Service Manual

Oscilloscope

SS-7810/05/04

IWATSU

Introduction

◇ Thank you very much for your purchase of Iwatsu electronic measuring instruments.
◇ Please adjust or calibrate your instrument after throughly reading this service manual and understanding its contents. After reading this manual, please keep it for future reference.

Cautions for safe use

Matters that must be observed for operation of this instrument and for prevention of injury to humans and damage to property are described as "⚠ warnings" and "⚠ cautions" in this service manual.

Explanation of "⚠Warnings" and "⚠Cautions" coulmns in this manual

⚠ **Warning**	Incorrect operation or failure to need warnings may result in death or serious injury.
⚠ **Caution**	Incorrect operation or failure to need cautions may result in injury or damage to equipment.

Cautions

◇ Parts of the contents of this service manual may be modified without notice to accommodate improvements in performance and function.
◇ Reproduction of the contents of this service manual without previous consent is prohibited.

History

◇ Jan. 2004 : Issue of the 1st edition

⚠ Warnings

Use care when servicing with power on:

Dangerous voltages exist at several points in this product. To avoid personal injury, do not touch exposed connections or components while power is on.

Disconnect power before removing protective panels, soldering, or replacing components.

⚠ Cautions

- **Never place a heavy substance on the power cord:**
  It will cause an electric shock or fire.

- **Prior to connecting or disconnecting the power cord, set the power supply to STBY:**
  Its negligence will cause an electric shock or trouble.

- **Use the specified AC power to operate the instrument:**
  Use of non-specified power will cause an electric shock, fire, or trouble. The available AC power supplies are as follows:
  - Supply voltage : 90 to 132V AC/180 to 250V AC
  - Frequency : 48 to 440Hz
  - Power consumption : Max. 110VA

- **Use a 3-core power cord suitable to the supply voltage:**
  Use of other cord will an electric shock or fire.

- **When replacing a fuse, be sure to use our specified one (φ5×20mm, 250VA, 2A, slow):**
  Use of other fuse will cause a fire or trouble.

- **Do not place any substance near the air vent of this instrument or fan:**
  It will cause a fire or trouble.

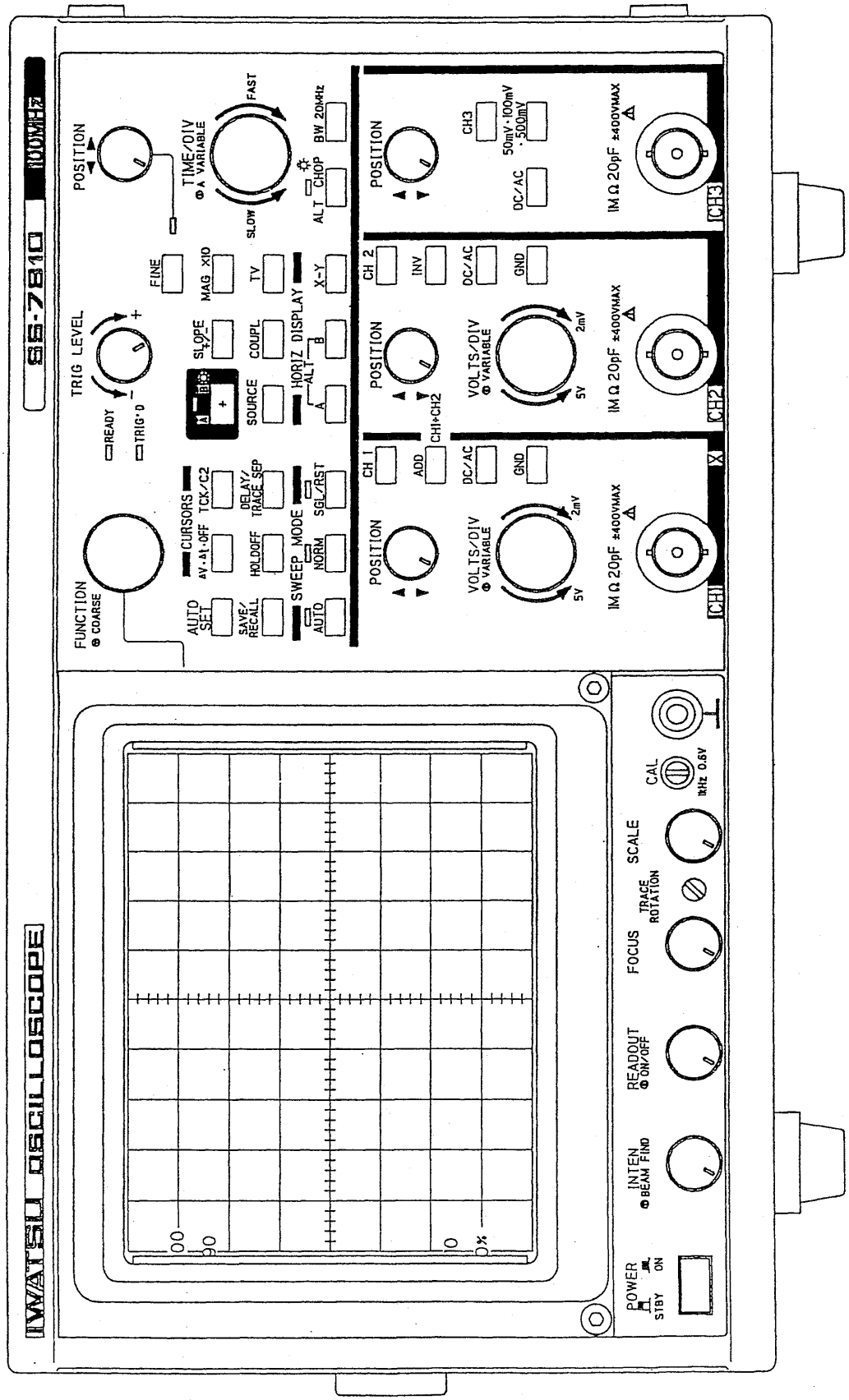
- **Use the instrument within the specified operating range:**
  Otherwise, it will cause a trouble. An available temperature range is as follows:
  - Temperature : 0 to 40℃
  - Relative humidity : 90% RH(40℃)

- **Do not apply an overvoltage to the input terminal:**
  It will cause a trouble. A maximum allowable input voltage is as follows:
  - CH1, CH2, CH3 (EXT):
    Directly : Max. ± 400V
  - When the SS-087R (10:1) or SS-088 (1:1, 10:1) probe is used:
    At 10:1 : Max. ± 600V
    At 1:1 : Max. ± 400V

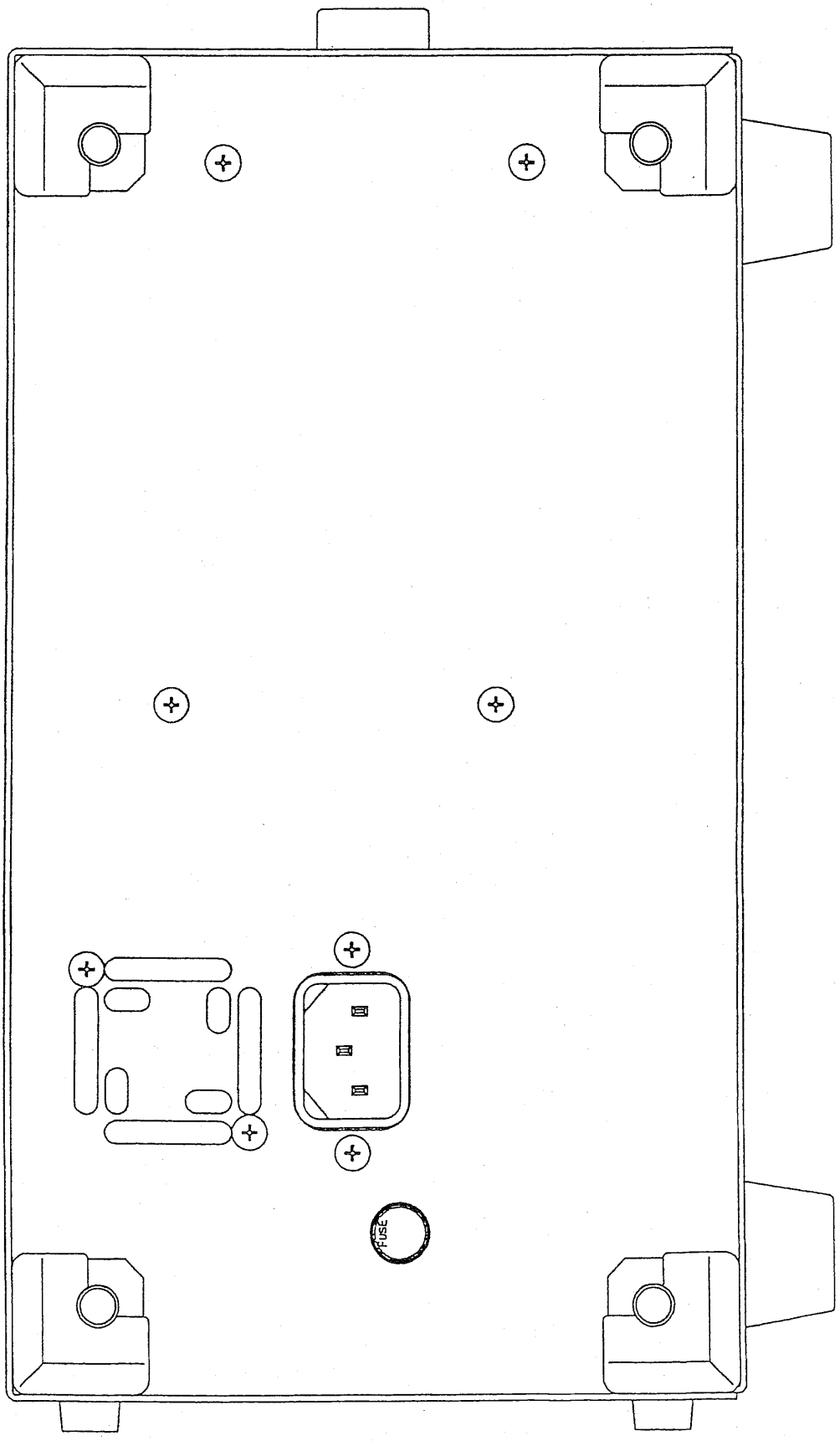
[NOTE] The maximum input voltage decreases depending on frequency and high voltage pulse of the input signal.

Table of Contents

Front Panel (SS-7810/05/04)



Rear Panel (SS-7810/05/04)



MEMO

Section 1 Specifications

SS-7810

CRT

Type	6 inch, diagonal rectangular flat face, intemal graticule, meshelss CRT with graticule illumination
Display area	8 div × 10 div (1 div = 10 mm)
Accelerating voltage	Approx. 16 kV

Vertical defection system (Y axis)

Vertical mode	CH1, CH2, CH3, ADD, ALT/CHOP
CH1, CH2	CHOP mode switching rate 555 kHz ± 1 %
Deflection factor	
Range	2 mV/div to 5 Vdiv, 1-2-5 sequence, 11 steps
Variable control range	2 mV/div to 12.5 V/div continuously variable
Accuracy	± 2%
Frequency characteristics	
Bandwidth	
5 mV to 5 V/div	DC to 100 MHz − 3 dB
2 mV/div	DC to 50 MHz − 3 dB
Band width limiter	DC to approx. 20 MHz [Note] AC coupled low cutoff frequency (− 3 dB) is 4 Hz.
Rise time	Approx. 3.5 ns [Note] Rise time Tr is calculate from: $Tr = \frac{350}{\text{Bandwidth [MHz]}}$ [ns]
Step response	at 10 mV/div, with 50 Ω termination
Over shoot	3 %
Sag (at 1 KHz)	1 %
Signal delay	At least 30 ns of the sweep is displayed before the triggering event.
Input coupling	AC, DC, GND
Input RC	1 M Ω ± 1.5 % // 20pF ± 2pF
Maximum input voltage	± 400 V MAX
Position control range	Approx. ± 10 div from the center line of the screen
Invert	Available on CH2
ADD	
Accuracy of sum (at 1 kHz)	± 3%
Frequency characteristics	DC to 60 MHz − 3 dB
Common-mode rejection ratio	at 10 mV/div
1 kHz sin wave	50:1
20 MHz sine wave	15:1
Dynamic range	Overranging the screen at 100 MHz in the case of 10 mV/div
Probe sense	10:1, 100:1 detection

CH3

Deflection factor

Range	50 mV/div, 100 mV/div, 500 mV/div
Accuracy	± 2 %
Bandwidth	DC to 100 MHz −3 dB
Rise time	Approx. 3.5 ns [Note] Rise time Tr is calculate from: $Tr = \frac{350}{\text{Bandwidth [MHz]}}$ [ns]
Step response	at 50 mV/div, with 50 Ω termination
Over shoot	6 %
Sag (at 1 KHz)	1 % [Note] AC coupled low cutoff frequency (−3 dB) is 10 Hz
Imput coupling	AC, DC
Input RC	1 M Ω ± 1.5 % // 20 pF ± 3pF
Maximum input voltage	± 400 V MAX
Position control range	Approx. ± 10 div from the center line of the screen
Dynamic range	Overranging the screen at 100 MHz
Probe sense	10:1, 100:1 detection

Triggering

A triggering

Trigger sensitivity

Frequency	P.P signal amplitude
DC to 10 MHz	0.4 div
10 MHz to 100 MHz	1.0 div

[Note] TV : The ratio between the composite video signal and synchronization signal is 7:3 and synchronization signal amplitude is 1.5 div or more.
HF-REJ : Attenuates at 10 kHz or more
LF:REJ : Attenuates at 10 kHz or less

Trigger level range	± 9.5 div or more (set range: ± 10 div)
Signal source	CH1, CH2, CH3, LINE, VERT
Coupling	AC, DC, HF-REJ, LF-REJ
Slope	+, −

B triggering

Trigger sensitivity

Frequency	P.P signal amplitude
DC to 10 MHz	0.4 div
10 MHz to 100 MHz	1.0 div

[Note] HF-REJ : Attenuates at 10 kHz or more
LF-REJ : Attenuates at 10 kHz or less

Trigger level range	± 9.5 div or more (set range: ± 10 div)
Signal souroe	CH1, CH2, CH3
Coupling	AC, DC, HF-REJ, LF-REJ
Slope	+, −
TV mode	NTSC, PAL, (SECAM)
TV synchronization	ODD, EVEN, BOTH TV-H [Note] ODD/EVN, or BOTH can be seiected NTSC: 5 H to 2000 H PAL (SECAM), HDTV: 2 H to 1997 H

AUTO SETUP

Channels	Avallable CH1 and CH2
Frequency	50 Hz to 50 MHz

Horizontal deflection system (X axis)

Horizontal display	A, ALT, B, X-Y
A sweep	
Sweep mode	AUTO, NORMAL SINGLE
Sweep rates	
Maximum sweep	2 ns/div
Range	20 ns to 500 ms/div 1-2-5 sequence, 23 steps
Variable range	20 ns to 1.5 s/div
Accuracy **I**	± 2 % over center 8 div
Accuracy **II**	± 5 % over center any 2 div within center 8 div
Hold-off time	Countinuously variable
B sweep	
Delay	Triggered delay or continuous delay (RUNS AFTER)
Sweep rates	
Maximum sweep	2 ns/div
Range	20 ns to 5 ms/div 1-2-5 sequence, 17 steps
Accuracy **I**	± 2 % over center 8 div
Accuracy **II**	± 5 % over center any 2 div within center 8 div
Delay time	
Position control range	0.2 to 10.2 div
Accuracy	± [(set value × 0.005)＋(sweep rate × 0.1)]－55 ns with in range of 1 μ s/div to 500 ms/div
Delay pick off jitter	1/2000, at 1 ms/div of A sweep:, at 500 ns/div of B sweep
Sweep magnification	
Magnifying ratio	10 times
Accuracy **I**	over center 8 div
20 ns/div, 50 ns/div	± 5 %
100 ns/div to 500 ms/div	± 3 %
*1 Accuracy **II**	Over any 2 div within center 8 div
20 ns/div, 50 ns/div	± 8 %
100 ns/div to 500 ms/div	± 5 %

*1 30 ns or 1 div at the beginning of sweep and 30 ns at the end of sweep are excluded.

X-Y operation	
X axis (CH1)	
Deflection factor	Same as CH1
Accuracy	± 4 %
Bandwidth	DC to 2 MHz, －3 db
Y axis	CH1, CH2, CH3, ADD
Phase difference between × axis and Y axis	3' or less (DC to 200 kHz)
CAL (Probe calibration signal)	
Waveform	Rectangular wave
Fraquency	1 kHz ± 0.1 %
Duty ratio	49 % to 51 %
Output voltage	0.6 V ± 1%

Measurement with cursors and counter	
Measurement with cursors	
Type of measurement	Time difference (△ t), Voltage difference (△ V)
Cursor position control range	
X axis	± (5 ± 0.2) div from the center line of the screen
Y axis	± (4 ± 0.2) div from the center line of the screen
Accuracy	
Voltage difference (△ V)	± [(2 % of reading) + (0.3 % of full scale)]
Time difference (△ t)	
MAG OFF	± [(2 % of reading) ± (0.3 % of full scale)]
MAG ON (MAG × 10)	
500 ms to 100 ns/div	± [(3 % of reading) + (0.3 % of full scale)]
50 ns, 20 ns/div	± [(5 % of reading) + (0.3 % of full scale)]
Counter	
Number of digits displayed	5 digits
Accuracy	± 0.01 %
Frequency measurement range	2 Hz to 100 MHz
Saving data	Backup by built-in battery
Type of date to be saved	Panel setup conditions immediately before turning power off *2 Storing of panel setup conditions *3 (SS-7821/11) *2 The state where the power cord is disconnected. *3 The maximum number of date items that can be stored: 32
Data retention time	Approx. 30000H (at approx. 25 ℃)
Power source	
Voltage range	90 to 132 VAC / 180 to 250 VAC
Frequency range	48 to 440 Hz
Power consumption	110 VA MAX
Mass and Dimension	
Mass	Approx. 7.5 kg (without accessories)
Dimension	Approx. 272W × 152 H × 390 L [mm] [Note] Without accessories, and projections.

Environmental condtions

Specification assurance temperature	10 to 35 ℃
Operating	
Temperature	0 to 40 ℃
Humidity	90 % RH or less (at 40 ℃)
Storage	
Temperature	− 20 to 70 ℃
Humidlty	80 % RH or less (at 70 ℃)
Altitude	
Operating	5000 m, atmospheric pressure: Approx. 55 kPa
Nunoperating	15000 m, atmospheric pressure: Approx. 12 kPa
Vibration	15 minutes along each of three axes at a total displacement of 0.67 mmp. p with frequency Varied from 10 Hz to 55 Hz in 1 minute sweep.

Shock	Lifting a side to a height of 10 cm and dropping it naturally onto hard wood: 4 times on each side.
Dropping packaged	Dropping an instrument packaged for transportation from a height of 90 cm.
Warm up time	The specifications for this instrument are the assured values after more than 30 min of power on.

SS-7805/04

CRT

Type	6 inch, diagonal rectangular flat face, internal graticule, meshelss CRT with graticule illumination
Display area	8 div × 10 div (1 div = 10 mm)
Accelerating voltage	Approx. 16 kV

Vertical deflection system (Y axis)

Vertical mode	CH1, CH2, ADD, ALT/CHOP
CH1, CH2	CHOP mode switching rate 555 kHz ± 1 %
Deflection factor	
Range	2 mV/div to 5 V/div, 1-2-5 sequence, 11 steps
Variable control range	2 mV/div to 12.5 V/div continuously variable
Accuracy	± 2%
Frequency characteristics	
Bandwidth	
5 mV to 5 V/div	DC to 40 MHz −3 dB (SS-7804) / DC to 50 MHz −3 dB (SS-7805)
2 mV/div	DC to 20 MHz −3 dB (SS-7804) / DC to 20 MHz −3 dB (SS-7805)
Rise time	
SS-7804	Approx. 8.75 ns
SS-7805	Approx. 7.0 ns
	[Note] Rise time Tr is calculate from:
	$Tr = \frac{350}{\text{Bandwidth [MHz]}}$ [ns]
Step response	at 10 mV/div, 50 Ω termination
Over shoot	3 % (SS-7804) / 8 % (SS-7805)
Sag (at 1 kHz)	1 % (SS-7804) / 1 % (SS-7805)
Signal delay	At least 30 ns of the sweep is displayed before the triggering event.
Input coupling	AC, DC, GND
Input RC	1 MΩ ± 1.5 % // 25 pF ± 2 pF
Maximum input voltage	± 400 V (DC+ACpeak)
Position control range	Approx. ± 10 div from the center line of the screen
Invert	Available on CH2
ADD	
Accuracy of sum (at 1 kHz)	± 3%
Frequency characteristics	DC to 20 MHz − 3 dB
Common-mode rejection ratio	
50:1	1 kHz sine wave
15:1	20 MHz sine wave
Dynamic range	Overranging the screen at 40 MHz (SS-7804)
	Overranging the screen at 50 MHz (SS-7805)
Probe sense	
Attached probe	No function.
Optional probe	10:1, 100:1 detection

Triggering

Trigger sensitivity

Frequency	CH1, CH2	EXT
DC to 5 MHz	0.4 div	80 mV
5 MHz to 40 MHz (SS-7804)	1.0 div	200 mV
5 MHz to 50 MHz (SS-7805)		

[Note] TV : The ratio between the composite video signal and synchronization signal is 7:3 and synchronization signal amplitude is 1.5 div or more.
HF-REJ : Attenuates at 10 kHz or more
LF-REJ : Attenuates at 10 kHz or less

Trigger level range	± 9.5 div or more (set range: ± 10 div)
Signal source	CH1, CH2, EXT, LINE, VERT
Coupling	AC, DC, HF-REJ, LF-REJ
Slope	＋, －
TV mode	NTSC, PAL (SECAM)
TV synchronization	ODD, EVEN, BOTH TV-H
	[Note] ODD, EVEN, or BOTH can be selected NTSC: 5 H to 2000 H PAL (SECAM): 2 H to 1997 H
EXTTRIG	
Input RC	1 MW ± 2 % // 25 pF ± 3 pF
Input coupling	DC
Maximum input voltage	± 400 V (DC+ACpeak)
Probe sence	10:1 and 100:1 detection with an optional probe (SS-78R)

Horizontal deflection system (X axis)

Horizontal display	A, X-Y
Sweep mode	AUTO, NORMAL SINGLE
Sweep rates	
Maximum sweep	10 ns/div
Range	100 ns to 500 ms/div
Variable range	100 ns to 1.25 s/div
Accuracy **I**	± 2 % over center 8 div
Accuracy **II**	± 5 % over center any 2 div within center 8 div
Hold-off time	Countinuously variable
Sweep magnification	
Magnifying ratio	10 times
Accuracy **I**	over center 8 div
100 ns/div to 200 ns/div	± 5 %
500 ns/div to 500 ms/div	± 3 %
*1 Accuracy **II**	Over any 2 div within center 8 div
100 ns/div to 200 ns/div	± 8 %
500 ns/div to 500 ms/div	± 5 %

X-Y operation

X axis (CH1)	
Deflection factor	Same as CH1
Accuracy	± 3 %
Bandwidth	DC to 2 MHz − 3 dB
Y axis	CH1, CH2, ADD
Phase difference between X axis and Y axis	3 ° or less (DC to 50 kHz)

CAL (Probe calibration signal)

Waveform	Rectangular wave
Fraquency	1 kHz ± 0.1 %
Duty ratio	49 to 51 %
Output voltage	0.6 V ± 1%

Measurement with cursors and counter

Measurement with cursors	
Type of measurement	Time difference (△ t), Voltage difference (△ V)
Cursor position control range	
X axis	± (5 ± 0.2) div from the center line of the screen
Y axis	± (4 ± 0.2) div from the center line of the screen
Accuracy	
Voltage difference (△ V)	± [(2 % of reading) + (0.3 % of full scale)]
Time difference (△ t)	
MAG OFF	± [(2 % of reading) + (0.3 % of full scale)]
MAG ON (MAG × 10)	
100 ns, 200 ns/div	± [(5 % of reading) + (0.3 % of full scale)]
500 ns to 500 ms/div	± [(3 % of reading) + (0.3 % of full scale)]
Counter	
Number of digits displayed	5 digits
Accuracy	± 0.01 %
Frequency measurement range	
SS-7804	2 Hz to 40 MHz
SS-7805	2 Hz to 50 MHz

Saving data	Backup by built-in battery
Type of date to be saved	Panel setup conditions immediately before turning power off *2 *2 The state where the power cord is disconnected.
Data retention time	Approx. 30,000H (at approx. 25 ℃)

Power source

Voltage range	90 to 132 VAC / 180 to 250 VAC
Frequency range	48 to 440 Hz
Power consumption	110 VA MAX

Mass and Dimension

Mass	Approx. 7.5 kg (without accessories)
Dimension	Approx. 272W × 152 H × 390 L [mm] [Note] Without accessories, and projections.

Environmental conditions

Specification assurance temperature	10 to 35 ℃
Operating	
Temperature	0 to 40 ℃
Humidity	90 % RH or less (at 40 ℃)
Storage	
Temperature	-20 to 70 ℃
Humidity	80 % RH or less (at 70 ℃)
Altitude	
Operating	5,000 m, atmospheric pressure : Approx. 55 kPa
Nunoperating	15,000 m, atmospheric pressure : Approx. 12 kPa
Vibration	15 minutes along each of three axes at a total displacement of 0.67 mmp. p with frequency Varied from 10 Hz to 55 Hz in 1 minute sweep.
Shock	Lifting a side to a height of 10 cm and dropping it naturally onto hard wood: 4 times on each side.
Dropping packaged	Dropping an instrument packaged for transportation from a height of 90 cm.
Warm up time	The specifications for this instrument are the assured values after more than 30 min of power on.

SS-501 (CH2 OUT, Z AXIS IN)

Factory option for the SS-7800 series.
SS-501 : SS-7804/7805

CH2 OUT connector (rear panel)
Outputs a sample of the signal applied to the CH2 signal input.

Z AXIS IN connector (rear panel)
Input a signal for an intensity modulation on screen.

Specification

CH2 OUT

Deflection factor	45 mV ± 20 % per one division screen amplitude (at 50 Ω load)
DC level	± 100 mV (at 50 Ω load)
Output coupling	DC
Bandwidth	20 MHz –3 dB (at 50 Ω load)
Output resistance	50 Ω ± 20 %

Z AXIS IN

Input voltage	0.5 Vp-p or more
Polarity	Positive going signal decreases intensity and negative going signal increases intensity
Input frequency	DC to 5 MHz
Input resistance	4.5 k Ω ± 20 %
Maximum input voltage	± 50 V (DC+ACpeak)

2

Section 2 Check and Adjustment

Table of Contents

2.1 Knowledge Required before Beginning Adjustment

2.1.1 Introduction

Periodic check and adjustment maintains reliable performance of this instrument for a long time.

2.1.2 Check and Adjustment Intervals

To measure signals accurately, it is necessary to periodically check and adjust the measuring instrument. Recommended check and adjustment intervals for this instrument are approx. 6 months.

2.1.3 Menu Screen

For this instrument, there are three of menu screens for check and adjustment.

◇Adjustment Menu Screen

- Adjust 116 items manually on the adjust menu screen.
  For further details, refer to "2.13" Manual Adjustment Items".

◇Automatic Adjustment Menu Screen

- Adjust the instrument automatically with the jig IE-1066.
  For futrther details, refer to "2.11 Automatic Adjustment".

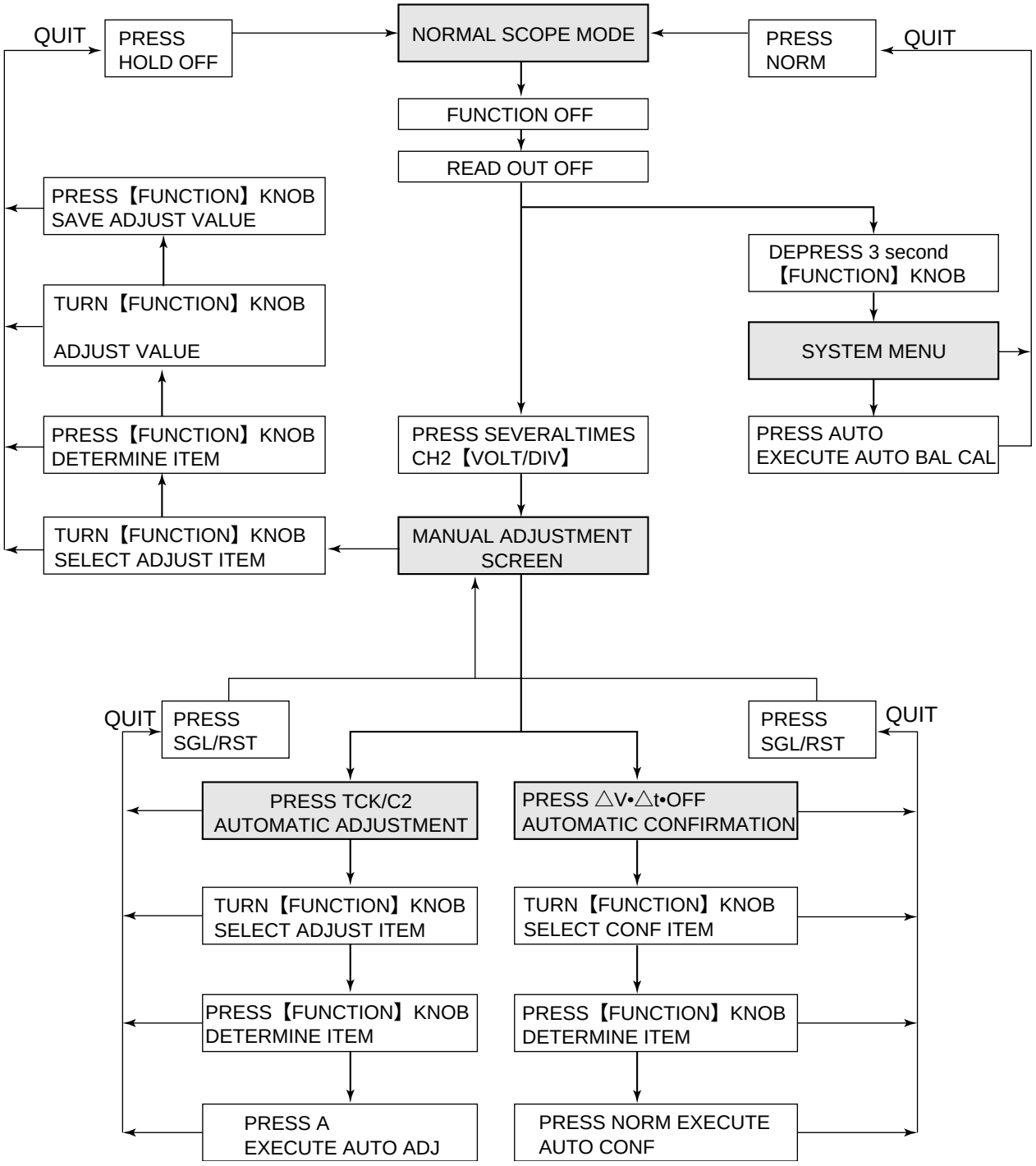
◇Automatic Confirmation Menu Screen

- Confirm and check the instrument functions and perfomances automatically with the jig IE-1066.
  For furher details, refer to "2.12 Automatic Confirmation".
- For KEY confirmation, refer to "2.4 KEY".

Use IE-1066 when carrying out Automatic Adjustment or/and Automatic Confirmation.

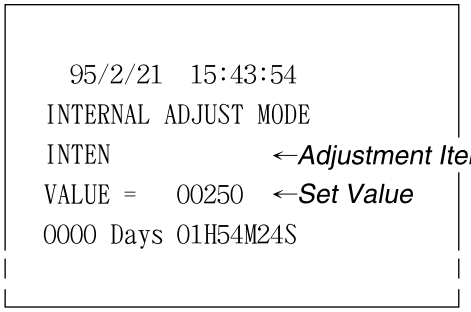
- For connections, refer to "2.18 Connection the Adjustment Jig IE-1066.
- For calibration of IE-1066, refer to "2.14 Adjustment Jig IE 1066".

① Menu Tree SS-7810/05/04



② Mannual Adjustment Menu

The following describes how to enter the manual adjustment screen.



Procedure

——Enter to Manual Adjustment Menu Screen——

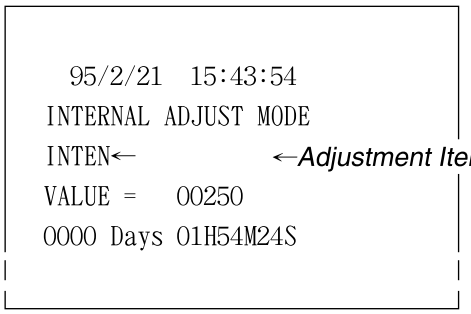
①Turn off all the functions to disable【FUNCTION】.*1

*1 Condition that f•XXXX is not being displayed at the upper right of the screen (the delay time, number of TV lines, etc.)

②Press READOUT to set the charactors to OFF (non-display).

③Press【VOLTS/DIV】of CH2 several times quickly.

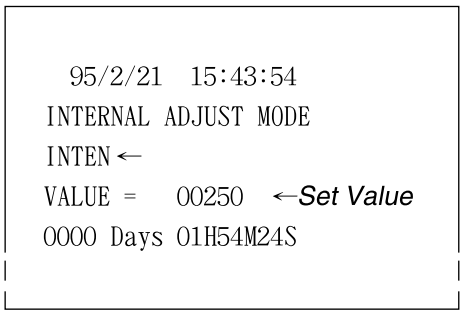
- Manual adjustment menu is displayed.
- The function indication turns to f:MAN-ADJ.
- Select the adjustment item by turrning【FUNCTION】. The steps below describes an example when INTEN is to be selected.



——Selecting the Adjustment Item——

④Turn【FUNCTION】to select INTEN.

- For details of the adjustment menu items, refer to the "2.13.5 Manual Adjustment Procedure".



——Setting the Value——

⑤Press【FUNCTION】.

- The adjustment item is determined.

⑥Turn【FUNCTION】to set the VALUE.

——Saving the VALUE——

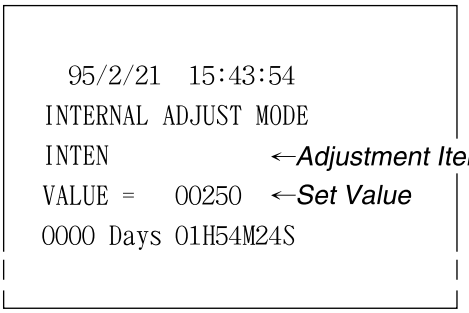
⑦Press【FUNCTION】.

- The set value is saved and "SAVED" appears at the lower left of the screen.

——Canceling the Adjustment Menu Screen——

⑧To cancel the adjustment menu screen, press HOLD OFF.

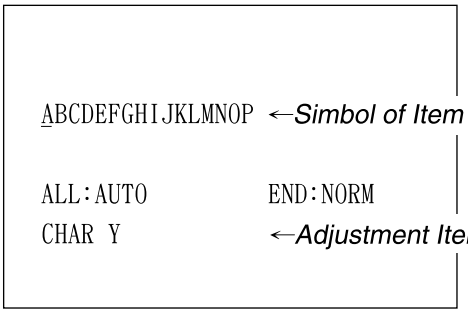
③Menu Screen (f:MAN-ADJ, AUTO-ADJ, AUTO-CONF)



◇Procedure ① to ③, refer to "2.1.3 ② Adjustment Menu".

- Display the adjustment menu screen.

Automatic Adjustment Menu screen



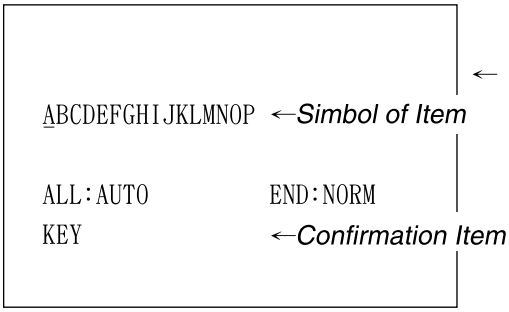
◇Press TCK/C2 in the manual adjustment screen.

- Display the automatic adjustment menu screen.
  For the automatic adjustment menu, see "2.11 Automatic Adjustment".

——*Return to Manual Adjustment Menu Screen* ——

- To cancel the auto adjustment menu screen, press SGL/RST.

Automatic Confirmation Menu screen



◇Press △V-△t-OFF in the adjustment menu screen.

- Display the automatic confirmation menu screen.
- For the "KEY", see "2.4 KEY on automatic confirmation".
  For the items except "KEY", see "2.14 Automatic Confirmation".

——*Return to Manual Adjustment Menu Screen* ——

- To cancel the auto confirmation menu screen, press SGL/RST.

④Key Function/Movement in Adjustmnet Menu

MANUAL ADJUSTMENT MENU

A. Selecting the Adjust Item	Turn FUNCTION key
B. Determine the Adjust Item	Press FUNCTION key
C. Vary the Adjust Value	Turn FUNCTION key
D. Save the Adjust Value	Press FUNCTION key
QUIT	Press HOLD OFF or POWER OFF

AUTO ADJUSTMENT MENU

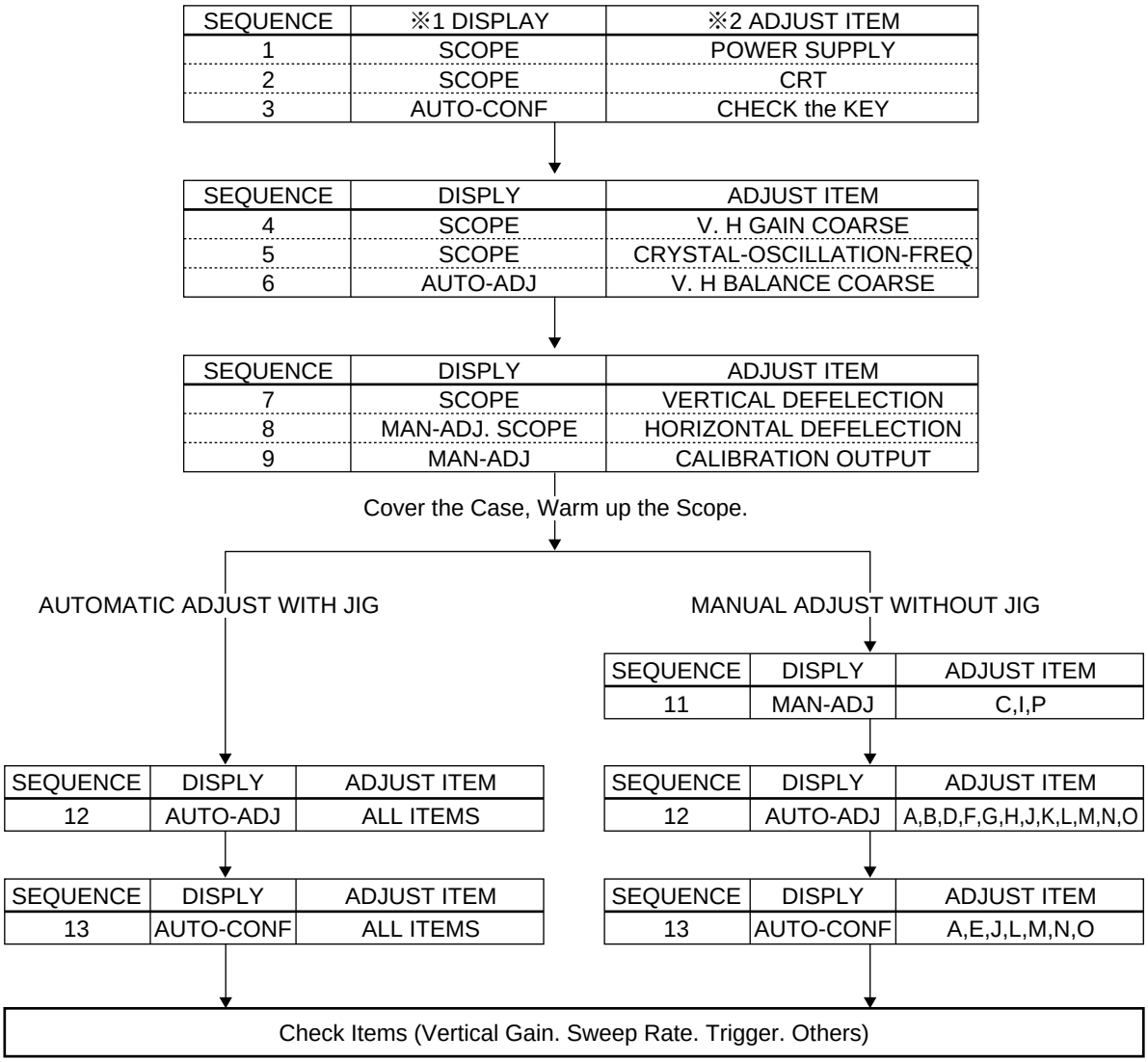
A. Selecting All Adjust Item	Press AUTO key
A'. Selecting Individual Adjust Item	Turn FUNCTION key
B. Determine the Adjust Item	Press FUNCTION key
C. Start AUTO ADJUSTMENT	Press NORM
QUIT	Press SGL/RST or POWER OFF

AUTO CONFIRMATION MENU

A. Selecting All Confirmation Item	Press AUTO key
A'. Selecting Individual Confirmation Item	Turn FUNCTION key
B. Determine the Confirmation Item	Press FUNCTION key
C. Startr AUTO CONFIRMATION	Press NORM
QUIT	Press SGL/RST or POWER OFF

2.1.4 Check and Adjustment Method

① Check/Adjustment Procedure Flow Chart SS-78 ∗∗



※1 DISPLAY

SCOPE	: NORMAL OSCILLOSCOPE MODE
MAN-ADJ	: MANUAL ADJUSTMENT SCREEN
AUTO-ADJ	: AUTOMATIC ADJUSTMENT
AUTO-CONF	: AUTOMATIC CONFIRMATION
SYS-MENU	: SYSTEM MENU

※2 ADJUST ITEM

A, B, C, O ※	: refer to"2.1.4. ② ADJUSTMENT ITEM" next page.

Table 2.1.1 ② **Automatic Adjustment Items**

Item	Description	Page
A. CHAR Y	Cursor moving range and intercursor accuracy at △V cursor measurement time	2-48
B. CHAR X	Cursor moving range and Intercursor accuracy at △t cursor measurement time	2-48
C. *V-GAIN	Vertical gain (CH1 to CH3)	2-48
D. V-BAL	DC balance (CH1, CH2) and Step balance (CH1 to CH3)	2-49
E. *V-VARI	Beginning of the effect of the vertical variable (CH1, CH2)	2-49
F. ADD-BL	Add balance	2-49
G. CH2 INV	CH2 Inversion balance	2-49
H. V-POSI	Vertical position (CH1 to CH3)	2-50
I. *TRIG	Trigger level and trigger gain	2-50
J. H-SWP	Sweep rate (A/B)	2-50
K. H-LENG	Sweep length (A/B)	2-51
L. MAG	Magnification center	2-51
M. H-POSI	Horizontal position	2-51
N. BS-POS	B sweep start position	2-51
O. B-DLY	Delay time	2-52
P. *X-Y	X-Y gain and position	2-52

*: Denotes the item for which an adjusting jig is required.

Table 2.1.2 ③ **Automatic Confirmation Items**

Item	Rating	Description
A. KEY	———	Check the operations of the keys, controls, and pulse switches.
B. *V DCSFT	0.06/6div or less	Inputs a 6 div DC signal and automatically confirms a move amount 10 seconds later (CH1 to CH3)
C. *V POSI	±10.0div or more	Automatically confirms the variable range of the 【▲POSITION▼】control (CH1 to CH3).
D. *ADD GAI	3.0%	Automatically confirms sensitivity at ADD mode. A 3 div signal for CH1 and CH2 is turned to 6 div at ADD mode.
E. H POSI	±6.5div or more	Automatically confirms the variable range of the 【◀ POSITION ▶】control.
F. *POL GAI	1.5%	Automatically confirms sensitivity of CH2 INV.
G. *AC/DC	Normal changed	Automatically confirms the operation of input coupling AC/DC (CH1 to CH3).
H. *V RANGE	1.5%	Automatically confirms the next range of vertical sensitivity. CH1, CH2: 20 Mv, 50 mV/div. CH3: 50 mV, 500 mV/div
I. *TRIG LVL	±9.5 div or more	Automatically confirms the variable range of the 【TRIG LEVEL】control.
J. H VAR	2.5 times or more	Automatically confirms the variable range of the 【VARIABLE】 control.
K. *V VAR	Variable Range: 2.5 times or more Variable Balance 20mV to 5V/div : 0.5div or less 2mV to 10mV/div : 5mV or less	Automatically confirms the operation of the 【VARIABLE】control (CH1, CH2) of VOLTS/DIV.
L. H RANGE	± 1.8%	Automatically confirms 200 μs or 500 μs/div at A TIME/DIV or B TIME/DIV.
M. TR-SEP	+4div or more	Automatically confirms trace separation.
N. LINETRG	Automatically confirms the line synchronism.	
O. H START	2div or less (× 10 MAG)	Automatically confirms shifting of the A-sweep start point upon switching the【TIME/DIV】control in the following ranges: 100 ms, 10 ms, 1 ms, 500 μs, 200 μs, 100 μs, 10 μs, 1 μs
P. ———		

*: Denotes the item for which an adjusting jig is required.

④The Check/Adjustment Items and Sequence With Jig IE-1066

Table2.1.3 The check list With Jig IE-1066

SEQ *1	Adjust Item	Function Display	Condition Adjust/Check	See Page	Remarks
1	**DC Power Supply**	SCOPE	ADJ-VR *2	22	39VR1
2	**CRT Display**				
	Cathode Voltage	SCOPE	ADJ-VR	23	33VR15 HV ADJ
	Heater Voltage			23	33R21 HEATER
	Focus			24	33R23, 33R41, 33R51, 33R54
	Intensity			25	33R46
	Trace Rotation			26	TRACE ROTATION
	Orthogonality	MAN-ADJ	ADJ-VALUE *3	27	MENU "ORTHOGO"
3	**KEY Switch**	AUTO-CONF	Check	28	MENU "A. KEY"
4	**Gain Coarse**				
	Vertical Gain	SCOPE	ADJ-VALUE	29	11R41 "CH1 10mV GAIN" VALUE 180
	Horizontal Gain		ADJ-VR	30	24R84 "AS100-500 μs" VALUE 128
	△V readout Gain			30	10R24 "Y-CHRG" VALUE 128
	△t readout Gain			31	26R49 "X-CHRG" VALUE 128
5	Crystal Oscillation 20MHz	SCOPE	Check	31	20IC3#1 with the counter
6	V BAL Coarse	AUTO-ADJ	Check	32	MENU "D, L"
	Magnification Gain	MAN-ADJ	ADJ-VALUE	33	MENU "MAG SWEEP REF"
7	**Vertical Deflection System**				
	① Flatness	SCOPE	ADJ-VR, C *4	34	1R39(CH1),2R39(CH2),3R39(CH3)
	② Attenuator Compensation			35 36	(CH1)1C4,1C5,1C12A,(CH2)2C4,2C5 2C12A,(CH3)3C5,7C3,7C4,8C3,8C4
	③ High-FREQ Compensation			37 38	6C4,7C4,9R23,9C23,9C12,11C22, 11C23,11C39B,11148, etc 4 point
	④Bandwidth			39	
8	**Horizontal Deflection System**				
	High-speed Sweep Rate	SCOPE	ADJ-VALUE	40	MENU "AS 100-500ns", etc
	Sweep Linearity at High -speed Sweep Rate		ADJ-VALUE ADJ-C	41	MENU "AS 20-50ns" 27C13, 27C33
9	Calibration Output	MAN-ADJ	ADJ-VALUE	42	MENU "CAL LEVEL"
10	**Cover the Case. Warm up the Scope.**				
11	Automatic Adjustment. Connection the jig IE-1066 to the SS-78＊＊.			43 to 51	A,B,C,D,E,F,G,H,I,J,K,L,M,N,O,P
12	Automatic Confirmation. Connection the jig IE-1066 to the SS-78＊＊.			52 to 53	A,B,C,D,E,F,G,H,I,J,K,L,M,N,O
13	**Check Items** (Vertical Gain, Sweep Rate, Trigger, Others) using the standard measurement instrument.				

*1 SEQ : The Check/Adjustment Sequence number
*2 ADJ-VR : Adjust variable resistor
*3 ADJ-VALUE : Set Value on Manual Adjustment Screen
*4 ADJ-C : Adjust variable capacitor

⑤The Check/Adjustment Items and Sequence Without Jig IE-1066

Table2.1.3 The check list Without Jig IE-1066

SEQ *1	Adjust Item	Function Display	Condition Adjust/Check	See Page	Remarks
1	**DC Power Supply**	SCOPE	ADJ-VR *2	22	39VR1
2	**CRT Display**				
	Cathode Voltage	SCOPE	ADJ-VR	23	33VR15 HV ADJ
	Heater Voltage			23	33R21 HEATER
	Focus			24	33R23, 33R41, 33R51, 33R54
	Intensity			25	33R46
	Trace Rotation			26	TRACE ROTATION
	Orthogonality	MAN-ADJ	ADJ-VALUE *3	27	MENU "ORTHOGO"
3	KEY Switch	AUTO-CONF	Check	28	MENU "A. KEY"
4	**Gain Coarse**				
	Vertical Gain	SCOPE	ADJ-VALUE	29	11R41 "CH1 10mV GAIN" VALUE 180
	Horizontal Gain		ADJ-VR	30	24R84 "AS100-500 μs" VALUE 128
	△V readout Gain			30	10R24 "Y-CHRG" VALUE 128
	△t readout Gain			31	26R49 "X-CHRG" VALUE 128
5	Crystal Oscillation 20MHz	SCOPE	Check	31	20IC3#1 with the counter
6	V BAL Coarse	AUTO-ADJ	Check	32	MENU "D, L"
	Magnification Gain	MAN-ADJ	ADJ-VALUE	33	MENU "MAG SWEEP REE"
7	**Vertical Deflection System**				
	① Flatness	SCOPE	ADJ-VR, C *4	34	1R39(CH1),2R39(CH2),3R39(CH3)
	② Attenuator Compensation			35 36	(CH1)1C4,1C5,1C12A,(CH2)2C4,2C5 2C12A,(CH3)3C5,7C3,7C4,8C3,8C4
	③ High-FREQ Compensation			37 38	6C4,7C4,9R23,9C23,9C12,11C22, 11C23,11C39B,11148, etc 4 point
	④ Bandwidth			39	
8	**Horizontal Deflection System**				
	High-speed Sweep Rate	SCOPE	ADJ-VALUE	40	MENU "AS 100-500ns", etc
	Sweep Linearity at High -speed Sweep Rate		ADJ-VALUE ADJ-C	41	MENU "AS 20-50ns" 27C13, 27C33
9	Calibration Output	MAN-ADJ	ADJ-VALUE	42	MENU "CAL LEVEL"
10	**Cover the Case. Warm up the Scope.**				
11	Manual Adjustment C: V-GAIN I: TRIG P: X-Y			54 to 60	C, I, P
12	Automatic Adjustment.			43 to 51	A,B,D,E,F,G,H,J,K,L,M,N*5,O*5
13	Automatic Confirmation.			52 to 53	A,E,J,L,M,N,O
14	**Check Items** (Vertical Gain, Sweep Rate, Trigger, Others) using the standard measurement instrument.				

*1 SEQ : The Check/Adjustment Sequence number
*2 ADJ-VR : Adjust variable resistor
*3 ADJ-VALUE : Set Value on Manual Adjustment Screen
*4 ADJ-C : Adjust variable capacitor

2.1.5 Check and Adjustment Affected Item

Table 2.1.5 shows the check/adjustment items and sequence.

a. When replaced CRT, adjust/check all the itmes start from top of the next flow chart.

b. When checking/adjusting/repairing only the limited items:

Check/adjust the items listed in the right "Affected Item" column of the table below.

Table 2.1.5 Check and Adjustment items

Sequence	Item	Page	Affected Item
1	**2.2 DC Power Supply**	2-22	All items
2	**2.3 CRT Display**		
	2.3.1 CRT Cathode Voltage	2-23	2.3.2 to 2.3.6, 2.5, 2.8.4 to 2.8.6 2.9, 2.13, 2.11
	2.3.2 CRT Heater Voltage	2-23	2.3.2 to 2.3.6, 2.5, 2.8.4 to 2.8.6 2.9, 2.13, 2.11
	2.3.3 Focus	2-24	2.3.4
	2.3.4 Intensity	2-25	
	2.3.5 Trace Rotation	2-26	
	2.3.6 Orthogonality	2-27	
3	**2.4 Check the Key Function in Automatic Confirmation Mode**	2-28	
4	**2.5 Gain Coarse**		
	2.5.1 Vertical Gain	2-29	2.8.4 to 2.8.6, 2.13, 2.11
	2.5.2 Horizontal Gain	2-30	2.9, 2.13.3, 2.11
	2.5.3 △V Readout Gain	2-30	2.11
	2.5.4 △t Readout Gain	2-31	2.11
5	**2.6 Crystal Oscillation Frequency**	2-31	
6	**2.7 Balance Coarse**		
	2.7.1 Balance Coarse (AUTO-ADJ "D, L")	2-32	2.13, 2.11
	2.7.2 Magnification sweep reference	2-33	2.11
7	**2.8 Vertical Deflection System**		
	2.8.1 Flatness CH1/CH2/CH3	2-34	2.8.2 to, 2.8.6
	2.8.2 Attenuator Compensation CH1/CH2	2-35	2.8.4, 2.8.6
	2.8.3 Attenuator Compensation CH3	2-36	2.8.5, 2.8.6
	2.8.4 High-frequency Compensation CH1/CH2	2-37	2.8.6
	2.8.5 High-frequency Compensation CH3	2-38	2.8.6
	2.8.6 Bandwidth	2-39	
8	**2.9 Horizontal Deflection System**		
	2.9.1 High-speed Sweep Rate	2-40	2.9.2
	2.9.2 Sweep Linearity at High-speed Sweep Rate	2-41	
9	**2.10 Calibration Output**	2-42	
10	**Cover the Case, Warm up the Scope.**		
11	**2.13 Manual Adjustment**		
	2.13.1 Vertical Gain	2-57	2.12
	2.13.2 Trigger	2-58	2.12
	2.13.3 X-Y gain and position	2-59	2.12
12	**2.11 Automatic Adjustment**	2-43	2.12
13	**2.12 Automatic Confirmation**	2-52	

*1 : Except SS-7804/02

2.1.6 Test Equipment Required

a. When checking or adjusting this instrument, the measuring instruments, etc. listed in Table 2.1.6 are required.
   • Adjustment jig IE-1066 for the SS-78XX are required.
   • The performance of the measuring instruments should be equivalent or higher than that described below.

b. The signal input connector for this instrument is a BNC type. When the terminator or signal output terminal used for the measuring instrument is not a BNC type, prepare a proper adaptor.

Table 2.1.6 Test Equipment Required Ⅰ (1/2)

Equipment/Minimum Specification	Purpose	Recommended Model
1. Adjustment jig IE-1066 for SS-78XX	Vertical, horizontal, triggering check and adjustment	
2. Oscilloscope Ⅰ Minimum deflection factor : 1mV/div Bandwidth : DC to 1MHz	Power supply check and adjustment	
3. Oscilloscope Ⅱ Deflection factor : 10mV to 5V/div Bandwidth : DC to 350MHz	General signal check	IWATSU SS-7840
4. Digital multimeter Range : DC to 300V Accuracy : 0.2%+1dgt TRUE RMS bandwidth : 100kHz	Power supply check and adjustment	IWATSU VOAC7411 with SC306 Battery Unit
5. Frequency counter Range : 20MHz or more Reference oscillator accuracy : ±3 × 10-5 or more	Crystal oscillator frequency and calibrator frequency check	IWATSU SC-7201
6. Function generator Repetition rate : DC to 10MHz Signal level : 1Vp-p or more	Vertical, horizontal, triggering check and adjustment	IWATSU FG-350
7. Scope calibrator • Calibration voltage Output voltage : 12mV to 60V Accuracy : 0.5% or less • Time marker Repetition rate : 10ns to 2s Accuracy : 0.5% or less • Square wave Repetition rate : 50Hz to 200kHz Rise Time : 5ns or less • Sine wave Repetition rate : 1kHz Accuracy : 20% or less	Display, vertical, horizontal, triggering check and adjustment	IWATSU SC-340

Table 2.1.7 Test Equipment Required **l** (2/2)

Equipment/Minimum Specification	Purpose	Recommended Model
8. Constant amplitude signal generator Frequency : 50kHz to 250MHz Signal level*1 : 60mV or more	Bandwidth check	TEK SG-503
9. Pulse generator Repetition rate : 50kHz to 100kHz Rise Time : 1ns or less Waveform distorion : Should be less Signal level : 60mVp-p or more	Step response check and adjustment	TEK PG-506 PSPL MODEL 2600
10. Time mark generator	Sweep linerarity at high-speed sweep rate	TEK TG501
11. Probe for osilloscope Attenuation ratio : 10:1, 1:1	Signal probe SS-0130R (10:1) : SS-7810's accessory SS-0110R (10:1) : SS-7805/04's assessory	
12. High-voltage probe for digital multimeter Attenuation ratio : 1000:1 Range : DC to 30kV DC Accuracy : ± 5%+1digit	High-voltage check and adjustment	
13. BNC coaxial cable (5 pieces) Impedance : 50 **Ω** Length : 50cm, 1.2 m	Signal interconnection	IWATSU BB-120C IWATSU BB-50M1
14. 50ƒ¶ termination (2 pieces) Impedance : 50 **Ω** Connector : BNC	Signal termination	 IWATSU
15. Attenuater Ratio : 0 to 50dB Bandwidth : DC to 2GHz	Signal attenuation	AA-03B, AA-06B AA-10B, AA-20B Probe's accessory
16. Screwdriver (Low capacitance)	Adjustment of variable resistors and capacitors	
17. 2mm hexagonal-head screw driver		

*1 Should be calibrated to a constant level if the frequency is changed.

2.1.7 Preparation for Check and Adjustment

Prior to starting a check or Adjustment, prepare the following:

a. Set an ambient temperature to 23℃±5℃.

b. Adjust INTEN, READOUT, FOCUS, and SCALE to ensure a clear display.

c. Warm up the instrument for approx. 30 minutes.

d. Set the keys and controls as shown in Table 2.1.8.

Table 2.1.8 Key and Control Setting

Key and Control	Setting
CRT Display	
INTEN	Midrange
READOUT	Midrange
FOCUS	Midrange
Vertical Deflection System	
CH1, CH2	ON (Display)
VOLTS/DIV (CH1, CH2)	10mV
VARIABLE (CH1, CH2)	OFF (CAL)
DC/AC (CH1, CH2)	DC
GND (CH1, CH2)	OFF (GND release)
CH2 INV	OFF (INV release)
Triggering	
A/B	A
LEVEL	Midrange
SOURCE	CH1
COUPL	DC
Horizontal Deflection System	
HORIZ DISPLAY	A
SWEEP MODE	AUTO
TIME/DIV	1ms/div
VARIABLE	OFF
MAG	OFF (× 1)

2.1.8 Connection the Adjustment Jig IE-1066 to the SS-78∗∗

How to use Adjustment Jig IE-1066 is described as below.

• Preparation

① Peel the grey tape on the rear panel.

② Appear the I/F connector

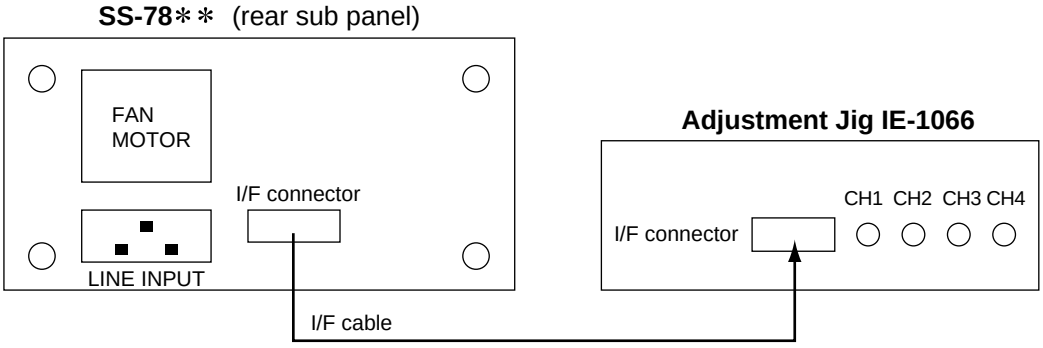


Figure 2.1 Rear sub panel of SS-78∗∗

• Connection

Procedure

① Connect between the IE-1066 I/F connector and SS-78∗∗ I/F connector with the exclusive I/F cable (See Figure 2.1 and Figure 2.2).

② Connect between the IE-1066 OUTPUT connectors and the SS-78∗∗ INPUT connector with the BNC coaxial cables (See Figure 2.2).

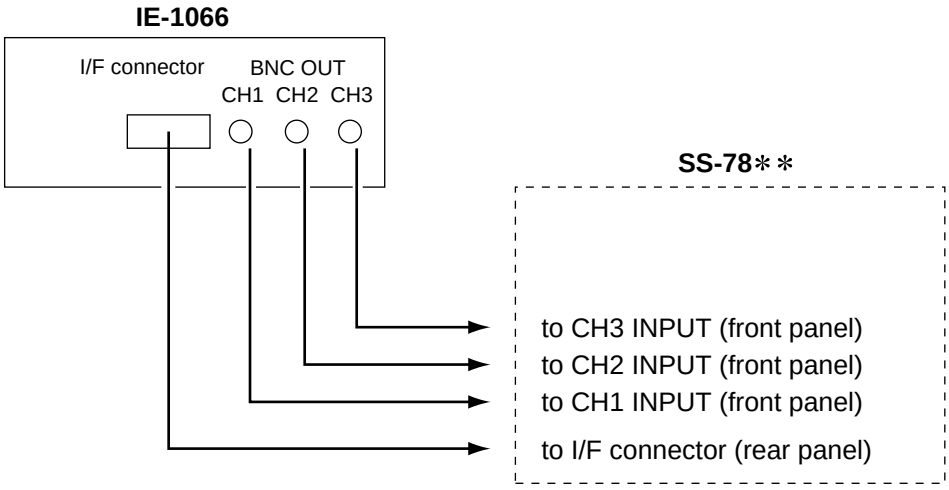


Figure 2.2 Connection IE-1066 to SS-78∗∗

Calibrating IE-1066

See "2.14 Adjustment Jig IE-1066".

2.1.9 Check and Adjustment Locations

See Figure 2.1.1. to 2.1.7

① POWER BOARD

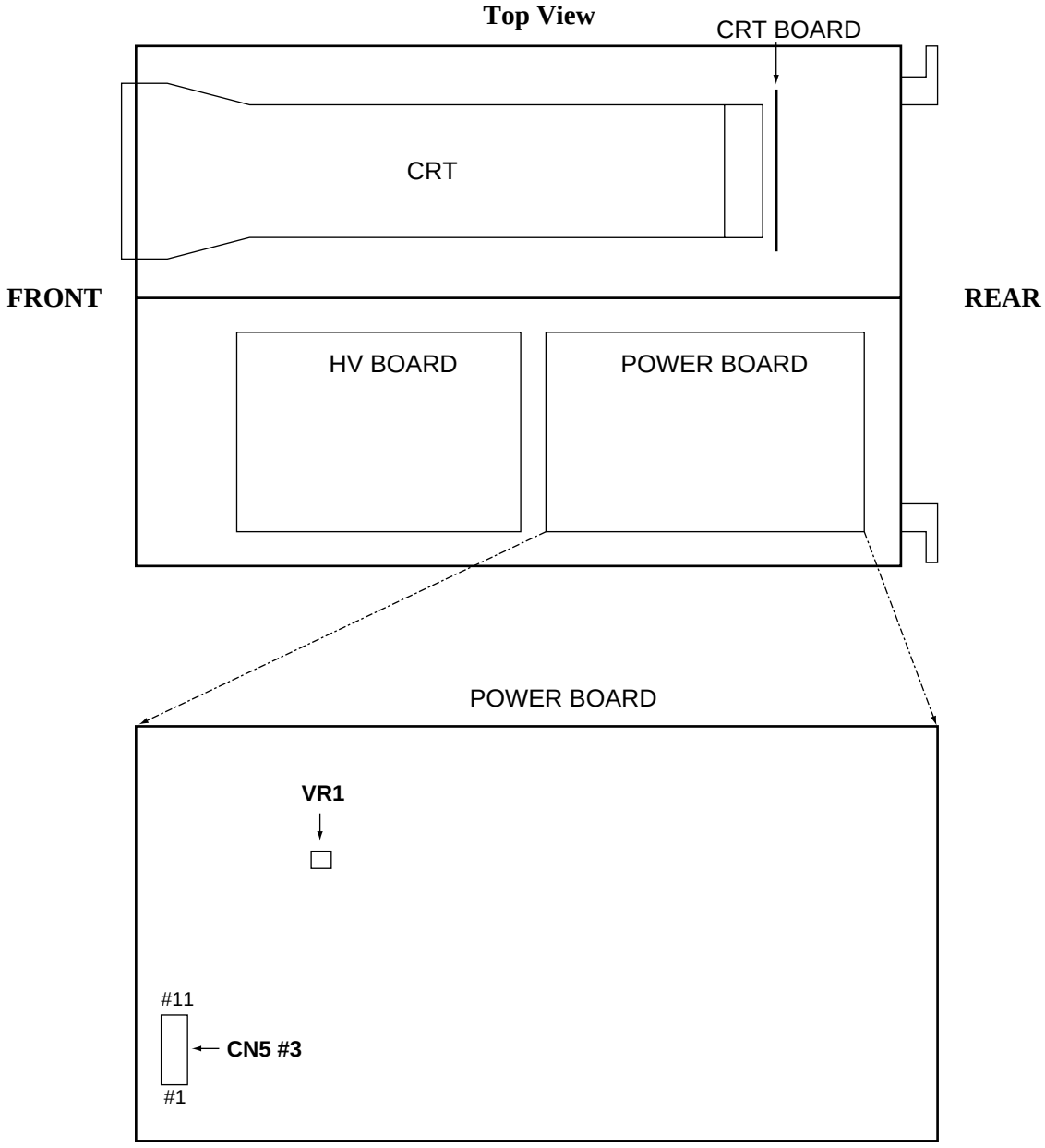


Figure 2.1.1 POWER BOARD

②ANA BOARD Ⅰ

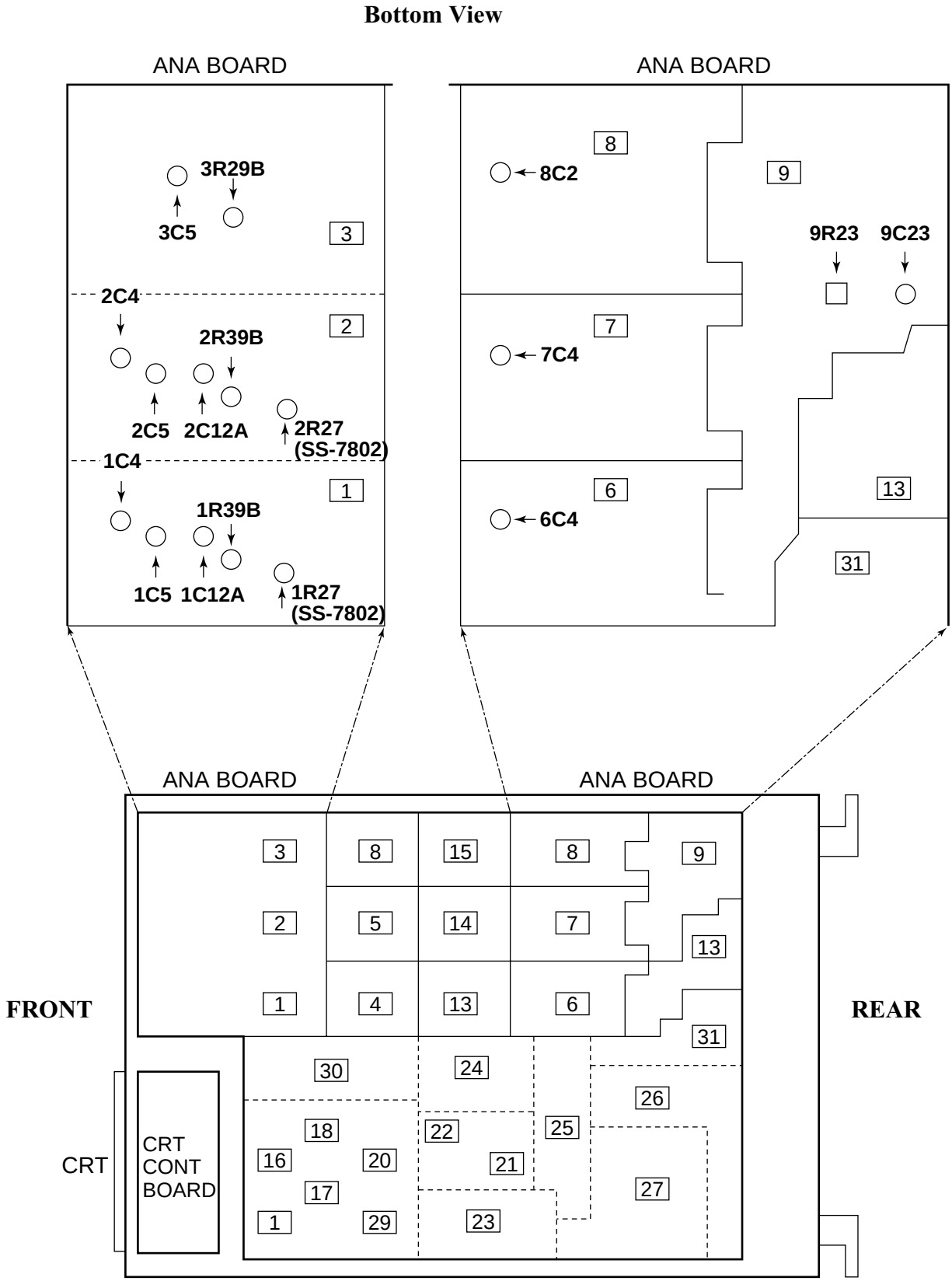


Figure 2.1.2 ANA BOARD Ⅰ

③ANA BOARD Ⅱ

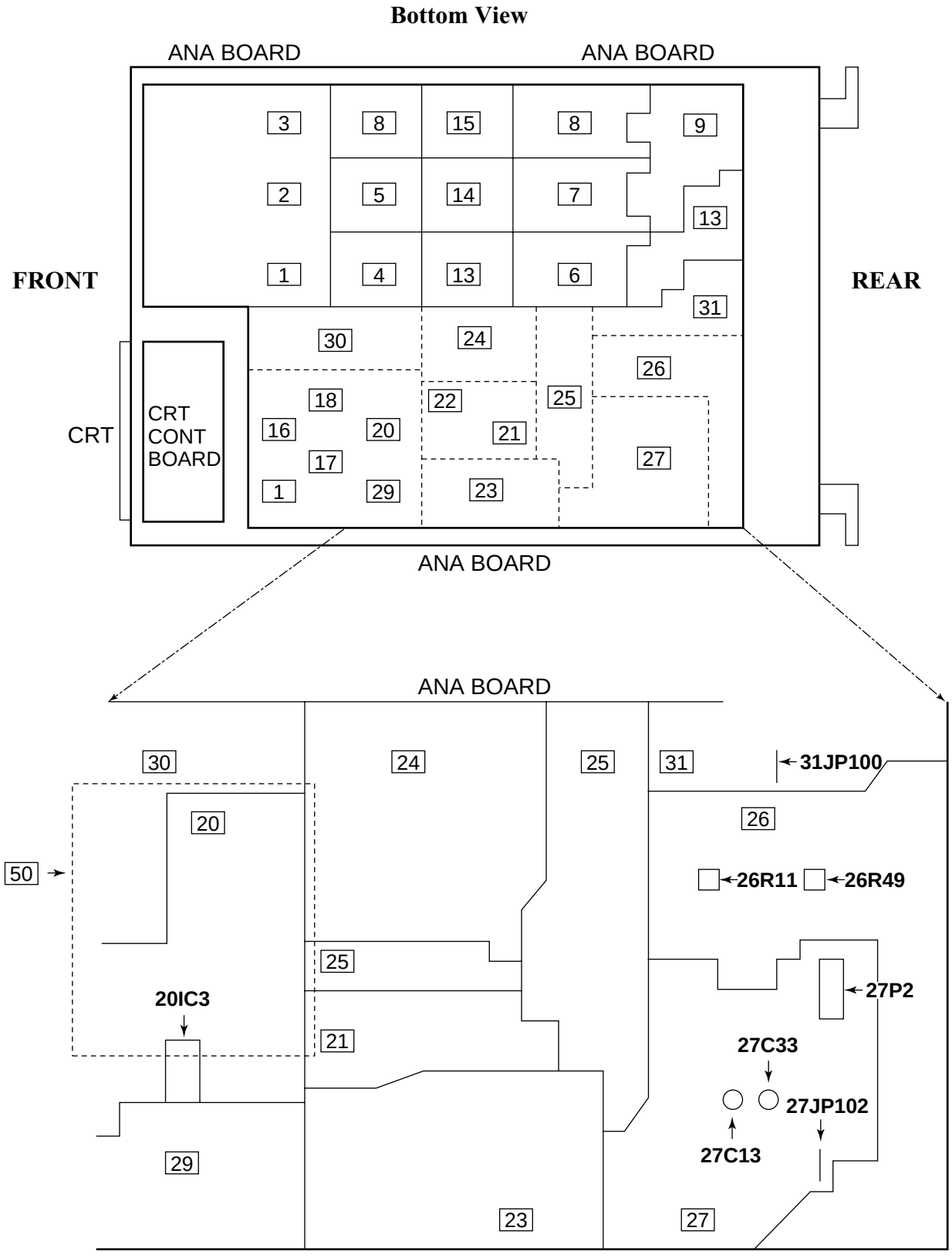


Figure 2.1.3 ANA BOARD Ⅱ

④ **HV BOARD**

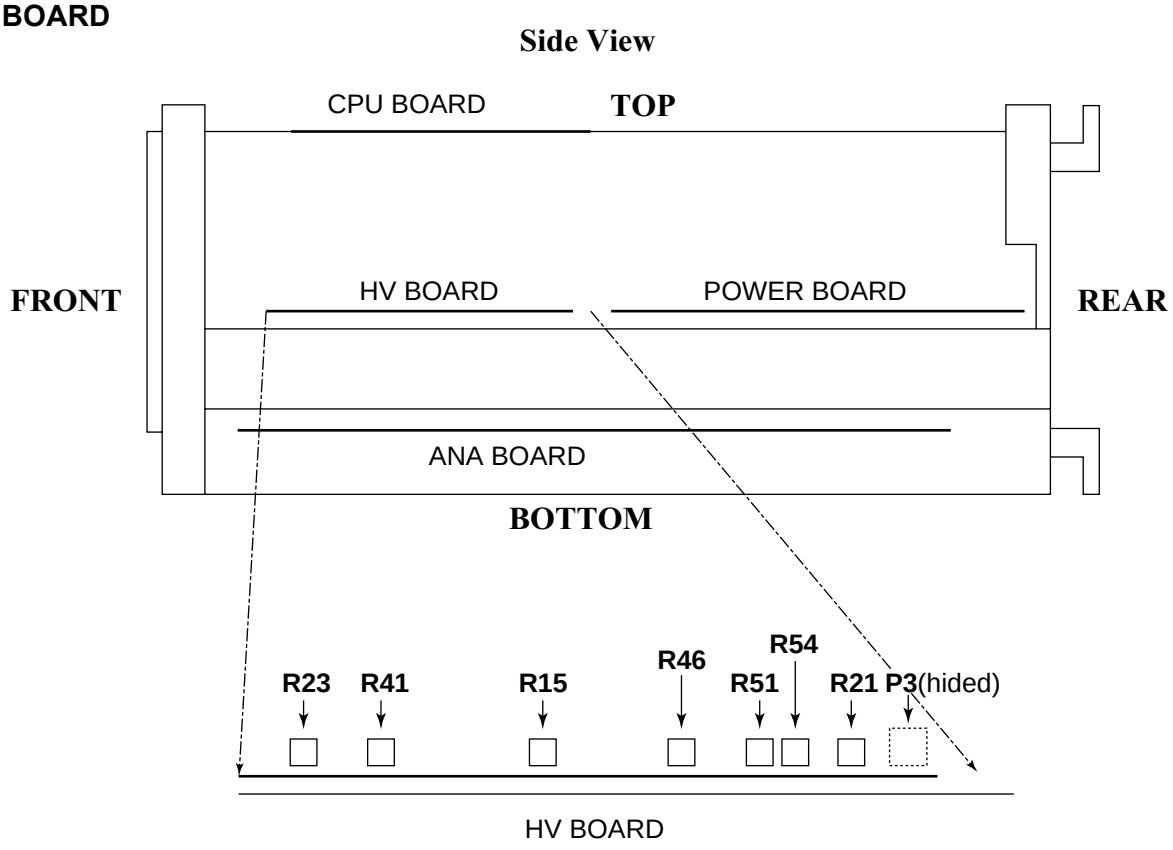


Figure 2.1.4 HV BOARD Ⅰ (SS-7810/05/04)

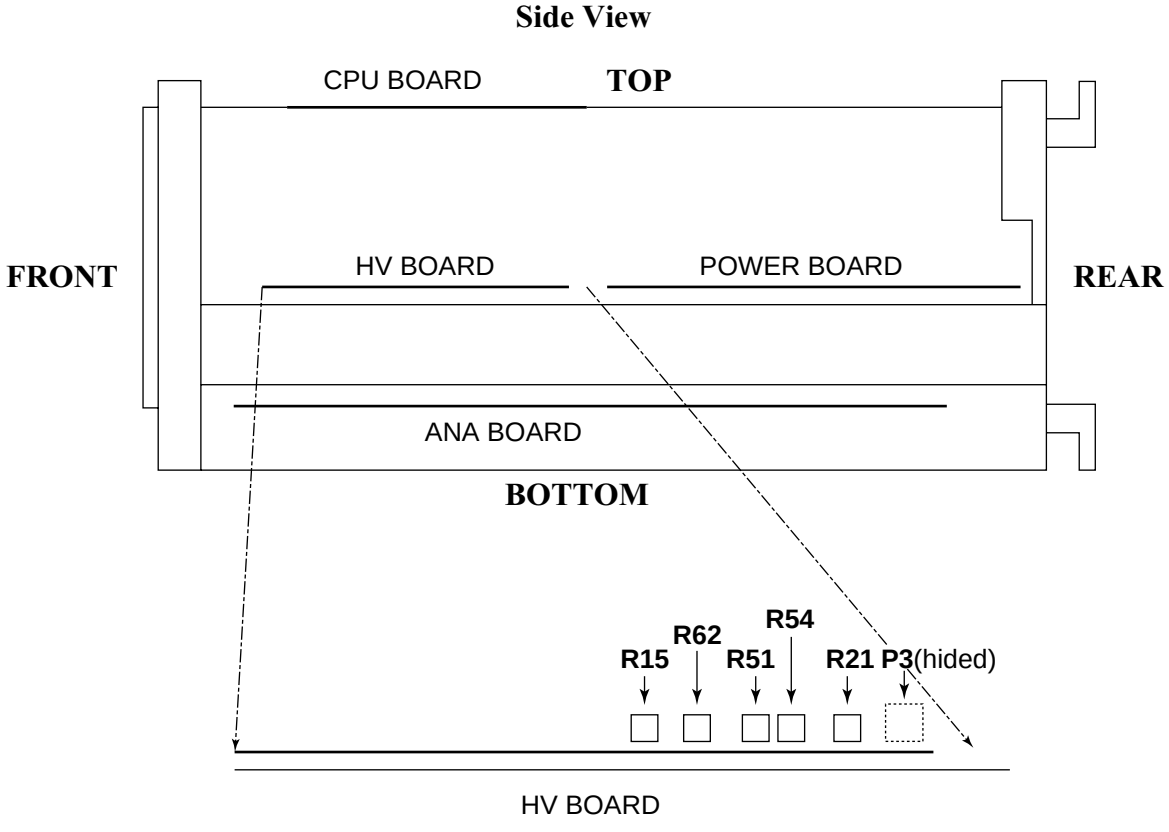


Figure 2.1.5 HV BOARD Ⅱ (SS-7810)

⑤ V MAIN BOARD Ⅰ (SS-7810)

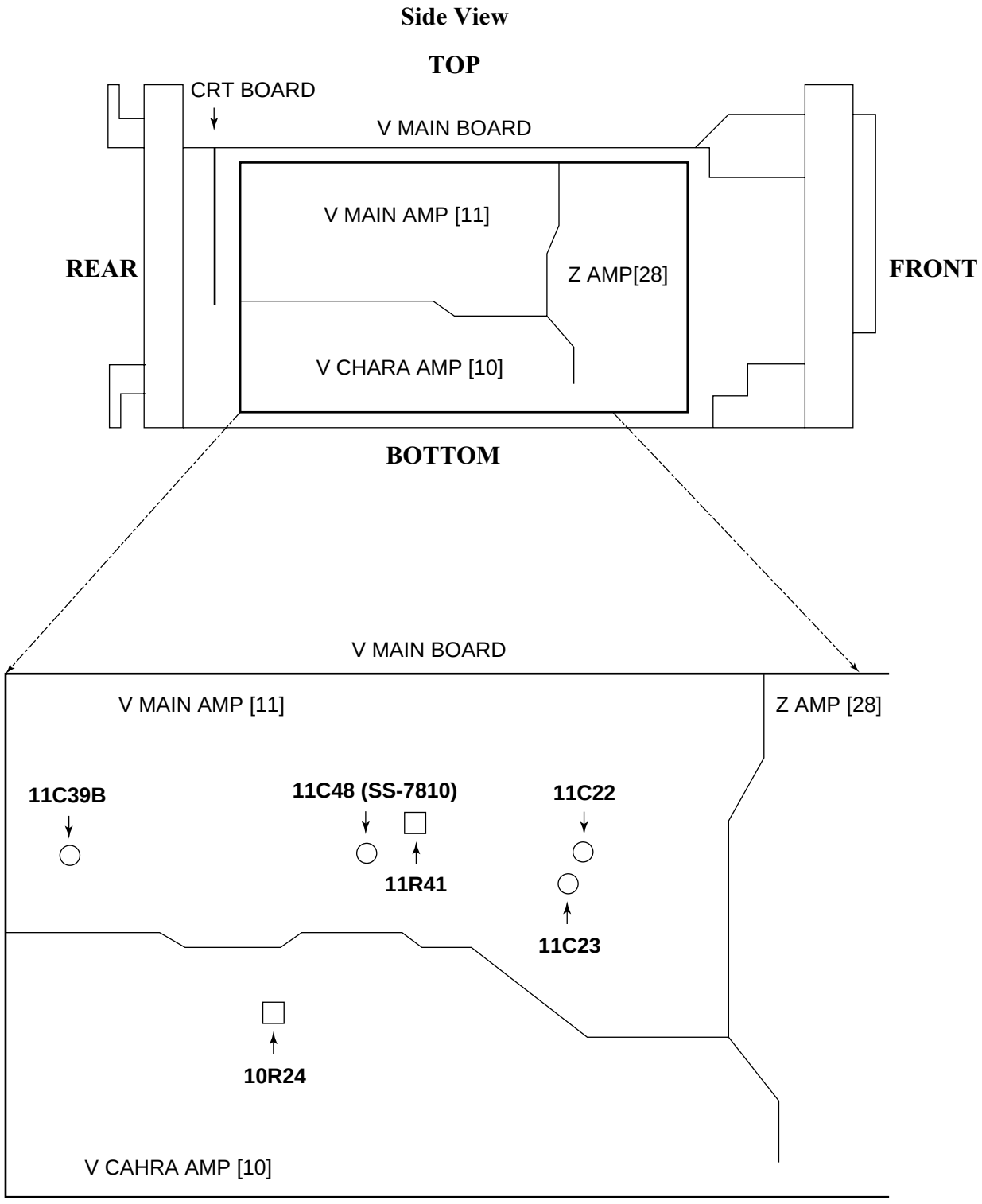


Figure 2.1.6 V MAIN BOARD Ⅰ (SS-7810/05/04)

2.2 DC Power Supply

<table>
<tr><td>Item</td><td>Description</td></tr>
<tr><td>Rating and test point</td><td>
<table>
<tr><th>DC voltage</th><th>Accuracy</th><th>Ripple voltage</th><th>Test point</th><th>Adjuster</th></tr>
<tr><td>-12V</td><td>± 0.5%</td><td>3mVp-p or less</td><td>ANA BOARD 27P2 (BLUE)</td><td>39VR1</td></tr>
<tr><td>+50V</td><td>± 2.0%</td><td>5mVp-p or less</td><td>ANA BOARD 27JP102</td><td>–</td></tr>
<tr><td>+12V</td><td>± 1.5%</td><td>3mVp-p or less</td><td>ANA BOARD 27PS (RED)</td><td>–</td></tr>
<tr><td>+5V</td><td>± 3.0%</td><td>40mVp-p or less</td><td>ANA BOARD 31JP100</td><td>–</td></tr>
<tr><td>+150V</td><td>± 3.0%</td><td>20mVp-p or less</td><td>POWER BOARD CN5 #3</td><td>–</td></tr>
</table>
</td></tr>
<tr><td>Equipment</td><td>• Digital multimeter: VOAC7411 or equivalent
• 1mV/div oscilloscope with a probe of 1:1 attenuation ratio</td></tr>
<tr><td>Procedure</td><td>――DC Voltage ――
① Chcek a voltage between the test points and ground with a digital multimeter.
② Adjust -12 V with 39VR1. within 11.94 to 12.06.
――Ripple Voltage ――
③ Set SWEEP MODE to SINGLE.
④ Check the ripple voltage of each power supply with a 1mV/div oscilloscope (use a probe of 1:1attenuation ratio).</td></tr>
<tr><td>Reference</td><td>If -12 V is adjusted, the other power supplies should be meet to the specification.</td></tr>
<tr><td>Test/ Adjustment Location</td><td>39VR1, +150V 39 CN5 #3: See "Figure 2.1.1 POWER BOARD"
• 27P2 (BLUE, -12V), 31JP100 (+5V), 27P2 (RED, +12V), 27JP102 (+50V):
See "Figure 2.1.3 ANA BOARD II"</td></tr>
</table>

2.3 CRT Display

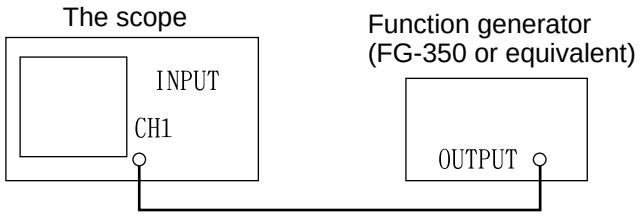
2.3.1 CRT Cathode Voltage

Item	Description
Rating	-1975V ±20V
Equipment	• Digital multimeter: VOAC7411 or equivalent • High-voltage probe (adjusted one)
Note	• Adjustment of the CRT cathode voltage affects most of the items. When it is within the specification, do not adjust it. • When the CRT cathode voltage is adjusted, check/adjust the affected items in accordance with Table 2.1.5.
Procedure	① Use the digital multimeter (high-voltage probe used) to check a voltage between **33 P3 #4** and **GND**. ② When a check result is nonstandard, adjust it to -1,975V with **33R15 HV ADJ**.
Check/ Adjustment Location	33P3, 33R15 : See "Figure 2.1.4 HV BOARD Ⅰ"

2.3.2 CRT Heater Voltage

Item	Description
Rating	5.6 to 6.1 Vrms (When SS-7802's Serial Number is XXXX 268 or more, it's 6.0 to 6.6 Vrms.)
Equipment	Digital multimeter with rms function: VOAC7411 with SC306 (Battery Unit) or equivalent
Procedure	① At MIN load, check a voltage between **33 P3 #5** and **33 #6** using the digital multimeter. • The MIN load is as follows: INTEN : Fully counterclockwise READ OUT : OFF (not displayed) FOCUS : Fully clockwise ② When a check result is nonstandard, adjust it to **5.80 Vrms** (When SS-7802's Serial Number is XXXX 268 or more, it's 6.3 Vrms.) with **33 R21 HEATER**. ③ At MAX load, check a heater voltage. • The MAX load is as follows: INTEN : Fully clockwise READ OUT : OFF (not displayed) FOCUS : Fully counterclockwise TIME/DIV : 500 μ s/div
Check/ Adjustment Location	33P3, 33R21 : See "Figure 2.1.4 HV BOARD Ⅰ"

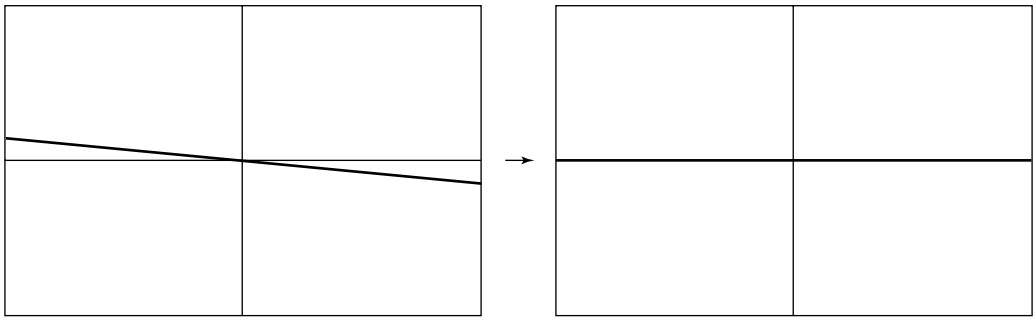
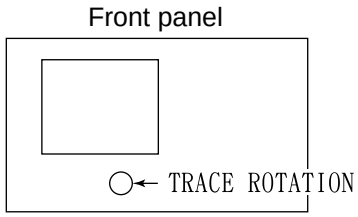
2.3.3 Focus

Item	Description
Rating	The trace should be focused when the【FOCUS】control is positioned between plus minus 45 ° from the midrange.
Connection	
Procedure	① Set the instrument as follows: INTEN : To such an extent that the trace can be slightly seen READ OUT : To such an extent that the characters can be slightly seen FOCUS : midrange ② Check **33 P3 #1** with the digitl multimeter (high-voltage probe used) and adjust to **-625V** with **33 R51**. ③ Input a sine wave (1KHz) and adjust the amplitude to 4 div. ④ Adjust the following variable resistors to optimize the focus. 33 R23, 33 R41, 33 R54
Check/ Adjustment Location	33 P3, 33 R51, 33 R23, 33 R41, 33 R54 : See "Figure 2.1.4 HV BOARD Ⅰ"

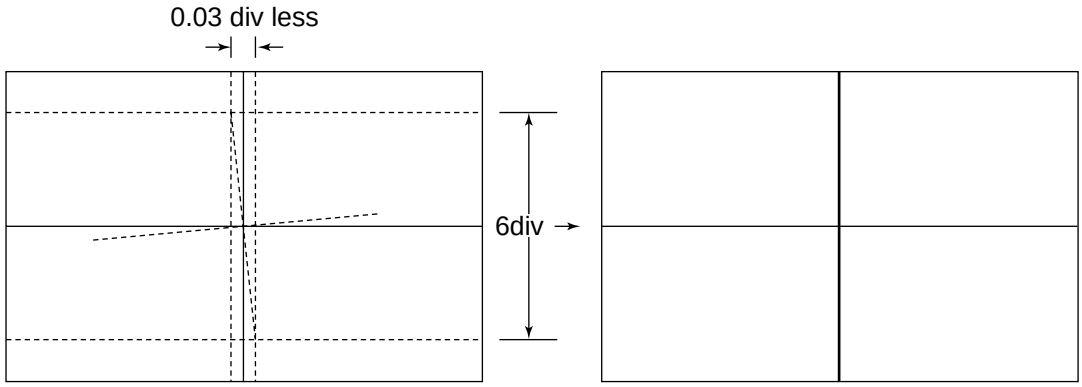
2.3.4 Intensity

Item	Description
Rating	• The trace should disappear when the【INTEN】control is turned fully counterclockwise. • The characters should disappear when the【READOUT】control is turned fully counter-clockwise.
Procedure	① Set the scope as follows so that a spot is displayed. INTEN : Fully counterclockwise READOUT : OFF (not displayed) HORIZ DISPLAY : X-Y ② Adjust **33 R46 CUT OFF** so that the spot disappear thoroughly. ③ Set **HORIZ DISPLAY to A**. ④ Set **TIME/DIV** to **100 μs/DIV**. ⑤ Set the **INTEN** to **10 O'clock position**. ⑥ Adjust the brightness of Intensity by using adjustment menu so that trace line is slighly appear. ⑦ Set READOUT INTEN to the 12:00 position and make sure that the characters have not disappeared. • Refer to "2.1.3 Manual Adjustment Menu".
Adjustment Location	33R46 : See "Figure 2.1.4 HV BOARD "

2.3.5 Trace Rotation

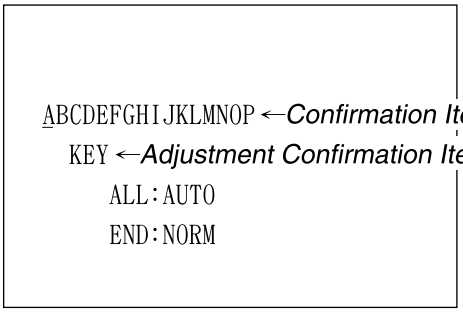
Item	Description
Rating	The horizontal trace should be aligned with the horizontal graticule.
Procedure	① Set the scope as follows. HORIZ DISPLAY : A SWEEP MODE : AUTO TIME/DIV : 1 ms/div ② Adjust with **TRACE ROTATION** and align the horizontal trace.
Waveform on Screen	 Dislocation of horizontal trace from horizontal graticule ② Align horizontal trace with horizontal graticule
Adjustment Location	

2.3.6 Orthogonality

Item	Description
Rating	±0.03/6 div or less
Procedure	① In the adjustment menu, select the ORTHOGO adjustment menu. ② Press a function key. A crosshair cursor will appear. ③ Adjust the value and align the vertical cursor with the vertical graticule.
Waveform on Screen	 Dislocation of Vertical Trace from Vertical Graticule ③ Align Vertical Trace with Vertical Graticule

2.4 Check the Key Function in Automatic Confirmation Mode

Check the function of the keys, controles, and pulse switches on the front panel. In this section, check only the functions of those keys. For the other items, refer to "2.12 Automatic Confirmation".



Procedure

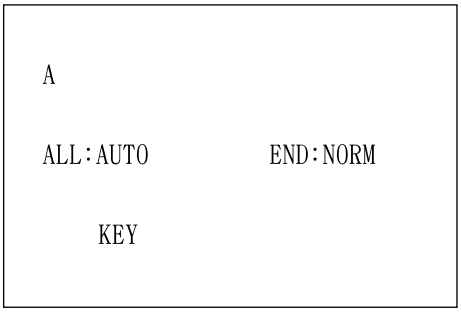
——*Entering the Automatic Confirmation Menu* ——

①Press △V-△t-OFF in "the manual adjustment menu screen".

- The automatic confirmation menu is displayed.

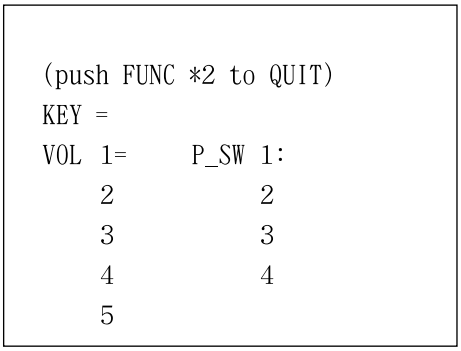
——*Selecting the Automatic Conifirmation Item A* ——

②Select an item A for automatic confirmation.



←

◇Only A (KEY) is displayed.



←

——*Execute the Automatic Confirmation* ——

③Press NORM.

- The KEY SW confirmation screen is displayed.

——*Confirming the Operations* ——

④Press all the keys and pulse switches to confirm that a display "KEY=**XXXX**" will change.

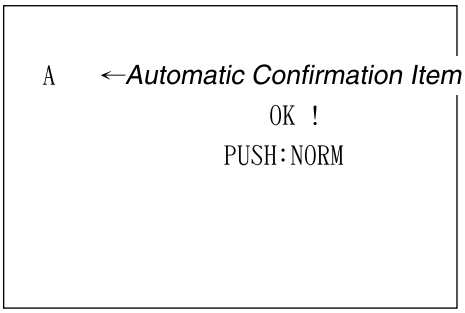
⑤Turn all VRs to confirm that VOL is set to **0** to **4095**.

⑥Confirm that "P_SW1:>" is displayed by turning all the pulse switch to the right, and that "P_SW1:<" is displayed by turning them to the left.

——*End of Confirmation* ——

⑦Press 【FUNCTION】.

- "KEY=**23**" is displayed.



←

⑧Press 【FUNCTION】.

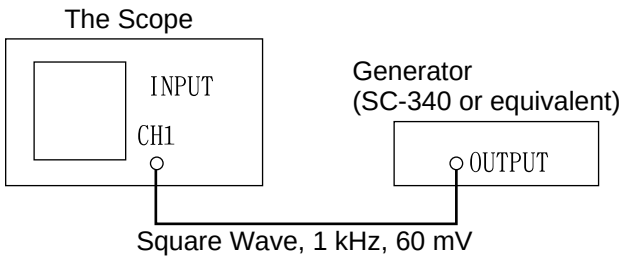
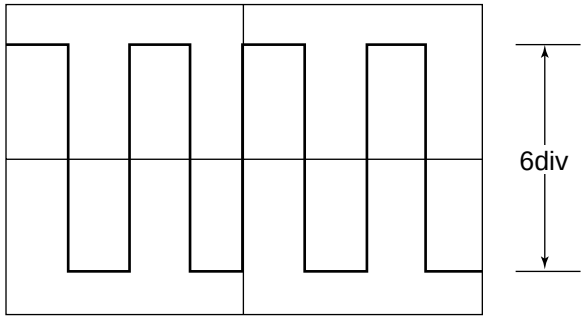
- "OK!" is displayed.

⑨Press NORM.

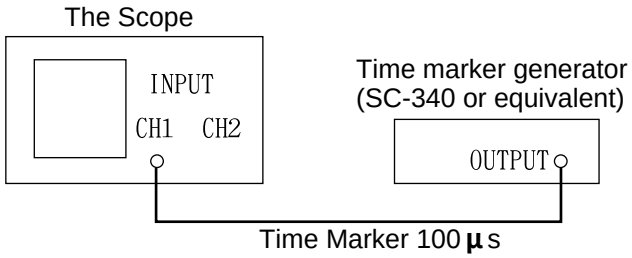
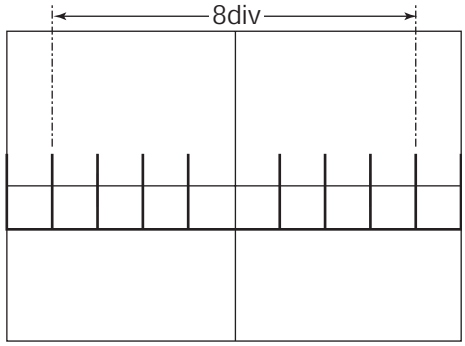
- You are returned to a normal screen.

2.5 Gain (Coarse)

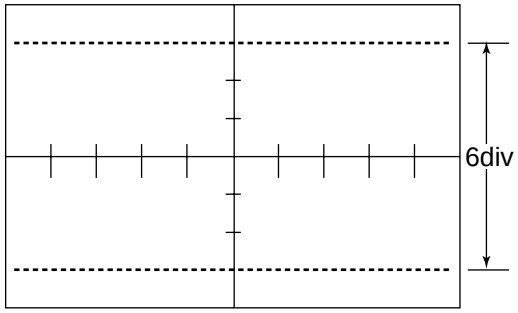
2.5.1 Vertical Gain

Item	Description
Rating	± 2% or less
Connection	
Procedure	① Set VOLTS/DIV of CH1 to **10 mV/div**. ② Input a square wave (1kHz, 60mV) to CH1. ③ CH1 10mV GAIN in the Adjustment Menu to set VALUE 180. ④ Adjust **11R41** to **6 div** amplitude.
Waveform on Screen	
Adjustment Location	11R41 : See "Figure 2.1.6 V MAIN BOARD Ⅰ"

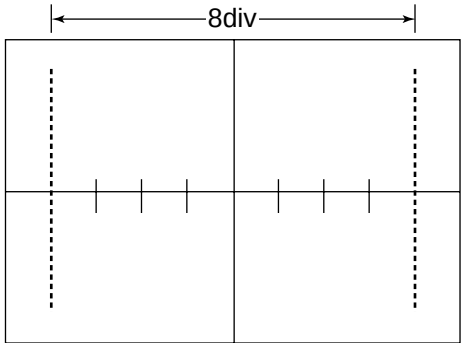
2.5.2 Horizontal Gain

Item	Description
Connection	
Procedure	① "AS 100-500 μs" in the Adjustment Menu to set VALUE 128. ② Input a time marker 100 μs to CH1. ③ Set A TIME/DIV to 100 μs/div. ④ Adjust **26R11** so that the pulse meet to graticule over ±4div from the screen center.
Waveform on Screen	
Adjustment Location	26R11 : See "Figure 2.1.3 ANA BOARD Ⅱ"

2.5.3 △V Readout Gain

Item	Description
Procedure	① "Y-CHRG" in the Adjustment Menu to set VALUE 128. ② Set VOLTS/DIV to **10 mV/div**. ③ Use [△V-△t-OFF] to select **△V** and display the △V cursor. ④ Adjust with **10R24** so that an intercursor distance will be **6 div** on △V=60 mV.
Waveform on Screen	
Adjustment Location	SS-7810 (10R24) : See "Figure 2.1.6 V MAIN BOARD Ⅰ" SS-7805/04 (10R24) : See "Figure 2.1.7 V MAIN BOARD Ⅱ"

2.5.4 △t Readout Gain

Item	Description
Procedure	① Use [△V-△t-OFF] to select △t and display the △t cursor. ② Set TIME/DIV to **1 ms/div**. ③ "X-CHRG" is the Adjustment Menu to set VALUE 128. ④ Adjust with **26R49** so that an intercursor distance will be 8 div on △t=8ms.
Waveform on Screen	
Adjustment Location	26R49 : See "Figure 2.1.3 ANA BOARD **II**"

2.6 Crystal Oscillation Frequency

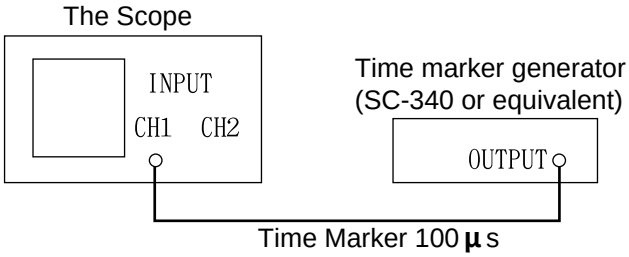
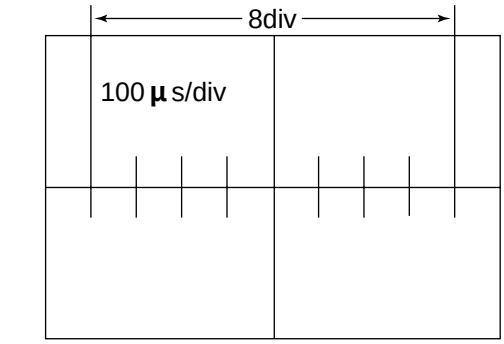
Item	Description
Rating	20MHz ± 100ppm (± 0.01%: 19,998 to 20,002MHz)
Equipment	Frequency Counter
Procedure	Check **20IC3 #1** with the counter.
Check Location	20IC3 : See "Figure 2.1.3 ANA BOARD **II**"

2.7 Balance Coarse

2.7.1 Balance Coarse (Automatic Adjustment Menu "D, L")

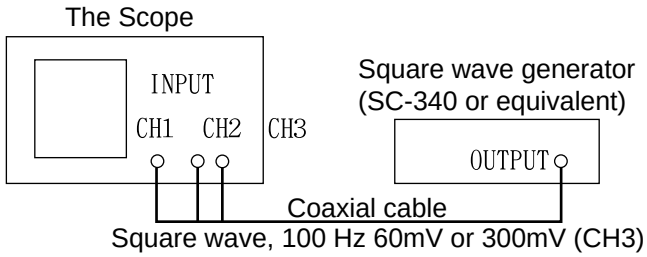
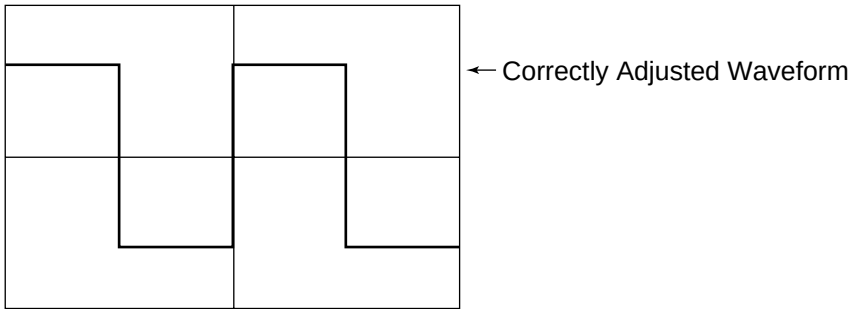
<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Procedure</td><td>①Enter the Adjustment Menu Screen.
(refer to "2.1.3 Menu Screen")
②Press TCK/C2 in the adjustment menu screen.
•Display the automatic adjustment menu screen.
③Select an item "D, L" for automatic adjustment.
Display the symbol for the automatic adjustment item and undisplay those for the non-automatic adjustment items.
(refer to 2.11 Automatic Adjustment)
④Press NORM to execute the automatic adjustment items (D, L).</td></tr>
<tr><td>Waveform on Screen</td><td>D L ← symbol of item
ALL :AUTO END :NORM
V-BAL ← Adjustment item</td></tr>
<tr><td>Adjustment Symbol D: V-BAL</td><td>• DC BAL : 2mV, 5mV, 100mV and 1V of CH1 and CH2
• STEP BAL : CH1 to CH3</td></tr>
<tr><td>Rating</td><td>• DC BAL : 0.5div
• STEP BAL
10mV TO 5V/dib : 0.5div
2mV, 5mV : 5mV</td></tr>
<tr><td>Error display</td><td>
<table>
<tr><th>Menu No.</th><th>Detail</th><th>Menu No.</th><th>Detail</th></tr>
<tr><td>000</td><td>CH1 2mV DC BAL</td><td>006</td><td>CH2 100mV DC BAL</td></tr>
<tr><td>001</td><td>CH1 5mV DC BAL</td><td>007</td><td>CH2 1V DC BAL</td></tr>
<tr><td>002</td><td>CH1 100mV DC BAL</td><td>008</td><td>CH1 STEP BAL</td></tr>
<tr><td>003</td><td>CH1 1V DC BAL</td><td>009</td><td>CH2 STEP BAL</td></tr>
<tr><td>004</td><td>CH2 2mV DC BAL</td><td>010</td><td>CH3 STEP BAL</td></tr>
<tr><td>005</td><td>CH2 5mV DC BAL</td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Adjustment Symbol L: H-MAG</td><td>• Magnification center</td></tr>
<tr><td>Rating</td><td>• Magnification center: ±3.0 div or less</td></tr>
<tr><td>Error display</td><td>
<table>
<tr><th>Menu No.</th><th>Detail</th><th>Menu No.</th><th>Detail</th></tr>
<tr><td>001</td><td>Out of center at MAG ON</td><td>002</td><td>Out of center at MAG OFF</td></tr>
</table>
</td></tr>
<tr><td>Jig</td><td>Unnecessary</td></tr>
</table>

2.7.2 Magnification Gain

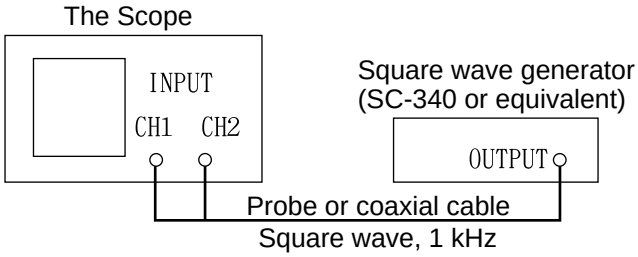
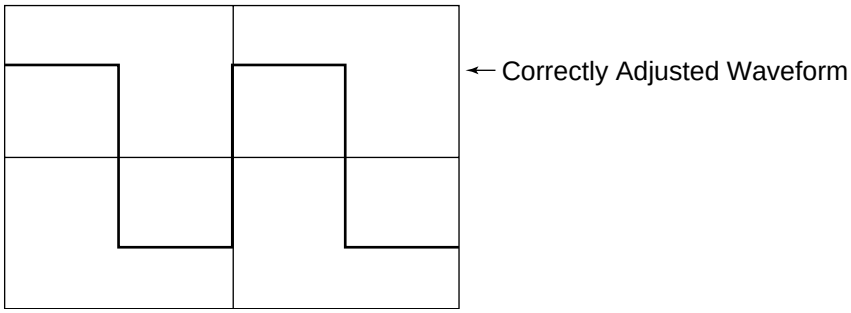
Item	Description
Connection	
Procedure	① Set the scope as follows: A TIME/DIV : 1ms, MAG×10 : OFF ② Input the 100μs time marker to CH1. ③ Set MAG × 10 ON. ④ Adjust with **MAG SWEEP REF** in the adjustment menu so that the pulse meet to graticule. over ±4div, from the screen center. [Note] New setting VALUE is effective by pressing MAG×10 after saving VALUE by pressing the FUNCTION Key.
Waveform on Screen	 Adjust the sweep time with "MAG SWEEP REF".

2.8 Vertical Deflection System

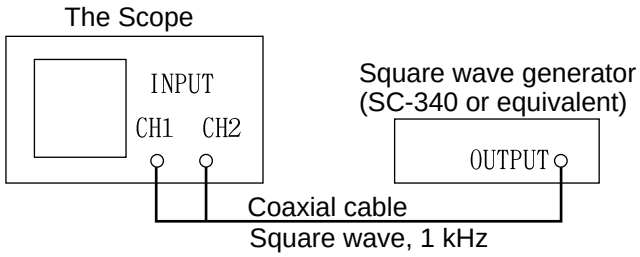
2.8.1 Flatness CH1, CH2, CH3 (SS-7810)

Item	Description
Connection	
Procedure	① Set VOLTS/DIV of CH1 and CH2 to 10mV, CH3 to 50mV. ② Set TIME/DIV to 1ms. ③ Set DC/AC of CH1, CH2 and CH3 to DC. ④ Input the 100Hz 60mV or 300mV(CH3) from the SC-340. ⑤ Adjust Flatness of square wave with the **1R39B(CH1), 2R39B(CH2), 3R39B(CH3)**
Waveform on Screen	
Adjustment Location	See "2.1.9② ANA BOARD Ⅰ"

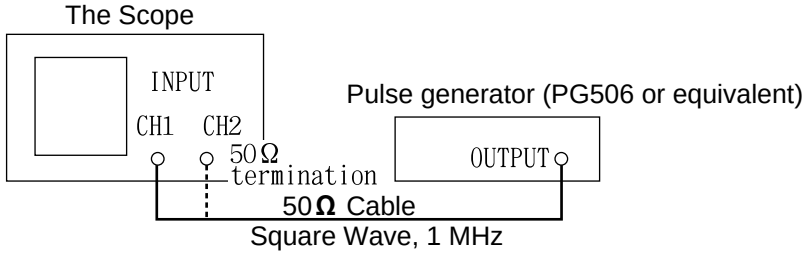
2.8.2 Attenuator Compensation CH1/CH2

<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Rating</td><td>±2.0% or Less</td></tr>
<tr><td>Connection</td><td> 
</td></tr>
<tr><td>Procedure</td><td>――CH1 (CH1 ATT UNIT)――
① Connect CH1 INPUT to the output of the square wave generator (1kHz) with coaxial cable.
② Adjust the waveform of 100mV/div to flat with 1C5, and that of 1V/div with 1C12A (refer to the following table).
③ Set VOLTS/div to 10mV.
④ Connect CH1 INPUT to the output of the square wave generator (1kHz) with a probe.
⑤ Adjust the waveform to flat with the Variable Capacitor on the probe.
⑥ Set the VOLTS/div to 100mV, and adjust the waveform with 1C4.
――CH2 (CH2 ATT UNIT)――
⑦ Adjust CH2 in accordance with the following table as same as CH1
<table>
<tr><th rowspan="2">Channel 1</th><th rowspan="2">Connection</th><th colspan="3">VOLTS/DIV</th></tr>
<tr><th>10mV/div</th><th>100mV/div</th><th>1V/div</th></tr>
<tr><td rowspan="2">CH1</td><td>Coaxial cable</td><td>――</td><td>1C5</td><td>1C12A</td></tr>
<tr><td>Probe</td><td>Variable capacitor on the probe</td><td>1C4</td><td>――</td></tr>
<tr><td rowspan="2">CH2</td><td>Coaxial cable</td><td>――</td><td>2C5</td><td>2C12A</td></tr>
<tr><td>Probe</td><td>Variable capacitor on the probe</td><td>2C4</td><td>――</td></tr>
</table></td></tr>
<tr><td>Waveform on Screen</td><td> 
</td></tr>
<tr><td>Adjustment Location</td><td>See "2.1.2② ANA BOARD Ⅰ"</td></tr>
</table>

2.8.3 Attenuator Compensation CH3 (SS-7810)

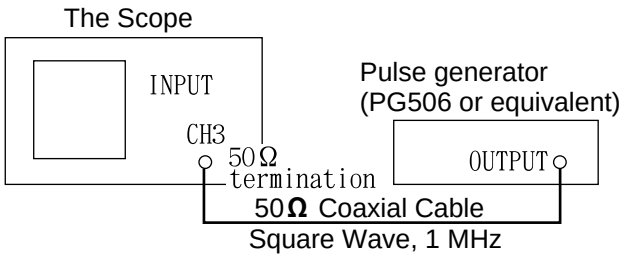
Item	Description
Rating	± 2.0% or less
Connection	
Procedure	――*CH3 (CH1 ATT UNIT)*―― ① Connect CH3 INPUT to the output of the square wave generator 1kHz with coaxial cable. ② Adjust the waveform of 50mV/div to flat with **3C5**.
Waveform on screen	Refer to "2.8.2 Attenuator Compensatin"
Adjustment Location	See "2.1.2 ② ANA BOARD Ⅰ"

2.8.4 High-frequency Compensation CH1/CH2

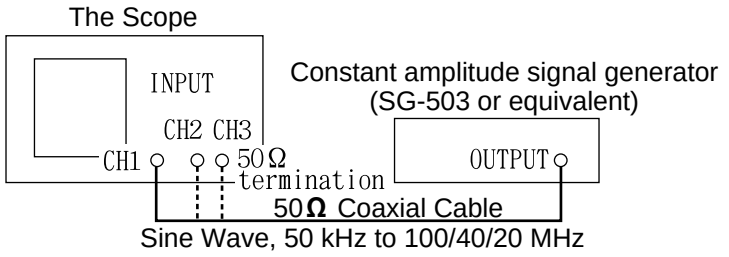
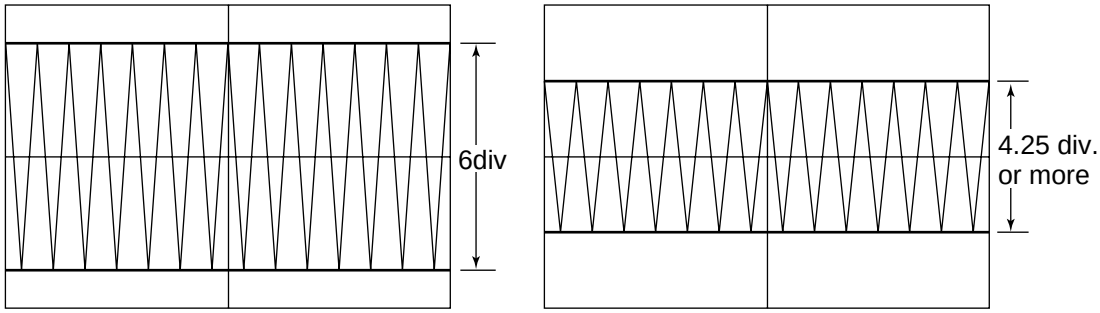
Item	Description
Rating	Overshoot : 3% at 10mV/div, 50Ω termination
Connection	
Procedure	① Set VOLTS/DIV of CH1 and CH2 to **10 mV**. ② Input a square wave (1 MHz) from the PG-506 and adjust the amplitude to **6 div**. ③ Adjust the waveform with the following variable capacitors and resistors.
Adjustment Location	ANA BOARD : See "Figure 2.1.2 ANA BOARD Ⅰ" V MAIN BOARD : See "Figure 2.1.6 V MAIN BOARD Ⅰ"

	CH1	CH2	Common
ANA BOARD	6C4	7C4	9R23, 9C23
V MAIN BOARD	——	——	11C22, 11C23, 11C39B, 11C48(SS-7810 ONLY)

2.8.5 High-frequency Compensation CH3 (SS-7810)

Item	Description
Rating	Overshoot : 6% at 50mV/div, 50Ω termination
Connection	
Procedure	① Set VOLTS/DIV of CH3 to **50 mV**. ② Input a square wave (1MHz) from the PG-506 and adjust the amplitude to **6 div**. ③ Adjust the waveform with **8C2**. [Note] Adjust to meet to both specifications of overshoot and frequency characteristic. For the frequency characteristic checking method, refer to "2.8.6 Bandwidth."
Adjustment Location	8C2 : See "Figure 2.1.2 ANA BOARD Ⅰ"

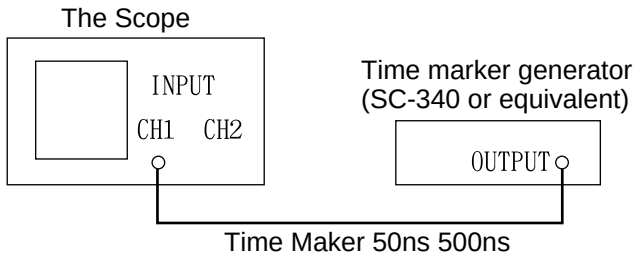
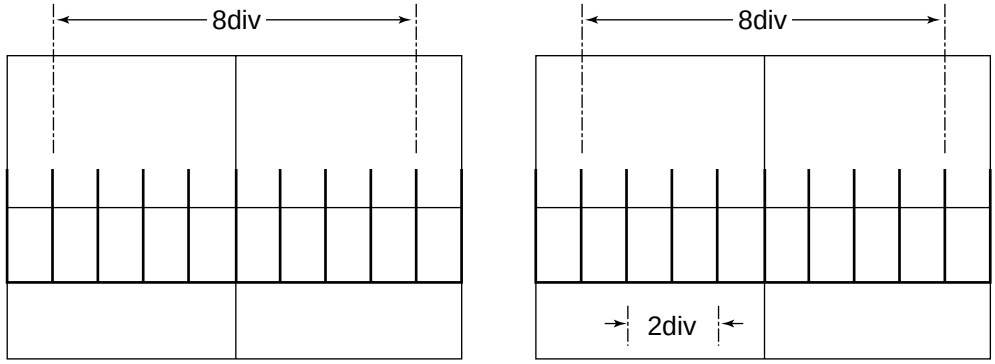
2.8.6 Bandwidth

Item	Description
Rating	SS-7810 (CH1 to CH3) : DC to 100MHz -3dB SS-7805 (CH1, CH2) : DC to 50MHz -3dB SS-7804 (CH1, CH2) : DC to 40MHz -3dB
Connection	
Procedure	——*CH1, CH2*—— ① Set VOLTS/DIV of CH1 and CH2 to **10 mV**. ② Input a sine wave (50kHz) from the signal generator and adjust the amplitude to **6 div**. ③ Read the amplitude when the frequency of the signal generator is changed to the respective specified frequencies. ——*CH3 (SS-7810)*—— ④ Set VOLTS/DIV of CH3 to **50 mV**. ⑤ Check the frequency bandwidth in the same manner as for CH1 and CH2.
Waveform on Screen	 ② Amplitude for Reference Frequency (50kHz): 6 div ③ Amplitude for Specified Frequency: 4.25 div or more
Reference	The following is a decibel conversion table to be applied when the reference amplitude is set to 6 div.

Amplitude (div)	6.0	4.4	4.3	4.25	4.2	4.1	4.0
Decibel (dB)	0.0	-2.7	-2.9	-3.0	-3.1	-3.3	-3.5

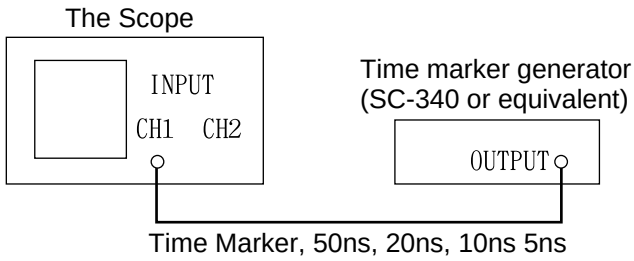
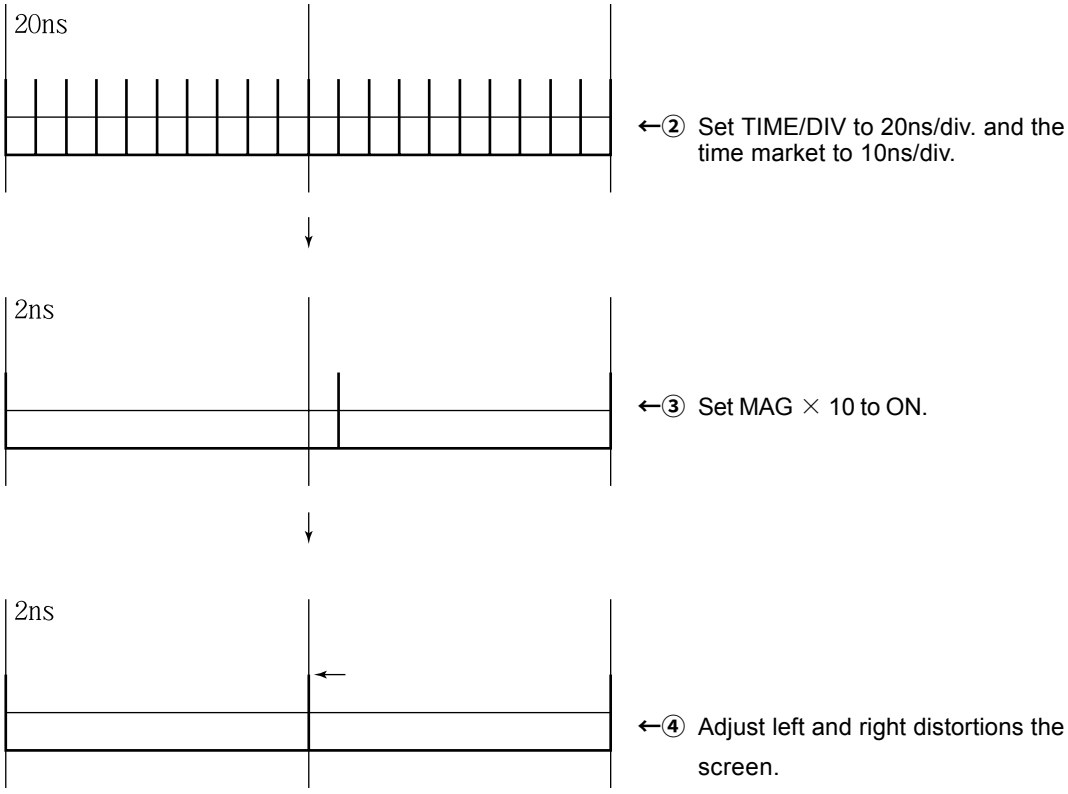
2.9 Horizontal Deflection system

2.9.1 High-speed Sweep Rate

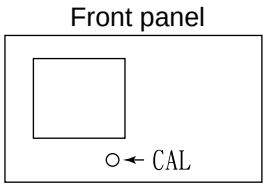
<table>
<tr><th>Item</th><th>Description</th></tr>
<tr><td>Rating</td><td>± 2% (Central 8 div of screen)
± 5% (Optional 2 div of central 8 div of screen)</td></tr>
<tr><td>Connection</td><td> 
</td></tr>
<tr><td>Procedure</td><td>① Adjust 500ns/div and 50ns/div in the adjustment menu. (Refer to the table below)
<table>
<tr><th>TIME/DIV</th><th>Adjustment Menu</th></tr>
<tr><td>A 500ns/div</td><td>AS 100-500ns</td></tr>
<tr><td>A 50ns/div (SS-7810)</td><td>AS 20-50ns</td></tr>
<tr><td>B 500ns/div (SS-7810)</td><td>BS 100-500ns</td></tr>
<tr><td>B 50ns/div (SS-7810)</td><td>BS 20-50ns</td></tr>
</table></td></tr>
<tr><td>Waveform
on Screen</td><td> 

Cantral 8 Div of Screen Optional 2 Div of Central 8 Div of Screen</td></tr>
</table>

2.9.2 Sweep Linearity at High-speed Sweep Rate (SS-7810)

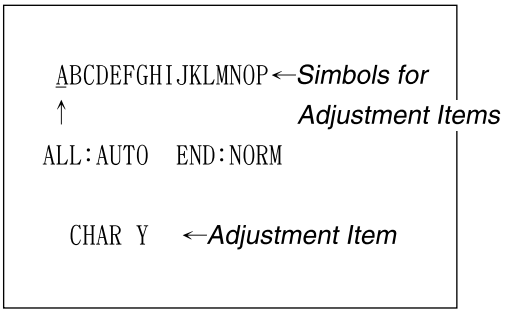
Item	Description
Connection	
Procedure	① Confirm A Sweep Rate (50ns/div, 20ms/div) before adjusting this item, if rating is out of range, adjust "2.9.1 High speed Sweep Rate." ② Set TIME/DIV to the scope to 20ns/div and the time marker to 10ns/div. ③ Set MAG × 10 to ON. ④ Adjust sweep linearity (left and right distortions of the screen) with **27C13** and **27C33**.
Waveform on Screen	
Adjustment Location	27C13, 27C33: See "Figure 2.1.3 ANA BOARD **II**"

2.10 Calibrator Output

Item	Description
Rating	0.6V ± 0.8%
Equipment	Digital multimeter (DCV): VOAC7411 or equivalent
Procedure	① Check a voltage between the **CAL** terminal and **ground** with digital multimeter. ② Adjust it to **+0.599 to +0.601** with "**CAL LEVEL**" in manual adjustment menu. ③ Save the setting value. • "the manual adjustmen menu" refer to 2-1-3 Menu Screen" ④ Turn on the power again. A 1 kHz square wave will be oscillated.
Check Location	

2.11 Automatic Adjustment

The following describes the automatic adjustment method.



Procedure

——*Connection*——

① Connect the adjustment jig IE-1066 to the SS-78∗∗.

- See 2.1.8 about connection.

——*Displaying the Automatic Adjustment Screen*——

② Press TCK/C2 in the adjustment menu screen change to the automatic adjustment menu screen.

- To enter the adjustment menu screen, refer to "2.1.3 menu Screen".

——*Selecting the Automatic Adjustment Item*——

③ Select some adjust items for automatic adjustment.

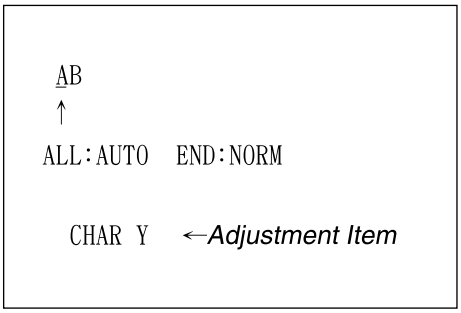
I . Press AUTO to display all the items (A to P).

- Every time AUTO is pressed, the all symbols are displayed/undisplayed altemately.

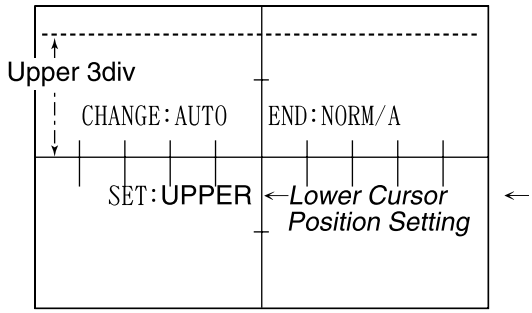
II . Turn【FUNCTION】to select the relevant symbol with a " ↑ " mark.

III . Press【FUNCTION】to determine the adjust item.

IV . *mark, use the jig.



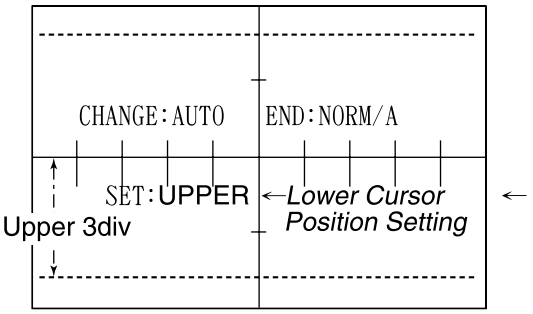
◇ The following shows an example of adjusting A and B automatically.



——*Setting the Screen Reference Position*——

④ Press NORM of SWEEP MODE.

- The upper cursor position setting screen (SET: **UPPER**) is displayed.

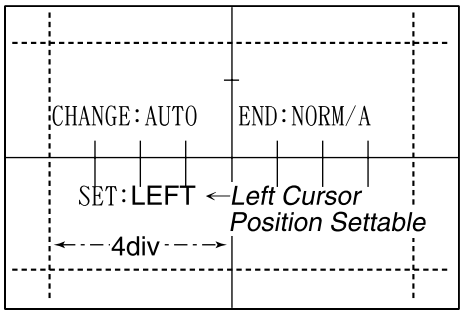


⑤ Turn or press【FUNCTION】to set the cursor to the position 3 div. above the horizontal center line.

⑥ Press AUTO of SWEEP MODE.

- The lower cursor position setting screen (SET: **LOWER**) is displayed.

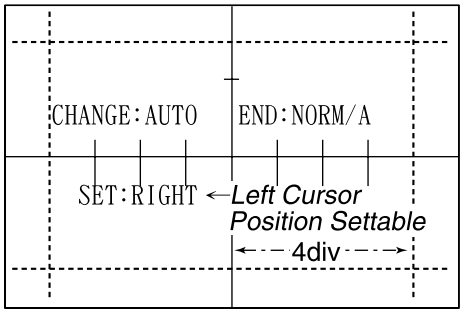
⑦ Turn or press【FUNCTION】to set the cursor to the position 3 div. below the horizontal center line.



⑧ Press AUTO .

- The left cursor position setting screen (SET: **LEFT**) is displayed.

⑨ Turn or press【FUNCTION】to set the cursor to the position 4 div to the left of the vertical center line.



⑩ Press AUTO.

- The right cursor position setting screen (SET: **RIGHT**) is displayed.

⑪ Turn or press【FUNCTION】to set the cursor to the position 4 div to the right of the vertical center line.

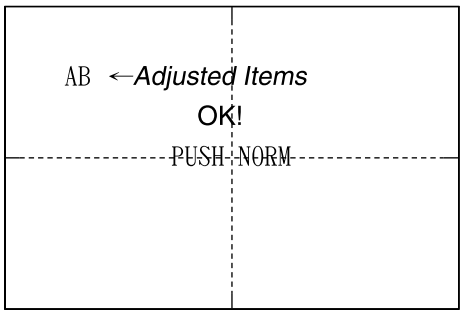
- Every time AUTO is pressed, the display in the SET field. The cursor position can be set in the indicated direction.

UPPER → LOWER → LEFT → RIGHT

——Performing Automatic Adjustment——

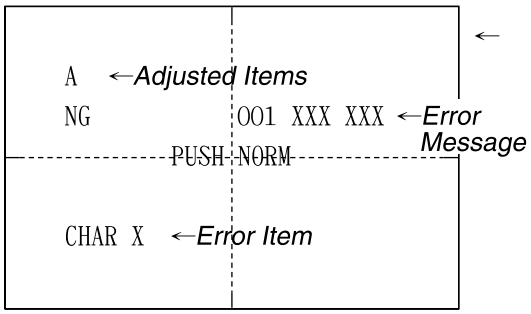
⑫ Press A of HORIZ DISPLAY.

- The displayed items are automatically adjusted in an alphabetic order.



◇When automatic adjustment is completed, "OK!" is displayed.

- The symbol for the automatically adjusted item is displayed at the upper left of the screen.
- The left figure shows that automatic adjustment of **A** and **B** has been performed.



◇Unless automatic adjustment is performed, "NG" is displayed.

- An error item is displayed at the bottom of the screen and an error message is displayed in the NG field, respectively.
- The left figure shows that the item A has been automatically adjusted and the item B has an error.

——Cancelling Automatic Adjustment——

⑬ To cancel the automatic adjustment menu screen, press SGL/RST.

Table 2.11.1 Automatic Adjustment Item

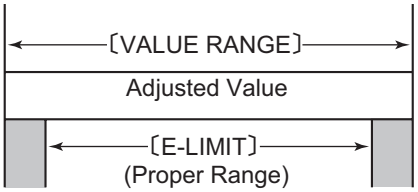
Item	Description	Page
A. CHAR Y	Cursor moving range and intercursor accuracy at △V cursor measurement time	2-47
B. CHAR X	Cursor moving range and intercursor accuracy at △t cursor measurement time	2-47
C. *V-GAIN	Vertical gain (CH1 to ↑CH3)	2-47
D. V-BAL	DC balance (CH1, CH2) and Step balance (CH1 to ↑CH3)	2-48
E. *V-VARI	Beginning of the effect of the vertical varlable (CH1, CH2)	2-48
F. ADD-BL	Add balance	2-48
G. CH2 INV	CH2 inversion balance	2-48
H. V-POSI	Vartical position (CH1 to ↑CH3)	2-49
I. *TRIG	Trigger level and trigger gain	2-49
J. H-SWP	Sweep rate (A/B)	2-49
K. H-LENG	Sweep length (A/B)	2-50
L. MAG	Magnification center	2-50
M. H-POSI	Horizontal position	2-50
↑N. BS-POPS	B sweep start position	2-50
↑O. B-DLY	Delay time	2-51
P. *X-Y	X-Y gain and position	2-51

* : Denotes the item for which an adjusting jig is required.

↑ : Except SS-7805/04.

2.11.2 Error message

- When automatic adjutment is not performed collectly, an error message is displayed as below.
- There are two type Error messages depends on a judgement.

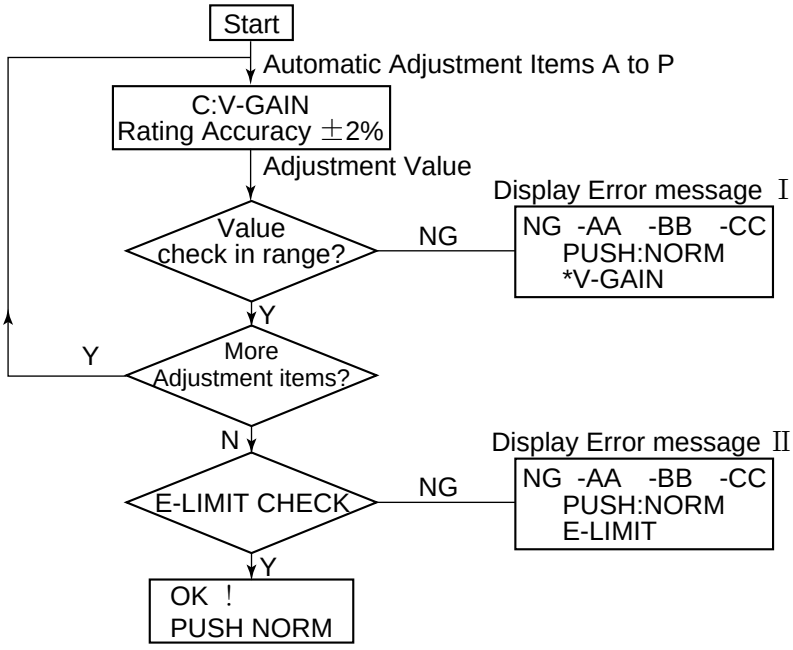


Error message Ⅰ : Unable the adjustment in〔VALUE RANGE〕
Error message Ⅱ : Completed the adjustment, but the adjusted value is close to upper or lower limit.

Range = Error

- Rating Accuracy : Refer to page 48 to 52
- 〔VALUE RANGE〕〔E-LIMIT〕: Refer to 2.13.5 Manual Adjustment Procedure

e.g.



a. Error message Ⅰ

- Display of Error message Ⅰ

```
NG    - AA - BB - CC
        PUSH:NORM
        *V-GAIN
```

AA : 000 to 015(Error Items)
BB : Refer to page 48 to 52.
CC : Refer to page 48 to 52.

b. Error message Ⅱ

- Display of Error message Ⅱ

```
NG    - AA - BB - CC
        PUSH:NORM
E-LIMIT
```

AA : Error NO. (Refer to table 2.11.2)
BB : No meaning
CC : Adjusted value

- E-LIMIT judgement : The adjusted value is close to upper or lower limit
  This judgement is avalable from CPU Ver5.1
- If plural E-LIMIT error occured, smaller error number is displayed.
- E-LIMIT judgement is applyed to all adjustment items including designated adjustment items.

e.g. After adjustment item A and B(read out adjustment) are completed, the error message is displayed in case of the A trigger center value is 255.

The following table shows the relations between the error numbers and adjustment menu items.

Error No.	Manual Adjustment Item	Error No.	Manual Adjustment Item	Error No.	Manual Adjustment Item
006	Y-CHR G	026	AS 100-500ms	050	CH1 2mV BAL
007	Y-CHR 0	027	AS 10-50ms	051	CH1 5mV BAL
008	X-CHR G	028	AS 1-5ms	052	CH1 100mV BAL
009	X-CHR O	029	AS 100-500us	053	CH1 1V BAL
010	B START POSI	030	AS 10-50us	054	CH2 2mV BAL
011	NORM POSI	031	AS 1-5us	055	CH2 5mV BAL
012	ADD BAL	032	AS 100-500ns	056	CH2 100mV BAL
013	CH2 POLA BAL	033	AS 20-50ns	057	CH2 1V BAL
014	CH1 STEP BAL	034	—	058	CH1 2mV GAIN
015	CH2 STEP BAL	035	BS 1-5ms	059	CH1 5mV GAIN
016	CH3 STEP BAL	036	BS 100-500us	060	CH1 10mV GAIN
017	CH3 50mV GAIN	037	BS 10-50us	061	CH1 100mV GAIN
018	A LENGTH	038	BS 1-5us	062	CH1 1V GAIN
019	B LENGTH	039	BS 100-500ns	063	CH2 2mV GAIN
020	INTEN	040	BS 20-50ns	064	CH2 5mV GAIN
021	—	041	—	065	CH2 10mV GAIN
022	CAL LEVEL	042	AT AC CENT	066	CH2 100mV GAIN
023	ORTHOGO	043	AT CH1 CENT	067	CH2 1V GAIN
024	X-Y GAIN	044	AT CH2 CENT		
025	X-Y POSI	045	AT CH3 CENT		
		046	BT AC CENT		
		047	BT CH1 CENT		
		048	BT CH2 CENT		
		049	BT CH3 CENT		

The following table shows the relations between the auto adjustment items and manual adjustment items.

Auto Adjustment Item	Manual Adjustment Item
A (CHAR Y)	Y-CHR.G, Y-CHR.0
B (CHAR X)	X-CHR.G, X-CHR.0
C (*V-GAIN)	CH1 2mV/5mV/10mV/100mV/1V GAIN CH2 2mV/5mV/10mV/100mV/1V GAIN CH3 50mV GAIN
D (V-BAL)	CH1 STEP BAL, CH2 STEP BAL, CH3 STEP BAL CH1 2mV/5mV/100mV/1V BAL CH2 2mV/5mV/100mV/1V BAL
E (*V-VARI)	CH1 VAR ADJ, CH2 VAR ADJ
F (ADD-BL)	ADD BAL
G (CH2INV)	CH2 POLA BAL
H (V-POSI)	CH1 POST CENT, CH2 POSI CENT, CH3 POSI CENT
I (*TRIG)	AT AC CENT, AT CH1 CENT, AT CH2 CENT, AT CH3 CENT BT AC CENT, BT CH1 CENT, BT CH2 CENT, BT CH3 CENT AT CH1 GAIN, AT CH2 GAIN, AT CH3 GAIN BT CH1 GAIN, BT CH2 GAIN, BT CH3 GAIN
J (H-SWP)	AS 100-500ms/10-50ms/1-5ms/100-500us/10-50us/1-5us BS 1-5ms/100-500us/10-50us/1-5us
K (H-LENG)	A LENGTH, B LENGTH
L (MAG)	NORM POST
M (H-POSI)	H-POS CENT
N (BS-POS)	B START POSI
O (B-DLY)	DELAY OFS, DELAY GAIN
P (*X-Y)	X-Y GAIN, X-Y POSI

A. CHAR Y

Automatically adjusts the cursor moving range and intercursor probability at △V cursor measurement time.

Rating

Cursor moving range	±(4.0±0.2) div from the center of the screen.
△V intercursor probability	±[(2% of reading)+(0.3% of full scale)]
Error display	**I** . 001 (+3 div cursor error)
	002 (-3 div cursor error)
	II . Y-cursor POSI adjustment value
	III . Y-cursor GAIN adjustment value

B. CHAR X

Automatically adjusts the cursor moving range and intercursor probability at △t cursor measurement time.

Rating

Cursor moving range MAG	±(5.0±0.2) div from the center of the screen.
△V intercursor probability	
MAG OFF	±[(2% of reading)+(0.3% of full scale)]
Error display	**I** . 001 (-4 div cursor error)
	002 (-4 div cursor error)
	II . Y-cursor POSI adjustment value
	III . Y-cursor GAIN adjustment value

C. V-GAIN

Automatically adjusts the vertical gain in the following ranges:

CH1, CH2 : 2 mV, 5 mV, 10 mV, 100 mV, 1 V

CH3 : 50mV

Rating

Accuracy	± 2%
Error display	**I** . 001 (CH1 error)
	002 (CH2 error)
	003 (CH3 error)
	II . GAIN adjustment value

D. V-BAL

Automatically adjusts the DC balance and step balance.

DC BAL : 2 mV, 5mV, 100 mV and 1 V of CH1 and CH2

STEP BAL : CH1 to CH3

Rating

DC BAL	0.5div
STEP BAL	
10mv to 5V/div	0.5div
2mV, 5mV/div	5mV

Error display

I . 000 (CH1 2mV DC BAL) 008 (CH1 STEP BAL)
001 (CH1 5mV DC BAL) 009 (CH2 STEP BAL)
002 (CH1 100mV DC BAL) 010 (CH3 STEP BAL)
003 (CH1 1V DC BAL)
004 (CH2 2mV DC BAL)
005 (CH2 5mV DC BAL)
006 (CH2 100mV DC BAL)
007 (CH2 1V DC BAL)

II . Difference from the reference (lower 8 bits)

III . Adjustment value

E. V-VARI

Automatically adjusts the beginning of effect of the【VARIABLE】control of VOLTS/DIV.

Error display

I . 001 (CH1 error)
002 (CH2 error)

II . Difference from the reference (lower 8 bits)

III . VAR adjustment value

F. ADD-BL

Automatically adjusts the Add balance.

Rating 0.5 div

Error display

I . Difference from the reference (upper 8 bits)

II . Difference from the reference (lower 8 bits)

III . ADD BAL adjustment value

G. CH2 INV

Automatically adjusts the CH2 polarity balance.

Rating 0.5 div

Error display

I . Difference from the reference (upper 8 bits)

II . Difference from the reference (lower 8 bits)

III . POL BAL adjustment value

H. V-POSI

Automatically adjust the center position of the【▲POSITION▼】control.

Rating

Error from the center line of the scale when the【▲POSITION▼】control is set to the midrange

±1 div or less

Error display

I . 001 (CH1 error)
002 (CH2 error)
003 (CH3 error)

II . Center value (upper 8 bits)

III . Center value (lower 8 bits)

I. TRIG

Automatically adjusts the center position of the【TRIG LEVEL 】control and the trigger gain.

Rating Gain ±(5% of the set value +50% of sensitivity +1 mV)

Error display

I . 000 (A AC POSI error)
001 (A CH1 POSI error)
002 (A CH2 POSI error)
003 (A CH3 POSI error)
004 (B AC POSI error)
005 (B CH1 POSI error)
006 (B CH2 POSI error)
007 (B CH3 POSI error)
010 (A CH1 GAIN error)
011 (A CH2 GAIN error)
012 (A CH3 GAIN error)
013 (B CH1 GAIN error)
014 (B CH2 GAIN error)
015 (B CH3 GAIN error)

II . TRIG POSI adjustment value/GAIN adjustment value (upper 8 bits)

III . Difference from the reference (lower 8 bits)/GAIN adjustment value (lowre 8 bits)

J. H-SWP

Automatically adjusts the following sweep rate ranges:

A TIME/DIV : 100 ms, 10 ms, 1 ms, 100 μs, 50 μs, 5 μs

B TIME/DIV : 1 ms, 100 μs, 50 μs, 5 μs

Rating Accuracy ± 1.8%

Error display

I . 000 (A 100ms error)
001 (A 10ms error)
002 (A 1ms error)
003 (A 100 μs error)
004 (A 50 μs error)
005 (A 5 μs error)
006 (B 1 ms error)
007 (B 100 μs error)
008 (B 50 μs error)
009 (B 5 μ error)

II . 001 (4th div to the right of the screen center, beyond the right limit)
002 (4th div to the left of the screen center, beyond the left limit)

III . A/B adjustment value

K. H-LENG

Automatically adjusts the A/B sweep length at 1 ms/div.

Rating

1 ms/div	11.0 div to 11.6 div
All ranges	10.5 div or more
Error display	**I** . 001 (B sweep length error)
	002 (A sweep length error)
	II . 001 (11.1 div or less)
	002 (11.3 div or more)
	III . A/B LENGTH adjustment value

L. MAG

Automatically adjusts the × 10 MAG center.

Rating	±3.0 div or less
Error display	**I** . 001 (Out of center at MAG ON)
	002 (Out of center at MAG OFF)
	II . Difference from the reference (lower 8 bits)
	III . NORM POSI adjustment value

M. H-POSI

Automatically adjust the center position of the【▲POSITION▼】control.

Rating

Error from the center line of the scale when the【▲POSITION▼】control is set to the midrange

±1 div or less

Variable range	Should overlap the center of the screen.
Error display	**I** . Horizontal position adjustment value (upper 8 bits)
	II . Horizontal position adjustment value (lower 8 bits)
	III . Difference from the reference (lower 8 bits)

N. BS-POS

Automatically adjusts the B-sweep start position no that it will coincide with the A-sweep start position.

Rating	1 div or less (× 10 MAG ON)
Error display	**I** . 000 (Error)
	II . B START POSI adjustment value
	III . Difference from the reference (lower 8 bits)

O. B-DLY

Automatically adjusts probability of the delay time.

Rating	At 1 μs to 500ms/div
	±(0.5% of the set value +10% of the sweep time)-55ns
Error display	**I** . 001 (To the right of the set value; Error: 930 μs)
	002 (To the left of the set value; Error: 910 μs)
	II . DLY OFFSET (lower 8 bits)
	III . DYL AGAIN (lower 8 bits)

P. X-Y

Automatically adjusts the sensitivity and position at X-Y mode.

Rating	
Gain	
Accuracy	± 3.5%
Position	±1 div from the center
Error display	**I** . GAIN adjustment value
	II . POSI adjustment value
	III . Difference from the reference (lower 8 bits)

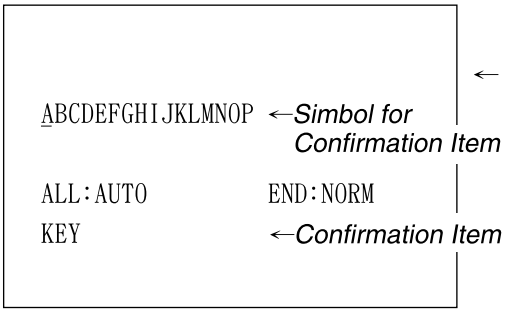
2.12 Automatic Confirmation

Confirm and check the functions and performances automatically.
The following describes the automatic confirmation method.

Procedure

——Connection ——

① Connect the adjustment jig IE-1066 to the SS-78**.
- See 2.1.8 about connection.



——Displaying the Automatic Confirmation Screen ——

② Press △V-△t-OFF in the adjustment menu screen to display the automatic confirmation menu screen.
- For the adjustment menu screen, refer to "2.1.3 Menu Screen".

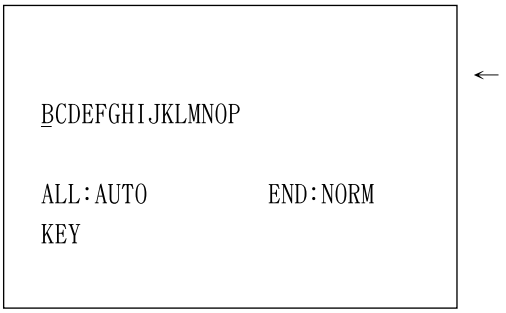
——Selecting the Automatic Confirmation Item ——

③ Select some check items for automatic confirmation.

I . Press AUTO to display all the items (A to P).
- Every time AUTO is pressed, the symbols are displayed/ undisplayed alternately.

II . Turn【FUNCTION】to select the relevant symbol with a " ↑ " mark.

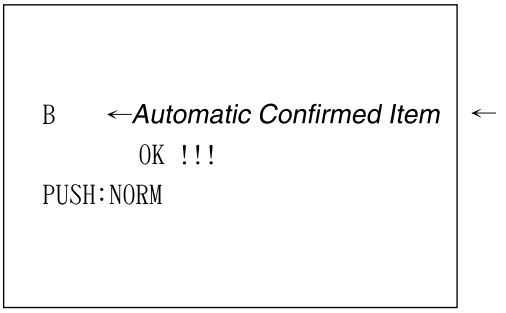
III . Press【FUNCTION】to determine the check item.



◇ In this example, undisplay "A" (operation check for KEY) and select an automatic confirmation item "B".

——Performing Automatic Confirmation ——

④ Press NORM .
- Perform automatic confirmation on the displayed items in an alphabetic order.
- When automatic confirmation is properly performed. "OK!!!" is displayed. The symbol for the automatically confirmed item appears at the upper left on the screen.
- When automatic confirmation is not performed, "NG" is displayed.



——Cancelling Automatic Confirmation ——

⑤ To cancel the automatic confirmation screen, press【SGL/RST】.

Table 2.12.1 Automatic Confirmation Items

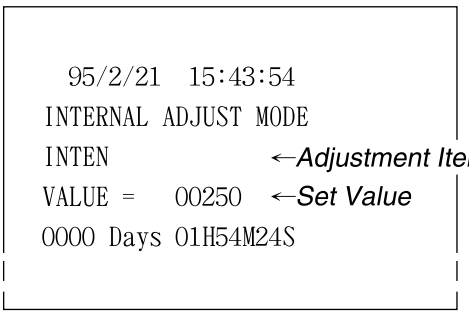
Item	Rating	Description
A. KEY	——	Check the operations of the keys, controls, and pulse switches.
B. *V DCSFT	0.06/6div or less	Inputs a 6 div DC signal and automatically confirms a move amount 10 seconds later (CH1 to ↑CH3).
C. *V POSI	±10.0div or moer	Automatically confirms the variable range of the 【▲POSITION▼】control (CH1 to ↑CH3).
D. *ADD GAI	3.0%	Automatically confirms sensitivity at ADD mode. A 3 div singal for CH1 and CH2 is turned to 6 div at ADD mode.
E. H POSI	±6.5div or more	Automatically confirms the variable range of the 【◀ POSITION ▶】control.
F. *POL GAI	1.5%	Automatically confirms sensitivity of CH2 INV.
G. *AC/DC	Normal changed	Automatically confirms the operation of input coupling AC/DC (CH1 to ↑CH3).
H. *V RANGE	1.5%	Automatically confirms the next range of vertical sensitivity. CH1, CH2: 20 mV, 50 mV/div ↑CH3: 50 mV, 500 mV/div
I. *TRIG LVL	±9.5 div or more	Automatically confirms the variable range of the 【TRIG LEVEL】control.
J. H VAR	2.5 times or more	Automatically confirms the variable range of the 【VARIABLE】control.
K. * V VAR	Variable Range : 2.5 times or more Variable Blance 20mV to 5V/div : 0.5div or less 2mV to 10mV/div : 5mV or less	Automatically confirms the operation of the 【VARIABLE】control (CH1, CH2) of VOLTS/DIV.
L. H RANGE	± 1.8%	Automatically confirms 200 μs or 500 μs/div at A TIME/DIV or B TIME/DIV.
M. TR-SEP	±4div or more	Automatically confirms trace separation.
N. LINETRG	Automatically confirms the line synchronism.	
O. H START	2div or less (× 10 MAG)	Automatically confirms shifting of the A-sweep start point upon switching the 【TIME/DIV】control in the following ranges: 100 ms, 10 ms, 1 ms, 500 μs, 200 μs, 100 μs, 10 μs, 1 μs
P. ——		

* : Denotes the item for which an adjusting jig is required.

↑ : Except SS-7805/04.

2.13 Manual Adjustment Menu

The following describes how to enter the manual adjustment screen.



Procedure

——*Enter to Manual Adjustment Menu Screen* ——

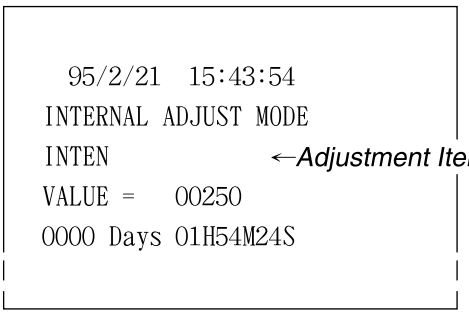
① Turn off all the functions to disable【FUNCTION】.*1

*1 Condition that f:XXXX is not being displayed at the upper right of the screen (the delay time, number of TV lines, etc)

② Press READOUT to set the charactors to OFF (non-display).

③ Press【VOLTS/DIV】of CH2 several times quickly.

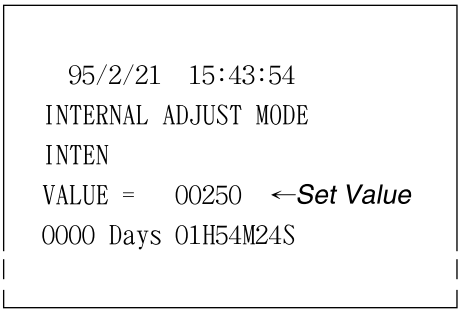
- Manual adjustment menu is displayed.
- The function indication turns to f: MAN-ADJ.
- Select the adjustment item by turning【FUNCTION】. The steps below describes an example when INTEN is to be selected.



——*Selecting the Adjustment Item* ——

④ Turn【FUNCTION】to select INTEN.

- For details of the adjustment menu items, refer to the "2-13-5 Manual Adjustment Procedure".



——*Setting the VALUE* ——

⑤ Press【FUNCTION】.

- The adjustment item is determined.

⑥ Turn【FUNCTION】to set the VALUE.

——*Saving the VALUE* ——

⑦ Press【FUNCTION】.

- The set value is saved and "SAVED" appears at the lower left of the screen.

——*Canceling the Adjustment Menu Screen* ——

⑧ To cancel the adjustment menu screen, press HOLD OFF .

2.13.1 Manual Adjustment Items

Number	Item	Auto adj item	Description
1.1	SYSTEM ID	Menu	Omitted
1.2	INTEN	Menu	Brightness adjustment
1.3	CAL LEVEL	Menu	CAL signal amplitude adjustment
1.4	ORTHOGO	Menu	ORTHOGONALITY
※ 1.5	AS 100-500ns	Menu	A sweep 100ns～500ns/div adjustment
※ 1.6	AS 20-50ns	Menu	A sweep 20ns～50ns/div adjustment
※ 1.7	BS 100-500ns	Menu	B sweep 100ns～500ns/div adjustment
※ 1.8	BS 20-50ns	Menu	B sweep 20ns～50ns/div adjustment
1.9	MAG SWEEP REF	Menu	MAG×10 adjustment
1.10	A LENGTH	K	A sweep Length adjustment
1.11	B LENGTH	K	B sweep Length adjustment
1.12	Y-CHR G	A	CURSOR V gain adjustment
1.13	Y-CHR O	A	CURSOR V position adjustment
1.14	X-CHR G	B	CURSOR X gain adjustment
1.15	X-CHR O	B	CURSOR X position adjustment
1.16	CH1 STEP BAL	D	CH1 2mV/div GND adjustment
1.17	CH1 1V BAL	D	Trace shift at CH1 1V/div
1.18	CH1 100mV BAL	D	Trace shift at CH1 100mV/div
1.19	CH1 5mV BAL	D	Trace shift at CH1 5mV/div
1.20	CH1 2mV BAL	D	Trace shift at CH1 2mV/div
1.21	CH1 10mV GAIN	* C	Gain adjust at CH1 10mV/div
1.22	CH1 5mV GAIN	* C	Gain adjust at CH1 5mV/div
1.23	CH1 2mV GAIN	* C	Gain adjust at CH1 2mV/div
1.24	CH1 100mV GAIN	* C	Gain adjust at CH1 100mV/div
1.25	CH1 1V GAIN	* C	Gain adjust at CH1 1V/div
1.26	CH2 STEP BAL	D	CH1 2mV/div GND adjustment
1.27	CH2 1V BAL	D	Trace shift at CH1 1V/div
1.28	CH2 100mV BAL	D	Trace shift at CH1 100mV/div
1.29	CH2 5mV BAL	D	Trace shift at CH1 5mV/div
1.30	CH2 2mV BAL	D	Trace shift at CH1 2mV/div
1.31	CH2 10mV GAIN	* C	Gain adjust at CH1 10mV/div
1.32	CH2 5mV GAIN	* C	Gain adjust at CH1 5mV/div
1.33	CH2 2mV GAIN	* C	Gain adjust at CH1 2mV/div
1.34	CH2 100mV GAIN	* C	Gain adjust at CH1 100mV/div
1.35	CH2 1V GAIN	* C	Gain adjust at CH1 1V/div
1.36	CH2 POLA BAL	G	CH2 INV balance adjustment
※ 1.37	CH3 STEP BAL	D	Trace sift at CH3 50mV/div
※ 1.38	CH3 50mV GAIN	* C	Gain adjust at CH3 50mV/div

Arranged in order of setting items.

*indicates the item which requires a jig to make automatic adjustment.

※1.5,1.6,1.7,1.8,1.37,1.38 ORTHOGO : * Except SS-7805/04

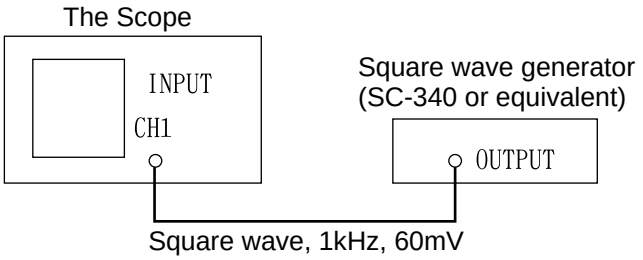
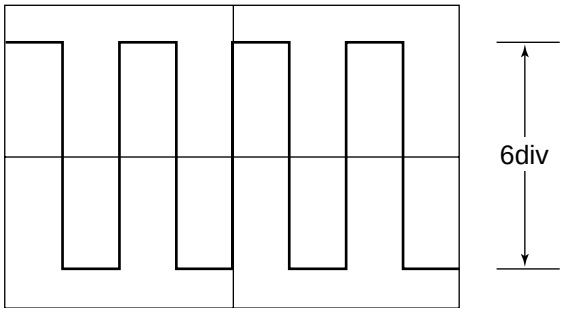
Number	Item	Auto adj item	Description
1.39	ADD BAL	F	ADD (CH1+CH2) balance
1.40	AT AC CENT	* I	A TRIG JEVEL center adjustment at AC cupling
1.41	AT CH1 CENT	* I	A TRIG LEVEL center adjustment at CH1 DC cupling
1.42	AT CH2 CENT	* I	A TRIG LEVEL center adjusrment at CH2 DC cupling
※ 1.43	AT CH3 CENT	* I	A TRIG LEVEL center adjustment at CH3 DC cupling
※ 1.44	BT AC CENT	* I	B TRIG LEVEL center adjustment at AC cupling
※ 1.45	BT CH1 CENT	* I	B TRIG LEVEL center adjustment at CH1 DC cupling
※ 1.46	BT CH2 CENT	* I	B TRIG LEVEL center adjustment at CH2 DC cupling
※ 1.47	BT CH3 CENT	* I	B TRIG LEVEL center adjustment at CH3 DC cupling
1.48	AS 100-500 μs	J	A SWEEP 100～500 μs/div adjustment
1.49	AS 100-500ms	J	A SWEEP 100～500ms/div adjustment
1.50	AS 10-50ms	J	A SWEEP 10～500ms/div adjustment
1.51	AS 1-5ms	J	A SWEEP 1～5ms/div adjustment
1.52	AS 10-50 μs	J	A SWEEP 10～50 μs/div adjustment
1.53	AS 1-5 μs	J	A SWEEP 1～5 μs/div adjustment
※ 1.54	BS 100-500 μs	J	B SWEEP 100～500 μs/div adjustment
※ 1.55	BS 1-5ms	J	B SWEEP 1～5ms/div adjustment
※ 1.56	BS 10-50 μs	J	B SWEEP 10～50 μs/div adjustment
※ 1.57	BS 1-5 μs	J	B SWEEP 1～5 μs/div adjustment
1.58	NORM POSI	L	MAG×10 center adjustment
※ 1.59	B START POSI	N	B SWEEP START POSITION adjustment
1.60	X-Y GAIN	* P	X GAIN adjustment
1.61	X-Y POSI	* P	X-Y POSITION adjustment
1.62	CHI VARI ADJ	* E	CH1 VARIABLE GAIN at fully turned to clockwise
1.63	CH2 VARI ADJ	* E	CH2 VARIABL GAIN at fully turned to clockwise
1.64	CH1 POSI CENT	H	CH1 POSI CENTER by AUTOSET
1.65	CH2 POSI CENT	H	CH2 POSI CENTER by AUTOSET
※ 1.66	CH3 POSI CENT	H	CH3 trace position center
1.67	AT CH1 GAIN	* I	CH1 A TRIG LEVEL GAIN
1.68	AT CH2 GAIN	* I	CH2 A TRIG LEVEL GAIN
※ 1.69	AT CH3 GAIN	* I	CH3 A TRIG LEVEL GAIN
※ 1.70	BT CH1 GAIN	* I	CH1 B TRIG LEVEL GAIN
※ 1.71	BT CH2 GAIN	* I	CH2 B TRIG LEVEL GAIN
※ 1.72	BT CH3 GAIN	* I	CH3 B TRIG LEVEL GAIN
1.73	H POSI CENT	M	H POSI CENTER by AUTOSET
※ 1.74	DELAY OFS	O	Delay time adjustment at TIME/DIV×0.2
※ 1.75	DELAY GAIN	O	Delay time adjustment at TIME/DIV×10.2

Arranged in order of setting items.

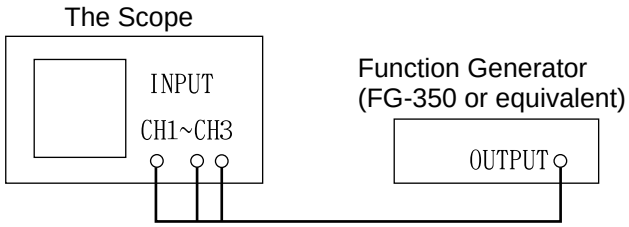
*indicates the item which requires a jig to make automatic adjustment.

※Except SS-7805/04

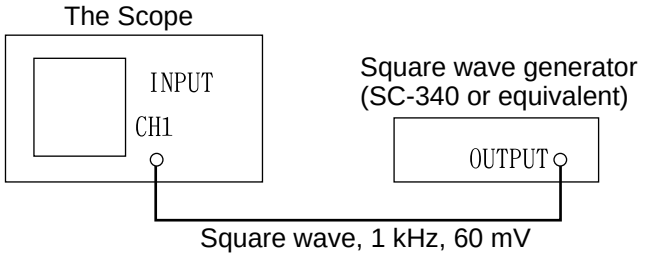
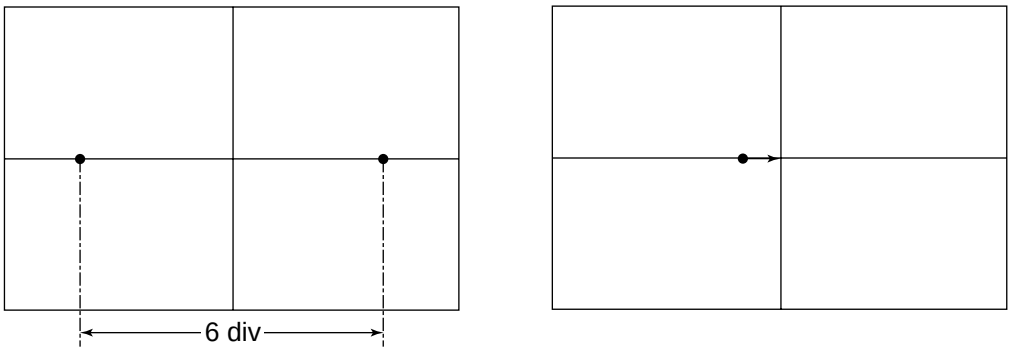
2.13.2 Vertical Gain

Item	Description
Rating	± 2% or less
Connection	
Setting	① INPUT CUPLING : DC ② VOLTS/DIV(CH1) : 10mV
Procedure	① Input a square wave (1kHz, 60mV) to CH1. ② Adjust with "CH1 10mV GAIN" in the adjustment menu to set the amplitude to 6 div. ③ Save the setting VALUE. ④ Adjust in order "5mV GAIN", "2mV GAIN", "100mV GAIN". ——*"CH2 10mV GAIN", "CH3 50mV GAIN"*—— ① Adjust by the procedure which is the same above.
Waveform on Screen	

2.13.3 Trigger

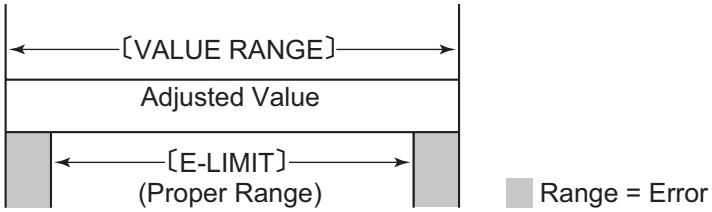
Item	Description
Rating	Trigger level control readout accuracy: ±(5% of set value+0.5div+1mV)
Connection	
Setting	①VOLTS/div : 10mV ②INPUT COUPLING : AC
Procedure	——*A Trigger level AC CENTER*—— ①Disconnect signal. ②Set the trace on the center horizontal graticule line using the CH1【POSITION】. ③Input a 1kHz sine wave about 60mVP-P. ④Select Trigger source CH1, trigger coupling AC, trigger level 0V and adjust "**AT AC CENT**" VALUE so that the trigger point will be at the center of the CRT screen. ⑤Save the setting VALUE [NOTE] New setting VALUE is uneffective by switching Trigger Coupling before saving VALUE by pressing the FUNCTION Key. ——*Atrigger level DC CENTER*—— ①Select Trigger couplling DC and adjust "AT CH1 CENT" VALUE so that trigger point will be at the center of the CRT screen. ②Save the setting VALUE [NOTE] New setting VALUE is uneffective by switching Trigger Coupling before saving VALUE by pressing the FUNCTION Key. ——*"AT CH2 CENT" "AT CH3 CENT"*—— ①Adjust in the same manner as CH1 above. ——*B Trigger level AC CENTER*—— "BT AC CENT" ①Adjust in the same manner as Trigger level AC CENTER above. ——*B Trigger level DC CENTER*—— "BT CH1 CENT", "BT CH2 CENT", "BT CH3 CENT" ①Adjust in the same manner as A Trigger level DC CENTER above.

2.13.4 X-Y Gain and Position

Item	Description
Rating	± 2% or less
Connection	
Setting	① INPUT COUPLING : DC ② INPUT RC : 1M Ω ③ VOLTS/DIV (CH1) : 10mV ④ VERT MODE : CH2 ⑤ HORIZ DISPLAY : X-Y
Procedure	① Input a suquare wave (1 kHz, 60mV) to CH1. ② Adjust with "X-Y GAIN" in the adjustment menu to set the amplitude to 6 div. ③ Save the setting VALUE. ④ Disconnect CH1 signal. ⑤ Set HORIZ DISPLAY to A. ⑥ Set the sweep start point to the vertical left end line of graticule with the horizonal POSITION. ⑦ Set HORIZ DISPLAY to X-Y. ⑧ Adjust with "X-Y POSI" in the adjustment menu so that the spot meet to the center of graticule. ⑨ Save the setting VALUE. ◇ This item should be adjusted after Vertical GAIN, BALANCE adjustment.
Waveform on Screen	 Adjust the amplitude to 6div Adjust the spot to the center of graticule.

2.13.5 Manual Adjustment Procedure

The relation between 〔VALUE〕and〔E-LIMIT〕is as below.



1.SYSTEM ID
Omitted

2.INTEN(INTENSITY)
〔DESCRIPTION〕 Brightness adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

Refer to "2.3.4 Intensity"

3.CAL LEVEL (CALIBRATOR OUTPUT LEVEL)
〔DESCRIPTION〕 CAL signal amplitude adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

Refer to "2.10 Calibration Output"

4.ORTHOGO
〔DESCRIPTION〕 ORTHOGONALITY
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

Refer to "2.3.6 Orthogonality"

5.AS 100-500ns
〔DESCRIPTION〕 A sweep 100n to 500ns/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

Refer to "2.9.1 High-speed Sweep Rate"

6.AS 20-50ns (Except SS-7805/7804)
〔DESCRIPTION〕 A sweep 20n to 50ns/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

Refer to "2.9.1 High-speed Sweep Rate"

7.BS 100-500ns (Except SS-7805/7804)
〔DESCRIPTION〕 B sweep 100n to 500ns/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

Refer to "2.9.1 High-speed Sweep Rate"

8.BS 20-50ns (Except SS-7805/7804)

〔DESCRIPTION〕 B sweep 20n to 50ns/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

Refer to "2.9.1 High-speed Sweep Rate"

9.MAG SWEEP REF

〔DESCRIPTION〕 MAG × 10 adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

Setting value is effective when MAG×10 is pressed after saved value.

10.A LENGTH

〔DESCRIPTION〕 A sweep length adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **K** (H-LENG)
〔SPECIFICATION〕 11.2 ± 0.1 div (1ms/div)
〔SIGNAL〕 5kHz(0.2ms/div) pulse train

Adjust A SWEEP LENGTH to 11.2 at 1ms/div.

11.B LENGTH

〔DESCRIPTION〕 B sweep length adjust
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **K** (H-LENG)
〔SPECIFICATION〕 11.2 ± 0.1 div (1ms/div)
〔SIGNAL〕 5kHz(0.2ms/div) pulse train

Adjust B SWEEP LENGTH to 11.2 at 1ms/div.

12.Y-CHR G

〔DESCRIPTION〕 CURSOR V gain adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **A** (CHAR Y)

Enter 1.4. ORTHOGO adjustment menu to display + pattern cursor.
Press the FUNCTION knob to display 4 cursors(box) without changing the ORTHOGO adjustment value.
Turn the FUNCTION knob to select Y-CHR Gadjustment.
Adjust the coarce △V gain if needed.
Adjust the span of two △V cursors to 6.00div.(Initial adjustment value 128)

13.Y-CHR O (Y Character Offset)

〔DESCRIPTION〕 CURSOR V position adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **A** (CHAR Y)

Adjust after Y-CHR G completed.
Adjust upper and lower cursors to meet to ±3div graticule.
Return to Y-CHR G adjustment if needed.

14.X-CHR G

〔DESCRIPTION〕	CURSOR X gain adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM **B** (CHAR X)

Enter 1.4. ORTHOGO adjustment menu to display + pattern cursor.
Press the FUNCTION knob to display 4 cursors(box) without changing the ORTHOGO adjustment value.
Turn the FUNCTION knob to select X-CHR G adjustment.
Adjust the coarce △t gain if needed.
Adjust the span of two △t cursors to 8.00div.(Initial adjustment value 128)

15.X-CHR O (X Character Offset)

〔DESCRIPTION〕	CURSOR X position adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM **B** (CHAR X)

Adjust after X-CHR G completed.
Adjust left and right cursors to meet to ±4div graticule.
Return to X-CHR G adjustment if needed.

16.CH1 STEP BAL

〔DESCRIPTION〕	CH1 2mV/div GND adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	41 to 209
〔AUTO ADJ〕	ITEM **D** (V-BAL)
〔SPECIFICATION〕	Less than ±0.1 div

Trace Shift when GND ON/OFF at CH1 2mV/div
Adjust GND trace meet to 0V trace.

17.CH1 1V BAL

〔DESCRIPTION〕	Trace shift at CH1 1V/div
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	11 to 244
〔AUTO ADJ〕	ITEM **D** (V-BAL)
〔SPECIFICATION〕	±0.1 div

Trace Shift between 10mV/div and 1V/div.
Adjust after CH1 10mV GAIN and 1V GAIN completed.
New setting value is not effective when V range changed before saving.

18.CH1 100mV BAL

〔DESCRIPTION〕 Trace shift at CH1 100mV/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 11 to 244
〔AUTO ADJ〕 ITEM **D** (V-BAL)
〔SPECIFICATION〕 ±0.1 div

Trace Shift between 10mV/div and 100mV/div.
Adjust after CH1 10mV GAIN and 100mV GAIN completed.
New setting value is not effective when V range changed before saving.

19.CH1 5mV BAL

〔DESCRIPTION〕 Trace shift at CH1 5mV/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 11 to 244
〔AUTO ADJ〕 ITEM **D** (V-BAL)
〔SPECIFICATION〕 ±0.1 div
Trace Shift between 10mV/div and 5mV/div.
Adjust after CH1 10mV GAIN and 5mV GAIN completed.
New setting value is not effective when V range changed before saving.

20.CH1 2mV BAL

〔DESCRIPTION〕 Trace shift at CH1 2mV/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 11 to 244
〔AUTO ADJ〕 ITEM **D** (V-BAL)
〔SPECIFICATION〕 ±0.1 div
Trace Shift between 10mV/div and 2mV/div.
Adjust after CH1 10mV GAIN and 2mV GAIN completed.
New setting value is not effective when V range changed before saving.

21.CH1 10mV GAIN

〔DESCRIPTION〕 Gain adjust at CH1 10mV/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **C** (∗V-GAIN)
〔SPECIFICATION〕 ± 1.0 %
〔SIGNAL〕 60mV SQUARE WAVE
Adjust after 2.5.1 Vertical Gain(Coarse) completed.
Refer to "2.5.1 Vertical Gain(Coarse)"

22.CH1 5mV GAIN

〔DESCRIPTION〕 Gain adjust at CH1 5mV/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **C** (∗V-GAIN)
〔SPECIFICATION〕 ± 1.0 %
〔SIGNAL〕 30mV SQUARE WAVE

23.CH1 2mV GAIN

〔DESCRIPTION〕 Gain adjust at CH1 2mV/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254

〔AUTO ADJ〕 ITEM **C** (✳V-GAIN)
〔SPECIFICATION〕 ± 1.0 %
〔SIGNAL〕 12mV SQUARE WAVE

24.CH1 100mV GAIN
〔DESCRIPTION〕 Gain adjust at CH1 100mV/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **C** (✳V-GAIN)
〔SPECIFICATION〕 ± 1.0 %
〔SIGNAL〕 600mV SQUARE WAVE

25.CH1 1V GAIN
〔DESCRIPTION〕 Gain adjust at CH1 1V/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **C** (✳V-GAIN)
〔SPECIFICATION〕 ± 1.0 %
〔SIGNAL〕 6V SQUARE WAVE

26.CH2 STEP BAL
Refer CH1 STEP BAL

27.CH2 1V BAL
Refer CH1 1V BAL

28.CH2 100mV BAL
Refer CH1 100mV BAL

29.CH2 5mV BAL
Refer CH1 5mV BAL

30.CH2 2mV BAL
Refer CH1 2mV BAL

31.CH2 10mV GAIN
〔DESCRIPTION〕 Gain adjust at CH2 10mV/div
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **C** (✳V-GAIN)
〔SPECIFICATION〕 ± 1.0 %
〔SIGNAL〕 60mV SQUARE WAVE

32.CH2 5mV GAIN
Refer CH1 5mV GAIN

33.CH2 2mV GAIN
Refer CH1 2mV GAIN

34.CH2 100mV GAIN
Refer CH1 100mV GAIN

35.CH2 1V GAIN
Refer CH1 1V GAIN

36.CH2 POLA BAL

〔DESCRIPTION〕	CH2 INV balance adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM **G** (CH2INV)
〔SPECIFICATION〕	0.1 div

Adjust to reduce the trace shift when CH2 INV ON/OFF where center position at CH2 10mV/div.
Adjust after ADD BAL completed.

37.CH3 STEP BAL (Except SS-7805/7804)

〔DESCRIPTION〕	CH3 50mV/div to 500mV/div balance
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	41 to 209
〔AUTO ADJ〕	ITEM **D** (V-BAL)
〔SPECIFICATION〕	0.1 div

Trace Shift between 50mV/div 100mV and 500mV/div.

38.CH3 50mV GAIN (Except SS-7805/7804)

〔DESCRIPTION〕	CH3 50mV/div gain adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM **C** (＊V-GAIN)
〔SPECIFICATION〕	± 1.0 %

39.ADD BAL

〔DESCRIPTION〕	ADD(CH1+CH2) balance
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM **F** (ADD-BL)
〔SPECIFICATION〕	0.1 div

Adjust ADD trace meet to center position when ADD ON where both CH1 and CH2 traces are center position.
(After CH1 trace set to center by CH1 position and ADD trace set to center position by CH2 position control, then adjust CH2 trace position to meet to center position by function knob.)

40.AT AC CENT

〔DESCRIPTION〕	A TRIG LEVEL center adjustment at AC coupling.
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM **I** (＊TRIG)

Input CH1 approx.1kHz 60mv SINE wave
Set CH1 trace to center at GND AC 10mV/div, then GND off.
Set A TRIG LEVEL display at 0mV.
Adjust the trigger center point(Center point of +, - slope) to start from GND(Center of the screen)
New setting value is not effective when SLOPE changed before saving.

41.AT CH1 CENT

〔DESCRIPTION〕	A TRIG LEVEL center adjustment at CH1 DC coupling.
〔VALUE RANGE〕	0 to 255

〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **I** (＊TRIG)

Input CH1 approx.1kHz 60mv SINE wave
Set CH1 AC 10mV/div
Adjust the DC trigger point to start from same as AC trigger point when trigger coupling changed AC to DC.
New setting value is not effective when COUPLE changed before saving.

42.AT CH2 CENT
Refer AT CH1 CENT

43.AT CH3 CENT (Except SS-7805/7804)
〔DESCRIPTION〕 A TRIG LEVEL center adjustment at CH3 DC coupling.
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **I** (＊TRIG)

<For SS-7811>
Input CH3 approx.1kHz 300mv SINE wave
Set CH3 AC 50mV/div
Adjust the DC trigger point to start from same as AC trigger point when trigger coupling changed AC to DC.
New setting value is not effective when COUPLE changed before saving.

44.BT AC CENT
〔DESCRIPTION〕 B TRIG LEVEL center adjustment at AC coupling.
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **I** (＊TRIG)

Input CH1 approx.1kHz 60mv SINE wave
Set CH1 trace to center at GND AC 10mV/div, then GND off.
Set B TRIG LEVEL display at 0mV.
Adjust the trigger center point(Center point of +, - slope) to start from GND(Center of the screen)
New setting value is not effective when SLOPE changed before saving.

45.BT CH1 CENT (Except SS-7805/7804)
〔DESCRIPTION〕 B TRIG LEVEL center adjustment at CH1 DC coupling.
(Except SS-7802/7804)
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **I** (＊TRIG)

Input CH1 approx.1kHz 60mv SINE wave
Set CH1 AC 10mV/div
Set CH1 trace to center at GND AC 10mV/div ,then GND off.
Adjust the DC trigger point to start from same as AC trigger point when B trigger coupling changed AC to DC.
New setting value is not effective when B COUPLE changed before saving.

46.BT CH2 CENT
Refer BT CH1 CENT

47.BT CH3 CENT

Refer BT CH1 CENT

48.AS 100-500us

〔DESCRIPTION〕 A SWEEP 100u to 500us/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **J** (H-SWP)
〔SPECIFICATION〕 ± 1.0 %

Adjust A SWEEP 100us/div after coarse HORIZONTAL adjustment under nominal set value "128".
New setting value is not effective when SWEEP RANGE changed before saving.

49.AS 100-500ms

〔DESCRIPTION〕 A SWEEP 100m to 500ms/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **J** (H-SWP)
〔SPECIFICATION〕 ± 1.0 %
Note:Manual adjustment procedure for this item needs highly trained skill, using jig is quick and easier.

Adjust A SWEEP 100ms/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

50.AS 10-50ms

〔DESCRIPTION〕 A SWEEP 10m to 50ms/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **J** (H-SWP)
〔SPECIFICATION〕 ± 1.0 %

Adjust A SWEEP 10ms/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

51.AS 1-5ms

〔DESCRIPTION〕 A SWEEP 1m to 5ms/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **J** (H-SWP)
〔SPECIFICATION〕 ± 1.0 %

Adjust A SWEEP 1ms/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

52.AS 10-50us

〔DESCRIPTION〕 A SWEEP 10u to 50us/div Adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **J** (H-SWP)
〔SPECIFICATION〕 ± 1.0 %

Adjust A SWEEP 10us/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

53.AS 1-5us

〔DESCRIPTION〕	A SWEEP 1u to 5us/div Adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM J (H-SWP)
〔SPECIFICATION〕	± 1.0 %

Adjust A SWEEP 1us/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

54.BS 100-500us (Except SS-7805/7804)

〔DESCRIPTION〕	B SWEEP 100u to 500us/div Adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM J (H-SWP)
〔SPECIFICATION〕	± 1.0 %

Adjust B SWEEP 100us/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

55.BS 1-5ms (Except SS-7805/7804)

〔DESCRIPTION〕	B SWEEP 1m to 5ms/div Adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM J (H-SWP)
〔SPECIFICATION〕	± 1.0 %

Adjust B SWEEP 1ms/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

56.BS 10-50us (Except SS-7805/7804)

〔DESCRIPTION〕	B SWEEP 10u to 50us/div Adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM J (H-SWP)
〔SPECIFICATION〕	± 1.0 %

Adjust B SWEEP 10us/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

57.BS 1-5us (Except SS-7805/7804)

〔DESCRIPTION〕	B SWEEP 1u to 5us/div Adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254
〔AUTO ADJ〕	ITEM J (H-SWP)
〔SPECIFICATION〕	± 1.0 %

Adjust B SWEEP 1us/div after AS 100-500us adjustment.(coarse adjustment)
New setting value is not effective when SWEEP RANGE changed before saving.

58.NORM POSI

〔DESCRIPTION〕	MAG ×10 center adjustment
〔VALUE RANGE〕	0 to 255
〔E-LIMIT〕	1 to 254

〔AUTO ADJ〕 ITEM **L** (MAG)
〔SPECIFICATION〕 ±0.5 div (1ms/div)

Adjust sweep start point to start from center of the screen whether MAG × 10 ON/OFF at A SWEEP 1ms/div.

59.B START POSI (Except SS-7805/7804)
〔DESCRIPTION〕 B SWEEP START POSITION adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **N** (BS-POS)
〔SPECIFICATION〕 ±0.2 div (1ms/div MAG×10)

Adjust A and B sweep start point to meet to same position while HORIZ DISPLAY switch A or B at MAG ×10 ON.

60.X-Y GAIN
〔DESCRIPTION〕 X GAIN adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **P** (∗X-Y)
〔SPECIFICATION〕 ± 1.0 %
〔SIGNAL〕 60mV SQUARE WAVE

61.X-Y POSI
〔DESCRIPTION〕 X-Y POSITION adjustment
〔VALUE RANGE〕 0 to 255
〔E-LIMIT〕 1 to 254
〔AUTO ADJ〕 ITEM **P** (∗X-Y)
〔SPECIFICATION〕 ±0.5 div

Set the trace position start from left end graticule at 1ms/div.
Change HORIZONTAL DIS`PLAY from A to X-Y.
Adjust the spot position to center of the screen.
Adjust after X-Y GAIN completed.

62.CH1 VAR ADJ
〔DESCRIPTION〕 CH1 VARIABLE GAIN at fully turned to clockwise.
〔VALUE RANGE〕 0 to 511
〔E-LIMIT〕 None
〔AUTO ADJ〕 ITEM **E** (∗V-VARI)
〔SIGNAL〕 60mV SQUARE WAVE

Set VARIABLE ON at 10mv/div.
Turn the VOLTS/DIV knob to clockwise till "CH1 VAR LIMIT" is displayed.
Set the value and press the FUNCTION knob to save.
Press VOLTS/DIV for VARIABLE ON/OFF
Check the VARIABLE ON gain as slightly reduced from VARIABLE OFF gain.
If gain difference is large, set the value again.

<For SS-7810>
Increment 20 counts to the value.

Save the incremented value to press the FUNCTION knob.
New setting value is not effective when VARIABLE turned before saving.

63.CH2 VAR ADJ

Refer CH1 VAR ADJ

64.CH1 POSI CENT

〔DESCRIPTION〕 CH1 POSI CENTER by AUTOSET
〔VALUE RANGE〕 64736 to 65535 or 0 to 800
〔E-LIMIT〕 None
〔AUTO ADJ〕 ITEM **H** (V-POSI)
Note:Manual adjustment procedure for this item needs highly trained skill, using jig is quick and easier.

Set VERT MODE to CH1 and turn the V POSITION knob to fully counter clockwise or clockwise.
Adjust the trace position to center after pressing AUTOSET at 10mv/div with no signal.
Save the new value to press the function knob.
(To set the trace 1div above, increment the value 120 count.
To set the trace 1div down, decrement the value 120 count.)

Confirmation procedure
Press HOLDOFF key to quit from adjustment menu after new value saving..
Confirm the trace position to center after pressing AUTOSET.

65.CH2 POSI CENT

Refer CH1 POSI CENT

66.CH3 POSI CENT (Except SS-7805/7804)

〔DESCRIPTION〕 CH3 trace position center
〔VALUE RANGE〕 64736 to 65535 or 0 to 800
〔E-LIMIT〕 None
〔AUTO ADJ〕 ITEM **H** (V-POSI)
Note:Manual adjustment procedure for this item needs highly trained skill, using jig is quick and easier.

Set CH3 V POSITION knob to mechanical center position.
Adjust the CH3 trace position to center of the screen.
Save the new value to press the function knob.
(To set the trace 1div above, increment the value 120 count.
To set the trace 1div down, decrement the value 120 count.)

Confirmation procedure
Press HOLDOFF key to quit from adjustment menu after new value saving..
Turn CH3 V POSITION knob to fully counter clockwise and clockwise.
Set CH3 V POSITION knob to mechanical center position.
Confirm CH3 trace position

67.AT CH1 GAIN

〔DESCRIPTION〕 CH1 A TRIG LEVEL GAIN
〔VALUE RANGE〕 183 to 339
〔E-LIMIT〕 None
〔AUTO ADJ〕 ITEM **I** (*TRIG)
〔SIGNAL〕 +-80mV TRIANGLE WAVE

Set CH1 10mV/div DC,A TRIG COUPL DC.A TRIG LEVEL value 0mV
Set V POSITION knob as the trigger point 3div below from the center of screen.
Set A TRIG LEVEL value 60mV
Adjust FUNCTION knob as the trigger point 3div above from the center of screen.
(To set the trigger point 1div above, increment the value 40 count.
To set the trigger point 1div down, decrement the value 40 count.)

68.AT CH2 GAIN
Refer AT CH1 GAIN

69.AT CH3 GAIN (Except SS-7805/7804)

〔DESCRIPTION〕	CH3 A TRIG LEVEL gain
〔VALUE RANGE〕	183 to 339
〔E-LIMIT〕	None
〔AUTO ADJ〕	ITEM Ⅰ (＊TRIG)

<For SS-7810>
Input ±400mV TRIANGLE WAVE to CH3 50mV/div
Set A TRIG COUPL DC, A TRIG LEVEL 0mV
Set V POSITION knob as the trigger point 3div below from the center of screen.
Set A TRIG LEVEL value 60mV
Adjust FUNCTION knob as the trigger point 3div above from the center of screen.
(To set the trigger point 1div above, increment the value 40 count.
To set the trigger point 1div down, decrement the value 40 count.)

<For SS-7805/7804>
Input ±800mV TRIANGLE WAVE to both EXT TRIG and CH1 100mV/div
Set A TRIG COUPL DC, A TRIG LEVEL 0mV
Set V POSITION knob as the trigger point 3div below from the center of screen.
Set A TRIG LEVEL value 600mV
Adjust FUNCTION knob as the trigger point 3div above from the center of screen.
(To set the trigger point 1div above, increment the value 40 count.
To set the trigger point 1div down, decrement the value 40 count.)

Confirmation procedure <For SS-7810>
Press HOLDOFF key to quit from adjustment menu after new value saving..
Turn CH3 V POSITION knob to fully counter clockwise and clockwise.
Set CH3 V POSITION knob to mechanical center position.
Confirm CH3 trace position

70.BT CH1 GAIN (Except SS-7805/7804)

〔DESCRIPTION〕	CH1 B TRIG LEVEL gain
〔VALUE RANGE〕	183 to 339
〔E-LIMIT〕	None
〔AUTO ADJ〕	ITEM Ⅰ (＊TRIG)

Input □}80mV TRIANGLE WAVE to CH1 10mV/div.
Set CH1 10mV/div DC, A TRIG COUPL DC, B TRIG LEVEL value 0mV
Set V POSITION knob as the trigger point 3div below from the center of screen.
Set B TRIG LEVEL value 60mV
Adjust FUNCTION knob as the trigger point 3div above from the center of screen.
(To set the trigger point 1div above, increment the value 40 count.
To set the trigger point 1div down, decrement the value 40 count.)

71.BT CH2 GAIN

Refer BT CH1 GAIN

72.BT CH3 GAIN (Except SS-7805/7804)

〔DESCRIPTION〕	CH3 B TRIG LEVEL gain
〔VALUE RANGE〕	183 to 339
〔E-LIMIT〕	None
〔AUTO ADJ〕	ITEM Ⅱ (＊TRIG)

Input ±400mV TRIANGLE WAVE to CH3 50mV/div.
Set B TRIG COUPL DC § B TRIG LEVEL value 0mV
Set V POSITION knob as the trigger point 3div below from the center of screen.
Set B TRIG LEVEL value 300mV
Adjust FUNCTION knob as the trigger point 3div above from the center of screen.
(To set the trigger point 1div above, increment the value 40 count.
To set the trigger point 1div down, decrement the value 40 count.)

73.H-POS CENT

〔DESCRIPTION〕	H-POS CENTER by AUTOSET
〔VALUE RANGE〕	64736 to 65535 or 0 to 800
〔E-LIMIT〕	None
〔AUTO ADJ〕	ITEM **M** (H-POSI)
〔SPECIFICATION〕	-5.0 ±0.2 div (After AUTO SET at 1ms/div)

Note:Manual adjustment procedure for this item needs highly trained skill, using jig is quick and easier.
Set A TIME/DIV 1ms/div,no signal input
Press AUTOSET key
Check trace start position as 5div left from the center of screen.
(To set the start point 1div left, increment the value 250 count.
To set the start point 1div right, decrement the value 250 count.)

74.DELAY OFS (Except SS-7805/7804)

〔DESCRIPTION〕	Delay time adjustment at TIME/DIV X 0.2
〔VALUE RANGE〕	64736 to 65535 or 0 to 800
〔E-LIMIT〕	None
〔AUTO ADJ〕	ITEM **O** (B-DLY)
〔SIGNAL〕	5kHz pulse train

Note:Manual adjustment procedure for this item needs highly trained skill, using jig is quick and easier.

Set A TIME 1ms/div, B TIME 100us/div, H DISPLAY ALT, DELAY 0.200ms
Adjust FUNCTION knob as B SWEEP start from 2nd pulse.
Save the new value to press the function knob.

Confirmation procedure
Press DELAY/TRACE SEP key to quit from adjustment menu after new value saving..
Confirm the delay start position at 0.200ms DELAY.
(To set the start point 0.1 div right, increment the value 30 count.
To set the start point 0.1 div left, decrement the value 30 count.)

75.DELAY GAIN (Except SS-7805/7804)

〔DESCRIPTION〕	Delay time adjustment at TIME/DIV X10.2
〔VALUE RANGE〕	183 to 339
〔E-LIMIT〕	None
〔AUTO ADJ〕	ITEM **O** (B-DLY)
〔SIGNAL〕	5kHz pulse train

Note:Manual adjustment procedure for this item needs highly trained skill, using jig is quick and easier.

Set A TIME 1ms/div, B TIME 100us/div, H DISPLAY ALT, DELAY 10.200ms
Adjust FUNCTION knob as B SWEEP start from 10.2 ms position.
Save the new value to press the function knob.

Confirmation procedure
Press DELAY/TRACE SEP key to quit from adjustment menu after new value saving..
Confirm the delay start position at 10.200ms DELAY.
(To set the start point 0.5 div right, increment the value 10 count.
To set the start point 0.5 div left, decrement the value 10 count.)

2.14 Adjustment Jig IE-1066

How to calibrate Adjustment Jig IE-1066 is described as below.

2.14.1 Specifications

a. Power supply

Votage range	100V/125V/225/250V ±10% (By changing the internal wiring)
Frequency range	50Hz or 60 Hz
Power consumption	5W MAX
Dimensions	Approx. 160W × 65H × 180L[mm]

b. Environmental conditions

- Performance assurance temperature : 20 to 25℃
- Operating temperature : 0 to 40℃
- Perheating time : 30 minutes or more

2.14.2 Preparation

a. Required equipment

- Oscilloscope SS-78＊＊
- Exclusive I/F cable
- Digital multimeter (5 1/2 digits)
  Recomended model: IWATSU VOAC7513
- BNC coaxial cable (3 pieces)
- Screw driver (Low capacitance)
- BNC terminal adapter.

b. SS-78** I/F connector

①Peel the grey tape on the rear panel.

②Appear the I/F connector

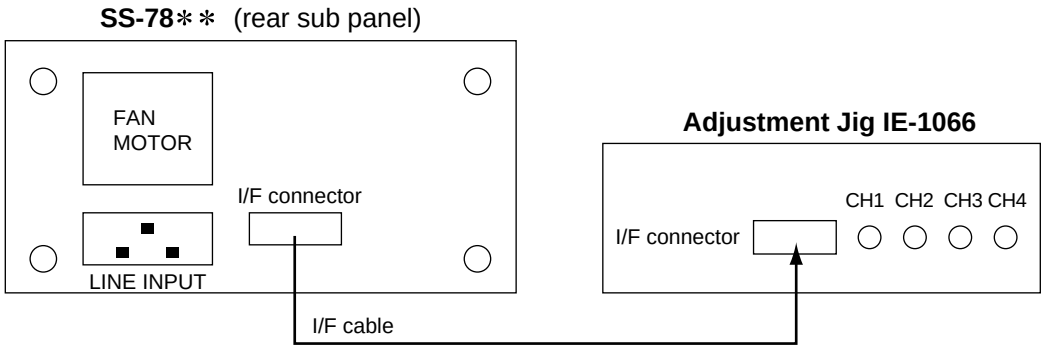


Figure 2.12 Rear panel of SS-78**

2.14.3 Adjustment of IE-1066

a. Connection

Procedure

① Connect between the IE-1066 I/F DSUB 9 PIN connector and the SS-78∗∗ I/F 6 PIN connector with the I/F cable (See Figure 2.12 and 2.13).

② Connect between the IE-1066 OUTPUT connectors and the SS-78∗∗ INPUT connectors with the BNC coaxial cables (See Figure 2.13).

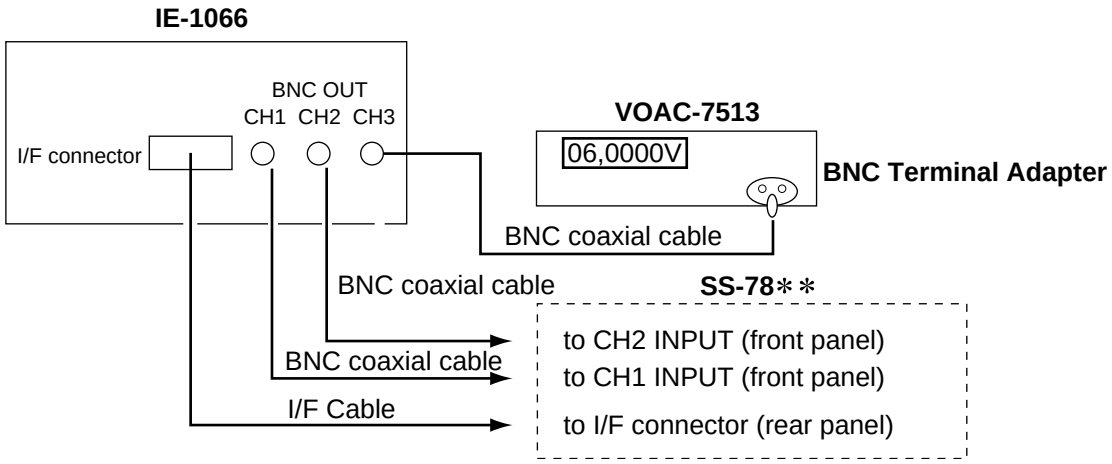


Figure 2.13 Connection IE-1066 to SS-78∗∗

b. Adjustment

Caution

In order to cancel the offest voltage of the digital multimeter, use its REL computation to measure.

Procedure

① At an ambient temperature of 21 to 24**℃**, turn on the IE-1066 and warm it up for 30 minutes or more.

② Display the "Automatic Adjustment Menu" screen.

- For the Automatic Adjustment Menu, see "2.11 Automatic Adjustment".

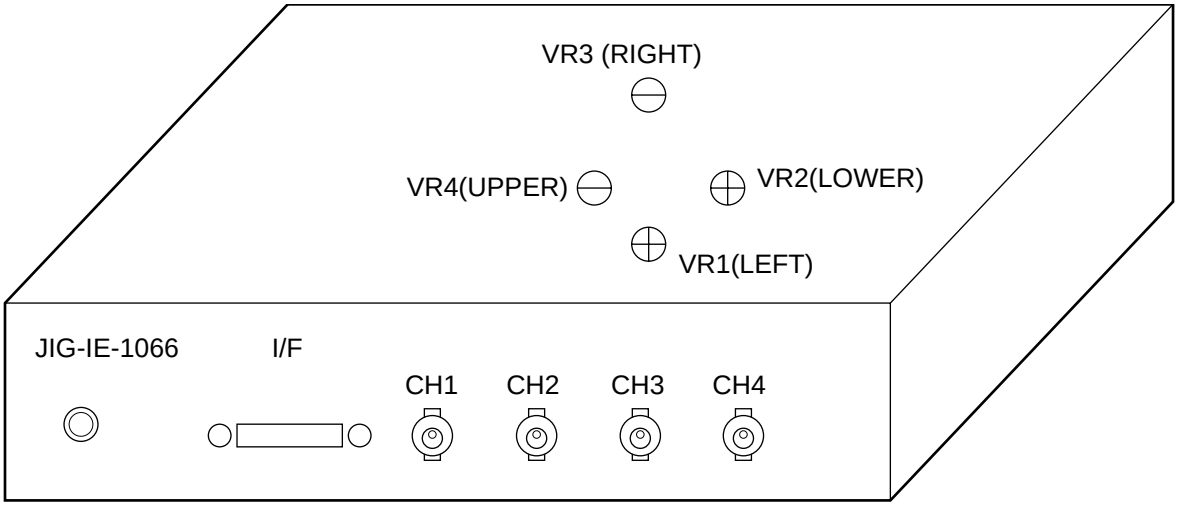
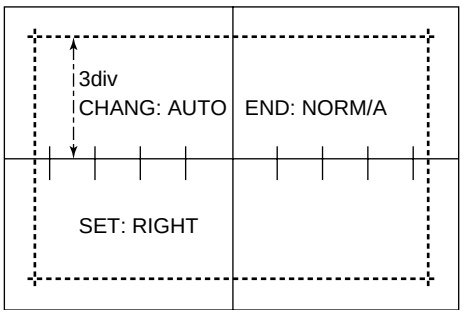


Figure 2.14 IE-1066

——Displaying "Cursor position setting" screen ——



③ Press AUTO to select the automatic adjustment items (A through P are not displayed).
Press NORM to enter the cursor position adjustment mode.

——Calibrating "UPPER, LOWER, LEFT and RIGHT" ——

④ Press AUTO . With "SET: UPPER" displayed, adjust CH3 output voltage within 0 ±30.0 μV with VR4.
⑤ Press AUTO . With "SET: LOWER" displayed, tadjust CH3 output voltage within 0 ±0.30 mV with VR2.
⑥ Press AUTO . Wtih "SET: LEFT" displayed, adjust CH3 output voltage to within 6.00 V ±1.50 mV with VR1.
⑦ Press AUTO . With "SET: RIGHT" displayed, adjust CH3 output voltage to within 300 mV ±0.15 mV with VR3.
⑧ For UPPER④, LOWER⑤, LEFT⑥ and RIGHT⑦ adjust to within this rating.
◇ Every time AUTO is pressed, the voltages corresponding to the respective cursors are output from the IE-1066 in the following order.
UPPER→LOWER→LEFT→RIGHT→UPPER

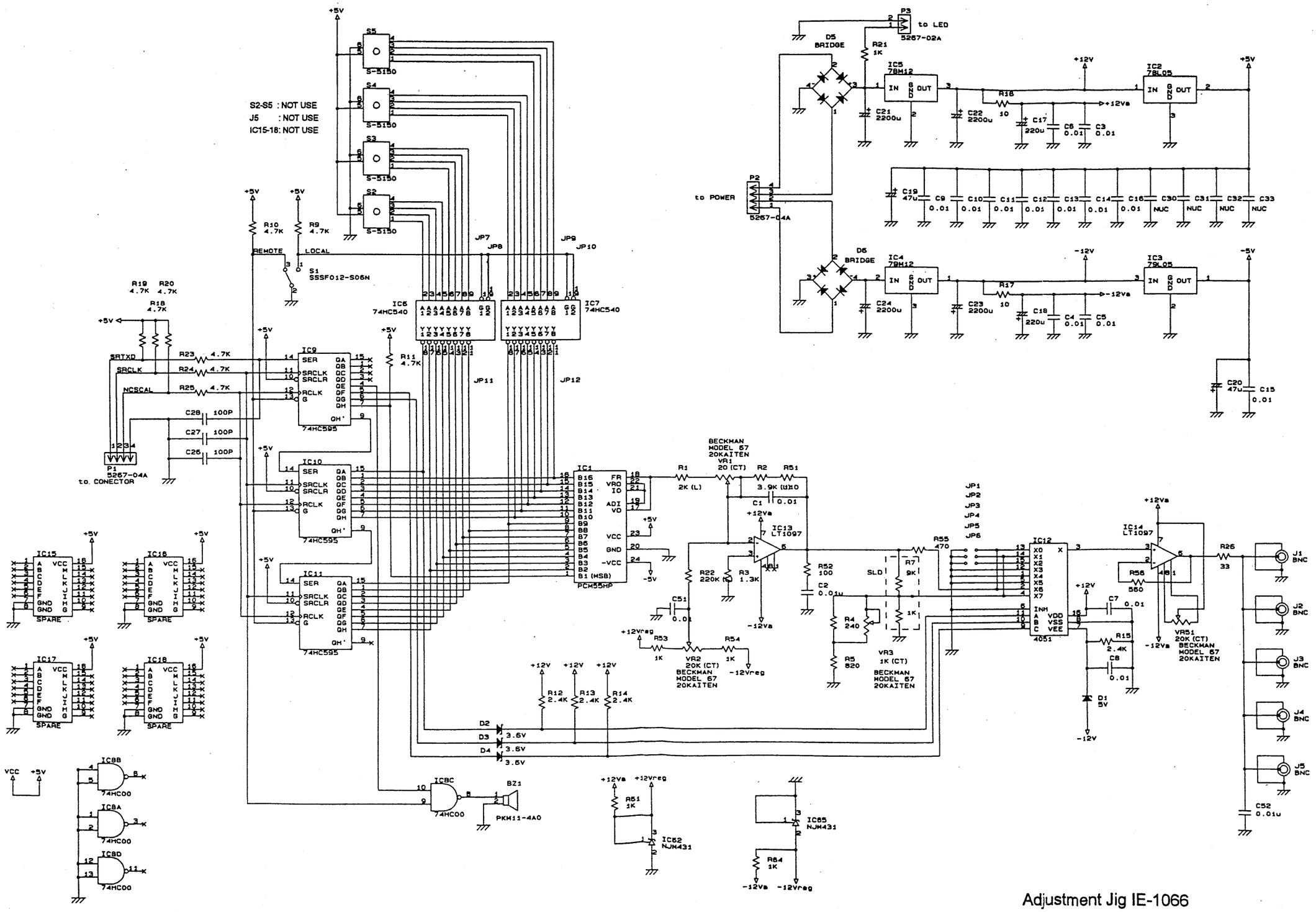
Table 2.14.1 Calibration of IE-1066 (Ambient Temperature 21 to 24℃)

Type of cursor	CH3 output	Rating		Adjuster
		Ⅰ (21 to 24℃)	Ⅱ (20 to 25℃)	
UPPER	0 mV(1/20)	0 ± 30.0 μ V	0 ± 120.0 μ V	VR4
LOWER	0 mV(1/1)	0 ± 0.30mV	0 ± 1.20mV	VR2
LEFT	6.00V	6.00V ± 1.50mV	6.00V ± 6.00mV	VR1
RIGHT	300 mV	300 mV ± 0.15mV	300 mV ± 0.60mV	VR3

◇ Rating Ⅰ : Specification for IE-1066 calibration.
◇ Rating Ⅱ : Specification for scope SS-78＊＊ with IE-1066 calibration.

2.14.4 Schematic Diagram

MEMO



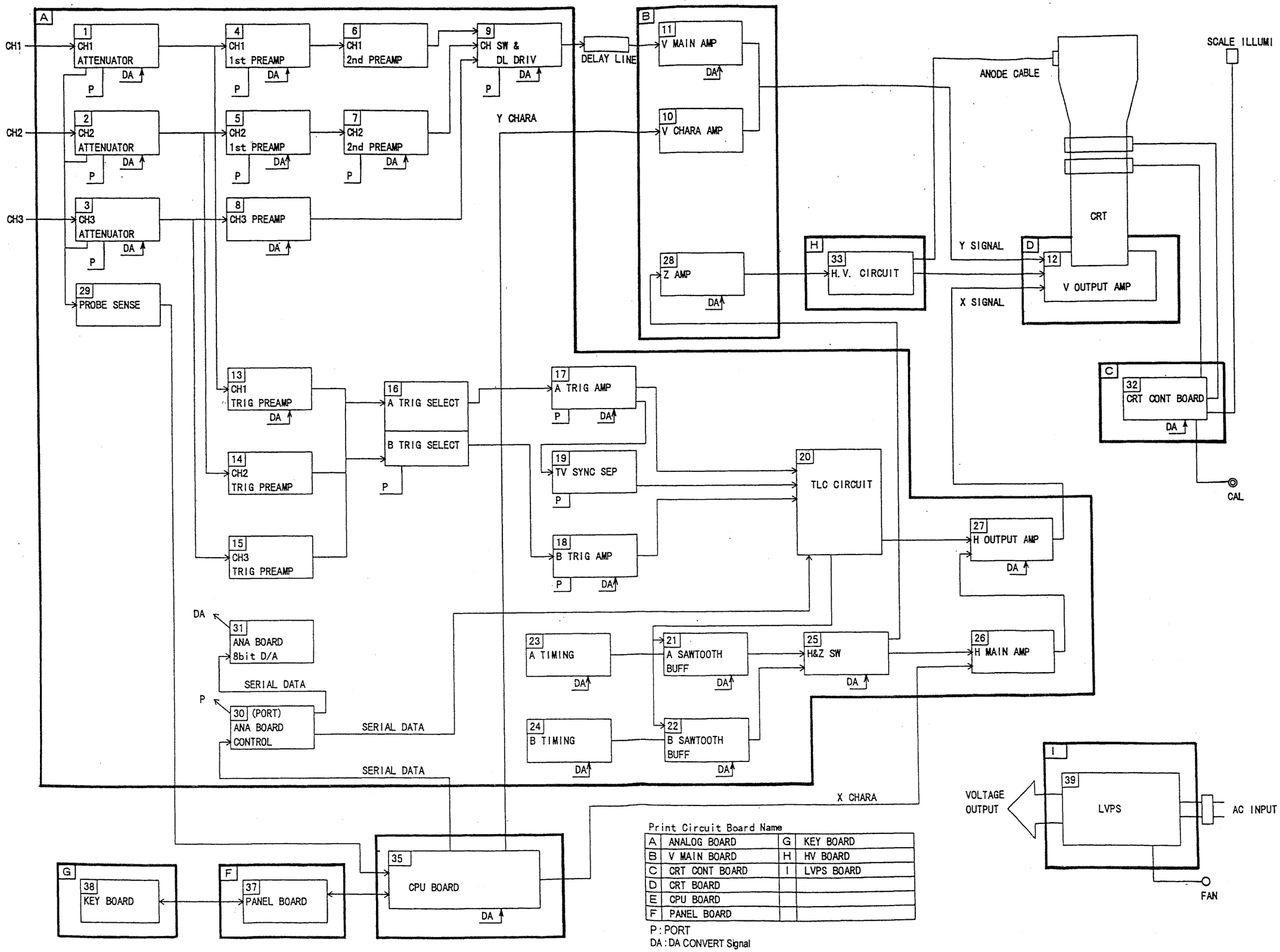
Adjustment Jig IE-1066
Schematic Diagram

Section 3 Block Diagram

3

Table of Contents

SS-7810 Block Diagram



Print Circuit Board Name

A	ANALOG BOARD	G	KEY BOARD
B	V MAIN BOARD	H	HV BOARD
C	CRT CONT BOARD	I	LVPS BOARD
D	CRT BOARD		
E	CPU BOARD		
F	PANEL BOARD		

P : PORT
DA : DA CONVERT Signal

MEMO

Summary of SS-7810 Block Functions

[ANALOG BOARD]

No.	Block name	Summary of block functions
1 2	CH1 ATT CH2 ATT	① Attenuation ratio control: Input sensitivity is switched to 10mV~5V/div by combining attenuation ratios of 1:1, 10:1, 100:1 and 1:1, 2:1, 5:1. ② Input coupling SELECTOR AC/DC/GND ③ Attenuation ratio variable (VARIABLE) ④ Probe sensing
3	CH3 ATT	① Attenuation ratio control: Switches input sensitivity 50mV/div, 100mV/div and 0.5V/div according to damping ratio of 1:1, 2:1 and 10:1. ② Input coupling switching AC/DC ③ Probe sensing
4 5	CH1 1st PREAMP CH2 1st PREAMP	① Converts attenuator output (single end) to differential output. ② 2mv, 5mV gain switching (× 5, × 2) ③ Adjusts gain. ④ Adjusts DC balance. ⑤ Outputs internal trigger signal.
6 7	CH1 2nd PREAMP CH2 2nd PREAMP	① Controls V POSITION for CH1, CH2. ② Inverts CH2 signal polarity. ③ Converts voltage output to current output for CH switching.
8	CH3 PREAMP	① Converts CH3 attenuator single end output to differential outputs. ② Adjusts gain. ③ Outputs CH3 trigger signal. ④ Sets V POSITION of CH3. ⑤ Converts voltage input to current output for CH switch.
9	CH SW & DL DRIV	① Switches PREAMP output currents of CH1, CH2 according to VERT MODE. ② Adds signals of CH1, CH2. ③ Drives delay cable. ④ Performs BANDWIDTH LIMIT.
13	CH1 TRIG PREAMP	① Amplifies CH1 1st PREAMP differential output signals, converts to single end output, supplies inverted output to A TRIG SELECT. ② Amplifies CH1 1st PREAMP differential output signals, converts to single end output, supplies non-inverted output to H&Z SW as X signal for X-Y display.
14	CH2 TRIG PREAMP	① Amplifies CH2 1st PREAMP differential output signals, converts to single, supplies inverted output to A TRIG SELECT. ② Amplifies CH2 1st PREAMP differential output signals, convewts to single end output, outputs CH2 input signal to CH2 OUT via buffer. (Only installed CH2 OUT option)
15	CH3 TRIG PREAMP	① Amplifies CH3 PREAMP differential output signals and converts to single end output, supplies non-inverted output to A/B TRIG SELECT.
16	A/B TRIG SELECT	① Selects A trigger signal of CH1, CH2, CH3, LINE from TRIG PREAMP, and outputs to A TRIG AMP. ② Selects B trigger signal of CH1, CH2, CH3 from TRIG AMP, and outputs to B TRIG AMP.
17 18	A TRIG AMP B TRIG AMP	① Selects trigger coupling (DC, AC, HF-REJ, LF-REJ). ② Set a trigger level, compares it with a trigger signal, amplifies to TTL level and outputs to TLC IC. ③ Outputs Automatic Adjustment signal for Trigger circuit.

[ANALOG BOARD]

No.	Block name	Summary of block functions
19	TV SYNC SEP	① Separates TV sync components from Trigger signal, and outputs in TTL level. ② Controls video signal amplitude to a fixed amplitude by AGC.
20	TLC CIRCUIT	① Controls the Trigger and Sweep circuit. (TLC: Trigger Logic Control)
21 22	A SAWTOOTH BUFF B SAWTOOTH BUFF	① Switch A/B sweep signal by A/B gate signal. ② A/B sweep signal buffer
23 24	A TIMING B TIMING	① Switches capacitor and resistor of saw tooth generator corresponding to sweep range. ② Varies charging current for varies sweep time (VARIABLE). ③ Adjusts sweep time.
25	H&Z SW	① Switches sweep signals (A sweep signal, X signal of X-Y). ② Controls sweep position. ③ Z signal switch ④ Sweep magnification (× 10 MAG)
26	H MAIN AMP	① Converts a voltage-input sweep signal to a current. ② Converts a voltage-input character signal to a current. ③ Switches sweep/character and outputs to H OUTPUT AMP. ④ Reduces AMP bias current to narrow dynamic range (BEAM FIND).
27	H OUTPUT AMP	① Amplifies sweep signal and outputs to CRT. ② Outputs Automatic Adjustment signal for sweep time circuit.
29	PROBE SENSE	① Multiplexes and outputs a voltage generated by type of probe connected to the input (ATTENUATOR) of CH1, CH2, EXT. ② Multiplexes and outputs Automatic Adjustment signal for Vertical system, Horizontal system.
30	ANA BOARD CONTROL	① Controls each block of VERTICAL section and HORIZONTAL section.
31	ANA BOARD 8bit D/A	① Generates voltage for adjusting each block of VERTICAL section and HORIZONTAL section, CRT, etc.

[CRT CONT BOARD]

No.	Block name	Summary of block functions
32	CRT CONT BOARD	① Generates REAL INTEN variable voltage. ② Generates BEAM FIND control voltage. ③ Generates LEAD-out ON/OFF control voltage. ④ Generates FOCUS control voltage. ⑤ Generates SCALE ILLUMINATION control voltage. ⑥ Generates TRACE ROTATION adjusting voltage. ⑦ Generates ORTHOGONARITY adjusting voltage. ⑧ Generates CAL signal. ⑨ Generates power OFF detection signal.

[V MAIN BOARD]

No.	Block name	Summary of block functions
10	V CHARA AMP	① Amplifies character signal and outputs to V OUTPUT AMP. ② Switches real/character output.
11	V MAIN AMP	① Amplifies output signal of delay cable and outputs to V OUTPUT AMP. ② Controls gain for BEAM FIND. ③ Controls trace separation and sets separation level. ④ Adjusts ADD balance. ⑤ Switches real/character output.
28	Z AMP	① Converts Z switch signal (Z SW OUT, current) to voltage, and supplies to H.V. CIRCUIT. ② Performs blanking of Z axis when switching real/character sweeping.

[CRT BOARD]

No.	Block name	Summary of block functions
12	V OUTPUT AMP	① Converts V CHARA AMP current output to voltage, and outputs to CRT. ② Outputs auto-adjusting signal. ③ Provided with a socket for inserting CRT electrode pin.

[CPU BOARD]

No.	Block name	Summary of block functions
35	CPU BOARD	① Controls power ON/OFF according to state of power supply and power SW. ② Stores adjustment data in EEPROM. ③ Controls DC voltage generation. ④ Controls PANEL BOARD. ⑤ Controls KEY BOARD. ⑥ Controls ANALOG BOARD. ⑦ Controls character display.

[PANEL BOARD]

No.	Block name	Summary of block functions
37	PANEL BOARD	① Scans key matrix. ② Drives LEDs. ③ Scans volume.

[KEY BOARD]

No.	Block name	Summary of block functions
38	KEY BOARD	① Front panel key switches and LEDs.

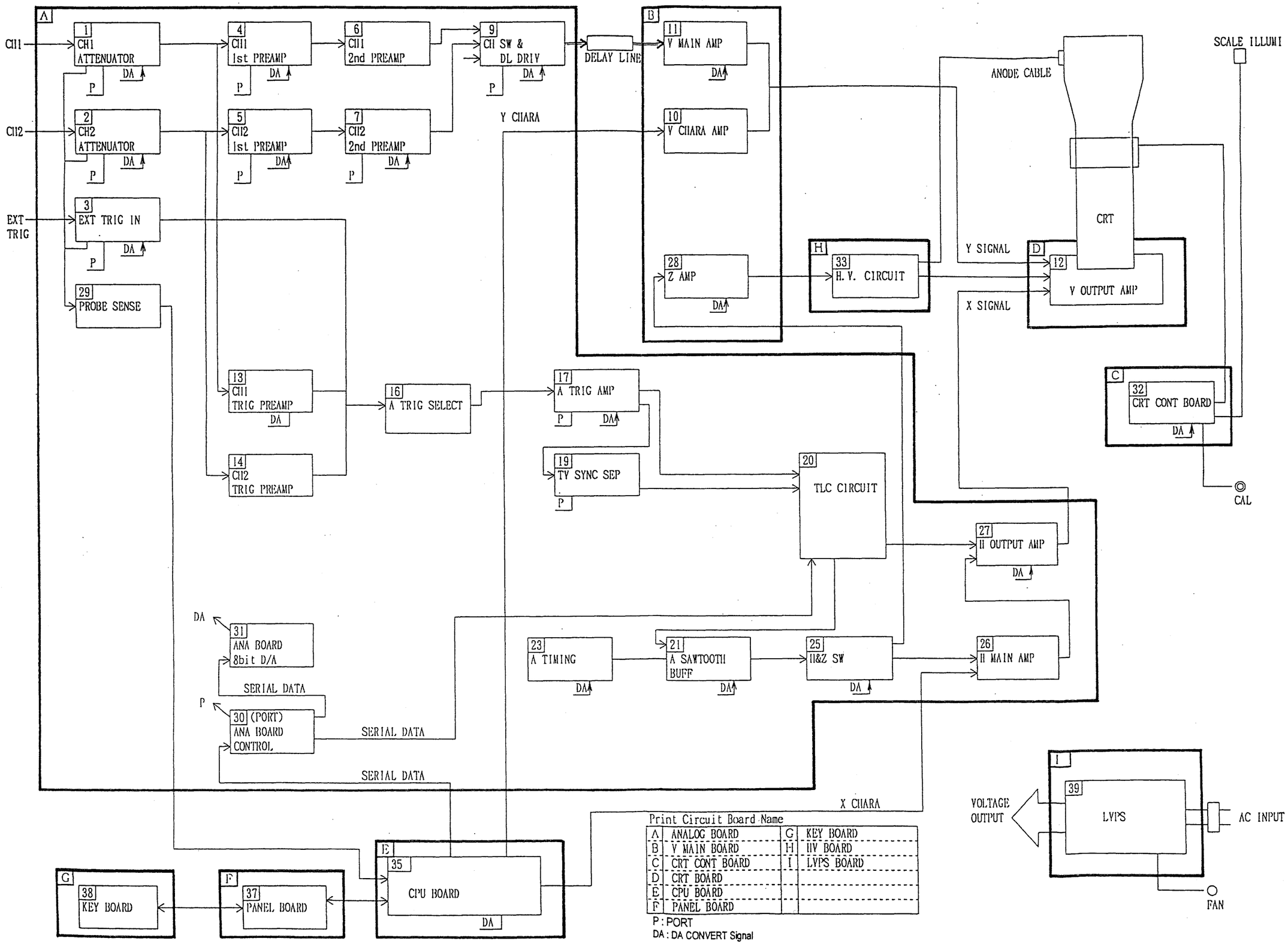
[HVPS BOARD]

No.	Block name	Summary of block functions
33	H.V. CIRCUIT	① Inputs +50V unreg, and generates high voltage to supply to CRT. ② Generates CRT post acceleration voltage.

[LVPS BOARD]

No.	Block name	Summary of block functions
39.	LVPS	① Generates +5V, +12V, +150V, +12V requlated voltage, +50V unrequlated voltage, +5V for CPU from AC power supply. ② Switches AC input voltage 100V/200V by jumper wire.

SS-7805/04 Block Diagram



Print Circuit Board Name

A	ANALOG BOARD	G	KEY BOARD
B	V MAIN BOARD	H	HV BOARD
C	CRT CONT BOARD	I	LVPS BOARD
D	CRT BOARD		
E	CPU BOARD		
F	PANEL BOARD		

P : PORT

DA : DA CONVERT Signal

MEMO

Summary of SS-7805/04 Block Functions

[ANALOG BOARD]

No.	Block name	Summary of block functions
1 2	CH1 ATT CH2 ATT	① Attenuation ratio control: Input sensitivity is switched to 10mV~5V/div by combining attenuation ratios of 1:1, 10:1, 100:1 and 1:1, 2:1, 5:1. ② Input coupling SELECTOR AC/DC/GND ③ Attenuation ratio variable (VARIABLE) ④ Probe sensing
3	EXT TRIG IN	① EXT TRIG input is buffered and output to TRIG SELECT. ② Probe sensing
4 5	CH1 1st PREAMP CH2 1st PREAMP	① Converts attenuator output (single end) to differential output. ② 2mv, 5mV gain switching (× 5, × 2) ③ Adjusts gain. ④ Adjusts DC balance. ⑤ Outputs internal trigger signal.
6 7	CH1 2nd PREAMP CH2 2nd PREAMP	① Controls V POSITION for CH1, CH2. ② Inverts CH2 signal polarity. ③ Converts voltage output to current output for CH switching.
9	CH SW & DL DRIV	① Switches PREAMP output currents of CH1, CH2 according to VERT MODE. ② Adds signals of CH1, CH2. ③ Drives delay cable.
13	CH1 TRIG PREAMP	① Amplifies CH1 1st PREAMP differential output signals, converts to single end output, supplies inverted output to A TRIG SELECT. ② Amplifies CH1 1st PREAMP differential output signals, converts to single end output, supplies non-inverted output to H&Z SW as X signal for X-Y display.
14	CH2 TRIG PREAMP	① Amplifies CH2 1st PREAMP differential output signals, converts to single, supplies inverted output to A TRIG SELECT. ② Amplifies CH2 1st PREAMP differential output signals, convewts to single end output, outputs CH2 input signal to CH2 OUT via buffer. (Only when CH2 OUT is adopted and set)
16	A TRIG SELECT	① Selects A trigger signal of CH1, CH2, EXT, LINE from TRIG PREAMP, and outputs to A TRIG AMP.
17	A TRIG AMP	① Selects synchronization coupling (DC, AC, HF-REJ, LF-REJ). ② Sets a trigger level, compares it with a trigger signal, amplifies to TTL level and outputs to TLC IC. ③ Sends a synchronizing system CAL output signal.
19	TV SYNC SEP	① Separates TV sync components from Trigger signal, and outputs in TTL level. ② Controls video signal amplitude to a fixed amplitude by AGC.
20	TLC CIRCUIT	① Controls the synchronizing system. (TLC: Trigger Logic Control)
21	A SAWTOOTH BUFF	① Switches A sweep signal by A gate signal. ② A sweep signal buffer
23	A TIMING	① Switches capacitor and resistor of saw tooth generator corresponding to sweep range. ② Varies charging current for varies sweep time (VARIABLE). ③ Adjusts sweep time.

[ANALOG BOARD]

No.	Block name	Summary of block functions
25	H&Z SW	① Switches sweep signals (A sweep signal, X signal of X-Y). ② Controls sweep position. ③ Z signal switch ④ Sweep magnification (× 10 MAG)
26	H MAIN AMP	① Converts a voltage-input sweep signal to a current. ② Converts a voltage-input character signal to a current. ③ Switches sweep/character and outputs to H OUTPUT AMP. ④ Reduces AMP bias current to narrow dynamic range (BEAM FIND).
27	H OUTPUT AMP	① Amplifies sweep signal and outputs to CRT. ② Outputs Automatic Adjustment signal for sweep time circuit.
29	PROBE SENSE	① Multiplexes and outputs a voltage generated by type of probe connected to the input (ATTENUATOR) of CH1, CH2, EXT. ② Multiplexes and outputs Automatic Adjustment signal for Vertical system, Horizontal system.
30	ANA BOARD CONTROL	① Controls each block of VERTICAL section and HORIZONTAL section.
31	ANA BOARD 8bit D/A	① Generates voltage for adjusting each block of VERTICAL section and HORIZONTAL section, CRT, etc.

[CRT CONT BOARD]

No.	Block name	Summary of block functions
32	CRT CONT BOARD	① Generates REAL INTEN variable voltage. ② Generates BEAM FIND control voltage. ③ Generates lead-out ON/OFF control voltage. ④ Generates FOCUS variable voltage. ⑤ Generates SCALE ILLUMINATION variable voltage. ⑥ Generates TRACE ROTATION adjusting voltage. ⑦ Generates ORTHOGONARITY adjusting voltage. ⑧ Generates CAL signal. ⑨ Generates power OFF detection signal.

[V MAIN BOARD]

No.	Block name	Summary of block functions
10	V CHARA AMP	① Amplifies character signal and outputs to V OUTPUT AMP. ② Switches real/character output.
11	V MAIN AMP	① Amplifies output signal of delay cable and outputs to V OUTPUT AMP. ② Controls gain for BEAM FIND. ③ Controls trace separation and sets separation level. ④ Adjusts ADD balance. ⑤ Switches real/character output.
28	Z AMP	① Converts Z switch signal (Z SW OUT, current) to voltage, and supplies to H.V. CIRCUIT. ② Performs blanking of Z axis when switching real/character sweeping.

[CRT BOARD]

No.	Block name	Summary of block functions
12	V OUTPUT AMP	① Converts CHARA AMP current output to voltage and outputs to CRT. ② Outputs auto-adjusting signal. ③ Provided with a socket for inserting CRT electrode pin.

[CPU BOARD]

No.	Block name	Summary of block functions
35	CPU BOARD	① Controls power ON/OFF according to state of power supply and power SW. ② Stores adjustment data in EEPROM. ③ Controls DC voltage generation. ④ Controls PANEL BOARD. ⑤ Controls KEY BOARD. ⑥ Controls ANALOG BOARD. ⑦ Controls character display.

[PANEL BOARD]

No.	Block name	Summary of block functions
37	PANEL BOARD	① Scans key matrix. ② Drives LEDs. ③ Scans volume.

[KEY BOARD]

No.	Block name	Summary of block functions
38	KEY BOARD	① Front panel key switches and LEDs

[HVPS BOARD]

No.	Block name	Summary of block functions
33	H.V. CIRCUIT	① Inputs +50V unreg, and generates high voltage to supply to CRT. ② Multiplier if used to supply voltage for CRT post acceleration.

[LVPS BOARD]

No.	Block name	Summary of block functions
39	LVPS	① Generates +5V, +12V, +150V, +12V unreg, +50V unreg, +5V for CPU from AC power supply. ② Switches AC input voltage 100V/200V by jumper wire.

MEMO

Section 4 Electrical Parts List

Table of Contents

Order Information

Replacement parts may be ordered through an IWATSU representative or directly from the factory. For receiving the proper parts, the following information should be included.

a. Model Number and serial number of the instrument.
b. Circuit reference number and subassembly name, if applicable, for which the part is intended. If the part does not have a circuit reference, the description from the parts list should be used.
c. Iwatsu part number.

For asking the repair, contact the IWATSU agent and inform the followings.

a. Model number and serial number of the instrument.
b. Details of the malfunction.

* When yhou order the parts, please use a copy of the "INQUIRY (for REPAIR PARTS)" form on the following page.

How to Use This Parts List

The parts list is devided into subsections corresponding to the schematic diagrams. Component locations can be determined from the schematic diagrams, each componento is listed only one part in the partslist. At the begining of each subsection are listed part number of any complete subassemblies in that category that are available replacement parts. These subassemblies may include individually-listed components; care should be taken to pin point malfunctions to the exact replacement parts actually needed and thus avoid the time and cost involved in "over-repair".

*** When you order the Parts, use this form.**

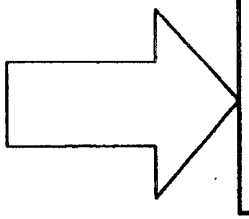
SIGNATURE _____

YOUR P/O NO. _____

DATE: MM / DD / YYYY

CHECK BOX ☐ **INQUIRY (for REPAIR PARTS)**
☐ **ORDER**

YOUR ADDRESS



IWATSU TEST INSTRUMENTS CORPORATION
T. M. E. Dep. (海外担当)

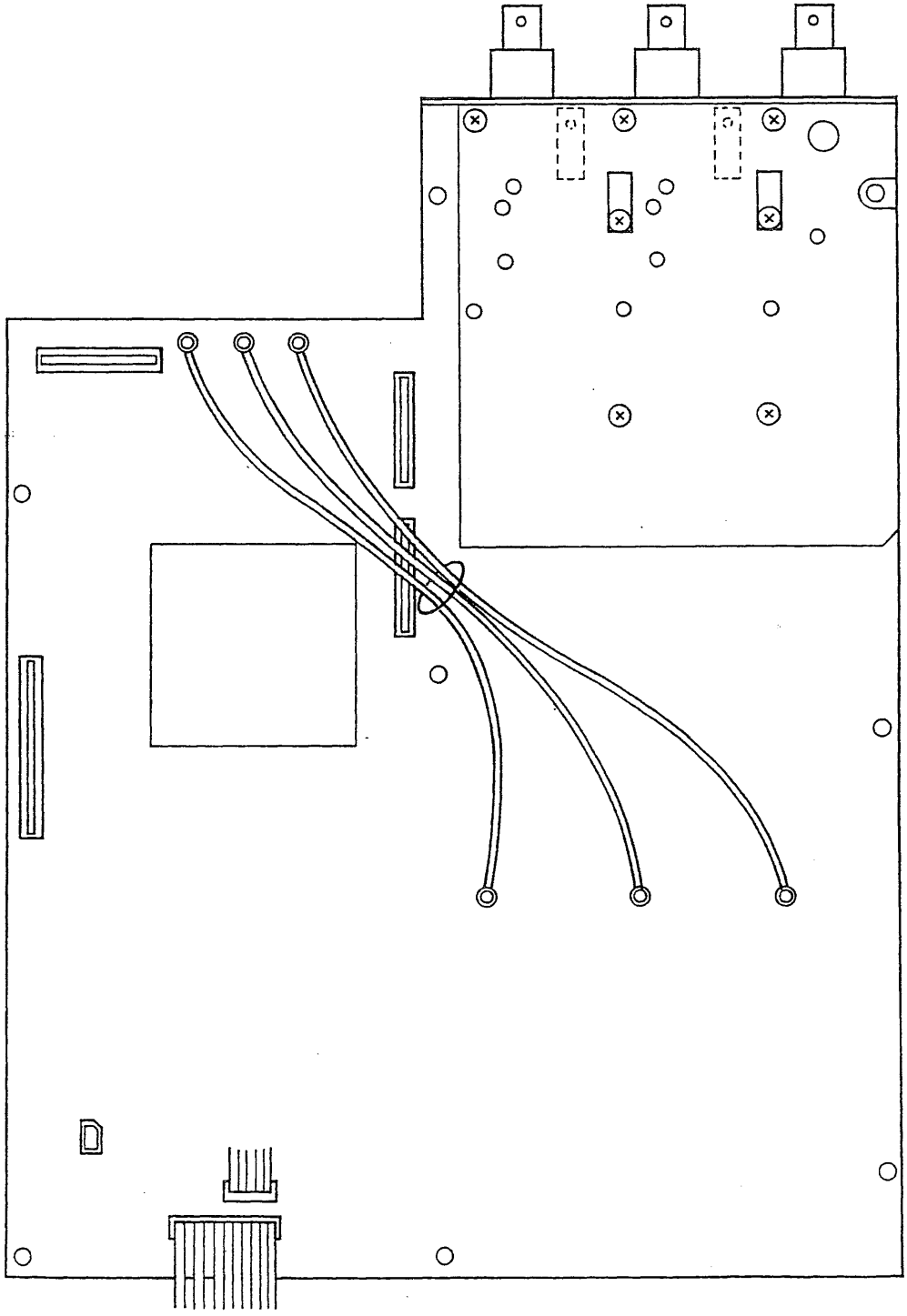
7-41, Kugayama 1-chome, Suginami-ku, Tokyo, 168-8501 Japan
TEL. +81-3-5370-5483 FAX. +81-3-5370-5492

No.	MODEL NAME	(SERIAL No.)	CIRCUIT REF	IWATSU PART No.	NAME & DESCRIPTION	QUANTITY		TOTAL
						URGENT	STOCK	
Ex	S S - 5 7 1 1	1 2 5 6 8 9 9 9	1Q11	D T R 2 5 0 0 1 1	F E T , 2 N 5 9 1 2 - 1	2	18	20
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								

Assembled P.C.B for Repair

SS-7810 ANALOG BOARD

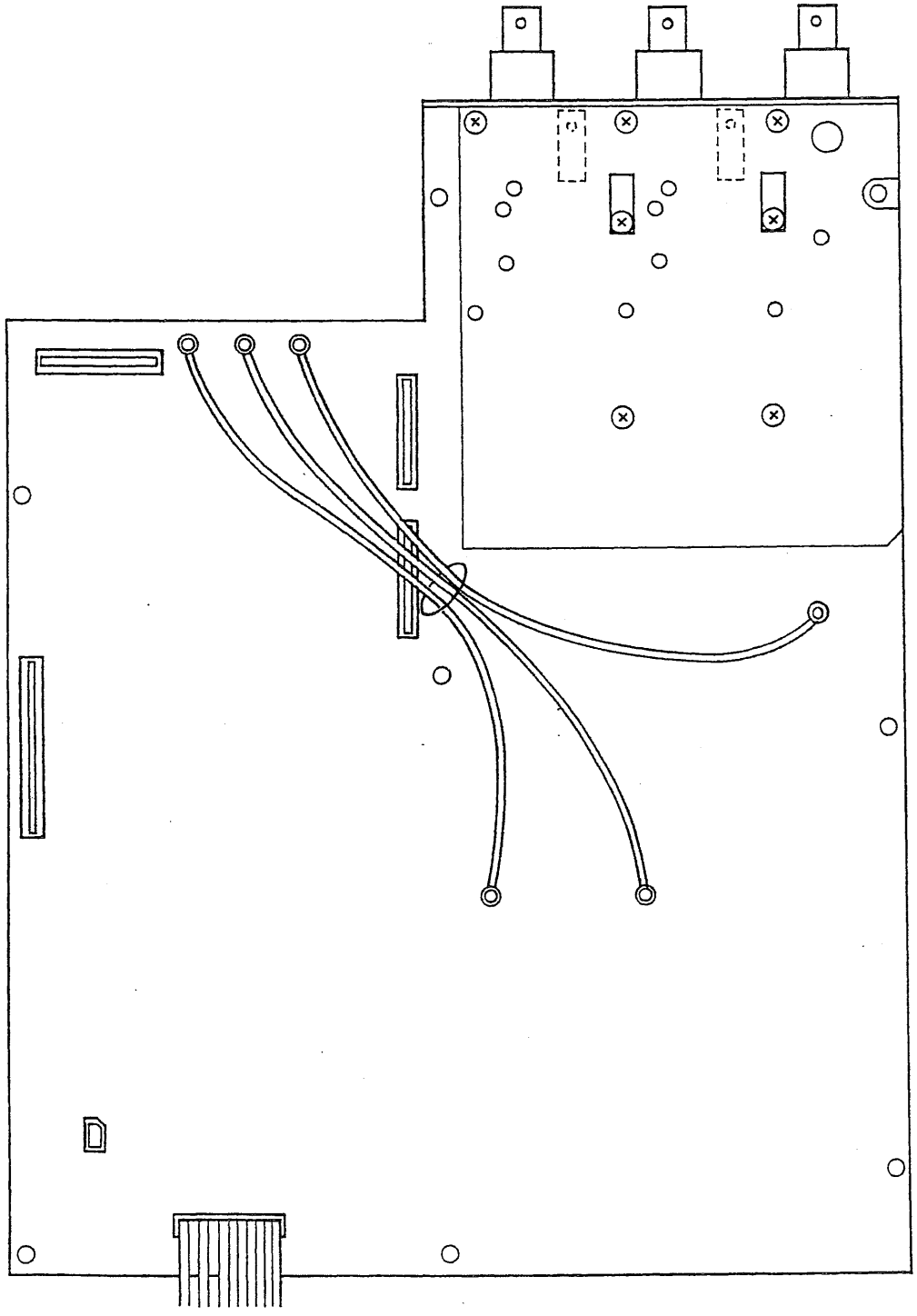
MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7810	213023010	ASSEMBLED P.C.B ANALOG BOARD



SS-7805/04 ANALOG BOARD

MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7805/04	213023110	ASSEMBLED P.C.B ANALOG BOARD

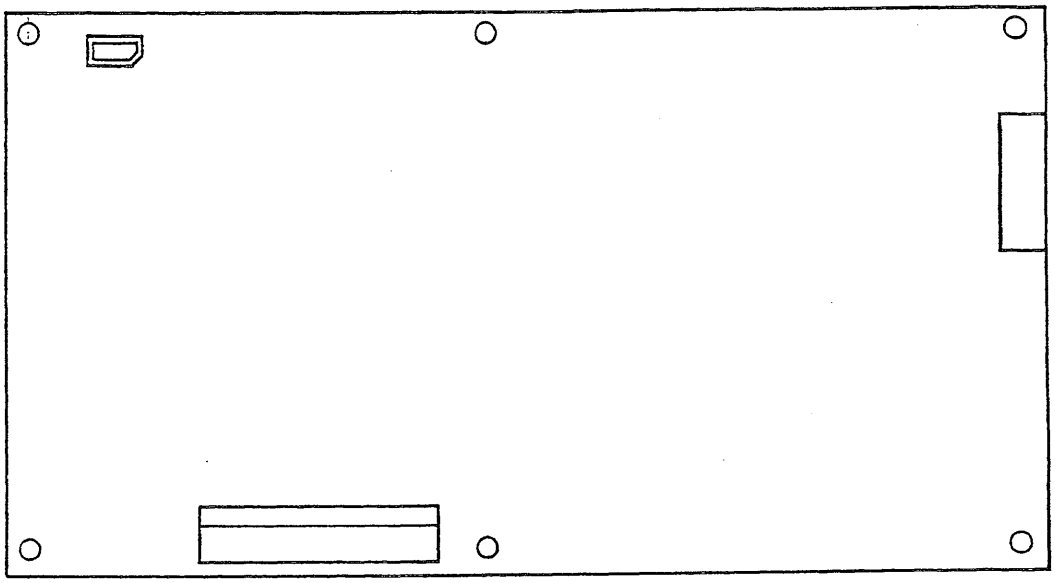
Note: SS-7804 boards produced before 2004/03 cannot be used for SS-7805.
Exchange ANALOG BOARD and V MAIN BOARD at the same time.



SS-7810/05/04 V MAIN BOARD

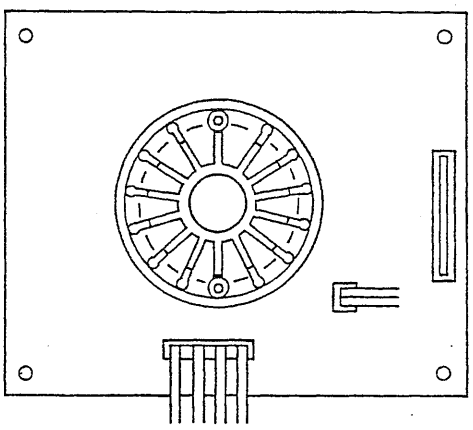
MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7810/05/04	213023020	ASSEMBLED P.C.B V MAIN BOARD

Note: Exchange ANALOG BOARD and V MAIN BOARD at the same time.



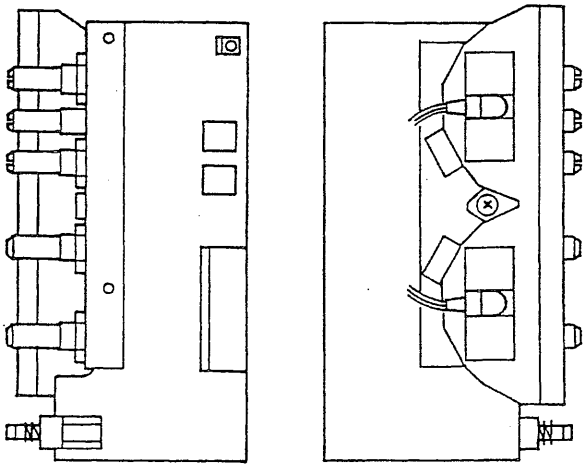
SS-7810/05/04 CRT BOARD

MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7810/05/04	213023030	ASSEMBLED P.C.B CRT BOARD



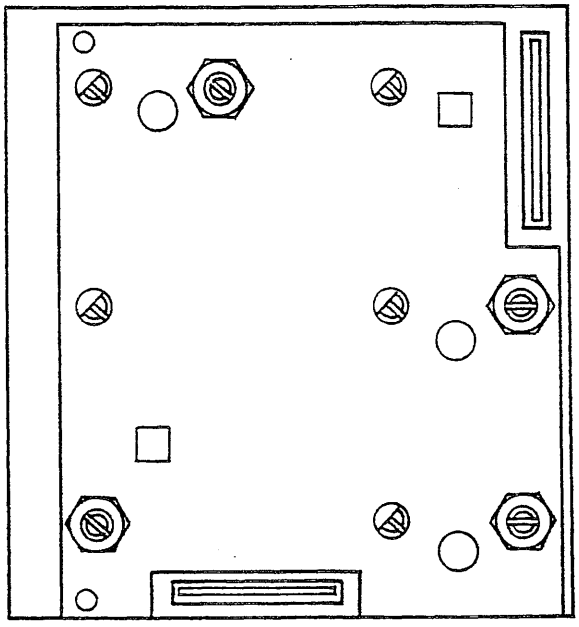
SS-7810/05/04 CRT CONT

MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7810	213023033	ASSEMBLED P.C.B CRT CONT
SS-7805/04	213023036	ASSEMBLED P.C.B CRT CONT



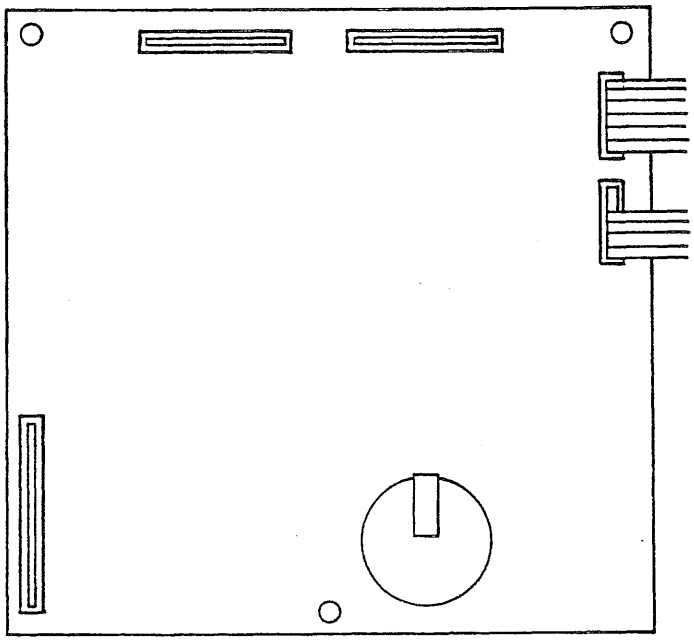
SS-7810/05/04 PANEL BOARD

MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7810	213023040	ASSEMBLED P.C.B PANEL BOARD
SS-7805/04	213023140	ASSEMBLED P.C.B PANEL BOARD



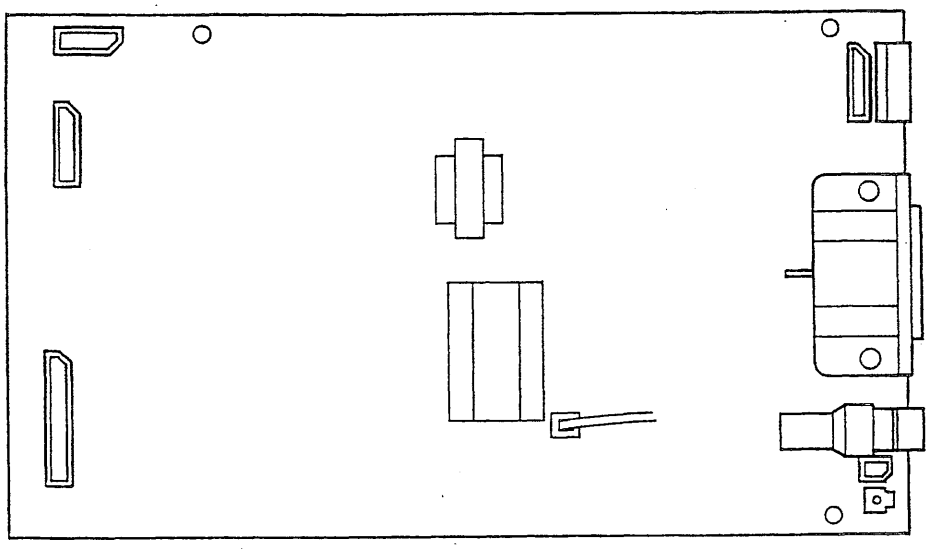
SS-7810/05/04 CPU BOARD

MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7810	213023050	ASSEMBLED P.C.B CPU BOARD
SS-7805/04	213023150	ASSEMBLED P.C.B CPU BOARD



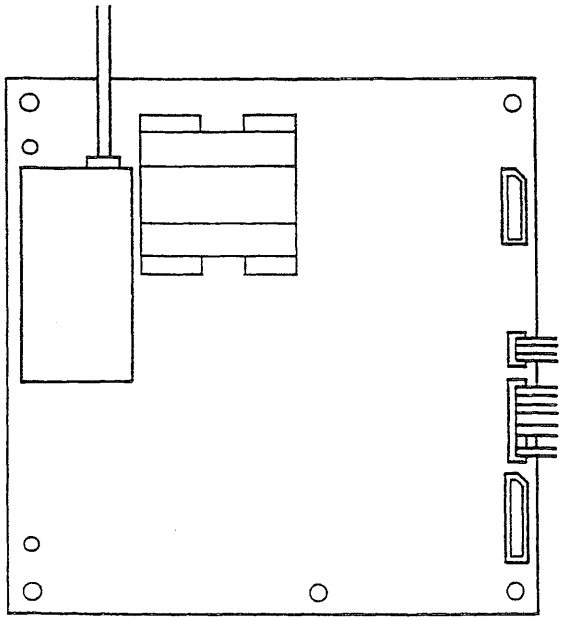
SS-7810/05/04 LVPS BOARD

MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7810/05/04	213023070	ASSEMBLED P.C.B LOW-VOLTAGE POWER SUPPLY (LVPS)



SS-7810/05/04 HVPS BOARD

MODEL NAME	IWATSU PART NO.	NAME & DESCRIPTION
SS-7810/05/04	213023080	ASSEMBLED P.C.B HIGH-VOLTAGE POWER SUPPLY (HVPS)



SS-7810 Parts List

SS-7810

CH1 ATTENUATOR [1]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
1C1	DCC239521	UP050SL 220J TA21N
1C2	DCC810511	C2012F 1H 103Z A TD84N
1C3	DCF168011	4MFT-D 473M
1C4	DCV019612	ECV-1ZW 06X53T
1C4B	DCC815891	C2012CH 1H 150J A TD84N
1C5	DCV019612	ECV-1ZW 06X53T
1C7A	DCC816561	C2012CH 1H 470J A TD84N
1C7B	DCC816441	C2012CH 1H 050C A TD84N
1C12A	DCV819051	TZBX4 Z030BA110 TE1208R
1C14A	DCC816561	C2012CH 1H 470J A TD84N
1C19	DCC816421	C2012CH 1H 040C A TD84N
1C20A, 1C20B	DCC159021	CK45B 2H 222K TC04N
1C25	DCC810531	C2012F 1H 223Z A TD84N
1C27	DCC816601	C2012CH 1H 101J A TD84N
1C30	DCC810571	C2012F 1E 104Z A TD84N
1C31	DCC810511	C2012F 1H 103Z A TD84N
1C32	DCC810511	C2012F 1H 103Z A TD84N
1C35	DCC810511	C2012F 1H 103Z A TD84N
1C38	DCC810531	C2012F 1H 223Z A TD84N
1C42A, 1C42B	DCC810511	C2012F 1H 103Z A TD84N
1C44	DCC816381	C2012CH 1H 020C A TD84N
1C49	DCC816361	C2012CH 1H 010C A TD84N
1C55	DCC810571	C2012F 1E 104Z A TD84N
1C56	DCC810511	C2012F 1H 103Z A TD84N
1C58	DCC810511	C2012F 1H 103Z A TD84N
1C60	DCC810511	C2012F 1H 103Z A TD84N
1C62	DCC810511	C2012F 1H 103Z A TD84N
1C63	DCC816531	C2012CH 1H 270J A TD84N
1C67 to 1C69	DCC810511	C2012F 1H 103Z A TD84N
1C79	DCC810511	C2012F 1H 103Z A TD84N
1C80	DCC810841	C2012B 1H 102K A TD84N
1C100	DCC810511	C2012F 1H 103Z A TD84N
1C101A, 1C101B	DCC810511	C2012F 1H 103Z A TD84N
1C102	DCC810511	C2012F 1H 103Z A TD84N
1C103A	DCC810841	C2012B 1H 102K A TD84N
1C103B	DCC816601	C2012CH 1H 101J A TD84N
1C104	DCC810511	C2012F 1H 103Z A TD84N
1C105A	DCC810841	C2012B 1H 102K A TD84N
1C105B	DCC816601	C2012CH 1H 101J A TD84N
1C106	DCC810511	C2012F 1H 103Z A TD84N
1C107A	DCC810841	C2012B 1H 102K A TD84N
1C107B	DCC816601	C2012CH 1H 101J A TD84N

CH1 ATTENUATOR [1]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
1C108, 1C109	DCC810511	C2012F 1H 103Z A TD84N
1C110	DCE229221	SME-CE04W 1E 221M TC04R
1C111	DCE229221	SME-CE04W 1E 221M TC04R
1C112	DCC810511	C2012F 1H 103Z A TD84N
1C112B	DCC816421	C2012CH 1H 040C A TD84N
1C115	DCC810511	C2012F 1H 103Z A TD84N
1C116, 1C117	DCC810841	C2012B 1H 102K A TD84N
1C118	DCC810571	C2012F 1E 104Z A TD84N
1D1	DDD810241	1SS 272 TE0804R
1D2	DDD810241	1SS 272 TE0804R
1D4	DDD810241	1SS 272 TE0804R
1D5	DDD838831	RD 4.7M-T1B B2
1D6A, 1D6B	DDD810521	1SS 307 TE0804L
1D7	DDD810261	HSM 88AS TL
1D10, 1D11	DDD810141	MA 159-(TX) TE0804L
1D12	DDD830361	RD5.1M-T1B B2 TE0804L
1D14	DDD830341	RD6.8M-T1B B2
1IC1	DIC614741	LT 1097CN8
1IC2	DIC619101	OP AMP 4558F TE1208B
1IC3	DIC495081	TC 4052BF (EL) TE1612B
1JP1	DRZ831501	MCR10 000E TD0804N
1JP3	DRZ831501	MCR10 000E TD0804N
1JP5	DRZ831501	MCR10 000E TD0804N
1JP100, 1JP101	DZB999011	JPW 01 TA21N
1Q1 to 1Q3	DTR890791	IMD3 TE0804R
1Q4	DTR810041	2SA 1162Y TE85L
1Q5	DTR830071	2SC 3356-T1B
1Q6	DTR860161	2SK 508 K51 TE0804L
1Q7	DTR830071	2SC 3356-T1B
1Q8 to 1Q12	DTR870011	3SK 184R TE0804F
1Q14	DTR810041	2SA 1162Y TE85L
1R1	DRE137481	EF1/4S 22ΩF TA21N
1R2	DRZ832251	RK73H 2A 1.0KΩF TD0804N
1R3A, 1R3B	DRZ832051	RK73H 2A 150ΩF TD0804N
1R3C, 1R3D	DRZ832051	RK73H 2A 150ΩF TD0804N
1R4	DRZ831501	MCR10 000E TD0804N
1R5	DRE938081	SN14K 2E 900KΩD TA21N
1R6A	DRZ832741	RK73H 2A 110KΩF TD0804N
1R6B	DRZ832261	RK73H 2A 1.1KΩF TD0804N
1R7	DRZ833511	RK73H 2A 22ΩF TD0804N
1R9A	DRZ832031	RK73H 2A 120ΩF TD0804N

SS-7810

CH1 ATTENUATOR [1]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
1R10, 1R11	DRZ833441	RK73H 2A 10ΩF TD0804N
1R12	DRE938081	SN14K 2E 900KΩD TA21N
1R13A	DRZ832741	RK73H 2A 110KΩF TD0804N
1R13B	DRZ832261	RK73H 2A 1.1KΩF TD0804N
1R14	DRZ833511	RK73H 2A 22ΩF TD0804N
1R16	DRZ833081	RK73H 2A 91ΩF TD0804N
1R17	DRZ833441	RK73H 2A 10ΩF TD0804N
1R18	DRZ833441	RK73H 2A 10ΩF TD0804N
1R19	DRZ832251	RK73H 2A 1.0KΩF TD0804N
1R20	DRE938681	CRB25CY 820KΩ T-29E TA21N
1R21	DRE938671	CRB25CY 180KΩ T-29E TA21N
1R24	DRZ832491	RK73H 2A 10KΩF TD0804N
1R26	DRZ832381	RK73H 2A 3.6KΩF TD0804N
1R27	DRZ832311	RK73H 2A 1.8KΩF TD0804N
1R28	DRZ832171	RK73H 2A 470ΩF TD0804N
1R29	DRZ832131	RK73H 2A 330ΩF TD0804N
1R31	DRG939011	VR25 10MΩJ TA21N
1R32	DRZ832011	RK73H 2A 100ΩF TD0804N
1R33	DRZ833511	RK73H 2A 22ΩF TD0804N
1R34	DRZ832341	RK73H 2A 2.4KΩF TD0804N
1R35	DRZ832341	RK73H 2A 2.4KΩF TD0804N
1R36	DRZ832341	RK73H 2A 2.4KΩF TD0804N
1R37	DRE938681	CRB25CY 820KΩ T-29E TA21N
1R38	DRE138421	EF1/4S 180KΩF TA21N
1R39A	DRZ832431	RK73H 2A 5.6KΩF TD0804N
1R39B	DRV810241	G4AT/ST-4TA 2KΩ TE1208L
1R40	DRZ833441	RK73H 2A 10ΩF TD0804N
1R42	DRZ832581	RK73H 2A 24KΩF TD0804N
1R44	DRZ833071	RK73H 2A 82ΩF TD0804N
1R45, 1R46	DRE938611	CRB25CY 160Ω T-29E TA21N
1R47	DRE938621	CRB25CY 390Ω T-29E TA21N
1R48	DRZ833441	RK73H 2A 10ΩF TD0804N
1R49	DRE938531	CRB25CY 100Ω T-29E TA21N
1R50	DRZ833071	RK73H 2A 82ΩF TD0804N
1R51 to 1R54	DRZ832661	RK73H 2A 51KΩF TD0804N
1R55	DRZ832701	RK73H 2A 75KΩF TD0804N
1R57	DRZ832701	RK73H 2A 75KΩF TD0804N
1R59	DRZ832701	RK73H 2A 75KΩF TD0804N
1R61	DRZ832701	RK73H 2A 75KΩF TD0804N
1R63	DRZ833551	RK73H 2A 33ΩF TD0804N
1R65	DRZ833441	RK73H 2A 10ΩF TD0804N

CH1 ATTENUATOR [1]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
1R67	DRZ832511	RK73H 2A 12KΩF TD0804N
1R68, 1R69	DRZ832581	RK73H 2A 24KΩF TD0804N
1R70	DRZ832431	RK73H 2A 5.6KΩF TD0804N
1R72	DRZ831591	MCR10J 4R7E TD0804N
1R73	DRZ833441	RK73H 2A 10ΩF TD0804N
1R75	DRZ832741	RK73H 2A 110KΩF TD0804N
1R76	DRZ832551	RK73H 2A 18KΩF TD0804N
1R77	DRZ832511	RK73H 2A 12KΩF TD0804N
1R78	DRZ832511	RK73H 2A 12KΩF TD0804N
1R79	DRZ832221	RK73H 2A 750ΩF TD0804N
1R80	DRZ833551	RK73H 2A 33ΩF TD0804N
1RL1 to 1RL3	DKD028361	Relay A12W-K
1TL1	KBA745911	ATT Earth Spring
1U1	DCN041171	Connector L235

CH2 ATTENUATOR [2]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
2C1	DCC239521	UP050SL 220J TA21N
2C2	DCC810511	C2012F 1H 103Z A TD84N
2C3	DCF168011	4MFT-D 473M
2C4	DCV019612	ECV-1ZW 06X53T
2C5	DCV019612	ECV-1ZW 06X53T
2C7A	DCC816561	C2012CH 1H 470J A TD84N
2C7B	DCC816441	C2012CH 1H 050C A TD84N
2C12A	DCV819051	TZBX4 Z030BA110 TE1208R
2C12B	DCC816421	C2012CH 1H 040C A TD84N
2C14A	DCC816561	C2012CH 1H 470J A TD84N
2C14B	DCC815891	C2012CH 1H 150J A TD84N
2C19	DCC816421	C2012CH 1H 040C A TD84N
2C20A, 2C20B	DCC159021	CK45B 2H 222K TC04N
2C25	DCC810531	C2012F 1H 223Z A TD84N
2C27	DCC816601	C2012CH 1H 101J A TD84N
2C30	DCC810571	C2012F 1E 104Z A TD84N
2C31	DCC810511	C2012F 1H 103Z A TD84N
2C32	DCC810511	C2012F 1H 103Z A TD84N
2C35	DCC810511	C2012F 1H 103Z A TD84N
2C38	DCC810531	C2012F 1H 223Z A TD84N
2C42A	DCC810511	C2012F 1H 103Z A TD84N
2C42B	DCC810511	C2012F 1H 103Z A TD84N
2C44	DCC816381	C2012CH 1H 020C A TD84N
2C49	DCC816361	C2012CH 1H 010C A TD84N
2C55	DCC810571	C2012F 1E 104Z A TD84N
2C56	DCC810511	C2012F 1H 103Z A TD84N
2C58	DCC810511	C2012F 1H 103Z A TD84N
2C60	DCC810511	C2012F 1H 103Z A TD84N
2C62	DCC810511	C2012F 1H 103Z A TD84N
2C63	DCC816531	C2012CH 1H 270J A TD84N
2C67 to 2C69	DCC810511	C2012F 1H 103Z A TD84N
2C79	DCC810511	C2012F 1H 103Z A TD84N
2C80	DCC810841	C2012B 1H 102K A TD84N
2C100	DCC810511	C2012F 1H 103Z A TD84N
2C101A, 2C101B	DCC810511	C2012F 1H 103Z A TD84N
2C102	DCC810511	C2012F 1H 103Z A TD84N
2C103A	DCC810841	C2012B 1H 102K A TD84N
2C103B	DCC816601	C2012CH 1H 101J A TD84N
2C104	DCC810511	C2012F 1H 103Z A TD84N
2C105A	DCC810841	C2012B 1H 102K A TD84N
2C105B	DCC816601	C2012CH 1H 101J A TD84N
2C106	DCC810511	C2012F 1H 103Z A TD84N

CH2 ATTENUATOR [2]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
2C107A	DCC810841	C2012B 1H 102K A TD84N
2C107B	DCC816601	C2012CH 1H 101J A TD84N
2C108, 2C109	DCC810511	C2012F 1H 103Z A TD84N
2C110, 2C111	DCE229221	SME-CE04W 1E 221M TC04R
2C112	DCC810511	C2012F 1H 103Z A TD84N
2C115	DCC810511	C2012F 1H 103Z A TD84N
2C116, 2C117	DCC810841	C2012B 1H 102K A TD84N
2C118	DCC810571	C2012F 1E 104Z A TD84N
2D1, 2D2	DDD810241	1SS 272 TE0804R
2D4	DDD810241	1SS 272 TE0804R
2D5	DDD838831	RD 4.7M-T1B B2
2D6A, 2D6B	DDD810521	1SS 307 TE0804L
2D7	DDD810261	HSM 88AS TL
2D10, 2D11	DDD810141	MA 159-(TX) TE0804L
2D12	DDD830361	RD5.1M-T1B B2 TE0804L
2D14	DDD830341	RD6.8M-T1B B2
2IC1	DIC614741	LT 1097CN8
2IC2	DIC619101	OP AMP 4558F TE1208B
2IC3	DIC495081	TC 4052BF (EL) TE1612B
2JP1	DRZ831501	MCR10 000E TD0804N
2JP3	DRZ831501	MCR10 000E TD0804N
2JP5	DRZ831501	MCR10 000E TD0804N
2JP100, 2JP101	DZB999011	JPW 01 TA21N
2Q1 to 2Q3	DTR890791	IMD3 TE0804R
2Q4	DTR810041	2SA 1162Y TE85L
2Q5	DTR830071	2SC 3356-T1B
2Q6	DTR860161	2SK 508 K51 TE0804L
2Q7	DTR830071	2SC 3356-T1B
2Q8 to 2Q12	DTR870011	3SK 184R TE0804F
2Q14	DTR810041	2SA 1162Y TE85L
2R1	DRE137481	EF1/4S 22ΩF TA21N
2R2	DRZ832251	RK73H 2A 1.0KΩF TD0804N
2R3A, 2R3B	DRZ832051	RK73H 2A 150ΩF TD0804N
2R3C, 2R3D	DRZ832051	RK73H 2A 150ΩF TD0804N
2R4	DRZ831501	MCR10 000E TD0804N
2R5	DRE938081	SN14K 2E 900KΩD TA21N
2R6A	DRZ832741	RK73H 2A 110KΩF TD0804N
2R6B	DRZ832261	RK73H 2A 1.1KΩF TD0804N
2R7	DRZ833511	RK73H 2A 22ΩF TD0804N
2R9A	DRZ832031	RK73H 2A 120ΩF TD0804N
2R10, 2R11	DRZ833441	RK73H 2A 10ΩF TD0804N
2R12	DRE938081	SN14K 2E 900KΩD TA21N

SS-7810

CH2 ATTENUATOR [2]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
2R13A	DRZ832741	RK73H 2A 110KΩF TD0804N
2R13B	DRZ832261	RK73H 2A 1.1KΩF TD0804N
2R14	DRZ833511	RK73H 2A 22ΩF TD0804N
2R16	DRZ833081	RK73H 2A 91ΩF TD0804N
2R17, 2R18	DRZ833441	RK73H 2A 10ΩF TD0804N
2R19	DRZ832251	RK73H 2A 1.0KΩF TD0804N
2R20	DRE938681	CRB25CY 820KΩ T-29E TA21N
2R21	DRE938671	CRB25CY 180KΩ T-29E TA21N
2R24	DRZ832491	RK73H 2A 10KΩF TD0804N
2R26	DRZ832381	RK73H 2A 3.6KΩF TD0804N
2R27	DRZ832311	RK73H 2A 1.8KΩF TD0804N
2R28	DRZ832171	RK73H 2A 470ΩF TD0804N
2R29	DRZ832131	RK73H 2A 330ΩF TD0804N
2R31	DRG939011	VR25 10MΩJ TA21N
2R32	DRZ832011	RK73H 2A 100ΩF TD0804N
2R33	DRZ833511	RK73H 2A 22ΩF TD0804N
2R34	DRZ832341	RK73H 2A 2.4KΩF TD0804N
2R35	DRZ832341	RK73H 2A 2.4KΩF TD0804N
2R36	DRZ832341	RK73H 2A 2.4KΩF TD0804N
2R37	DRE938681	CRB25CY 820KΩ T-29E TA21N
2R38	DRE138421	EF1/4S 180KΩF TA21N
2R39A	DRZ832431	RK73H 2A 5.6KΩF TD0804N
2R39B	DRV810241	G4AT/ST-4TA 2KΩ TE1208L
2R40	DRZ833441	RK73H 2A 10ΩF TD0804N
2R42	DRZ832581	RK73H 2A 24KΩF TD0804N
2R44	DRZ833071	RK73H 2A 82ΩF TD0804N
2R45, 2R46	DRE938611	CRB25CY 160Ω T-29E TA21N
2R47	DRE938621	CRB25CY 390Ω T-29E TA21N
2R48	DRZ833441	RK73H 2A 10ΩF TD0804N
2R49	DRE938531	CRB25CY 100Ω T-29E TA21N
2R50	DRZ833071	RK73H 2A 82ΩF TD0804N
2R51 to 2R54	DRZ832661	RK73H 2A 51KΩF TD0804N
2R55	DRZ832701	RK73H 2A 75KΩF TD0804N
2R57	DRZ832701	RK73H 2A 75KΩF TD0804N
2R59	DRZ832701	RK73H 2A 75KΩF TD0804N
2R61	DRZ832701	RK73H 2A 75KΩF TD0804N
2R63	DRZ833551	RK73H 2A 33ΩF TD0804N
2R65	DRZ833441	RK73H 2A 10ΩF TD0804N
2R67	DRZ832511	RK73H 2A 12KΩF TD0804N
2R68, 2R69	DRZ832581	RK73H 2A 24KΩF TD0804N
2R70	DRZ832431	RK73H 2A 5.6KΩF TD0804N
2R72	DRZ831591	MCR10J 4R7E TD0804N

CH2 ATTENUATOR [2]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
2R73	DRZ833441	RK73H 2A 10ΩF TD0804N
2R75	DRZ832741	RK73H 2A 110KΩF TD0804N
2R76	DRZ832551	RK73H 2A 18KΩF TD0804N
2R77, 2R78	DRZ832511	RK73H 2A 12KΩF TD0804N
2R79	DRZ832221	RK73H 2A 750ΩF TD0804N
2R80	DRZ833551	RK73H 2A 33ΩF TD0804N
2RL1 to 2RL3	DKD028361	Relay A12W-K
2U1	DCN041171	Connector L235

CH3 ATTENUATOR [3]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
3C1	DCC239521	UP050SL 220J TA21N
3C2	DCC810511	C2012F 1H 103Z A TD84N
3C3	DCF168011	4MFT-D 473M
3C4	DCC259281	CC45CH 2H 050C TC04N
3C5	DCV019612	ECV-1ZW 06X53T
3C8A	DCC816531	C2012CH 1H 270J A TD84N
3C11A, 3C11B	DCC159021	CK45B 2H 222K TC04N
3C16	DCC810511	C2012F 1H 103Z A TD84N
3C18	DCC816601	C2012CH 1H 101J A TD84N
3C21	DCC810511	C2012F 1H 103Z A TD84N
3C22	DCC810511	C2012F 1H 103Z A TD84N
3C23	DCC810511	C2012F 1H 103Z A TD84N
3C26	DCC810511	C2012F 1H 103Z A TD84N
3C28	DCC810921	C2012B 1H 472K A TD84N
3C32A	DCC810511	C2012F 1H 103Z A TD84N
3C32B	DCC810511	C2012F 1H 103Z A TD84N
3C35	DCC816361	C2012CH 1H 010C A TD84N
3C42	DCC816401	C2012CH 1H 030C A TD84N
3C45 to 3C48	DCC810511	C2012F 1H 103Z A TD84N
3C50	DCC810511	C2012F 1H 103Z A TD84N
3C55	DCC810511	C2012F 1H 103Z A TD84N
3C79	DCC810511	C2012F 1H 103Z A TD84N
3C80	DCC810841	C2012B 1H 102K A TD84N
3C100	DCC810511	C2012F 1H 103Z A TD84N
3C101A, 3C101B	DCC810511	C2012F 1H 103Z A TD84N
3C102A	DCC810841	C2012B 1H 102K A TD84N
3C102B	DCC816601	C2012CH 1H 101J A TD84N
3C103, 3C104	DCC810511	C2012F 1H 103Z A TD84N
3C105	DCE229221	SME-CE04W 1E 221M TC04R
3C106	DCE229221	SME-CE04W 1E 221M TC04R
3C107	DCC810511	C2012F 1H 103Z A TD84N
3C110, 3C111	DCC810841	C2012B 1H 102K A TD84N
3C112	DCC810511	C2012F 1H 103Z A TD84N
3D1, 3D2	DDD810241	1SS 272 TE0804R
3D3	DDD838831	RD 4.7M-T1B B2
3D4A, 3D4B	DDD810521	1SS 307 TE0804L
3D5	DDD810261	HSM 88AS TL
3D8, 2D9	DDD810141	MA 159-(TX) TE0804L
3D10	DDD830361	RD5.1M-T1B B2 TE0804L
3D12	DDD830341	RD6.8M-T1B B2
3IC1	DIC614741	LT 1097CN8
3IC2	DIC495081	TC 4052BF (EL) TE1612B

CH3 ATTENUATOR [3]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
3JP1	DRZ831501	MCR10 000E TD0804N
3JP100, 3JP101	DZB999011	JPW 01 TA21N
3Q1	DTR890791	IMD3 TE0804R
3Q2	DTR810041	2SA 1162Y TE85L
3Q3	DTR830071	2SC 3356-T1B
3Q4	DTR860161	2SK 508 K51 TE0804L
3Q5	DTR830071	2SC 3356-T1B
3Q6 to 3Q9	DTR870011	3SK 184R TE0804F
3Q14	DTR810041	2SA 1162Y TE85L
3R1	DRE137481	EF1/4S 22ΩF TA21N
3R2	DRZ832251	RK73H 2A 1.0KΩF TD0804N
3R3A, 3R3B	DRZ832051	RK73H 2A 150ΩF TD0804N
3R3C, 3R3D	DRZ832051	RK73H 2A 150ΩF TD0804N
3R4A	DRZ831591	MCR10J 4R7E TD0804N
3R5	DRE997181	CRB20 470KΩDY T-29E TA21N
3R6	DRE997171	CRB20 330KΩDY T-29E TA21N
3R7A	DRZ832731	RK73H 2A 100KΩF TD0804N
3R7B	DRZ832771	RK73H 2A 150KΩF TD0804N
3R8	DRZ833011	RK73H 2A 47ΩF TD0804N
3R10A	DRZ833051	RK73H 2A 68ΩF TD0804N
3R11	DRE938681	CRB25CY 820KΩ T-29E TA21N
3R12	DRE938671	CRB25CY 180KΩ T-29E TA21N
3R15	DRZ832491	RK73H 2A 10KΩF TD0804N
3R17	DRZ832381	RK73H 2A 3.6KΩF TD0804N
3R18	DRZ832311	RK73H 2A 1.8KΩF TD0804N
3R19	DRZ832171	RK73H 2A 470ΩF TD0804N
3R20	DRZ832131	RK73H 2A 330ΩF TD0804N
3R22	DRG939011	VR25 10MΩJ TA21N
3R23	DRZ832011	RK73H 2A 100ΩF TD0804N
3R24	DRZ833511	RK73H 2A 22ΩF TD0804N
3R26	DRZ832341	RK73H 2A 2.4KΩF TD0804N
3R27	DRZ832341	RK73H 2A 2.4KΩF TD0804N
3R28	DRE138421	EF1/4S 180KΩF TA21N
3R29A	DRZ832431	RK73H 2A 5.6KΩF TD0804N
3R29B	DRV810241	G4AT/ST-4TA 2KΩ TE1208L
3R30	DRZ833441	RK73H 2A 10ΩF TD0804N
3R32	DRZ832581	RK73H 2A 24KΩF TD0804N
3R33	DRZ833071	RK73H 2A 82ΩF TD0804N
3R34	DRZ832661	RK73H 2A 51KΩF TD0804N
3R35	DRZ833071	RK73H 2A 82ΩF TD0804N
3R36	DRZ832661	RK73H 2A 51KΩF TD0804N
3R37, 3R38	DRE938611	CRB25CY 160Ω T-29E TA21N

CH3 ATTENUATOR [3]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
3R39	DRZ832661	RK73H 2A 51KΩF TD0804N
3R40	DRE938631	CRB25CY 820Ω T-29E TA21N
3R42	DRE938601	CRB25CY 91Ω T-29E TA21N
3R43	DRZ832661	RK73H 2A 51KΩF TD0804N
3R49 to 3R52	DRZ832701	RK73H 2A 75KΩF TD0804N
3R54	DRZ833441	RK73H 2A 10ΩF TD0804N
3R55	DRZ831591	MCR10J 4R7E TD0804N
3R56	DRE938681	CRB25CY 820KΩ T-29E TA21N
3R57	DRZ832551	RK73H 2A 18KΩF TD0804N
3R58	DRZ832741	RK73H 2A 110KΩF TD0804N
3R77	DRZ832511	RK73H 2A 12KΩF TD0804N
3R78	DRZ832511	RK73H 2A 12KΩF TD0804N
3R79	DRZ832221	RK73H 2A 750ΩF TD0804N
3R80	DRZ833551	RK73H 2A 33ΩF TD0804N
3RL1	DKD028361	Relay- A12W-K
3U1	DCN041171	Connector L235

CH1 1ST PREAMP [4]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
4C3	DCC810511	C2012F 1H 103Z A TD84N
4C7	DCC816361	C2012CH 1H 010C A TD84N
4C9	DCC810841	C2012B 1H 102K A TD84N
4C10	DCC816381	C2012CH 1H 020C A TD84N
4C11	DCC810841	C2012B 1H 102K A TD84N
4C15	DCC816421	C2012CH 1H 040C A TD84N
4C16	DCC816351	C2012CH 1H 0R5C A TD84N
4C18	DCC810841	C2012B 1H 102K A TD84N
4C19	DCC810841	C2012B 1H 102K A TD84N
4C24	DCC815891	C2012CH 1H 150J A TD84N
4C29	DCC810841	C2012B 1H 102K A TD84N
4C30	DCC810841	C2012B 1H 102K A TD84N
4C37	DCC810511	C2012F 1H 103Z A TD84N
4C42	DCC810511	C2012F 1H 103Z A TD84N
4C48	DCC816531	C2012CH 1H 270J A TD84N
4C58B	DCC810511	C2012F 1H 103Z A TD84N
4C61	DCC810511	C2012F 1H 103Z A TD84N
4C62	DCC810511	C2012F 1H 103Z A TD84N
4C63	DCC810571	C2012F 1E 104Z A TD84N
4C64	DCC810511	C2012F 1H 103Z A TD84N
4C66	DCC810511	C2012F 1H 103Z A TD84N
4C68	DCC810511	C2012F 1H 103Z A TD84N
4C71	DCC810511	C2012F 1H 103Z A TD84N
4C75	DCC810511	C2012F 1H 103Z A TD84N
4C77	DCC810511	C2012F 1H 103Z A TD84N
4C79	DCC810511	C2012F 1H 103Z A TD84N
4C81	DCC816601	C2012CH 1H 101J A TD84N
4C100	DCC810571	C2012F 1E 104Z A TD84N
4C102	DCC810571	C2012F 1E 104Z A TD84N
4C104, 4C105	DCC810841	C2012B 1H 102K A TD84N
4D1	DDD830361	RD5.1M-T1B B2 TE0804L
4D2	DDD830151	RD9.1M-T1B B
4D3 to 4D6	DDD810141	MA 159-(TX) TE0804L
4IC1	DIC619101	OP AMP 4558F TE1208B
4IC2	DIC889171	TC 7W04F(TE12L) TE1208R
4JP1 to 4JP7	DRZ831501	MCR10 000E TD0804N
4JP10 to 4JP13	DRZ831501	MCR10 000E TD0804N
4JP100 to 4JP104	DZB999011	JPW 01 TA21N
4Q1 to 4Q6	DTR890761	IMX5 TE0804R
4Q7	DTR810041	2SA 1162Y TE85L
4Q8 to 4Q10	DTR838661	2SC 2712LG TE85L
4Q11, 4Q12	DTR890831	IMD2 TE0804R

SS-7810

CH1 1ST PREAMP [4]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
4Q13	DTR838661	2SC 2712LG TE85L
4Q14	DTR870011	3SK 184R TE0804F
4Q20	DTR870011	3SK 184R TE0804F
4R2	DRZ833051	RK73H 2A 68ΩF TD0804N
4R3	DRZ832351	RK73H 2A 2.7KΩF TD0804N
4R4A	DRZ832511	RK73H 2A 12KΩF TD0804N
4R4B	DRZ832341	RK73H 2A 2.4KΩF TD0804N
4R5	DRZ833481	RK73H 2A 15ΩF TD0804N
4R6	DRZ831501	MCR10 000E TD0804N
4R7, 4R8	DRZ832051	RK73H 2A 150ΩF TD0804N
4R9	DRZ832091	RK73H 2A 220ΩF TD0804N
4R10	DRZ833441	RK73H 2A 10ΩF TD0804N
4R11	DRZ832091	RK73H 2A 220ΩF TD0804N
4R12 to 4R14	DRZ833441	RK73H 2A 10ΩF TD0804N
4R15	DRZ832111	RK73H 2A 270ΩF TD0804N
4R16, 4R17	DRZ832041	RK73H 2A 130ΩF TD0804N
4R18, 4R19	DRZ832181	RK73H 2A 510ΩF TD0804N
4R20	DRZ832501	RK73H 2A 11KΩF TD0804N
4R21	DRZ832511	RK73H 2A 12KΩF TD0804N
4R24	DRZ832041	RK73H 2A 130ΩF TD0804N
4R25, 4R26	DRZ833561	RK73H 2A 36ΩF TD0804N
4R27, 4R28	DRZ832071	RK73H 2A 180ΩF TD0804N
4R29, 4R30	DRZ832191	RK73H 2A 560ΩF TD0804N
4R31	DRZ832501	RK73H 2A 11KΩF TD0804N
4R32	DRZ832511	RK73H 2A 12KΩF TD0804N
4R33	DRZ832011	RK73H 2A 100ΩF TD0804N
4R34, 4R35	DRZ820011	RN73G 2A 30ΩD TD0804N
4R36	DRZ832011	RK73H 2A 100ΩF TD0804N
4R37	DRZ832431	RK73H 2A 5.6KΩF TD0804N
4R38	DRZ832341	RK73H 2A 2.4KΩF TD0804N
4R39A, 4R39B	DRZ833011	RK73H 2A 47ΩF TD0804N
4R40	DRZ832081	RK73H 2A 200ΩF TD0804N
4R41	DRZ832321	RK73H 2A 2.0KΩF TD0804N
4R42, 4R43	DRZ832251	RK73H 2A 1.0KΩF TD0804N
4R44	DRZ832081	RK73H 2A 200ΩF TD0804N
4R45	DRZ832321	RK73H 2A 2.0KΩF TD0804N
4R46, 4R47	DRZ832141	RK73H 2A 360ΩF TD0804N
4R48	DRZ832631	RK73H 2A 39KΩF TD0804N
4R50, 4R51	DRZ833051	RK73H 2A 68ΩF TD0804N
4R52, 4R53	DRZ832251	RK73H 2A 1.0KΩF TD0804N
4R54	DRZ832511	RK73H 2A 12KΩF TD0804N
4R55	DRZ832321	RK73H 2A 2.0KΩF TD0804N

CH1 1ST PREAMP [4]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
4R56, 4R57	DRZ832511	RK73H 2A 12KΩF TD0804N
4R58	DRZ832011	RK73H 2A 100ΩF TD0804N
4R59	DRZ832081	RK73H 2A 200ΩF TD0804N
4R60	DRZ832311	RK73H 2A 1.8KΩF TD0804N
4R61	DRZ832411	RK73H 2A 4.7KΩF TD0804N
4R62	DRZ832421	RK73H 2A 5.1KΩF TD0804N
4R64	DRZ832201	RK73H 2A 620ΩF TD0804N
4R65	DRZ832151	RK73H 2A 390ΩF TD0804N
4R66	DRZ832271	RK73H 2A 1.2KΩF TD0804N
4R67	DRZ832151	RK73H 2A 390ΩF TD0804N
4R68	DRZ832271	RK73H 2A 1.2KΩF TD0804N
4R69A, 4R69B	DRZ833011	RK73H 2A 47ΩF TD0804N
4R70	DRZ832431	RK73H 2A 5.6KΩF TD0804N
4R71	DRZ832531	RK73H 2A 15KΩF TD0804N
4R72	DRZ832341	RK73H 2A 2.4KΩF TD0804N
4R73	DRZ832381	RK73H 2A 3.6KΩF TD0804N
4R74	DRZ832081	RK73H 2A 200ΩF TD0804N
4R75	DRZ832291	RK73H 2A 1.5KΩF TD0804N
4R76	DRZ832231	RK73H 2A 820ΩF TD0804N
4R77	DRZ832541	RK73H 2A 16KΩF TD0804N
4R78	DRZ832621	RK73H 2A 36KΩF TD0804N
4R79	DRZ832251	RK73H 2A 1.0KΩF TD0804N
4R80	DRZ832491	RK73H 2A 10KΩF TD0804N
4R81	DRZ832501	RK73H 2A 11KΩF TD0804N
4R82	DRZ832511	RK73H 2A 12KΩF TD0804N
4R83	DRZ832501	RK73H 2A 11KΩF TD0804N
4R84	DRZ832511	RK73H 2A 12KΩF TD0804N
4R85	DRZ833441	RK73H 2A 10ΩF TD0804N
4R86	DRZ833551	RK73H 2A 33ΩF TD0804N
4R87	DRZ832511	RK73H 2A 12KΩF TD0804N
4R100, 4R101	DRZ832351	RK73H 2A 2.7KΩF TD0804N

CH2 1ST PREAMP [5]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
5C3	DCC810511	C2012F 1H 103Z A TD84N
5C7	DCC816361	C2012CH 1H 010C A TD84N
5C9	DCC810841	C2012B 1H 102K A TD84N
5C10	DCC816381	C2012CH 1H 020C A TD84N
5C11	DCC810841	C2012B 1H 102K A TD84N
5C15	DCC816421	C2012CH 1H 040C A TD84N
5C16	DCC816351	C2012CH 1H 0R5C A TD84N
5C18, 5C19	DCC810841	C2012B 1H 102K A TD84N
5C24	DCC815891	C2012CH 1H 150J A TD84N
5C29, 5C30	DCC810841	C2012B 1H 102K A TD84N
5C37	DCC810511	C2012F 1H 103Z A TD84N
5C42	DCC810511	C2012F 1H 103Z A TD84N
5C48	DCC816531	C2012CH 1H 270J A TD84N
5C58B	DCC810511	C2012F 1H 103Z A TD84N
5C61	DCC810511	C2012F 1H 103Z A TD84N
5C62	DCC810511	C2012F 1H 103Z A TD84N
5C63	DCC810571	C2012F 1E 104Z A TD84N
5C64	DCC810511	C2012F 1H 103Z A TD84N
5C66	DCC810511	C2012F 1H 103Z A TD84N
5C68	DCC810511	C2012F 1H 103Z A TD84N
5C71	DCC810511	C2012F 1H 103Z A TD84N
5C75	DCC810511	C2012F 1H 103Z A TD84N
5C77	DCC810511	C2012F 1H 103Z A TD84N
5C79	DCC810511	C2012F 1H 103Z A TD84N
5C81	DCC816601	C2012CH 1H 101J A TD84N
5C100	DCC810571	C2012F 1E 104Z A TD84N
5C102	DCC810571	C2012F 1E 104Z A TD84N
5C104, 5C105	DCC810841	C2012B 1H 102K A TD84N
5D1	DDD830361	RD5.1M-T1B B2 TE0804L
5D2	DDD830151	RD9.1M-T1B B
5D3 to 5D6	DDD810141	MA 159-(TX) TE0804L
5IC1	DIC619101	OP AMP 4558F TE1208B
5IC2	DIC889171	TC 7W04F(TE12L) TE1208R
5JP1 to 5JP7	DRZ831501	MCR10 000E TD0804N
5JP10 to 5JP13	DRZ831501	MCR10 000E TD0804N
5JP100 to 5JP105	DZB999011	JPW 01 TA21N
5Q1 to 5Q6	DTR890761	IMX5 TE0804R
5Q11, 5Q12	DTR890831	IMD2 TE0804R
5Q13	DTR838661	2SC 2712LG TE85L
5Q14	DTR870011	3SK 184R TE0804F
5Q20	DTR870011	3SK 184R TE0804F
5Q7	DTR810041	2SA 1162Y TE85L

CH2 1ST PREAMP [5]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
5Q8 to 5Q10	DTR838661	2SC 2712LG TE85L
5R2	DRZ833051	RK73H 2A 68ΩF TD0804N
5R3	DRZ832351	RK73H 2A 2.7KΩF TD0804N
5R4A	DRZ832511	RK73H 2A 12KΩF TD0804N
5R4B	DRZ832341	RK73H 2A 2.4KΩF TD0804N
5R5	DRZ833481	RK73H 2A 15ΩF TD0804N
5R7, 5R8	DRZ832051	RK73H 2A 150ΩF TD0804N
5R9	DRZ832091	RK73H 2A 220ΩF TD0804N
5R10	DRZ833441	RK73H 2A 10ΩF TD0804N
5R11	DRZ832091	RK73H 2A 220ΩF TD0804N
5R12 to 5R14	DRZ833441	RK73H 2A 10ΩF TD0804N
5R15	DRZ832111	RK73H 2A 270ΩF TD0804N
5R16, 5R17	DRZ832041	RK73H 2A 130ΩF TD0804N
5R18, 5R19	DRZ832181	RK73H 2A 510ΩF TD0804N
5R20	DRZ832501	RK73H 2A 11KΩF TD0804N
5R21	DRZ832511	RK73H 2A 12KΩF TD0804N
5R24	DRZ832041	RK73H 2A 130ΩF TD0804N
5R25, 5R26	DRZ833561	RK73H 2A 36ΩF TD0804N
5R27, 5R28	DRZ832071	RK73H 2A 180ΩF TD0804N
5R29, 5R30	DRZ832191	RK73H 2A 560ΩF TD0804N
5R31	DRZ832501	RK73H 2A 11KΩF TD0804N
5R32	DRZ832511	RK73H 2A 12KΩF TD0804N
5R33	DRZ832011	RK73H 2A 100ΩF TD0804N
5R34, 5R35	DRZ820011	RN73G 2A 30ΩD TD0804N
5R36	DRZ832011	RK73H 2A 100ΩF TD0804N
5R37	DRZ832431	RK73H 2A 5.6KΩF TD0804N
5R38	DRZ832341	RK73H 2A 2.4KΩF TD0804N
5R39A, 5R39B	DRZ833011	RK73H 2A 47ΩF TD0804N
5R40	DRZ832081	RK73H 2A 200ΩF TD0804N
5R41	DRZ832321	RK73H 2A 2.0KΩF TD0804N
5R42, 5R43	DRZ832251	RK73H 2A 1.0KΩF TD0804N
5R44	DRZ832081	RK73H 2A 200ΩF TD0804N
5R45	DRZ832321	RK73H 2A 2.0KΩF TD0804N
5R46, 5R47	DRZ832141	RK73H 2A 360ΩF TD0804N
5R48	DRZ832631	RK73H 2A 39KΩF TD0804N
5R50, 5R51	DRZ833051	RK73H 2A 68ΩF TD0804N
5R52, 5R53	DRZ832251	RK73H 2A 1.0KΩF TD0804N
5R54	DRZ832511	RK73H 2A 12KΩF TD0804N
5R55	DRZ832321	RK73H 2A 2.0KΩF TD0804N
5R56, 5R57	DRZ832511	RK73H 2A 12KΩF TD0804N
5R58	DRZ832011	RK73H 2A 100ΩF TD0804N
5R59	DRZ832081	RK73H 2A 200ΩF TD0804N

SS-7810

CH2 1ST PREAMP [5]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
5R60	DRZ832311	RK73H 2A 1.8KΩF TD0804N
5R61	DRZ832411	RK73H 2A 4.7KΩF TD0804N
5R62	DRZ832421	RK73H 2A 5.1KΩF TD0804N
5R64	DRZ832201	RK73H 2A 620ΩF TD0804N
5R65	DRZ832151	RK73H 2A 390ΩF TD0804N
5R66	DRZ832271	RK73H 2A 1.2KΩF TD0804N
5R67	DRZ832151	RK73H 2A 390ΩF TD0804N
5R68	DRZ832271	RK73H 2A 1.2KΩF TD0804N
5R69A, 5R69B	DRZ833011	RK73H 2A 47ΩF TD0804N
5R70	DRZ832431	RK73H 2A 5.6KΩF TD0804N
5R71	DRZ832531	RK73H 2A 15KΩF TD0804N
5R72	DRZ832341	RK73H 2A 2.4KΩF TD0804N
5R73	DRZ832381	RK73H 2A 3.6KΩF TD0804N
5R74	DRZ832081	RK73H 2A 200ΩF TD0804N
5R75	DRZ832291	RK73H 2A 1.5KΩF TD0804N
5R76	DRZ832231	RK73H 2A 820ΩF TD0804N
5R77	DRZ832541	RK73H 2A 16KΩF TD0804N
5R78	DRZ832621	RK73H 2A 36KΩF TD0804N
5R79	DRZ832251	RK73H 2A 1.0KΩF TD0804N
5R80	DRZ832491	RK73H 2A 10KΩF TD0804N
5R81	DRZ832501	RK73H 2A 11KΩF TD0804N
5R82	DRZ832511	RK73H 2A 12KΩF TD0804N
5R83	DRZ832501	RK73H 2A 11KΩF TD0804N
5R84	DRZ832511	RK73H 2A 12KΩF TD0804N
5R85	DRZ833441	RK73H 2A 10ΩF TD0804N
5R86	DRZ833551	RK73H 2A 33ΩF TD0804N
5R87	DRZ832511	RK73H 2A 12KΩF TD0804N
5R100, 5R101	DRZ832351	RK73H 2A 2.7KΩF TD0804N

CH1 2ND PREAMP [6]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
6C3	DCC816641	C2012CH 1H 221J A TD84N
6C4	DCV819061	TZBX4 Z060BA110 TE1208R
6C6	DCC810511	C2012F 1H 103Z A TD84N
6C10	DCC810841	C2012B 1H 102K A TD84N
6C12	DCC810841	C2012B 1H 102K A TD84N
6C14	DCC810511	C2012F 1H 103Z A TD84N
6C18	DCC816531	C2012CH 1H 270J A TD84N
6C22	DCC810841	C2012B 1H 102K A TD84N
6C23	DCC810841	C2012B 1H 102K A TD84N
6C33	DCC810511	C2012F 1H 103Z A TD84N
6C40	DCC810511	C2012F 1H 103Z A TD84N
6C42 to 6C44	DCC810511	C2012F 1H 103Z A TD84N
6C104, 6C105	DCE229201	SME-CE04W 1E 470M TC04R
6D1, 6D2	DDD838341	RD 3.3M-T1B B1
6FL1, 6FL2	DCL119361	BL02RN2-R62 TD04N
6JP1, 6JP2	DRZ831501	MCR10 000E TD0804N
6JP3	DRZ831501	MCR10 000E TD0804N
6Q1	DTR890761	IMX5 TE0804R
6Q2, 6Q3	DTR810221	2SA 1462-T1B Y34
6Q4	DTR838661	2SC 2712LG TE85L
6Q5, 6Q6	DTR890761	IMX5 TE0804R
6Q7	DTR890841	IMX3 TE0804R
6R1, 6R2	DRZ833011	RK73H 2A 47ΩF TD0804N
6R3	DRZ832461	RK73H 2A 7.5KΩF TD0804N
6R4	DRZ832031	RK73H 2A 120ΩF TD0804N
6R5	DRZ832301	RK73H 2A 1.6KΩF TD0804N
6R6, 6R7	DRZ832301	RK73H 2A 1.6KΩF TD0804N
6R8	DRZ832301	RK73H 2A 1.6KΩF TD0804N
6R9	DRZ833441	RK73H 2A 10ΩF TD0804N
6R10	DRZ832131	RK73H 2A 330ΩF TD0804N
6R12	DRZ832131	RK73H 2A 330ΩF TD0804N
6R11	DRZ833441	RK73H 2A 10ΩF TD0804N
6R13 to 6R16	DRZ832081	RK73H 2A 200ΩF TD0804N
6R17	DRZ833511	RK73H 2A 22ΩF TD0804N
6R18	DRZ832521	RK73H 2A 13KΩF TD0804N
6R19	DRZ832411	RK73H 2A 4.7KΩF TD0804N
6R20	DRZ832391	RK73H 2A 3.9KΩF TD0804N
6R21	DRZ832461	RK73H 2A 7.5KΩF TD0804N
6R24	DRZ832351	RK73H 2A 2.7KΩF TD0804N
6R25, 6R26	DRZ833071	RK73H 2A 82ΩF TD0804N
6R27	DRZ832351	RK73H 2A 2.7KΩF TD0804N
6R28, 6R29	DRZ832131	RK73H 2A 330ΩF TD0804N

SS-7810

CH1 2ND PREAMP [6]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
6R32A, 6R32B	DRZ833011	RK73H 2A 47ΩF TD0804N
6R34	DRZ831501	MCR10 000E TD0804N
6R37A, 6R37B	DRZ833011	RK73H 2A 47ΩF TD0804N
6R38	DRZ832471	RK73H 2A 8.2KΩF TD0804N
6R39	DRZ832351	RK73H 2A 2.7KΩF TD0804N
6R40	DRZ832411	RK73H 2A 4.7KΩF TD0804N
6R41	DRZ832401	RK73H 2A 4.3KΩF TD0804N
6R42	DRZ832201	RK73H 2A 620ΩF TD0804N
6R43A	DRZ832201	RK73H 2A 620ΩF TD0804N
6R43B	DRZ832411	RK73H 2A 4.7KΩF TD0804N
6R44	DRZ832401	RK73H 2A 4.3KΩF TD0804N
6R45	DRZ832081	RK73H 2A 200ΩF TD0804N
6R46, 6R47	DRZ832321	RK73H 2A 2.0KΩF TD0804N
6R60, 6R61	DRZ833011	RK73H 2A 47ΩF TD0804N

CH2 2ND PREAMP [7]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
7C3	DCC816641	C2012CH 1H 221J A TD84N
7C4	DCV819061	TZBX4 Z060BA110 TE1208R
7C6	DCC810511	C2012F 1H 103Z A TD84N
7C10	DCC810841	C2012B 1H 102K A TD84N
7C12	DCC810841	C2012B 1H 102K A TD84N
7C14	DCC810511	C2012F 1H 103Z A TD84N
7C18	DCC816531	C2012CH 1H 270J A TD84N
7C22, 7C23	DCC810841	C2012B 1H 102K A TD84N
7C33	DCC810511	C2012F 1H 103Z A TD84N
7C40	DCC810511	C2012F 1H 103Z A TD84N
7C42 to 44	DCC810511	C2012F 1H 103Z A TD84N
7C48	DCC810841	C2012B 1H 102K A TD84N
7C50, 7C51	DCC810511	C2012F 1H 103Z A TD84N
7C100	DCC810571	C2012F 1E 104Z A TD84N
7C102	DCC810571	C2012F 1E 104Z A TD84N
7C104, 7C105	DCE229201	SME-CE04W 1E 470M TC04R
7D1, 7D2	DDD838341	RD 3.3M-T1B B1
7FL1, 7FL2	DCL119361	BL02RN2-R62 TD04N
7IC1	DIC619101	OP AMP 4558F TE1208B
7JP1, 7JP2	DRZ831501	MCR10 000E TD0804N
7JP3	DRZ831501	MCR10 000E TD0804N
7JP5, 7JP6	DRZ831501	MCR10 000E TD0804N
7Q1	DTR890761	IMX5 TE0804R
7Q2, 7Q3	DTR810221	2SA 1462-T1B Y34
7Q4	DTR838661	2SC 2712LG TE85L
7Q5, 7Q6	DTR890761	IMX5 TE0804R
7Q7	DTR890841	IMX3 TE0804R
7Q8	DTR890851	IMH1 TE0804N
7Q9	DTR890551	DTC114EK/RN1402 TE0804L
7R1, 7R2	DRZ833011	RK73H 2A 47ΩF TD0804N
7R3	DRZ832461	RK73H 2A 7.5KΩF TD0804N
7R4	DRZ832031	RK73H 2A 120ΩF TD0804N
7R5	DRZ832301	RK73H 2A 1.6KΩF TD0804N
7R6, 7R7	DRZ832301	RK73H 2A 1.6KΩF TD0804N
7R8	DRZ832301	RK73H 2A 1.6KΩF TD0804N
7R9	DRZ833441	RK73H 2A 10ΩF TD0804N
7R10	DRZ832131	RK73H 2A 330ΩF TD0804N
7R11	DRZ833441	RK73H 2A 10ΩF TD0804N
7R12	DRZ832131	RK73H 2A 330ΩF TD0804N
7R13 to 7R16	DRZ832081	RK73H 2A 200ΩF TD0804N
7R17	DRZ833511	RK73H 2A 22ΩF TD0804N
7R18	DRZ832521	RK73H 2A 13KΩF TD0804N

CH2 2ND PREAMP [7]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
7R19	DRZ832411	RK73H 2A 4.7KΩF TD0804N
7R20	DRZ832391	RK73H 2A 3.9KΩF TD0804N
7R21	DRZ832461	RK73H 2A 7.5KΩF TD0804N
7R24	DRZ832351	RK73H 2A 2.7KΩF TD0804N
7R25, 7R26	DRZ833071	RK73H 2A 82ΩF TD0804N
7R27	DRZ832351	RK73H 2A 2.7KΩF TD0804N
7R28, 7R29	DRZ832131	RK73H 2A 330ΩF TD0804N
7R32A, 7R32B	DRZ833011	RK73H 2A 47ΩF TD0804N
7R33	DRZ832471	RK73H 2A 8.2KΩF TD0804N
7R34	DRZ832351	RK73H 2A 2.7KΩF TD0804N
7R37A, 7R37B	DRZ833011	RK73H 2A 47ΩF TD0804N
7R38	DRZ832471	RK73H 2A 8.2KΩF TD0804N
7R39	DRZ832351	RK73H 2A 2.7KΩF TD0804N
7R40	DRZ832411	RK73H 2A 4.7KΩF TD0804N
7R41	DRZ832401	RK73H 2A 4.3KΩF TD0804N
7R42	DRZ832201	RK73H 2A 620ΩF TD0804N
7R43A	DRZ832201	RK73H 2A 620ΩF TD0804N
7R43B	DRZ832411	RK73H 2A 4.7KΩF TD0804N
7R44	DRZ832401	RK73H 2A 4.3KΩF TD0804N
7R45	DRZ832081	RK73H 2A 200ΩF TD0804N
7R46, 7R47	DRZ832321	RK73H 2A 2.0KΩF TD0804N
7R48	DRZ832491	RK73H 2A 10KΩF TD0804N
7R49	DRZ832461	RK73H 2A 7.5KΩF TD0804N
7R50	DRZ832551	RK73H 2A 18KΩF TD0804N
7R51	DRZ832491	RK73H 2A 10KΩF TD0804N
7R52	DRZ832591	RK73H 2A 27KΩF TD0804N
7R53	DRZ832421	RK73H 2A 5.1KΩF TD0804N
7R60, 7R61	DRZ833011	RK73H 2A 47ΩF TD0804N

CH3 PREAMP [8]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
8C1	DCC816351	C2012CH 1H 0R5C A TD84N
8C2	DCV819061	TZBX4 Z060BA110 TE1208R
8C3	DCC816371	C2012CH 1H 1R5C A TD84N
8C4	DCC816361	C2012CH 1H 010C A TD84N
8C7	DCC810841	C2012B 1H 102K A TD84N
8C9	DCC810511	C2012F 1H 103Z A TD84N
8C11	DCC810841	C2012B 1H 102K A TD84N
8C18	DCC810511	C2012F 1H 103Z A TD84N
8C23	DCC810511	C2012F 1H 103Z A TD84N
8C29	DCC815891	C2012CH 1H 150J A TD84N
8C35B	DCC810511	C2012F 1H 103Z A TD84N
8C36	DCC816601	C2012CH 1H 101J A TD84N
8C40	DCC816561	C2012CH 1H 470J A TD84N
8C47	DCC810841	C2012B 1H 102K A TD84N
8C49	DCC810511	C2012F 1H 103Z A TD84N
8C51	DCC810841	C2012B 1H 102K A TD84N
8C59	DCC810841	C2012B 1H 102K A TD84N
8C60	DCC810841	C2012B 1H 102K A TD84N
8C70	DCC810511	C2012F 1H 103Z A TD84N
8C75	DCC810511	C2012F 1H 103Z A TD84N
8C79	DCC810511	C2012F 1H 103Z A TD84N
8C83	DCC810511	C2012F 1H 103Z A TD84N
8C84	DCC810511	C2012F 1H 103Z A TD84N
8C89	DCC810511	C2012F 1H 103Z A TD84N
8C92	DCC810511	C2012F 1H 103Z A TD84N
8C96	DCC810511	C2012F 1H 103Z A TD84N
8C98	DCC810511	C2012F 1H 103Z A TD84N
8C99	DCC810511	C2012F 1H 103Z A TD84N
8C100 to 8C103	DCC810511	C2012F 1H 103Z A TD84N
8C200	DCC810571	C2012F 1E 104Z A TD84N
8C201	DCE229201	SME-CE04W 1E 470M TC04R
8C202	DCC810571	C2012F 1E 104Z A TD84N
8C203	DCE229201	SME-CE04W 1E 470M TC04R
8D1, 8D2	DDD838341	RD 3.3M-T1B B1
8D3	DDD830151	RD9.1M-T1B B
8D4	DDD830361	RD5.1M-T1B B2 TE0804L
8FL1, 8FL2	DCL119361	BL02RN2-R62 TD04N
8IC1	DIC619101	OP AMP 4558F TE1208B
8JP3	DRZ831501	MCR10 000E TD0804N
8JP100 to 8JP105	DZB999011	JPW 01 TA21N
8Q1 to 8Q5	DTR890761	IMX5 TE0804R
8Q6, 8Q7	DTR810221	2SA 1462-T1B Y34

SS-7810

CH3 PREAMP [8]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
8Q8	DTR838661	2SC 2712LG TE85L
8Q9	DTR890761	IMX5 TE0804R
8Q10	DTR890841	IMX3 TE0804R
8Q11	DTR890861	IMZ1 TE0804R
8Q13	DTR838661	2SC 2712LG TE85L
8Q14	DTR870011	3SK 184R TE0804F
8R1	DRZ832341	RK73H 2A 2.4KΩF TD0804N
8R2	DRZ833511	RK73H 2A 22ΩF TD0804N
8R3	DRZ832211	RK73H 2A 680ΩF TD0804N
8R4, 8R5	DRZ832051	RK73H 2A 150ΩF TD0804N
8R6	DRZ833441	RK73H 2A 10ΩF TD0804N
8R7	DRZ832091	RK73H 2A 220ΩF TD0804N
8R8	DRZ832351	RK73H 2A 2.7KΩF TD0804N
8R9	DRZ832091	RK73H 2A 220ΩF TD0804N
8R10	DRZ833441	RK73H 2A 10ΩF TD0804N
8R11	DRZ832091	RK73H 2A 220ΩF TD0804N
8R12	DRZ832351	RK73H 2A 2.7KΩF TD0804N
8R13	DRZ832091	RK73H 2A 220ΩF TD0804N
8R14	DRZ832011	RK73H 2A 100ΩF TD0804N
8R15, 8R16	DRZ820011	RN73G 2A 30ΩD TD0804N
8R17	DRZ832011	RK73H 2A 100ΩF TD0804N
8R18	DRZ832431	RK73H 2A 5.6KΩF TD0804N
8R19A, 8R19B	DRZ833011	RK73H 2A 47ΩF TD0804N
8R20	DRZ832341	RK73H 2A 2.4KΩF TD0804N
8R23, 8R24	DRZ832251	RK73H 2A 1.0KΩF TD0804N
8R27, 8R28	DRZ832141	RK73H 2A 360ΩF TD0804N
8R29	DRZ832751	RK73H 2A 120KΩF TD0804N
8R31, 8R32	DRZ833051	RK73H 2A 68ΩF TD0804N
8R33, 8R34	DRZ832251	RK73H 2A 1.0KΩF TD0804N
8R35	DRZ832011	RK73H 2A 100ΩF TD0804N
8R36, 8R37	DRZ832511	RK73H 2A 12KΩF TD0804N
8R38, 8R39	DRZ833011	RK73H 2A 47ΩF TD0804N
8R40	DRZ832611	RK73H 2A 33KΩF TD0804N
8R41	DRZ832031	RK73H 2A 120ΩF TD0804N
8R42	DRZ832301	RK73H 2A 1.6KΩF TD0804N
8R43, 8R44	DRZ832301	RK73H 2A 1.6KΩF TD0804N
8R45	DRZ832301	RK73H 2A 1.6KΩF TD0804N
8R46	DRZ833441	RK73H 2A 10ΩF TD0804N
8R47	DRZ832131	RK73H 2A 330ΩF TD0804N
8R48, 8R49	DRZ832081	RK73H 2A 200ΩF TD0804N
8R50	DRZ833441	RK73H 2A 10ΩF TD0804N
8R51	DRZ832131	RK73H 2A 330ΩF TD0804N

CH3 PREAMP [8]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
8R52, 8R53	DRZ832081	RK73H 2A 200ΩF TD0804N
8R54, 8R55	DRZ833011	RK73H 2A 47ΩF TD0804N
8R56	DRZ832411	RK73H 2A 4.7KΩF TD0804N
8R57	DRZ832391	RK73H 2A 3.9KΩF TD0804N
8R58	DRZ832461	RK73H 2A 7.5KΩF TD0804N
8R61, 8R62	DRZ832131	RK73H 2A 330ΩF TD0804N
8R63	DRZ832351	RK73H 2A 2.7KΩF TD0804N
8R64, 8R65	DRZ833071	RK73H 2A 82ΩF TD0804N
8R66	DRZ832351	RK73H 2A 2.7KΩF TD0804N
8R69A, 8R69B	DRZ833011	RK73H 2A 47ΩF TD0804N
8R70	DRZ832471	RK73H 2A 8.2KΩF TD0804N
8R71	DRZ832351	RK73H 2A 2.7KΩF TD0804N
8R72	DRZ833071	RK73H 2A 82ΩF TD0804N
8R75	DRZ832411	RK73H 2A 4.7KΩF TD0804N
8R76	DRZ832421	RK73H 2A 5.1KΩF TD0804N
8R77	DRZ832311	RK73H 2A 1.8KΩF TD0804N
8R78	DRZ832081	RK73H 2A 200ΩF TD0804N
8R79	DRZ832201	RK73H 2A 620ΩF TD0804N
...	DRZ833011	RK73H 2A 47ΩF TD0804N
8R81	DRZ832431	RK73H 2A 5.6KΩF TD0804N
8R82	DRZ832341	RK73H 2A 2.4KΩF TD0804N
8R83	DRZ832531	RK73H 2A 15KΩF TD0804N
8R84	DRZ832541	RK73H 2A 16KΩF TD0804N
8R87	DRZ832621	RK73H 2A 36KΩF TD0804N
8R88	DRZ832231	RK73H 2A 820ΩF TD0804N
8R89	DRZ832291	RK73H 2A 1.5KΩF TD0804N
8R90	DRZ832381	RK73H 2A 3.6KΩF TD0804N
8R91	DRZ832081	RK73H 2A 200ΩF TD0804N
8R92	DRZ832251	RK73H 2A 1.0KΩF TD0804N
8R93	DRZ832491	RK73H 2A 10KΩF TD0804N
8R94	DRZ832321	RK73H 2A 2.0KΩF TD0804N
8R95	DRZ832511	RK73H 2A 12KΩF TD0804N
8R96	DRZ832411	RK73H 2A 4.7KΩF TD0804N
8R97	DRZ832401	RK73H 2A 4.3KΩF TD0804N
8R98	DRZ832201	RK73H 2A 620ΩF TD0804N
8R99, 8R100	DRZ832321	RK73H 2A 2.0KΩF TD0804N
8R101	DRZ832081	RK73H 2A 200ΩF TD0804N
8R102A	DRZ832201	RK73H 2A 620ΩF TD0804N
8R102B	DRZ832411	RK73H 2A 4.7KΩF TD0804N
8R103	DRZ832401	RK73H 2A 4.3KΩF TD0804N

CH SW & DRY LINE DRIV [9]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
9C3	DCC816351	C2012CH 1H 0R5C A TD84N
9C5	DCC816381	C2012CH 1H 020C A TD84N
9C23	DCV819071	TZBX4 N100BA110 TE1208R
9C24	DCC816551	C2012CH 1H 390J A TD84N
9C28	DCC810841	C2012B 1H 102K A TD84N
9C30	DCC816501	C2012CH 1H 120J A TD84N
9C31	DCC810841	C2012B 1H 102K A TD84N
9C33	DCC816501	C2012CH 1H 120J A TD84N
9C36	DCC810511	C2012F 1H 103Z A TD84N
9C37	DCE229201	SME-CE04W 1E 470M TC04R
9C40	DCC816601	C2012CH 1H 101J A TD84N
9C41	DCC810511	C2012F 1H 103Z A TD84N
9C42	DCE229201	SME-CE04W 1E 470M TC04R
9C43	DCC816601	C2012CH 1H 101J A TD84N
9C45	DCC810841	C2012B 1H 102K A TD84N
9C54	DCC810571	C2012F 1E 104Z A TD84N
9C55	DCC810511	C2012F 1H 103Z A TD84N
9C64	DCC810571	C2012F 1E 104Z A TD84N
9C65	DCC810511	C2012F 1H 103Z A TD84N
9C74	DCC810571	C2012F 1E 104Z A TD84N
9C75	DCC810511	C2012F 1H 103Z A TD84N
9D1	DDD810241	1SS 272 TE0804R
9D2	DDD810141	MA 159-(TX) TE0804L
9D3	DDD810241	1SS 272 TE0804R
9D4	DDD810141	MA 159-(TX) TE0804L
9D5	DDD810241	1SS 272 TE0804R
9D6	DDD810141	MA 159-(TX) TE0804L
9D7	DDD810131	1SS 269 TE0804L
9D8	DDD810341	HSM 88WK TE0804L
9J4	DCN124751	FF3-34-S55
9JP1 to 9JP 5	DRZ831501	MCR10 000E TD0804N
9JP100 to 9JP112	DZB999011	JPW 01 TA21N
9JP114, 9JP115	DZB999011	JPW 01 TA21N
9Q1	DTR890761	IMX5 TE0804R
9Q2	DTR890841	IMX3 TE0804R
9Q3	DTR830371	2SC 3735B34/B35-T1B
9Q4	DTR890831	IMD2 TE0804R
9Q5 to Q7	DTR838661	2SC 2712LG TE85L
9R1 to 9R6	DRZ833011	RK73H 2A 47ΩF TD0804N
9R7 to 9R9	DRZ833441	RK73H 2A 10ΩF TD0804N
9R10, 9R11	DRZ832511	RK73H 2A 12KΩF TD0804N
9R12	DRZ832221	RK73H 2A 750ΩF TD0804N

CH SW & DRY LINE DRIV [9]

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
9R14	DRZ832221	RK73H 2A 750ΩF TD0804N
9R16	DRZ832011	RK73H 2A 100ΩF TD0804N
9R17	DRZ832251	RK73H 2A 1.0KΩF TD0804N
9R23	DRV810201	ST-4TA 100Ω TE1208L
9R24, 9R25	DRZ833511	RK73H 2A 22ΩF TD0804N
9R26, 9R27	DRZ832131	RK73H 2A 330ΩF TD0804N
9R28	DRZ831501	MCR10 000E TD0804N
9R29	DRZ832061	RK73H 2A 160ΩF TD0804N
9R30	DRZ833081	RK73H 2A 91ΩF TD0804N
9R31	DRZ831501	MCR10 000E TD0804N
9R32	DRZ832061	RK73H 2A 160ΩF TD0804N
9R33	DRZ833081	RK73H 2A 91ΩF TD0804N
9R34	DRZ833011	RK73H 2A 47ΩF TD0804N
9R35	DRZ832331	RK73H 2A 2.2KΩF TD0804N
9R36 to 9R39	DRZ832341	RK73H 2A 2.4KΩF TD0804N
9R40	DRZ832061	RK73H 2A 160ΩF TD0804N
9R41, 9R42	DRZ833031	RK73H 2A 56ΩF TD0804N
9R43	DRZ832061	RK73H 2A 160ΩF TD0804N
9R44	DRZ832251	RK73H 2A 1.0KΩF TD0804N
9R45	DRZ832351	RK73H 2A 2.7KΩF TD0804N
9R46	DRZ832731	RK73H 2A 100KΩF TD0804N
9R50	DRZ832331	RK73H 2A 2.2KΩF TD0804N
9R51	DRZ832251	RK73H 2A 1.0KΩF TD0804N
9R53	DRZ832391	RK73H 2A 3.9KΩF TD0804N
9R54	DRZ832011	RK73H 2A 100ΩF TD0804N
9R55	DRZ832451	RK73H 2A 6.8KΩF TD0804N
9R60	DRZ832331	RK73H 2A 2.2KΩF TD0804N
9R61	DRZ832251	RK73H 2A 1.0KΩF TD0804N
9R63	DRZ832391	RK73H 2A 3.9KΩF TD0804N
9R64	DRZ832011	RK73H 2A 100ΩF TD0804N
9R65	DRZ832451	RK73H 2A 6.8KΩF TD0804N
9R70	DRZ832331	RK73H 2A 2.2KΩF TD0804N
9R71	DRZ832251	RK73H 2A 1.0KΩF TD0804N
9R73	DRZ832391	RK73H 2A 3.9KΩF TD0804N
9R74	DRZ832011	RK73H 2A 100ΩF TD0804N
9R75	DRZ832451	RK73H 2A 6.8KΩF TD0804N
9R80, 9R81	DRZ831591	MCR10J 4R7E TD0804N

SS-7810

V CHARA AMP 10

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
10C9	DCC810511	C2012F 1H 103Z A TD84N
10C12	DCC810511	C2012F 1H 103Z A TD84N
10C13, 10C14	DCE229201	SME-CE04W 1E 470M TC04R
10C18	DCC810511	C2012F 1H 103Z A TD84N
10C19	DCC810511	C2012F 1H 103Z A TD84N
10C36	DCC816521	C2012CH 1H 220J A TD84N
10C39	DCC810511	C2012F 1H 103Z A TD84N
10C43	DCC816551	C2012CH 1H 390J A TD84N
10C49	DCE249481	SME-CE04W 1J 220M TC04R
10C50	DCE229201	SME-CE04W 1E 470M TC04R
10C61	DCC159011	CK45B 2H 102K TC04N
10C63, 10C64	DCC810511	C2012F 1H 103Z A TD84N
10C100	DCE229201	SME-CE04W 1E 470M TC04R
10C101	DCC810511	C2012F 1H 103Z A TD84N
10C102	DCE219051	SME-CE04W 1A 101M TC04R
10C103	DCC810511	C2012F 1H 103Z A TD84N
10C104	DCC816491	C2012CH 1H 100D A TD84N
10D1 to 10D4	DDD019071	1SS 120 TA21R
10D5	DDD830121	RD6.8M-T1B B
10FL1 to 10FL3	DCL119361	BL02RN2-R62 TD04N
10IC1	DIC889171	TC 7W04F(TE12L) TE1208R
10J1	DCN124721	FF3-34-R15
10J2	DCN124701	FF3-18-R15
10L1	DCL119361	BL02RN2-R62 TD04N
10Q1	DTR890841	IMX3 TE0804R
10Q2	DTR890841	IMX3 TE0804R
10Q3	DTR890861	IMZ1 TE0804R
10Q4 to 10Q7	DTR139011	2SC 1815GR TPER1
10Q8	DTR139351	2SC 2901-T
10R1	DRZ832011	RK73H 2A 100ΩF TD0804N
10R4	DRE137681	EF1/4S 150ΩF TA21N
10R5	DRZ832071	RK73H 2A 180ΩF TD0804N
10R6	DRZ832011	RK73H 2A 100ΩF TD0804N
10R7, 10R8	DRZ832011	RK73H 2A 100ΩF TD0804N
10R9 to10R11	DRZ832221	RK73H 2A 750ΩF TD0804N
10R12	DRZ832411	RK73H 2A 4.7KΩF TD0804N
10R13	DRZ832471	RK73H 2A 8.2KΩF TD0804N
10R14	DRE137971	EF1/4S 2.4KΩF TA21N
10R15	DRE137881	EF1/4S 1.0KΩF TA21N
10R16, 10R17	DRZ832031	RK73H 2A 120ΩF TD0804N
10R18	DRE137701	EF1/4S 180ΩF TA21N
10R20	DRZ832021	RK73H 2A 110ΩF TD0804N

V CHARA AMP 10

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
10R21, 10R22	DRZ832031	RK73H 2A 120ΩF TD0804N
10R23	DRZ832021	RK73H 2A 110ΩF TD0804N
10R24	DRV810062	G4AT/ST-4TA 2KΩ TE1208L
10R25	DRZ832231	RK73H 2A 820ΩF TD0804N
10R26, 10R27	DRZ833511	RK73H 2A 22ΩF TD0804N
10R28, 10R29	DRE137811	EF1/4S 510ΩF TA21N
10R30	DRE137761	EF1/4S 330ΩF TA21N
10R31, 10R32	DRE137811	EF1/4S 510ΩF TA21N
10R33	DRZ833511	RK73H 2A 22ΩF TD0804N
10R34	DRE137791	EF1/4S 430ΩF TA21N
10R35	DRE137801	EF1/4S 470ΩF TA21N
10R36	DRE137761	EF1/4S 330ΩF TA21N
10R37	DRE137801	EF1/4S 470ΩF TA21N
10R38	DRE137791	EF1/4S 430ΩF TA21N
10R39	DRE138201	EF1/4S 22KΩF TA21N
10R40	DRE137561	EF1/4S 47ΩF TA21N
10R41	DRE138201	EF1/4S 22KΩF TA21N
10R42	DRE137561	EF1/4S 47ΩF TA21N
10R43	DRZ832171	RK73H 2A 470ΩF TD0804N
10R44	DRZ832301	RK73H 2A 1.6KΩF TD0804N
10R49, 10R50	DRZ832971	RK73H 2A 1.0MΩF TD0804N
10R51	DRZ833511	RK73H 2A 22ΩF TD0804N
10R61, 10R62	DRZ832971	RK73H 2A 1.0MΩF TD0804N
10R63, 10R64	DRZ832011	RK73H 2A 100ΩF TD0804N

SS-7810

V MAIN AMP 11

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
11C1	DCC810511	C2012F 1H 103Z A TD84N
11C6, 11C7	DCC810511	C2012F 1H 103Z A TD84N
11C22, 11C23	DCV819061	TZBX4 Z060BA110 TE1208R
11C24	DCC816501	C2012CH 1H 120J A TD84N
11C27	DCC816501	C2012CH 1H 120J A TD84N
11C29, 11C30	DCC810841	C2012B 1H 102K A TD84N
11C36	DCC810511	C2012F 1H 103Z A TD84N
11C39A	DCC816511	C2012CH 1H 180J A TD84N
11C39B	DCV819071	TZBX4 N100BA110 TE1208R
11C48	DCV819051	TZBX4 Z030BA110 TE1208R
11C53	DCC816601	C2012CH 1H 101J A TD84N
11C55	DCC810511	C2012F 1H 103Z A TD84N
11C59	DCC810511	C2012F 1H 103Z A TD84N
11C66	DCC816401	C2012CH 1H 030C A TD84N
11C67	DCC810511	C2012F 1H 103Z A TD84N
11C75	DCC816401	C2012CH 1H 030C A TD84N
11C76, 11C77	DCC810841	C2012B 1H 102K A TD84N
11C78	DCC810511	C2012F 1H 103Z A TD84N
11C79	DCC810511	C2012F 1H 103Z A TD84N
11C84	DCC810511	C2012F 1H 103Z A TD84N
11C85	DCC810511	C2012F 1H 103Z A TD84N
11C89	DCC810511	C2012F 1H 103Z A TD84N
11C92	DCC816551	C2012CH 1H 390J A TD84N
11C100	DCC810511	C2012F 1H 103Z A TD84N
11C101	DCE229201	SME-CE04W 1E 470M TC04R
11C102	DCC810511	C2012F 1H 103Z A TD84N
11C103	DCE229201	SME-CE04W 1E 470M TC04R
11C104	DCC810511	C2012F 1H 103Z A TD84N
11C105	DCC810511	C2012F 1H 103Z A TD84N
11D1, 11D2	DDD810401	HVU 202A3 TE0804R
11D3	DDD810241	1SS 272 TE0804R
11D4 to 11D7	DDD019071	1SS 120 TA21R
11IC1	DIC619101	OP AMP 4558F TE1208B
11Q1, 11Q2	DTR890761	IMX5 TE0804R
11Q3, 11Q4	DTR810221	2SA 1462-T1B Y34
11Q5	DTR838661	2SC 2712LG TE85L
11Q6	DTR890761	IMX5 TE0804R
11Q7 to 11Q10	DTR165031	2SC 2570A-T
11Q11	DTR890791	IMD3 TE0804R
11Q12	DTR890841	IMX3 TE0804R
11Q13	DTR810041	2SA 1162Y TE85L
11Q14	DTR139351	2SC 2901-T

V MAIN AMP 11

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
11R1, 11R2	DRZ832011	RK73H 2A 100Ω F TD0804N
11R4, 11R5	DRZ832011	RK73H 2A 100Ω F TD0804N
11R6	DRE137721	EF1/4S 220Ω F TA21N
11R7, 11R8	DRZ832461	RK73H 2A 7.5KΩ F TD0804N
11R9, 11R10	DRZ832461	RK73H 2A 7.5KΩ F TD0804N
11R11, 11R12	DRZ833011	RK73H 2A 47Ω F TD0804N
11R13, 11R14	DRZ832431	RK73H 2A 5.6KΩ F TD0804N
11R15 to 11R18	DRZ832431	RK73H 2A 5.6KΩ F TD0804N
11R19	DRZ832081	RK73H 2A 200Ω F TD0804N
11R20, 11R21	DRE138141	EF1/4S 12KΩ F TA21N
11R22	DRZ833441	RK73H 2A 10Ω F TD0804N
11R23	DRZ832291	RK73H 2A 1.5KΩ F TD0804N
11R24	DRZ832401	RK73H 2A 4.3KΩ F TD0804N
11R25	DRZ832311	RK73H 2A 1.8KΩ F TD0804N
11R26	DRE137701	EF1/4S 180Ω F TA21N
11R27	DRZ832521	RK73H 2A 13KΩ F TD0804N
11R28	DRZ833511	RK73H 2A 22Ω F TD0804N
11R29	DRZ832011	RK73H 2A 100Ω F TD0804N
11R30	DRZ833511	RK73H 2A 22Ω F TD0804N
11R31	DRZ832011	RK73H 2A 100Ω F TD0804N
11R32	DRZ833051	RK73H 2A 68Ω F TD0804N
11R33	DRZ833041	RK73H 2A 62Ω F TD0804N
11R34	DRZ833061	RK73H 2A 75Ω F TD0804N
11R35	DRZ833061	RK73H 2A 75Ω F TD0804N
11R36	DRZ832301	RK73H 2A 1.6KΩ F TD0804N
11R37, 11R38	DRZ832411	RK73H 2A 4.7KΩ F TD0804N
11R39	DRZ832071	RK73H 2A 180Ω F TD0804N
11R41	DRV810251	G4AT/ST-4TA 5KΩ TE1208L
11R42	DRZ832231	RK73H 2A 820Ω F TD0804N
11R44 to 11R47	DRZ832031	RK73H 2A 120Ω F TD0804N
11R48	DRZ832351	RK73H 2A 2.7KΩ F TD0804N
11R51, 11R52	DRZ833051	RK73H 2A 68Ω F TD0804N
11R53, 11R54	DRE138121	EF1/4S 10KΩ F TA21N
11R55 to11R58	DRZ832411	RK73H 2A 4.7KΩ F TD0804N
11R59	DRE137721	EF1/4S 220Ω F TA21N
11R60	DRZ833511	RK73H 2A 22Ω F TD0804N
11R61	DRZ833511	RK73H 2A 22Ω F TD0804N
11R62 to 11R65	DRE137811	EF1/4S 510Ω F TA21N
11R66	DRE137551	EF1/4S 43Ω F TA21N
11R67, 11R68	DRZ832571	RK73H 2A 22KΩ F TD0804N
11R69, 11R70	DRZ833011	RK73H 2A 47Ω F TD0804N
11R71 to 11R74	DRE137791	EF1/4S 430Ω F TA21N

SS-7810

V MAIN AMP 11

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
11R75	DRE137551	EF1/4S 43ΩF TA21N
11R76, 11R77	DRE137581	EF1/4S 56ΩF TA21N
11R78	DRZ832491	RK73H 2A 10KΩF TD0804N
11R79	DRZ832571	RK73H 2A 22KΩF TD0804N
11R80	DRZ832451	RK73H 2A 6.8KΩF TD0804N
11R81	DRZ832411	RK73H 2A 4.7KΩF TD0804N
11R82	DRZ832471	RK73H 2A 8.2KΩF TD0804N
11R83	DDD880081	DTN-T203K 103KS TD0804N
11R84	DRZ832361	RK73H 2A 3.0KΩF TD0804N
11R85	DRE137641	EF1/4S 100ΩF TA21N
11R86	DRE137881	EF1/4S 1.0KΩF TA21N
11R87	DRE137641	EF1/4S 100ΩF TA21N
11R88	DRZ832301	RK73H 2A 1.6KΩF TD0804N
11R89	DRZ832401	RK73H 2A 4.3KΩF TD0804N
..	DRZ832491	RK73H 2A 10KΩF TD0804N
11R92	DRZ832171	RK73H 2A 470ΩF TD0804N
11R93	DRZ832301	RK73H 2A 1.6KΩF TD0804N
11R94	DDD880081	DTN-T203K 103KS TD0804N

V OUTPUT AMP 12

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
12C9	DCE249481	SME-CE04W 1J 220M TC04R
12C10	DCC159011	CK45B 2H 102K TC04N
12C11	DCE249481	SME-CE04W 1J 220M TC04R
12C17	DCC139271	UP050B 101K TA21N
12C21	DCC139271	UP050B 101K TA21N
12C23	DCC139271	UP050B 101K TA21N
12C57	DCC139501	CK45F 1H 103ZYR TC04N
12C100	DCC139501	CK45F 1H 103ZYR TC04N
12C101	DCE229201	SME-CE04W 1E 470M TC04R
12C102	DCC139501	CK45F 1H 103ZYR TC04N
12C103	DCE229201	SME-CE04W 1E 470M TC04R
12C104	DCC159011	CK45B 2H 102K TC04N
12C107	DCC159011	CK45B 2H 102K TC04N
12C108	DCC171931	DE1710F 103Z 3K
12D1, 12D2	DDD019071	1SS 120 TA21R
12D3, 12D4	DDD038891	RD33ESB/HZS33NB TA21R
12FFC7	AHB201711	FFC-18P-L040-P1.25
12IC1	DIC614101	NJM 082D (JRC)
12J1	DCN124731	FF3-18-S55
12J2	DSK010251	CRT Socket E-2025 UL-I
1240J1	KHB177321	SS-7810 CRT CABLE1 UL-I
12L1	DCL151301	Peaking Coil
12L2	DCL151301	Peaking Coil
12L3	DCL119361	BL02RN2-R62 TD04N
12L4	DCL119361	BL02RN2-R62 TD04N
12P3	KHB177511	SS-7810 X SIG CABLE
12P4	KHB177421	SS-7810 CRT CABLE 2 UL-I
12Q1, 12Q2	DTR191331	MRF 544
12Q7	DTR139011	2SC 1815GR TPER1
12Q8	DTR119011	2SA 1015Y TPER1
12R1	DRE137641	EF1/4S 100ΩF TA21N
12R2	DRE137561	EF1/4S 47ΩF TA21N
12R3	DRE137561	EF1/4S 47ΩF TA21N
12R4	DRE137701	EF1/4S 180ΩF TA21N
12R5	DRE137401	EF1/4S 10ΩF TA21N
12R6	DRE137701	EF1/4S 180ΩF TA21N
12R7	DRE137401	EF1/4S 10ΩF TA21N
12R8	DRS341201	RSS3 330ΩJ L20
12R9	DRS341201	RSS3 330ΩJ L20
12R10	DRS331471	RSS2 150ΩJ L15
12R16	DRE138361	EF1/4S 100KΩF TA21N
12R17	DRE138201	EF1/4S 22KΩF TA21N

V OUTPUT AMP 12

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
12R18	DRE138181	EF1/4S 18KΩF TA21N
12R19	DRE138201	EF1/4S 22KΩF TA21N
12R20	DRE138361	EF1/4S 100KΩF TA21N
12R21	DRE138201	EF1/4S 22KΩF TA21N
12R22	DRE138121	EF1/4S 10KΩF TA21N
12R23	DRE137641	EF1/4S 100ΩF TA21N
12R56	DRE138281	EF1/4S 47KΩF TA21N
12R57	DRE138291	EF1/4S 51KΩF TA21N
12R58	DRE138211	EF1/4S 24KΩF TA21N
12R59	DRE137881	EF1/4S 1.0KΩF TA21N
12R60	DRE138051	EF1/4S 5.1KΩF TA21N
12R104 to 12R107	DRD147401	PSS1/2S 100ΩJ TA21N

CH1 TRIG PREAMP 13

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
13C4	DCC815891	C2012CH 1H 150J A TD84N
13C5	DCC816661	C2012CH 1H 391J A TD84N
13C6	DCC816441	C2012CH 1H 050C A TD84N
13C8	DCC810511	C2012F 1H 103Z A TD84N
13C12	DCC810841	C2012B 1H 102K A TD84N
13C14	DCC810841	C2012B 1H 102K A TD84N
13C16A	DCC810511	C2012F 1H 103Z A TD84N
13C16B	DCC810571	C2012F 1E 104Z A TD84N
13C23, 13C24	DCC810841	C2012B 1H 102K A TD84N
13C25	DCC816601	C2012CH 1H 101J A TD84N
13C28	DCC810511	C2012F 1H 103Z A TD84N
13C30A	DCC810511	C2012F 1H 103Z A TD84N
13C30B	DCC810571	C2012F 1E 104Z A TD84N
13C39, 13C40	DCC810511	C2012F 1H 103Z A TD84N
13C44	DDD880081	DTN-T203K 103KS TD0804N
13C55	DCC810511	C2012F 1H 103Z A TD84N
13C57	DCC816601	C2012CH 1H 101J A TD84N
13C60	DCC810511	C2012F 1H 103Z A TD84N
13C61	DCE229221	SME-CE04W 1E 221M TC04R
13C63	DCC810571	C2012F 1E 104Z A TD84N
13C64	DCC810511	C2012F 1H 103Z A TD84N
13C67	DCC810511	C2012F 1H 103Z A TD84N
13C69	DCC810511	C2012F 1H 103Z A TD84N
13C70	DCC816601	C2012CH 1H 101J A TD84N
13C72	DCC810511	C2012F 1H 103Z A TD84N
13C74	DCC816491	C2012CH 1H 100D A TD84N
13C100	DCC810511	C2012F 1H 103Z A TD84N
13C102	DCC810511	C2012F 1H 103Z A TD84N
13D1, 13D2	DDD838341	RD 3.3M-T1B B1
13D3	DDD830151	RD9.1M-T1B B
13IC1	DIC619101	OP AMP 4558F TE1208B
13J1	KHB095411	Mini Pin Jack
13JP100, 13JP101	DZB999011	JPW 01 TA21N
13Q1	DTR890761	IMX5 TE0804R
13Q2, 13Q3	DTR810221	2SA 1462-T1B Y34
13Q4	DTR810041	2SA 1162Y TE85L
13Q5	DTR890821	IMT2 TE0804R
13Q6	DTR890761	IMX5 TE0804R
13Q7	DTR890841	IMX3 TE0804R
13Q8	DTR838661	2SC 2712LG TE85L
13Q9	DTR890841	IMX3 TE0804R
13Q10	DTR838661	2SC 2712LG TE85L

CH1 TRIG PREAMP 13

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
13Q11	DTR860171	FC13 TE0804R
13R1, 13R2	DRZ833051	RK73H 2A 68ΩF TD0804N
13R3	DRZ832251	RK73H 2A 1.0KΩF TD0804N
13R5	DRZ832341	RK73H 2A 2.4KΩF TD0804N
13R6	DRZ833031	RK73H 2A 56ΩF TD0804N
13R7	DRZ832441	RK73H 2A 6.2KΩF TD0804N
13R8, 13R9	DRZ832451	RK73H 2A 6.8KΩF TD0804N
13R10	DRZ832441	RK73H 2A 6.2KΩF TD0804N
13R11	DRZ833441	RK73H 2A 10ΩF TD0804N
13R12	DRZ832131	RK73H 2A 330ΩF TD0804N
13R13	DRZ833441	RK73H 2A 10ΩF TD0804N
13R14	DRZ832131	RK73H 2A 330ΩF TD0804N
13R15	DRZ832081	RK73H 2A 200ΩF TD0804N
13R16	DRZ832081	RK73H 2A 200ΩF TD0804N
13R17	DRZ832081	RK73H 2A 200ΩF TD0804N
13R18	DRZ832081	RK73H 2A 200ΩF TD0804N
13R21	DRZ832381	RK73H 2A 3.6KΩF TD0804N
13R22	DRZ832421	RK73H 2A 5.1KΩF TD0804N
13R23, 13R24	DRZ833011	RK73H 2A 47ΩF TD0804N
13R25, 13R26	DRZ832141	RK73H 2A 360ΩF TD0804N
13R27	DRZ832341	RK73H 2A 2.4KΩF TD0804N
13R28	DRZ832351	RK73H 2A 2.7KΩF TD0804N
13R29, 13R30	DRZ832411	RK73H 2A 4.7KΩF TD0804N
13R31, 13R32	DRZ833011	RK73H 2A 47ΩF TD0804N
13R33, 13R34	DRZ832411	RK73H 2A 4.7KΩF TD0804N
13R35 to 13R38	DRZ832351	RK73H 2A 2.7KΩF TD0804N
13R39, 13R40	DRZ832191	RK73H 2A 560ΩF TD0804N
13R41	DRZ832201	RK73H 2A 620ΩF TD0804N
13R42	DRZ832251	RK73H 2A 1.0KΩF TD0804N
13R43	DRZ832271	RK73H 2A 1.2KΩF TD0804N
13R44	DRZ832371	RK73H 2A 3.3KΩF TD0804N
13R45, 13R46	DRZ833071	RK73H 2A 82ΩF TD0804N
13R47	DRZ832081	RK73H 2A 200ΩF TD0804N
13R48	DRZ832191	RK73H 2A 560ΩF TD0804N
13R49	DRZ832371	RK73H 2A 3.3KΩF TD0804N
13R50	DRZ832361	RK73H 2A 3.0KΩF TD0804N
13R51 13R,52	DRZ831501	MCR10 000E TD0804N
13R53, 13R54	DRZ832221	RK73H 2A 750ΩF TD0804N
13R55, 13R56	DRZ832401	RK73H 2A 4.3KΩF TD0804N
13R57, 13R58	DRZ832531	RK73H 2A 15KΩF TD0804N
13R59	DRZ832041	RK73H 2A 130ΩF TD0804N
13R60	DRZ832011	RK73H 2A 100ΩF TD0804N

CH1 TRIG PREAMP 13

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
13R61	DRZ832551	RK73H 2A 18KΩF TD0804N
13R62	DRZ832521	RK73H 2A 13KΩF TD0804N
13R63	DRZ832201	RK73H 2A 620ΩF TD0804N
13R64	DRZ832621	RK73H 2A 36KΩF TD0804N
13R65	DRZ832321	RK73H 2A 2.0KΩF TD0804N
13R66	DRZ832931	RK73H 2A 680KΩF TD0804N
13R67	DRZ832491	RK73H 2A 10KΩF TD0804N
13R68	DRZ832851	RK73H 2A 330KΩF TD0804N
13R69	DRZ832251	RK73H 2A 1.0KΩF TD0804N
13R70	DRZ832251	RK73H 2A 1.0KΩF TD0804N
13R71, 13R72	DRZ832491	RK73H 2A 10KΩF TD0804N
13R73	DRZ832751	RK73H 2A 120KΩF TD0804N
13R74	DRZ832011	RK73H 2A 100ΩF TD0804N
13R80	DRZ832091	RK73H 2A 220ΩF TD0804N
13R81	DRZ832241	RK73H 2A 910ΩF TD0804N
13R82	DRZ832661	RK73H 2A 51KΩF TD0804N
13R83	DRZ832771	RK73H 2A 150KΩF TD0804N
13R100	DRZ832091	RK73H 2A 220ΩF TD0804N

CH2 TRIG PREAMP 14

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
14C4	DCC815891	C2012CH 1H 150J A TD84N
14C5	DCC816661	C2012CH 1H 391J A TD84N
14C6	DCC816441	C2012CH 1H 050C A TD84N
14C8	DCC810511	C2012F 1H 103Z A TD84N
14C12	DCC810841	C2012B 1H 102K A TD84N
14C14	DCC810841	C2012B 1H 102K A TD84N
14C16A	DCC810511	C2012F 1H 103Z A TD84N
14C16B	DCC810571	C2012F 1E 104Z A TD84N
14C23, 14C24	DCC810841	C2012B 1H 102K A TD84N
14C25	DCC816601	C2012CH 1H 101J A TD84N
14C28	DCC810511	C2012F 1H 103Z A TD84N
14C30A	DCC810511	C2012F 1H 103Z A TD84N
14C30B	DCC810571	C2012F 1E 104Z A TD84N
14C39	DCC810511	C2012F 1H 103Z A TD84N
14C40	DCC810511	C2012F 1H 103Z A TD84N
14C43	DCC810511	C2012F 1H 103Z A TD84N
14C47	DCC810511	C2012F 1H 103Z A TD84N
14C74	DCC816491	C2012CH 1H 100D A TD84N
14D1, 14D2	DDD838341	RD 3.3M-T1B B1
14J1	KHB095411	Mini Pin Jack
14JP100	DZB999011	JPW 01 TA21N
14Q1	DTR890761	IMX5 TE0804R
14Q2, 14Q3	DTR810221	2SA 1462-T1B Y34
14Q4	DTR810041	2SA 1162Y TE85L
14Q5	DTR890821	IMT2 TE0804R
14Q6	DTR890761	IMX5 TE0804R
14R1, 14R2	DRZ833051	RK73H 2A 68ΩF TD0804N
14R3	DRZ832251	RK73H 2A 1.0KΩF TD0804N
14R5	DRZ832341	RK73H 2A 2.4KΩF TD0804N
14R6	DRZ833031	RK73H 2A 56ΩF TD0804N
14R7	DRZ832441	RK73H 2A 6.2KΩF TD0804N
14R8, 14R9	DRZ832451	RK73H 2A 6.8KΩF TD0804N
14R10	DRZ832441	RK73H 2A 6.2KΩF TD0804N
14R11	DRZ833441	RK73H 2A 10ΩF TD0804N
14R12	DRZ832131	RK73H 2A 330ΩF TD0804N
14R13	DRZ833441	RK73H 2A 10ΩF TD0804N
14R14	DRZ832131	RK73H 2A 330ΩF TD0804N
14R15	DRZ832081	RK73H 2A 200ΩF TD0804N
14R16, 14R17	DRZ832081	RK73H 2A 200ΩF TD0804N
14R18	DRZ832081	RK73H 2A 200ΩF TD0804N
14R21	DRZ832381	RK73H 2A 3.6KΩF TD0804N
14R22	DRZ832421	RK73H 2A 5.1KΩF TD0804N

CH2 TRIG PREAMP 14

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
14R23, 14R24	DRZ833011	RK73H 2A 47ΩF TD0804N
14R25, 14R26	DRZ832141	RK73H 2A 360ΩF TD0804N
14R27	DRZ832341	RK73H 2A 2.4KΩF TD0804N
14R28	DRZ832351	RK73H 2A 2.7KΩF TD0804N
14R29, 14R30	DRZ832411	RK73H 2A 4.7KΩF TD0804N
14R31, 14R32	DRZ833011	RK73H 2A 47ΩF TD0804N
14R33, 14R34	DRZ832411	RK73H 2A 4.7KΩF TD0804N
14R35 to 14R38	DRZ832351	RK73H 2A 2.7KΩF TD0804N
14R39, 14R40	DRZ832191	RK73H 2A 560ΩF TD0804N
14R41	DRZ832201	RK73H 2A 620ΩF TD0804N
14R74	DRZ832011	RK73H 2A 100ΩF TD0804N
14R100	DRZ832071	RK73H 2A 180ΩF TD0804N

CH3 TRIG PREAMP 15

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
15C4	DCC815891	C2012CH 1H 150J A TD84N
15C5	DCC816661	C2012CH 1H 391J A TD84N
15C6	DCC816441	C2012CH 1H 050C A TD84N
15C8	DCC810511	C2012F 1H 103Z A TD84N
15C12	DCC810841	C2012B 1H 102K A TD84N
15C14	DCC810841	C2012B 1H 102K A TD84N
15C16A	DCC810511	C2012F 1H 103Z A TD84N
15C16B	DCC810571	C2012F 1E 104Z A TD84N
15C23, 15C24	DCC810841	C2012B 1H 102K A TD84N
15C25	DCC816601	C2012CH 1H 101J A TD84N
15C28	DCC810511	C2012F 1H 103Z A TD84N
15C30A	DCC810511	C2012F 1H 103Z A TD84N
15C30B	DCC810571	C2012F 1E 104Z A TD84N
15C39	DCC810511	C2012F 1H 103Z A TD84N
15C40	DCC810511	C2012F 1H 103Z A TD84N
15C74	DCC816491	C2012CH 1H 100D A TD84N
15D1, 15D2	DDD838341	RD 3.3M-T1B B1
15J1	KHB095411	Mini Pin Jack
15JP100	DZB999011	JPW 01 TA21N
15Q1	DTR890761	IMX5 TE0804R
15Q2, 15Q3	DTR810221	2SA 1462-T1B Y34
15Q4	DTR810041	2SA 1162Y TE85L
15Q5	DTR890821	IMT2 TE0804R
15Q6	DTR890761	IMX5 TE0804R
15R1, 15R2	DRZ833051	RK73H 2A 68ΩF TD0804N
15R3	DRZ832251	RK73H 2A 1.0KΩF TD0804N
15R5	DRZ832341	RK73H 2A 2.4KΩF TD0804N
15R6	DRZ833031	RK73H 2A 56ΩF TD0804N
15R7	DRZ832441	RK73H 2A 6.2KΩF TD0804N
15R8, 15R9	DRZ832451	RK73H 2A 6.8KΩF TD0804N
15R10	DRZ832441	RK73H 2A 6.2KΩF TD0804N
15R11	DRZ833441	RK73H 2A 10ΩF TD0804N
15R12	DRZ832131	RK73H 2A 330ΩF TD0804N
15R13	DRZ833441	RK73H 2A 10ΩF TD0804N
15R14	DRZ832131	RK73H 2A 330ΩF TD0804N
15R15	DRZ832081	RK73H 2A 200ΩF TD0804N
15R16, 15R17	DRZ832081	RK73H 2A 200ΩF TD0804N
15R18	DRZ832081	RK73H 2A 200ΩF TD0804N
15R21	DRZ832381	RK73H 2A 3.6KΩF TD0804N
15R22	DRZ832421	RK73H 2A 5.1KΩF TD0804N
15R23, 15R24	DRZ833011	RK73H 2A 47ΩF TD0804N
15R25, 15R26	DRZ832141	RK73H 2A 360ΩF TD0804N

CH3 TRIG PREAMP 15

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
15R27	DRZ832341	RK73H 2A 2.4KΩF TD0804N
15R28	DRZ832351	RK73H 2A 2.7KΩF TD0804N
15R29, 15R30	DRZ832411	RK73H 2A 4.7KΩF TD0804N
15R31, 15R32	DRZ833011	RK73H 2A 47ΩF TD0804N
15R33, 15R34	DRZ832411	RK73H 2A 4.7KΩF TD0804N
15R35 to 15R38	DRZ832351	RK73H 2A 2.7KΩF TD0804N
15R39, 15R40	DRZ832191	RK73H 2A 560ΩF TD0804N
15R41	DRZ832201	RK73H 2A 620ΩF TD0804N
15R74	DRZ832011	RK73H 2A 100ΩF TD0804N
15R100	DRZ832071	RK73H 2A 180ΩF TD0804N

A/B TRIG SELECT 16

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
16C5 to 16C8	DCC810511	C2012F 1H 103Z A TD84N
16C9	DCC810571	C2012F 1E 104Z A TD84N
16C10	DCC810511	C2012F 1H 103Z A TD84N
16C16	DCC810511	C2012F 1H 103Z A TD84N
16C18	DCC810571	C2012F 1E 104Z A TD84N
16C24	DCC810841	C2012B 1H 102K A TD84N
16C25	DCE949081	SRA 50VB-1 TC04R
16C26	DCE229201	SME-CE04W 1E 470M TC04R
16C55 to 16C57	DCC810511	C2012F 1H 103Z A TD84N
16C60	DCC810571	C2012F 1E 104Z A TD84N
16C61	DCC810511	C2012F 1H 103Z A TD84N
16C66	DCC810511	C2012F 1H 103Z A TD84N
16C68	DCC810571	C2012F 1E 104Z A TD84N
16C100	DCC810511	C2012F 1H 103Z A TD84N
16C101, 16C102	DCC810841	C2012B 1H 102K A TD84N
16C150	DCC810511	C2012F 1H 103Z A TD84N
16C151, 16C152	DCC810841	C2012B 1H 102K A TD84N
16C200	DCE229201	SME-CE04W 1E 470M TC04R
16C201, 16C202	DCC810571	C2012F 1E 104Z A TD84N
16D1, 16D2	DDD810141	MA 159-(TX) TE0804L
16D3	DDD830341	RD6.8M-T1B B2
16D51, 16D52	DDD810141	MA 159-(TX) TE0804L
16D53	DDD830341	RD6.8M-T1B B2
16IC1, 16IC2	DIC495081	TC 4052BF (EL) TE1612B
16J1 to 16J3	KHB095411	Mini Pin Jack
16Q1 to 16Q4	DTR870011	3SK 184R TE0804F
16Q5	DTR830121	2SC 3123 TE85L
16Q6	DTR870011	3SK 184R TE0804F
16Q7	DTR810221	2SA 1462-T1B Y34
16Q51 to 16Q53	DTR870011	3SK 184R TE0804F
16Q55	DTR830121	2SC 3123 TE85L
16Q56	DTR870011	3SK 184R TE0804F
16Q57	DTR810221	2SA 1462-T1B Y34
16R1 to 16R4	DRZ832661	RK73H 2A 51KΩF TD0804N
16R5, 16R6	DRZ831501	MCR10 000E TD0804N
16R8	DRZ831501	MCR10 000E TD0804N
16R9 to 16R12	DRZ832701	RK73H 2A 75KΩF TD0804N
16R13	DRZ832051	RK73H 2A 150ΩF TD0804N
16R14	DRZ832661	RK73H 2A 51KΩF TD0804N
16R15, 16R16	DRZ832401	RK73H 2A 4.3KΩF TD0804N
16R17	DRZ833011	RK73H 2A 47ΩF TD0804N
16R18, 16R19	DRZ832271	RK73H 2A 1.2KΩF TD0804N

A/B TRIG SELECT 16

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
16R20	DRZ832011	RK73H 2A 100ΩF TD0804N
16R24	DRZ832521	RK73H 2A 13KΩF TD0804N
16R26	DRZ832251	RK73H 2A 1.0KΩF TD0804N
16R51 to 16R53	DRZ832661	RK73H 2A 51KΩF TD0804N
16R55, 16R56	DRZ831501	MCR10 000E TD0804N
16R60 to 16R62	DRZ832701	RK73H 2A 75KΩF TD0804N
16R63	DRZ832051	RK73H 2A 150ΩF TD0804N
16R64	DRZ832661	RK73H 2A 51KΩF TD0804N
16R65, 16R66	DRZ832401	RK73H 2A 4.3KΩF TD0804N
16R67	DRZ833011	RK73H 2A 47ΩF TD0804N
16R68, 16R69	DRZ832271	RK73H 2A 1.2KΩF TD0804N
16R70	DRZ832011	RK73H 2A 100ΩF TD0804N
16R74	DRZ832011	RK73H 2A 100ΩF TD0804N
16R100	DRZ833061	RK73H 2A 75ΩF TD0804N
16R101, 16R102	DRZ833011	RK73H 2A 47ΩF TD0804N
16R103	DRZ833061	RK73H 2A 75ΩF TD0804N
16R104, 16R105	DRZ833011	RK73H 2A 47ΩF TD0804N
16R106	DRZ833061	RK73H 2A 75ΩF TD0804N
16R107, 16R108	DRZ833011	RK73H 2A 47ΩF TD0804N

A TRIG AMP 17

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
17C2	DCE949441	SME 50VB-1(M)BP TC04N
17C5	DCC810511	C2012F 1H 103Z A TD84N
17C12	DCF121721	MF-3S 1H 103J TC04N
17C16	DCC810511	C2012F 1H 103Z A TD84N
17C20	DCC810511	C2012F 1H 103Z A TD84N
17C23, 17C24	DCC810511	C2012F 1H 103Z A TD84N
17C48	DCC810571	C2012F 1E 104Z A TD84N
17C51	DCC810511	C2012F 1H 103Z A TD84N
17C53	DCC810571	C2012F 1E 104Z A TD84N
17C56	DCC810571	C2012F 1E 104Z A TD84N
17C57	DCC810841	C2012B 1H 102K A TD84N
17C58	DCC810571	C2012F 1E 104Z A TD84N
17C59	DCC810841	C2012B 1H 102K A TD84N
17C64	DCC810511	C2012F 1H 103Z A TD84N
17C66	DCC810511	C2012F 1H 103Z A TD84N
17C67	DCE229201	SME-CE04W 1E 470M TC04R
17C68, 17C69	DCC810511	C2012F 1H 103Z A TD84N
17C100	DCC810511	C2012F 1H 103Z A TD84N
17C101	DCC810571	C2012F 1E 104Z A TD84N
17C105	DCC810571	C2012F 1E 104Z A TD84N
17C108	DCC810511	C2012F 1H 103Z A TD84N
17C109 to 17C111	DCC810841	C2012B 1H 102K A TD84N
17D1	DDD810241	1SS 272 TE0804R
17IC1	DIC499641	TC4053BF/MC14053BFR TJ3212F
17IC2	DIC619101	OP AMP 4558F TE1208B
17IC3	DIC623501	μPC 1663G (NEC)
17JP1	DRZ831501	MCR10 000E TD0804N
17JP2	DRZ831501	MCR10 000E TD0804N
17JP4	DRZ831501	MCR10 000E TD0804N
17JP100 to 17JP103	DZB999011	JPW 01 TA21N
17Q1	DTR830121	2SC 3123 TE85L
17Q2 to 5	DTR890761	IMX5 TE0804R
17Q6	DTR890861	IMZ1 TE0804R
17R1	DRZ832331	RK73H 2A 2.2KΩF TD0804N
17R2	DRZ832491	RK73H 2A 10KΩF TD0804N
17R3	DRZ832011	RK73H 2A 100ΩF TD0804N
17R4	DRZ832051	RK73H 2A 150ΩF TD0804N
17R5	DRZ832411	RK73H 2A 4.7KΩF TD0804N
17R6	DRZ832401	RK73H 2A 4.3KΩF TD0804N
17R7	DRZ832571	RK73H 2A 22KΩF TD0804N
17R8	DRZ832561	RK73H 2A 20KΩF TD0804N
17R9	DRZ832361	RK73H 2A 3.0KΩF TD0804N

A TRIG AMP 17

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
17R10	DRZ832571	RK73H 2A 22KΩF TD0804N
17R11	DRZ832491	RK73H 2A 10KΩF TD0804N
17R12	DRZ832301	RK73H 2A 1.6KΩF TD0804N
17R13	DRZ832491	RK73H 2A 10KΩF TD0804N
17R14, 17R15	DRZ833051	RK73H 2A 68ΩF TD0804N
17R16	DRZ832711	RK73H 2A 82KΩF TD0804N
17R17	DRZ832361	RK73H 2A 3.0KΩF TD0804N
17R18	DRZ832571	RK73H 2A 22KΩF TD0804N
17R19	DRZ832741	RK73H 2A 110KΩF TD0804N
17R20	DRZ832491	RK73H 2A 10KΩF TD0804N
17R21	DRZ832671	RK73H 2A 56KΩF TD0804N
17R22	DRZ832441	RK73H 2A 6.2KΩF TD0804N
17R23	DRZ832491	RK73H 2A 10KΩF TD0804N
17R24	DRZ832301	RK73H 2A 1.6KΩF TD0804N
17R25, 17R26	DRZ832291	RK73H 2A 1.5KΩF TD0804N
17R27, 17R28	DRZ832191	RK73H 2A 560ΩF TD0804N
17R31	DRZ832501	RK73H 2A 11KΩF TD0804N
17R32	DRZ831501	MCR10 000E TD0804N
17R33	DRZ832501	RK73H 2A 11KΩF TD0804N
17R34	DRZ831501	MCR10 000E TD0804N
17R36	DRZ832131	RK73H 2A 330ΩF TD0804N
17R37	DRZ832351	RK73H 2A 2.7KΩF TD0804N
17R38, 17R39	DRZ833011	RK73H 2A 47ΩF TD0804N
17R41, 17R42	DRZ832341	RK73H 2A 2.4KΩF TD0804N
17R44, 17R45	DRZ832341	RK73H 2A 2.4KΩF TD0804N
17R46, 17R47	DRZ832011	RK73H 2A 100ΩF TD0804N
17R48, 17R49	DRZ832181	RK73H 2A 510ΩF TD0804N
17R50	DRZ832351	RK73H 2A 2.7KΩF TD0804N
17R51	DRZ832421	RK73H 2A 5.1KΩF TD0804N
17R52	DRZ832391	RK73H 2A 3.9KΩF TD0804N
17R53, 1S7R54	DRZ832271	RK73H 2A 1.2KΩF TD0804N
17R55	DRZ832261	RK73H 2A 1.1KΩF TD0804N
17R56	DRZ832071	RK73H 2A 180ΩF TD0804N
17R57	DRZ832041	RK73H 2A 130ΩF TD0804N
17R58	DRZ832071	RK73H 2A 180ΩF TD0804N
17R59	DRZ832041	RK73H 2A 130ΩF TD0804N
17R60, 17R61	DRZ833051	RK73H 2A 68ΩF TD0804N
17R62, 17R63	DRZ832341	RK73H 2A 2.4KΩF TD0804N
17R64	DRZ832411	RK73H 2A 4.7KΩF TD0804N
17R65	DRZ832411	RK73H 2A 4.7KΩF TD0804N
17R66	DRZ832411	RK73H 2A 4.7KΩF TD0804N
17R67	DRZ832411	RK73H 2A 4.7KΩF TD0804N

A TRIG AMP 17

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
17R68	DRZ832191	RK73H 2A 560ΩF TD0804N
17R69	DRZ832191	RK73H 2A 560ΩF TD0804N
17R70	DRZ833511	RK73H 2A 22ΩF TD0804N
17R71	DRZ832351	RK73H 2A 2.7KΩF TD0804N

B TRIG AMP 18

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
18C2	DCE949441	SME 50VB-1(M)BP TC04N
18C5	DCC810511	C2012F 1H 103Z A TD84N
18C12	DCF121721	MF-3S 1H 103J TC04N
18C16	DCC810511	C2012F 1H 103Z A TD84N
18C20	DCC810511	C2012F 1H 103Z A TD84N
18C23, 18C24	DCC810511	C2012F 1H 103Z A TD84N
18C48	DCC810571	C2012F 1E 104Z A TD84N
18C51	DCC810511	C2012F 1H 103Z A TD84N
18C53	DCC810571	C2012F 1E 104Z A TD84N
18C56	DCC810571	C2012F 1E 104Z A TD84N
18C57	DCC810841	C2012B 1H 102K A TD84N
18C58	DCC810571	C2012F 1E 104Z A TD84N
18C59	DCC810841	C2012B 1H 102K A TD84N
18C64	DCC810511	C2012F 1H 103Z A TD84N
18C66	DCC810511	C2012F 1H 103Z A TD84N
18C68, 18C69	DCC810511	C2012F 1H 103Z A TD84N
18C100	DCC810511	C2012F 1H 103Z A TD84N
18C101	DCC810571	C2012F 1E 104Z A TD84N
18C105	DCC810571	C2012F 1E 104Z A TD84N
18C108	DCC810511	C2012F 1H 103Z A TD84N
18C109 to 18C111	DCC810841	C2012B 1H 102K A TD84N
18D1	DDD810241	1SS 272 TE0804R
18IC1	DIC499641	TC4053BF/MC14053BFR TJ3212F
18IC2	DIC619101	OP AMP 4558F TE1208B
18IC3	DIC623501	μPC 1663G (NEC)
18JP2, 18JP3	DRZ831501	MCR10 000E TD0804N
18JP4, 18JP5	DRZ831501	MCR10 000E TD0804N
18JP100, 18JP101	DZB999011	JPW 01 TA21N
18Q1	DTR830121	2SC 3123 TE85L
18Q2 to 18Q5	DTR890761	IMX5 TE0804R
18Q6	DTR890861	IMZ1 TE0804R
18R2	DRZ832491	RK73H 2A 10KΩF TD0804N
18R3	DRZ832011	RK73H 2A 100ΩF TD0804N
18R4	DRZ832051	RK73H 2A 150ΩF TD0804N
18R5	DRZ832411	RK73H 2A 4.7KΩF TD0804N
18R6	DRZ832401	RK73H 2A 4.3KΩF TD0804N
18R7	DRZ832571	RK73H 2A 22KΩF TD0804N
18R8	DRZ832561	RK73H 2A 20KΩF TD0804N
18R9	DRZ832361	RK73H 2A 3.0KΩF TD0804N
18R10	DRZ832571	RK73H 2A 22KΩF TD0804N
18R11	DRZ832491	RK73H 2A 10KΩF TD0804N
18R12	DRZ832301	RK73H 2A 1.6KΩF TD0804N

SS-7810

B TRIG AMP 18

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
18R13	DRZ832491	RK73H 2A 10KΩF TD0804N
18R14, 18R15	DRZ833051	RK73H 2A 68ΩF TD0804N
18R16	DRZ832711	RK73H 2A 82KΩF TD0804N
18R17	DRZ832361	RK73H 2A 3.0KΩF TD0804N
18R18	DRZ832571	RK73H 2A 22KΩF TD0804N
18R19	DRZ832741	RK73H 2A 110KΩF TD0804N
18R20	DRZ832491	RK73H 2A 10KΩF TD0804N
18R21	DRZ832671	RK73H 2A 56KΩF TD0804N
18R22	DRZ832441	RK73H 2A 6.2KΩF TD0804N
18R23	DRZ832491	RK73H 2A 10KΩF TD0804N
18R24	DRZ832301	RK73H 2A 1.6KΩF TD0804N
18R25, 18R26	DRZ832291	RK73H 2A 1.5KΩF TD0804N
18R27, 18R28	DRZ832191	RK73H 2A 560ΩF TD0804N
18R31	DRZ832501	RK73H 2A 11KΩF TD0804N
18R32	DRZ831501	MCR10 000E TD0804N
18R33	DRZ832501	RK73H 2A 11KΩF TD0804N
18R34	DRZ831501	MCR10 000E TD0804N
18R36	DRZ832131	RK73H 2A 330ΩF TD0804N
18R37	DRZ832351	RK73H 2A 2.7KΩF TD0804N
18R38, 18R39	DRZ833011	RK73H 2A 47ΩF TD0804N
18R41, 18R42	DRZ832341	RK73H 2A 2.4KΩF TD0804N
18R44, 18R45	DRZ832341	RK73H 2A 2.4KΩF TD0804N
18R46, 18R47	DRZ832011	RK73H 2A 100ΩF TD0804N
18R48, 18R49	DRZ832181	RK73H 2A 510ΩF TD0804N
18R50	DRZ832351	RK73H 2A 2.7KΩF TD0804N
18R51	DRZ832421	RK73H 2A 5.1KΩF TD0804N
18R52	DRZ832391	RK73H 2A 3.9KΩF TD0804N
18R53, 18R54	DRZ832271	RK73H 2A 1.2KΩF TD0804N
18R55	DRZ832261	RK73H 2A 1.1KΩF TD0804N
18R56	DRZ832071	RK73H 2A 180ΩF TD0804N
18R57	DRZ832041	RK73H 2A 130ΩF TD0804N
18R58	DRZ832071	RK73H 2A 180ΩF TD0804N
18R59	DRZ832041	RK73H 2A 130ΩF TD0804N
18R60, 18R61	DRZ833051	RK73H 2A 68ΩF TD0804N
18R62, 18R63	DRZ832341	RK73H 2A 2.4KΩF TD0804N
18R64 to 18R67	DRZ832411	RK73H 2A 4.7KΩF TD0804N
18R68, 18R69	DRZ832191	RK73H 2A 560ΩF TD0804N
18R70	DRZ833511	RK73H 2A 22ΩF TD0804N
18R71	DRZ832351	RK73H 2A 2.7KΩF TD0804N

TV SYNC SEP 19

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
19C2, 19C3	DCC810511	C2012F 1H 103Z A TD84N
19C6	DCE919461	SME 10VB-100(M)BP TC04N
19C15	DCC816601	C2012CH 1H 101J A TD84N
19C16	DCE229241	SME-CE04W 1C 100M TC04R
19C17	DCE949441	SME 50VB-1(M)BP TC04N
19C22	DCC810511	C2012F 1H 103Z A TD84N
19C100	DCC810511	C2012F 1H 103Z A TD84N
19C101	DCE219051	SME-CE04W 1A 101M TC04R
19C102	DCC810511	C2012F 1H 103Z A TD84N
19C103	DCE219051	SME-CE04W 1A 101M TC04R
19C104, 19C105	DCC810511	C2012F 1H 103Z A TD84N
19C107	DCC810511	C2012F 1H 103Z A TD84N
19C109, 19C110	DCC810841	C2012B 1H 102K A TD84N
19C111	DCC810511	C2012F 1H 103Z A TD84N
19D1	DDD810241	1SS 272 TE0804R
19D4, 19D5	DDD810241	1SS 272 TE0804R
19D7	DDD830121	RD6.8M-T1B B
19D8	DDD830101	RD5.6M-T1B B
19IC1	DIC623501	μPC 1663G (NEC)
19IC2	DIC889161	TC 4W53F(TE12L) TE1208R
19IC3	DIC619191	NJM 082M(TE3) TE1208L
19IC4	DIC639031	NJM 2903M(TE3) TE1208L
19JP1, 19JP2	DRZ831501	MCR10 000E TD0804N
19JP100	DRD137001	PSS1/4S 2.2ΩJ TA21N
19JP101	DZB999011	JPW 01 TA21N
19Q1	DTR838661	2SC 2712LG TE85L
19Q2	DTR890831	IMD2 TE0804R
19Q3	DTR870011	3SK 184R TE0804F
19R2	DRZ832011	RK73H 2A 100ΩF TD0804N
19R3	DRZ832431	RK73H 2A 5.6KΩF TD0804N
19R4	DRZ832561	RK73H 2A 20KΩF TD0804N
19R5	DRZ832171	RK73H 2A 470ΩF TD0804N
19R6	DRZ832251	RK73H 2A 1.0KΩF TD0804N
19R7	DRZ832291	RK73H 2A 1.5KΩF TD0804N
19R8	DRZ832491	RK73H 2A 10KΩF TD0804N
19R9, 19R10	DRZ832251	RK73H 2A 1.0KΩF TD0804N
19R11, 19R12	DRZ832011	RK73H 2A 100ΩF TD0804N
19R13	DRZ832491	RK73H 2A 10KΩF TD0804N
19R14	DRZ832731	RK73H 2A 100KΩF TD0804N
19R15	DRZ832501	RK73H 2A 11KΩF TD0804N
19R16	DRZ832731	RK73H 2A 100KΩF TD0804N
19R17, 19R18	DRZ832971	RK73H 2A 1.0MΩF TD0804N

SS-7810

TV SYNC SEP 19

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
19R22	DRZ832561	RK73H 2A 20KΩF TD0804N
19R23	DRZ832121	RK73H 2A 300ΩF TD0804N
19R24	DRZ832251	RK73H 2A 1.0KΩF TD0804N
19R27	DRZ833011	RK73H 2A 47ΩF TD0804N

TLC CIRCUIT 20

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
20C1	DCC810511	C2012F 1H 103Z A TD84N
20C4	DCC810571	C2012F 1E 104Z A TD84N
20C5	DCC810511	C2012F 1H 103Z A TD84N
20C6	DCC810571	C2012F 1E 104Z A TD84N
20C7	DCE229201	SME-CE04W 1E 470M TC04R
20C8	DCF139011	MF-3 2A 103K TC04N
20C9	DCC810511	C2012F 1H 103Z A TD84N
20C16	DCC810511	C2012F 1H 103Z A TD84N
20C34	DCC810511	C2012F 1H 103Z A TD84N
20C36	DCC810511	C2012F 1H 103Z A TD84N
20C38	DCC810511	C2012F 1H 103Z A TD84N
20C39	DCC810511	C2012F 1H 103Z A TD84N
20C40	DCE229201	SME-CE04W 1E 470M TC04R
20C41	DCC810571	C2012F 1E 104Z A TD84N
20C42, 20C43	DCC810571	C2012F 1E 104Z A TD84N
20C50	DCC816561	C2012CH 1H 470J A TD84N
20C51	DCC816641	C2012CH 1H 221J A TD84N
20C53 to 20C55	DCC816601	C2012CH 1H 101J A TD84N
20C56	DCC816491	C2012CH 1H 100D A TD84N
20C58	DCC810841	C2012B 1H 102K A TD84N
20C59	DCC816601	C2012CH 1H 101J A TD84N
20D1	DDD810241	1SS 272 TE0804R
20D4	DDD830261	RD30M-T1B B
20FL1	DHF039021	DSS306-91FZ 103N 100 TE04N
20IC1	DIC470081	CD107BPF (NEC)
20IC2	DIC619101	OP AMP 4558F TE1208B
20IC3	DHF012991	EXO-3C 20.000MHZ
20JP2 to 20JP8	DRZ831501	MCR10 000E TD0804N
20JP100	DZB999011	JPW 01 TA21N
20Q1	DTR890821	IMT2 TE0804R
20Q2, 20Q3	DTR890841	IMX3 TE0804R
20Q4	DTR838661	2SC 2712LG TE85L
20R1	DRZ832541	RK73H 2A 16KΩF TD0804N
20R2	DRZ832621	RK73H 2A 36KΩF TD0804N
20R4	DRZ832571	RK73H 2A 22KΩF TD0804N
20R5	DRZ832461	RK73H 2A 7.5KΩF TD0804N
20R6	DRZ832251	RK73H 2A 1.0KΩF TD0804N
20R7	DRZ832011	RK73H 2A 100ΩF TD0804N
20R10 to 20R13	DRZ832461	RK73H 2A 7.5KΩF TD0804N
20R14, 20R15	DRZ832401	RK73H 2A 4.3KΩF TD0804N
20R16, 20R17	DRZ832491	RK73H 2A 10KΩF TD0804N
20R18	DRZ832321	RK73H 2A 2.0KΩF TD0804N

TLC CIRCUIT 20

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
20R19	DRZ832011	RK73H 2A 100ΩF TD0804N
20R20	DRZ832251	RK73H 2A 1.0KΩF TD0804N
20R21	DRZ831501	MCR10 000E TD0804N
20R30	DRZ832011	RK73H 2A 100ΩF TD0804N
20R33	DRZ832131	RK73H 2A 330ΩF TD0804N
20R37	DRZ832131	RK73H 2A 330ΩF TD0804N
20R41, 20R42	DRZ832011	RK73H 2A 100ΩF TD0804N
20R43 to 20R45	DRZ832011	RK73H 2A 100ΩF TD0804N
20R46	DRZ832321	RK73H 2A 2.0KΩF TD0804N
20R47	DRZ832011	RK73H 2A 100ΩF TD0804N
20R48, 29R49	DRZ832251	RK73H 2A 1.0KΩF TD0804N

A SAWTOOTH BUFF 21

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
21C2	DCC816541	C2012CH 1H 330J A TD84N
21C5	DCC816521	C2012CH 1H 220J A TD84N
21C6, 21C7	DCC810511	C2012F 1H 103Z A TD84N
21C10	DCC810511	C2012F 1H 103Z A TD84N
21C12	DCC810511	C2012F 1H 103Z A TD84N
21C14	DCC810511	C2012F 1H 103Z A TD84N
21C17	DCC810511	C2012F 1H 103Z A TD84N
21C18	DCC816601	C2012CH 1H 101J A TD84N
21C19	DCC810511	C2012F 1H 103Z A TD84N
21C21	DCC810841	C2012B 1H 102K A TD84N
21C22	DCC810511	C2012F 1H 103Z A TD84N
21C25	DCC816491	C2012CH 1H 100D A TD84N
21C26	DCC810571	C2012F 1E 104Z A TD84N
21C32	DCC810511	C2012F 1H 103Z A TD84N
21C33	DCE229201	SME-CE04W 1E 470M TC04R
21C100	DCE219051	SME-CE04W 1A 101M TC04R
21D1	DDD810261	HSM 88AS TL
21D2	DDD810241	1SS 272 TE0804R
21D3	DDD810261	HSM 88AS TL
21D4	DDD810521	1SS 307 TE0804L
21D5	DDD830231	RD20M-T1B B
21D6	DDD830161	RD10M-T1B B
21D7, 21D8	DDD830201	RD15M-T1B B
21D9	DDD830061	RD3.9M-T1B B
21D10	DDD810261	HSM 88AS TL
21D11	DDD810341	HSM 88WK TE0804L
21IC1	DIC499681	74HC14F TE1612B
21JP100 to 21JP102	DZB999011	JPW 01 TA21N
21Q1	DTR890861	IMZ1 TE0804R
21Q2	DTR890841	IMX3 TE0804R
21Q3, 21Q4	DTR830371	2SC 3735B34/B35-T1B
21Q5	DTR830081	2SC 2714 TE85L
21Q6	DTR860171	FC13 TE0804R
21Q7	DTR838661	2SC 2712LG TE85L
21Q8	DTR890861	IMZ1 TE0804R
21Q9, 21Q10	DTR838661	2SC 2712LG TE85L
21R1	DRZ832301	RK73H 2A 1.6KΩF TD0804N
21R2, 21R3	DRZ832251	RK73H 2A 1.0KΩF TD0804N
21R5	DRZ832251	RK73H 2A 1.0KΩF TD0804N
21R6	DRZ832151	RK73H 2A 390ΩF TD0804N
21R7, 21R8	DRZ832371	RK73H 2A 3.3KΩF TD0804N
21R9	DRZ832461	RK73H 2A 7.5KΩF TD0804N

SS-7810

A SAWTOOTH BUFF 21

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
21R10	DRZ832221	RK73H 2A 750ΩF TD0804N
21R11	DRZ832451	RK73H 2A 6.8KΩF TD0804N
21R12	DRZ832421	RK73H 2A 5.1KΩF TD0804N
21R13	DRZ832411	RK73H 2A 4.7KΩF TD0804N
21R14	DRZ832211	RK73H 2A 680ΩF TD0804N
21R15	DRZ832081	RK73H 2A 200ΩF TD0804N
21R16	DRZ832061	RK73H 2A 160ΩF TD0804N
21R17	DRZ832131	RK73H 2A 330ΩF TD0804N
21R18	DRZ833551	RK73H 2A 33ΩF TD0804N
21R19	DRZ832091	RK73H 2A 220ΩF TD0804N
21R20	DRZ833551	RK73H 2A 33ΩF TD0804N
21R21, 21R22	DRZ832551	RK73H 2A 18KΩF TD0804N
21R23	DRZ832591	RK73H 2A 27KΩF TD0804N
21R24	DRZ832011	RK73H 2A 100ΩF TD0804N
21R25	DRZ832471	RK73H 2A 8.2KΩF TD0804N
21R26	DRZ832491	RK73H 2A 10KΩF TD0804N
21R27	DRZ832491	RK73H 2A 10KΩF TD0804N
21R28	DRZ832251	RK73H 2A 1.0KΩF TD0804N
21R30	DRZ833061	RK73H 2A 75ΩF TD0804N
21R32	DRZ832361	RK73H 2A 3.0KΩF TD0804N
21R33	DRZ832341	RK73H 2A 2.4KΩF TD0804N
21R100	DRZ833511	RK73H 2A 22ΩF TD0804N

B SAWTOOTH BUFF 22

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
22C2	DCC816541	C2012CH 1H 330J A TD84N
22C5	DCC816521	C2012CH 1H 220J A TD84N
22C6, 22C7	DCC810511	C2012F 1H 103Z A TD84N
22C10	DCC810511	C2012F 1H 103Z A TD84N
22C12	DCC810511	C2012F 1H 103Z A TD84N
22C14	DCC810511	C2012F 1H 103Z A TD84N
22C17	DCC810511	C2012F 1H 103Z A TD84N
22C18	DCC816601	C2012CH 1H 101J A TD84N
22C19	DCC810511	C2012F 1H 103Z A TD84N
22C21	DCC810841	C2012B 1H 102K A TD84N
22C22	DCC810511	C2012F 1H 103Z A TD84N
22C25	DCC816491	C2012CH 1H 100D A TD84N
22C26	DCC810571	C2012F 1E 104Z A TD84N
22C32	DCC810511	C2012F 1H 103Z A TD84N
22C33	DCE229201	SME-CE04W 1E 470M TC04R
22D1	DDD810261	HSM 88AS TL
22D2	DDD810241	1SS 272 TE0804R
22D3	DDD810261	HSM 88AS TL
22D4	DDD810521	1SS 307 TE0804L
22D5	DDD830231	RD20M-T1B B
22D6	DDD830161	RD10M-T1B B
22D7, 22D8	DDD830201	RD15M-T1B B
22D9	DDD830061	RD3.9M-T1B B
22D10	DDD810261	HSM 88AS TL
22D11	DDD810341	HSM 88WK TE0804L
22Q1	DTR890861	IMZ1 TE0804R
22Q2	DTR890841	IMX3 TE0804R
22Q3, 22Q4	DTR830371	2SC 3735B34/B35-T1B
22Q5	DTR830081	2SC 2714 TE85L
22Q6	DTR860171	FC13 TE0804R
22Q7	DTR838661	2SC 2712LG TE85L
22Q8	DTR890861	IMZ1 TE0804R
22Q9, 22Q10	DTR838661	2SC 2712LG TE85L
22R1	DRZ832301	RK73H 2A 1.6KΩF TD0804N
22R2, 22R3	DRZ832251	RK73H 2A 1.0KΩF TD0804N
22R5	DRZ832251	RK73H 2A 1.0KΩF TD0804N
22R6	DRZ832151	RK73H 2A 390ΩF TD0804N
22R7, 22R8	DRZ832371	RK73H 2A 3.3KΩF TD0804N
22R9	DRZ832461	RK73H 2A 7.5KΩF TD0804N
22R10	DRZ832221	RK73H 2A 750ΩF TD0804N
22R11	DRZ832451	RK73H 2A 6.8KΩF TD0804N
22R12	DRZ832421	RK73H 2A 5.1KΩF TD0804N

B SAWTOOTH BUFF 22

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
22R10	DRZ832221	RK73H 2A 750ΩF TD0804N
22R11	DRZ832451	RK73H 2A 6.8KΩF TD0804N
22R12	DRZ832421	RK73H 2A 5.1KΩF TD0804N
22R13	DRZ832411	RK73H 2A 4.7KΩF TD0804N
22R14	DRZ832211	RK73H 2A 680ΩF TD0804N
22R15	DRZ832081	RK73H 2A 200ΩF TD0804N
22R16	DRZ832061	RK73H 2A 160ΩF TD0804N
22R17	DRZ832131	RK73H 2A 330ΩF TD0804N
22R18	DRZ833551	RK73H 2A 33ΩF TD0804N
22R19	DRZ832091	RK73H 2A 220ΩF TD0804N
22R20	DRZ833551	RK73H 2A 33ΩF TD0804N
22R21, 22R22	DRZ832551	RK73H 2A 18KΩF TD0804N
22R23	DRZ832591	RK73H 2A 27KΩF TD0804N
22R24	DRZ832011	RK73H 2A 100ΩF TD0804N
22R25	DRZ832471	RK73H 2A 8.2KΩF TD0804N
22R26, 22R27	DRZ832491	RK73H 2A 10KΩF TD0804N
22R28	DRZ832251	RK73H 2A 1.0KΩF TD0804N
22R32	DRZ832361	RK73H 2A 3.0KΩF TD0804N
22R33	DRZ832341	RK73H 2A 2.4KΩF TD0804N
22R100	DRZ833511	RK73H 2A 22ΩF TD0804N

A TIMING 23

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
23C1, 23C2	DCC810511	C2012F 1H 103Z A TD84N
23C3	DCE949081	SRA 50VB-1 TC04R
23C4	DCC810571	C2012F 1E 104Z A TD84N
23C5	DCC810511	C2012F 1H 103Z A TD84N
23C15	DCC816601	C2012CH 1H 101J A TD84N
23C17	DCC816601	C2012CH 1H 101J A TD84N
23C18	DCC810571	C2012F 1E 104Z A TD84N
23C20	DCE949081	SRA 50VB-1 TC04R
23C21	DCC810571	C2012F 1E 104Z A TD84N
23C23	DCC810571	C2012F 1E 104Z A TD84N
23C25, 23C26	DCC810841	C2012B 1H 102K A TD84N
23C28	DCC810571	C2012F 1E 104Z A TD84N
23C29 to 23C32	DCC816601	C2012CH 1H 101J A TD84N
23C100	DCF128401	MS18 1H 1004G
23C101	DCF125791	NQS6 1H 9901C
23C102	DCC816591	C2012CH 1H 820J A TD84N
23C103	DCC816451	C2012CH 1H 060D A TD84N
23C104	DCC816361	C2012CH 1H 010C A TD84N
23C105	DCF139011	MF-3 2A 103K TC04N
23C106	DCC810511	C2012F 1H 103Z A TD84N
23C107	DCC810571	C2012F 1E 104Z A TD84N
23C110	DCF139011	MF-3 2A 103K TC04N
23C111	DCC810571	C2012F 1E 104Z A TD84N
23D6	DDD810241	1SS 272 TE0804R
23D7	DDD830271	RD24M-T1B B3 TE0804L
23D8, 23D9	DDD830341	RD6.8M-T1B B2
23D10	DDD830161	RD10M-T1B B
23D11	DDD810241	1SS 272 TE0804R
23IC1	DIC619171	NJM 353M(TE3) TE1208L
23IC2	DIC619101	OP AMP 4558F TE1208B
23JP1	DRZ831501	MCR10 000E TD0804N
23Q1 to 23Q4	DTR838661	2SC 2712LG TE85L
23Q5	DTR818021	2SA 811A-T1B C17/C18
23Q6	DTR838661	2SC 2712LG TE85L
23Q7 to 23Q11	DTR818021	2SA 811A-T1B C17/C18
23Q13	DTR830081	2SC 2714 TE85L
23Q14	DTR830081	2SC 2714 TE85L
23Q15 to 23Q17	DTR890831	IMD2 TE0804R
23Q18, 23Q19	DTR890851	IMH1 TE0804N
23Q20	DTR890551	DTC114EK/RN1402 TE0804L
23R2	DRZ832491	RK73H 2A 10KΩF TD0804N
23R1	DRZ832651	RK73H 2A 47KΩF TD0804N

SS-7810

A TIMING 23

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
23R3	DRZ832541	RK73H 2A 16KΩF TD0804N
23R4	DRZ832521	RK73H 2A 13KΩF TD0804N
23R5	DRZ832261	RK73H 2A 1.1KΩF TD0804N
23R6	DRZ832391	RK73H 2A 3.9KΩF TD0804N
23R7	DRZ832591	RK73H 2A 27KΩF TD0804N
23R8	DRZ832631	RK73H 2A 39KΩF TD0804N
23R9 to 23Q11	DRZ832491	RK73H 2A 10KΩF TD0804N
23R12	DRE938641	CRB25CY 15KΩ T-29E TA21N
23R13	DRZ832661	RK73H 2A 51KΩF TD0804N
23R14	DRE938651	CRB25CY 30KΩ T-29E TA21N
23R15	DRZ832721	RK73H 2A 91KΩF TD0804N
23R16	DRE938661	CRB25CY 75KΩT-29E TA21N
23R17	DRZ832791	RK73H 2A 180KΩF TD0804N
23R18	DRZ832601	RK73H 2A 30KΩF TD0804N
23R19	DRZ832531	RK73H 2A 15KΩF TD0804N
23R20	DRZ832611	RK73H 2A 33KΩF TD0804N
23R21	DRZ832541	RK73H 2A 16KΩF TD0804N
23R22	DRZ832251	RK73H 2A 1.0KΩF TD0804N
23R23	DRZ832011	RK73H 2A 100ΩF TD0804N
23R24	DRZ832501	RK73H 2A 11KΩF TD0804N
23R25, 23R26	DRZ832171	RK73H 2A 470ΩF TD0804N
23R27	DRZ832731	RK73H 2A 100KΩF TD0804N
23R28 to 23R32	DRZ832591	RK73H 2A 27KΩF TD0804N
23R33 to 23R36	DRZ832491	RK73H 2A 10KΩF TD0804N
23R37	DRE997141	CRB20 2.2KΩDY T-29E TA21N
23R38	DRE997151	CRB20 22KΩDY T-29E TA21N
23R39	DRE997161	CRB20 220KΩDY T-29E TA21N
23R40	DRE948091	SN14K 2H 2.2MΩD TA21N
23R41	DRZ832751	RK73H 2A 120KΩF TD0804N

B TIMING 24

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
24C1	DCC810511	C2012F 1H 103Z A TD84N
24C4	DCC810571	C2012F 1E 104Z A TD84N
24C5	DCC810511	C2012F 1H 103Z A TD84N
24C15	DCC816601	C2012CH 1H 101J A TD84N
24C17	DCC816601	C2012CH 1H 101J A TD84N
24C18	DCC810571	C2012F 1E 104Z A TD84N
24C21	DCC810571	C2012F 1E 104Z A TD84N
24C23	DCC810571	C2012F 1E 104Z A TD84N
24C26	DCC810841	C2012B 1H 102K A TD84N
24C28	DCC810571	C2012F 1E 104Z A TD84N
24C29 to 24C32	DCC816601	C2012CH 1H 101J A TD84N
24C101	DCF125791	NQS6 1H 9901C
24C102	DCC816591	C2012CH 1H 820J A TD84N
24C103	DCC816491	C2012CH 1H 100D A TD84N
24C105	DCF139011	MF-3 2A 103K TC04N
24C106	DCC810511	C2012F 1H 103Z A TD84N
24C107	DCC810571	C2012F 1E 104Z A TD84N
24C110	DCF139011	MF-3 2A 103K TC04N
24C111	DCC810571	C2012F 1E 104Z A TD84N
24D6	DDD810241	1SS 272 TE0804R
24D7	DDD830271	RD24M-T1B B3 TE0804L
24D8	DDD830341	RD6.8M-T1B B2
24D9	DDD830341	RD6.8M-T1B B2
24D10	DDD830161	RD10M-T1B B
24D11	DDD810241	1SS 272 TE0804R
24IC1	DIC619171	NJM 353M(TE3) TE1208L
24IC2	DIC619101	OP AMP 4558F TE1208B
24JP100, 24JP101	DZB999011	JPW 01 TA21N
24Q1 to 24Q4	DTR838661	2SC 2712LG TE85L
24Q5	DTR818021	2SA 811A-T1B C17/C18
24Q6	DTR838661	2SC 2712LG TE85L
24Q7 to 24Q11	DTR818021	2SA 811A-T1B C17/C18
24Q14	DTR830081	2SC 2714 TE85L
24Q15 to 24Q17	DTR890831	IMD2 TE0804R
24Q18, 24Q19	DTR890851	IMH1 TE0804N
24Q20	DTR890551	DTC114EK/RN1402 TE0804L
24R1	DRZ832651	RK73H 2A 47KΩF TD0804N
24R3	DRZ832541	RK73H 2A 16KΩF TD0804N
24R4	DRZ832591	RK73H 2A 27KΩF TD0804N
24R5	DRZ832371	RK73H 2A 3.3KΩF TD0804N
24R6	DRZ832471	RK73H 2A 8.2KΩF TD0804N
24R7	DRZ832591	RK73H 2A 27KΩF TD0804N

SS-7810

B TIMING 24

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
24R8	DRZ832631	RK73H 2A 39KΩF TD0804N
24R9 to 24R11	DRZ832491	RK73H 2A 10KΩF TD0804N
24R12	DRE938641	CRB25CY 15KΩ T-29E TA21N
24R13	DRZ832661	RK73H 2A 51KΩF TD0804N
24R14	DRE938651	CRB25CY 30KΩ T-29E TA21N
24R15	DRZ832721	RK73H 2A 91KΩF TD0804N
24R16	DRE938661	CRB25CY 75KΩ T-29E TA21N
24R17	DRZ832791	RK73H 2A 180KΩF TD0804N
24R18	DRZ832601	RK73H 2A 30KΩF TD0804N
24R19	DRZ832531	RK73H 2A 15KΩF TD0804N
24R20	DRZ832611	RK73H 2A 33KΩF TD0804N
24R21	DRZ832541	RK73H 2A 16KΩF TD0804N
24R22	DRZ832251	RK73H 2A 1.0KΩF TD0804N
24R23	DRZ832011	RK73H 2A 100ΩF TD0804N
24R24	DRZ832501	RK73H 2A 11KΩF TD0804N
24R26	DRZ832171	RK73H 2A 470ΩF TD0804N
24R27	DRZ832731	RK73H 2A 100KΩF TD0804N
24R37	DRE997141	CRB20 2.2KΩDY T-29E TA21N
24R28 to 24R32	DRZ832591	RK73H 2A 27KΩF TD0804N
24R33 to 24R36	DRZ832491	RK73H 2A 10KΩF TD0804N
24R38	DRE997151	CRB20 22KΩDY T-29E TA21N
24R39	DRE997161	CRB20 220KΩDY T-29E TA21N
24R40	DRE948091	SN14K 2H 2.2MΩD TA21N
24R41	DRZ832751	RK73H 2A 120KΩF TD0804N

H & Z SW 25

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
25C1	DCC810511	C2012F 1H 103Z A TD84N
25C3	DCC816381	C2012CH 1H 020C A TD84N
25C4	DCC816381	C2012CH 1H 020C A TD84N
25C5A	DCC810511	C2012F 1H 103Z A TD84N
25C5B	DCE229221	SME-CE04W 1E 221M TC04R
25C6	DCC816601	C2012CH 1H 101J A TD84N
25C8	DCC816601	C2012CH 1H 101J A TD84N
25C10	DCC810511	C2012F 1H 103Z A TD84N
25C11	DCC816601	C2012CH 1H 101J A TD84N
25C12	DCC810571	C2012F 1E 104Z A TD84N
25C13	DCC810511	C2012F 1H 103Z A TD84N
25C17	DCC810511	C2012F 1H 103Z A TD84N
25C19A	DCC810571	C2012F 1E 104Z A TD84N
25C19B	DCE229221	SME-CE04W 1E 221M TC04R
25C23	DCC810511	C2012F 1H 103Z A TD84N
25C28, 25C29	DCC810571	C2012F 1E 104Z A TD84N
25C32	DCC810511	C2012F 1H 103Z A TD84N
25C35	DCC810511	C2012F 1H 103Z A TD84N
25C38, 25C39	DCC810511	C2012F 1H 103Z A TD84N
25C41	DCE219051	SME-CE04W 1A 101M TC04R
25C45	DCC810511	C2012F 1H 103Z A TD84N
25C46	DCC810571	C2012F 1E 104Z A TD84N
25C47	DCC816401	C2012CH 1H 030C A TD84N
25C100 to 25C103	DCC810511	C2012F 1H 103Z A TD84N
25C200	DCC810511	C2012F 1H 103Z A TD84N
25D1 to 3	DDD810141	MA 159-(TX) TE0804L
25D4	DDD810261	HSM 88AS TL
25D6	DDD830691	RD10M-T1B B2/B3 TE0804L
25D7 to 25D9	DDD810241	1SS 272 TE0804R
25D10, 25D11	DDD810341	HSM 88WK TE0804L
25IC1	DIC619101	OP AMP 4558F TE1208B
25IC2	DIC889171	TC 7W04F(TE12L) TE1208R
25IC3	DIC499361	74HC32F/AF TE1612B
25JP1, 25JP2	DRZ831501	MCR10 000E TD0804N
25JP4, 25JP5	DRZ831501	MCR10 000E TD0804N
25JP100 to 25JP102	DZB999011	JPW 01 TA21N
25Q1, 25Q2	DTR830371	2SC 3735B34/B35-T1B
25Q3	DTR890851	IMH1 TE0804N
25Q4	DTR810221	2SA 1462-T1B Y34
25Q5	DTR838661	2SC 2712LG TE85L
25Q6, 25Q7	DTR810041	2SA 1162Y TE85L
25Q8, 25Q9	DTR838661	2SC 2712LG TE85L

SS-7810

H & Z SW 25

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
25Q10	DTR890821	IMT2 TE0804R
25Q11	DTR890761	IMX5 TE0804R
25Q12	DTR810041	2SA 1162Y TE85L
25Q13	DTR838661	2SC 2712LG TE85L
25R1	DRZ832451	RK73H 2A 6.8KΩF TD0804N
25R2	DRZ832311	RK73H 2A 1.8KΩF TD0804N
25R3, 25R4	DRZ832341	RK73H 2A 2.4KΩF TD0804N
25R5	DRZ832321	RK73H 2A 2.0KΩF TD0804N
25R6A	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R6B	DRZ832191	RK73H 2A 560ΩF TD0804N
25R7	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R8A	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R8B	DRZ832191	RK73H 2A 560ΩF TD0804N
25R9	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R10	DRZ832241	RK73H 2A 910ΩF TD0804N
25R11A	DRZ832291	RK73H 2A 1.5KΩF TD0804N
25R11B	DRZ833081	RK73H 2A 91ΩF TD0804N
25R12	DRZ832241	RK73H 2A 910ΩF TD0804N
25R13	DRZ832181	RK73H 2A 510ΩF TD0804N
25R14	DRZ832311	RK73H 2A 1.8KΩF TD0804N
25R15	DRZ832311	RK73H 2A 1.8KΩF TD0804N
25R16, 25R17	DRZ832411	RK73H 2A 4.7KΩF TD0804N
25R18	DRZ832401	RK73H 2A 4.3KΩF TD0804N
25R19	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R20	DRE997201	CRB20 1.2KΩDY T-29E TA21N
25R21A	DRZ833071	RK73H 2A 82ΩF TD0804N
25R21B	DRZ833061	RK73H 2A 75ΩF TD0804N
25R22	DRZ832321	RK73H 2A 2.0KΩF TD0804N
25R23	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R24	DRE997191	CRB20 120ΩDY T-29E TA21N
25R25	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R26	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R27	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R28	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R29	DRZ832151	RK73H 2A 390ΩF TD0804N
25R30, 25R31	DRZ833011	RK73H 2A 47ΩF TD0804N
25R32, 25R33	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R36	DRZ832601	RK73H 2A 30KΩF TD0804N
25R37	DRZ832541	RK73H 2A 16KΩF TD0804N
25R38	DRZ832501	RK73H 2A 11KΩF TD0804N
25R39	DRZ832421	RK73H 2A 5.1KΩF TD0804N
25R40	DRZ832091	RK73H 2A 220ΩF TD0804N

H & Z SW 25

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
25R42	DRZ832241	RK73H 2A 910ΩF TD0804N
25R43	DRZ820161	RN73F 2A 120ΩD TD0804N
25R44	DRZ832011	RK73H 2A 100ΩF TD0804N
25R45	DRZ820431	RN73F 2A 1.6KΩD TD0804N
25R46	DRZ832351	RK73H 2A 2.7KΩF TD0804N
25R47	DRZ832581	RK73H 2A 24KΩF TD0804N
25R48	DRZ832351	RK73H 2A 2.7KΩF TD0804N
25R50, 25R51	DRZ832131	RK73H 2A 330ΩF TD0804N
25R52A, 25R52B	DRZ832091	RK73H 2A 220ΩF TD0804N
25R53, 25R54	DRZ833011	RK73H 2A 47ΩF TD0804N
25R100	DRZ831591	MCR10J 4R7E TD0804N
25R200	DRZ832101	RK73H 2A 240ΩF TD0804N
25R201	DRZ832171	RK73H 2A 470ΩF TD0804N

SS-7810

H MAIN AMP 26

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
26C1	DCC810511	C2012F 1H 103Z A TD84N
26C4	DCC810511	C2012F 1H 103Z A TD84N
26C6	DCC810511	C2012F 1H 103Z A TD84N
26C10	DCC816541	C2012CH 1H 330J A TD84N
26C15, 26C16	DCC810841	C2012B 1H 102K A TD84N
26C19	DCC810511	C2012F 1H 103Z A TD84N
26C23	DCC810511	C2012F 1H 103Z A TD84N
26C26	DCC810511	C2012F 1H 103Z A TD84N
26C27	DCE219051	SME-CE04W 1A 101M TC04R
26C33	DCC816421	C2012CH 1H 040C A TD84N
26C34	DCC816361	C2012CH 1H 010C A TD84N
26C37, 26C38	DCC810511	C2012F 1H 103Z A TD84N
26C41	DCC810511	C2012F 1H 103Z A TD84N
26C44	DCC810511	C2012F 1H 103Z A TD84N
26C56	DCC810511	C2012F 1H 103Z A TD84N
26C60	DCC810511	C2012F 1H 103Z A TD84N
26C63	DCE929841	SME 16VB-10(M)BP TC04N
26C100	DCC810511	C2012F 1H 103Z A TD84N
26C103	DCE249481	SME-CE04W 1J 220M TC04R
26C104	DCE229201	SME-CE04W 1E 470M TC04R
26C105 to 26C107	DCE229221	SME-CE04W 1E 221M TC04R
26D1	DDD810241	1SS 272 TE0804R
26D2	DDD810241	1SS 272 TE0804R
26D3	DDD830151	RD9.1M-T1B B
26FL1 to 26FL5	DCL119361	BL02RN2-R62 TD04N
26IC1	DIC889171	TC 7W04F(TE12L) TE1208R
26JP1, 26JP2	DRZ831501	MCR10 000E TD0804N
26JP100, 26JP101	DZB999011	JPW 01 TA21N
26JP103	DZB999011	JPW 01 TA21N
26L2 to 26L4	DCL113701	Choke Coil AN FS-44263-11
26P1	KHB176911	SS-78XX Analog Power Cable
26Q1	DTR890861	IMZ1 TE0804R
26Q2	DTR890761	IMX5 TE0804R
26Q3	DTR890821	IMT2 TE0804R
26Q4	DTR890861	IMZ1 TE0804R
26Q5	DTR890761	IMX5 TE0804R
26Q6	DTR890861	IMZ1 TE0804R
26Q7	DTR890841	IMX3 TE0804R
26Q8	DTR890821	IMT2 TE0804R
26Q9	DTR890431	DTA114EK/RN2402 TE0804L
26R1	DRZ832471	RK73H 2A 8.2KΩF TD0804N
26R2	DRZ832211	RK73H 2A 680ΩF TD0804N

H MAIN AMP 26

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
26R3	DRZ832321	RK73H 2A 2.0KΩF TD0804N
26R4	DRZ832571	RK73H 2A 22KΩF TD0804N
26R5	DRZ832371	RK73H 2A 3.3KΩF TD0804N
26R6	DRZ832231	RK73H 2A 820ΩF TD0804N
26R7	DRZ833011	RK73H 2A 47ΩF TD0804N
26R8, 26R9	DRZ832041	RK73H 2A 130ΩF TD0804N
26R10	DRZ832131	RK73H 2A 330ΩF TD0804N
26R11	DRV810241	G4AT/ST-4TA 2KΩ TE1208L
26R12	DRZ832171	RK73H 2A 470ΩF TD0804N
26R15, 26R16	DRZ832241	RK73H 2A 910ΩF TD0804N
26R17	DRZ833061	RK73H 2A 75ΩF TD0804N
26R18	DRZ832251	RK73H 2A 1.0KΩF TD0804N
26R19, 26R20	DRZ832131	RK73H 2A 330ΩF TD0804N
26R21	DRZ832251	RK73H 2A 1.0KΩF TD0804N
26R22	DRZ832491	RK73H 2A 10KΩF TD0804N
26R23	DRZ832321	RK73H 2A 2.0KΩF TD0804N
26R24, 26R25	DRZ833011	RK73H 2A 47ΩF TD0804N
26R26, 26R27	DRZ832131	RK73H 2A 330ΩF TD0804N
26R28	DRZ832011	RK73H 2A 100ΩF TD0804N
26R29	DRZ832201	RK73H 2A 620ΩF TD0804N
26R30	DRZ832371	RK73H 2A 3.3KΩF TD0804N
26R31, 26R32	DRZ833011	RK73H 2A 47ΩF TD0804N
26R33	DRZ832031	RK73H 2A 120ΩF TD0804N
26R34	DRZ832971	RK73H 2A 1.0MΩF TD0804N
26R35, 26R36	DRZ832201	RK73H 2A 620ΩF TD0804N
26R37	DRZ832421	RK73H 2A 5.1KΩF TD0804N
26R38	DRZ832381	RK73H 2A 3.6KΩF TD0804N
26R39	DRZ832101	RK73H 2A 240ΩF TD0804N
26R40	DRZ832011	RK73H 2A 100ΩF TD0804N
26R41	DRZ832441	RK73H 2A 6.2KΩF TD0804N
26R42	DRZ832401	RK73H 2A 4.3KΩ TD0804N
26R43	DRZ832371	RK73H 2A 3.3KΩF TD0804N
26R44	DRZ832231	RK73H 2A 820ΩF TD0804N
26R45	DRZ832011	RK73H 2A 100ΩF TD0804N
26R46, 26R47	DRZ832111	RK73H 2A 270ΩF TD0804N
26R49	DRV810241	G4AT/ST-4TA 2KΩ TE1208L
26R50	DRZ832231	RK73H 2A 820ΩF TD0804N
26R51	DRZ833061	RK73H 2A 75ΩF TD0804N
26R52, 26R53	DRZ832111	RK73H 2A 270ΩF TD0804N
26R54	DRZ833061	RK73H 2A 75ΩF TD0804N
26R55	DRZ832251	RK73H 2A 1.0KΩF TD0804N
26R56, 26R57	DRZ832131	RK73H 2A 330ΩF TD0804N

SS-7810

H MAIN AMP 26

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
26R58	DRZ832251	RK73H 2A 1.0KΩF TD0804N
26R59	DRZ832491	RK73H 2A 10KΩF TD0804N
26R60	DRZ832321	RK73H 2A 2.0KΩF TD0804N
26R61, 26R62	DRZ833011	RK73H 2A 47ΩF TD0804N
26R63	DRZ832571	RK73H 2A 22KΩF TD0804N

H OUTPUT AMP 27

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
27C2A	DCC810511	C2012F 1H 103Z A TD84N
27C2B	DCE229201	SME-CE04W 1E 470M TC04R
27C3	DCC810841	C2012B 1H 102K A TD84N
27C4	DCC810511	C2012F 1H 103Z A TD84N
27C5	DCE229201	SME-CE04W 1E 470M TC04R
27C6A	DCF139011	MF-3 2A 103K TC04N
27C8	DCF139011	MF-3 2A 103K TC04N
27C9	DCF121971	MF-3 2A 104K TC04N
27C13	DCV819061	TZBX4 Z060BA110 TE1208R
27C14	DCC816381	C2012CH 1H 020C A TD84N
27C15	DCV819062	TZBX4 Z060BA110 TE1209R
27C22	DCC810511	C2012F 1H 103Z A TD84N
27C24	DCC810511	C2012F 1H 103Z A TD84N
27C26A	DCF139011	MF-3 2A 103K TC04N
27C29	DCF121971	MF-3 2A 104K TC04N
27C33	DCV819061	TZBX4 Z060BA110 TE1208R
27C34	DCC816381	C2012CH 1H 020C A TD84N
27C43	DCC816491	C2012CH 1H 100D A TD84N
27C45	DCC816491	C2012CH 1H 100D A TD84N
27C48	DCC816601	C2012CH 1H 101J A TD84N
27C54, 27C55	DCC810511	C2012F 1H 103Z A TD84N
27C100	DCC810511	C2012F 1H 103Z A TD84N
27C101	DCC816491	C2012CH 1H 100D A TD84N
27C102	DCC810511	C2012F 1H 103Z A TD84N
27C103	DCE219051	SME-CE04W 1A 101M TC04R
27C106	DCC810571	C2012F 1E 104Z A TD84N
27D1	DDD810241	1SS 272 TE0804R
27IC1	DIC619101	OP AMP 4558F TE1208B
27IC2	DIC639041	μPC 311G2-E1 TE1208F
27IC3	DIC499371	74HC74F/AF TE1612B
27P1	DCN990871	Connector 5267-02A
27P2	KHB178011	SS-78XX ANALOG INNER CABLE
27Q1	DTR830371	2SC 3735B34/B35-T1B
27Q2	DTR139011	2SC 1815GR TPER1
27Q3	DTR119011	2SA 1015Y TPER1
27Q4	DTR830371	2SC 3735B34/B35-T1B
27Q5	DTR139011	2SC 1815GR TPER1
27Q6	DTR119011	2SA 1015Y TPER1
27Q7	DTR838661	2SC 2712LG TE85L
27Q8	DTR890431	DTA114EK/RN2402 TE0804L
27R1	DRZ832031	RK73H 2A 120ΩF TD0804N
27R2A	DRZ832431	RK73H 2A 5.6KΩF TD0804N

SS-7810

H OUTPUT AMP 27

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
27R3	DRZ832011	RK73H 2A 100ΩF TD0804N
27R4	DRZ832381	RK73H 2A 3.6KΩF TD0804N
27R5	DRZ832381	RK73H 2A 3.6KΩF TD0804N
27R6	DRZ832611	RK73H 2A 33KΩF TD0804N
27R7	DRZ832431	RK73H 2A 5.6KΩF TD0804N
27R8	DRZ832231	RK73H 2A 820ΩF TD0804N
27R11, 27R12	DRE138061	EF1/4S 5.6KΩF TA21N
27R13	DRZ833511	RK73H 2A 22ΩF TD0804N
27R16, 27R17	DRE138061	EF1/4S 5.6KΩF TA21N
27R21	DRZ832031	RK73H 2A 120ΩF TD0804N
27R22A	DRZ832431	RK73H 2A 5.6KΩF TD0804N
27R23	DRZ832011	RK73H 2A 100ΩF TD0804N
27R24	DRZ832381	RK73H 2A 3.6KΩF TD0804N
27R25	DRZ832381	RK73H 2A 3.6KΩF TD0804N
27R26	DRZ832611	RK73H 2A 33KΩF TD0804N
27R27	DRZ832431	RK73H 2A 5.6KΩF TD0804N
27R28	DRZ832231	RK73H 2A 820ΩF TD0804N
27R31, 27R32	DRE138061	EF1/4S 5.6KΩF TA21N
27R33	DRZ833511	RK73H 2A 22ΩF TD0804N
27R36, 27R37	DRE138061	EF1/4S 5.6KΩF TA21N
27R41	DRE138361	EF1/4S 100KΩF TA21N
27R42	DRZ832541	RK73H 2A 16KΩF TD0804N
27R43, 27R44	DRZ832561	RK73H 2A 20KΩF TD0804N
27R45	DRZ832571	RK73H 2A 22KΩF TD0804N
27R46	DRE138361	EF1/4S 100KΩF TA21N
27R47	DRZ832491	RK73H 2A 10KΩF TD0804N
27R48	DRZ832011	RK73H 2A 100ΩF TD0804N
27R51	DRZ832011	RK73H 2A 100ΩF TD0804N
27R52	DRZ832731	RK73H 2A 100KΩF TD0804N
27R53	DRZ832551	RK73H 2A 18KΩF TD0804N
27R54	DRZ832391	RK73H 2A 3.9KΩF TD0804N
27R55	DRZ832491	RK73H 2A 10KΩF TD0804N
27R56, 27R57	DRZ832251	RK73H 2A 1.0KΩF TD0804N
27R58	DRZ832491	RK73H 2A 10KΩF TD0804N
27R59	DRZ832251	RK73H 2A 1.0KΩF TD0804N
27R60	DRZ832011	RK73H 2A 100ΩF TD0804N

Z AMP 28

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
28C1	DCC810511	C2012F 1H 103Z A TD84N
28C6	DCC810511	C2012F 1H 103Z A TD84N
28C8	DCC810511	C2012F 1H 103Z A TD84N
28C11	DCC810511	C2012F 1H 103Z A TD84N
28C12	DCC810511	C2012F 1H 103Z A TD84N
28C14	DCC810511	C2012F 1H 103Z A TD84N
28C16	DCC810571	C2012F 1E 104Z A TD84N
28C19	DCC816491	C2012CH 1H 100D A TD84N
28C23	DCC816491	C2012CH 1H 100D A TD84N
28C33	DCC810511	C2012F 1H 103Z A TD84N
28C35	DCC810511	C2012F 1H 103Z A TD84N
28C38	DCC810571	C2012F 1E 104Z A TD84N
28C43	DCC810511	C2012F 1H 103Z A TD84N
28C45 to 28C47	DCC810511	C2012F 1H 103Z A TD84N
28C48	DCF121981	MF-3 2A 473K TC04N
28C49, 28C50	DCF121971	MF-3 2A 104K TC04N
28C57, 28C58	DCC816401	C2012CH 1H 030C A TD84N
28C100, 28C101	DCC810511	C2012F 1H 103Z A TD84N
28C102, 28C103	DCE229201	SME-CE04W 1E 470M TC04R
28C106	DCC816601	C2012CH 1H 101J A TD84N
28C107	DCC810511	C2012F 1H 103Z A TD84N
28D1	DDD810141	MA 159-(TX) TE0804L
28D2, 28D3	DDD810241	1SS 272 TE0804R
28D5	DDD830361	RD5.1M-T1B B2 TE0804L
28D6	DDD019291	1SS 83 TA21R
28D7, 28D8	DDD810241	1SS 272 TE0804R
28D9	DDD830381	RD15M-T1B B2 TE0804L
28IC1	DIC619101	OP AMP 4558F TE1208B
28P1	DCN990881	Connector 5267-03A
28Q1	DTR890831	IMD2 TE0804R
28Q2, 28Q3	DTR838661	2SC 2712LG TE85L
28Q4, 28Q5	DTR838661	2SC 2712LG TE85L
28Q6, 28Q7	DTR810041	2SA 1162Y TE85L
28Q8	DTR838661	2SC 2712LG TE85L
28Q9	DTR119011	2SA 1015Y TPER1
28Q10	DTR139011	2SC 1815GR TPER1
28R1	DRE138241	EF1/4S 33KΩF TA21N
28R3	DRD137741	PSS1/4S 2.7KΩJ TA21N
28R4	DRD137731	PSS1/4S 2.4KΩJ TA21N
28R5	DRE137401	EF1/4S 10ΩF TA21N
28R6	DRE138011	EF1/4S 3.6KΩF TA21N
28R7	DRE138001	EF1/4S 3.3KΩF TA21N

SS-7810

Z AMP 28

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
28R9	DRE138001	EF1/4S 3.3KΩF TA21N
28R10	DRZ832591	RK73H 2A 27KΩF TD0804N
28R11	DRE138121	EF1/4S 10KΩF TA21N
28R12	DRZ832491	RK73H 2A 10KΩF TD0804N
28R13	DRZ832401	RK73H 2A 4.3KΩF TD0804N
28R14	DRZ832371	RK73H 2A 3.3KΩF TD0804N
28R15	DRZ832381	RK73H 2A 3.6KΩF TD0804N
28R16	DRZ832291	RK73H 2A 1.5KΩF TD0804N
28R17	DRZ832281	RK73H 2A 1.3KΩF TD0804N
28R18	DRZ832371	RK73H 2A 3.3KΩF TD0804N
28R19	DRZ832321	RK73H 2A 2.0KΩF TD0804N
28R20	DRZ832411	RK73H 2A 4.7KΩF TD0804N
28R21	DRZ832461	RK73H 2A 7.5KΩF TD0804N
28R22	DRZ832371	RK73H 2A 3.3KΩF TD0804N
28R23	DRZ832321	RK73H 2A 2.0KΩF TD0804N
28R24	DRZ832411	RK73H 2A 4.7KΩF TD0804N
28R25	DRZ832461	RK73H 2A 7.5KΩF TD0804N
28R26	DRZ832281	RK73H 2A 1.3KΩF TD0804N
28R27	DRZ832611	RK73H 2A 33KΩF TD0804N
28R28	DRZ832381	RK73H 2A 3.6KΩF TD0804N
28R31	DRE138011	EF1/4S 3.6KΩF TA21N
28R33	DRZ832391	RK73H 2A 3.9KΩF TD0804N
28R34	DRZ832471	RK73H 2A 8.2KΩF TD0804N
28R35	DRZ832321	RK73H 2A 2.0KΩF TD0804N
28R36	DRZ832491	RK73H 2A 10KΩF TD0804N
28R37	DRZ832371	RK73H 2A 3.3KΩF TD0804N
28R38 to 28C41	DRZ832501	RK73H 2A 11KΩF TD0804N
28R42	DRZ832691	RK73H 2A 68KΩF TD0804N
28R43	DRZ832251	RK73H 2A 1.0KΩF TD0804N
28R44	DRZ832251	RK73H 2A 1.0KΩF TD0804N
28R45	DRZ832011	RK73H 2A 100ΩF TD0804N
28R46	DRZ832231	RK73H 2A 820ΩF TD0804N
28R47	DRZ832611	RK73H 2A 33KΩF TD0804N
28R48	DRZ832421	RK73H 2A 5.1KΩF TD0804N
28R49	DRZ832161	RK73H 2A 430ΩF TD0804N
28R51 to 28R53	DRE137971	EF1/4S 2.4KΩF TA21N
28R54	DRZ833011	RK73H 2A 47ΩF TD0804N
28R56	DRE138051	EF1/4S 5.1KΩF TA21N
28R57, 28R58	DRE138031	EF1/4S 4.3KΩF TA21N
28R61	DRE137721	EF1/4S 220ΩF TA21N
28R62	DRZ832091	RK73H 2A 220ΩF TD0804N

PROBE SENCE 29

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
29C7 to 29C9	DCC810571	C2012F 1E 104Z A TD84N
29C100	DCC810571	C2012F 1E 104Z A TD84N
29C101 to 29C103	DCC816601	C2012CH 1H 101J A TD84N
29C104	DCC810571	C2012F 1E 104Z A TD84N
29D1, 29D2	DDD830061	RD3.9M-T1B B
29D3, 29D4	DDD810241	1SS 272 TE0804R
29D7	DDD830341	RD6.8M-T1B B2
29IC1	DIC483021	TC 4051BF (EL) TE1612B
29IC2	DIC619101	OP AMP 4558F TE1208B
29JP3	DRZ831501	MCR10 000E TD0804N
29JP100	DZB999011	JPW 01 TA21N
29R1	DRZ832581	RK73H 2A 24KΩF TD0804N
29R2	DRZ832511	RK73H 2A 12KΩF TD0804N
29R3	DRZ832581	RK73H 2A 24KΩF TD0804N
29R4	DRZ832511	RK73H 2A 12KΩF TD0804N
29R5	DRZ832581	RK73H 2A 24KΩF TD0804N
29R6	DRZ832511	RK73H 2A 12KΩF TD0804N
29R7, 29R8	DRZ832371	RK73H 2A 3.3KΩF TD0804N
29R9	DRZ832491	RK73H 2A 10KΩF TD0804N
29R10	DRZ832131	RK73H 2A 330ΩF TD0804N
29R17	DRZ832011	RK73H 2A 100ΩF TD0804N

SS-7810

ANA BOARD CONTROL 30

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
30C101	DCC810571	C2012F 1E 104Z A TD84N
30C102A	DCC810571	C2012F 1E 104Z A TD84N
30C102B	DCE219051	SME-CE04W 1A 101M TC04R
30C103A	DCC810571	C2012F 1E 104Z A TD84N
30C103B	DCE219051	SME-CE04W 1A 101M TC04R
30C105	DCC810571	C2012F 1E 104Z A TD84N
30C106	DCC810571	C2012F 1E 104Z A TD84N
30IC1	DIC499381	74HC138F/AF TE1612B
30IC2, 30IC3	DIC483321	74HC595F/AF TE1612B
30IC4, 30IC5	DIC483321	74HC595F/AF TE1612B
30IC6	DIC889131	TC 7W32F(TE12L) TE1208R
30IC7	DIC889171	TC 7W04F(TE12L) TE1208R
30J1, 30J2	DCN124501	FF3-22-S55
30JP100	DZB999011	JPW 01 TA21N
30JP2	DRZ831501	MCR10 000E TD0804N
30JP5	DRZ831501	MCR10 000E TD0804N
30JP3, 30JP4	DRZ831501	MCR10 000E TD0804N
30R1 to 30R7	DRZ832131	RK73H 2A 330Ω F TD0804N
30R8, 30R9	DRZ832131	RK73H 2A 330Ω F TD0804N

ANA BOARD 8 BIT D/A 31

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
31C2	DCC810571	C2012F 1E 104Z A TD84N
31C3	DCE229241	SME-CE04W 1C 100M TC04R
31C5	DCC810511	C2012F 1H 103Z A TD84N
31C20	DCC810571	C2012F 1E 104Z A TD84N
31C31, 31C32	DCC816521	C2012CH 1H 220J A TD84N
31C40	DCC810571	C2012F 1E 104Z A TD84N
31C60	DCC810571	C2012F 1E 104Z A TD84N
31C114	DCC810511	C2012F 1H 103Z A TD84N
31IC1 to 31IC3	DIC642201	MB88346BPF-G-BND-ER TE2412B
31IC4	DIC619101	OP AMP 4558F TE1208B
31J1	DCN124501	FF3-22-S55
31JP100 to 31JP103	DZB999011	JPW 01 TA21N
31R1	DRZ832531	RK73H 2A 15KΩ F TD0804N
31R2, 31R3	DRZ832551	RK73H 2A 18KΩ F TD0804N
31R4	DRZ832431	RK73H 2A 5.6KΩ F TD0804N

SS-7810

CRT CONT BOARD 32

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
32C1 to 32C3	DCC810511	C2012F 1H 103Z A TD84N
32C10, 32C11	DCC810511	C2012F 1H 103Z A TD84N
32C14	DCC810511	C2012F 1H 103Z A TD84N
32C17	DCC810511	C2012F 1H 103Z A TD84N
32C18	DCC810511	C2012F 1H 103Z A TD84N
32C20	DCC810511	C2012F 1H 103Z A TD84N
32C21	DCE229221	SME-CE04W 1E 221M TC04R
32C22	DCC816601	C2012CH 1H 101J A TD84N
32C23, 32C24	DCC810511	C2012F 1H 103Z A TD84N
32C103	DCE229201	SME-CE04W 1E 470M TC04R
32C104	DCE229221	SME-CE04W 1E 221M TC04R
32C105	DCE229201	SME-CE04W 1E 470M TC04R
32C106, 32C107	DCC810511	C2012F 1H 103Z A TD84N
32D1	DDD810241	1SS 272 TE0804R
32D2	DDD830141	RD8.2M-T1B B
32IC1	DIC619101	OP AMP 4558F TE1208B
32J1	DCN124711	FF3-22-R15
32J4	DCN033821	Wire Post WP22-1B UL-I
32P2, 32C3	DCN034901	Connector M36-02-30-134P
32Q1, 32C2	DTR890431	DTA114EK/RN2402 TE0804L
32Q10A, 32Q10B	DTR139011	2SC 1815GR TPER1
32Q10C	DTR139011	2SC 1815GR TPER1
32Q3	DTR838661	2SC 2712LG TE85L
32Q4	DTR890431	DTA114EK/RN2402 TE0804L
32Q5	DTR890551	DTC114EK/RN1402 TE0804L
32Q6	DTR139011	2SC 1815GR TPER1
32Q7	DTR119011	2SA 1015Y TPER1
32Q8	DTR890861	IMZ1 TE0804R
32Q9	DTR838661	2SC 2712LG TE85L
32R1, 32R2	DRV120731	RK0971114 (S10KB+PS) DCUT
32R3 to 32R5	DRV120612	RK0971110 20KB DCUT
32R6	DRZ832541	RK73H 2A 16KΩF TD0804N
32R7A, 32R7B	DRE137541	EF1/4S 39ΩF TA21N
32R7C	DRE137541	EF1/4S 39ΩF TA21N
32R8	DRZ833441	RK73H 2A 10ΩF TD0804N
32R9	DRE137541	EF1/4S 39ΩF TA21N
32R10	DRZ832551	RK73H 2A 18KΩF TD0804N
32R11	DRZ832521	RK73H 2A 13KΩF TD0804N
32R12	DRZ832691	RK73H 2A 68KΩF TD0804N
32R13	DRZ832491	RK73H 2A 10KΩF TD0804N
32R14	DRZ832671	RK73H 2A 56KΩF TD0804N
32R15	DRZ833441	RK73H 2A 10ΩF TD0804N

CRT CONT BOARD 32

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
32R13	DRZ832491	RK73H 2A 10KΩF TD0804N
32R14	DRZ832671	RK73H 2A 56KΩF TD0804N
32R15	DRZ833441	RK73H 2A 10ΩF TD0804N
32R16	DRZ832331	RK73H 2A 2.2KΩF TD0804N
32R17	DRZ832491	RK73H 2A 10KΩF TD0804N
32R18	DRZ832421	RK73H 2A 5.1KΩF TD0804N
32R19	DRZ832441	RK73H 2A 6.2KΩF TD0804N
32R20	DRZ832331	RK73H 2A 2.2KΩF TD0804N
32R21	DRZ832251	RK73H 2A 1.0KΩF TD0804N
32R22	DRZ832031	RK73H 2A 120ΩF TD0804N
32R23, 32R24	DRZ832011	RK73H 2A 100ΩF TD0804N
32S1	DSW017001	SPUP19

H. V. CIRCUIT 33

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
33C1	DCE259111	SME-CE04W 2A 470M TC04R
33C5	DCF121721	MF-3S 1H 103J TC04N
33C6	DCF121841	MF-3S 1H 104J TC04N
33C13	DCF121841	MF-3S 1H 104J TC04N
33C16 to 33C18	DCC171931	DE1710F 103Z 3K
33C19	DCC171911	DE1010B 102K 3K
33C20	DCC171931	DE1710F 103Z 3K
33C22	DCF179061	MMH 2J 473K
33C23	DCF179041	MMH 2J 103K
33C28	DCF179061	MMH 2J 473K
33C29	DCC163141	DE1510E 103Z 1K
33C30	DCC929031	EP050Y 103N-B TA21N
33C32	DCC171951	DE0507B 221K 3K
33C33	DCC171941	DE0707B 471K 3K
33C34	DCC171951	DE0507B 221K 3K
33C38	DCF179061	MMH 2J 473K
33C39	DCE285031	CE USM 2G 3R3
33C43	DCC171931	DE1710F 103Z 3K
33C44	DCC171911	DE1010B 102K 3K
33C45	DCE259101	SME-CE04W 2A 4R7M TC04R
33C49	DCC171941	DE0707B 471K 3K
33C50	DCC171931	DE1710F 103Z 3K
33C51	DCC171911	DE1010B 102K 3K
33C54	DCF169011	MM-3D 2E 103K TC04N
33C56	DCF169011	MM-3D 2E 103K TC04N
33C100	DCC929031	EP050Y 103N-B TA21N
33C101	DCE229201	SME-CE04W 1E 470M TC04R
33C102	DCC929031	EP050Y 103N-B TA21N
33C103	DCE229201	SME-CE04W 1E 470M TC04R
33D1	DDD019071	1SS 120 TA21R
33D2	DDD021451	SHV-06
33D3, 33D4	DDD021541	SHV-02
33D5 to 33D12	DDD019291	1SS 83 TA21R
33D13 to 33D15	DDD019071	1SS 120 TA21R
33D16 to 33D18	DDD019291	1SS 83 TA21R
33D19 to 33D21	DDD019291	1SS 83 TA21R
33FL1, 33FL2	DCL119361	BL02RN2-R62 TD04N
33IC1	DIC613771	4558
33L1	DCL113701	Choke Coil AN FS-44263-11
33NE1	DLP025171	Neonlamp NL-235D
33P1	KHB177111	SS-78XX Z SIG CABLE
33P2	KHB177211	SS-78XX HV POWER CABLE
33P3	DCN990901	Connector 5267-06A
33P4	DCN990911	Connector 5267-07A
33PB8	KPN363051	HV BOARD UL-M

H. V. CIRCUIT 33

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
33Q1	DTR136301	2SC 3570L
33Q2, 33Q3	DTR139011	2SC 1815GR TPER1
33Q4, 33Q5	DTR135231	2SC 2752
33Q6	DTR136181	2SC 2551
33R1	DRE137801	EF1/4S 470ΩF TA21N
33R2	DRE138321	EF1/4S 68KΩF TA21N
33R3	DRE138121	EF1/4S 10KΩF TA21N
33R4	DRE138201	EF1/4S 22KΩF TA21N
33R5	DRE137591	EF1/4S 62ΩF TA21N
33R6	DRE137961	EF1/4S 2.2KΩF TA21N
33R7	DRE138121	EF1/4S 10KΩF TA21N
33R8	DRE138201	EF1/4S 22KΩF TA21N
33R9	DRE997011	CRB20 220KΩFY T-29E TA21N
33R10	DRE138351	EF1/4S 91KΩF TA21N
33R11	DRE998621	CRB20 1.3KΩFY T-29E TA21N
33R12	DRE137881	EF1/4S 1.0KΩF TA21N
33R13	DRE138041	EF1/4S 4.7KΩF TA21N
33R14	DRE998611	CRB20 82KΩFY T-29E TA21N
33R15	DRV419371	GF06VT2/CT-6TH00 10KΩ (T)
33R16 to 33R18	DRE138001	EF1/4S 3.3KΩF TA21N
33R19	DRG152001	RH1HVD 15MΩF
33R20	DRE138361	EF1/4S 100KΩF TA21N
33R21	DRV419451	GF06VT2/CT-6TH00 10ΩTE04B
33R22	DRE138381	EF1/4S 120KΩF TA21N
33R23	DRV419411	GF06VT2/CT-6TH00 200KΩ (T)
33R24, 33R25	DRE138451	EF1/4S 240KΩF TA21N
33R26, 33R27	DRS320661	RSS1 56KΩJ TA21N
33R28A, 33R28B	DRE138351	EF1/4S 91KΩF TA21N
33R28C	DRE138351	EF1/4S 91KΩF TA21N
33R29	DRE138391	EF1/4S 130KΩF TA21N
33R30	DRE138211	EF1/4S 24KΩF TA21N
33R31	DRE138261	EF1/4S 39KΩF TA21N
33R32 to 33R35	DRE138481	EF1/4S 330KΩF TA21N
33R36, 33R37	DRE137961	EF1/4S 2.2KΩF TA21N
33R38, 33RR39	DRE136321	AF1/4S 330KΩF T2 TA21N
33R40	DRE136311	AF1/4S 24KΩF T2 TA21N
33R41	DRV419361	GF06VT2/CT-6TH00 5KΩTE04B
33R42	DRE138201	EF1/4S 22KΩF TA21N
33R43	DRG940651	VR37 18MΩF
33R44	DRD147481	PSS1/2S 220ΩJ TA21N
33R45	DRE138291	EF1/4S 51KΩF TA21N
33R46	DRV419391	GF06VT2/CT-6TH00 50KΩ (T)
33R47	DRE138241	EF1/4S 33KΩF TA21N
33R48	DRE138381	EF1/4S 120KΩF TA21N
33R49	DRG940631	VR37 5.1MΩF

H. V. CIRCUIT 33

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
33R50	DRG940671	VR37 6.8MΩF
33R51	DRV419431	GF06VT2/CT-6TH00 1MΩTE04B
33R52	DRG940621	VR37 2.2MΩF
33R53	DRE138321	EF1/4S 68KΩF TA21N
33R54	DRV419391	GF06VT2/CT-6TH00 50KΩ (T)
33R55	DRE137801	EF1/4S 470ΩF TA21N
33R61	DRE138421	EF1/4S 180KΩF TA21N
33T1	DCL220431	High Voltage Trans. CP3003 UL-I
33U1	DES050762	MSL3587Q

SS-7810

CPU BOARD 35

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
35BT1	DES011881	CR2450-H03
35C1 to 35C4	DCE229201	SME-CE04W 1E 470M TC04R
35C5 to 35C13	DCC810571	C2012F 1E 104Z A TD84N
35C14	DCC810571	C2012F 1E 104Z A TD84N
35C15	DCC810571	C2012F 1E 104Z A TD84N
35C17	DCE229201	SME-CE04W 1E 470M TC04R
35C18	DCC810571	C2012F 1E 104Z A TD84N
35C19	DCC810571	C2012F 1E 104Z A TD84N
35C20	DCC810571	C2012F 1E 104Z A TD84N
35C21	DCC810571	C2012F 1E 104Z A TD84N
35C22, 35C23	DCC816521	C2012CH 1H 220J A TD84N
35C24, 35C25	DCC810571	C2012F 1E 104Z A TD84N
35C26, 35C27	DCC810571	C2012F 1E 104Z A TD84N
35C31	DCC810571	C2012F 1E 104Z A TD84N
35C33	DCC810511	C2012F 1H 103Z A TD84N
35C34	DCC810511	C2012F 1H 103Z A TD84N
35C36	DCC810511	C2012F 1H 103Z A TD84N
35C39	DCC810511	C2012F 1H 103Z A TD84N
35C40	DCC816601	C2012CH 1H 101J A TD84N
35C41 to 35C43	DCC810571	C2012F 1E 104Z A TD84N
35C45 to 35C47	DCC816601	C2012CH 1H 101J A TD84N
35C48	DCC810571	C2012F 1E 104Z A TD84N
35C50	DCC810571	C2012F 1E 104Z A TD84N
35C52	DCC816601	C2012CH 1H 101J A TD84N
35C53	DCE229201	SME-CE04W 1E 470M TC04R
35C54, 35C55	DCC810571	C2012F 1E 104Z A TD84N
35C56	DCE229201	SME-CE04W 1E 470M TC04R
35C57, 35C60	DCC810571	C2012F 1E 104Z A TD84N
35C62, 35C63	DCC810571	C2012F 1E 104Z A TD84N
35C65 to 35C68	DCC810571	C2012F 1E 104Z A TD84N
35C71 to 35C74	DCC810511	C2012F 1H 103Z A TD84N
35C75, 35C76	DCC816521	C2012CH 1H 220J A TD84N
35C78	DCC810571	C2012F 1E 104Z A TD84N
35C80	DCC810571	C2012F 1E 104Z A TD84N
35C81	DCC816491	C2012CH 1H 100D A TD84N
35C82, 35C83	DCC810571	C2012F 1E 104Z A TD84N
35C85	DCC816491	C2012CH 1H 100D A TD84N
35C86, 35R87	DCC810571	C2012F 1E 104Z A TD84N
35C88	DCE229201	SME-CE04W 1E 470M TC04R
35C90	DCC810571	C2012F 1E 104Z A TD84N
35C92	DCC810571	C2012F 1E 104Z A TD84N
35C93, 35C94	DCC816581	C2012CH 1H 680J A TD84N

CPU BOARD 35

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
35C95	DCC810571	C2012F 1E 104Z A TD84N
35C103, 35C104	DCC810571	C2012F 1E 104Z A TD84N
35C105	DCE229201	SME-CE04W 1E 470M TC04R
35C106	DCC810571	C2012F 1E 104Z A TD84N
35C107	DCE229201	SME-CE04W 1E 470M TC04R
35C108	DCC810571	C2012F 1E 104Z A TD84N
35D1 to 35D6	DDD810241	1SS 272 TE0804R
35FL1 to 35FL3	DHF039021	DSS306-91FZ 103N 100 TE04N
35IC1	DIC554964	μPD 78014GC-787-AB8 (NEC)
35IC2, 35IC3	DIC699231	M51957BFP TE1208F
35IC4	DIC483041	74HC03F/AF TE1612B
35IC6	DIC529072	CAT35C102K/AT93C57 TE1612F
35IC8	DIC641111	BA 9221F (ROHM)
35IC9	DIC619191	NJM 082M(TE3) TE1208L
35IC10	DIC639031	NJM 2903M(TE3) TE1208L
35IC11	DIC483021	TC 4051BF (EL) TE1612B
35IC12 to 35IC15	DIC619191	NJM 082M(TE3) TE1208L
35IC16, 35IC17	DIC641111	BA 9221F (ROHM)
35IC18	DIC619191	NJM 082M(TE3) TE1208L
35IC19	DIC619101	OP AMP 4558F TE1208B
35IC20	DIC659011	TA 78L005AP TPE5
35IC21	DIC470091	CD108BPF (NEC)
35IC22	DIC519351	SRAM 8KX8(M100)LLF TE2416B
35J1	DCN124741	FF3-26-S55
35J2, 353	DCN124501	FF3-22-S55
35P1	KHB181511	SS-78XX CPU POWER CABLE
35P2	KHB178111	SS-78XX EXT I/F CABLE
35PB4	KPN362451	CPU BOARDUL-M
35Q1	DTR810041	2SA 1162Y TE85L
35Q2, 35Q3	DTR890411	DTA124EK/RN2403 TE0804L
35Q4, 35Q5	DTR810041	2SA 1162Y TE85L
35Q6	DTR830041	2SC 2712 TE85L
35R1	DRZ832631	RK73H 2A 39KΩF TD0804N
35R2	DRZ832431	RK73H 2A 5.6KΩF TD0804N
35R3	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R4	DRZ832491	RK73H 2A 10KΩF TD0804N
35R5	DRZ832391	RK73H 2A 3.9KΩF TD0804N
35R6, 35R7	DRZ832411	RK73H2A4.7KΩ TD0804N
35R8	DRZ832651	RK73H 2A 47KΩF TD0804N
35R9, 35R10	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R12	DRZ832651	RK73H 2A 47KΩF TD0804N
35R15	DRZ832651	RK73H 2A 47KΩF TD0804N

SS-7810

CPU BOARD 35

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
35R17 to 35R20	DRZ832011	RK73H 2A 100ΩF TD0804N
35R21	DRZ832411	RK73H2A4.7KΩ TD0804N
35R22	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R23	DRZ832131	RK73H 2A 330ΩF TD0804N
35R30	DRZ832231	RK73H 2A 820ΩF TD0804N
35R31	DRE138141	EF1/4S 12KΩF TA21N
35R32, 35R33	DRZ832511	RK73H 2A 12KΩF TD0804N
35R34	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R35	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R36	DRE138141	EF1/4S 12KΩF TA21N
35R38	DRZ832131	RK73H 2A 330ΩF TD0804N
35R39	DRZ832491	RK73H 2A 10KΩF TD0804N
35R40	DRZ832131	RK73H 2A 330ΩF TD0804N
35R41	DRZ832491	RK73H 2A 10KΩF TD0804N
35R42	DRZ832131	RK73H 2A 330ΩF TD0804N
35R43	DRZ832491	RK73H 2A 10KΩF TD0804N
35R44	DRZ832131	RK73H 2A 330ΩF TD0804N
35R45	DRZ832491	RK73H 2A 10KΩF TD0804N
35R46 to 35R49	DRZ832411	RK73H2A4.7KΩ TD0804N
35R51	DRZ832011	RK73H 2A 100ΩF TD0804N
35R53	DRZ832011	RK73H 2A 100ΩF TD0804N
35R55	DRZ832011	RK73H 2A 100ΩF TD0804N
35R57	DRZ832011	RK73H 2A 100ΩF TD0804N
35R59	DRZ832011	RK73H 2A 100ΩF TD0804N
35R61	DRZ832011	RK73H 2A 100ΩF TD0804N
35R63	DRZ832011	RK73H 2A 100ΩF TD0804N
35R65	DRZ832011	RK73H 2A 100ΩF TD0804N
35R66	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R69, 35R70	DRZ832451	RK73H 2A 6.8KΩF TD0804N
35R71	DRZ831501	MCR10 000E TD0804N
35R73	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R76	DRZ832411	RK73H2A4.7KΩ TD0804N
35R85	DRZ832651	RK73H 2A 47KΩF TD0804N
35R86	DRZ832511	RK73H 2A 12KΩF TD0804N
35R87	DRZ832631	RK73H 2A 39KΩF TD0804N
35R88	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R89	DRZ832371	RK73H 2A 3.3KΩF TD0804N
35R90	DRZ832511	RK73H 2A 12KΩF TD0804N
35R91	DRZ832631	RK73H 2A 39KΩF TD0804N
35R92	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R93	DRZ832371	RK73H 2A 3.3KΩF TD0804N
35R94	DRZ832431	RK73H 2A 5.6KΩF TD0804N

CPU BOARD 35

35R100	DRZ831501	MCR10 000E TD0804N
35R101	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R102	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R103	DRZ832231	RK73H 2A 820ΩF TD0804N
35R104	DRZ832351	RK73H 2A 2.7KΩF TD0804N
35R105	DRZ832191	RK73H 2A 560ΩF TD0804N
35R106	DRZ832351	RK73H 2A 2.7KΩF TD0804N
35R107	DRZ832191	RK73H 2A 560ΩF TD0804N
35R108	DRZ832391	RK73H 2A 3.9KΩF TD0804N
35R109	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R110	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R111	DRZ832231	RK73H 2A 820ΩF TD0804N
35R112	DRZ832491	RK73H 2A 10KΩF TD0804N
35R113	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R114, 35R115	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R116	DRZ832371	RK73H 2A 3.3KΩF TD0804N
35R117	DRZ832491	RK73H 2A 10KΩF TD0804N
35R118, 35R119	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R120, 35R121	DRZ832011	RK73H 2A 100ΩF TD0804N
35R122	DRZ832131	RK73H 2A 330ΩF TD0804N
35R134 to 35R141	DRZ832131	RK73H 2A 330ΩF TD0804N
35R142 to 35R149	DRZ832561	RK73H 2A 20KΩF TD0804N
35R150, 35R151	DRZ832491	RK73H 2A 10KΩF TD0804N
35X1	DHF013521	AT-51 10.00MHZ
35X2	DHF013621	AT-51 20MHZ

SS-7810

PANEL BOARD 37

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
37C1	DCE229201	SME-CE04W 1E 470M TC04R
37C2, 37C3	DCC810571	C2012F 1E 104Z A TD84N
37C4	DCE229201	SME-CE04W 1E 470M TC04R
37C5	DCC810571	C2012F 1E 104Z A TD84N
37C6	DCE229201	SME-CE04W 1E 470M TC04R
37C7, 37C8	DCC810571	C2012F 1E 104Z A TD84N
37C9	DCE229201	SME-CE04W 1E 470M TC04R
37C10 to 37C17	DCC810571	C2012F 1E 104Z A TD84N
37D1 to 37D4	DDD810241	1SS 272 TE0804R
37IC1	DIC499381	74HC138F/AF TE1612B
37IC2	DIC619191	NJM 082M(TE3) TE1208L
37IC3	DIC483021	TC 4051BF (EL) TE1612B
37IC4	DIC483321	74HC595F/AF TE1612B
37J1	DCN124741	FF3-26-S55
37J2	DCN124501	FF3-22-S55
37PB5	KPN362341	PANEL BOARD UL-M
37Q1, 37Q2	DTR830041	2SC 2712 TE85L
37Q3, 37Q4	DTR890431	DTA114EK/RN2402 TE0804L
37R1	DRZ832491	RK73H 2A 10KΩF TD0804N
37R2	DRZ832561	RK73H 2A 20KΩF TD0804N
37R3	DRZ832491	RK73H 2A 10KΩF TD0804N
37R4	DRZ832561	RK73H 2A 20KΩF TD0804N
37R5	DRZ832491	RK73H 2A 10KΩF TD0804N
37R6	DRZ832561	RK73H 2A 20KΩF TD0804N
37R7	DRZ832491	RK73H 2A 10KΩF TD0804N
37R8	DRZ832561	RK73H 2A 20KΩF TD0804N
37R9	DRZ832491	RK73H 2A 10KΩF TD0804N
37R10	DRZ832561	RK73H 2A 20KΩF TD0804N
37R11	DRZ832491	RK73H 2A 10KΩF TD0804N
37R12	DRZ832561	RK73H 2A 20KΩF TD0804N
37R13 to 37R21	DRZ832211	RK73H 2A 680ΩF TD0804N
37R22	DRZ832491	RK73H 2A 10KΩF TD0804N
37S1 to 37S4	DSW035561	Pulse Switch RK09710WL
37VR1 to 37VR5	DRV131991	RD11K1140 (20KB)

KEY BOARD 38

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
38D1 to 38D8	DDD870281	PY1102W-1 TE0804R
38J1	DCN124501	FF3-22-S55
38PB7	KPN362221	KEY BOARD UL-M

SS-7810

POWER 39

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
39C1, 39C2	DCF161711	ECQ-U2A 224MT
39C3, 39C4	DCC140131	DE7100F 222M VA1-KC
39C5, 39C6	DCE460911	CEDUF 2D 331M1
39C7	DCF168261	MMH 2G 104K
39C9	DCE929231	KME 25VB-100(M) TC04R
39C10	DCC239181	USD10SL 331J TC04N
39C11	DCE949761	KME 50VB-1(M) TC04R
39C12	DCF121721	MF-3S 1H 103J TC04N
39C13	DCF121761	MF-3S 1H 223J TC04N
39C14	DCF168661	MMH 2G 683K
39C15	DCF121801	MF-3S 1H 473J TC04N
39C16	DCF135041	MMH 2A 224K
39C17	DCE929231	KME 25VB-100(M) TC04R
39C19	DCE919861	KME 10VB-220(M) TC04R
39C20	DCE919661	KME 10VB-100(M) TC04R
39c21	DCE926331	CEEFM 1E 221M5
39C22	DCC163251	DE0705R 221K 1K
39C24	DCE919871	KME 10VB-330(M) TC04R
39C25	DCE919861	KME 10VB-220(M) TC04R
39C27	DCF121841	MF-3S 1H 104J TC04N
39C28	DCC163251	DE0705R 221K 1K
39C29	DCE921351	SXE 16VB-680(10X20)
39C30	DCE920891	KME 16VB-1000(M)
39C32	DCE920891	KME 16VB-1000(M)
39C33	DCF121841	MF-3S 1H 104J TC04N
39C34	DCC163251	DE0705R 221K 1K
39C35	DCE921351	SXE 16VB-680(10X20)
39C36	DCF121721	MF-3S 1H 103J TC04N
39C37	DCE920891	KME 16VB-1000(M)
39C38	DCF121841	MF-3S 1H 104J TC04N
39C40	DCE920891	KME 16VB-1000(M)
39C41, 39C42	DCF121841	MF-3S 1H 104J TC04N
39C43	DCC163251	DE0705R 221K 1K
39C44	DCE945581	CEEFM 1J 101M6
39C45	DCE945671	KME 63VB-220(M)
39C46	DCF121971	MF-3 2A 104K TC04N
39C47	DCE945671	KME 63VB-220(M)
39C48	DCC163251	DE0705R 221K 1K
39C49	DCE960251	KME 160VB-47(M)
39C50, 39C51	DCE965121	KME 200VB-22(M)
39C56	DCF121721	MF-3S 1H 103J TC04N
39C57	DCC140131	DE7100F 222M VA1-KC

POWER 39

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
39C59	DCF121841	MF-3S 1H 104J TC04N
39C60	DCF121841	MF-3S 1H 104J TC04N
39C61	DCF121971	MF-3 2A 104K TC04N
39C70	DCC140131	DE7100F 222M VA1-KC
39C100, 39C101	DCC140161	DE7150F 472M VA1-KC
39C102	DCC140131	DE7100F 222M VA1-KC
39C103, 39C104	DCE229211	SME-CE04W 1E 101M TC04R
39C105	DCF121721	MF-3S 1H 103J TC04N
39C106	DCF121841	MF-3S 1H 104J TC04N
39C108	DCF121841	MF-3S 1H 104J TC04N
39C111	DCF121971	MF-3 2A 104K TC04N
39CN1	DCN121511	Connector 5268-06A
39CN2, 39CN3	DCN990901	Connector 5267-06A
39CN4	DCN990911	Connector 5267-07A
39CN5	DCN120191	Connector 5267-11A
39CN6	DCN013161	Inlet AP-320(V) BLACK
39CN7	DCN990871	Connector 5267-02A
39CN8, 39CN9	DCN996681	RTB-1.5-1F
39CN10	KHB181821	Switching Cable FS44298-21 UL-I
39D1	DDD029471	D1NL40 TA21R
39D2	DDD021591	D3SB60
39D3	DDD021481	RG1C
39D6	DDD038791	RD12ESB/HZS12NB TA21R
39D7	DDD029551	D1NL20U TA21R
39D8	DDD021481	RG1C
39D9 39D10	DDD019071	1SS 120 TA21R
39D11	DDD038741	RD7.5ESB/HZS7.5NB TA21R
39D12, 39D13	DDD029551	D1NL20U TA21R
39D14	DDD019071	1SS 120 TA21R
39D17	DDD029551	D1NL20U TA21R
39D18	DDD019071	1SS 120 TA21R
39D19	DDD024031	D5LC20U
39D20	DDD029091	EM01 TA21R
39D22	DDD024031	D5LC20U
39D23	DDD029091	EM01 TA21R
39D24	DDD024021	D3L60
39D25	DDD033241	RD47EB TA21R
39D26	DDD029091	EM01 TA21R
39D27	DDD033241	RD47EB TA21R
39D28	DDD024011	S2L60
39D29	DDD029551	D1NL20U TA21R
39D31	DDD038731	RD6.8ESB/HZS6.8NB TA21R

POWER 39

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
39F1	DFU020671	Fuse 239 002 UL-ML
IC1	DFB031571	TLP721F (D4-GR M)
IC2A, B	DFB031571	TLP721F (D4-GR M)
IC4	DIC653611	M 51995AP (Mitsubishi)
IC5	DIC659011	TA78L005AP TPE5
IC6	DIC653901	NJM 7805FA (JRC)
IC7	DIC613771	4558
IC8	DIC613771	4558
IC9, IC100	DIC653771	NJM 431L TE04F
39JP100, 39JP101	DCL119361	BL02RN2-R62 TD04N
39L1	DCL170202	Line Filter FS-44302-21 UL-I
39L3 to 39L5	DCL113701	Choke Coil AN FS-44263-11
39L7	DCL113701	Choke Coil AN FS-44263-11
39L8A, 39L8B	DCL321111	Ferrite Beads HF70BB3.5X5X1.3
39L9	DCL321111	Ferrite Beads HF70BB3.5X5X1.3
39L11A, 39L11B	DCL321111	Ferrite Beads HF70BB3.5X5X1.3
39L100 to 39L105	DCL119361	BL02RN2-R62 TD04N
39L106, 39L107	DCL321111	Ferrite Beads HF70BB3.5X5X1.3
39L10A, 39L10B	DCL321111	Ferrite Beads HF70BB3.5X5X1.3
39PB9	KPN368531	PCB LVPS UL-M
39PF820	KSN090611	Heat Sink PF-820
39Q1	DTR215731	IRFPC40
39Q2	DTR139601	2SC 4311
39Q3	DTR139011	2SC 1815GR TPER1
39Q4	DTR199511	DTC 114ES TP
39Q5	DTR215501	2SK 591
39Q6	DTR139011	2SC 1815GR TPER1
39Q7	DTR119011	2SA 1015Y TPER1
39Q8	DTR225011	2SJ 143
39Q9	DTR219051	2SK 373-GR TPE2
39Q10	DTR136181	2SC 2551
39Q11	DTR149071	2SD 1407O/Y
39Q12	DTR136181	2SC 2551
39Q13	DTR116571	2SA 1668
39Q15	DTR119291	2SA 1091-O TPE2
39R1	DRS331261	RSS2 68KΩJ L15
39R2	DRS331261	RSS2 68KΩJ L15
39R5	DRS320071	RSS1 0.68ΩJ TA21N
39R7	DRS320361	RSS1 180ΩJ TA21N
39R8	DRD137381	PSS1/4S 82ΩJ TA21N
39R9	DRD137921	PSS1/4S 15KΩJ TA21N
39R10	DRE138191	EF1/4S 20KΩF TA21N
39R11	DRE138211	EF1/4S 24KΩF TA21N

POWER 39

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
39R12	DRE137681	EF1/4S 150ΩF TA21N
39R13	DRD137921	PSS1/4S 15KΩJ TA21N
39R14	DRE137571	EF1/4S 51ΩF TA21N
39R15	DRS331271	RSS2 100KΩJ L15
39R16	DRD148281	PSS1/2S 470KΩJ TA21N
39R17	DRE137681	EF1/4S 150ΩF TA21N
39R18	DRD137481	PSS1/4S 220ΩJ TA21N
39R19	DRD137641	PSS1/4S 1.0KΩJ TA21N
39R20	DRS320091	RSS1 1.0ΩJ TA21N
39R23	DRS321151	RSS1 6.8KΩJ L12.5
39R24	DRE137851	EF1/4S 750ΩF TA21N
39R25	DRS320491	RSS1 2.2KΩJ TA21N
39R26	DRS320371	RSS1 220ΩJ TA21N
39R27	DRD137321	PSS1/4S 47ΩJ TA21N
39R29	DRE137881	EF1/4S 1.0KΩF TA21N
39R30	DRE137971	EF1/4S 2.4KΩF TA21N
39R31	DRE138101	EF1/4S 8.2KΩF TA21N
39R32	DRS320451	RSS1 1.0KΩJ TA21N
39R33	DRS320491	RSS1 2.2KΩJ TA21N
39R34	DRE138121	EF1/4S 10KΩF TA21N
39R35	DZB999011	JPW 01 TA21N
39R36	DRD137601	PSS1/4S 680ΩJ TA21N
39R37	DRE137971	EF1/4S 2.4KΩF TA21N
39R38	DRE138121	EF1/4S 10KΩF TA21N
39R39	DRS320371	RSS1 220ΩJ TA21N
39R40	DRD137321	PSS1/4S 47ΩJ TA21N
39R41	DRD137841	PSS1/4S 6.8KΩJ TA21N
39R42	DRE138141	EF1/4S 12KΩF TA21N
39R43, 39R44	DRE138141	EF1/4S 12KΩF TA21N
39R45	DRE138171	EF1/4S 16KΩF TA21N
39R46, 39R47	DRE138141	EF1/4S 12KΩF TA21N
39R48	DRE137881	EF1/4S 1.0KΩF TA21N
39R49	DRS320411	RSS1 470ΩJ TA21N
39R50	DRE138281	EF1/4S 47KΩF TA21N
39R51	DRE137911	EF1/4S 1.3KΩF TA21N
39R52	DRS321321	RSS1 4.7ΩJ L12.5
39R53	DRE137881	EF1/4S 1.0KΩF TA21N
39R54	DRE138121	EF1/4S 10KΩF TA21N
39R55	DRE138131	EF1/4S 11KΩF TA21N
39R56	DRE138261	EF1/4S 39KΩF TA21N
39R57	DRE137881	EF1/4S 1.0KΩF TA21N
39R58	DRE138131	EF1/4S 11KΩF TA21N

POWER 39

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
39R59	DRS321331	RSS1 100ΩJ L12.5
39R60	DRD137061	PSS1/4S 3.9ΩJ TA21N
39R61	DRE138401	EF1/4S 150KΩF TA21N
39R65	DZB999011	JPW 01 TA21N
39R70	DRD137181	PSS1/4S 12ΩJ TA21N
39R100, 39R101	DRE137971	EF1/4S 2.4KΩF TA21N
39R102	DRE138401	EF1/4S 150KΩF TA21N
39R103	DRD137481	PSS1/4S 220ΩJ TA21N
39T1	DCL233821	Trans. FS44237-21 UL-I
39T2	DCL215191	Sub Power Trans. FS44238-21 UL-I
39TH1	DDD080391	8D13
39VR1	DRV419191	GF06UT2/CT-6TV00 2KΩTE04B

OVER ALL 40

CIRCUIT REFERENCE	IWATSU PART NO.	DESCRIPTION
40DL1	KHB179011	Delay Chain SU-3-100CM UL-I
40FFC1	AHB201311	FFC-22P-L040-P1.25
40FFC2	AHB201811	FFC-34P-L040-P1.25
40FFC3, 40FFC4	AHB202011	FFC-22P-L150-P1.25
40FFC5	AHB202111	FFC-26P-L150-P1.25
40FFC6	AHB201911	FFC-22P-L200-P1.25
40L1	DCL140454	Rotation Coil FS-39726 UL-I
40L2	DCL140464	Orthogonarity Coil FS-39725 UL-I
40R1	DRD147641	PSS1/2S 1.0KΩJ TA21N
40TA1	DTA010871	Terminal CAL
40V1	DET016162	CRT S-8100A

SS-7805/04 Parts List

CH1 ATTENUATOR(1) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
1C2	DCC810511	C2012F 1H 103Z A TD84N
1C3	DCF168011	4MFT-D 473M/MM-3 2G 473KS
1C4	DCV019602	ECV-1ZW 10X53T
1C5	DCV019612	ECV-1ZW 06X53T
1C7A	DCC816561	C2012CH 1H 470J A TD84N
1C12A	DCV819061	TZBX4 Z060BA110 TE1208R
1C14	DCC816561	C2012CH 1H 470J A TD84N
1C15	DCC816361	C2012CH 1H 010C A TD84N
1C19	DCC259281	CC45CH 2H 050C TC04N
1C20	DCC159021	CK45B 2H 222K TC04N
1C24	DCC816601	C2012CH 1H 101J A TD84N
1C26A,1C26B,1C27A,1C27B	DCC810571	C2012F 1H 104Z A TD0804N
1C29,1C31,1C32	DCC810511	C2012F 1H 103Z A TD84N
1C33	DCC810571	C2012F 1H 104Z A TD0804N
1C36,1C39,1C42B	DCC810511	C2012F 1H 103Z A TD84N
1C44	DCC816491	C2012CH 1H 100D A TD84N
1C47	DCC816361	C2012CH 1H 010C A TD84N
1C55	DCC810571	C2012F 1H 104Z A TD0804N
1C56,1C58,1C60,1C62,1C67 to 1C69	DCC810511	C2012F 1H 103Z A TD84N
1C72,1C73	DCC810571	C2012F 1H 104Z A TD0804N
1C100,1C101A,1C101B,1C102	DCC810511	C2012F 1H 103Z A TD84N
1C103A	DCC810841	C2012B 1H 102K A TD84N
1C103B	DCC816601	C2012CH 1H 101J A TD84N
1C104	DCC810511	C2012F 1H 103Z A TD84N
1C105A	DCC810841	C2012B 1H 102K A TD84N
1C105B	DCC816601	C2012CH 1H 101J A TD84N
1C106	DCC810511	C2012F 1H 103Z A TD84N
1C107A	DCC810841	C2012B 1H 102K A TD84N
1C107B	DCC816601	C2012CH 1H 101J A TD84N
1C112,1C113	DCE229221	SME-CE04W 1E 221M TC04R
1C115	DCC810511	C2012F 1H 103Z A TD84N
1C116,1C117	DCC810841	C2012B 1H 102K A TD84N
1C118	DCC810511	C2012F 1H 103Z A TD84N
1D1,1D2,1D4,1D5	DDD810241	1SS 272 TE0804R
1D6,1D7	DDD810521	1SS 307 TE0804L
1D8 to 1D11	DDD810241	1SS 272 TE0804R
1D14 to 1D16	DDD830341	RD6.8M-T1B B2
1IC2	DIC619101	NJM 4558M(TE3) TE1208L
1IC3	DIC495081	TC 4052BF (EL) TE1612B
1JP3	DRZ831501	MCR10 000E TD0804N
1Q1 to 1Q3	DTR890791	IMD3 TE0804R
1Q4	DTR890861	IMZ1 TE0804R
1Q6	DTR860171	FC13-TL TE0804L
1Q8 to 1Q12	DTR860161	2SK 508 K51 TE0804L
1R1	DRD137241	PSS1/4S 22ΩJ TA21N
1R2	DRZ832251	RK73H 2A 1.0KΩF TD0804N
1R3A to 1R3D	DRZ832071	RK73H 2A 180ΩF TD0804N
1R5	DRE938081	SN14K 2E 900KΩD TA21N
1R6A	DRE138371	EF1/4S 110KΩF TA21N
1R6B	DRZ832261	RK73H 2A 1.1KΩF TD0804N
1R7	DRZ833531	RK73H 2A 27ΩF TD0804N
1R9A	DRZ832041	RK73H 2A 130ΩF TD0804N
1R10	DRZ833441	RK73H 2A 10ΩF TD0804N
1R11	DRZ833511	RK73H 2A 22ΩF TD0804N
1R12	DRE938081	SN14K 2E 900KΩD TA21N
1R13A	DRE138371	EF1/4S 110KΩF TA21N
1R13B	DRZ832261	RK73H 2A 1.1KΩF TD0804N
1R14	DRZ833531	RK73H 2A 27ΩF TD0804N
1R15	DRZ832381	RK73H 2A 3.6KΩF TD0804N
1R16	DRZ832041	RK73H 2A 130ΩF TD0804N
1R17,1R18	DRZ833441	RK73H 2A 10ΩF TD0804N
1R19	DRZ832251	RK73H 2A 1.0KΩF TD0804N
1R20A,1R20B	DRE138451	EF1/4S 240KΩF TA21N

CH1 ATTENUATOR(1) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
1R21	DRE930221	SN14K 2E 1MΩD
1R24,1R25	DRZ832011	RK73H 2A 100ΩF TD0804N
1R26	DRZ833011	RK73H 2A 47ΩF TD0804N
1R27	DRV810201	G4AT/ST-4TA 100Ω TE1208L
1R28	DRZ833011	RK73H 2A 47ΩF TD0804N
1R29	DRZ832331	RK73H 2A 2.2KΩF TD0804N
1R30	DRZ833011	RK73H 2A 47ΩF TD0804N
1R31	DRZ832241	RK73H 2A 910ΩF TD0804N
1R32	DRZ832161	RK73H 2A 430ΩF TD0804N
1R33,1R34	DRZ832331	RK73H 2A 2.2KΩF TD0804N
1R35	DRZ832811	RK73H 2A 220KΩF TD0804N
1R36	DRZ832561	RK73H 2A 20KΩF TD0804N
1R37	DRZ832661	RK73H 2A 51KΩF TD0804N
1R38	DRZ832331	RK73H 2A 2.2KΩF TD0804N
1R39	DRZ832491	RK73H 2A 10KΩF TD0804N
1R40	DRZ832441	RK73H 2A 6.2KΩF TD0804N
1R41,1R42	DRZ832491	RK73H 2A 10KΩF TD0804N
1R44	DRZ833071	RK73H 2A 82ΩF TD0804N
1R45,1R46	DRE938611	CRB25CY 160Ω T-29E TA21N
1R47	DRE938621	CRB25CY 390Ω T-29E TA21N
1R48	DRZ833441	RK73H 2A 10ΩF TD0804N
1R49	DRE938531	CRB25CY 100Ω T-29E TA21N
1R50	DRZ833071	RK73H 2A 82ΩF TD0804N
1R51 to 1R54	DRZ832591	RK73H 2A 27KΩF TD0804N
1R55,1R57,1R59,1R61	DRZ832701	RK73H 2A 75KΩF TD0804N
1R63	DRZ833531	RK73H 2A 27ΩF TD0804N
1R65	DRZ832681	RK73H 2A 62KΩF TD0804N
1R67	DRZ832591	RK73H 2A 27KΩF TD0804N
1R68,1R69	DRZ832621	RK73H 2A 36KΩF TD0804N
1R70	DRZ832431	RK73H 2A 5.6KΩF TD0804N
1R72,1R73	DRE137401	EF1/4S 10ΩF TA21N
1R74	DRZ832411	RK73H 2A 4.7KΩF TD0804N
1R110	DRE138291	EF1/4S 51KΩF TA21N
1RL1 to 1RL3	DKD028361	Relay A12W-K
1U1	DCN041171	Connector L235 UL-I

CH2 ATTENUATOR(2) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
2C2	DCC810511	C2012F 1H 103Z A TD84N
2C3	DCF168011	4MFT-D 473M/MM-3 2G 473KS
2C4	DCV019602	ECV-1ZW 10X53T
2C5	DCV019612	ECV-1ZW 06X53T
2C7A	DCC816561	C2012CH 1H 470J A TD84N
2C12A	DCV819061	TZBX4 Z060BA110 TE1208R
2C14	DCC816561	C2012CH 1H 470J A TD84N
2C15	DCC816361	C2012CH 1H 010C A TD84N
2C19	DCC259281	CC45CH 2H 050C TC04N
2C20	DCC159021	CK45B 2H 222K TC04N
2C24	DCC816601	C2012CH 1H 101J A TD84N
2C26A,2C26B,2C27A,2C27B	DCC810571	C2012F 1H 104Z A TD0804N
2C29,2C31,2C32	DCC810511	C2012F 1H 103Z A TD84N
2C33	DCC810571	C2012F 1H 104Z A TD0804N
2C36,2C39,2C42B	DCC810511	C2012F 1H 103Z A TD84N
2C44	DCC816491	C2012CH 1H 100D A TD84N
2C47	DCC816361	C2012CH 1H 010C A TD84N
2C55	DCC810571	C2012F 1H 104Z A TD0804N
2C56,2C58,2C60,2C62,2C67 to 2C69	DCC810511	C2012F 1H 103Z A TD84N
2C72,2C73	DCC810571	C2012F 1H 104Z A TD0804N
2C100,2C101A,2C101B,2C102	DCC810511	C2012F 1H 103Z A TD84N
2C103A	DCC810841	C2012B 1H 102K A TD84N
2C103B	DCC816601	C2012CH 1H 101J A TD84N
2C104	DCC810511	C2012F 1H 103Z A TD84N
2C105A	DCC810841	C2012B 1H 102K A TD84N
2C105B	DCC816601	C2012CH 1H 101J A TD84N
2C106	DCC810511	C2012F 1H 103Z A TD84N
2C107A	DCC810841	C2012B 1H 102K A TD84N
2C107B	DCC816601	C2012CH 1H 101J A TD84N
2C112,2C113	DCE229221	SME-CE04W 1E 221M TC04R
2C115	DCC810511	C2012F 1H 103Z A TD84N
2C116,2C117	DCC810841	C2012B 1H 102K A TD84N
2C118	DCC810511	C2012F 1H 103Z A TD84N
2D1,2D2,2D4,2D5	DDD810241	1SS 272 TE0804R
2D6,2D7	DDD810521	1SS 307 TE0804L
2D8 to 2D11	DDD810241	1SS 272 TE0804R
2D14 to 2D16	DDD830341	RD6.8M-T1B B2
2IC2	DIC619101	NJM 4558M(TE3) TE1208L
2IC3	DIC495081	TC 4052BF (EL) TE1612B
2JP3	DRZ831501	MCR10 000E TD0804N
2Q1 to 2Q3	DTR890791	IMD3 TE0804R
2Q4	DTR890861	IMZ1 TE0804R
2Q6	DTR860171	FC13-TL TE0804L
2Q8 to 2Q12	DTR860161	2SK 508 K51 TE0804L
2R1	DRD137241	PSS1/4S 22ΩJ TA21N
2R2	DRZ832251	RK73H 2A 1.0KΩF TD0804N
2R3A to 2R3D	DRZ832071	RK73H 2A 180ΩF TD0804N
2R5	DRE938081	SN14K 2E 900KΩD TA21N
2R6A	DRE138371	EF1/4S 110KΩF TA21N
2R6B	DRZ832261	RK73H 2A 1.1KΩF TD0804N
2R7	DRZ833531	RK73H 2A 27ΩF TD0804N
2R9A	DRZ832041	RK73H 2A 130ΩF TD0804N
2R10	DRZ833441	RK73H 2A 10ΩF TD0804N
2R11	DRZ833511	RK73H 2A 22ΩF TD0804N
2R12	DRE938081	SN14K 2E 900KΩD TA21N
2R13A	DRE138371	EF1/4S 110KΩF TA21N
2R13B	DRZ832261	RK73H 2A 1.1KΩF TD0804N
2R14	DRZ833531	RK73H 2A 27ΩF TD0804N
2R15	DRZ832381	RK73H 2A 3.6KΩF TD0804N
2R16	DRZ832041	RK73H 2A 130ΩF TD0804N
2R17,2R18	DRZ833441	RK73H 2A 10ΩF TD0804N
2R19	DRZ832251	RK73H 2A 1.0KΩF TD0804N
2R20A,2R20B	DRE138451	EF1/4S 240KΩF TA21N

CH2 ATTENUATOR(2) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
2R21	DRE930221	SN14K 2E 1MΩD
2R24,2R25	DRZ832011	RK73H 2A 100ΩF TD0804N
2R26	DRZ833011	RK73H 2A 47ΩF TD0804N
2R27	DRV810201	G4AT/ST-4TA 100Ω TE1208L
2R28	DRZ833011	RK73H 2A 47ΩF TD0804N
2R29	DRZ832331	RK73H 2A 2.2KΩF TD0804N
2R30	DRZ833011	RK73H 2A 47ΩF TD0804N
2R31	DRZ832241	RK73H 2A 910ΩF TD0804N
2R32	DRZ832161	RK73H 2A 430ΩF TD0804N
2R33,2R34	DRZ832331	RK73H 2A 2.2KΩF TD0804N
2R35	DRZ832811	RK73H 2A 220KΩF TD0804N
2R36	DRZ832561	RK73H 2A 20KΩF TD0804N
2R37	DRZ832661	RK73H 2A 51KΩF TD0804N
2R38	DRZ832331	RK73H 2A 2.2KΩF TD0804N
2R39	DRZ832491	RK73H 2A 10KΩF TD0804N
2R40	DRZ832441	RK73H 2A 6.2KΩF TD0804N
2R41,2R42	DRZ832491	RK73H 2A 10KΩF TD0804N
2R44	DRZ833071	RK73H 2A 82ΩF TD0804N
2R45,2R46	DRE938611	CRB25CY 160Ω T-29E TA21N
2R47	DRE938621	CRB25CY 390Ω T-29E TA21N
2R48	DRZ833441	RK73H 2A 10ΩF TD0804N
2R49	DRE938531	CRB25CY 100Ω T-29E TA21N
2R50	DRZ833071	RK73H 2A 82ΩF TD0804N
2R51 to 2R54	DRZ832591	RK73H 2A 27KΩF TD0804N
2R55,2R57,2R59,2R61	DRZ832701	RK73H 2A 75KΩF TD0804N
2R63	DRZ833531	RK73H 2A 27ΩF TD0804N
2R65	DRZ832681	RK73H 2A 62KΩF TD0804N
2R67	DRZ832591	RK73H 2A 27KΩF TD0804N
2R68,2R69	DRZ832621	RK73H 2A 36KΩF TD0804N
2R70	DRZ832431	RK73H 2A 5.6KΩF TD0804N
2R72,2R73	DRE137401	EF1/4S 10ΩF TA21N
2R74	DRZ832411	RK73H 2A 4.7KΩF TD0804N
2R110	DRE138291	EF1/4S 51KΩF TA21N
2RL1 to 2RL3	DKD028361	Relay A12W-K
2U1	DCN041171	Connector L235 UL-I

EXT TRIG IN(3)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
3C2	DCC810511	C2012F 1H 103Z A TD84N
3C20	DCC159021	CK45B 2H 222K TC04N
3C24	DCC816601	C2012CH 1H 101J A TD84N
3C26A,3C26B,3C27A,3C27B	DCC810571	C2012F 1H 104Z A TD0804N
3C29,3C31,3C32	DCC810511	C2012F 1H 103Z A TD84N
3C50	DCC816541	C2012CH 1H 330J A TD84N
3C72,3C73	DCC810571	C2012F 1H 104Z A TD0804N
3C75A	DCC259281	CC45CH 2H 050C TC04N
3C75B	DCC259031	CC45CH 2H 070D TC04N
3C100,3C101A,3C101B	DCC810511	C2012F 1H 103Z A TD84N
3C112,3C113,3C201,3C203	DCE229201	SME-CE04W 1E 470M TC04R
3D2	DDD810241	1SS 272 TE0804R
3D6,3D7	DDD810521	1SS 307 TE0804L
3D8,3D9	DDD810241	1SS 272 TE0804R
3D15,3D16	DDD830341	RD6.8M-T1B B2
3FL1,3FL2	DCL119361	BL02RN2-R62 TD04N
3Q4	DTR890861	IMZ1 TE0804R
3Q6	DTR860171	FC13-TL TE0804L
3R1	DRD137241	PSS1/4S 22ΩJ TA21N
3R2	DRZ832251	RK73H 2A 1.0KΩF TD0804N
3R18	DRZ833511	RK73H 2A 22ΩF TD0804N
3R20A,3R20B	DRE138451	EF1/4S 240KΩF TA21N
3R21	DRE930221	SN14K 2E 1MΩD
3R24 to 3R26	DRZ832011	RK73H 2A 100ΩF TD0804N
3R28	DRZ833011	RK73H 2A 47ΩF TD0804N
3R29	DRZ832331	RK73H 2A 2.2KΩF TD0804N
3R30	DRZ833011	RK73H 2A 47ΩF TD0804N
3R31	DRZ832241	RK73H 2A 910ΩF TD0804N
3R32	DRZ832171	RK73H 2A 470ΩF TD0804N
3R33,3R34	DRZ832351	RK73H 2A 2.7KΩF TD0804N
3R50	DRZ832011	RK73H 2A 100ΩF TD0804N
3R72,3R73	DRZ833441	RK73H 2A 10ΩF TD0804N
3R74	DRZ832411	RK73H 2A 4.7KΩF TD0804N
3U1	DCN041171	Connector L235 UL-I

SS-7805/04

CH1 1st PREAMP(4) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
4C3	DCC810511	C2012F 1H 103Z A TD84N
4C7	DCC816361	C2012CH 1H 010C A TD84N
4C9,4C11	DCC810841	C2012B 1H 102K A TD84N
4C15	DCC816401	C2012CH 1H 030C A TD84N
4C16	DCC816361	C2012CH 1H 010C A TD84N
4C18,4C19,4C29,4C30	DCC810841	C2012B 1H 102K A TD84N
4C37,4C42	DCC810511	C2012F 1H 103Z A TD84N
4C48	DCC816441	C2012CH 1H 050C A TD84N
4C58B,4C61,4C62	DCC810511	C2012F 1H 103Z A TD84N
4C63	DCC810571	C2012F 1H 104Z A TD0804N
4C66,4C68,4C71,4C75,4C77,4C79	DCC810511	C2012F 1H 103Z A TD84N
4C81	DCC816601	C2012CH 1H 101J A TD84N
4C83	DCC816491	C2012CH 1H 100D A TD84N
4C100,4C102	DCC810571	C2012F 1H 104Z A TD0804N
4C104,4C105	DCC810841	C2012B 1H 102K A TD84N
4D1	DDD830361	RD5.1M-T1B B2 TE0804L
4D2	DDD830151	RD9.1M-T1B B/MA3091 TE0804L
4D3 to 4D6	DDD810241	1SS 272 TE0804R
4IC1	DIC619101	NJM 4558M(TE3) TE1208L
4IC2	DIC889171	TC 7W04F(TE12L) TE1208R
4JP1 to 4JP8,4JP10 to 4JP13	DRZ831501	MCR10 000E TD0804N
4JP100 to 4JP104	DZB999011	JPW 01 TA21N
4Q1 to 4Q3	DTR890891	IMX5(S-DTR890761 IS)TE0804R
4Q4,4Q5	DTR890841	IMX3 TE0804R
4Q6	DTR890891	IMX5(S-DTR890761 IS)TE0804R
4Q7	DTR810041	2SA 1162Y TE85L
4Q8 to 4Q10	DTR838661	2SC 2712LG TE85L
4Q11,4Q12	DTR890831	IMD2 TE0804R
4Q13	DTR838661	2SC 2712LG TE85L
4Q14,4Q20	DTR860161	2SK 508 K51 TE0804L
4R2	DRZ833051	RK73H 2A 68ΩF TD0804N
4R3	DRZ832311	RK73H 2A 1.8KΩF TD0804N
4R4A	DRZ832151	RK73H 2A 390ΩF TD0804N
4R4B	DRZ832481	RK73H 2A 9.1KΩF TD0804N
4R5	DRZ833481	RK73H 2A 15ΩF TD0804N
4R7,4R8	DRZ832051	RK73H 2A 150ΩF TD0804N
4R9	DRZ832101	RK73H 2A 240ΩF TD0804N
4R10	DRZ831501	MCR10 000E TD0804N
4R11	DRZ832101	RK73H 2A 240ΩF TD0804N
4R12	DRZ831501	MCR10 000E TD0804N
4R13,4R14	DRZ833011	RK73H 2A 47ΩF TD0804N
4R15	DRZ832011	RK73H 2A 100ΩF TD0804N
4R16,4R17	DRZ832041	RK73H 2A 130ΩF TD0804N
4R18,4R19	DRZ832191	RK73H 2A 560ΩF TD0804N
4R20	DRZ832481	RK73H 2A 9.1KΩF TD0804N
4R21	DRZ832531	RK73H 2A 15KΩF TD0804N
4R25,4R26	DRZ833561	RK73H 2A 36ΩF TD0804N
4R27,4R28	DRZ832071	RK73H 2A 180ΩF TD0804N
4R29,4R30	DRZ832201	RK73H 2A 620ΩF TD0804N
4R31	DRZ832481	RK73H 2A 9.1KΩF TD0804N
4R32	DRZ832531	RK73H 2A 15KΩF TD0804N
4R33	DRZ832011	RK73H 2A 100ΩF TD0804N
4R34,4R35	DRZ820011	RN73G 2A 30ΩD TD0804N
4R36	DRZ832011	RK73H 2A 100ΩF TD0804N
4R37	DRZ832431	RK73H 2A 5.6KΩF TD0804N
4R38	DRZ832341	RK73H 2A 2.4KΩF TD0804N
4R39	DRZ832011	RK73H 2A 100ΩF TD0804N
4R40	DRZ832081	RK73H 2A 200ΩF TD0804N
4R41	DRZ832321	RK73H 2A 2.0KΩF TD0804N
4R42,4R43	DRZ832011	RK73H 2A 100ΩF TD0804N
4R44	DRZ832081	RK73H 2A 200ΩF TD0804N
4R45	DRZ832321	RK73H 2A 2.0KΩF TD0804N
4R46,4R47	DRZ832141	RK73H 2A 360ΩF TD0804N

CH1 1st PREAMP(4) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
4R48	DRZ832771	RK73H 2A 150KΩF TD0804N
4R50,4R51	DRZ833051	RK73H 2A 68ΩF TD0804N
4R52,4R53	DRZ832251	RK73H 2A 1.0KΩF TD0804N
4R54	DRZ832511	RK73H 2A 12KΩF TD0804N
4R55	DRZ832321	RK73H 2A 2.0KΩF TD0804N
4R56,4R57	DRZ832511	RK73H 2A 12KΩF TD0804N
4R58	DRZ832011	RK73H 2A 100ΩF TD0804N
4R59	DRZ832081	RK73H 2A 200ΩF TD0804N
4R60	DRZ832311	RK73H 2A 1.8KΩF TD0804N
4R61	DRZ832411	RK73H 2A 4.7KΩF TD0804N
4R62	DRZ832421	RK73H 2A 5.1KΩF TD0804N
4R64	DRZ832201	RK73H 2A 620ΩF TD0804N
4R65	DRZ832151	RK73H 2A 390ΩF TD0804N
4R66	DRZ832271	RK73H 2A 1.2KΩF TD0804N
4R67	DRZ832151	RK73H 2A 390ΩF TD0804N
4R68	DRZ832271	RK73H 2A 1.2KΩF TD0804N
4R69	DRZ832011	RK73H 2A 100ΩF TD0804N
4R70	DRZ832431	RK73H 2A 5.6KΩF TD0804N
4R71	DRZ832531	RK73H 2A 15KΩF TD0804N
4R72	DRZ832341	RK73H 2A 2.4KΩF TD0804N
4R73	DRZ832381	RK73H 2A 3.6KΩF TD0804N
4R74	DRZ832081	RK73H 2A 200ΩF TD0804N
4R75	DRZ832291	RK73H 2A 1.5KΩF TD0804N
4R76	DRZ832231	RK73H 2A 820ΩF TD0804N
4R77	DRZ832541	RK73H 2A 16KΩF TD0804N
4R78	DRZ832621	RK73H 2A 36KΩF TD0804N
4R79	DRZ832251	RK73H 2A 1.0KΩF TD0804N
4R80	DRZ832491	RK73H 2A 10KΩF TD0804N
4R81	DRZ832481	RK73H 2A 9.1KΩF TD0804N
4R82	DRZ832531	RK73H 2A 15KΩF TD0804N
4R83	DRZ832481	RK73H 2A 9.1KΩF TD0804N
4R84	DRZ832531	RK73H 2A 15KΩF TD0804N
4R85	DRZ832681	RK73H 2A 62KΩF TD0804N
4R86	DRZ833531	RK73H 2A 27ΩF TD0804N
4R87	DRZ832511	RK73H 2A 12KΩF TD0804N
4R100,4R101	DRZ832351	RK73H 2A 2.7KΩF TD0804N
4R110	DRE138291	EF1/4S 51KΩF TA21N

CH2 1st PREAMP(5) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
5C3	DCC810511	C2012F 1H 103Z A TD84N
5C7	DCC816361	C2012CH 1H 010C A TD84N
5C9,5C11	DCC810841	C2012B 1H 102K A TD84N
5C15	DCC816401	C2012CH 1H 030C A TD84N
5C16	DCC816361	C2012CH 1H 010C A TD84N
5C18,5C19,5C29,5C30	DCC810841	C2012B 1H 102K A TD84N
5C37,5C42	DCC810511	C2012F 1H 103Z A TD84N
5C48	DCC816441	C2012CH 1H 050C A TD84N
5C58B,5C61,5C62	DCC810511	C2012F 1H 103Z A TD84N
5C63	DCC810571	C2012F 1H 104Z A TD0804N
5C66,5C68,5C71,5C75,5C77,5C79	DCC810511	C2012F 1H 103Z A TD84N
5C81	DCC816601	C2012CH 1H 101J A TD84N
5C83	DCC816491	C2012CH 1H 100D A TD84N
5C100,5C102	DCC810571	C2012F 1H 104Z A TD0804N
5C104,5C105	DCC810841	C2012B 1H 102K A TD84N
5D1	DDD830361	RD5.1M-T1B B2 TE0804L
5D2	DDD830151	RD9.1M-T1B B/MA3091 TE0804L
5D3 to 5D6	DDD810241	1SS 272 TE0804R
5IC1	DIC619101	NJM 4558M(TE3) TE1208L
5IC2	DIC889171	TC 7W04F(TE12L) TE1208R
5JP1 to 5JP8,5JP10 to 5JP13	DRZ831501	MCR10 000E TD0804N
5JP100 to 5JP104	DZB999011	JPW 01 TA21N
5Q1 to 5Q3	DTR890891	IMX5(S-DTR890761 IS)TE0804R
5Q4,5Q5	DTR890841	IMX3 TE0804R
5Q6	DTR890891	IMX5(S-DTR890761 IS)TE0804R
5Q7	DTR810041	2SA 1162Y TE85L
5Q8 to 5Q10	DTR838661	2SC 2712LG TE85L
5Q11,5Q12	DTR890831	IMD2 TE0804R
5Q13	DTR838661	2SC 2712LG TE85L
5Q14,5Q20	DTR860161	2SK 508 K51 TE0804L
5R2	DRZ833051	RK73H 2A 68ΩF TD0804N
5R3	DRZ832311	RK73H 2A 1.8KΩF TD0804N
5R4A	DRZ832151	RK73H 2A 390才ΩF TD0804N
5R4B	DRZ832481	RK73H 2A 9.1KΩF TD0804N
5R5	DRZ833481	RK73H 2A 15ΩF TD0804N
5R7,5R8	DRZ832051	RK73H 2A 150ΩF TD0804N
5R9	DRZ832101	RK73H 2A 240ΩF TD0804N
5R10	DRZ831501	MCR10 000E TD0804N
5R11	DRZ832101	RK73H 2A 240ΩF TD0804N
5R12	DRZ831501	MCR10 000E TD0804N
5R13,5R14	DRZ833011	RK73H 2A 47ΩF TD0804N
5R15	DRZ832011	RK73H 2A 100ΩF TD0804N
5R16,5R17	DRZ832041	RK73H 2A 130ΩF TD0804N
5R18,5R19	DRZ832191	RK73H 2A 560ΩF TD0804N
5R20	DRZ832481	RK73H 2A 9.1KΩF TD0804N
5R21	DRZ832531	RK73H 2A 15KΩF TD0804N
5R25,5R26	DRZ833561	RK73H 2A 36ΩF TD0804N
5R27,5R28	DRZ832071	RK73H 2A 180ΩF TD0804N
5R29,5R30	DRZ832201	RK73H 2A 620ΩF TD0804N
5R31	DRZ832481	RK73H 2A 9.1KΩF TD0804N
5R32	DRZ832531	RK73H 2A 15KΩF TD0804N
5R33	DRZ832011	RK73H 2A 100ΩF TD0804N
5R34,5R35	DRZ820011	RN73G 2A 30ΩD TD0804N
5R36	DRZ832011	RK73H 2A 100ΩF TD0804N
5R37	DRZ832431	RK73H 2A 5.6KΩF TD0804N
5R38	DRZ832341	RK73H 2A 2.4KΩF TD0804N
5R39	DRZ832011	RK73H 2A 100ΩF TD0804N
5R40	DRZ832081	RK73H 2A 200ΩF TD0804N
5R41	DRZ832321	RK73H 2A 2.0KΩF TD0804N
5R42,5R43	DRZ832011	RK73H 2A 100ΩF TD0804N
5R44	DRZ832081	RK73H 2A 200ΩF TD0804N
5R45	DRZ832321	RK73H 2A 2.0KΩF TD0804N
5R46,5R47	DRZ832141	RK73H 2A 360ΩF TD0804N

CH2 1st PREAMP(5) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
5R48	DRZ832771	RK73H 2A 150KΩF TD0804N
5R50,5R51	DRZ833051	RK73H 2A 68ΩF TD0804N
5R52,5R53	DRZ832251	RK73H 2A 1.0KΩF TD0804N
5R54	DRZ832511	RK73H 2A 12KΩF TD0804N
5R55	DRZ832321	RK73H 2A 2.0KΩF TD0804N
5R56,5R57	DRZ832511	RK73H 2A 12KΩF TD0804N
5R58	DRZ832011	RK73H 2A 100ΩF TD0804N
5R59	DRZ832081	RK73H 2A 200ΩF TD0804N
5R60	DRZ832311	RK73H 2A 1.8KΩF TD0804N
5R61	DRZ832411	RK73H 2A 4.7KΩF TD0804N
5R62	DRZ832421	RK73H 2A 5.1KΩF TD0804N
5R64	DRZ832201	RK73H 2A 620ΩF TD0804N
5R65	DRZ832151	RK73H 2A 390ΩF TD0804N
5R66	DRZ832271	RK73H 2A 1.2KΩF TD0804N
5R67	DRZ832151	RK73H 2A 390ΩF TD0804N
5R68	DRZ832271	RK73H 2A 1.2KΩF TD0804N
5R69	DRZ832011	RK73H 2A 100ΩF TD0804N
5R70	DRZ832431	RK73H 2A 5.6KΩF TD0804N
5R71	DRZ832531	RK73H 2A 15KΩF TD0804N
5R72	DRZ832341	RK73H 2A 2.4KΩF TD0804N
5R73	DRZ832381	RK73H 2A 3.6KΩF TD0804N
5R74	DRZ832081	RK73H 2A 200ΩF TD0804N
5R75	DRZ832291	RK73H 2A 1.5KΩF TD0804N
5R76	DRZ832231	RK73H 2A 820ΩF TD0804N
5R77	DRZ832541	RK73H 2A 16KΩF TD0804N
5R78	DRZ832621	RK73H 2A 36KΩF TD0804N
5R79	DRZ832251	RK73H 2A 1.0KΩF TD0804N
5R80	DRZ832491	RK73H 2A 10KΩF TD0804N
5R81	DRZ832481	RK73H 2A 9.1KΩF TD0804N
5R82	DRZ832531	RK73H 2A 15KΩF TD0804N
5R83	DRZ832481	RK73H 2A 9.1KΩF TD0804N
5R84	DRZ832531	RK73H 2A 15KΩF TD0804N
5R85	DRZ832681	RK73H 2A 62KΩF TD0804N
5R86	DRZ833531	RK73H 2A 27ΩF TD0804N
5R87	DRZ832511	RK73H 2A 12KΩF TD0804N
5R100,5R101	DRZ832351	RK73H 2A 2.7KΩF TD0804N
5R110	DRE138291	EF1/4S 51KΩF TA21N

CH1 2nd PREAMP(6)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
6C3	DCC816421	C2012CH 1H 040C A TD84N
6C4	DCV819071	TZBX4 N100BA110 TE1208R
6C6	DCC810511	C2012F 1H 103Z A TD84N
6C7	DCC816401	C2012CH 1H 030C A TD84N
6C10,6C12	DCC810841	C2012B 1H 102K A TD84N
6C18	DCF121781	MF-3S 1H 333J TC04N
6C25,6C33	DCC810511	C2012F 1H 103Z A TD84N
6C37	DCC816421	C2012CH 1H 040C A TD84N
6C39,6C40,6C42 to 6C44,6C46	DCC810511	C2012F 1H 103Z A TD84N
6C104,6C105	DCE229201	SME-CE04W 1E 470M TC04R
6FL1,6FL2	DCL119361	BL02RN2-R62 TD04N
6Q1,6Q2	DTR810221	2SA 1462-T1B Y34
6Q5,6Q7	DTR890841	IMX3 TE0804R
6R1,6R2	DRZ833011	RK73H 2A 47ΩF TD0804N
6R3	DRZ833441	RK73H 2A 10ΩF TD0804N
6R4	DRZ832031	RK73H 2A 120ΩF TD0804N
6R5,6R6	DRZ832281	RK73H 2A 1.3KΩF TD0804N
6R7	DRZ832371	RK73H 2A 3.3KΩF TD0804N
6R10,6R12	DRZ832131	RK73H 2A 330ΩF TD0804N
6R17	DRZ833011	RK73H 2A 47ΩF TD0804N
6R18	DRZ832611	RK73H 2A 33KΩF TD0804N
6R24	DRZ832351	RK73H 2A 2.7KΩF TD0804N
6R25,6R26	DRZ832091	RK73H 2A 220ΩF TD0804N
6R27	DRZ832351	RK73H 2A 2.7KΩF TD0804N
6R28,6R29	DRZ832131	RK73H 2A 330ΩF TD0804N
6R37	DRZ832011	RK73H 2A 100ΩF TD0804N
6R38	DRZ832471	RK73H 2A 8.2KΩF TD0804N
6R39	DRZ832351	RK73H 2A 2.7KΩF TD0804N
6R40	DRZ832411	RK73H 2A 4.7KΩF TD0804N
6R41	DRZ832401	RK73H 2A 4.3KΩF TD0804N
6R42,6R43A	DRZ832201	RK73H 2A 620ΩF TD0804N
6R43B	DRZ832411	RK73H 2A 4.7KΩF TD0804N
6R44	DRZ832401	RK73H 2A 4.3KΩF TD0804N
6R45	DRZ832081	RK73H 2A 200ΩF TD0804N
6R46,6R47	DRZ832321	RK73H 2A 2.0KΩF TD0804N

CH2 2nd PREAMP(7)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
7C3	DCC816421	C2012CH 1H 040C A TD84N
7C4	DCV819071	TZBX4 N100BA110 TE1208R
7C6	DCC810511	C2012F 1H 103Z A TD84N
7C7	DCC816421	C2012CH 1H 040C A TD84N
7C10,7C12	DCC810841	C2012B 1H 102K A TD84N
7C18	DCF121781	MF-3S 1H 333J TC04N
7C25,7C33,7C34,7C39,7C40,7C42 to 7C44,7C46	DCC810511	C2012F 1H 103Z A TD84N
7C48	DCC810841	C2012B 1H 102K A TD84N
7C50,7C51	DCC810511	C2012F 1H 103Z A TD84N
7C100,7C102	DCC810571	C2012F 1H 104Z A TD0804N
7C104,7C105	DCE229201	SME-CE04W 1E 470M TC04R
7FL1,7FL2	DCL119361	BL02RN2-R62 TD04N
7IC1	DIC619101	NJM 4558M(TE3) TE1208L
7JP1,7JP2	DRZ831501	MCR10 000E TD0804N
7Q1,7Q2	DTR810221	2SA 1462-T1B Y34
7Q5,7Q6	DTR890841	IMX3 TE0804R
7Q7	DTR890841	IMX3 TE0804R
7Q8	DTR890851	IMH1 TE0804N
7Q9	DTR890551	DTC114EK/RN1402 TE0804L
7R1,7R2	DRZ833011	RK73H 2A 47ΩF TD0804N
7R3	DRZ833441	RK73H 2A 10ΩF TD0804N
7R4	DRZ832031	RK73H 2A 120ΩF TD0804N
7R5,7R6	DRZ832281	RK73H 2A 1.3KΩF TD0804N
7R7	DRZ832371	RK73H 2A 3.3KΩF TD0804N
7R10,7R12	DRZ832131	RK73H 2A 330ΩF TD0804N
7R17	DRZ833011	RK73H 2A 47ΩF TD0804N
7R18	DRZ832611	RK73H 2A 33KΩF TD0804N
7R24	DRZ832351	RK73H 2A 2.7KΩF TD0804N
7R25,7R26	DRZ832091	RK73H 2A 220ΩF TD0804N
7R27	DRZ832351	RK73H 2A 2.7KΩF TD0804N
7R28,7R29	DRZ832131	RK73H 2A 330ΩF TD0804N
7R32	DRZ832011	RK73H 2A 100ΩF TD0804N
7R33	DRZ832471	RK73H 2A 8.2KΩF TD0804N
7R34	DRZ832351	RK73H 2A 2.7KΩF TD0804N
7R37	DRZ832011	RK73H 2A 100ΩF TD0804N
7R38	DRZ832471	RK73H 2A 8.2KΩF TD0804N
7R39	DRZ832351	RK73H 2A 2.7KΩF TD0804N
7R40	DRZ832411	RK73H 2A 4.7KΩF TD0804N
7R41	DRZ832401	RK73H 2A 4.3KΩF TD0804N
7R42,7R43A	DRZ832201	RK73H 2A 620ΩF TD0804N
7R43B	DRZ832411	RK73H 2A 4.7KΩF TD0804N
7R44	DRZ832401	RK73H 2A 4.3KΩF TD0804N
7R45	DRZ832081	RK73H 2A 200ΩF TD0804N
7R46,7R47	DRZ832321	RK73H 2A 2.0KΩF TD0804N
7R48	DRZ832491	RK73H 2A 10KΩF TD0804N
7R49	DRZ832461	RK73H 2A 7.5KΩF TD0804N
7R50	DRZ832551	RK73H 2A 18KΩF TD0804N
7R51	DRZ832491	RK73H 2A 10KΩF TD0804N
7R52	DRZ832591	RK73H 2A 27KΩF TD0804N
7R53	DRZ832421	RK73H 2A 5.1KΩF TD0804N

SS-7805/04

CH SW&DLY LINE DRIV(9)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
9C18	DCC810511	C2012F 1H 103Z A TD84N
9C23	DCV819071	TZBX4 N100BA110 TE1208R
9C24	DCC816551	C2012CH 1H 390J A TD84N
9C28	DCC810841	C2012B 1H 102K A TD84N
9C30	DCC815891	C2012CH 1H 150J A TD84N
9C31	DCC810841	C2012B 1H 102K A TD84N
9C33	DCC815891	C2012CH 1H 150J A TD84N
9C36	DCC810511	C2012F 1H 103Z A TD84N
9C37	DCE229201	SME-CE04W 1E 470M TC04R
9C41	DCC810511	C2012F 1H 103Z A TD84N
9C42	DCE229201	SME-CE04W 1E 470M TC04R
9C54	DCC810571	C2012F 1H 104Z A TD0804N
9C55	DCC810511	C2012F 1H 103Z A TD84N
9C64	DCC810571	C2012F 1H 104Z A TD0804N
9C65	DCC810511	C2012F 1H 103Z A TD84N
9D1	DDD810241	1SS 272 TE0804R
9D2	DDD810141	MA 159A-(TX) TE0804L
9D3	DDD810241	1SS 272 TE0804R
9D4	DDD810141	MA 159A-(TX) TE0804L
9J4	DCN124751	FF3-34-S55
9JP4	DRZ831501	MCR10 000E TD0804N
9JP100 to 9JP110,9JP114,9JP116	DZB999011	JPW 01 TA21N
9Q1	DTR890761	IMX5 TE0804R
9Q2	DTR890841	IMX3 TE0804R
9Q3	DTR830371	2SC 3735B34/B35-T1B
9Q5,9Q6	DTR838661	2SC 2712LG TE85L
9R1 to 9R4	DRZ833011	RK73H 2A 47ΩF TD0804N
9R7,9R8	DRZ833441	RK73H 2A 10ΩF TD0804N
9R10,9R11	DRZ832511	RK73H 2A 12KΩF TD0804N
9R12	DRZ832301	RK73H 2A 1.6KΩF TD0804N
9R13	DRZ832291	RK73H 2A 1.5KΩF TD0804N
9R14	DRZ832301	RK73H 2A 1.6KΩF TD0804N
9R15	DRZ832291	RK73H 2A 1.5KΩF TD0804N
9R16	DRZ832011	RK73H 2A 100ΩF TD0804N
9R17	DRZ832251	RK73H 2A 1.0KΩF TD0804N
9R23	DRV810201	G4AT/ST-4TA 100Ω TE1208L
9R24,9R25	DRZ833011	RK73H 2A 47ΩF TD0804N
9R26,9R27	DRZ832131	RK73H 2A 330ΩF TD0804N
9R28	DRZ833441	RK73H 2A 10ΩF TD0804N
9R29	DRZ832061	RK73H 2A 160ΩF TD0804N
9R30	DRZ833081	RK73H 2A 91ΩF TD0804N
9R31	DRZ833441	RK73H 2A 10ΩF TD0804N
9R32	DRZ832061	RK73H 2A 160ΩF TD0804N
9R33	DRZ833081	RK73H 2A 91ΩF TD0804N
9R34	DRZ833011	RK73H 2A 47ΩF TD0804N
9R35	DRZ832331	RK73H 2A 2.2KΩF TD0804N
9R36 to 9R39	DRZ832341	RK73H 2A 2.4KΩF TD0804N
9R40	DRZ832011	RK73H 2A 100ΩF TD0804N
9R41,9R42	DRZ832031	RK73H 2A 120ΩF TD0804N
9R43	DRZ832011	RK73H 2A 100ΩF TD0804N
9R50	DRZ832331	RK73H 2A 2.2KΩF TD0804N
9R51	DRZ832251	RK73H 2A 1.0KΩF TD0804N
9R53	DRZ832391	RK73H 2A 3.9KΩF TD0804N
9R54	DRZ832011	RK73H 2A 100ΩF TD0804N
9R55	DRZ832451	RK73H 2A 6.8KΩF TD0804N
9R60	DRZ832331	RK73H 2A 2.2KΩF TD0804N
9R61	DRZ832251	RK73H 2A 1.0KΩF TD0804N
9R63	DRZ832391	RK73H 2A 3.9KΩF TD0804N
9R64	DRZ832011	RK73H 2A 100ΩF TD0804N
9R65	DRZ832451	RK73H 2A 6.8KΩF TD0804N

V CHARA AMP(10)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
10C9,10C12	DCC810511	C2012F 1H 103Z A TD84N
10C13,10C14	DCE229201	SME-CE04W 1E 470M TC04R
10C18,10C19,10C39	DCC810511	C2012F 1H 103Z A TD84N
10C43	DCC816551	C2012CH 1H 390J A TD84N
10C49	DCE249481	SME-CE04W 1J 220M TC04R
10C50	DCE229201	SME-CE04W 1E 470M TC04R
10C61	DCC159011	CK45B 2H 102K TC04N
10C63,10C64	DCC810511	C2012F 1H 103Z A TD84N
10C100	DCE229201	SME-CE04W 1E 470M TC04R
10C101	DCC810511	C2012F 1H 103Z A TD84N
10C102	DCE219051	SME-CE04W 1A 101M TC04R
10C103	DCC810511	C2012F 1H 103Z A TD84N
10D1 to 10D4	DDD019071	1SS 120 TA21R
10D5	DDD830121	RD6.8M-T1B B/MA3068 TE0804L
10FL1 to 10FL3	DCL119361	BL02RN2-R62 TD04N
10IC1	DIC889171	TC 7W04F(TE12L) TE1208R
10J1	DCN124721	FF3-34-R15
10J2	DCN124701	FF3-18-R15
10Q1,10Q2	DTR890841	IMX3 TE0804R
10Q3	DTR890861	IMZ1 TE0804R
10Q4 to 10Q7	DTR139011	2SC 1815GR TPER1
10Q8	DTR139351	2SC 2901-T
10R1	DRZ832011	RK73H 2A 100ΩF TD0804N
10R4	DRE137681	EF1/4S 150ΩF TA21N
10R5	DRZ832071	RK73H 2A 180ΩF TD0804N
10R6 to 10R8	DRZ832011	RK73H 2A 100ΩF TD0804N
10R9 to 10R11	DRZ832221	RK73H 2A 750ΩF TD0804N
10R12	DRZ832411	RK73H 2A 4.7KΩF TD0804N
10R13	DRZ832471	RK73H 2A 8.2KΩF TD0804N
10R14	DRE137971	EF1/4S 2.4KΩF TA21N
10R15	DRE137881	EF1/4S 1.0KΩF TA21N
10R16,10R17	DRZ832031	RK73H 2A 120ΩF TD0804N
10R18	DRE137701	EF1/4S 180ΩF TA21N
10R20	DRZ832021	RK73H 2A 110ΩF TD0804N
10R21,10R22	DRZ832031	RK73H 2A 120ΩF TD0804N
10R23	DRZ832021	RK73H 2A 110ΩF TD0804N
10R24	DRV810241	G4AT/ST-4TA 2KΩ TE1208L
10R25	DRZ832231	RK73H 2A 820ΩF TD0804N
10R26,10R27	DRZ833511	RK73H 2A 22ΩF TD0804N
10R28,10R29	DRE137811	EF1/4S 510ΩF TA21N
10R30	DRE137761	EF1/4S 330ΩF TA21N
10R31,10R32	DRE137811	EF1/4S 510ΩF TA21N
10R33	DRZ833511	RK73H 2A 22ΩF TD0804N
10R34	DRE137791	EF1/4S 430ΩF TA21N
10R35	DRE137801	EF1/4S 470ΩF TA21N
10R36	DRE137761	EF1/4S 330ΩF TA21N
10R37	DRE137801	EF1/4S 470ΩF TA21N
10R38	DRE137791	EF1/4S 430ΩF TA21N
10R39	DRE138201	EF1/4S 22KΩF TA21N
10R40	DRE137561	EF1/4S 47ΩF TA21N
10R41	DRE138201	EF1/4S 22KΩF TA21N
10R42	DRE137561	EF1/4S 47ΩF TA21N
10R43	DRZ832171	RK73H 2A 470ΩF TD0804N
10R44	DRZ832301	RK73H 2A 1.6KΩF TD0804N
10R49,10R50	DRZ832971	RK73H 2A 1.0MΩF TD0804N
10R51	DRZ833511	RK73H 2A 22ΩF TD0804N
10R61,10R62	DRZ832971	RK73H 2A 1.0MΩF TD0804N
10R63	DRZ832011	RK73H 2A 100ΩF TD0804N

SS-7805/04

V MAIN AMP(11) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
11C1,11C6,11C7	DCC810511	C2012F 1H 103Z A TD84N
11C22	DCV819051	TZBX4 Z030BA110 TE1208R
11C23	DCV819071	TZBX4 N100BA110 TE1208R
11C24	DCC816481	C2012CH 1H 090D A TD84N
11C27	DCC816491	C2012CH 1H 100D A TD84N
11C29,11C30	DCC810841	C2012B 1H 102K A TD84N
11C36,11C37	DCC810511	C2012F 1H 103Z A TD84N
11C39A	DCC816531	C2012CH 1H 270J A TD84N
11C53	DCC816601	C2012CH 1H 101J A TD84N
11C55,11C59	DCC810511	C2012F 1H 103Z A TD84N
11C66	DCC816491	C2012CH 1H 100D A TD84N
11C67	DCC810511	C2012F 1H 103Z A TD84N
11C75	DCC816491	C2012CH 1H 100D A TD84N
11C76,11C77	DCC810841	C2012B 1H 102K A TD84N
11C78,11C79,11C84,11C85,11C89	DCC810511	C2012F 1H 103Z A TD84N
11C92	DCC816551	C2012CH 1H 390J A TD84N
11C100	DCC810511	C2012F 1H 103Z A TD84N
11C101	DCE229201	SME-CE04W 1E 470M TC04R
11C102	DCC810511	C2012F 1H 103Z A TD84N
11C103	DCE229201	SME-CE04W 1E 470M TC04R
11C104,11C105	DCC810511	C2012F 1H 103Z A TD84N
11D1,11D2	DDD810401	HVU 202A3 TE0804R
11D4 to 11D7	DDD019071	1SS 120 TA21R
11IC1	DIC619101	NJM 4558M(TE3) TE1208L
11Q1	DTR890841	IMX3 TE0804R
11Q2	DTR890761	IMX5 TE0804R
11Q3,11Q4	DTR810221	2SA 1462-T1B Y34
11Q5	DTR838661	2SC 2712LG TE85L
11Q6	DTR890841	IMX3 TE0804R
11Q7 to 11Q10	DTR165031	2SC 2570A-T
11Q11	DTR890791	IMD3 TE0804R
11Q13	DTR810041	2SA 1162Y TE85L
11Q14	DTR139351	2SC 2901-T
11R1,11R2	DRZ832011	RK73H 2A 100ΩF TD0804N
11R4,11R5	DRZ833011	RK73H 2A 47ΩF TD0804N
11R6	DRE137721	EF1/4S 220ΩF TA21N
11R7 to 11R10	DRZ832461	RK73H 2A 7.5KΩF TD0804N
11R11,11R12	DRZ833011	RK73H 2A 47ΩF TD0804N
11R13 to 11R18	DRZ832431	RK73H 2A 5.6KΩF TD0804N
11R19	DRZ832081	RK73H 2A 200ΩF TD0804N
11R20,11R21	DRE138141	EF1/4S 12KΩF TA21N
11R22	DRZ832251	RK73H 2A 1.0KΩF TD0804N
11R23	DRZ832291	RK73H 2A 1.5KΩF TD0804N
11R24	DRZ832401	RK73H 2A 4.3KΩF TD0804N
11R25	DRZ832311	RK73H 2A 1.8KΩF TD0804N
11R26	DRE137851	EF1/4S 750ΩF TA21N
11R27	DRZ832521	RK73H 2A 13KΩF TD0804N
11R28	DRZ833511	RK73H 2A 22ΩF TD0804N
11R29	DRZ832011	RK73H 2A 100ΩF TD0804N
11R30	DRZ833511	RK73H 2A 22ΩF TD0804N
11R31	DRZ832011	RK73H 2A 100ΩF TD0804N
11R32	DRZ833051	RK73H 2A 68ΩF TD0804N
11R33	DRZ833041	RK73H 2A 62ΩF TD0804N
11R34,11R35	DRZ833061	RK73H 2A 75ΩF TD0804N
11R36	DRZ832301	RK73H 2A 1.6KΩF TD0804N
11R37,11R38	DRZ832411	RK73H 2A 4.7KΩF TD0804N
11R39	DRZ832051	RK73H 2A 150ΩF TD0804N
11R41	DRV810251	G4AT/ST-4TA 5KΩ TE1208L
11R42	DRZ832231	RK73H 2A 820ΩF TD0804N
11R44 to 11R47	DRZ832021	RK73H 2A 110ΩF TD0804N
11R51,11R52	DRZ833011	RK73H 2A 47ΩF TD0804N
11R53,11R54	DRE138121	EF1/4S 10KΩF TA21N
11R55 to 11R58	DRZ832451	RK73H 2A 6.8KΩF TD0804N

V MAIN AMP(11) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
11R59	DRE137721	EF1/4S 220ΩF TA21N
11R60,11R61	DRZ833511	RK73H 2A 22ΩF TD0804N
11R62 to 11R65	DRE137811	EF1/4S 510ΩF TA21N
11R66	DRE137551	EF1/4S 43ΩF TA21N
11R67,11R68	DRZ832571	RK73H 2A 22KΩF TD0804N
11R69,11R70	DRZ833011	RK73H 2A 47ΩF TD0804N
11R71 to 11R74	DRE137791	EF1/4S 430ΩF TA21N
11R75	DRE137551	EF1/4S 43ΩF TA21N
11R76,11R77	DRE137581	EF1/4S 56ΩF TA21N
11R78	DRZ832491	RK73H 2A 10KΩF TD0804N
11R79	DRZ832571	RK73H 2A 22KΩF TD0804N
11R80	DRZ832451	RK73H 2A 6.8KΩF TD0804N
11R81	DRZ832411	RK73H 2A 4.7KΩF TD0804N
11R82	DRZ832471	RK73H 2A 8.2KΩF TD0804N
11R83	DDD880081	DTN-T203K 103KS TD0804N
11R84	DRZ832361	RK73H 2A 3.0KΩF TD0804N
11R90,11R91	DRZ832491	RK73H 2A 10KΩF TD0804N
11R92	DRZ832171	RK73H 2A 470ΩF TD0804N
11R93	DRZ832301	RK73H 2A 1.6KΩF TD0804N
11R94	DDD880081	DTN-T203K 103KS TD0804N

SS-7805/04

V OUTPUT AMP(12)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
12C8	DCC139501	CK45F 1H 103ZYR TC04N
12C9	DCE249481	SME-CE04W 1J 220M TC04R
12C10	DCC159011	CK45B 2H 102K TC04N
12C11	DCE249481	SME-CE04W 1J 220M TC04R
12C17,12C21,12C23	DCC139271	UP050B 101K TA21N
12C57,12C100	DCC139501	CK45F 1H 103ZYR TC04N
12C101	DCE229201	SME-CE04W 1E 470M TC04R
12C102	DCC139501	CK45F 1H 103ZYR TC04N
12C103	DCE229201	SME-CE04W 1E 470M TC04R
12C104	DCC159011	CK45B 2H 102K TC04N
12C105	DCC139501	CK45F 1H 103ZYR TC04N
12C107	DCC159011	CK45B 2H 102K TC04N
12C108	DCC171931	DE1610F 103Z 3K
12D1,12D2	DDD019071	1SS 120 TA21R
12D3,12D4	DDD038891	RD33ESB/HZS33NB TA21R
12FFC7	AHB201711	FFC-18P-L040-P1.25
12IC1	DIC614101	NJM 082D (JRC)
12J1	DCN124731	FF3-18-S55
12J2	DSK010251	CRT socket E-2025 UL-I
12L1,12L2	DCL151301	Peaking coil
12L3,12L4	DCL119361	BL02RN2-R62 TD04N
12P3	KHB177511	SS-7810 X SIG CABLE UL-L
12P4	KHB177421	SS-7810 CRT CABLE 2 UL-I
12PB3	KPN362641	CRT BOARD UL-M
12Q1,12Q2	DTR191331	MRF 544
12Q7	DTR139011	2SC 1815GR TPER1
12Q8	DTR119011	2SA 1015Y TPER1
12R1	DRE137641	EF1/4S 100ΩF TA21N
12R2,12R3	DRE137561	EF1/4S 47ΩF TA21N
12R4	DRE137701	EF1/4S 180ΩF TA21N
12R5	DRE137401	EF1/4S 10ΩF TA21N
12R6	DRE137701	EF1/4S 180ΩF TA21N
12R7	DRE137401	EF1/4S 10ΩF TA21N
12R8,12R9	DRS341201	RSS3 330ΩJ L20
12R10	DRS331471	RSS2 150ΩJ L15
12R16	DRE138361	EF1/4S 100KΩF TA21N
12R17	DRE138201	EF1/4S 22KΩF TA21N
12R18	DRE138181	EF1/4S 18KΩF TA21N
12R19	DRE138201	EF1/4S 22KΩF TA21N
12R20	DRE138361	EF1/4S 100KΩF TA21N
12R21	DRE138201	EF1/4S 22KΩF TA21N
12R22	DRE138121	EF1/4S 10KΩF TA21N
12R23	DRE137641	EF1/4S 100ΩF TA21N
12R56	DRE138281	EF1/4S 47KΩF TA21N
12R57	DRE138291	EF1/4S 51KΩF TA21N
12R58	DRE138211	EF1/4S 24KΩF TA21N
12R59	DRE137881	EF1/4S 1.0KΩF TA21N
12R60	DRE138051	EF1/4S 5.1KΩF TA21N
12R104 to 12R107	DRD147401	PSS1/2S 100ΩJ TA21N

CH1 TRIG PREAMP (13)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
13C3	DCC816561	C2012CH 1H 470J A TD84N
13C7	DCC810571	C2012F 1H 104Z A TD0804N
13C8	DCC810511	C2012F 1H 103Z A TD84N
13C12,13C14	DCC810841	C2012B 1H 102K A TD84N
13C25	DCC816601	C2012CH 1H 101J A TD84N
13C26	DCC816381	C2012CH 1H 020C A TD84N
1328,13C30A	DCC810511	C2012F 1H 103Z A TD84N
13C30B	DCC810571	C2012F 1H 104Z A TD0804N
13C44	DCC816551	C2012CH 1H 390J A TD84N
13C45,13C46	DCC810511	C2012F 1H 103Z A TD84N
13C54	DCC816441	C2012CH 1H 050C A TD84N
13C56	DCC810511	C2012F 1H 103Z A TD84N
13C74	DCC816561	C2012CH 1H 470J A TD84N
13C100	DCC810511	C2012F 1H 103Z A TD84N
13C101	DCE229201	SME-CE04W 1E 470M TC04R
13C102	DCC810511	C2012F 1H 103Z A TD84N
13C103	DCE229201	SME-CE04W 1E 470M TC04R
13C104,13C200	DCC810511	C2012F 1H 103Z A TD84N
13D1	DDD830341	RD6.8M-T1B B2
13IC1	DIC619191	NJM 082M(TE3) TE1208L
13JP100,13JP101	DZB999011	JPW 01 TA21N
13Q1,13Q2	DTR810221	2SA 1462-T1B Y34
13Q4	DTR810041	2SA 1162Y TE85L
13Q5	DTR890821	IMT2 TE0804R
13Q6	DTR890761	IMX5 TE0804R
13R1 to 13R3	DRZ833011	RK73H 2A 47ΩF TD0804N
13R6	DRZ833031	RK73H 2A 56ΩF TD0804N
13R7,13R8	DRZ832281	RK73H 2A 1.3KΩF TD0804N
13R12,13R14	DRZ832171	RK73H 2A 470ΩF TD0804N
13R25,13R26	DRZ832141	RK73H 2A 360ΩF TD0804N
13R27	DRZ832341	RK73H 2A 2.4KΩF TD0804N
13R28	DRZ832351	RK73H 2A 2.7KΩF TD0804N
13R29,13R30,13R33,13R34	DRZ832411	RK73H 2A 4.7KΩF TD0804N
13R35 to 13R38	DRZ832351	RK73H 2A 2.7KΩF TD0804N
13R41	DRZ832201	RK73H 2A 620ΩF TD0804N
13R42	DRZ832011	RK73H 2A 100ΩF TD0804N
13R44	DRZ832391	RK73H 2A 3.9KΩF TD0804N
13R45	DRZ832691	RK73H 2A 68KΩF TD0804N
13R46,13R47	DRZ832701	RK73H 2A 75KΩF TD0804N
13R48	DRZ832711	RK73H 2A 82KΩF TD0804N
13R49	DRZ832631	RK73H 2A 39KΩF TD0804N
13R50	DRZ832381	RK73H 2A 3.6KΩF TD0804N
13R51	DRZ832691	RK73H 2A 68KΩF TD0804N
13R52	DRZ832491	RK73H 2A 10KΩF TD0804N
13R53	DRZ832221	RK73H 2A 750ΩF TD0804N
13R54	DRZ832411	RK73H 2A 4.7KΩF TD0804N
13R55	DRZ832051	RK73H 2A 150ΩF TD0804N
13R56	DRZ832671	RK73H 2A 56KΩF TD0804N
13R60	DRZ832371	RK73H 2A 3.3KΩF TD0804N
13R74,13R80	DRZ832011	RK73H 2A 100ΩF TD0804N
13R100	DRV419371	GF06VT2/CT-6TH00 10KΩ (T)

CH2 TRIG PREAMP (14)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
14C3	DCC816561	C2012CH 1H 470J A TD84N
14C7	DCC810571	C2012F 1H 104Z A TD0804N
14C8	DCC810511	C2012F 1H 103Z A TD84N
14C12,14C14	DCC810841	C2012B 1H 102K A TD84N
14C25	DCC816601	C2012CH 1H 101J A TD84N
14C26	DCC816421	C2012CH 1H 040C A TD84N
14C28,14C30A,14C30B	DCC810511	C2012F 1H 103Z A TD84N
14C42	DCC816451	C2012CH 1H 060D A TD84N
14C43,14C46,14C47	DCC810511	C2012F 1H 103Z A TD84N
14C74	DCC816561	C2012CH 1H 470J A TD84N
14C200	DCC810511	C2012F 1H 103Z A TD84N
14D1	DDD830341	RD6.8M-T1B B2
14D3,14D4	DDD810241	1SS 272 TE0804R
14JP1	DRZ831501	MCR10 000E TD0804N
14JP100	DZB999011	JPW 01 TA21N
14Q1,14Q2	DTR810221	2SA 1462-T1B Y34
14Q4	DTR810041	2SA 1162Y TE85L
14Q5	DTR890821	IMT2 TE0804R
14Q6	DTR890761	IMX5 TE0804R
14Q7	DTR810221	2SA 1462-T1B Y34
14Q8	DTR830121	2SC 3123 TE85L
14R1 to 14R3	DRZ833011	RK73H 2A 47ΩF TD0804N
14R6	DRZ833031	RK73H 2A 56ΩF TD0804N
14R7,14R8	DRZ832281	RK73H 2A 1.3KΩF TD0804N
14R12,14R14	DRZ832171	RK73H 2A 470ΩF TD0804N
14R25,14R26	DRZ832141	RK73H 2A 360ΩF TD0804N
14R27	DRZ832341	RK73H 2A 2.4KΩF TD0804N
14R28	DRZ832351	RK73H 2A 2.7KΩF TD0804N
14R29,14R30,14R33,14R34	DRZ832411	RK73H 2A 4.7KΩF TD0804N
14R35 to 14R38	DRZ832351	RK73H 2A 2.7KΩF TD0804N
14R41	DRZ832201	RK73H 2A 620ΩF TD0804N
14R42	DRZ833011	RK73H 2A 47ΩF TD0804N
14R43	DRZ832341	RK73H 2A 2.4KΩF TD0804N
14R44	DRZ833011	RK73H 2A 47ΩF TD0804N
14R45	DRZ832051	RK73H 2A 150ΩF TD0804N
14R47,14R48	DRZ832341	RK73H 2A 2.4KΩF TD0804N
14R49,14R50	DRZ832491	RK73H 2A 10KΩF TD0804N
14R51	DRZ833011	RK73H 2A 47ΩF TD0804N
14R74	DRZ832011	RK73H 2A 100ΩF TD0804N

A TRIG SELECT(16)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
16C5 to 16C8	DCC810511	C2012F 1H 103Z A TD84N
16C9	DCC810571	C2012F 1H 104Z A TD0804N
16C10,16C13,16C16,16C18,16C20	DCC810511	C2012F 1H 103Z A TD84N
16C24	DCC810841	C2012B 1H 102K A TD84N
16C25	DCE249321	SME-CE04W 1H 2R2M TC04R
16C26	DCE229201	SME-CE04W 1E 470M TC04R
16C100	DCC810511	C2012F 1H 103Z A TD84N
16C101,16C102	DCC810841	C2012B 1H 102K A TD84N
16C200	DCE229201	SME-CE04W 1E 470M TC04R
16C201	DCC810511	C2012F 1H 103Z A TD84N
16D1,16D2	DDD810241	1SS 272 TE0804R
16D3	DDD830341	RD6.8M-T1B B2
16IC1	DIC495081	TC 4052BF (EL) TE1612B
16Q1 to 16Q4	DTR860161	2SK 508 K51 TE0804L
16Q5	DTR890861	IMZ1 TE0804R
16Q6	DTR860161	2SK 508 K51 TE0804L
16R1 to 16R4	DRZ832591	RK73H 2A 27KΩF TD0804N
16R5 to 16R8	DRZ831501	MCR10 000E TD0804N
16R9 to 16R12	DRZ832701	RK73H 2A 75KΩF TD0804N
16R13	DRZ832051	RK73H 2A 150ΩF TD0804N
16R14	DRZ832591	RK73H 2A 27KΩF TD0804N
16R15,16R16	DRZ832401	RK73H 2A 4.3KΩF TD0804N
16R18,16R19	DRZ832271	RK73H 2A 1.2KΩF TD0804N
16R20	DRZ832011	RK73H 2A 100ΩF TD0804N
16R24	DRZ832521	RK73H 2A 13KΩF TD0804N
16R26	DRZ832251	RK73H 2A 1.0KΩF TD0804N
16R74	DRZ832011	RK73H 2A 100ΩF TD0804N
16R100,16R103,16R106	DRZ833061	RK73H 2A 75ΩF TD0804N

A TRIG AMP(17) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
17C2	DCE949441	SME 50VB-1(M)BP TC04N
17C4,17C5	DCC810511	C2012F 1H 103Z A TD84N
17C12	DCF121721	MF-3S 1H 103J TC04N
17C16,17C20,17C23,17C24	DCC810511	C2012F 1H 103Z A TD84N
17C48	DCC810571	C2012F 1H 104Z A TD0804N
17C51,17C53,17C56	DCC810511	C2012F 1H 103Z A TD84N
17C57	DCC810841	C2012B 1H 102K A TD84N
17C58	DCE219051	SME-CE04W 1A 101M TC04R
17C59	DCC810841	C2012B 1H 102K A TD84N
17C64,17C66	DCC810511	C2012F 1H 103Z A TD84N
17C67	DCE229201	SME-CE04W 1E 470M TC04R
17C68,17C69,17C100,17C101	DCC810511	C2012F 1H 103Z A TD84N
17C105	DCC810571	C2012F 1H 104Z A TD0804N
17C108	DCC810511	C2012F 1H 103Z A TD84N
17C109 to 17C111	DCC810841	C2012B 1H 102K A TD84N
17D1	DDD810241	1SS 272 TE0804R
17IC1	DIC499641	TC4053/MC14053BF EL TE1612B
17IC2	DIC619101	NJM 4558M(TE3) TE1208L
17IC3	DIC623501	Mpc 1663G-E1 TE1208F
17JP1	DRZ831501	MCR10 000E TD0804N
17JP100	DZB999011	JPW 01 TA21N
17Q1	DTR838661	2SC 2712LG TE85L
17Q2	DTR890841	IMX3 TE0804R
17Q4	DTR890761	IMX5 TE0804R
17Q5	DTR890841	IMX3 TE0804R
17Q6	DTR890861	IMZ1 TE0804R
17R1	DRZ832331	RK73H 2A 2.2KΩF TD0804N
17R2	DRZ832491	RK73H 2A 10KΩF TD0804N
17R3	DRZ833011	RK73H 2A 47ΩF TD0804N
17R4	DRZ832051	RK73H 2A 150ΩF TD0804N
17R5	DRZ832411	RK73H 2A 4.7KΩF TD0804N
17R6	DRZ832401	RK73H 2A 4.3KΩF TD0804N
17R7	DRZ832571	RK73H 2A 22KΩF TD0804N
17R8	DRZ832561	RK73H 2A 20KΩF TD0804N
17R9	DRZ832361	RK73H 2A 3.0KΩF TD0804N
17R10	DRZ832571	RK73H 2A 22KΩF TD0804N
17R11	DRZ832491	RK73H 2A 10KΩF TD0804N
17R12	DRZ832301	RK73H 2A 1.6KΩF TD0804N
17R13	DRZ832491	RK73H 2A 10KΩF TD0804N
17R14,17R15	DRZ833011	RK73H 2A 47ΩF TD0804N
17R16	DRZ832711	RK73H 2A 82KΩF TD0804N
17R17	DRZ832491	RK73H 2A 10KΩF TD0804N
17R18	DRZ832571	RK73H 2A 22KΩF TD0804N
17R19	DRZ832741	RK73H 2A 110KΩF TD0804N
17R20	DRZ832491	RK73H 2A 10KΩF TD0804N
17R21	DRZ832671	RK73H 2A 56KΩF TD0804N
17R22	DRZ832441	RK73H 2A 6.2KΩF TD0804N
17R23	DRZ832491	RK73H 2A 10KΩF TD0804N
17R24	DRZ832301	RK73H 2A 1.6KΩF TD0804N
17R25,17R26	DRZ832291	RK73H 2A 1.5KΩF TD0804N
17R27,17R28	DRZ832191	RK73H 2A 560ΩF TD0804N
17R31	DRZ832501	RK73H 2A 11KΩF TD0804N
17R32	DRZ831501	MCR10 000E TD0804N
17R33	DRZ832501	RK73H 2A 11KΩF TD0804N
17R34	DRZ831501	MCR10 000E TD0804N
17R36	DRZ832131	RK73H 2A 330ΩF TD0804N
17R37	DRZ832351	RK73H 2A 2.7KΩF TD0804N
17R46,17R47	DRZ832011	RK73H 2A 100ΩF TD0804N
17R48,17R49	DRZ832181	RK73H 2A 510ΩF TD0804N
17R50	DRZ832351	RK73H 2A 2.7KΩF TD0804N
17R51	DRZ832421	RK73H 2A 5.1KΩF TD0804N
17R52	DRZ832391	RK73H 2A 3.9KΩF TD0804N
17R53,17R54	DRZ832271	RK73H 2A 1.2KΩF TD0804N

A TRIG AMP(17) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
17R55	DRZ832261	RK73H 2A 1.1KΩF TD0804N
17R56	DRZ832071	RK73H 2A 180ΩF TD0804N
17R57	DRZ832011	RK73H 2A 100ΩF TD0804N
17R58	DRZ832071	RK73H 2A 180ΩF TD0804N
17R59 to 17R61	DRZ832011	RK73H 2A 100ΩF TD0804N
17R62,17R63	DRZ832341	RK73H 2A 2.4KΩF TD0804N
17R64 to 17R67	DRZ832441	RK73H 2A 6.2KΩF TD0804N
17R68,17R69	DRZ832251	RK73H 2A 1.0KΩF TD0804N
17R70	DRZ833011	RK73H 2A 47ΩF TD0804N
17R71	DRZ832351	RK73H 2A 2.7KΩF TD0804N

SS-7805/04

TV SYNC SEP(19)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
19C2,19C3	DCC810511	C2012F 1H 103Z A TD84N
19C6	DCE919461	SME 10VB-100(M)BP TC04N
19C15	DCC816601	C2012CH 1H 101J A TD84N
19C16	DCE929841	SME 16VB-10(M)BP TC04N
19C17	DCE949441	SME 50VB-1(M)BP TC04N
19C22,19C100	DCC810511	C2012F 1H 103Z A TD84N
19C101	DCE219051	SME-CE04W 1A 101M TC04R
19C102	DCC810511	C2012F 1H 103Z A TD84N
19C103	DCE219051	SME-CE04W 1A 101M TC04R
19C104,19C105,19C107	DCC810511	C2012F 1H 103Z A TD84N
19C109,19C110	DCC810841	C2012B 1H 102K A TD84N
19C111	DCC810511	C2012F 1H 103Z A TD84N
19D1,19D4,19D5	DDD810241	1SS 272 TE0804R
19D7	DDD830341	RD6.8M-T1B B2
19D8	DDD830101	RD5.6M-T1B B/MA3056 TE0804L
19IC1	DIC623501	µPC 1663G-E1 TE1208F
19IC2	DIC889161	TC 4W53F(TE12L) TE1208R
19IC3	DIC619191	NJM 082M(TE3) TE1208L
19IC4	DIC639031	NJM 2903M(TE3) TE1208L
19JP100	DRD137001	PSS1/4S 2.2ΩJ TA21N
19JP101	DZB999011	JPW 01 TA21N
19Q1	DTR838661	2SC 2712LG TE85L
19Q2	DTR890831	IMD2 TE0804R
19Q3	DTR860161	2SK 508 K51 TE0804L
19R1	DRZ832471	RK73H 2A 8.2KΩF TD0804N
19R2	DRZ832011	RK73H 2A 100ΩF TD0804N
19R3	DRZ832431	RK73H 2A 5.6KΩF TD0804N
19R4	DRZ832561	RK73H 2A 20KΩF TD0804N
19R5	DRZ832171	RK73H 2A 470ΩF TD0804N
19R6	DRZ832251	RK73H 2A 1.0KΩF TD0804N
19R7	DRZ832291	RK73H 2A 1.5KΩF TD0804N
19R8	DRZ832491	RK73H 2A 10KΩF TD0804N
19R9,19R10	DRZ832251	RK73H 2A 1.0KΩF TD0804N
19R11,19R12	DRZ832011	RK73H 2A 100ΩF TD0804N
19R13	DRZ832491	RK73H 2A 10KΩF TD0804N
19R14	DRZ832731	RK73H 2A 100KΩF TD0804N
19R15	DRZ832501	RK73H 2A 11KΩF TD0804N
19R16	DRZ832731	RK73H 2A 100KΩF TD0804N
19R17,19R18	DRZ832971	RK73H 2A 1.0MΩF TD0804N
19R22	DRZ832561	RK73H 2A 20KΩF TD0804N
19R23	DRZ832121	RK73H 2A 300ΩF TD0804N
19R24	DRZ832251	RK73H 2A 1.0KΩF TD0804N
19R27	DRZ833011	RK73H 2A 47ΩF TD0804N

TLC CIRCUIT(20)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
20C34,20C36 to 20C39	DCC810511	C2012F 1H 103Z A TD84N
20C40	DCE219051	SME-CE04W 1A 101M TC04R
20C41 to 20C43	DCC810571	C2012F 1H 104Z A TD0804N
20C44	DCE219051	SME-CE04W 1A 101M TC04R
20C50	DCC816561	C2012CH 1H 470J A TD84N
20C53,20C54	DCC816601	C2012CH 1H 101J A TD84N
20C56	DCC816491	C2012CH 1H 100D A TD84N
20C58	DCC810841	C2012B 1H 102K A TD84N
20C59	DCC816601	C2012CH 1H 101J A TD84N
20FL1	DCL119361	BL02RN2-R62 TD04N
20IC1	DIC470081	CD107BPF (NEC)
20IC3	DHF012991	EXO-3C 20.000MHZ
20JP100 to 20JP104	DZB999011	JPW 01 TA21N
20R30	DRZ832011	RK73H 2A 100ΩF TD0804N
20R33,20R37	DRZ832131	RK73H 2A 330ΩF TD0804N
20R42 to 20R44	DRZ832011	RK73H 2A 100ΩF TD0804N
20R46	DRZ832321	RK73H 2A 2.0KΩF TD0804N
20R47	DRZ832011	RK73H 2A 100ΩF TD0804N
20R48,20R49	DRZ832251	RK73H 2A 1.0KΩF TD0804N

A SAWTOOTH BUFF(21)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
21C2	DCC816491	C2012CH 1H 100D A TD84N
21C6,21C7,21C10,21C12,21C14,21C17,21C19	DCC810511	C2012F 1H 103Z A TD84N
21C21	DCC810841	C2012B 1H 102K A TD84N
21C22	DCC810511	C2012F 1H 103Z A TD84N
21C25	DCC816491	C2012CH 1H 100D A TD84N
21C26	DCC810571	C2012F 1H 104Z A TD0804N
21C32	DCC810511	C2012F 1H 103Z A TD84N
21C33	DCE229201	SME-CE04W 1E 470M TC04R
21C100	DCE219051	SME-CE04W 1A 101M TC04R
21D1	DDD810261	HSM 88AS TL
21D2	DDD810241	1SS 272 TE0804R
21D3	DDD810261	HSM 88AS TL
21D4	DDD810521	1SS 307 TE0804L
21D5	DDD830231	RD20M-T1B B/MA3200 TE0804L
21D6	DDD830161	RD10M-T1B B/MA3100 TE0804L
21D7,21D8	DDD830201	RD15M-T1B B/MA3150 TE0804L
21D9	DDD830061	RD3.9M-T1B B/MA3039 TE0804L
21D10	DDD810261	HSM 88AS TL
21D11	DDD810241	1SS 272 TE0804R
21IC1	DIC499681	74HC14F TE1612B
21JP100 to 21JP103	DZB999011	JPW 01 TA21N
21Q1	DTR890861	IMZ1 TE0804R
21Q2	DTR890841	IMX3 TE0804R
21Q3	DTR830371	2SC 3735B34/B35-T1B
21Q4	DTR838661	2SC 2712LG TE85L
21Q5	DTR830081	2SC 2714 TE85L
21Q6	DTR860171	FC13-TL TE0804L
21Q7	DTR838661	2SC 2712LG TE85L
21Q8	DTR890861	IMZ1 TE0804R
21Q9,21Q10	DTR838661	2SC 2712LG TE85L
21R1	DRZ832301	RK73H 2A 1.6KΩF TD0804N
21R2,21R3,21R5	DRZ832251	RK73H 2A 1.0KΩF TD0804N
21R6	DRZ832151	RK73H 2A 390ΩF TD0804N
21R7,21R8	DRZ832341	RK73H 2A 2.4KΩF TD0804N
21R9	DRZ832371	RK73H 2A 3.3KΩF TD0804N
21R10	DRZ832121	RK73H 2A 300ΩF TD0804N
21R11	DRZ832451	RK73H 2A 6.8KΩF TD0804N
21R12	DRZ832421	RK73H 2A 5.1KΩF TD0804N
21R13	DRZ832411	RK73H 2A 4.7KΩF TD0804N
21R14	DRZ832211	RK73H 2A 680ΩF TD0804N
21R15	DRZ832081	RK73H 2A 200ΩF TD0804N
21R16	DRZ832061	RK73H 2A 160ΩF TD0804N
21R17	DRZ832221	RK73H 2A 750ΩF TD0804N
21R18	DRZ832011	RK73H 2A 100ΩF TD0804N
21R19	DRZ832091	RK73H 2A 220ΩF TD0804N
21R20	DRZ832011	RK73H 2A 100ΩF TD0804N
21R21,21R22	DRZ832551	RK73H 2A 18KΩF TD0804N
21R23	DRZ832591	RK73H 2A 27KΩF TD0804N
21R24	DRZ832011	RK73H 2A 100ΩF TD0804N
21R25	DRZ832471	RK73H 2A 8.2KΩF TD0804N
21R26,21R27	DRZ832491	RK73H 2A 10KΩF TD0804N
21R28	DRZ832251	RK73H 2A 1.0KΩF TD0804N
21R32	DRZ832361	RK73H 2A 3.0KΩF TD0804N

A TIMING(23)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
23C1,23C2	DCC810511	C2012F 1H 103Z A TD84N
23C4	DCC810571	C2012F 1H 104Z A TD0804N
23C5	DCC810511	C2012F 1H 103Z A TD84N
23C15,23C17	DCC816601	C2012CH 1H 101J A TD84N
23C18,23C21,23C23	DCC810571	C2012F 1H 104Z A TD0804N
23C25,23C26	DCC810841	C2012B 1H 102K A TD84N
23C28	DCC810571	C2012F 1H 104Z A TD0804N
23C29 to 23C32	DCC816601	C2012CH 1H 101J A TD84N
23C100	DCF420401	2222 371 1µF J
23C101	DCF128461	ECQP 1H 103GZ
23C102	DCC816591	C2012CH 1H 820J A TD84N
23C103	DCC816471	C2012CH 1H 080D A TD84N
23C105	DCF139011	MF-3 2A 103K TC04N
23C106	DCC810511	C2012F 1H 103Z A TD84N
23C107	DCC810571	C2012F 1H 104Z A TD0804N
23C110	DCF139011	MF-3 2A 103K TC04N
23C111	DCC810571	C2012F 1H 104Z A TD0804N
23D6	DDD810241	1SS 272 TE0804R
23D7	DDD830271	RD24M-T1B B3 TE0804L
23D8	DDD830341	RD6.8M-T1B B2
23D9	DDD830041	RD3.3M-T1B B/MA3033 TE0804L
23D10	DDD830201	RD15M-T1B B/MA3150 TE0804L
23D11	DDD810241	1SS 272 TE0804R
23IC1	DIC619171	NJM 353M(TE3) TE1208L
23IC2	DIC619101	NJM 4558M(TE3) TE1208L
23Q1 to 23Q4	DTR838661	2SC 2712LG TE85L
23Q5	DTR818021	2SA 811A-T1B C17/C18
23Q6	DTR838661	2SC 2712LG TE85L
23Q8 to 23Q11	DTR818021	2SA 811A-T1B C17/C18
23Q13,23Q14	DTR830081	2SC 2714 TE85L
23Q15 to 23Q17	DTR890831	IMD2 TE0804R
23Q18,23Q19	DTR890851	IMH1 TE0804N
23Q20	DTR890551	DTC114EK/RN1402 TE0804L
23R1	DRZ832651	RK73H 2A 47KΩF TD0804N
23R2	DRZ832491	RK73H 2A 10KΩF TD0804N
23R3	DRZ832541	RK73H 2A 16KΩF TD0804N
23R4	DRZ832501	RK73H 2A 11KΩF TD0804N
23R5	DRZ832171	RK73H 2A 470ΩF TD0804N
23R6	DRZ832381	RK73H 2A 3.6KΩF TD0804N
23R7	DRZ832591	RK73H 2A 27KΩF TD0804N
23R8	DRZ832631	RK73H 2A 39KΩF TD0804N
23R9 to 23R11	DRZ832491	RK73H 2A 10KΩF TD0804N
23R12	DRE938641	CRB25CY 15KΩ T-29E TA21N
23R13	DRZ832661	RK73H 2A 51KΩF TD0804N
23R14	DRE938651	CRB25CY 30KΩ T-29E TA21N
23R15	DRZ832721	RK73H 2A 91KΩF TD0804N
23R16	DRE938661	CRB25CY 75KΩ T-29E TA21N
23R17	DRZ832791	RK73H 2A 180KΩF TD0804N
23R18	DRZ832601	RK73H 2A 30KΩF TD0804N
23R19	DRZ832531	RK73H 2A 15KΩF TD0804N
23R20	DRZ832601	RK73H 2A 30KΩF TD0804N
23R21	DRZ832561	RK73H 2A 20KΩF TD0804N
23R22	DRZ832251	RK73H 2A 1.0KΩF TD0804N
23R23	DRZ832011	RK73H 2A 100ΩF TD0804N
23R24	DRZ832511	RK73H 2A 12KΩF TD0804N
23R25,23R26	DRZ832171	RK73H 2A 470ΩF TD0804N
23R27	DRZ832731	RK73H 2A 100KΩF TD0804N
23R28,23R30 to 23R32	DRZ832591	RK73H 2A 27KΩF TD0804N
23R34 to 23R36	DRZ832491	RK73H 2A 10KΩF TD0804N
2338	DRE997151	CRB20 22KΩDY T-29E TA21N
23R39	DRE997161	CRB20 220KΩDY T-29E TA21N
23R40	DRE948091	SN14K 2H 2.2MΩD TA21N
23R41	DRZ832751	RK73H 2A 120KΩF TD0804N

SS-7805/04

H&Z SW(25) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
25C5A	DCC810511	C2012F 1H 103Z A TD84N
25C5B	DCE229201	SME-CE04W 1E 470M TC04R
25C8	DCC816601	C2012CH 1H 101J A TD84N
25C10	DCC810511	C2012F 1H 103Z A TD84N
25C11	DCC816601	C2012CH 1H 101J A TD84N
25C12	DCC810571	C2012F 1H 104Z A TD0804N
25C13,25C17	DCC810511	C2012F 1H 103Z A TD84N
25C19A	DCC810571	C2012F 1H 104Z A TD0804N
25C19B	DCE229201	SME-CE04W 1E 470M TC04R
25C23	DCC810511	C2012F 1H 103Z A TD84N
25C28,25C29	DCC810571	C2012F 1H 104Z A TD0804N
25C32,25C35,25C38,25C39	DCC810511	C2012F 1H 103Z A TD84N
25C41	DCE219051	SME-CE04W 1A 101M TC04R
25C45,25C46	DCC810571	C2012F 1H 104Z A TD0804N
25C48	DCE229201	SME-CE04W 1E 470M TC04R
25C100 to 25C103,25C200	DCC810511	C2012F 1H 103Z A TD84N
25D1 to 25D3	DDD810241	1SS 272 TE0804R
25D4	DDD810261	HSM 88AS TL
25D6	DDD830691	RD10M-T1B B2/B3 TE0804L
25D7,25D9	DDD810241	1SS 272 TE0804R
25D10	DDD810341	HSM 88WK TE0804L
25IC1	DIC619101	NJM 4558M(TE3) TE1208L
25IC2	DIC889171	TC 7W04F(TE12L) TE1208R
25IC3	DIC499361	74HC32F/AF TE1612B
25JP100 to 25JP102	DZB999011	JPW 01 TA21N
25Q2	DTR838661	2SC 2712LG TE85L
25Q3	DTR890851	IMH1 TE0804N
25Q4	DTR810041	2SA 1162Y TE85L
25Q5	DTR838661	2SC 2712LG TE85L
25Q6,25Q7	DTR810041	2SA 1162Y TE85L
25Q8,25Q9	DTR838661	2SC 2712LG TE85L
25Q10	DTR890821	IMT2 TE0804R
25Q11	DTR890841	IMX3 TE0804R
25Q12	DTR810041	2SA 1162Y TE85L
25Q13	DTR838661	2SC 2712LG TE85L
25R4	DRZ832381	RK73H 2A 3.6KΩF TD0804N
25R5,25R8A	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R8B	DRZ832191	RK73H 2A 560ΩF TD0804N
25R9	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R10	DRZ832301	RK73H 2A 1.6KΩF TD0804N
25R11A	DRZ832331	RK73H 2A 2.2KΩF TD0804N
25R11B	DRZ832071	RK73H 2A 180ΩF TD0804N
25R12	DRZ832261	RK73H 2A 1.1KΩF TD0804N
25R13	DRZ832271	RK73H 2A 1.2KΩF TD0804N
25R14	DRZ832321	RK73H 2A 2.0KΩF TD0804N
25R15	DRZ832311	RK73H 2A 1.8KΩF TD0804N
25R16,25R17	DRZ832411	RK73H 2A 4.7KΩF TD0804N
25R18	DRZ832401	RK73H 2A 4.3KΩF TD0804N
25R19	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R20	DRE997131	CRB20 1.8KΩDY T-29E TA21N
25R21A,25R21B	DRZ833511	RK73H 2A 22ΩF TD0804N
25R22	DRZ832321	RK73H 2A 2.0KΩF TD0804N
25R23	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R24	DRE997121	CRB20 180ΩDY T-29E TA21N
25R25	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R26	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R27	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R28	DRZ832251	RK73H 2A 1.0KΩF TD0804N
25R29	DRZ832151	RK73H 2A 390ΩF TD0804N
25R32,25R33	DRZ832361	RK73H 2A 3.0KΩF TD0804N
25R36	DRZ832601	RK73H 2A 30KΩF TD0804N
25R37	DRZ832531	RK73H 2A 15KΩF TD0804N
25R38	DRZ832501	RK73H 2A 11KΩF TD0804N

H&Z SW(25) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
25R39	DRZ832421	RK73H 2A 5.1KΩF TD0804N
25R40	DRZ832131	RK73H 2A 330ΩF TD0804N
25R42	DRZ832241	RK73H 2A 910ΩF TD0804N
25R43	DRZ820881	RN73F 2A 180ΩD TD0804N
25R44	DRZ832011	RK73H 2A 100ΩF TD0804N
25R45	DRZ820871	RN73F 2A 2.4KΩD TD0804N
25R46,25R48	DRZ832351	RK73H 2A 2.7KΩF TD0804N
25R50 to 25R52	DRZ831501	MCR10 000E TD0804N
25R53,25R54	DRZ833011	RK73H 2A 47ΩF TD0804N
25R200	DRZ832211	RK73H 2A 680ΩF TD0804N
25R201	DRZ832111	RK73H 2A 270ΩF TD0804N

H MAIN AMP(26) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
26C1,26C4,26C6	DCC810511	C2012F 1H 103Z A TD84N
26C10	DCC816531	C2012CH 1H 270J A TD84N
26C15,26C16	DCC810841	C2012B 1H 102K A TD84N
26C19,26C23,26C26	DCC810511	C2012F 1H 103Z A TD84N
26C27	DCE219051	SME-CE04W 1A 101M TC04R
26C34	DCC816361	C2012CH 1H 010C A TD84N
26C37,26C38,26C41,26C44,26C56,26C60	DCC810511	C2012F 1H 103Z A TD84N
26C63	DCE929841	SME 16VB-10(M)BP TC04N
26C100	DCC810511	C2012F 1H 103Z A TD84N
26C103	DCE249481	SME-CE04W 1J 220M TC04R
26C104	DCE229201	SME-CE04W 1E 470M TC04R
26C105 to 26C107	DCE229221	SME-CE04W 1E 221M TC04R
26D1,26D2	DDD810241	1SS 272 TE0804R
26D3	DDD830151	RD9.1M-T1B B/MA3091 TE0804L
26FL1 to 26FL5	DCL119361	BL02RN2-R62 TD04N
26IC1	DIC889171	TC 7W04F(TE12L) TE1208R
26JP1,26JP2,26JP5,26JP6	DRZ831501	MCR10 000E TD0804N
26JP100,26JP101,26JP103	DZB999011	JPW 01 TA21N
26L2 to 26L4	DCL152581	LHB0812-303
26P1	KHB176911	SS78ANALOG POWER CABLE UL-L
26Q1	DTR890861	IMZ1 TE0804R
26Q2	DTR890841	IMX3 TE0804R
26Q3	DTR890821	IMT2 TE0804R
26Q4	DTR890861	IMZ1 TE0804R
26Q5	DTR890841	IMX3 TE0804R
26Q6	DTR890861	IMZ1 TE0804R
26Q7	DTR890841	IMX3 TE0804R
26Q8	DTR890821	IMT2 TE0804R
26Q9	DTR890431	DTA114EK/RN2402 TE0804L
26R1	DRZ832471	RK73H 2A 8.2KΩF TD0804N
26R2	DRZ832211	RK73H 2A 680ΩF TD0804N
26R3	DRZ832321	RK73H 2A 2.0KΩF TD0804N
26R4	DRZ832571	RK73H 2A 22KΩF TD0804N
26R5	DRZ832371	RK73H 2A 3.3KΩF TD0804N
26R6	DRZ832231	RK73H 2A 820ΩF TD0804N
26R7	DRZ833011	RK73H 2A 47ΩF TD0804N
26R8,26R9	DRZ832041	RK73H 2A 130ΩF TD0804N
26R10	DRZ832141	RK73H 2A 360ΩF TD0804N
26R11	DRV810241	G4AT/ST-4TA 2KΩ TE1208L
26R12	DRZ832171	RK73H 2A 470ΩF TD0804N
26R15,26R16	DRZ832241	RK73H 2A 910ΩF TD0804N
26R17	DRZ833071	RK73H 2A 82ΩF TD0804N
26R18	DRZ832251	RK73H 2A 1.0KΩF TD0804N
26R19,26R20	DRZ832131	RK73H 2A 330ΩF TD0804N
26R21	DRZ832251	RK73H 2A 1.0KΩF TD0804N
26R22	DRZ832491	RK73H 2A 10KΩF TD0804N
26R23	DRZ832321	RK73H 2A 2.0KΩF TD0804N
26R26,26R27	DRZ832131	RK73H 2A 330ΩF TD0804N
26R28	DRZ832011	RK73H 2A 100ΩF TD0804N
26R29	DRZ832201	RK73H 2A 620ΩF TD0804N
26R30	DRZ832371	RK73H 2A 3.3KΩF TD0804N
26R34	DRZ832931	RK73H 2A 680KΩF TD0804N
26R35,26R36	DRZ832201	RK73H 2A 620ΩF TD0804N
26R37	DRZ832421	RK73H 2A 5.1KΩF TD0804N
26R38	DRZ832381	RK73H 2A 3.6KΩF TD0804N
26R39	DRZ832101	RK73H 2A 240ΩF TD0804N
26R40	DRZ832011	RK73H 2A 100ΩF TD0804N
26R41	DRZ832441	RK73H 2A 6.2KΩF TD0804N
26R42	DRZ832401	RK73H 2A 4.3KΩF TD0804N
26R43	DRZ832371	RK73H 2A 3.3KΩF TD0804N
26R44	DRZ832231	RK73H 2A 820ΩF TD0804N
26R45	DRZ832011	RK73H 2A 100ΩF TD0804N
26R46,26R47	DRZ832111	RK73H 2A 270ΩF TD0804N

H MAIN AMP(26) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
26R49	DRV810241	G4AT/ST-4TA 2KΩ TE1208L
26R50	DRZ832231	RK73H 2A 820ΩF TD0804N
26R51	DRZ833061	RK73H 2A 75ΩF TD0804N
26R52,26R53	DRZ832111	RK73H 2A 270ΩF TD0804N
26R54	DRZ833071	RK73H 2A 82ΩF TD0804N
26R55	DRZ832251	RK73H 2A 1.0KΩF TD0804N
26R56,26R57	DRZ832131	RK73H 2A 330ΩF TD0804N
26R58	DRZ832251	RK73H 2A 1.0KΩF TD0804N
26R59	DRZ832491	RK73H 2A 10KΩF TD0804N
26R60	DRZ832321	RK73H 2A 2.0KΩF TD0804N
26R63	DRZ832571	RK73H 2A 22KΩF TD0804N

H OUTPUT AMP(27) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
27C2A	DCC810511	C2012F 1H 103Z A TD84N
27C2B	DCE229201	SME-CE04W 1E 470M TC04R
27C3	DCC810841	C2012B 1H 102K A TD84N
27C4	DCC810511	C2012F 1H 103Z A TD84N
27C5	DCE229201	SME-CE04W 1E 470M TC04R
27C6	DCF139011	MF-3 2A 103K TC04N
27C9	DCF121971	MF-3 2A 104K TC04N
27C13,27C14	DCC259151	CC45SL 2H 030C TC04N
27C22	DCC810511	C2012F 1H 103Z A TD84N
27C23	DCC810841	C2012B 1H 102K A TD84N
27C24	DCC810511	C2012F 1H 103Z A TD84N
27C26	DCF139011	MF-3 2A 103K TC04N
27C29	DCF121971	MF-3 2A 104K TC04N
27C33,27C34	DCC259151	CC45SL 2H 030C TC04N
27C43,27C45	DCC816491	C2012CH 1H 100D A TD84N
27C48	DCC816601	C2012CH 1H 101J A TD84N
27C54,27C55,27C100	DCC810511	C2012F 1H 103Z A TD84N
27C101	DCC816491	C2012CH 1H 100D A TD84N
27C102	DCC810511	C2012F 1H 103Z A TD84N
27C103	DCE219051	SME-CE04W 1A 101M TC04R
27C104,27C105	DCC810511	C2012F 1H 103Z A TD84N
27C106	DCC810571	C2012F 1H 104Z A TD0804N
27D1	DDD810241	1SS 272 TE0804R
27IC1	DIC619101	NJM 4558M(TE3) TE1208L
27IC2	DIC639041	µPC 311G2-E1 TE1208F
27IC3	DIC499371	74HC74F/AF TE1612B
27JP102	DZB999011	JPW 01 TA21N
27P1	DCN990871	Connector 5267-02A
27Q1	DTR830371	2SC 3735B34/B35-T1B
27Q2	DTR139011	2SC 1815GR TPER1
27Q3	DTR119011	2SA 1015Y TPER1
27Q4	DTR830371	2SC 3735B34/B35-T1B
27Q5	DTR139011	2SC 1815GR TPER1
27Q6	DTR119011	2SA 1015Y TPER1
27Q7	DTR838661	2SC 2712LG TE85L
27Q8	DTR890431	DTA114EK/RN2402 TE0804L
27R1	DRZ831501	MCR10 000E TD0804N
27R2	DRZ832421	RK73H 2A 5.1KΩF TD0804N
27R3	DRZ832011	RK73H 2A 100ΩF TD0804N
27R4	DRZ832341	RK73H 2A 2.4KΩF TD0804N
27R6	DRZ832551	RK73H 2A 18KΩF TD0804N
27R7	DRZ832431	RK73H 2A 5.6KΩF TD0804N
27R8	DRZ832231	RK73H 2A 820ΩF TD0804N
27R9A to 27R9D	DRZ832651	RK73H 2A 47KΩF TD0804N
27R11,27R12	DRZ831501	MCR10 000E TD0804N
27R13	DRZ833011	RK73H 2A 47ΩF TD0804N
27R14,27R15	DZB999011	JPW 01 TA21N
27R16,27R17	DRE138061	EF1/4S 5.6KΩF TA21N
27R18	DRZ832541	RK73H 2A 16KΩF TD0804N
27R21	DRZ831501	MCR10 000E TD0804N
27R22	DRZ832421	RK73H 2A 5.1KΩF TD0804N
27R23	DRZ832011	RK73H 2A 100ΩF TD0804N
27R24	DRZ832341	RK73H 2A 2.4KΩF TD0804N
27R26	DRZ832551	RK73H 2A 18KΩF TD0804N
27R27	DRZ832431	RK73H 2A 5.6KΩF TD0804N
27R28	DRZ832231	RK73H 2A 820ΩF TD0804N
27R29A to 27R29D	DRZ832651	RK73H 2A 47KΩF TD0804N
27R31,27R32	DRZ831501	MCR10 000E TD0804N
27R33	DRZ833011	RK73H 2A 47ΩF TD0804N
27R34,27R35	DZB999011	JPW 01 TA21N
27R36,27R37	DRE138061	EF1/4S 5.6KΩF TA21N
27R38	DRZ832541	RK73H 2A 16KΩF TD0804N
27R41	DRE138361	EF1/4S 100KΩF TA21N

H OUTPUT AMP(27) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
27R42	DRZ832541	RK73H 2A 16KΩF TD0804N
27R43,27R44	DRZ832561	RK73H 2A 20KΩF TD0804N
27R45	DRZ832571	RK73H 2A 22KΩF TD0804N
27R46	DRE138361	EF1/4S 100KΩF TA21N
27R47	DRZ832491	RK73H 2A 10KΩF TD0804N
27R48,27R51	DRZ832011	RK73H 2A 100ΩF TD0804N
27R52	DRZ832731	RK73H 2A 100KΩF TD0804N
27R53	DRZ832551	RK73H 2A 18KΩF TD0804N
27R54	DRZ832391	RK73H 2A 3.9KΩF TD0804N
27R55	DRZ832491	RK73H 2A 10KΩF TD0804N
27R56,27R57	DRZ832251	RK73H 2A 1.0KΩF TD0804N
27R58	DRZ832491	RK73H 2A 10KΩF TD0804N
27R59	DRZ832251	RK73H 2A 1.0KΩF TD0804N
27R60	DRZ832011	RK73H 2A 100ΩF TD0804N

Z AMP(28) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
28C1,28C6,28C8,28C11,28C12,28C14	DCC810511	C2012F 1H 103Z A TD84N
28C16	DCC810571	C2012F 1H 104Z A TD0804N
28C19,28C23	DCC816491	C2012CH 1H 100D A TD84N
28C33,28C35	DCC810511	C2012F 1H 103Z A TD84N
28C38	DCC810571	C2012F 1H 104Z A TD0804N
28C43,28C45 to 28C47	DCC810511	C2012F 1H 103Z A TD84N
28C48	DCF121981	MF-3 2A 473K TC04N
28C49,28C50	DCF121971	MF-3 2A 104K TC04N
28C57,28C58	DCC816401	C2012CH 1H 030C A TD84N
28C59	DCC816541	C2012CH 1H 330J A TD84N
28C100,28C101	DCC810511	C2012F 1H 103Z A TD84N
28C102,28C103	DCE229201	SME-CE04W 1E 470M TC04R
28C106	DCC816601	C2012CH 1H 101J A TD84N
28C107	DCC810511	C2012F 1H 103Z A TD84N
28D1	DDD810141	MA 159A-(TX) TE0804L
28D2,28D3	DDD810241	1SS 272 TE0804R
28D5	DDD830361	RD5.1M-T1B B2 TE0804L
28D6	DDD019291	1SS 83 TA21R
28D7,28D8	DDD810241	1SS 272 TE0804R
28D9	DDD830381	RD15M-T1B B2 TE0804L
28IC1	DIC619101	NJM 4558M(TE3) TE1208L
28P1	DCN990881	Connector 5267-03A
28Q1	DTR890831	IMD2 TE0804R
28Q2 to 28Q5	DTR838661	2SC 2712LG TE85L
28Q6,28Q7	DTR810041	2SA 1162Y TE85L
28Q8	DTR838661	2SC 2712LG TE85L
28Q9	DTR119011	2SA 1015Y TPER1
28Q10	DTR139011	2SC 1815GR TPER1
28R1	DRE138241	EF1/4S 33KΩF TA21N
28R3	DRD137741	PSS1/4S 2.7KΩJ TA21N
28R4	DRD137731	PSS1/4S 2.4KΩJ TA21N
28R5	DRE137401	EF1/4S 10ΩF TA21N
28R6	DRE138011	EF1/4S 3.6KΩF TA21N
28R7,28R9	DRE138001	EF1/4S 3.3KΩF TA21N
28R10	DRZ832591	RK73H 2A 27KΩF TD0804N
28R11	DRE138121	EF1/4S 10KΩF TA21N
28R12	DRZ832491	RK73H 2A 10KΩF TD0804N
28R13	DRZ832401	RK73H 2A 4.3KΩF TD0804N
28R14	DRZ832371	RK73H 2A 3.3KΩF TD0804N
28R15	DRZ832381	RK73H 2A 3.6KΩF TD0804N
28R16	DRZ832291	RK73H 2A 1.5KΩF TD0804N
28R17	DRZ832281	RK73H 2A 1.3KΩF TD0804N
28R18	DRZ832371	RK73H 2A 3.3KΩF TD0804N
28R19	DRZ832321	RK73H 2A 2.0KΩF TD0804N
28R20	DRZ832411	RK73H 2A 4.7KΩF TD0804N
28R21	DRZ832461	RK73H 2A 7.5KΩF TD0804N
28R22	DRZ832371	RK73H 2A 3.3KΩF TD0804N
28R23	DRZ832321	RK73H 2A 2.0KΩF TD0804N
28R24	DRZ832411	RK73H 2A 4.7KΩF TD0804N
28R25	DRZ832461	RK73H 2A 7.5KΩF TD0804N
28R26	DRZ832281	RK73H 2A 1.3KΩF TD0804N
28R27	DRZ832611	RK73H 2A 33KΩF TD0804N
28R28	DRZ832381	RK73H 2A 3.6KΩF TD0804N
28R31	DRE138011	EF1/4S 3.6KΩF TA21N
28R33	DRZ832391	RK73H 2A 3.9KΩF TD0804N
28R34	DRZ832471	RK73H 2A 8.2KΩF TD0804N
28R35	DRZ832321	RK73H 2A 2.0KΩF TD0804N
28R36	DRZ832491	RK73H 2A 10KΩF TD0804N
28R37	DRZ832371	RK73H 2A 3.3KΩF TD0804N
28R38 to 28R41	DRZ832501	RK73H 2A 11KΩF TD0804N
28R42	DRZ832691	RK73H 2A 68KΩF TD0804N
28R43,28R44	DRZ832251	RK73H 2A 1.0KΩF TD0804N
28R45	DRZ832011	RK73H 2A 100ΩF TD0804N

Z AMP(28) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
28R46	DRZ832231	RK73H 2A 820ΩF TD0804N
28R47	DRZ832611	RK73H 2A 33KΩF TD0804N
28R48	DRZ832421	RK73H 2A 5.1KΩF TD0804N
28R49	DRZ832161	RK73H 2A 430ΩF TD0804N
28R51 to 28R53	DRE137971	EF1/4S 2.4KΩF TA21N
28R54	DRZ833011	RK73H 2A 47ΩF TD0804N
28R56	DRE138051	EF1/4S 5.1KΩF TA21N
28R57,28R58	DRE138031	EF1/4S 4.3KΩF TA21N
28R59	DRZ833061	RK73H 2A 75ΩF TD0804N
28R61	DRE137721	EF1/4S 220ΩF TA21N
28R62	DRZ832091	RK73H 2A 220ΩF TD0804N

SS-7805/04

PROBE SENCE(29)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
29C7 to 29C9,29C100	DCC810571	C2012F 1H 104Z A TD0804N
29C101 to 29C103	DCC816601	C2012CH 1H 101J A TD84N
29C104	DCC810571	C2012F 1H 104Z A TD0804N
29D1,29D2	DDD830061	RD3.9M-T1B B/MA3039 TE0804L
29D3,29D4	DDD810241	1SS 272 TE0804R
29D7	DDD830341	RD6.8M-T1B B2
29IC1	DIC483021	TC 4051BF (EL) TE1612B
29IC2	DIC619101	NJM 4558M(TE3) TE1208L
29JP100	DZB999011	JPW 01 TA21N
29R1	DRZ832581	RK73H 2A 24KΩF TD0804N
29R2	DRZ832511	RK73H 2A 12KΩF TD0804N
29R3	DRZ832581	RK73H 2A 24KΩF TD0804N
29R4	DRZ832511	RK73H 2A 12KΩF TD0804N
29R5	DRZ832581	RK73H 2A 24KΩF TD0804N
29R6	DRZ832511	RK73H 2A 12KΩF TD0804N
29R7,R8	DRZ832371	RK73H 2A 3.3KΩF TD0804N
29R9	DRZ832491	RK73H 2A 10KΩF TD0804N
29R10	DRZ832131	RK73H 2A 330ΩF TD0804N
29R17	DRZ832011	RK73H 2A 100ΩF TD0804N

ANA BOARD CONTROL(30)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
30C101,30C102A	DCC810571	C2012F 1H 104Z A TD0804N
30C102B	DCE219051	SME-CE04W 1A 101M TC04R
30C103A	DCC810571	C2012F 1H 104Z A TD0804N
30C103B	DCE219051	SME-CE04W 1A 101M TC04R
30C105,30C106	DCC810571	C2012F 1H 104Z A TD0804N
30IC1	DIC499381	74HC138F/AF TE1612B
30IC2,30IC3,30IC5	DIC483321	74HC595F/AF TE1612B
30IC6	DIC889131	TC 7W32F(TE12L) TE1208R
30IC7	DIC889171	TC 7W04F(TE12L) TE1208R
30J1,30J2	DCN124501	FF3-22-S55
30JP5	DRZ831501	MCR10 000E TD0804N
30JP100	DZB999011	JPW 01 TA21N
30R1 to 30R3,30R5 to 30R9	DRZ832131	RK73H 2A 330ΩF TD0804N

ANA BOARD 8bit D/A(31)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
31C2	DCC810571	C2012F 1H 104Z A TD0804N
31C3	DCE929841	SME 16VB-10(M)BP TC04N
31C5	DCC810511	C2012F 1H 103Z A TD84N
31C20	DCC810571	C2012F 1H 104Z A TD0804N
31C31,31C32	DCC816521	C2012CH 1H 220J A TD84N
31C40,31C60	DCC810571	C2012F 1H 104Z A TD0804N
31C114	DCC810511	C2012F 1H 103Z A TD84N
31IC1 to 31IC3	DIC642201	MB88346BPF-G-BND-EF TE2412F
31IC4	DIC619101	NJM 4558M(TE3) TE1208L
31J1	DCN124501	FF3-22-S55
31JP100 to 31JP103	DZB999011	JPW 01 TA21N
31R1	DRZ832531	RK73H 2A 15KΩF TD0804N
31R2,31R3	DRZ832551	RK73H 2A 18KΩF TD0804N
31R4	DRZ832431	RK73H 2A 5.6KΩF TD0804N

CPU BOARD 02/04(35)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
35IC1	DIC557921	µPD 78014FGC-711-8BS
35IC22	DIC519351	SRAM 8KX8(M100)LLF TE2416B
35P2	KHB178111	SS-78XX EXT I/F CABLE UL-L
35R73	DRZ832411	RK73H 2A 4.7KΩF TD0804N

PANEL BOARD(37)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
37C1	DCE229201	SME-CE04W 1E 470M TC04R
37C2,37C3	DCC810571	C2012F 1H 104Z A TD0804N
37C4	DCE229201	SME-CE04W 1E 470M TC04R
37C5	DCC810571	C2012F 1H 104Z A TD0804N
37C6	DCE229201	SME-CE04W 1E 470M TC04R
37C7,37C8	DCC810571	C2012F 1H 104Z A TD0804N
37C9	DCE229201	SME-CE04W 1E 470M TC04R
37C10 to 37C17	DCC810571	C2012F 1H 104Z A TD0804N
37D1 to 37D7	DDD810241	1SS 272 TE0804R
37IC1	DIC499381	74HC138F/AF TE1612B
37IC2	DIC619191	NJM 082M(TE3) TE1208L
37IC3	DIC483021	TC 4051BF (EL) TE1612B
37IC4	DIC483321	74HC595F/AF TE1612B
37J1	DCN124741	FF3-26-S55
37J2	DCN124501	FF3-22-S55
37PB5	KPN362351	PANEL BOARD UL-M
37Q1,37Q2	DTR830041	2SC 2712 TE85L
37Q3,37Q4	DTR890431	DTA114EK/RN2402 TE0804L
37R1	DRZ832491	RK73H 2A 10KΩF TD0804N
37R2	DRZ832561	RK73H 2A 20KΩF TD0804N
37R3	DRZ832491	RK73H 2A 10KΩF TD0804N
37R4	DRZ832561	RK73H 2A 20KΩF TD0804N
37R5	DRZ832491	RK73H 2A 10KΩF TD0804N
37R6	DRZ832561	RK73H 2A 20KΩF TD0804N
37R7	DRZ832491	RK73H 2A 10KΩF TD0804N
37R8	DRZ832561	RK73H 2A 20KΩF TD0804N
37R9	DRZ832491	RK73H 2A 10KΩF TD0804N
37R10	DRZ832561	RK73H 2A 20KΩF TD0804N
37R11	DRZ832491	RK73H 2A 10KΩF TD0804N
37R12	DRZ832561	RK73H 2A 20KΩF TD0804N
37R13 to 37R21	DRZ832211	RK73H 2A 680ΩF TD0804N
37R22	DRZ832491	RK73H 2A 10KΩF TD0804N
37S1 to 37S4	DSW035561	Pulse switch RK09710WL
37VR1 to 37VR4	DRV131991	RK11K1140 (20KB)

V MAIN BOARD

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
JP100	DRE138161	EF1/4S 15KΩF TA21N
PB2	KPN362841	V MAIN BOARD UL-M

CRT CONT BOARD(32)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
32C1 to 32C3,32C10,32C11,32C14,32C17,32C18,32C20	DCC810511	C2012F 1H 103Z A TD84N
32C21	DCE229221	SME-CE04W 1E 221M TC04R
32C22	DCC816601	C2012CH 1H 101J A TD84N
32C23,32C24	DCC810511	C2012F 1H 103Z A TD84N
32C103	DCE229201	SME-CE04W 1E 470M TC04R
32C104	DCE229221	SME-CE04W 1E 221M TC04R
32C105	DCE229201	SME-CE04W 1E 470M TC04R
32C106,32C107	DCC810511	C2012F 1H 103Z A TD84N
32D1	DDD810241	1SS 272 TE0804R
32D2	DDD830141	RD8.2M-T1B B/MA3082 TE0804L
32IC1	DIC619101	NJM 4558M(TE3) TE1208L
32J1	DCN124711	FF3-22-R15
32P2,32P3	DCN034901	Connector M36-02-30-134P
32Q1,32Q2	DTR890431	DTA114EK/RN2402 TE0804L
32Q3	DTR838661	2SC 2712LG TE85L
32Q4	DTR890431	DTA114EK/RN2402 TE0804L
32Q5	DTR890551	DTC114EK/RN1402 TE0804L
32Q6	DTR139011	2SC 1815GR TPER1
32Q7	DTR119011	2SA 1015Y TPER1
32Q8	DTR890861	IMZ1 TE0804R
32Q9	DTR838661	2SC 2712LG TE85L
32Q10A to 32Q10C	DTR139011	2SC 1815GR TPER1
32R1,32R2	DRV120731	RK0971114 (S10KB+PS) D
32R3 to 32R5	DRV120612	RK0971110 20KB D
32R6	DRZ832541	RK73H 2A 16KΩF TD0804N
32R7A to 32R7C	DRE137541	EF1/4S 39ΩF TA21N
32R8	DRZ833441	RK73H 2A 10ΩF TD0804N
32R9	DRE137541	EF1/4S 39ΩF TA21N
32R10	DRZ832551	RK73H 2A 18KΩF TD0804N
32R11	DRZ832521	RK73H 2A 13KΩF TD0804N
32R12	DRZ832691	RK73H 2A 68KΩF TD0804N
32R13	DRZ832491	RK73H 2A 10KΩF TD0804N
32R14	DRZ832671	RK73H 2A 56KΩF TD0804N
32R15	DRZ833441	RK73H 2A 10ΩF TD0804N
32R16	DRZ832321	RK73H 2A 2.0KΩF TD0804N
32R17	DRZ832491	RK73H 2A 10KΩF TD0804N
32R18	DRZ832421	RK73H 2A 5.1KΩF TD0804N
32R19	DRZ832441	RK73H 2A 6.2KΩF TD0804N
32R20	DRZ832331	RK73H 2A 2.2KΩF TD0804N
32R21	DRZ832251	RK73H 2A 1.0KΩF TD0804N
32R22	DRZ832031	RK73H 2A 120ΩF TD0804N
32R23,32R24	DRZ832011	RK73H 2A 100ΩF TD0804N
32S1	DSW017001	SPUP19

H.V. CIRCUIT(33) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
33C1	DCE259111	SME-CE04W 2A 470M TD04R
33C5	DCF121721	MF-3S 1H 103J TC04N
33C6	DCF121841	MF-3S 1H 104J TC04N
33C13	DCF121841	MF-3S 1H 104J TC04N
33C16 to 33C18	DCC171931	DE1610F 103Z 3K
33C19	DCC171911	DE0910B 102K 3K
33C20	DCC171931	DE1610F 103Z 3K
33C22	DCF179061	MMH 2J 473K
33C23	DCF179041	MMH 2J 103K
33C28	DCF179061	MMH 2J 473K
33C29	DCC163141	DE1310E 103Z 1K
33C30	DCC929031	EP050Y 103N-B TA21N
33C32	DCC171951	DE0507B 221K 3K
33C33	DCC171941	DE0707B 471K 3K
33C34	DCC171951	DE0507B 221K 3K
33C38	DCF179061	MMH 2J 473K
33C39	DCE285031	KME 400VB-3R3(M)
33C43	DCC171931	DE1610F 103Z 3K
33C44	DCC171911	DE0910B 102K 3K
33C45	DCE259101	SME-CE04W 2A 4R7M TC04R
33C49	DCC171941	DE0707B 471K 3K
33C50	DCC171931	DE1610F 103Z 3K
33C51	DCC171911	DE0910B 102K 3K
33C54,33C56	DCF169011	MM-3D 2E 103K TC04N
33C100	DCC929031	EP050Y 103N-B TA21N
33C101	DCE229201	SME-CE04W 1E 470M TC04R
33C102	DCC929031	EP050Y 103N-B TA21N
33C103	DCE229201	SME-CE04W 1E 470M TC04R
33D1	DDD019071	1SS 120 TA21R
33D2	DDD021451	SHV-06/SHV-06EN TA21R
33D3,33D4	DDD021541	SHV-02 TA21R
33D5 to 33D12	DDD019291	1SS 83 TA21R
33D13 to 33D15	DDD019071	1SS 120 TA21R
33D16	DDD021541	SHV-02 TA21R
33D17,33D18	DDD019291	1SS 83 TA21R
33D19	DDD019291	1SS 83 TA21R
33D20,33D21	DDD021541	SHV-02 TA21R
33FL1,33FL2	DCL119361	BL02RN2-R62 TD04N
33IC1	DIC613771	4558
33L1	DCL113701	Choke coil AN FS-44263-11
33NE1	DLP025171	Neonlamp NL-235D
33P1	KHB177111	SS-78XX Z SIG CABLE UL-L
33P2	KHB177211	SS-78XX HV POWER CABLE UL-L
33P3	DCN990901	Connector 5267-06A
33P4	DCN990911	Connector 5267-07A
33PB8	KPN363061	HV BOARD UL-M
33Q1	DTR136301	2SC 3570L
33Q2,33Q3	DTR139011	2SC 1815GR TPER1
33Q4,33Q5	DTR135231	2SC 2752
33Q6	DTR136181	2SC 2551
33R1	DRE137801	EF1/4S 470ΩF TA21N
33R2	DRE138321	EF1/4S 68KΩF TA21N
33R3	DRE138121	EF1/4S 10KΩF TA21N
33R4	DRE138161	EF1/4S 15KΩF TA21N
33R5	DRE137481	EF1/4S 22ΩF TA21N
33R6	DRE138011	EF1/4S 3.6KΩF TA21N
33R7	DRE138121	EF1/4S 10KΩF TA21N
33R8	DRE138201	EF1/4S 22KΩF TA21N
33R9	DRE997011	CRB20 220KΩFY T-29E TA21N
33R10	DRE138351	EF1/4S 91KΩF TA21N
33R11	DRE998621	CRB20 1.3KΩFY T-29E TA21N
33R12	DRE137881	EF1/4S 1.0KΩF TA21N
33R13	DRE138041	EF1/4S 4.7KΩF TA21N

H.V. CIRCUIT(33) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
33R14	DRE998611	CRB20 82KΩFY T-29E TA21N
33R15	DRV419371	GF06VT2/CT-6TH00 10KΩ (T)
33R16 to 33R18	DRD137761	PSS1/4S 3.3KΩJ TA21N
33R19	DRG152001	RH1HVD 15MΩF
33R20	DRE138361	EF1/4S 100KΩF TA21N
33R21	DRV419451	GF06VT2/CT-6TH00 10ΩTE04B
33R22	DRE138381	EF1/4S 120KΩF TA21N
33R23	DRV419411	GF06VT2/CT-6TH00 200KΩ (T)
33R24	DRE138451	EF1/4S 240KΩF TA21N
33R25	DRE138451	EF1/4S 240KΩF TA21N
33R26,33R27	DRS320661	RSS1 56KΩJ TA21N
33R28A to 33R28C	DRE138351	EF1/4S 91KΩF TA21N
33R29	DRE138391	EF1/4S 130KΩF TA21N
33R30	DRE138211	EF1/4S 24KΩF TA21N
33R31	DRE138261	EF1/4S 39KΩF TA21N
33R32 to 33R35	DRE138481	EF1/4S 330KΩF TA21N
33R36,33R37	DRE137961	EF1/4S 2.2KΩF TA21N
33R38,33R39	DRE949141	MBA0204-50 1 CT 330K TA21N
33R40	DRE949151	MBA0204-50 1 CT 24K TA21N
33R41	DRV419361	GF06VT2/CT-6TH00 5KΩTE04B
33R42	DRE138201	EF1/4S 22KΩF TA21N
33R43	DRG940651	VR37 18MΩF
33R44	DRD147481	PSS1/2S 220ΩJ TA21N
33R45	DRE138291	EF1/4S 51KΩF TA21N
33R46	DRV419391	GF06VT2/CT-6TH00 50KΩ (T)
33R47	DRE138241	EF1/4S 33KΩF TA21N
33R48	DRE138381	EF1/4S 120KΩF TA21N
33R49	DRG940631	VR37 5.1MΩF
33R50	DRG940671	VR37 6.8MΩF
33R51	DRV419431	GF06VT2/CT-6TH00 1MΩTE04B
33R52	DRG940621	VR37 2.2MΩF
33R53	DRE138321	EF1/4S 68KΩF TA21N
33R54	DRV419391	GF06VT2/CT-6TH00 50KΩ (T)
33R55	DRE137801	EF1/4S 470ΩF TA21N
33R61	DRE138421	EF1/4S 180KΩF TA21N
33T1	DCL220432	High voltage trans. CP3003 UL-I
33U1	DES050762	HV block MSL3587R UL-I

CPU BOARD(35) 1/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
35BT1	DES011881	CR2450-H03
35C1 to 35C4	DCE229201	SME-CE04W 1E 470M TC04R
35C5 to 35C15	DCC810571	C2012F 1H 104Z A TD0804N
35C17	DCE229201	SME-CE04W 1E 470M TC04R
35C18 to 35C21	DCC810571	C2012F 1H 104Z A TD0804N
35C22,35C23	DCC816521	C2012CH 1H 220J A TD84N
35C24 to 35C27,35C31	DCC810571	C2012F 1H 104Z A TD0804N
35C33,35C34,35C36,35C39	DCC810511	C2012F 1H 103Z A TD84N
35C40	DCC816601	C2012CH 1H 101J A TD84N
35C41 to 35C43	DCC810571	C2012F 1H 104Z A TD0804N
35C45 to 35C47	DCC816601	C2012CH 1H 101J A TD84N
35C48,35C50	DCC810571	C2012F 1H 104Z A TD0804N
35C52	DCC816601	C2012CH 1H 101J A TD84N
35C53	DCE229201	SME-CE04W 1E 470M TC04R
35C54,35C55	DCC810571	C2012F 1H 104Z A TD0804N
3556	DCE229201	SME-CE04W 1E 470M TC04R
35C57 to 35C60,35C62,35C63,35C65 to 35C68	DCC810571	C2012F 1H 104Z A TD0804N
35C71 to 35C74	DCC810511	C2012F 1H 103Z A TD84N
35C75,35C76	DCC816521	C2012CH 1H 220J A TD84N
35C78,35C80	DCC810571	C2012F 1H 104Z A TD0804N
35C81	DCC816491	C2012CH 1H 100D A TD84N
35C82,35C83	DCC810571	C2012F 1H 104Z A TD0804N
35C85	DCC816491	C2012CH 1H 100D A TD84N
35C86,35C87	DCC810571	C2012F 1H 104Z A TD0804N
35C88	DCE229201	SME-CE04W 1E 470M TC04R
35C90,35C92	DCC810571	C2012F 1H 104Z A TD0804N
35C93,35C94	DCC816581	C2012CH 1H 680J A TD84N
35C95,35C103,35C104	DCC810571	C2012F 1H 104Z A TD0804N
35C105	DCE229201	SME-CE04W 1E 470M TC04R
35C106	DCC810571	C2012F 1H 104Z A TD0804N
35C107	DCE229201	SME-CE04W 1E 470M TC04R
35C108	DCC810571	C2012F 1H 104Z A TD0804N
35D1 to 35D6	DDD810241	1SS 272 TE0804R
35FL1 to 35FL3	DHF039021	DSS306-91FZ 103N 100 TE04N
35IC2,35IC3	DIC699231	M51957BFP TE1208F
35IC4	DIC483041	74HC03F/AF TE1612B
35IC6	DIC529072	CAT93C57K-TE13 TE1612B
35IC8	DIC641111	BA 9221F (Rohm)
35IC9	DIC619191	NJM 082M(TE3) TE1208L
35IC10	DIC639031	NJM 2903M(TE3) TE1208L
35IC11	DIC483021	TC 4051BF (EL) TE1612B
35IC12,35IC13	DIC619191	NJM 082M(TE3) TE1208L
35IC16,35IC17	DIC641111	BA 9221F (Rohm)
35IC18	DIC619191	NJM 082M(TE3) TE1208L
35IC19	DIC619101	NJM 4558M(TE3) TE1208L
35IC20	DIC659011	TA 78L005AP TPE5
35IC21	DIC470091	CD108BPF (NEC)
35J1	DCN124741	FF3-26-S55
35J2,35J3	DCN124501	FF3-22-S55
35P1	KHB181511	SS-78XXCPU POWER CABLE UL-L
35PB4	KPN362451	CPU BOARDUL-M
35Q1	DTR810041	2SA 1162Y TE85L
35Q2,35Q3	DTR890411	DTA124EK/RN2403 TE0804L
35Q4,35Q5	DTR810041	2SA 1162Y TE85L
35Q6	DTR830041	2SC 2712 TE85L
35R1	DRZ832631	RK73H 2A 39KΩF TD0804N
35R2	DRZ832431	RK73H 2A 5.6KΩF TD0804N
35R3	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R4	DRZ832491	RK73H 2A 10KΩF TD0804N
35R5	DRZ832391	RK73H 2A 3.9KΩF TD0804N
35R6,35R7	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R8	DRZ832651	RK73H 2A 47KΩF TD0804N
35R9,35R10	DRZ832411	RK73H 2A 4.7KΩF TD0804N

CPU BOARD(35) 2/2

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
35R12,35R15	DRZ832651	RK73H 2A 47KΩF TD0804N
35R17 to 35R20	DRZ832011	RK73H 2A 100ΩF TD0804N
35R21	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R22	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R23	DRZ832131	RK73H 2A 330ΩF TD0804N
35R30	DRZ832231	RK73H 2A 820ΩF TD0804N
35R31	DRE138141	EF1/4S 12KΩF TA21N
35R32,35R33	DRZ832511	RK73H 2A 12KΩF TD0804N
35R34	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R35	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R36	DRE138141	EF1/4S 12KΩF TA21N
35R38	DRZ832131	RK73H 2A 330ΩF TD0804N
35R39	DRZ832491	RK73H 2A 10KΩF TD0804N
35R40	DRZ832131	RK73H 2A 330ΩF TD0804N
35R41	DRZ832491	RK73H 2A 10KΩF TD0804N
35R42	DRZ832131	RK73H 2A 330ΩF TD0804N
35R43	DRZ832491	RK73H 2A 10KΩF TD0804N
35R44	DRZ832131	RK73H 2A 330ΩF TD0804N
35R45	DRZ832491	RK73H 2A 10KΩF TD0804N
35R46 to 35R49	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R51,35R53,35R55,35R57	DRZ832011	RK73H 2A 100ΩF TD0804N
35R66	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R69,35R70	DRZ832451	RK73H 2A 6.8KΩF TD0804N
35R71	DRZ831501	MCR10 000E TD0804N
35R76	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R85	DRZ832651	RK73H 2A 47KΩF TD0804N
35R86	DRZ832511	RK73H 2A 12KΩF TD0804N
35R87	DRZ832631	RK73H 2A 39KΩF TD0804N
35R88	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R89	DRZ832371	RK73H 2A 3.3KΩF TD0804N
35R90	DRZ832511	RK73H 2A 12KΩF TD0804N
35R91	DRZ832631	RK73H 2A 39KΩF TD0804N
35R92	DRZ832411	RK73H 2A 4.7KΩF TD0804N
35R93	DRZ832371	RK73H 2A 3.3KΩF TD0804N
35R94	DRZ832431	RK73H 2A 5.6KΩF TD0804N
35R95	DRZ832401	RK73H 2A 4.3KΩF TD0804N
35R96	DRZ832351	RK73H 2A 2.7KΩF TD0804N
35R97	DRZ832191	RK73H 2A 560ΩF TD0804N
35R98,35R99	DRZ832391	RK73H 2A 3.9KΩF TD0804N
35R100	DRZ831501	MCR10 000E TD0804N
35R101	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R102	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R103	DRZ832231	RK73H 2A 820ΩF TD0804N
35R104	DRZ832351	RK73H 2A 2.7KΩF TD0804N
35R105	DRZ832191	RK73H 2A 560ΩF TD0804N
35R106	DRZ832351	RK73H 2A 2.7KΩF TD0804N
35R107	DRZ832191	RK73H 2A 560ΩF TD0804N
35R108	DRZ832391	RK73H 2A 3.9KΩF TD0804N
35R109	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R110	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R111	DRZ832231	RK73H 2A 820ΩF TD0804N
35R112	DRZ832491	RK73H 2A 10KΩF TD0804N
35R113	DRZ832291	RK73H 2A 1.5KΩF TD0804N
35R114,35R115	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R116	DRZ832371	RK73H 2A 3.3KΩF TD0804N
35R117	DRZ832491	RK73H 2A 10KΩF TD0804N
35R118,35R119	DRZ832271	RK73H 2A 1.2KΩF TD0804N
35R120,35R121	DRZ832011	RK73H 2A 100ΩF TD0804N
35R122,35R123,35R134 to 35R141	DRZ832131	RK73H 2A 330ΩF TD0804N
35R142 to 35R149	DRZ832561	RK73H 2A 20KΩF TD0804N
35R150,35R151	DRZ832491	RK73H 2A 10KΩF TD0804N
35X1	DHF013521	AT-51 10.00MHZ
35X2	DHF013621	AT-51 20MHZ

KEY BOARD(38)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
38D1 to 38D8	DDD870281	PY1102W-1 TE0804R
38J1	DCN124501	FF3-22-S55
38PB7	KPN362221	KEY BOARD UL-M

SS-78LVPS(100M) POWER(39) 1/3

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
39C1,39C2	DCF161711	ECQ-U2A 224MT
39C3,39C4	DCC140161	DE1307 E 472M-KH
39C5,39C6	DCE979041	KMH250VNSN 330M22D
39C7	DCF168261	MMH 2G 104K
39C9	DCE935411	LXZ 35VB100M F50 TC04R
39C10	DCC239181	USD10SL 331J TC04N
39C11	DCE949761	KME 50VB-1(M) TC04R
39C12	DCF121721	MF-3S 1H 103J TC04N
39C13	DCF121761	MF-3S 1H 223J TC04N
39C14	DCF168661	MMH 2G 683K
39C15	DCF121801	MF-3S 1H 473J TC04N
39C16	DCF135041	MMH 2A 224K
39C17	DCE926461	20SH100M TD04R
39C19	DCE929631	LXZ 16VB220M F50 TC04R
39C20	DCE919661	KME 10VB-100(M) TC04R
39C21	DCE926331	LXZ 35VB220M H15
39C22	DCC163251	DE0705R 221K 1K
39C24	DCE915961	LXV 10VB-330M H12 TC04R
39C25	DCE919861	KME 10VB-220(M) TC04R
39C27	DCF121841	MF-3S 1H 104J TC04N
39C28	DCC163251	DE0705R 221K 1K
39C29	DCE921351	SXE 16VB-680(10X20)
39C30,39C32	DCE920891	KME 16VB-1000(M)
39C33	DCF121841	MF-3S 1H 104J TC04N
39C34	DCC163251	DE0705R 221K 1K
39C35	DCE921351	SXE 16VB-680(10X20)
39C36	DCF121721	MF-3S 1H 103J TC04N
39C37	DCE920891	KME 16VB-1000(M)
39C38	DCF121841	MF-3S 1H 104J TC04N
39C40	DCE920891	KME 16VB-1000(M)
39C41,39C42	DCF121841	MF-3S 1H 104J TC04N
39C43	DCC163251	DE0705R 221K 1K
39C44	DCE945761	LXV 63VB-150M J25
39C45	DCE945671	KME 63VB-220(M)
39C46	DCF121971	MF-3 2A 104K TC04N
39C47	DCE945671	KME 63VB-220(M)
39C48	DCC163251	DE0705R 221K 1K
39C49	DCE262731	KMF 160VB-47M MC
39C50,39C51	DCE965121	KME 200VB-22(M)
39C56	DCF121721	MF-3S 1H 103J TC04N
39C57	DCC171961	DE1210E 222M-KX
39C59,39C60	DCF121841	MF-3S 1H 104J TC04N
39C61	DCF121971	MF-3 2A 104K TC04N
39C70,39C100 to 39C102	DCC140131	DE1007 E 222M-KH
39C103,39C104	DCE229211	SME-CE04W 1E 101M TC04R
39C105	DCF121721	MF-3S 1H 103J TC04N
39C106,39C108	DCF121841	MF-3S 1H 104J TC04N
39C111	DCF121971	MF-3 2A 104K TC04N
39CN1	DCN121511	Connector 5268-06A
39CN2,39CN3	DCN990901	Connector 5267-06A
39CN4	DCN990911	Connector 5267-07A
39CN5	DCN120191	Connector 5267-11A
39CN6	DCN015961	Inlet NC-187-10N
39CN7	DCN990871	Connector 5267-02A
39CN8,39CN9	DCN996681	Post RTB-1.5-1F UL-I
39CN10	KHB181821	AC input selecter FS44298-21 UL-I
39D1	DDD029471	D1NL40 TA21R
39D2	DDD021591	D3SB60
39D3	DDD021481	RG1C
39D5	DDD029411	D1NS4 TA21R
39D6	DDD038791	RD12ESB/HZS12NB TA21R
39D7	DDD029551	D1NL20U TA21R
39D8	DDD021481	RG1C

SS-78LVPS(100M) POWER(39) 2/3

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
39D9,39D10	DDD019071	1SS 120 TA21R
39D11	DDD038741	RD7.5ESB/HZS7.5NB TA21R
39D12,39D13	DDD029551	D1NL20U TA21R
39D14	DDD019071	1SS 120 TA21R
39D17	DDD029551	D1NL20U TA21R
39D18	DDD019071	1SS 120 TA21R
39D19	DDD024031	D5LC20U
39D20	DDD029091	EM01 TA21R
39D22	DDD024031	D5LC20U
39D23	DDD029091	EM01 TA21R
39D24	DDD024021	D3L60
39D25	DDD033241	RD47EB TA21R
39D26	DDD029091	EM01 TA21R
39D27	DDD033241	RD47EB TA21R
39D28	DDD024011	S2L60
39D29	DDD029551	D1NL20U TA21R
39D31,39D32	DDD038731	RD6.8ESB/HZS6.8NB TA21R
39F1	DFU025841	Fuse 218 002. UL-L
39GA1	DFU066011	Arrester CMP-470L
39IC1,39IC2A,39IC2B	DFB031681	TLP421F(D4-GR)
39IC4	DIC653611	M 51995AP (Mitsubishi)
39IC5	DIC659011	TA 78L005AP TPE5
39IC6	DIC653901	NJM 7805FA (JRC)
39IC7,39IC8	DIC613771	4558
39IC9,39IC100	DIC653771	NJM 431L TE04F
39JP100,39JP101	DCL119361	BL02RN2-R62 TD04N
39L1	DCL170204	Line filter FS-44302-31 UL-I
39L3,39L4,39L5,39L7	DCL113701	Choke coil AN FS-44263-11
39L8A,39L8B,39L9,39L10A,39L10B,39L11A,39L11B	DCL321111	Ferrite beads HF70BB3.5X5X1.3
39L100 to 39L105	DCL119361	BL02RN2-R62 TD04N
39L106,39L107	DCL321111	Ferrite beads HF70BB3.5X5X1.3
39PB9	KPN368541	POWER BOARD UL-M
39Q1	DTR215921	2SK 2610
39Q2	DTR138011	2SC 5353
39Q3	DTR139011	2SC 1815GR TPER1
39Q4	DTR199511	DTC 114ES/ESA TP TE04B
39Q5	DTR215911	2SK 2385
39Q6	DTR139011	2SC 1815GR TPER1
39Q7	DTR119011	2SA 1015Y TPER1
39Q8	DTR225011	2SJ 143
39Q9	DTR219051	2SK 373-GR TPE2
39Q10	DTR136181	2SC 2551
39Q11	DTR146231	2SD 1407A-Y
39Q12	DTR136181	2SC 2551
39Q13	DTR116571	2SA 1668
39Q15	DTR119291	2SA 1091-O TPE2
39R1,39R2	DRS331261	RSS2 68KΩJ L15
39R5	DRS320071	RSS1 0.68ΩJ TA21N
39R6	DRE137641	EF1/4S 100ΩF TA21N
39R7	DRS320361	RSS1 180ΩJ TA21N
39R8	DRD137381	PSS1/4S 82ΩJ TA21N
39R9	DRD137921	PSS1/4S 15KΩJ TA21N
39R10	DRE138191	EF1/4S 20KΩF TA21N
39R11	DRE138211	EF1/4S 24KΩF TA21N
39R12	DRE137681	EF1/4S 150ΩF TA21N
39R13	DRD137921	PSS1/4S 15KΩJ TA21N
39R14	DRE137571	EF1/4S 51ΩF TA21N
39R15	DRS331271	RSS2 100KΩJ L15
39R16	DRD148281	PSS1/2S 470KΩJ TA21N
39R17	DRE137681	EF1/4S 150ΩF TA21N
39R18	DRE137881	EF1/4S 1.0KΩF TA21N
39R19	DRE137511	EF1/4S 30ΩF TA21N
39R20	DRS320151	RSS1 3.3ΩJ TA21N

SS-78LVPS(100M) POWER(39) 3/3

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
39R23	DRS321151	RSS1 6.8KΩJ L12.5
39R24	DRE137851	EF1/4S 750ΩF TA21N
39R25	DRS320491	RSS1 2.2KΩJ TA21N
39R26	DRS320371	RSS1 220ΩJ TA21N
39R27	DRD137321	PSS1/4S 47ΩJ TA21N
39R29	DRE137881	EF1/4S 1.0KΩF TA21N
39R30	DRE137971	EF1/4S 2.4KΩF TA21N
39R31	DRE138101	EF1/4S 8.2KΩF TA21N
39R32	DRS320451	RSS1 1.0KΩJ TA21N
39R33	DRS320491	RSS1 2.2KΩJ TA21N
39R34	DRE138121	EF1/4S 10KΩF TA21N
39R35	DZB999011	JPW 01 TA21N
39R36	DRD137601	PSS1/4S 680ΩJ TA21N
39R37	DRE137971	EF1/4S 2.4KΩF TA21N
39R38	DRE138121	EF1/4S 10KΩF TA21N
39R39	DRS320371	RSS1 220ΩJ TA21N
39R40	DRD137321	PSS1/4S 47ΩJ TA21N
39R41	DRD137841	PSS1/4S 6.8KΩJ TA21N
39R42 to 39R44	DRE138141	EF1/4S 12KΩF TA21N
39R45	DRE138171	EF1/4S 16KΩF TA21N
39R46,39R47	DRE138141	EF1/4S 12KΩF TA21N
39R48	DRE137881	EF1/4S 1.0KΩF TA21N
39R49	DRS320411	RSS1 470ΩJ TA21N
39R50	DRE138281	EF1/4S 47KΩF TA21N
39R51	DRE137911	EF1/4S 1.3KΩF TA21N
39R52	DRS321321	RSS1 4.7ΩJ L12.5
39R53	DRE137881	EF1/4S 1.0KΩF TA21N
39R54	DRE138121	EF1/4S 10KΩF TA21N
39R55	DRE138131	EF1/4S 11KΩF TA21N
39R56	DRE138261	EF1/4S 39KΩF TA21N
39R57	DRE137881	EF1/4S 1.0KΩF TA21N
39R58	DRE138131	EF1/4S 11KΩF TA21N
39R59	DRS321331	RSS1 100ΩJ L12.5
39R60	DRD137061	PSS1/4S 3.9ΩJ TA21N
39R61	DRE138401	EF1/4S 150KΩF TA21N
39R65	DZB999011	JPW 01 TA21N
39R70	DRD137181	PSS1/4S 12ΩJ TA21N
39R100,39R101	DRE137971	EF1/4S 2.4KΩF TA21N
39R102	DRE138401	EF1/4S 150KΩF TA21N
39R103	DRD137481	PSS1/4S 220ΩJ TA21N
39T1	DCL233821	Trans FS44237-21 UL-I
39T2	DCL215191	Sub trans FS44238-21 UL-I
39TH1	DDD080391	8D13
39VR1	DRV419191	GF06UT2/CT-6TV00 2KΩTE04B

OVER ALL(40)

CIRCUIT REFERENCE	PART NO.	DESCRIPTION
40DL1	KHB179011	Delay line SU-3-100CM UL-I
40FFC1	AHB201311	FFC-22P-L040-P1.25
40FFC2	AHB201811	FFC-34P-L040-P1.25
40FFC3,40FFC4	AHB202011	FFC-22P-L150-P1.25
40FFC5	AHB202111	FFC-26P-L150-P1.25
40FFC6	AHB201911	FFC-22P-L200-P1.25
40L1	KHB188021	Rotation coil(Φ53.5)
40L2	KHB188121	Orthogonality coil(Φ53.5)
40R1	DRD147641	PSS1/2S 1.0KΩJ TA21N
40TA1	DTA010871	Terminal CAL
40V1	DET016163	CRT S-8100A

Section 5 Schematic Diagrams

5

Table of Contents

ANA BOARD

CH1/2 INPUT

U1

C1 22P

R1 22

C3 0.047μ 400V

R3A.B.C.D 150×4

NC NC NC

C2 0.01μ

R2 1K

PROBE S.

C100 0.01μ

D4 1SS 272

C101A, B 0.01μ×2

C102 0.01μ

D1 1SS272

RL1 A12W-K

+12V

Q1 IMD3

30 CH1 IC2 ≠ 3 CH2 IC3 ≠ 3

INPUT DC

C103A, B 1000p, 100p

C104 0.01μ

D2 1SS272

RL2 A12W-K

Q2 IMD3

30 CH1 IC2 ≠ 2 CH2 IC3 ≠ 2

1/10, 100

C105A, B 1000p, 100p

C106 0.01μ

RL3 A12W-K

Q3 IMD3

30 CH1 IC2 ≠ 1 CH2 IC3 ≠ 1

1/100

C107A, B 1000p, 100p

R4 0

R5 900KΩ

C4 5P

C5 5P

R6A 110Ω

R6B 1.1K

C7B 5P

R7 22

C7A 47P

R9A 120

R9B

C9

R8

C3

R10 10

R11 10

R17 10

R12 900KΩ

C12A 3P

C12B 4P

C11

R13A 110K

R13B 1.1K

C14B 15P

R14 2.2

C14A 47P

R16 91

C16

R15

C15

R18 10

a

4 5 R1 CH1/2 ATT OUT

+12V Vcc R72 4.7 C112 0.01μ R73 10 VEE -12V

C108 0.01μ

C110 220μ 25V

IC1

C109 0.01μ

C111 220μ 25V

VEE

Vcc

D5 RD4.7M B2

Q6 2SK508 K51

C30 0.1μ

R32 100

D12 RD3.1M

C20B 2200p 500V

C20A 2200p 500V

R19 1K

D6A.B 1SS307 ×2

C19 4P

C31 0.01μ

R20 820KCT

R31 10M

C80 1000p

R80 33

C32 0.01μ

R33 22

Q7 2SC 3356

D7 HSH 88AS

Q4 2SA1162

R26 3.6K

R29 330

Q5 2SC3356

R27 1.3K

C27 100p

R22 470

R24 10K

C24

R25

C25 0.022μ

R21 180K CY

LT1097

IC1

C38 0.022μ

R78 12K

C77 0.01μ

R79 750

Q14 2SA 1162

R77 12K

R38 180K

R39A 5.6K

R39B 2K

R37 820KCT

R34 2.4K

R35 2.4K

R36 2.4K

C35 0.01μ

R75 110K

R76 1FK

R40 10

R42 24K

C42A, B 0.01μ×2

CH1/2 STEP BAL

0 ~ +4.5V

DFT : 2.25V

31 CH1 IC1 ≠ 12 CH2 IC1 ≠ 5

C44 2P

R44 82

Q9 3SK184R

R51 51K

D11 HA159

C56 0.01μ

R55 75K

C45

R52 51K

D10 HA159

C46

C58 0.01μ

R57 75K

Q10 3SK184R

R45 160CY

R53 51K

C47

R48 10

C50 0.01μ

R59 75K

Q11 3SK184R

R47 390CY

C49B

R54 51K

C49 1P

R49 100CY

C52 0.01μ

R61 75K

C118 0.1μ

IC2

NJM 4558M

-12V

C63 27P

Q8 3SK184R

R50 82

R53 33

Q12 3SK 184R

R65 10

R67 12K

C67 0.01μ

R67 24K

IC2

R70 5.6K

CH1/2 VAR 1

0 ~ +4.5V

CAL : +4.5V.

R68 24K

C69 0.01μ

CH1/2 VAR 2

C68 0.01μ

31 CH1 IC1 ≠ 13 CH2 IC1 ≠ 12

31 CH1 IC1 ≠ 7 CH2 IC1 ≠ 3

D14 RD6.8M

C55 0.1μ

IC2 ≠ 8

30 CH1 IC2 ≠ 6 CH2 IC3 ≠ 6

CH1/2 STEP CONT 1

CH1/2 STEP CONT 2

C116 1000p

C117 1000p

30 CH1 IC2 ≠ 7 CH2 IC3 ≠ 7

IC3 CD4052

C115 0.01μ

R61 75K

名称 TITLE	SS-7810 CH1/2 ATTENUATOR 1 2
図面番号 DWG.NO.	BBWSS24439105
頁 SHEET	1/1

ANA BOARD

CH3 INPUT
U1
C1 22P
R1 22
C3 0.047μ 400V
B
C2 0.01μ
R2 1K
CH3 PROBE S. 29 RS.6
C100 0.01μ
D2 1SS 272
C101 A, B 0.01μ x2
C112 0.01μ
D1 1SS272
+12V
Q1 1HG3
30 IC4 # 15
CH3 INPUT DC
C102 A, B 1000P, 100P
RL1 A12W-K
R3A, B, C, D 150 x 4
NC
R4A 4.7
R5 470K BT
R6 330K BT
R10B
C10
R10A 68
C4 5P 500V
C5 6P
R7A 150K
R7B 100K
R8 47
C8B
C8A 27P
R9
C9
a
Vcc
C103 0.01μ
C105 220μ 25V
IC1
C104 0.01μ
C106 220μ 25V
VEE
R55 4.7
C55 0.01μ
C107 0.01μ
R54 10
-12V
8 R1
CH3 ATT OUT
(10 mV/DIV
0 Vofs)
Q6 3SK184R
R34 51K
D8 HA159
R33 82
C35 1P
R35 82
Q7 3SK184R
C45 0.01μ
R52 75K
R36 51K
C37
C38
R37 160CT
Q8 3SK184R
C46 0.01μ
R49 75K
R38 160CT
R39 51K
D9 HA159
C47 0.01μ
R50 75K
R40 920CT
Q9 3SK184R
R41
C41
R43 51K
C42 3P
R42 91CT
C48 0.01μ
R51 75K
-12V
C18 2200P 500V
C1A 2200P 500V
D4A, B 1SS307 x2
C22 0.01μ
R11 820KCT
R12 180KC
LT1097
IC1
C23 4700P
R15 10K
C15
C16 0.01μ
R16
Q2 2SA1162
R17 3.6K
Q3 2SC3356
R18 1.8K
C18 100P
R19 470
R20 330
R24 22
D5 MSM 88AS
Q5 2SC3356
R77 12K
Q14 2SA 1162
C79 0.01μ
R78 12K
R79 750
Vcc
VEE
+12V
Q4 2SK508 K51
C23 0.01μ
D3 RD4.7 M B2
R23 100
D10 RD5.1M
R22 10M
C80 1000P
R80
C21 0.01μ
R25
R26 2.4K
R27 2.4K
C24 0.01μ
R56 820KCT
R28A 5.6K
R28B 2K
R28 180K
R58 110K
R57 18K
R32 24K
R30 10
C32 A, B 0.01μ x2
CH3 STEP BAL
0 ~ +4.5V
DEF: +2.25V
31 IC2 # 19
VEF
D12 RD6.8M
C50 0.1μ
16
VDD
15
13
11
12
14
3
A
B
10
9
VEE INH VSS
7
6
8
IC2 CD4052
C109 0.01μ
C110 1000P
C111 1000P
30 IC4 # 1
CH3 STEP CONT 1
CH3 STEP CONT 2
30 IC4 # 2
-12V

名称 TITLE	SS-7810 CH3 ATTENUATOR 3
図面番号 DWG.NO.	BBWSS24411105
頁 SHEET	1/1

ANA BOARD

CH1/2 ATT OUT

(10mV/DIV
  0Vofs)

CH1/2 BC BAL

CH1 IC1 #8
CH2 IC1 #19

IC2 = 7

TC7W04F

CH1 IC2 #5
CH2 IC3 #5

CH1 IC2 #4
CH2 IC3 #4

CH1/2
GAIN ADJ

{ 0~+4.5V
  DEF: +2.25V

CH1 IC1 # 6
CH2 IC1 #19

CH1/2
2mV

CH1/2
2/5mV

NJM4558M

* CH1/Z
PRE1 OUT

* CH1/Z
TRIG

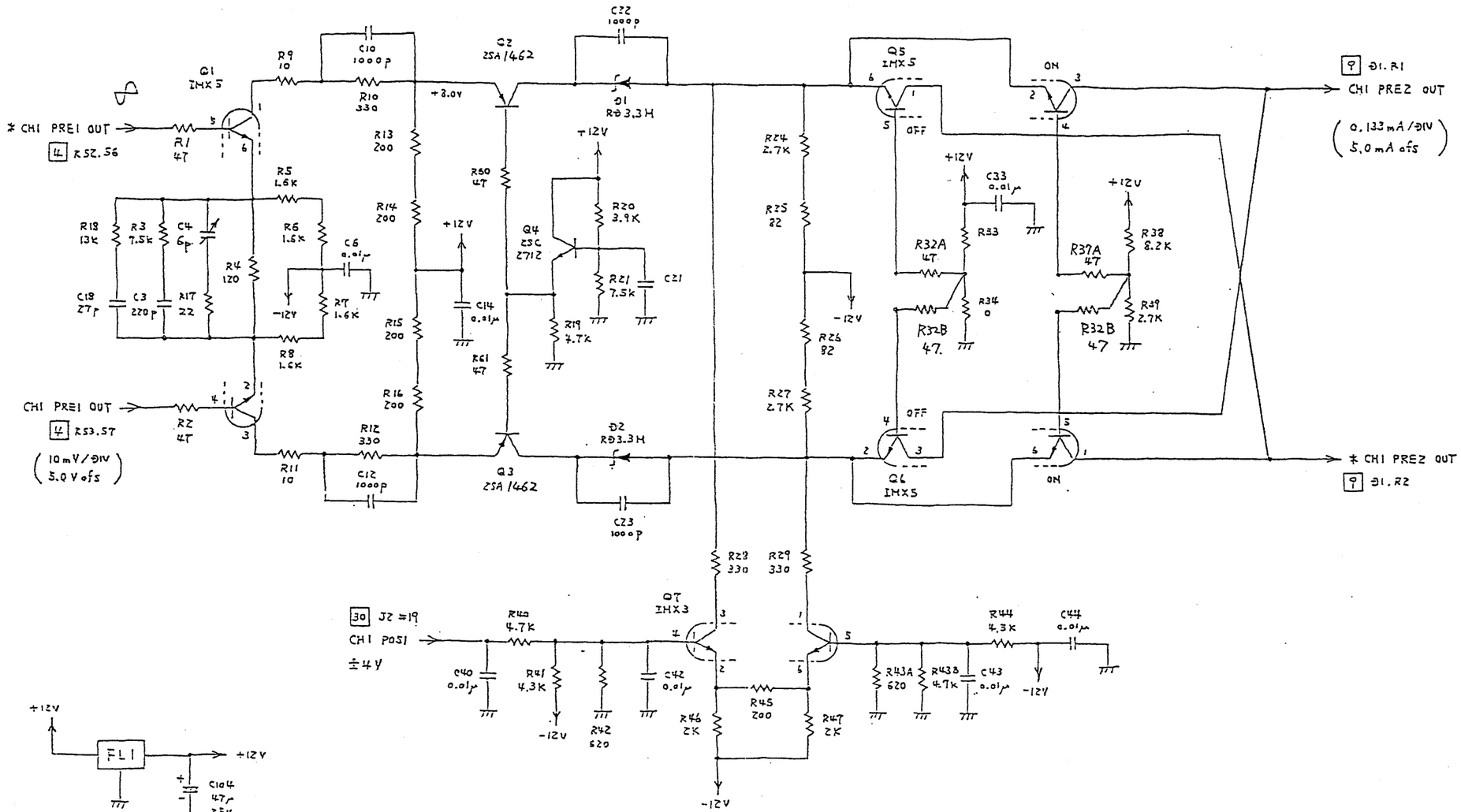
(10mV/DIV
  +5.0Vofs)

CH1/2
TRIG

CH1/2
PRE1 OUT

名称 TITLE	SS-7810 CH1/2 1st PREAMP
図面番号 DWG.NO.	BBWSS24442105
頁 SHEET	1/1

ANA BOARD



名称 TITLE	SS-7810 CH1 2nd PREAMP 6
図面番号 DWG.NO.	BBWSS24444105
頁 SHEET	1/1

ANA BOARD

CH2 PRE1 OUT
5 R52.56

* CH2 PRE1 OUT
5 R53.5T
(10mV/DIV 5.0V ofs)

Q1 IMX5
Q2 2SA1462
Q3 2SA1462
Q4 2SC2712
Q5 IMX5
Q6 IMX5
Q7 IMX3
Q8 IMH1
Q9 DTC114EK

D1 RD3.3M
D2 RD3.3H

+8V
+12V
-12V
+2.3V

9 D3, R3
CH2 PREZ OUT
(0.133mA/DIV 5.0mA ofs)

* CH2 PREZ OUT
9 D3, R4

30 J2 ≒ 20
CH2 POS1
±4V

* CH2 INV
30 IC3 ≒ 15

31 IC1 ≒ 2
POLA BAL
0~+4.5V
DEF: +2.25

4±4V

NJM4558M

名称 TITLE	SS-7810 CH2 2nd PREAMP	7
図面番号 DWG.NO.	BBWSS24445105	頁 SHEET 1/1

ANA BOARD

CH3 ATT OUT → [3] Q6.7.8.9
(10mV/DIV 0Vofs)

CH3 GAIN
0 ~ +4.5V
OFF: +2.25V
[31] IC2 #18

(10mV/DIV 5.0Vofs) * CH3 TRIG [15] R2

CH3 TRIG [15] R1

CH3 POSI ±4V [30] J2 #21

* CH3 PRE OUT [9] D5.R6

CH3 PRE OUT [9] D5.R5
(0.133mA/DIV 5.0mA ofs)

名称 TITLE	SS-7810 CH3 PREAMP
図面番号 DWG.NO.	BBWSS24446105
頁 SHEET	8 / 1/1

5-6

ANA BOARD

(0.133mA/DIV 5.0mA ofs)

CH1 PREZ OUT [6] Q5.6

* CH1 PREZ OUT [6] Q5.6

CH2 PREZ OUT [7] Q5.6

* CH2 PREZ OUT [7] Q5.5. R49

CH3 PRE OUT [8] Q9

* CH3 PRE OUT [8] Q9

R1 47, R2 47, R3 47, R4 47, R5 47, R6 47

C1, C3 0.5p, C5 2p, C7, C8, C9

D1 1SS272, D2 MA159, D3 1SS272, D4 MA159, D5 1SS272, D6 MA159

R7 10, R8 10, R9 10

R10 12K, R11 12K, R12 750, R13, R14 750, R15

C12

+4.0V

Q3 2SC3735

R16 100, R17 1K

10mA

* ADD [20] IC1 #12

11.7mA

R26 330, R29 0, C28 1000p, R29 160

(40mV/DIV +7.5V ofs)

R24 22, R25 22

Q1 IMX5

R23 100, C24 39P, C23 10p, C25

20mA

R34 47, Q2 IMX3

R36~39 2.4K×4

+12V, R35 2.2K, 1.5

C35, C36 0.01μ, R42 56, R43 160

-12V, C37 47μ 25V

R32 160, R31 0, C31. 1000p, R27 330

[30] IC5 #15 BW LMT

C45 1000p, Q4 IMD2, R45 2.7K, R44 100, -12V

+12V

C30 12P, R30 P1, C33 12P, R33 P1

R40 160, R41 56, R42 56, R43 160

C40 100P, C42 47μ 25V, C41 0.01μ, C100.101 0.01μ×2

R80 4.7, D7, D8, R44 1K, C43 100P, R81 4.7

JP114 → [11] JP69

JP115 → [11] JP71

+ to [V MAIN B]

1SS269

HSM 88WK.

J4

[30] J2 #5

[29] D3.IC14

[25] R52

[31] IC2 #7

[31] IC2 #9

[20] R41

[31] J1 #13

-12V

+12V

NC

+30V

NC

NC

NC

+150V

1C V CAL SIG

18 Y CHARA

Y REAL/*CHARA

13 ADD BAL

15 TR SEP LVL

14 TR SEP

12 BEAM FIND

21.22 -12V

25.26 +12V

27 +31V

28.29 +30V

30

31

32

33.34

10.11.19 20.23.24 GND

To [V MAIN B.] [10]

CH1 SW [20] IC1 #77

R51 1K, R50 2.2K, R52, R53 3.9K, R54 100, R55 6.8K, C51, C54 0.1μ, C55 0.01μ

Q5 2SC2712

CH2 SW [20] IC1 #76

R61 1K, R60 2.2K, R62, R63 3.9K, R64 100, R65 6.8K, C61, C64 0.1μ, C65 0.01μ

Q6 2SC2712

CH3 SW [20] IC1 #75

R71 1K, R70 2.2K, R72, R73 3.9K, R74 100, R75 6.8K, C71, C74 0.1μ, C75 0.01μ

Q7 2SC2712

名称 TITLE	SS-7810 CH SW & DRY LINE DRIV [9]
図面番号 DWG.NO.	BBWSS24447105
頁 SHEET	1/1

from ANA B. [9]

V MAIN BOARD

V CAL SIG

BEAM FIND

Y REAL/*CHARA

Y CHARA SIG
±2.0V f.s.

ADD BAL

TR SEP LVL

* TR SEP

+50V

+31V

+12V

GND

-12V

NC

[11] C104, Q11

[11] R78, C78

[11] R85, C85

[11] D3

FL1

FL2

FL3

Q1 IMX3

Q2 IMX3

Q3 IMZ1

10mA

20mA

+2.7V

(0.2V/DIV
+6.0Vafs)

+3.4V +8.3V

Q4 2SC1815GR

Q5 2SC1815GR

Q6 2SC1815GR

Q7 2SC1815GR

Q8 2SC2901

D1 1SS120

D2 1SS120

D3 1SS120

D4 1SS120

D5 RD6.8M

IC1 TC7W04F

REAL

[11] R92, C92

[11] R77, C77

V MAIN OUT

[12] To CRT B.

V SIG

GND

* V MAIN OUT

[11] R76, C76

* V SIG

V CAL SIG

+50V

+25V

+12V

-12V

名称 TITLE	SS-7810 V CHARA AMP	10
図面番号 DWG.NO.	BBWSS24332105	頁 SHEET 1/1

V MAIN BOARD

(20mV/DIV +7.5V ofs) J2 — from ANA B [9]

JP114 — JP69 — JP115 — JP71 — J3

Q1 IMX5 · Q2 IMX5 · Q3 2SA1462 · Q4 2SA1462 · Q5 2SC2712 · Q6 IMX5 · Q7 2SC2570A · Q8 2SC2570A · Q9 2SC2570A · Q10 2SC2570A · Q11 IMD3 · Q12 IHX3 · Q13 2SA1162 · Q14 2SC2901

IC1 (1/2) · IC1 (2/2)

D1 HVU202A · D2 HVU202A · D3 1SS272 · D4 1SS120 · D5 1SS120 · D6 1SS120 · D7 1SS120

+12V · -12V · +9.0V · +6.7V · +4.5V · +6.0V

3±1mA · 18mA · 20mA

(35mV/DIV +6.7V ofs)

(3.64mA/DIV 40mA ofs)

[10] R63 ADD BAL: 0~+4.5V, DEF: +2.25V

[10] R64 TR SEP LVL: 0~+4.5V, NORM: +4.5V

[10] R42 * V MAIN OUT

V MAIN OUT [10] R40

BEAM FIND [10] J1 #12

* TR SEP [10] L1

REAL [10] IC1 #7

名称 TITLE	SS-7810 V MAIN AMP [11]
図面番号 DWG.NO.	BBWSS24333105
頁 SHEET	1/1

CRT BOARD

10
from V MAIN B.
16 pin FFC

J1

+50V 4,7
* V SIG 1,2
+25V 5,8 NC
V SIG 17 18
V CAL SIG 13 14 b
+12V 9 10 +12V
-12V 11 12 -12V
GND 3,4 15,16

Q1 MRF544
Q2 MRF544
C2 R2 47
C3 R3 47
+12V R1 100
C10 1000p 500V
C11 22μ 63V
R10 150 RS52
C9 22μ 63V
R4 180
L1
R8 330 RS53
C8 0.01μ
R9 330 RS53
L2
R5 10
R6 180
R7 10
a
c

(1.15V/div +26 V ofs)

+50V
R58 24k
R56 47K
C57 0.01μ
R57 51K
Q8 2SA 1015
R59 1K
Q7 2SC 1815
R60 5.1K
d
c

* Y SIG
Y SIG

R16 100k
C17 100p
R17 22k
D1 1SS120
R18 18k
R20 100k
C21 100p
R19 22k
D2 1SS120
R22 10k
R23 100
C23 100p
R21 22k
(0.3V/div 0 V ofs)

+12V
C100 0.01μ
C101 47μ 25V
IC1
C102 0.01μ
C103 47μ 25V
-12V

S-8100A
+14 kV
Vg3
from H.V. B. 33

BL
a
X+ X-
b
IS
Q3+ Q3-
Q2+ Q2-
Q1+ Q1-
P2
P1
G2
G1
K
H1 H2
J2
c

from ANA B. 27
L3 BL02 RN2 - R62
L4 BL02 RN2 - R62
P3
X SIG
* X SIG
R104 100
D3 RD33 ESB
D4 RD33 ESB
+50V
Vg123+
R105 100
C104 1000p 500V
C105 0.01μ
NC 2.4.6
R107 100
Vg12-
Vp2
GND
R106 100
C106
C107 1000p 500V
P4
from H.V. B. 33
Vp1
Vg1
Vk
C108 0.01μ 3kV
Vh2
Vh1
from H.V. B. 33

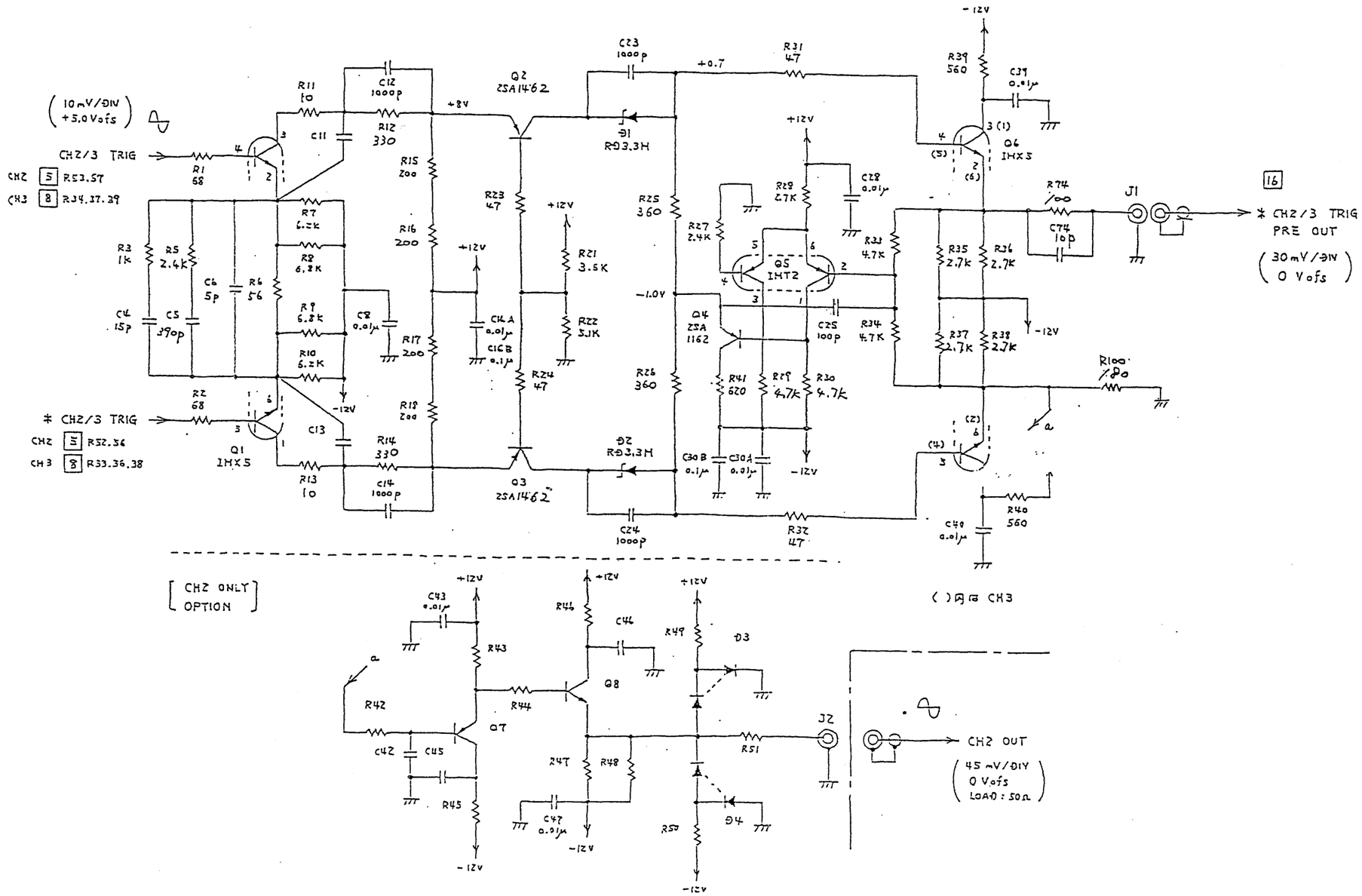
名称 TITLE	SS-7810 V OUTPUT AMP 12
図面番号 DWG.NO.	BBWSS24334105
頁 SHEET	1/1

ANA BOARD

(10mV/DIV +5.0V ofs)
CH1 TRIG
4 R53,57
R1 68
R11 10
C12 1000P
R12 330
C11
+8V
Q2 2SA1462
C23 1000P
D1 RD3.3M
R31 47
+12V
R39 560
C39 0.01μ
Q6 IMX5
C74 10P
R74 100
J1
(30mV/DIV 0 Vofs)
* CH1 TRIG. PRE OUT
16
R15 200
R16 200
R23 47
R25 360
R27 2.4K
R28 2.7K
C23 0.01μ
R33 4.7K
R35 2.7K
R36 2.7K
Q5 IMT2
C25 100P
R34 4.7K
R37 2.7K
R38 2.7K
R100 220
-12V
R3 1K
R5 2.4K
C6 5P
R6 56
R7 6.2K
R8 6.8K
C4 15P
C5 390P
R7 6.8K
C8 0.01μ
R10 6.2K
R17 200
C14A 0.01μ
C14B 0.1μ
R21 3.6K
R22 5.1K
R24 47
R26 360
Q4 2SA 1162
R41 620
R29 4.7K
R30 4.7K
C30B 0.1μ
C30A 0.01μ
R80 220
R42 1K
R81 910
RS1 0
Q7 IMX3
+12V
R40 560
C40 0.01μ
R82 51K
R32 47
C24 1000P
C70 100P
R73 120K
R43 7.2K
R44 3.3K
R45 82
R47 200
C50
R50 3K
R49 3.3K
Q8 2SC 2712
R48 560
-12V
+8.5V
R52 0
R34 750
C55 0.01μ
R53 750
R55 4.3K
R57 15K
R58 15K
R56 4.3K
R59 130
(50mV/DIV +5 Vofs)
XY SIG
25 R68
C61 220μ 25V
R61 18K
R62 13K
Q10 2SC2712
R63 620
IC1 (2/2)
RD9.1H
C43 0.1μ
C57 100P
Q9 IMX3
C51 0.01μ
R60 100
C60 0.01μ
R2 68
C13
R14 330
R18 200
C14 1000P
R13 10
Q1 IMX5
* CH1 TRIG
Q3 2SA1462
D2 RD3.3H
C24 1000P
31 IC2 #12
X-Y GAIN
0~+4.5V
DEF: +2.25V
R67 10K
C67 0.01μ
R69 1K
R62 330K
R70 1K
IC1 (1/2)
R71 10K
C72 0.01μ
C69 0.01μ
R72 10K
C44 10K
R46 82
Q11 FC13
31 IC2 #13
X-Y POSI
0~+4.5V
DEF: +2.25
R64 36K
R83 150K
C64 0.01μ
R65 2K
R66 680K
C100 0.01μ
C102 0.01μ
IC1 NJM 4558

名称 TITLE	SS-7810 CH1 TRIG PREAMP 13
図面番号 DWG.NO.	BBWSS34089105
頁 SHEET	1/1

ANA BOARD



名称 TITLE	SS-7810 CH2/3 TRIG PREAMP 14 15
図面番号 DWG.NO.	BBWSS34090105
頁 SHEET	1/1

ANA BOARD

CH1 TRIG PRE OUT [13] J1
CH2 TRIG PREOUT [14] J1
CH3 TRIG PRE OUT [15] J1
R100 75, R102 47, R101 47, J1, J2, J3, R103 75, R105 47, R104 47, R106 75, R108 47, R107 47
R1 51K, R2 51K, R3 51K, R4 51K
Q1 3SK184R, Q2 3SK184R, Q3 3SK184R, Q4 3SK184R
C5 0.01μ, C6 0.01μ, C7 0.01μ, C8 0.01μ
D1 MA159, D2 MA159
RT4 100
+12V, -12V
R13 150, C13, R14 51K, R15 4.3K, R16 4.3K, C14 0.01μ
Q5 2SC3123, Q6 3SK184R, Q7 2SA1462
C18 0.1μ, R18 1.2K, R19 1.2K, C20, R20 100
* A TRIG SIG [17] R1.2.3
D3 RD6.8M
[17] +5VB
R5.6.8 0×3
R5, R6, R8
Vdd, Vee INH Vss
C9 0.1μ, C10 0.01μ
R9 R10 R11 R12 R9~12 75k×4
C100 0.01μ
C101 1000P, C102 1000P
[30] IC4 #7
A TRIG CONT 1
A TRIG CONT 2
[30] IC4 #5
IC1 CD4052
[26] PI = 9
LINE SIG
R24 13K, C24 1000P, C25 1μ 50V, C26 47μ 25V, R26 1K

C201 0.1μ, C202 0.1μ, C200 47μ 25V
R63 150, C63
Q51 3SK184R, Q52 3SK184R, Q53 3SK184R, Q55 2SC3123, Q56 3SK184R, Q57 2SA1462
R51 51K, R52 51K, R53 51K, R64 51K, R65 4.3K, R66 4.3K, R67 47
C55 0.01μ, C56 0.01μ, C57 0.01μ, C66 0.01μ
D51 MA159, D52 MA159
C68 0.1μ, R68 1.2K, R69 1.2K, C70, R70 100
* B TRIG SIG [18] R2.3
D53 RD6.8M
[18] +5VC
R55.56 0×2
R55, R56
R60~62 75K×3
R60, R61, R62
C60 0.1μ, C61 0.01μ
C150 0.01μ
C151 1000P, C152 1000P
[30] IC4 #7
B TRIG CONT 1
B TRIG CONT 2
[30] IC4 #5
IC2 CD4052

名称 TITLE	SS-7810 A/B TRIG SELECT 16
図面番号 DWG.NO.	BBWSS24448105
頁 SHEET	1/1

ANA BOARD

19 Q1 TV SIG (A only)

16 17 R21, C21 * A/B TRIG SIG (30 mV/DIV, 0 V ofs)

R1 2.2K, R2 10K, R3 100, R4 150, C4, Q1 2SC3123

+12V, -12V

IC1

A/B TRIG DC — 30 A IC1 ≠ 3, B IC4 ≠ 5 — C109

A/B TRIG HF — 30 A IC1 ≠ 3, B IC4 ≠ 3 — C110

A/B TRIG LF — 30 A IC1 ≠ 4, B IC4 ≠ 4 — C111

C109 ~ 111 100 pF x 3

C2 1µ BP, C3 0.01µ, C109 0.01µ

R5 4.7K, R6 4.3K, R7 22K, R8 20K, R9 3K, R10 22K, R11 10K, R12 1.6K, R13 10K

D1 1SS272, C12 0.01µ 耐電圧

IC2 (1/2)

Q2 IHX5, R14 68, R25 1.5K, R26 1.5K, R27 560, R28 560

C24 0.01µ, R15 68, Q3 IHX5, R24 1.6K

C23 0.01µ, R18 22K, R23 10K

30 A IC2 ≠ 16, B IC2 ≠ 15 — A/B TRIG LVL — R16 82K, R17 3K, C16 0.01µ

31 A IC3 ≠ 19, B IC3 ≠ 18 — A/B TRIG ADJ — R20 10K, C20 0.01µ

R19 110K, R21 56K, R22 6.2K, C101 0.1µ

15 +5V B.C — C100 0.01µ — IC1 — CD4053

IC2 — NJM 4558 H

μPC1663G — IC3 — C105 0.1µ

C31, R31 11K, R32 0, R35, C35, R36 330, R37 2.7K, R38 47

IC3 (0, 2V/DIV, -3.1V ofs)

R33 11K, R34 0, C33, R39 47, R71 2.7K

Q3 IHX5, R46 100, R41 2.4K, R42 2.4K

R44 2.4K, R45 2.4K, R47 100

C53 0.1µ, R53 1.2K, R54 1.2K, R55 1.1K, C56 0.1µ, R56 180

R57 130, C57 1000p, R60 68, R62 2.4K

Q4 IHX5, R64 4.7K, R65 4.7K, C64 0.01µ

Q5 IHX5, R68 560, C62 0.01µ

Q6 IME1, R50 2.7K, R51 3.1K, R48 510, R49 510, R52 3.9K, C51 0.01µ, C66 0.01µ

(A ONLY) C67 47µ 25V

C48 0.1µ, R66 4.7K, R67 4.7K, R63 2.4K

TTL LVL, A/B TRIG OUT, 20 IC1 A ≠ 10, B ≠ 3

R59 130, C59 1000p, R61 68, R70 47, R69 560, C69 0.01µ

R58 180, C58 0.1µ

名称 TITLE: SS-7810 A/B TRIG AMP — 17 18

図面番号 DWG.NO.: BBWSS34092105 — 頁 SHEET: 1/1

ANA BOARD

17 R1 TV SIG

30 IC5 #1 TV POLA

30 IC5 #2 * TV

20 IC1 #6 TV SIG TTL LVL

名称 TITLE	SS-7810 TV SYNC SEP	19
図面番号 DWG.NO.	BBWSS34064105	頁 SHEET 1/1

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.

21 R30 DLY SWTH.

21/R30

IC2B NJM4558M

C8 0.01u 100V +50V

D4 RD30M

C9 0.01u

+50V

R11 7.5k R12 7.5k

R10 7.5k R13 7.5k

R14 4.3k R15 4.3k

Q1 IMT2

D1 1SS272

R20 1k

R19 100

C4 0.1u

R4 22k

IC2A NJM4558M

DLY TIME 30/J2#17

R1 15k

C1 0.01u

R2 36k

R5 7.5k

-12V

C5 0.01u

R6 1k

R7 100

C6 0.1u

C7 25V 47u

Q3 IMX3

Q2 IMX3

Q4 2SC2712

R18 2k

R17 10k

R16 10k

C16 0.01u

IC1

A TRIG SIG	17/R70	ATRG
B TRIG SIG	18/R70	BTRG
LV SIG	19/R27	TVSY
		AET
		BET
		EXTR
		GTIN
		ASTR
		BSTR
A SWP END	21/IC1#10	NASP
B SWP END	21/IC1#8	NBSP
		DMRD
	R21 0	DLY
NCS TLC	30/J1#8	NCS
SCLK	30/R8	SCLK
SER CLK	30/R8	SDI
SER DATA	30/J1#5	SDO
SR RXD	R33 330	NSOE
NRST	30/J1#7	NRST
		SYCK
		TMD0
		TMD1
		TMD2
		VDD
		GND

IC3 VCC C B A F D ST GND EXO-3C 20MHz

+5V C42 C43 0.1u 0.1u

C50 47p

+5V FL1 FILT C41 0.1u C40 25V 47u

C34, 36-39 0.01u

CD107BPF (TLC)

R30, 41-47 100*8

DTP	R30	31/J1#22 27/IC3#13 CAL CLK
GTDT		CAL CLK
CALS		
ATIH		
BTIH		
NINH		
NRDY	R48 1k R49 1k	30/J1#2 30/J1#1 *T READY *TRIGO
NTGO		21/R1 A GATE
AGAT		22/R1 B GATE
BGAT		25/D6 *A GATE
NAGT		25/D8 *B GATE
NBGT		
NSRD		
ACT		C58 1000p C59 100p
NINT	R37 330	30/J1#4 NINT
NADP		25/R8 *A DISP
NBDP		25/R6 *B DISP
NXY		25/C11 *XY
NTRS	R41 R42	11/D3 *TR SEP
NMAG		25/R25 *H MAG
NVD1	R43	9/R50 CH1 SW
NVD2	R44	9/R60 CH2 SW
NVD3	R45	9/R70 CH3 SW
NVD4		
NA12	R46	9/R16 *ADD
NA34	R47	
CBLK		25/IC3#1 CHOP BLK
PTA0		24/C25 B Q.01u
PTA1		24/C30 B 22k
PTA2		24/C29 B 2.2k
PTA3		24/C32 B 2.2M
PTA4		24/C31 B 220k
PTA5		24/C13 B STEP 1
PTA6		24/C15 B STEP 2
PTA7		
PTB0		23/C25 A 1u
PTB1		23/C26 A Q.01u
PTB2		23/C15 A STEP 2
PTB3		23/C13 A STEP 1
PTB4		23/C30 A 22k
PTB5		23/C31 A 220k
PTB6		23/C32 A 2.2M
PTB7		23/C28 A 2.2k
PTC0		27/IC3#13 H CAL RST
PTC1		28/C105 INTEN LIMIT
PTC2		29/IC1#11 CAL SEL 1
PTC3		29/IC1#10 CAL SEL 2
PTC4		29/IC1#9 CAL SEL 3
PTC5		
PTC6		
PTC7		

C51 220p

C53 100p

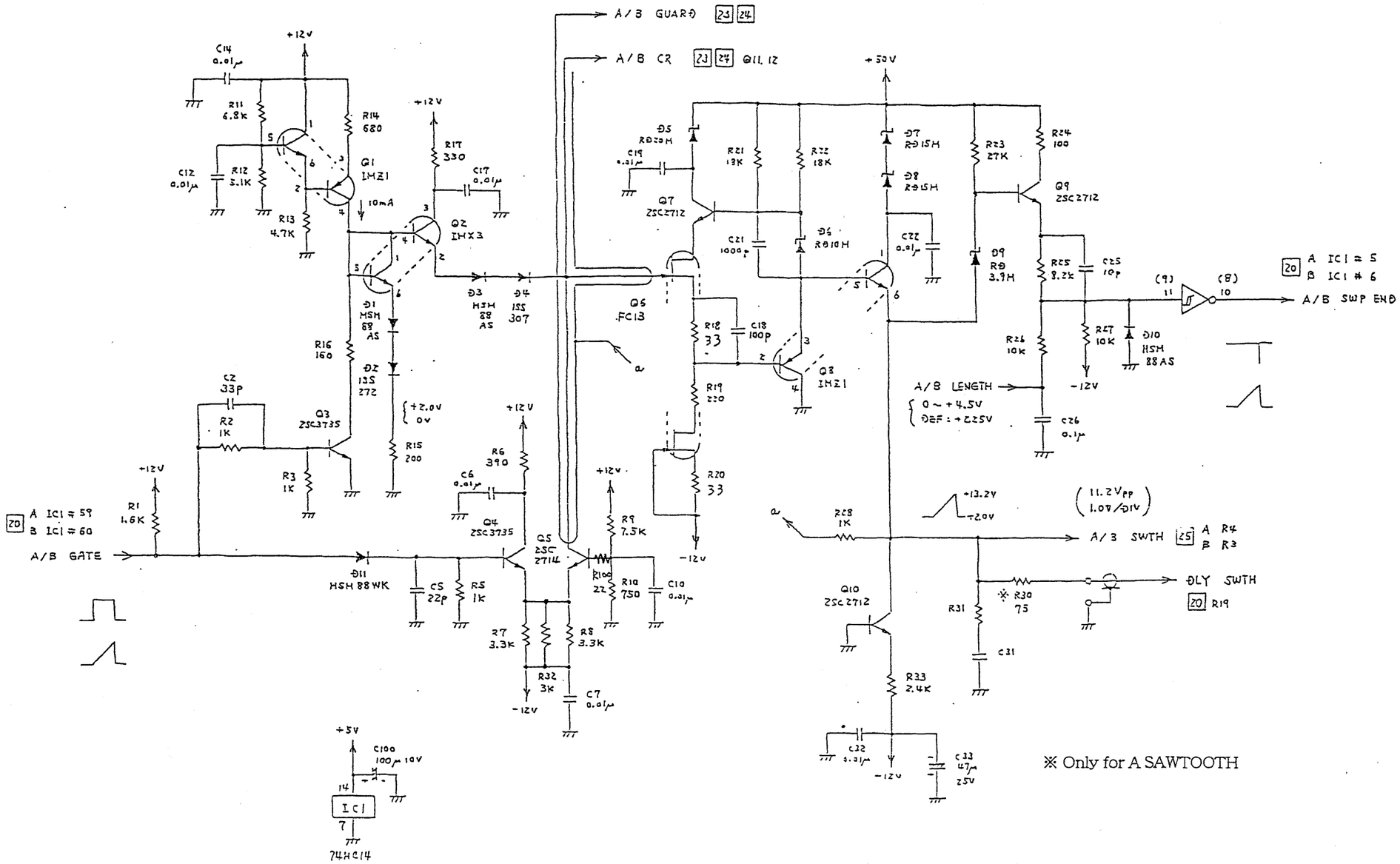
C54 100p

C55 100p

C56 100p

名称 TITLE	SS-7810 TLC CIRCUIT 20
図面番号 DWG.NO.	BBWSS11049105
頁 SHEET	1/1

ANA BOARD



名称 TITLE	SS-7810 21 22 A/B SAWTOOTH BUFF
図面番号 DWG.NO.	BBWSS20153105
頁 SHEET	1/1

ANA BOARD

20 A IC1 # 42 / B IC1 # 87

A/B STEP 1

A/B STEP 2

20 A IC1 # 41 / B IC1 # 90

D11 1SS272

+50V

R41 120k

C15 100p

C17 100p

Q20 DTC114 EK

Q15, 16, 17 IMD2 ×3

Q15 Q16 Q17

31 A IC3 #5 / B IC3 #2

A/B REF { 0 ~ +4.5V / DEF: +2.25V

R1 47k

R3 15K

C1 0.01μ

※ C3 1μ

R7 27K

R8 39K

Q1

R12 15K CT

R13 51K

R14 30K CT

R15 91K

R16 75K CT

R17 180K

Q2 Q3 Q4

R9 10K

R10 10K

R11 10K

+5.3V ~ +11.9V

CAL: +5.3V

Q1 ~ 4 2SC2712 ×4

※ R2 10K

A VAR { 0 ~ +4.5V / CAL: +4.5V

31 IC3 #6

C4 0.1μ

C2 0.01μ

R4 13k (27k)

R5 1.1k (3.3k)

R6 3.9k (8.2k)

C5 0.01μ

IC1 (1/2)

-12V

R18 30K

C18 0.1μ

IC2 (1/2)

R19 15K

R20 33K

+16.3V

※ C20 1μ

C21 0.1μ

R21 16K

IC1 (2/2)

R22 1K

Q11

R23 100

C23 0.1μ

R27 100k

R28 27K

Q5

+16.3V + { 22V / 11V / 4.4V

D1 ~ 5 RD 20M ×5

C29 0.1μ

Q6 2SC 2712

IC2 (2/2)

+50V

Q5, 7 ~ 11 2SA811A

C105 0.01μ 100V

R24 11K

C100 1μ

Q13 2SC 2714

R25 470

A 1μF

20 IC1 # 46

※ C25 1000P

D6 1SS272

R26 470

A/B 0.01μF

20 C26 1000P

A IC1 # 47 / B IC1 # 81

Q14 2SC 2714

C101 9900P

C102 82P

C103 6P(10P)

C104 1P※

A/B GUARD

21 22 R8

21 22 D4, Q5.6

A/B CR

+13.2V

+2.0V

20 A IC1 # 51 / B IC1 # 84 — A/B 2.2K

20 A IC1 # 43 / B IC1 # 82 — A/B 22K

20 A IC1 # 49 / B IC1 # 86 — A/B 220K

20 A IC1 # 50 / B IC1 # 85 — A/B 2.2M

C29 100P — Q18 1HH1

C30 100P — Q19 1HH1

C31 100P

C32 100P

R29 27K

R30 27K

R31 27K

R32 27K

Q7 Q8 Q9 Q10

R33 10K

R34 10K

R35 10K

R36 10K

R37 2.2K

R38 22K

R39 220K

R40 2.2MD

SEC/DIV	C	R	I
500m	1μ	2.2M	2μ
200m			5μ
100m			10μ
50m		220K	20μ
20m			50μ
10m			100μ
5m	0.01μ	22K (2.2M)	200μ
2m			500μ
1m			1m
500μ		220K	20μ
200μ			50μ
100μ			100μ
50μ	0.01μ	22K	200μ
20μ			500μ
10μ			1m
5μ		220K	20μ
2μ			50μ
1μ			100μ
500n	100P	22K	200μ
200n			500μ
100n			1m
50n		2.2K	2m
20n			5m

IC1 NJM353M — D7 RD 2.4M — C106 0.01μ — C107 0.1μ — D8 RD 6.8M

IC2 NJM4558M — D9 RD 6.8M — C110 0.01μ 100V — C111 0.1μ — D10 RD 10M

( ) Only for B TIMING

※ Only for A TIMING

名称 TITLE	SS-7810 A/B TIMING 23 24
図面番号 DWG.NO.	BBWSS20151105
頁 SHEET	1/1

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.

ANA BOARD

31 R6T
0 ~ +4.5V
DEF : +2.25V
B START POSI

22 R29 B SWTH

21 R29 A SWTH

13 R59 XY SIG

* B DISP
20 IC ≠ 23

* XY
20 IC1 ≠ 20

* A DISP
20 IC1 ≠ 24

* B GATE
20 IC1 ≠ 63

* A GATE
20 IC1 ≠ 60

30 J2 ≠ 7
H POSI
± 4V

* H MAG
20 IC1 ≠ 21

31 IC3 ≠ 8
NORM POSI
0 ~ +4.5V
DEF : +2.25V

30 J2 ≠ 8
REAL / * CHARA

CHARA BLK
30 J2 ≠ 9

CHOP BLK
20 R47

H REAL / * CHARA
26 IC1 ≠ 1.3

9 J4

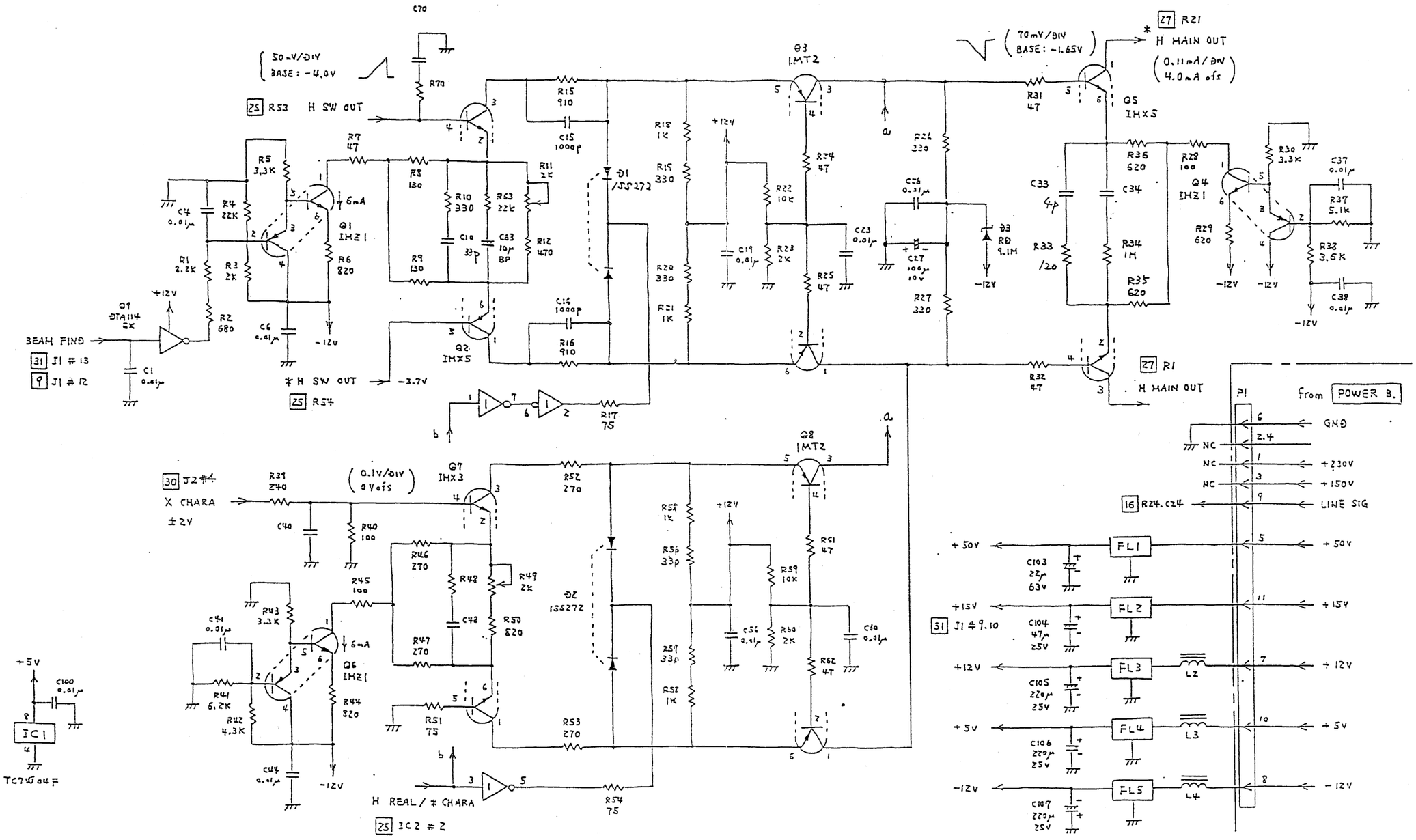
31 J1 ≠ 12 INTEN
31 J1 ≠ 14 R/G̅ INTEN
31 IC3 ≠ 12 INTEN ADJ
28
Y REAL / * CHARA 9
20 IC1 ≠ 13 INTEN LIMIT
31 J1 ≠ 16 FOCUS
28
* E CHARA
E SW OUT
* E REAL
to V MAIN B. 28

Z6 H SW OUT
(30mV/DIV BASE : -4.0V)
Z6 * H SW OUT

名称 TITLE	SS-7810 H & Z SW
図面番号 DWG.NO.	BBWSS24449105
頁 SHEET	1/1

25

ANA BOARD



名称 TITLE	SS-7810 H MAIN AMP
図面番号 DWG.NO.	BBWSS24450105
頁 SHEET	1/1

ANA BOARD

H MAIN OUT (0.11mA/DIV 4.0mA ofs) [25] Q5

H CAL SIG 0.3V/DIV [29] D4, IC1 #

X SIG (1.2V/DIV 2.5V ofs) [12] P3

* H MAIN OUT [26] Q3

* X SIG [12] P3

H CAL [30] J1 #18

H CAL REF [31] IC3 #9

0~+4.5V DEF: +2.25V

CAL CLK [20] R30

* H CAL RST [20] IC1 #12

NJM4558 H

NJM311 H

74HC74

名称 TITLE	SS-7810 H OUTPUT AMP [27]
図面番号 DWG.NO.	BBWSS24451105
頁 SHEET	1/1

V MAIN BOARD

ANA BOARD

* Z REAL

10J1

H: DARK

Q3 2SC2712

R20 4.7K

R19 2K

C19 10P

R18 3.3K

R21 7.5K

D1 MA159

+12V

-12V

J2

R3 2.7K

R4 2.4K

R1 33K

C1 0.01μ

D7 1SS272

+2.0V

R14 3.3K

R15 3.6K

R16 1.5K

R17 1.3K

C16 0.1μ

Q2 2SC2712

R62 220

C14 0.01μ

R10 27K

C12 0.01μ

R12 10K

R9 3.3K

R11 10K

C11 0.01μ

IC1

R13 4.3K

INTEN ADJ

0 ~ +4.5V

DEF: +2.25V

Z SW OUT

R5 10

R6 3.6K

* Z CHARA

INTEN

-12V ~ +12V

-12V: BRIGHT

R7 3.3K

R8

C8 0.01μ

D8 1SS272

D9 RD 15H

R/O INTEN

INTEN LIMIT

Q1 IMD2

C6 0.01μ

C106 100P

FOCUS

JP100

15K

R24 4.7K

Q4 2SC2712

R23 2K

R22 3.3K

C23 10P

R25 7.5K

D3 1SS272

R41 11K

R40 11K

R42 68K

R31 3.6K

R33 3.9K

R28 3.6K

R34 8.2K

C33 0.01μ

Q5 2SC2712

R26 1.3K

R27 33K

R61 220

R37 3.3K

Q6 2SA1162

R36 10K

C35 0.01μ

R35 2K

D2 1SS272

R38 11K

R39 11K

C38 0.1μ

Q7 2SA1162

Q8 2SC2712

+5.1V

+50V

C49 0.1μ 100V

R47 33K

R48 5.1K

R49 430

C47 0.01μ

R46 820

C48 0.047μ 100V

C50 0.1μ 100V

C46 0.01μ

D5 RD 5.1HBZ

Q9 2SA1015

R45 100

C45 0.01μ

D6 1SS83

Q10 2SC1815

R43 1K

C43 0.01μ

R44 1K

R58 4.3K

R57 4.3K

R56 5.1K

R59

C56 3P

C55 3P

C59

R51 2.4K

R52 2.4K

R53 2.4K

R54 47

P1

to H.V.B. 33

Z SIG

GND

FOCUS

C107 0.01μ

C100 0.01μ

C102 47μ 25V

C101 0.01μ

C103 47μ 25V

IC1

NJM 4558 M

名称 TITLE	SS-7810 Z AMP
図面番号 DWG.NO.	BBWSS24331105
頁 SHEET	1/1

28

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.

ANA BOARD

CH1 PROBE S. [1] RZ.D4

CH2 PROBE S. [2] RZ.D4

CH3 PROBE S. [3] RZ.D2

R1 24K, R2 12K, R3 24K, R4 12K, R5 24K, R6 12K.

V CAL SIG [9] J4 # 16

H CAL SIG [27] R48.51.C48

R7 3.3K, C7 0.1μ, D1 RD3.9M, D3 1SS272, D4 1SS272, C8 0.1μ, D2 RD 3.9M, R8 3.3K

D7 RD6.8H B2, R9 10K, C9 0.1μ

IC1 CD4051

[20] IC1 # CAL SEL 3

[20] IC1 # CAL SEL 2

[20] IC1 # CAL SEL 1

C101 100P, C102 100P, C103 100P

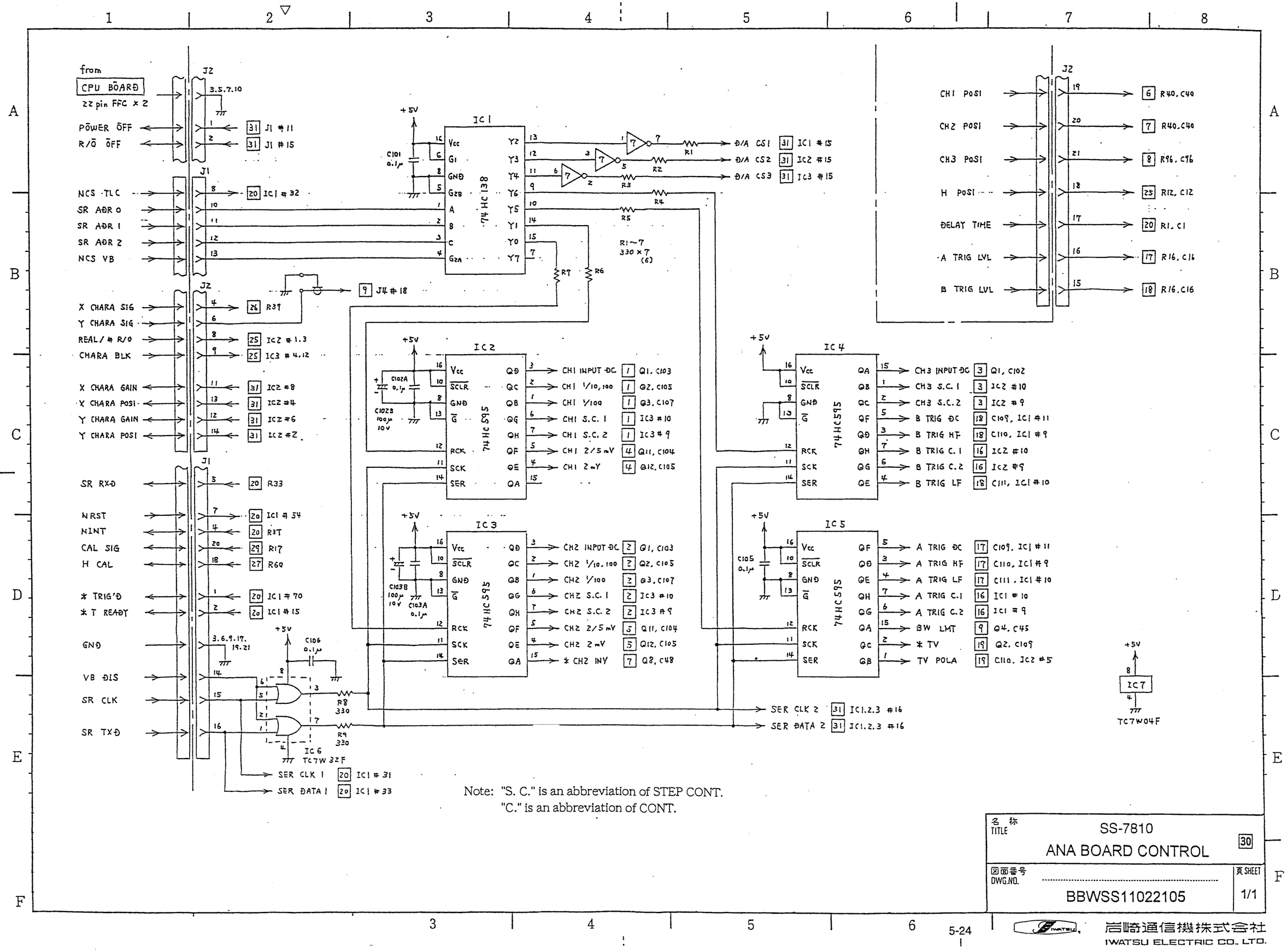
IC2, R17 100, R10 330

CAL SIG [30] J1 # 20

C100 0.1μ, IC2 NJM4558M, C104 0.1μ

PROBE SENCE R.
- 1:1 ··· ∞ : 4.0V
- 10:1 ··· 11k : 2.4V
- 100:1 ··· 6.2k : 1.9V

名称 TITLE	SS-7810 PROBE SENCE [29]
図面番号 DWG.NO.	BBWSS11036105
頁 SHEET	1/1

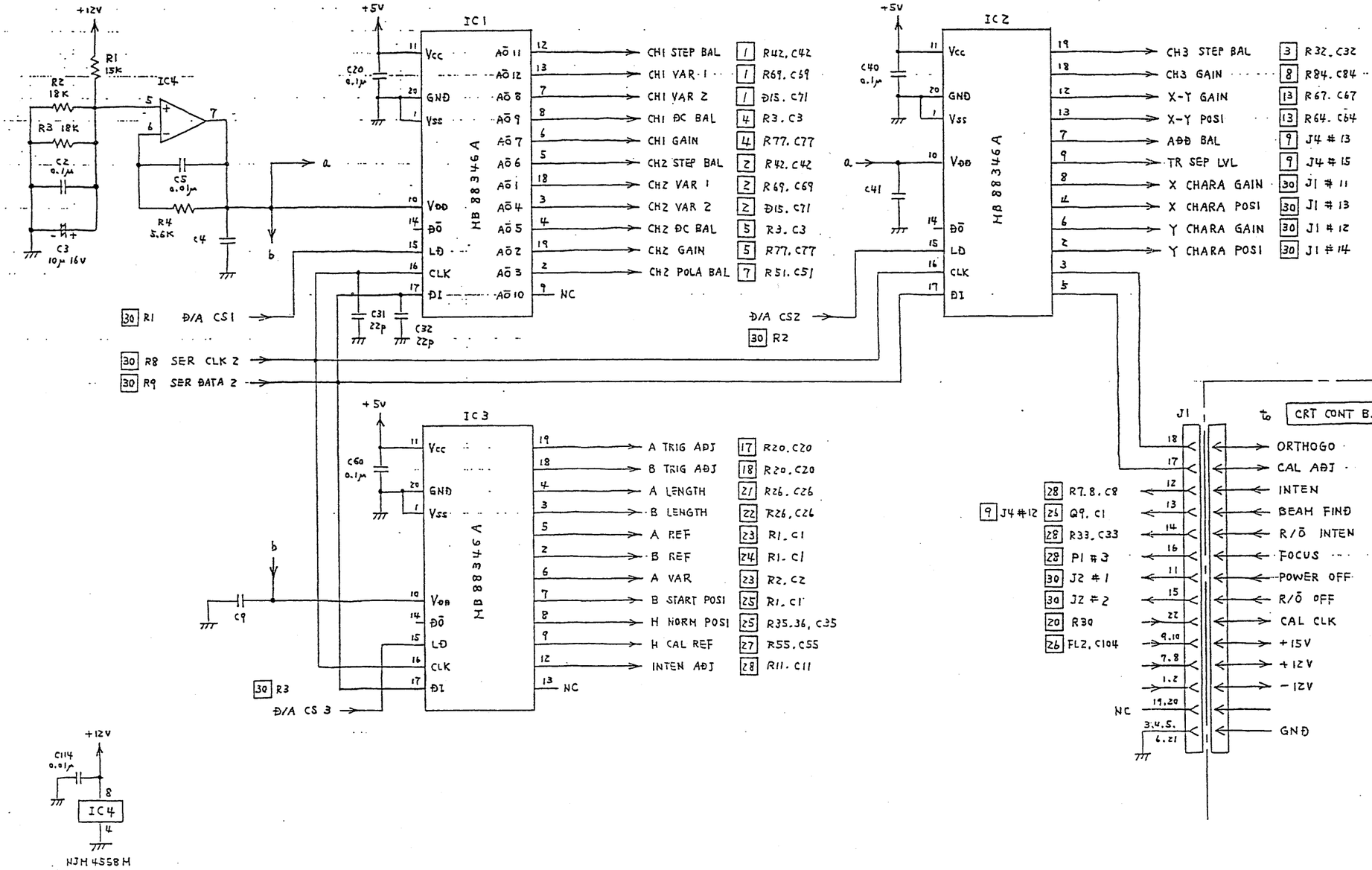


Note: "S. C." is an abbreviation of STEP CONT.
"C." is an abbreviation of CONT.

名称 TITLE	SS-7810 ANA BOARD CONTROL 30
図面番号 DWG.NO.	BBWSS11022105
頁 SHEET	1/1

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.

ANA BOARD



名称 TITLE	SS-7810 ANA BOARD 8BIT D/A
図面番号 DWG.NO.	BBWSS11023105
31	頁 SHEET 1/1

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.

CRT CONT BOARD

from ANA B. [31]
20pin FFC

INTEN
READOUT
FOCUS
SCALE
TRACE R.
POWER

INTEN
BEAM FIND
R/Ō INTEN
R/Ō OFF
FŌCUS
ŌRTHGŌ
POWER OFF
NC
CAL ADJ
CAL CLK
+15V
+12V
−12V
GND

Q1 DTA114EK
Q2 DTA114EK
Q3 2SC2712
Q4 DTA114EK
Q5 DTC114EK
Q6 2SC1815
Q7 2SA1015
Q8 IMZ1
Q9 2SC2712
Q10 A,B,C 2SC1815 × 3
IC1 (½)
IC1 (2/2)
IC1 NJM4558M
D1 1SS272
D2 RD8.2M

R1 10K
R2 10K
R3 20K
R4 20K
R5 20K
R6 16K
R7 A,B,C 39 × 3
R8 10
R9 39
R10 18K
R11 13K
R12 68K
R13 10K
R14 56K
R15 10
R16 2.2K
R17 10K
R18 5.1K
R19 6.2K
R20 2.2K
R21 1K
R22 120
RZ3 100
RZ4 100

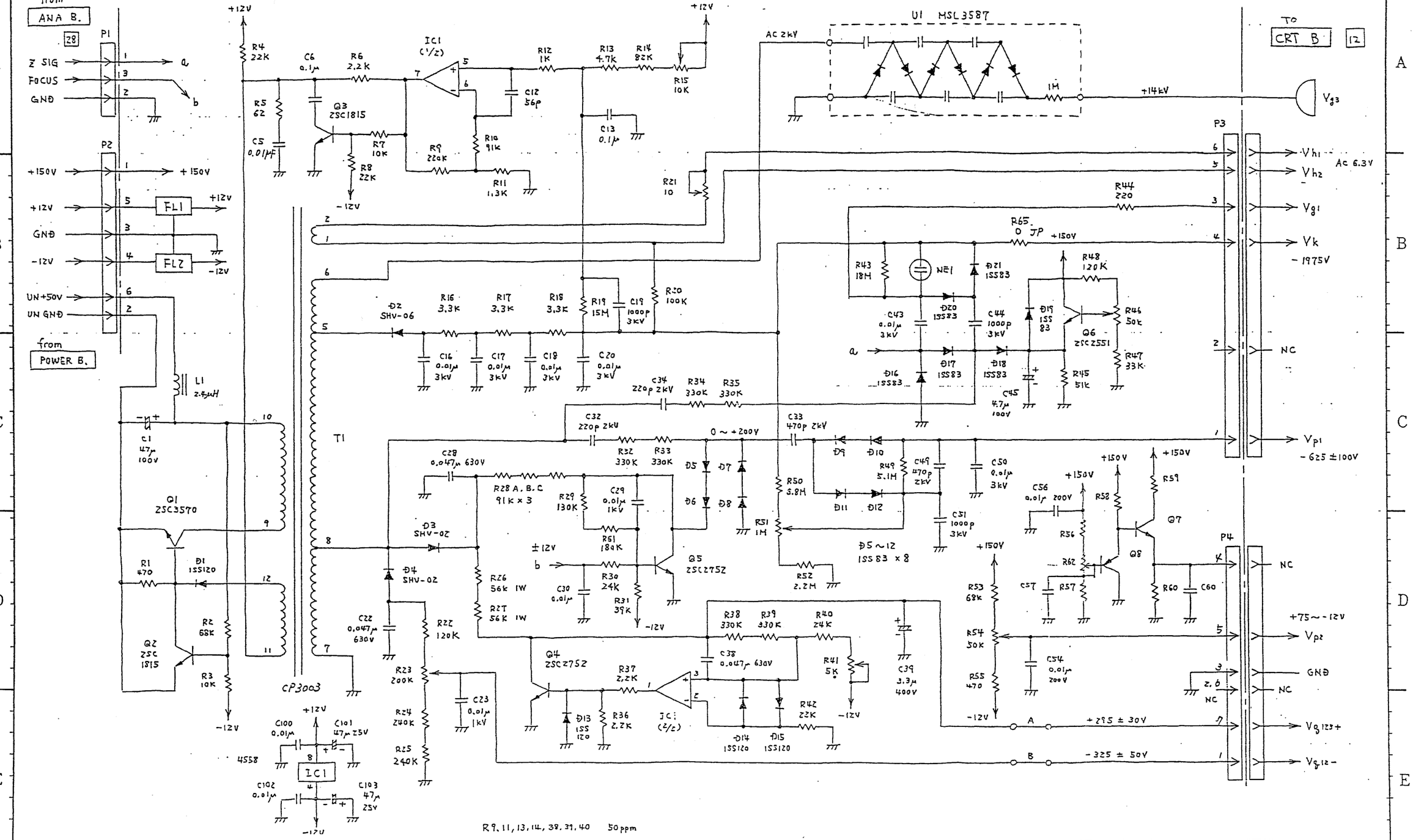
C1 0.01μ
C2 0.01μ
C3 0.01μ
C10 0.01μ
C11 0.01μ
C14 0.01μ
C17 0.01μ
C18 0.01μ
C19 0.01μ
C20 0.01μ
C21 220μ 25V
C22 100P
C23 0.01μ
C24 0.01μ
C102 0.01μ
C103 47μ 25V
C104 220μ 25V
C105 47μ 25V
C106 0.01μ
C107 0.01μ

0~+4.5V DEF: +2.25V
0~+4.5V DEF: +2.25V
+5.7V
±10V
1K
CAL OUT (0.6V 1kHz)
MAX 150mA

J1
J4
P2
P3

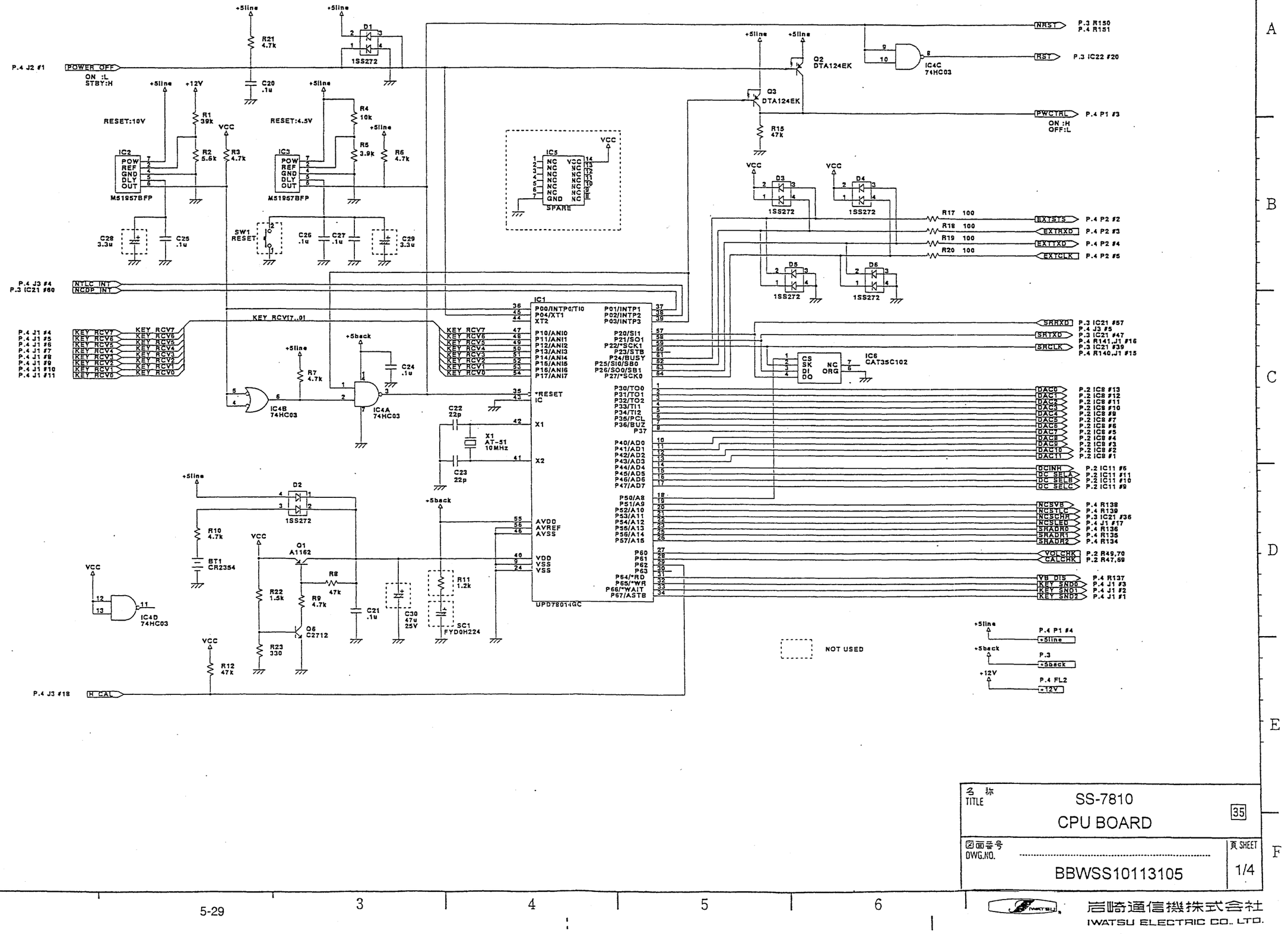
L1 TRACE ROTATION 1
L1 TRACE ROTATION 2
L2 ORTHOGONALITY 1
L2 ORTHOGONALITY 2
TA1
PL1
PL2

名称 TITLE	SS-7810 CRT CONT BOARD
図面番号 DWG.NO.	BBWSS11025105
頁 SHEET	32 1/1

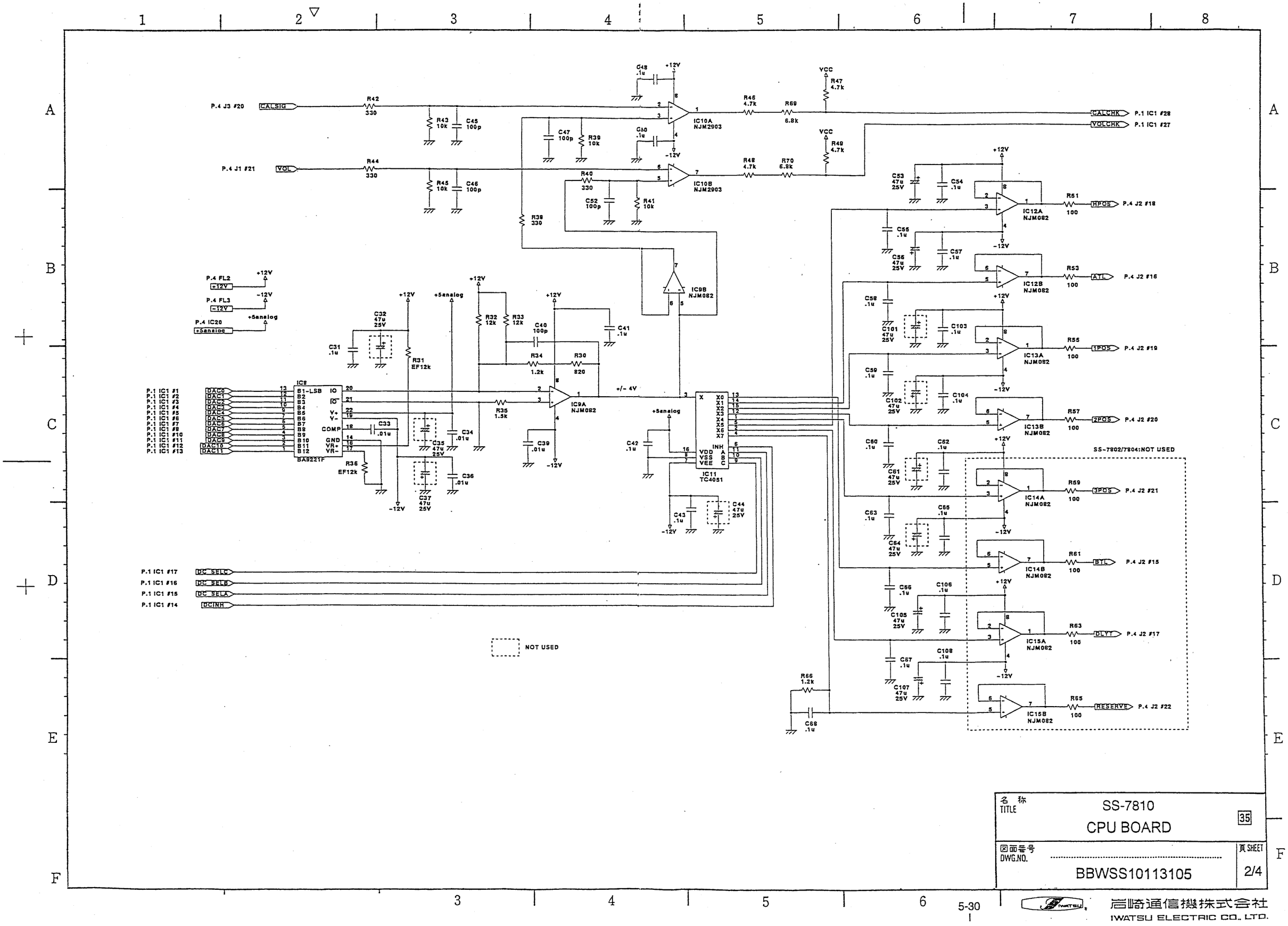


R9, 11, 13, 14, 38, 39, 40 50 ppm

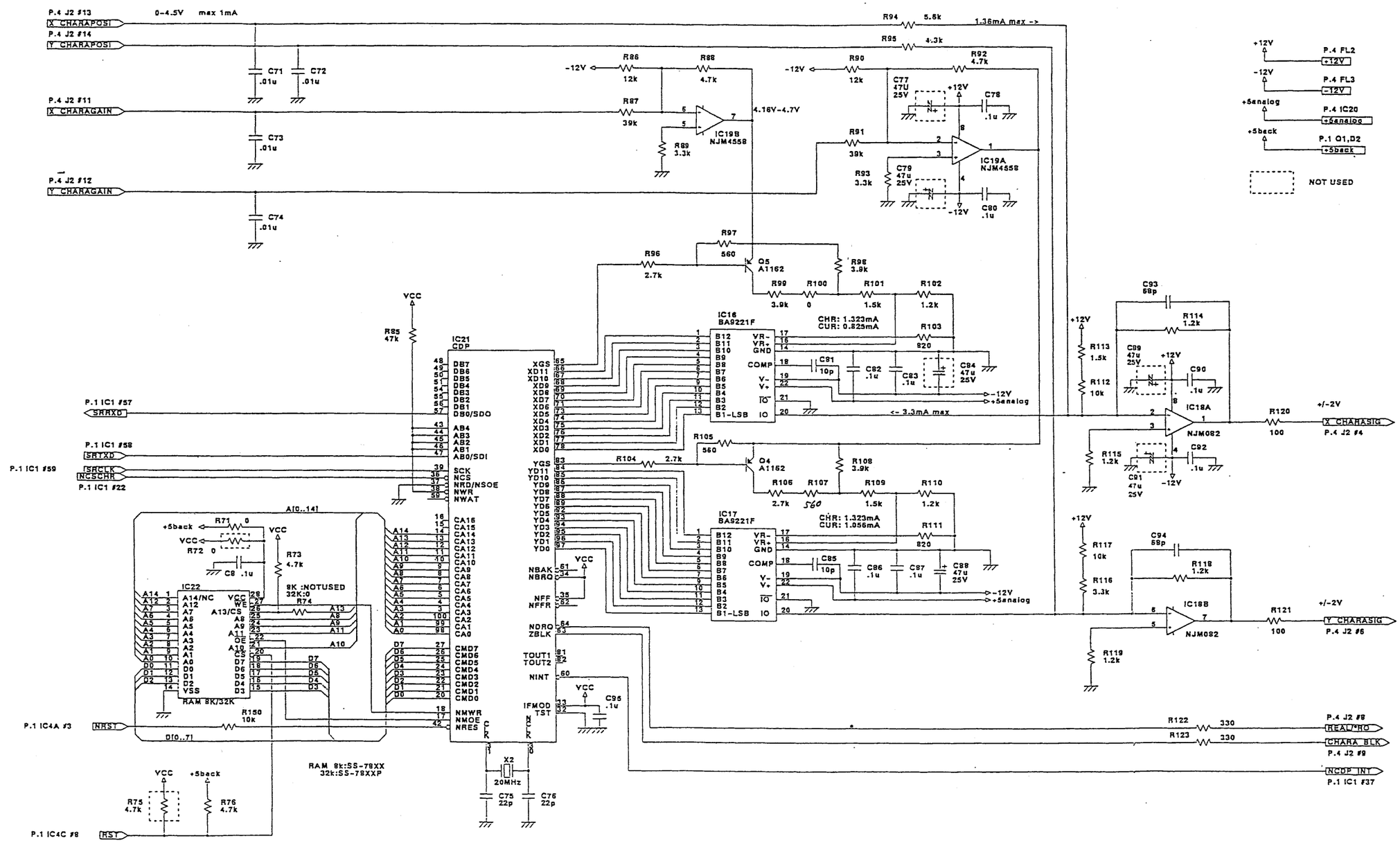
名称 TITLE	SS-7810 H. V. CIRCUIT 33
図面番号 DWG.NO.	BBWSS08073105
頁 SHEET	1/1



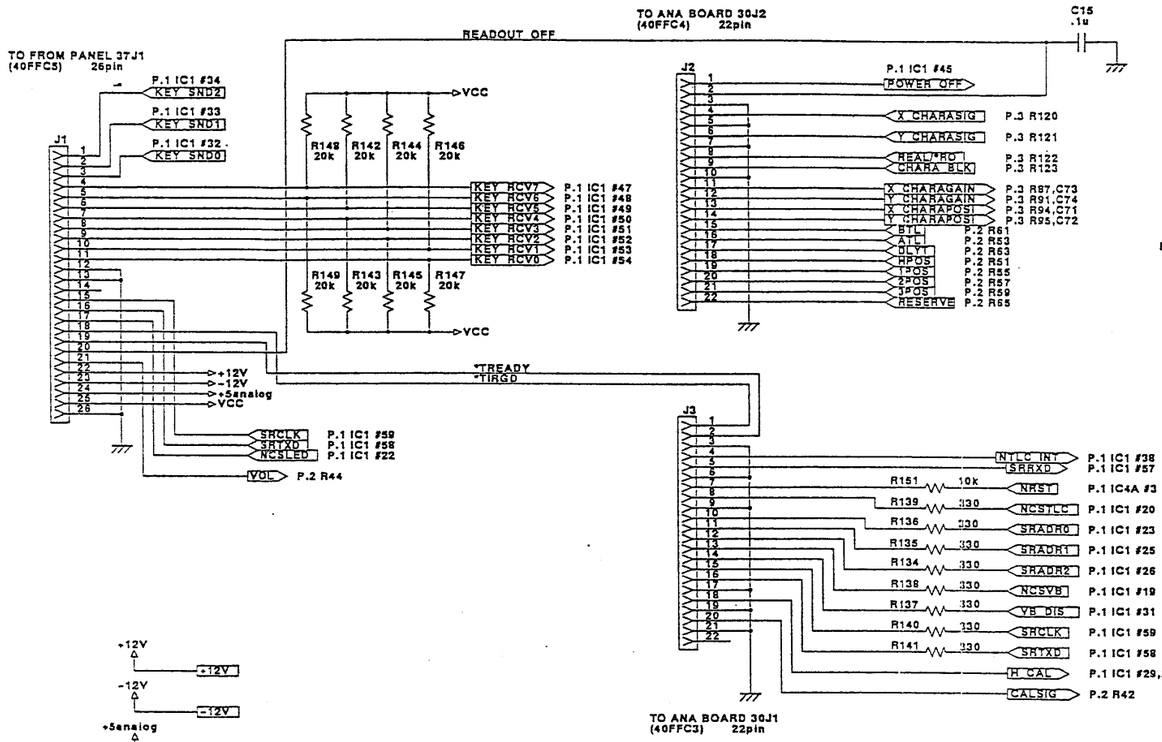
TITLE	SS-7810 CPU BOARD
図面番号 DWG.NO.	BBWSS10113105
頁 SHEET	35 1/4



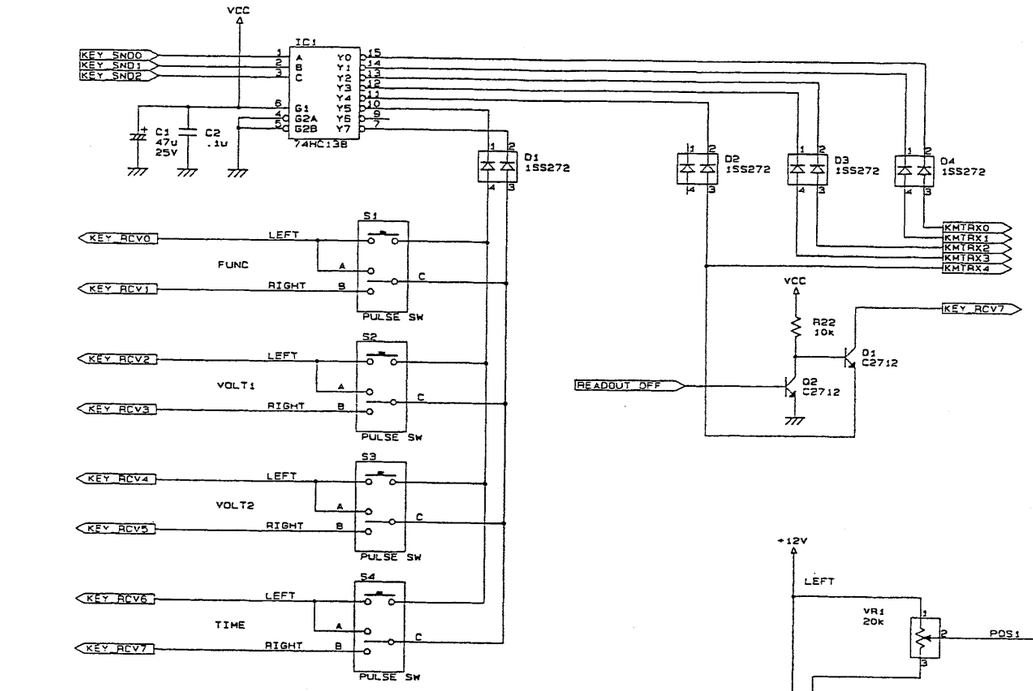
名称 TITLE	SS-7810 CPU BOARD
図面番号 DWG.NO.	BBWSS10113105
頁 SHEET	2/4
	35

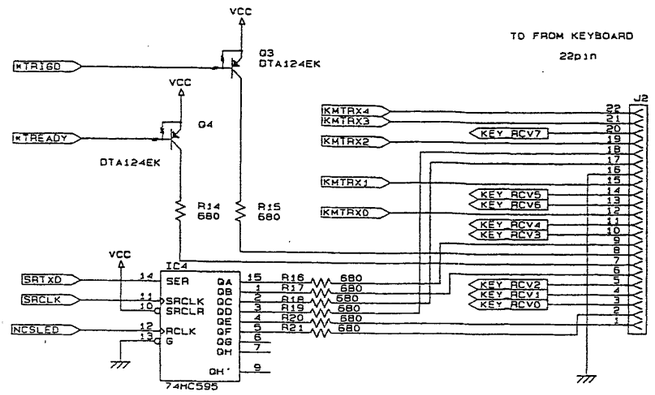


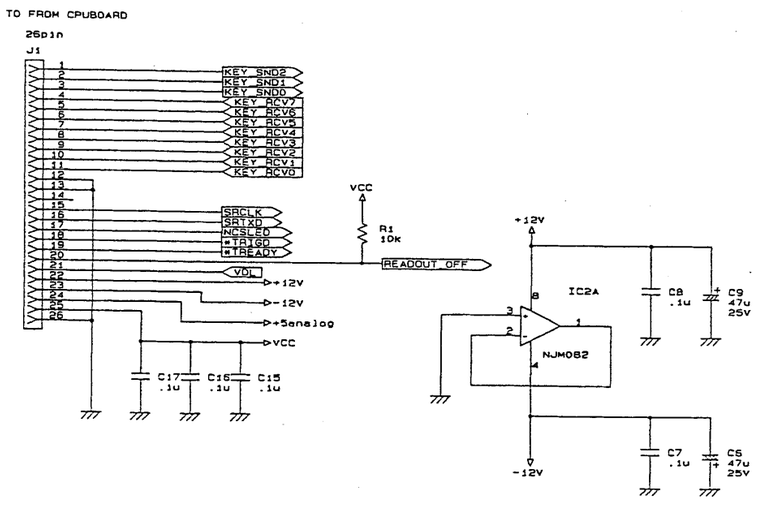
名称 TITLE	SS-7810 CPU BOARD 35
図面番号 DWG.NO.	BBWSS10113105
頁 SHEET	3/4

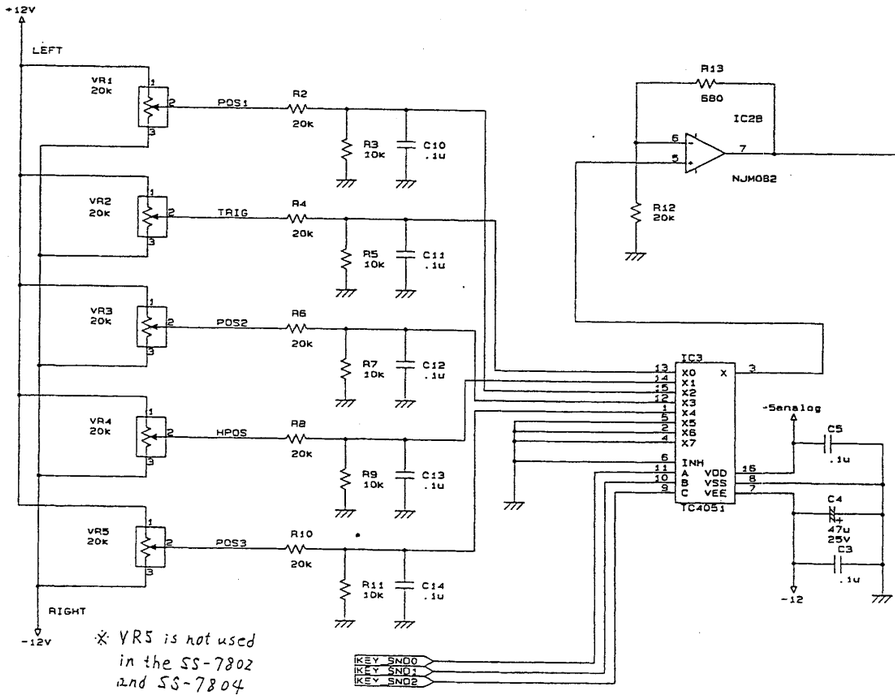


名称 TITLE	SS-7810 CPU BOARD 35
図面番号 DWG.NO.	BBWSS10113105
頁 SHEET	4/4

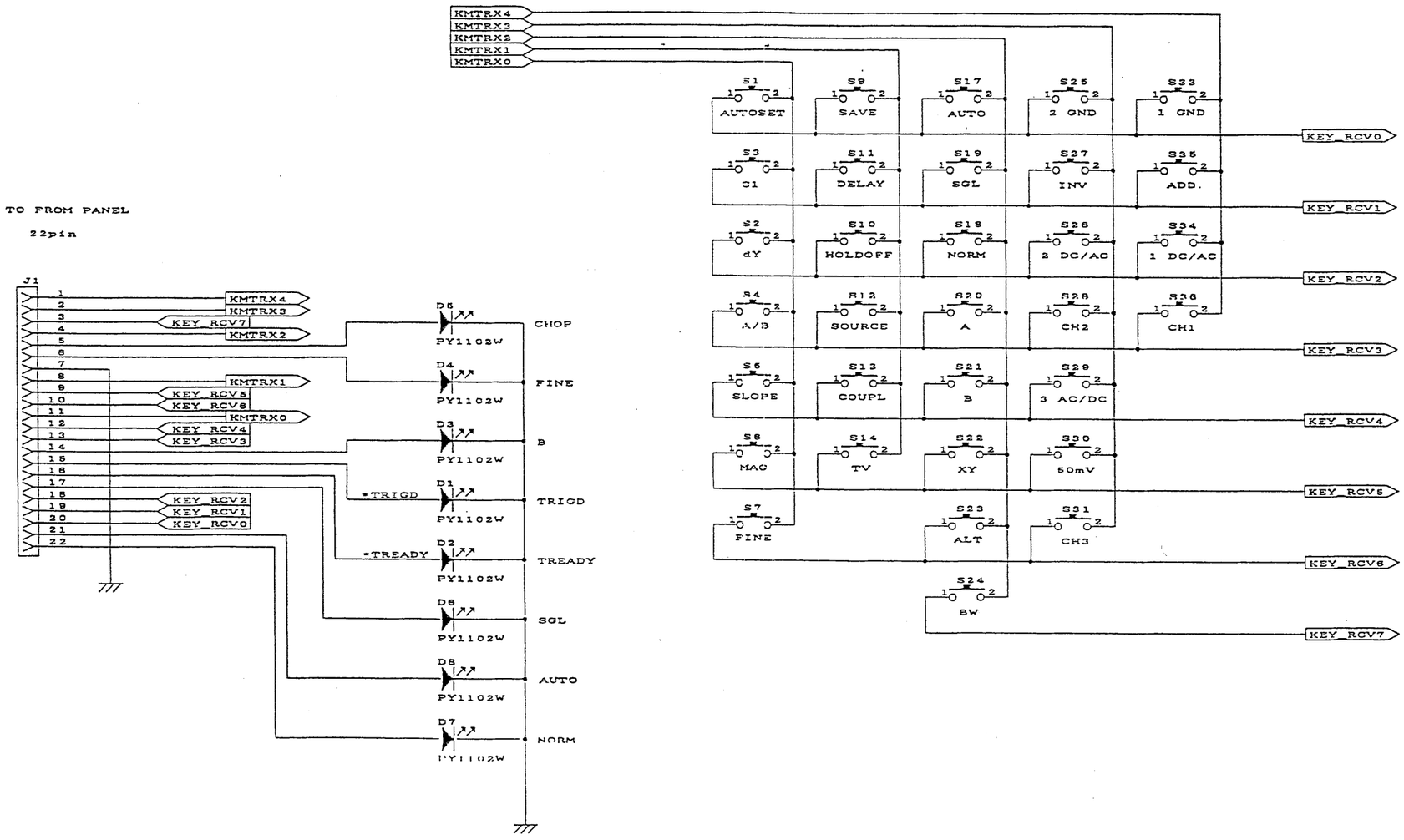




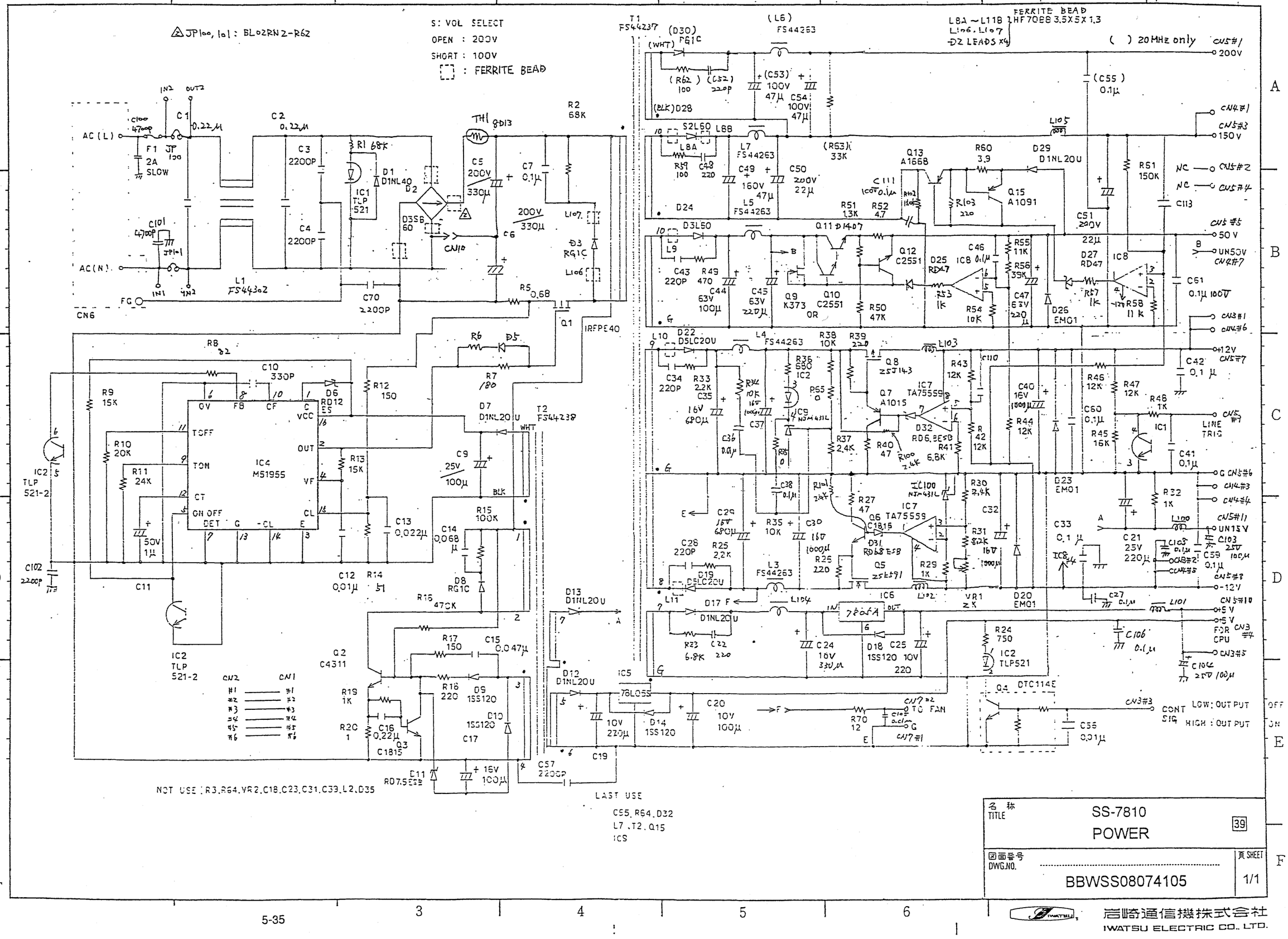




名 称 TITLE	SS-7810 PANEL BOARD
図面番号 DWG.NO.	BBWSS11024105
頁 SHEET	1/1

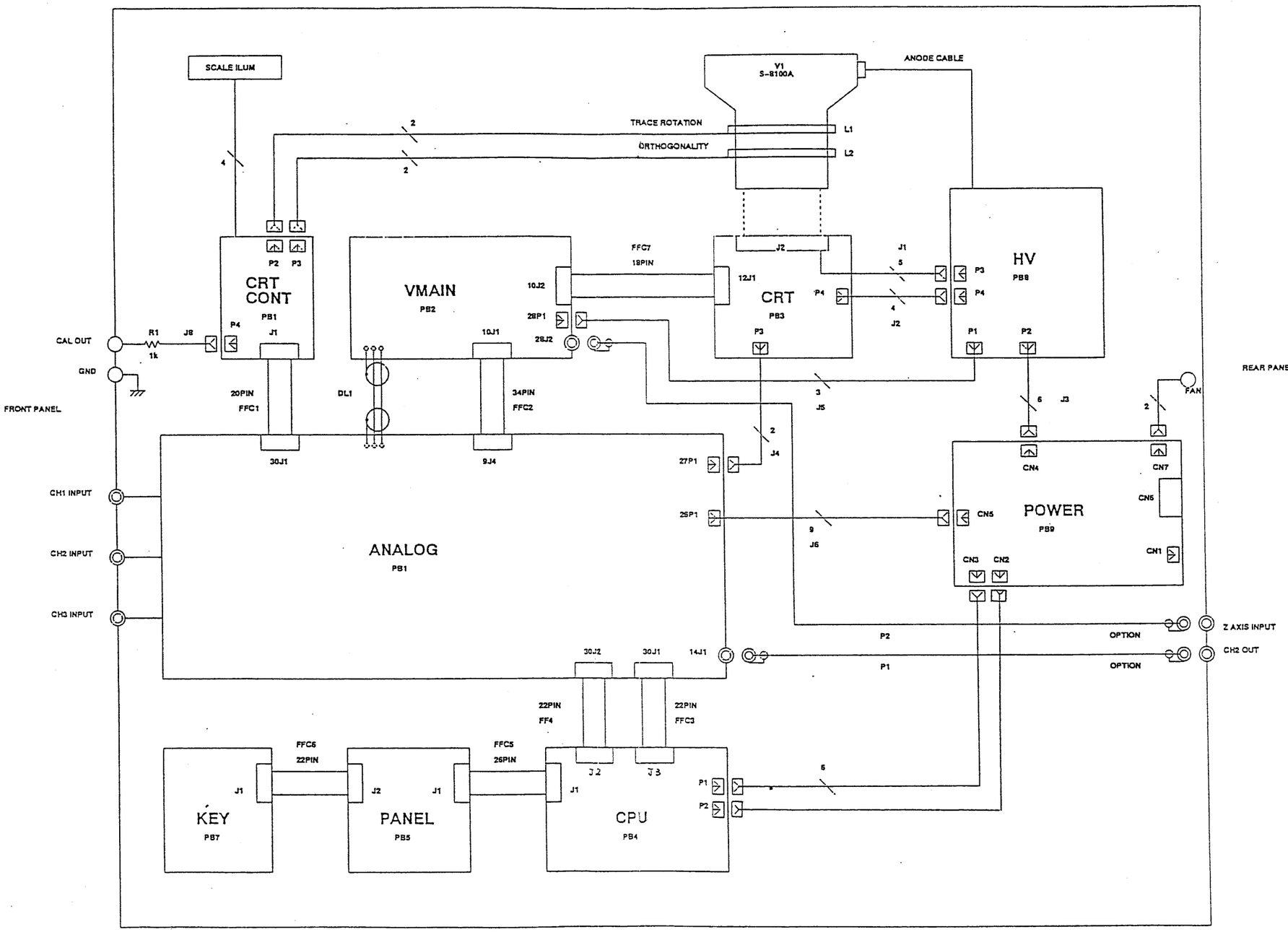


名称 TITLE	SS-7810 KEY BOARD
図面番号 DWG.NO.	BBWSS11027105
頁 SHEET	1/1



名称 TITLE	SS-7810 POWER
図面番号 DWG.NO.	BBWSS08074105
頁 SHEET	39 / 1/1

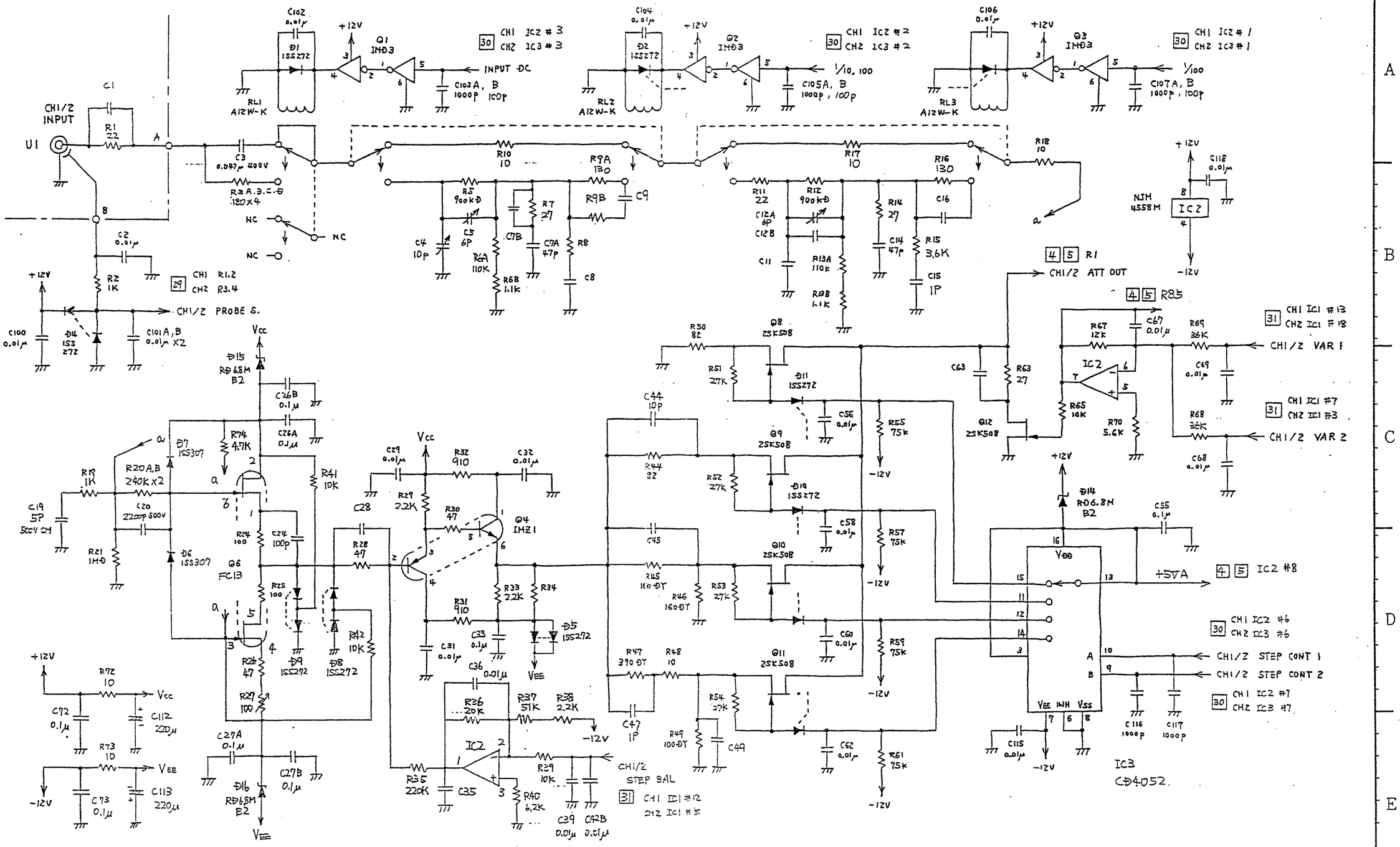
岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.



名称 TITLE	SS-7810 OVER ALL
図面番号 DWG.NO.	BBWSS02041105
頁 SHEET	40 / 1/1

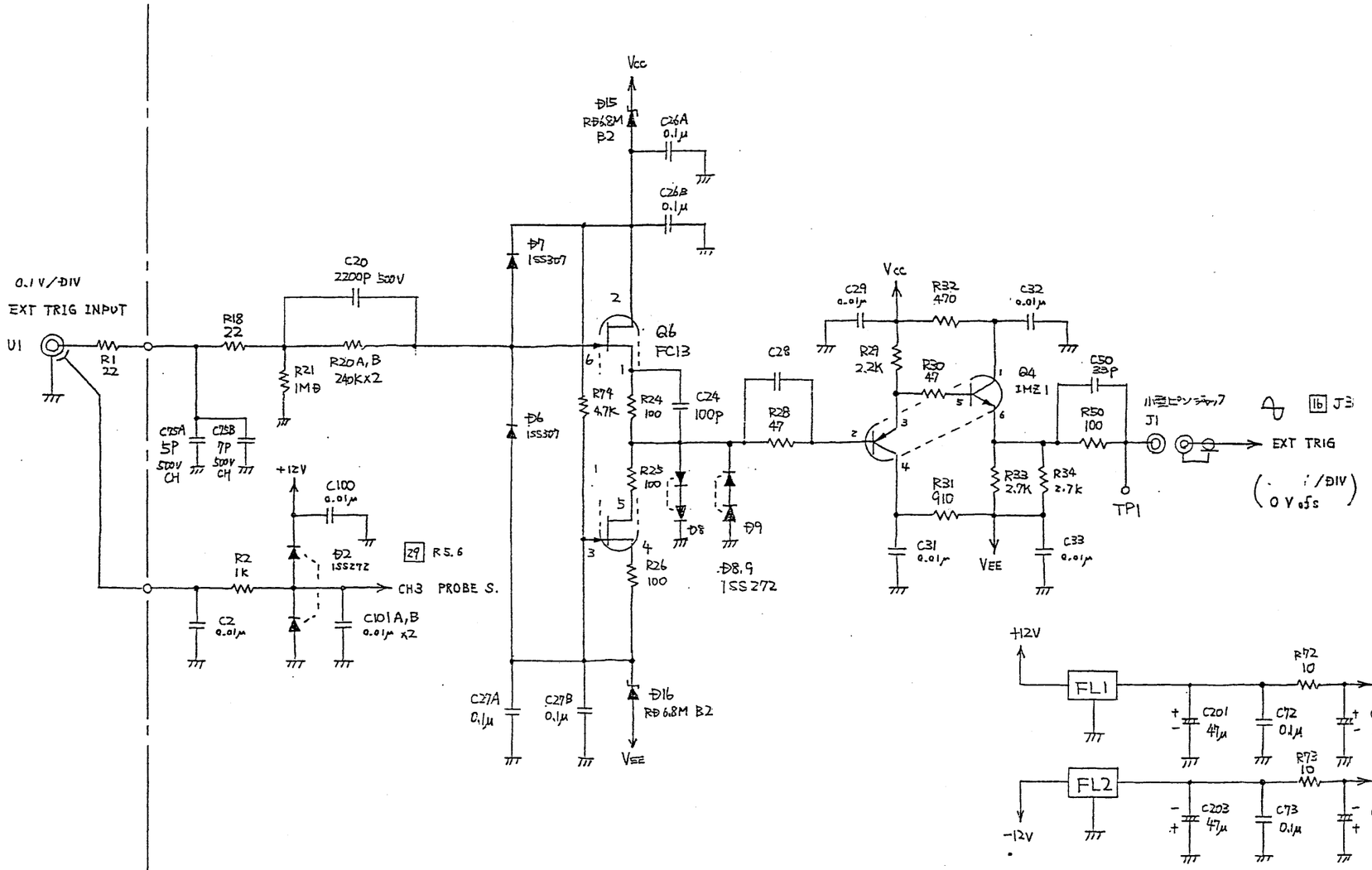
岩崎通信機株式会社
IWATSU ELECTRIC CO., LTD.

SS-7805/04



名称 TITLE	SS-7805/04
	CH1/2 ATTENUATOR
図面番号 DWG.NO.	BBWSS24378105
頁 SHEET	1/1

岩崎通信機株式会社
IWATSU ELECTRIC CO. LTD.



29 R.S.6
16 J3

名称 TITLE	SS-7805/04 EXT TRIG IN
図面番号 DWG.NO.	BBWSS24380105
頁 SHEET	1/1

3 CO:CHANGE ORDER

岩崎通信機株式会社
IWATSU ELECTRIC CO., LTD.

ANA BOARD

CH1/2 ATT OUT (10mV/DIV 0Vofs)

IC2 #7

CH1/Z DC BAL

CH1 IC1 #8
CH2 IC1 #19

TC7W04F

NJH4558M

CH1/2 2mV

CH1/2 2/5mV

CH1 IC2 #4
CH2 IC3 #4

CH1/2 GAIN ADJ
0~+4.5V
DEF:+2.25V

CH1 IC2 #5
CH2 IC3 #5

CH1 IC1 #6
CH2 IC1 #19

* CH1/Z PRE1 OUT

* CH1/Z TRIG (10mV/DIV +5.0Vofs)

CH1/Z TRIG

CH1/Z PRE1 OUT

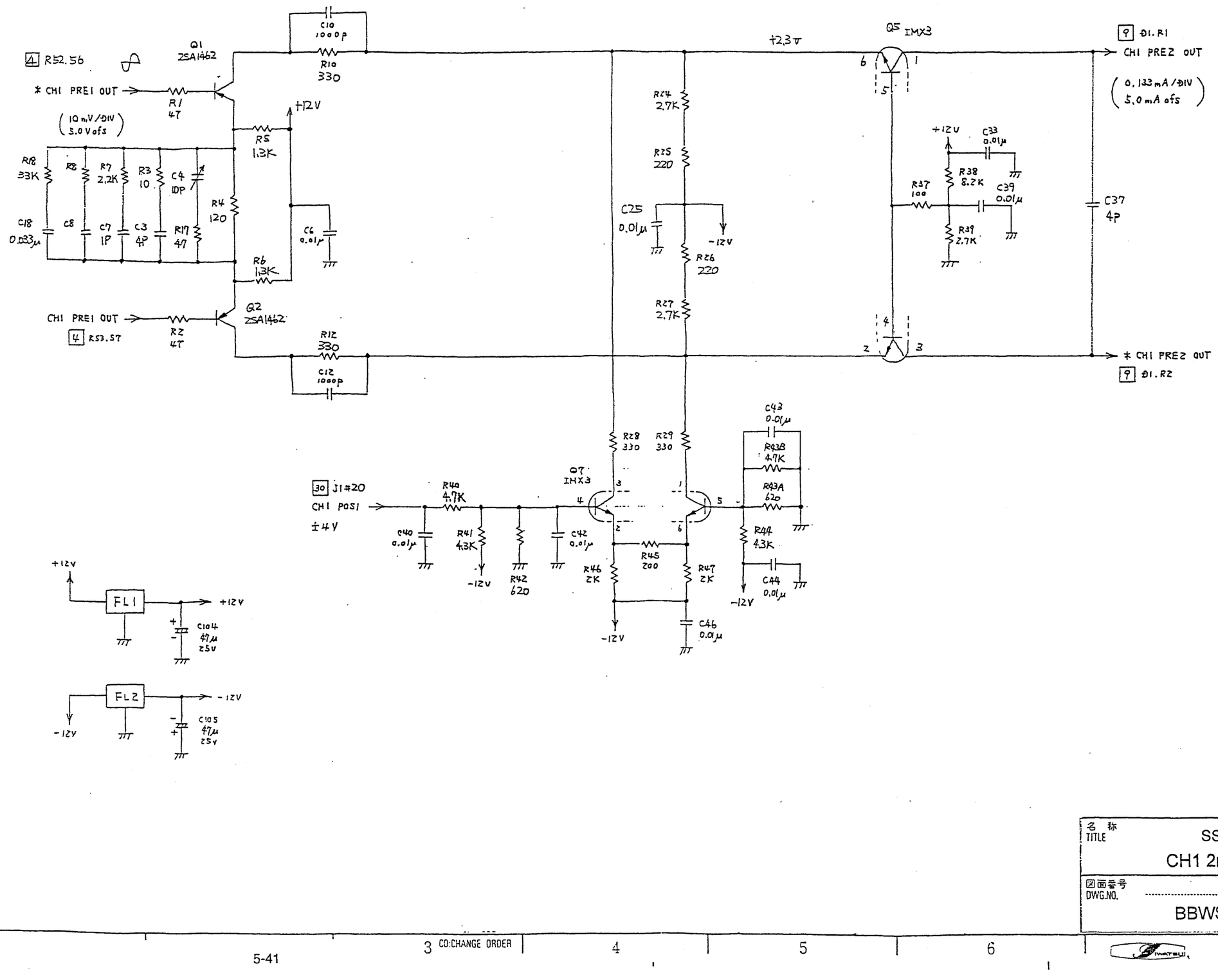
名称 TITLE	SS-7805/04 CH1/2 1st PREAMP
図面番号 DWG.NO.	BBWSS24381105
頁 SHEET	1/1

CO:CHANGE ORDER

5-40

岩崎通信機株式会社

ANA BOARD



名称 TITLE	SS-7805/04 CH1 2nd PREAMP
図面番号 DWG.NO.	BBWSS24383105
頁 SHEET	1/1

3 CO:CHANGE ORDER

ANA BOARD

[5] R52 56

+ CH2 PRE1 OUT (10mV/DIV 5.0V afs)

CH2 PRE1 OUT [5] R53 57

Q1 2SA1462

Q2 2SA1462

R1 47 · R2 47 · R3 10 · R4 120 · R5 1.3K · R6 1.3K · R7 · R8 · R10 330 · R12 330 · R17 47 · R18 33K

C3 6P · C4 10P · C6 0.01μ · C7 · C8 · C10 1000P · C12 1000P · C18 0.033μ

+12V · -12V

Q5 IMX3 · Q6 IMX3

R24 2.7K · R25 220 · R26 220 · R27 2.7K

C25 0.01μ · C33 0.01μ · C34 0.01μ · C39 0.01μ

R32 100 · R33 8.2K · R34 2.7K · R37 100 · R38 8.2K · R39 2.7K

[9] D3, R3 CH2 PRE2 OUT (0.133mA/DIV 5.0mA afs)

* CH2 PRE2 OUT [9] D3, R4

R49 7.5K

4±4V

IC1

C50 0.01μ · R50 18K · R51 10K · R52 27K · R53 5.1K

[31] IC1 #2 POLA BAL { 0~+4.5V DEF: +2.25

C51 0.01μ

[30] J1 #20 CH2 POSI ±4V

R40 4.7K · R41 4.3K · R42 620

C40 0.01μ · C42 0.01μ

Q7 IMX3

R28 330 · R29 330 · R44 4.3K · R45 200 · R46 2K · R47 2K · 4.7K · 620

C44 0.01μ · C46 0.01μ · C49 0.01μ

Q8 IMH1

+12V · R48 10K

* CH2 INV [30] IC3 #15

C48 1000P

Q9 DTC 114EK

FL1 · C104 47μ 25V

FL2 · C105 47μ 25V

C100 0.1μ · C102 0.1μ · IC1 NJM4558M

名称 TITLE	SS-7805/04 CH2 2nd PREAMP [7]
図面番号 DWG.NO.	BBWSS24384105
頁 SHEET	1/1

3 CO:CHANGE ORDER

ANA BOARD

(0.133mA/DIV 5.0mA ofs)

CH1 PRE2 OUT
6 Q5.6
D1 1SS272
R1 47
D2 MA159
R7 10
C7
a
6 Q5.6
* CH1 PRE2 OUT
R2 47

CH2 PRE2 OUT
7 Q5.6
D3 1SS272
R3 47
D4 MA159
R8 10
C8
b
7 Q5.6. R49
* CH2 PRE2 OUT
R4 47

+4.0V
R10 12K
R11 12K
R12 1.6K
R13 1.5K
R14 1.6K
R15 1.5K
R18
R19
C12 0.01μ
+12V

11.7mA
R26 330
R28 10
C28 1000P
R29 160
(40mV/DIV +7.5V ofs)
R24 47
Q1 IMX5
R23 100
C24 27P
C23 10P
20mA
R34 47
Q2 IMX3
R36~39 2.4K×4
+12V
R35 2.2K
C35
C36 0.01μ
-12V
R25 47
R32 160
R21 10
C31 1000P
R27 330
C30 15P
R30 91
R40 100
R41 120
R42 120
R43 100
C41 0.01μ
C42 47μ 25V
C37 47μ 25V
R33 91
C33 15P
JP114
JP116
11 JP69
11 JP71

Q3 2SC2735
10mA
C16
R16 100
R17 1K
* ADD
20 IC1 #72

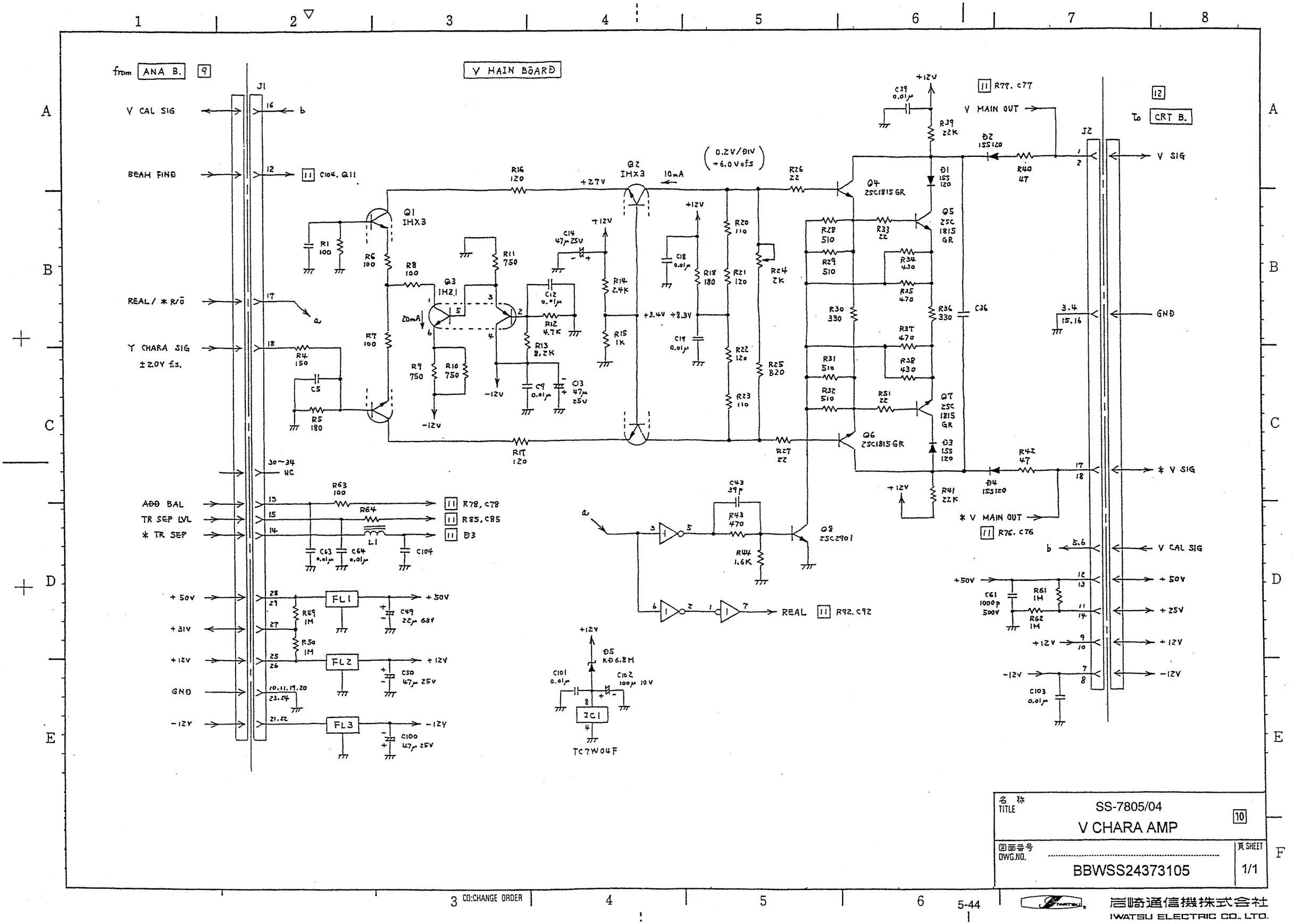
30 J2 #6
29 D3.IC(#12
J4
1C V CAL SIG
18 Y CHARA
13 ADD BAL
15 TR SEP LVL
14 TR SEP
12 BEAM FIND
21,22 -12V
25,26 +12V
27 +31V
28,29 +50V
30
31
32
33,34
10,11,19 20,23,24 GND
31 IC2 #7
31 IC2 #9
20 R41
31 J1 #13
-12V
+12V
NC
+50V
NC
NC
NC
+150V
to Y MAIN B. 10

+12V
C54 0.1μ
C51
R53 3.9K
R54 100
20 IC1 #77
* CH1 SW
R51 1K
Q5 2SC2712
a
R50 2.2K
R52
R53 6.8K
C55 0.01μ
-12V

+12V
C64 0.1μ
C61
R63 3.9K
R64 100
20 IC1 #76
* CH2 SW
R61 1K
Q6 2SC2712
b
R60 2.2K
R62
R65 6.8K
C65 0.01μ
-12V

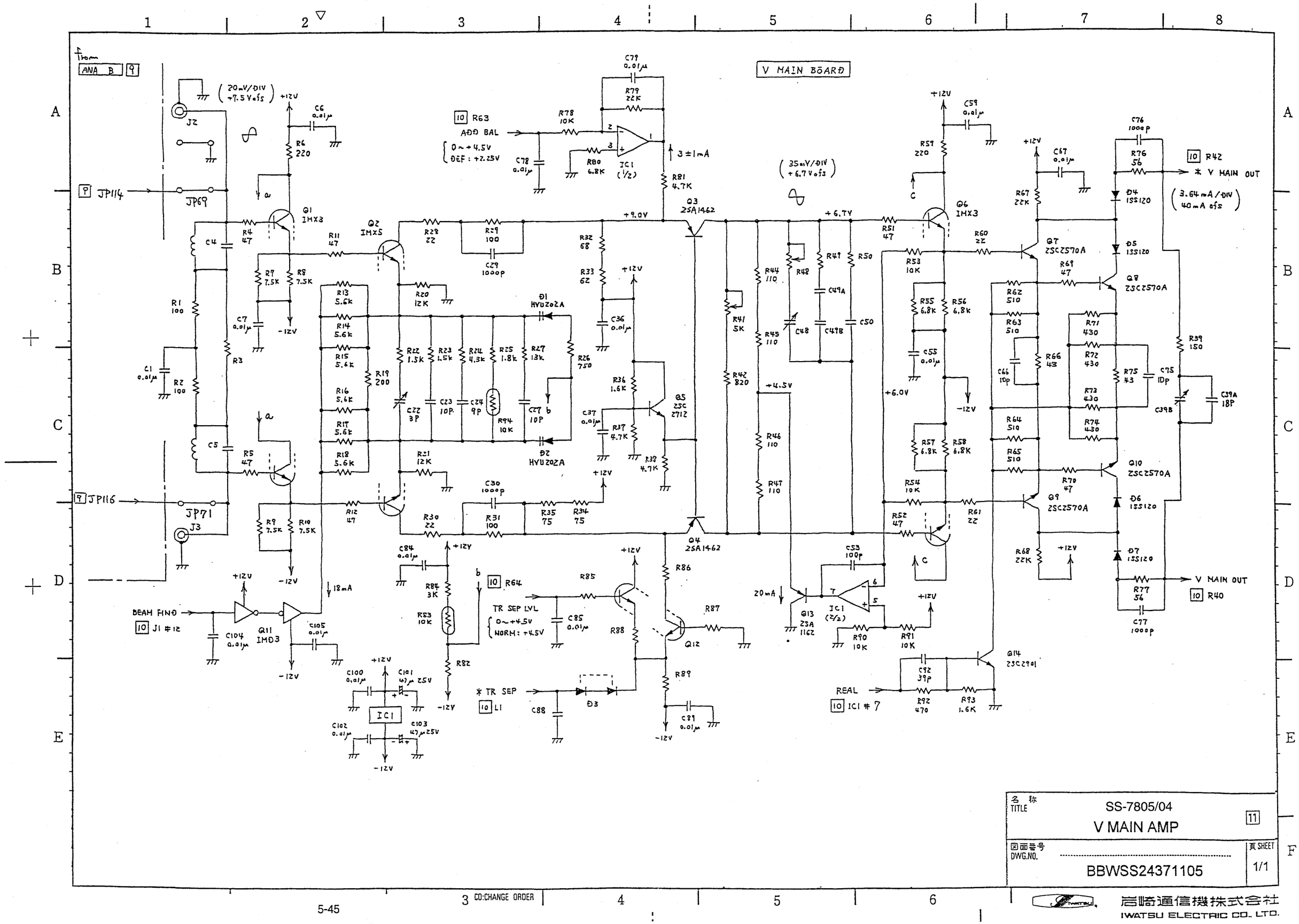
名称 TITLE	SS-7805/04
	CH SW & DRY LINE DRIV 9
図面番号 DWG.NO.	BBWSS24385105
頁 SHEET	1/1

3 CO:CHANGE ORDER



名称 TITLE	SS-7805/04 V CHARA AMP
図面番号 DWG.NO.	BBWSS24373105
頁 SHEET	1/1

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.


V MAIN BOARD
from ANA B 9
9 JP114
JP69
JP71
J3
J2
(20mV/DIV +7.5V ofs)
(35mV/DIV +6.7V ofs)
10 R63 ADD BAL
0 ~ +4.5V
DEF: +2.25V
3 ± 1mA
IC1 (1/2)
Q1 IMX3
Q2 IMX5
Q3 2SA1462
Q4 2SA1462
Q5 2SC2712
Q6 IMX3
Q7 2SC2570A
Q8 2SC2570A
Q9 2SC2570A
Q10 2SC2570A
Q11 IMD3
Q12
Q13 2SA1162
Q14 2SC2901
D1 HVU202A
D2 HVU202A
D3
D4 1SS120
D5 1SS120
D6 1SS120
D7 1SS120
+12V
-12V
+9.0V
+6.7V
+4.5V
+6.0V
18mA
20mA
BEAM BND
10 J1 #12
10 R64
TR SEP LVL
0 ~ +4.5V
NORM: +4.5V
* TR SEP
10 L1
REAL
10 IC1 # 7
10 R42
* V MAIN OUT
(3.64mA/DIV 40mA ofs)
V MAIN OUT
10 R40
C1 0.01μ
C4 47
C5 47
C6 0.01μ
C7 0.01μ
C22 3P
C23 10P
C24 9P
C27 10P
C29 1000P
C30 1000P
C36 0.01μ
C37 0.01μ
C48 C49A C49B C50
C53 100P
C59 0.01μ
C67 0.01μ
C76 1000P
C77 1000P
C78 0.01μ
C79 0.01μ
C84 0.01μ
C85 0.01μ
C88
C89 0.01μ
C92 39P
C100 0.01μ
C101 47μ 25V
C102 0.01μ
C103 47μ 25V
C104 0.01μ
C105 0.01μ
C66 10P
C75 10P
C39A 18P
C39B
R1 100
R2 100
R3
R4 47
R5 47
R6 220
R7 7.5K
R8 7.5K
R9 7.5K
R10 7.5K
R11 47
R12 47
R13 5.6K
R14 5.6K
R15 5.6K
R16 5.6K
R17 5.6K
R18 5.6K
R19 200
R20 12K
R21 12K
R22 1.5K
R23 1.5K
R24 4.3K
R25 1.8K
R26 750
R27 13K
R28 22
R29 100
R30 22
R31 100
R32 68
R33 62
R34 75
R35 75
R36 1.6K
R37 4.7K
R38 4.7K
R41 5K
R42 820
R44 110
R45 110
R46 110
R47 110
R48
R49 R50
R51 47
R52 47
R53 10K
R54 10K
R55 6.8K
R56 6.8K
R57 6.8K
R58 6.8K
R59 220
R60 22
R61 22
R62 510
R63 510
R64 510
R65 510
R66 43
R67 22K
R68 22K
R69 47
R71 430
R72 430
R73 430
R74 430
R75 43
R76 56
R77 56
R78 10K
R79 22K
R80 6.8K
R81 4.7K
R82
R83 10K
R84 3K
R85
R86
R87
R88
R89
R90 10K
R91 10K
R92 470
R93 1.6K
R94 10K
R39 150
IC1
IC1 (2/2)
TITLE SS-7805/04
V MAIN AMP
11
DWG.NO. BBWSS24371105
SHEET 1/1
3 CO:CHANGE ORDER
IWATSU ELECTRIC CO., LTD.
5-45

CRT BOARD

from 10 V MAIN B.
16 pin FFC

J1

+50V 6,7
* V SIG 1,2
+25V 5,8
NC
V SIG 17,18
V CAL SIG 13,14
+12V 9,10
-12V 11,12
GND 3,4,15,16

Q1 MRF544
Q2 MRF544
C2 C3 R1 R2 R3
C10 1000p 500V
C11 22μ 63V
C9 22μ 63V
R10 150 RS52
C8 0.01μ
R4 180
R5 10
R6 180
R7 10
R8 330 RS53
R9 330 RS53
L1 L2

(1.15V/DIV +26 V ofs)

+50V R58 24K R59 1K
R56 47K
C57 0.01μ
R57 51K
Q7 2SC 1815
Q8 2SA 1015
R60 5.1K
* Y SIG
Y SIG

R16 100K R17 22K C17 100P
R19 22K
R20 100K
R18 18K
R22 10K
C21 100P R21 22K R23 100 C23 100P
D1 1SS120 D2 1SS120

(0.5V/DIV 0 V ofs)

+12V C100 0.01μ C101 47μ 25V
IC1
C102 0.01μ C103 47μ 25V
-12V

S-8100A
+14 kV ← Vg2
from H.V. B. 33

BL
X+ X- Y+ Y- Q3+ Q3- Q2+ Q2- Q1+ Q1-
IS P2 P1 G2 G1 K H1 H2

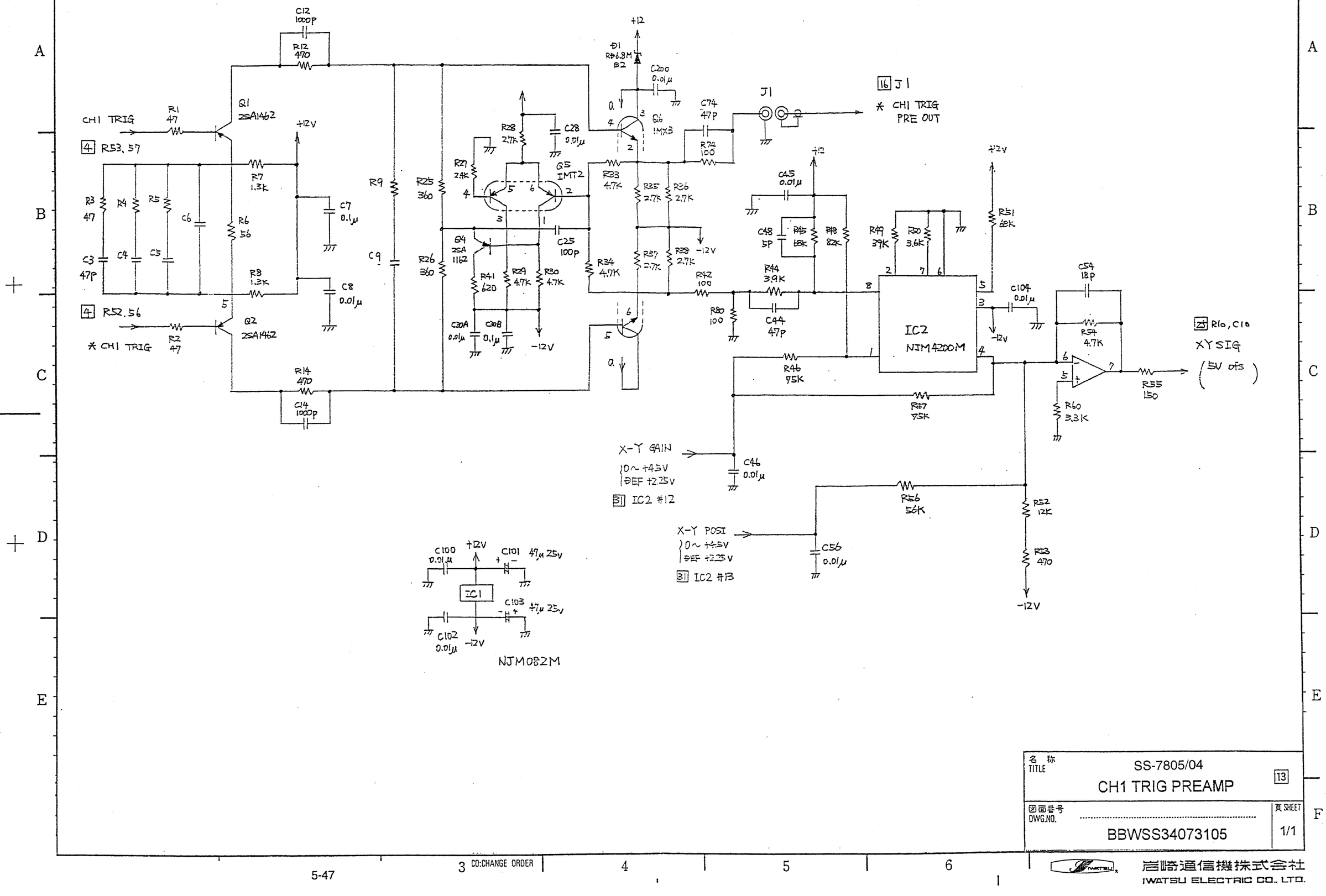
J2

L3 BL02 RN2 - R62
L4 BL02 RN2 - R62
P3

from ANA B. 27
X SIG
* X SIG
+50V
R104 100 D3 RD33 ESB D4 RD33 ESB
Vg123+
R105 100 C104 1000p 500V C105 0.01μ
NC 2,4,6
R107 100
Vg12-
Vp2
GND
R106 100 C106 C107 1000p 500V
P4
from H.V. B. 33
Vp1
Vg1
Vk
C108 0.01μ 3kV
Vhz
Vh1
from H.V. B. 33

3 CO:CHANGE ORDER

名称 TITLE	SS-7805/04 V OUTPUT AMP 12
図面番号 DWG.NO.	BBWSS24334105
頁 SHEET	1/1



名称 TITLE	SS-7805/04 13
	CH1 TRIG PREAMP
図面番号 DWG.NO.	BBWSS34073105
頁 SHEET	1/1

3 CO:CHANGE ORDER

ANA BOARD

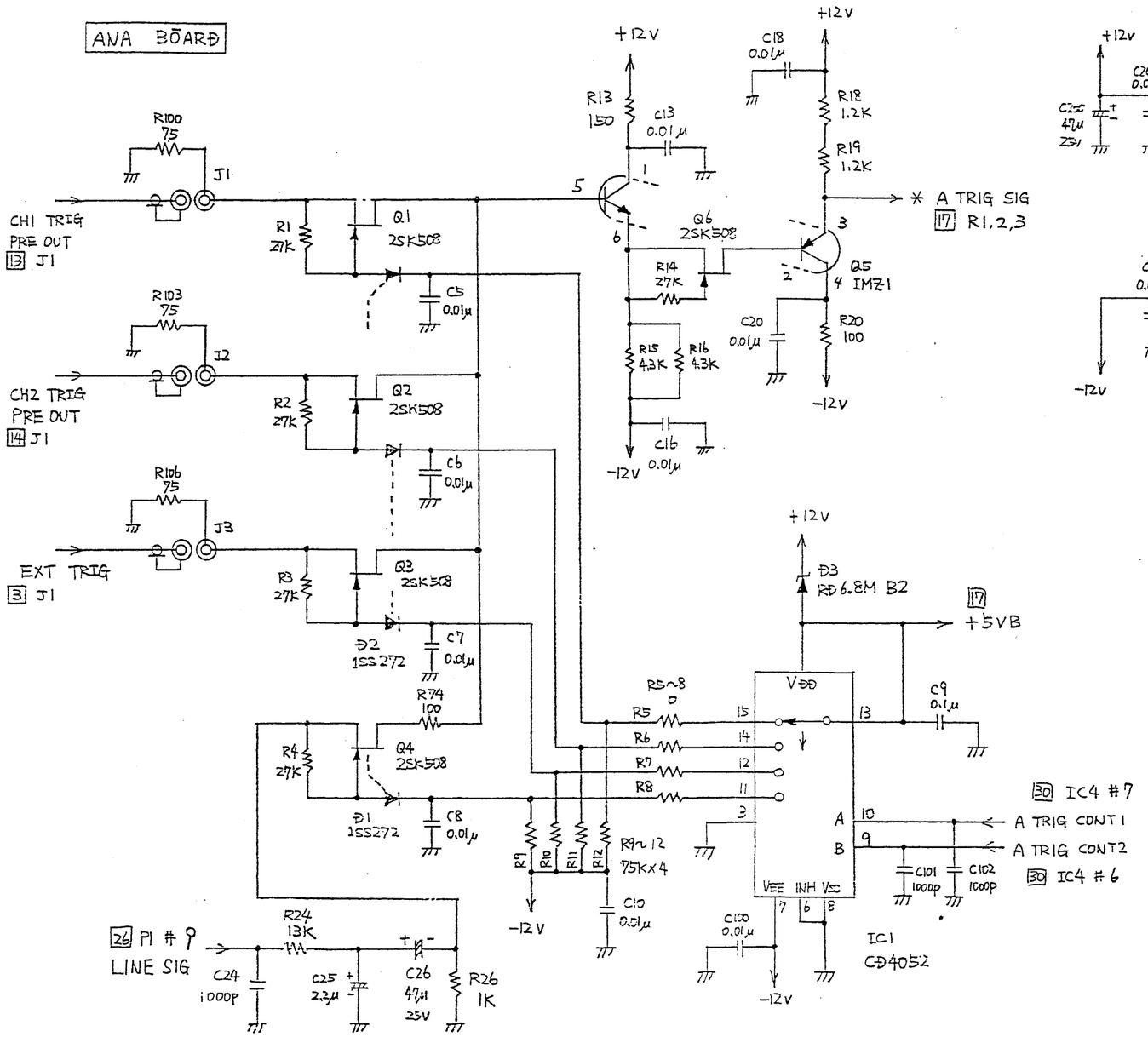
(10mV/DIV +5.0Vofs)
CH2 TRIG
CH2 5 R53.57
R1 47
Q1 2SA1462
+12V
C12 1000P
R12 470
R7 1.3K
R3 47
R4
R5
C6
R6 36
C3 47P
C4
C5
C7 0.1μ
C8 0.01μ
R8 1.3K
R2 47
* CH2 TRIG
CH2 5 R52.56
Q2 2SA1462
R14 470
C14 1000P
C26 2P
R9
C9
+0.7
R25 360
R26 360
-1.0V
+12V
R28 2.7K
C28 0.01μ
R27 2.4K
Q5 IMT2
R33 4.7K
Q4 2SA1162
C25 100P
R34 4.7K
R41 620
R29 4.7K
R30 4.7K
C30B 0.01μ
C30A 0.01μ
-12V
D1 RD6.8M B2
C200 0.01μ
Q6 IMX3
R74 100
C74 47P
J1
16
* CH2 TRIG PRE OUT
(30mV/DIV 0 Vofs)
R35 2.7K
R36 2.7K
R37 2.7K
R38 2.7K
-12V
a
b

[CH2 ONLY OPTION]
+12V
C43 0.01μ
R43
C42
R42
R44
Q7
C45
R45
-12V
R46
C46
Q8
R47
R48
C47 0.01μ
R49
D3
C51
R51
J2
R50
D4
CH2 OUT
(30mV/DIV 0 Vofs LOAD : 50Ω)

名称 TITLE	SS-7805/04 CH2 TRIG PREAMP 14
図面番号 DWG.NO.	BBWSS34074105
頁 SHEET	1/1

3 CO:CHANGE ORDER 4 5 6

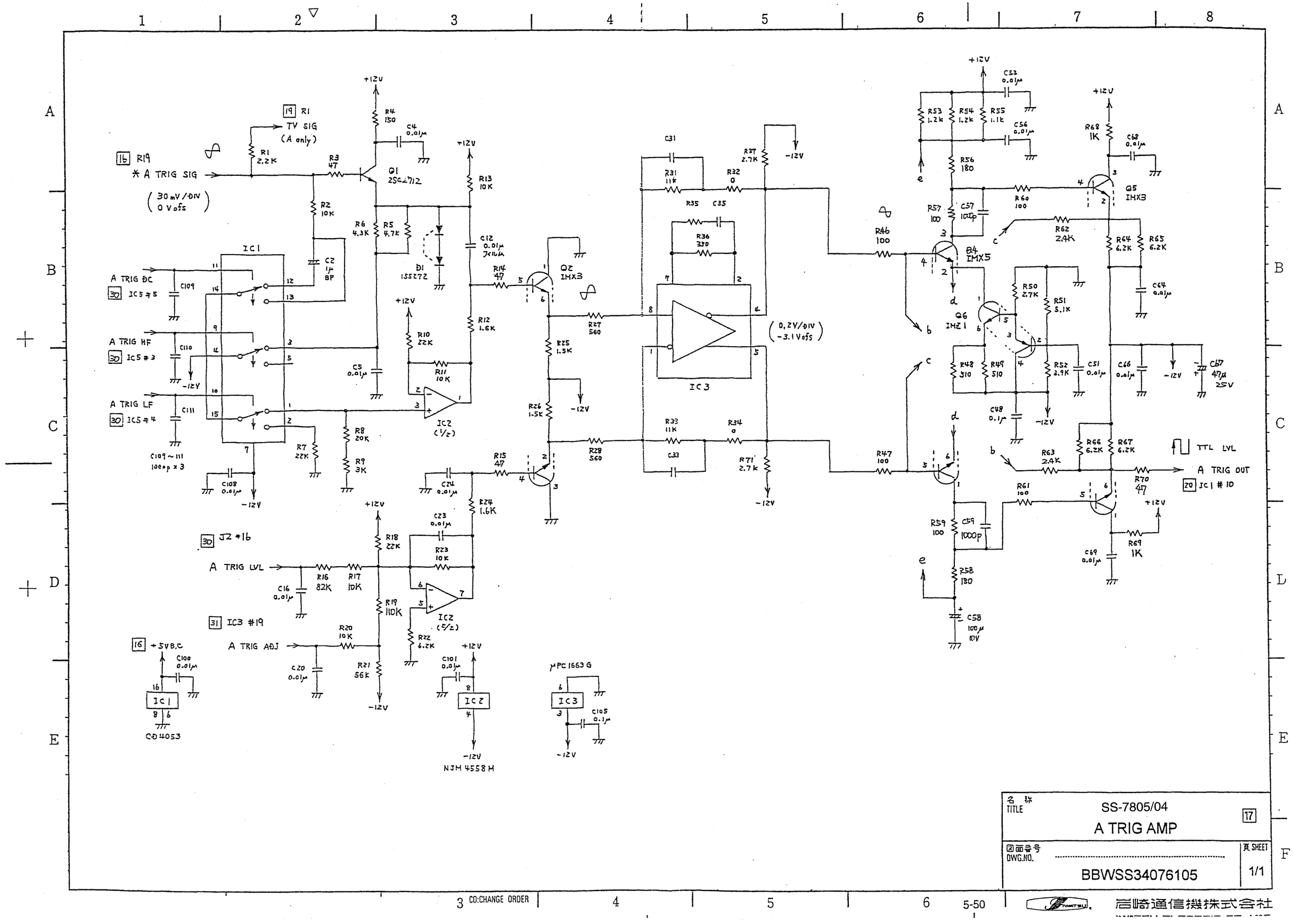
ANA BOARD



名称 TITLE	SS-7805/04 A TRIG SELECT 16
図面番号 DWG.NO.	BBWSS24386105
頁 SHEET	1/1

3 CO:CHANGE ORDER

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.

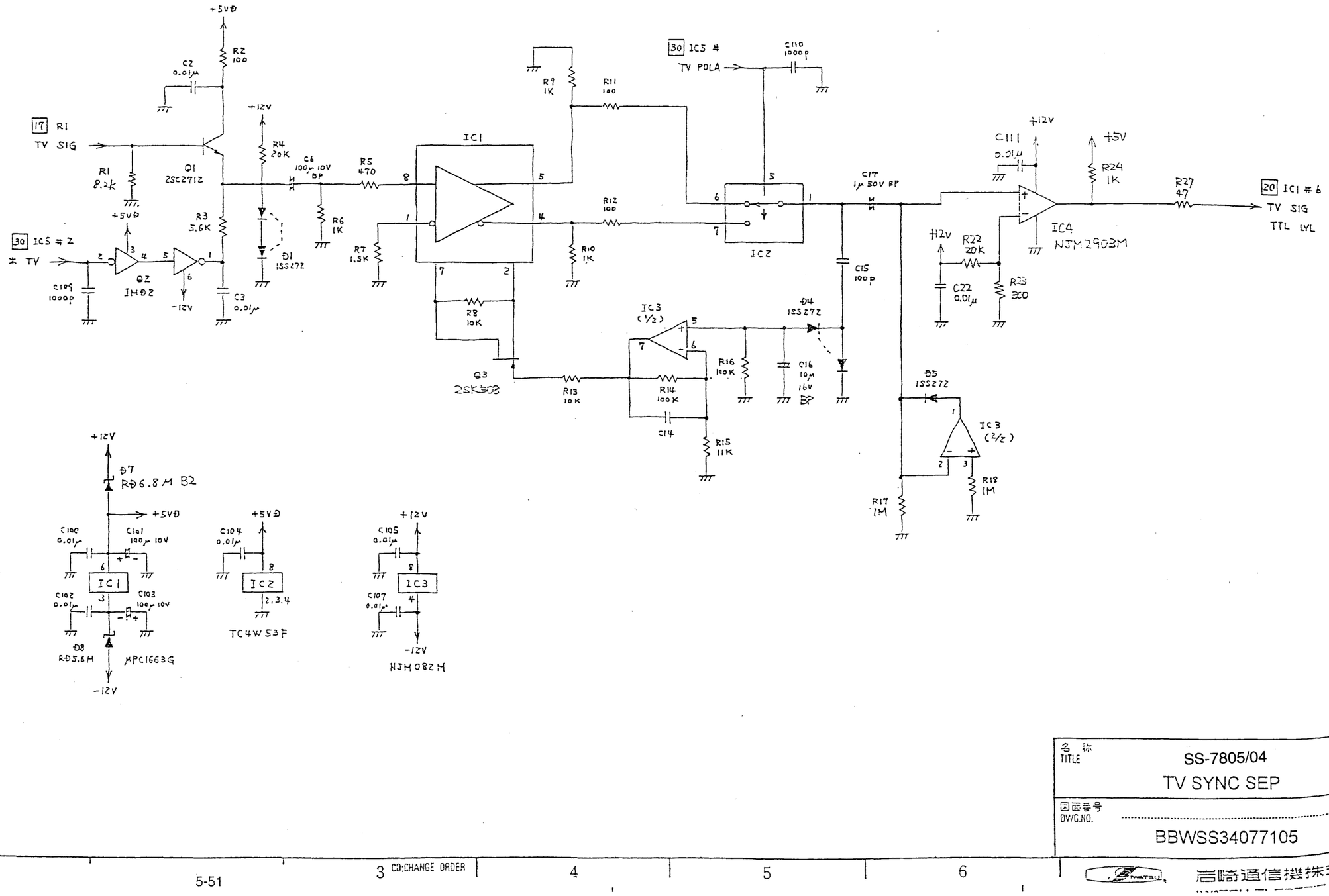


名称 TITLE	SS-7805/04 17
	A TRIG AMP
図面番号 DWG.NO.	BBWSS34076105
頁 SHEET	1/1

3 CO:CHANGE ORDER 4 5 6 5-50

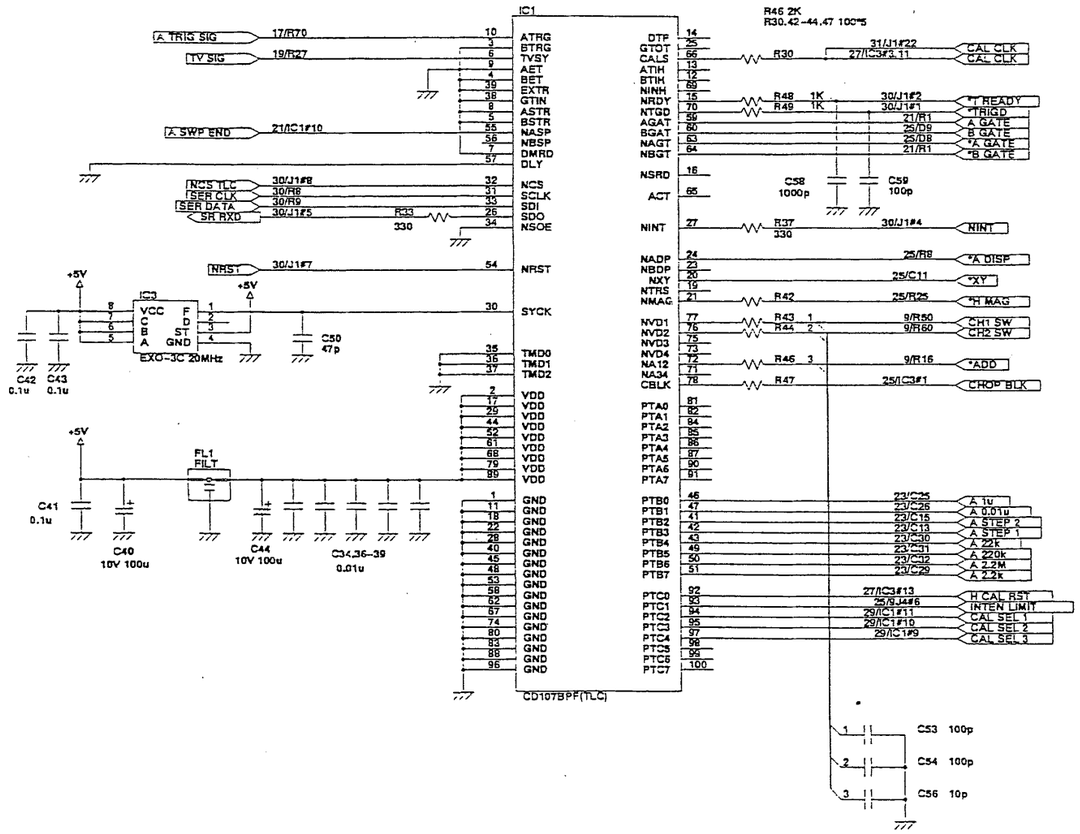
岩崎通信機株式会社

ANA BOARD



名称 TITLE	SS-7805/04 19
	TV SYNC SEP
図面番号 DWG.NO.	BBWSS34077105
頁 SHEET	1/1

3 CO:CHANGE ORDER



名称 TITLE	SS-7805/04 TLC CIRCUIT
図面番号 DWG.NO.	BBWSS11035105
頁 SHEET	1/1

3 CO:CHANGE ORDER

ANA BOARD

A GUARD [23]

A CR [23] Q11, 12

+12V
C14 0.01μ
R11 6.8K
R12 5.1K
C12 0.01μ
R13 4.7K
R14 680
Q1 IMZ1
10mA
R17 750
C17 0.01μ
Q2 IMX3
D1 MSM 88 AS
D2 1SS 272
R16 160
+2.0V
0V
R15 200
C2 10P
R2 1K
Q3 2SC3735
R3 1K
-12V
[20] IC1 # 59
R1 1.6K
A GATE
D11 1SS272
+12V
R6 390
C6 0.01μ
Q4 2SC2712
Q5 2SC 2714
C5
R5 1K
R7 2.4K
R8 2.4K
-12V
C7 0.01μ
+12V
R9 3.3K
R10 300
C10 0.01μ
D3 HSM 88 AS
D4 1SS 133
+5V
C100 100μ 10V
14
IC1
7
74HC14

+50V
D5 RD20H
C19 0.01μ
R21 18K
R22 18K
Q7 2SC2712
C21 1000P
D6 RD10H
Q6 FC13
R18 100
C18
R19 220
Q8 IMZ1
D7 RD15H
D8 RD15H
C22 0.01μ
D9 RD 3.9H
R23 27K
R24 100
Q9 2SC2712
R25 8.2K
C25 10P
R26 10K
R27 10K
D10 HSM 88 AS
-12V
A LENGTH
0 ~ +4.5V
DEF : +2.25V
C26 0.1μ
[20] IC1 #5
A SWP END
+13.2V
+2.0V
(11.2Vpp 1.0V/DIV)
R28 1K
A SWTH [25] R4
Q10 2SC2712
C31
R32 8K
R33
C32 0.01μ
C33 47μ 25V
-12V

名称 TITLE	SS-7805/04 [21]
	A SAWTOOTH BUFF
図面番号 DWG.NO.	BBWSS20145105
頁 SHEET	1/1

3 CO:CHANGE ORDER

ANA BOARD

20 IC1 #42

A STEP 1

A STEP 2

20 IC1 #41

+50V

D11 1SS272

R41 120K

C15 100P

C17 100P

Q20 DTC114 EK

Q15, 16, 17 1HD2 × 3

Q15 +50V Q16 +50V Q17 +50V

31 IC3 #5

A REF

0 ~ +4.5V

DEF : +2.25V

R1 47K

R3 16K

R7 27K

R8 39K

C1 0.01μ

C3

C4 0.1μ

Q1

A VAR

0 ~ +4.5V

CAL : +4.5V

R2 10K

C2 0.01μ

31 IC3 #6

R4 11K

R5 470

R6 3.6K

C5 0.01μ

IC1 (1/2)

-12V

R12 15K CT

R13 51K

R14 30K CT

R15 91K

R16 75K CT

R17 180K

Q2

Q3

Q4

R9 10K

R10 10K

R11 10K

+9.0V ~ +15.6V

CAL : +9.0V

Q1 ~ 4

2SC2712 × 4

R18 30K

C18 0.1μ

IC2 (1/2)

R19 15K

R20 30K

+20V

C20

C21 0.1μ

R21 20K

IC1 (2/2)

R22 1K

Q11

R23 100

C23 0.1μ

R27 100K

R28 27K

Q5

D1 ~ 5 RD 20M × 5

+20V { 22V 11V 4.4V

C29 0.1μ

Q6 2SC 2712

IC2 (2/2)

+50V

C105 0.01μ 100V

R24 12K

R25 470

Q13 2SC 2714

A 1μF

20 IC1 # 46

C25 1000P

D6 1SS272

R26 470

Q14 2SC 2714

A 0.01μF

20 C26 1000P

A IC1 # 47

C100 1μ

C101 9900P

C102 82P

C103 8P

C104

A GUARD

+13.2V

+2.0V

20 A IC1 # 51

20 A IC1 # 43

20 A IC1 # 49

20 A IC1 # 50

A 2.2K

A 22K

A 220K

A 2.2M

C29 100P

C30 100P

C31 100P

C32 100P

Q18 1HH1

Q19 1HH1

R29

R30 27K

R31 27K

R32 27K

Q7

Q8

Q9

Q10

R36 10K

R33

R34 10K

R35 10K

R37

R38 22K ΩT

R39 220K ΩT

R40 2.2M Ω

21 D4, Q5.6 A CR

21 R8 A GUARD

+50V

NJM 253M

D7 RD 24M B3

C106 0.01μ

IC1

C107 0.1μ

D8 RD 6.8M B2

-12V

+50V

NJM4558M

C110 0.01μ 100V

IC2

C111 0.1μ

D9 RD 3.3M

D10 RD 15M

GND

SEC/DIV	C	R	I
500m	1μ	2.2M	2μ
200m			5μ
100m			10μ
50m		220K	20μ
20m			50μ
10m			100μ
5m	0.01μ	220K (2.2M)	200μ
2m			500μ
1m			1m
500μ	100P	220K	20μ
200μ			50μ
100μ			100μ
50μ		22K	200μ
20μ			500μ
10μ			1m
5μ		220K	20μ
2μ			50μ
1μ			100μ
500n		22K	200μ
200n			500μ
100n			1m
50n		2.2K	2m
20n			5m

Y B

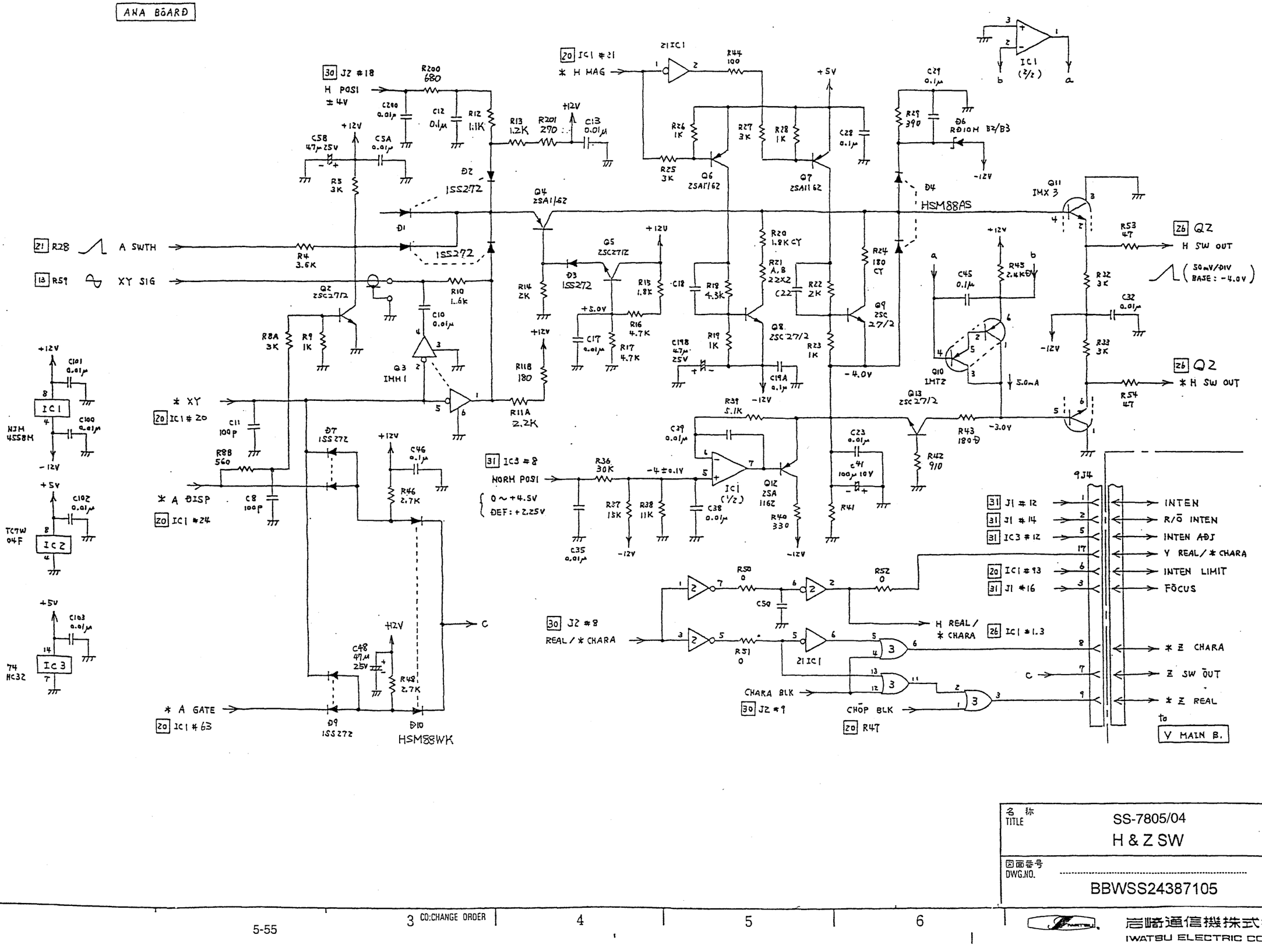
TITLE	SS-7805/04 A TIMING
DWG.NO.	BBWSS20146105
	23
SHEET	1/1

3 CO:CHANGE ORDER

5-54

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.

ANA BOARD



名称 TITLE	SS-7805/04 H & Z SW
図面番号 DWG.NO.	BBWSS24387105
頁 SHEET	1/1
	25

3 CO:CHANGE ORDER

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.

ANA BOARD

50mV/DIV
BASE : -4.0V

70mV/DIV
BASE : -1.65V

Q1 IHZ1
Q2 IMX3
Q3 IHTZ
Q4 IHZ1
Q5 IMX3
Q6 IHZ1
Q7 IHX3
Q8 IHTZ
Q9 DTA114EK

D1 1SS272
D2 1SS272
D3 RD 9.1M

IC1 TC7W04F

25 RS3 H SW OUT
25 RS4 ± H SW OUT
25 IC2 # 2 H REAL / ± CHARA
30 X CHARA ±2V
31 J1 # 13
9 J4 # 12
BEAM FIND

27 RZ1, CZ1 ± H MAIN OUT (0.11mA/DIV 4.0mA ofs)
27 R1, C1 H MAIN OUT

+12V -12V -3.7V +200V +150V +50V +15V +5V -12V

from POWER B.
P1 GND NC +200V +150V LINE SIG +50V +15V +12V +5V -12V
16 RZ4. CZ4
FL1 FL2 FL3 FL4 FL5
L2 L3 L4

名称 TITLE	SS-7805/04 H MAIN AMP
図面番号 DWG.NO.	BBWSS24388105
頁 SHEET	1/1
	26

3 CO:CHANGE ORDER

5-56

吉崎通信機株式会社

ANA BOARD

+200V +50V
JP101 JP102
R8 820
C9 0.1μ 100V
R19 R20 R7 5.6K
Q3 2SA1015
R9A.B.C.D 47KX4
+12V +12V
C2A 0.01μ
C2B 47μ 25V
R18 16K R6 18K
R3 100
D2
R12 0
R2 51K
C3 1000P
R13 47
26 Q5
H MAIN OUT
(0.11mA/DIV 4.0mA ofs)
R1 0
C1
Q1 2SC3735
R11 0
C6 0.01μ 100V
R4 2.4K R5
Q2 2SC1815
C4 0.01μ
-12V
+1.4V
R14 0
R15 0
R16 5.6K
C13 3P 500V
C14 3P 500V
R17 5.6K
(9.5 V/DIV 100V ofs)
12 P3
X SIG
P1
0.5V/DIV
29 D4, IC1 # 1
H CAL SIG
R41 100K
C43 10P
R43 20K
D1 1SS 272
IC1 (1/2)
R42 18K
R44 20K
C45 10P
R48 100
R45 22K
C48 100P
R46 100K
R47 10K
IC1 (1/2)
+12V
R51 100
R53 18K
R52 100K
+5V
R59 1K
C54 0.01μ
R54 3.9K
+2.0V
IC2
R55 10K
31 IC3 #9
H CAL REF
0~+4.5V DEF: +2.25V
C55 0.01μ
R57 1K
R56 1K
Q7 2SC2712
R58 10K
Q8 DTA114EK
IC3
SET D Q CK RST NC
R60 100
H CAL
30 J1 #18
CAL CLK
20 R30
* H CAL RST
20 IC1 #92
C101 10P
R28 820
C29 0.1μ 100V
R29A.B.C.D 47KX4
R39 R40 R27 5.6K
Q6 2SA1015
C22 0.01μ
C5 47μ 25V
R38 16K R26 18K
R23 100
D3
R32 0
R22 51K
C23 1000P
R33 47
26 Q5
* H MAIN OUT
R21 0
C21
Q4 2SC3735
R31 0
C26 0.01μ 100V
R24 2.4K R25
Q5 2SC1815
C24 0.01μ
-12V
+1.4V
R34 0
R35 0
R36 5.6K
C33 3P 500V
C34 3P 500V
R37 5.6K
12 P3
* X SIG
P1
C100 0.01μ
C102 0.01μ
IC1
-12V
NJH 4558 H
C104 0.01μ
C105 0.01μ
IC2
-12V
NJH 311 H
C103 100μ 10V
C106 0.1μ
IC3
74 HC 74

名称 TITLE	SS-7805/04 H OUTPUT AMP 27
図面番号 DWG.NO.	BBWSS24389105
頁 SHEET	1/1

V MAIN BOARD

ANA BOARD

* Z REAL

10J1

H: DARK

Q3 2SC2712

D1 MA159

J2

INTEN ADJ

0 ~ +4.5V
DEF: +2.25V

Z SW OUT

* Z CHARA

INTEN

-12V ~ +12V
-12V: BRIGHT

R/O INTEN

INTEN LIMIT

FOCUS

Q1 IHD2

IC1

Q2 2SC2712

Q4 2SC2712

Q5 2SC2712

Q6 2SA1162

Q7 2SA1162

Q8 2SC2712

Q9 2SA1015

Q10 2SC1815

D2 1SS272

D3 1SS272

D5 RD 5.1HBZ

D6 1SS83

D7 1SS272

D8 1SS272

D9 RD 15H

0 ~ -12V
-12V: BRIGHT

+50V

+12V

+5.1V

-12V

+2.0V

to H.V.B. 33

P1

Z SIG

GND

FOCUS

NJM 4558 M

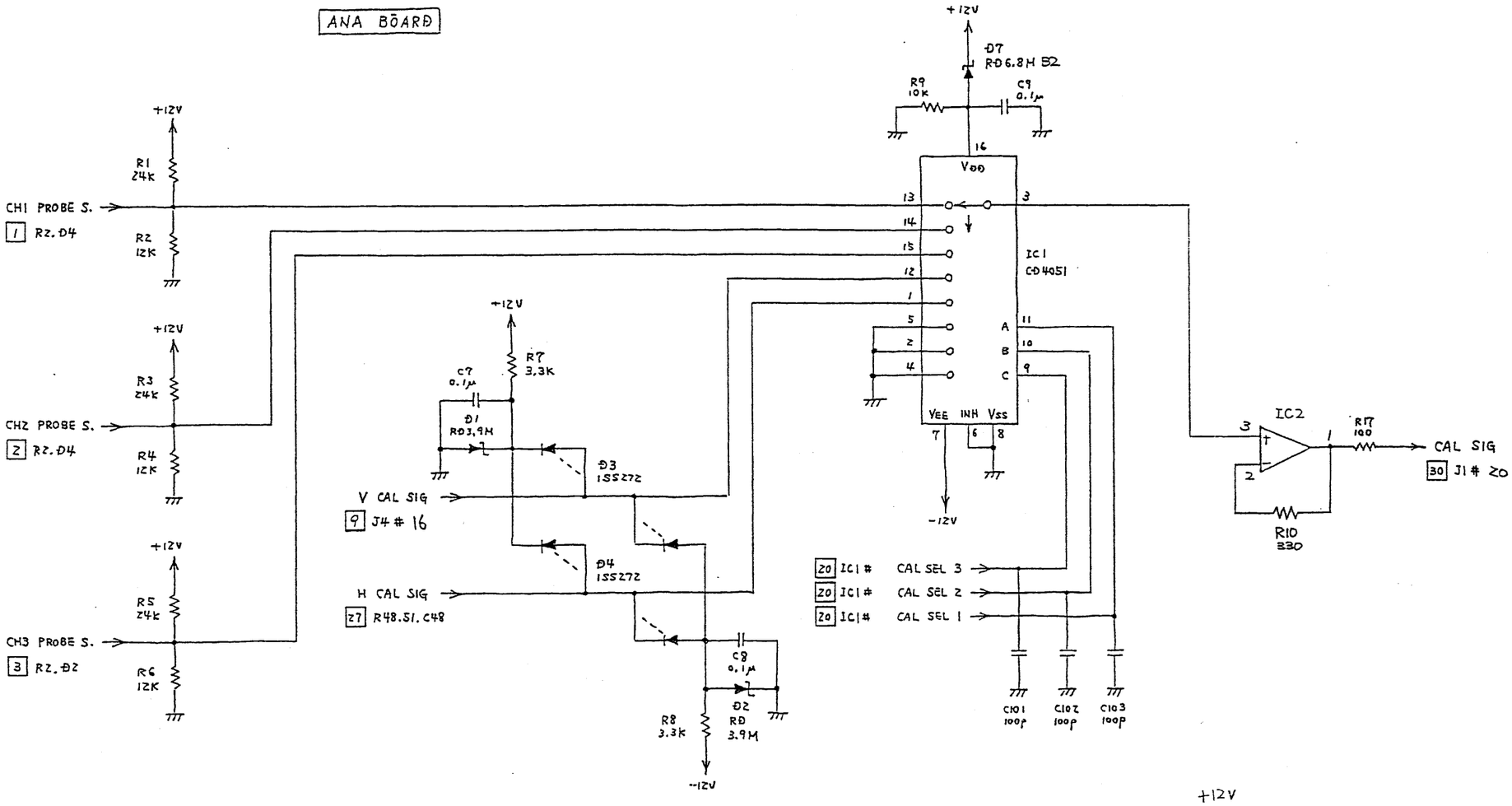
名称 TITLE	SS-7805/04 Z AMP 28
図面番号 DWG.NO.	BBWSS24372105
頁 SHEET	1/1

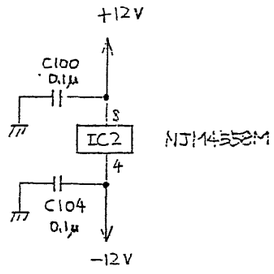
3 CO:CHANGE ORDER

5-58

岩崎通信機株式会社
IWATSU ELECTRIC CO., LTD.

ANA BOARD



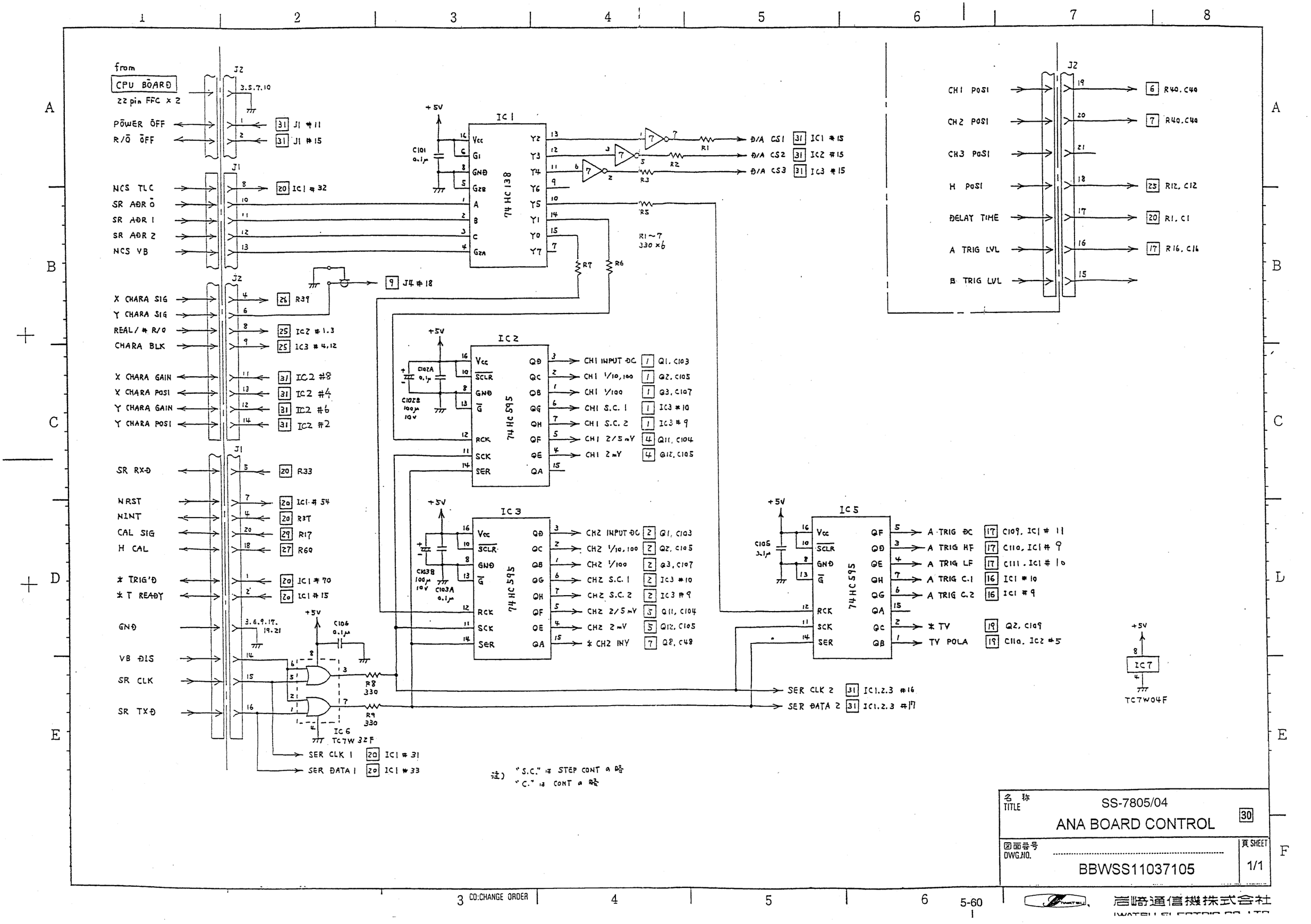


PROBE SENCE R.
- 1:1 ··· ∞ : 4.0V
- 10:1 ··· 11k : 2.4V
- 100:1 ··· 6.2k : 1.9V

名称 TITLE	SS-7805/04 PROBE SENCE 29
図面番号 DWG.NO.	BBWSS11036105
頁 SHEET	1/1

3 CO:CHANGE ORDER

岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.



名称 TITLE	SS-7805/04 ANA BOARD CONTROL 30
図面番号 DWG.NO.	BBWSS11037105
頁 SHEET	1/1

3 CO:CHANGE ORDER 4 5 6

ANA BOARD

+12V
R1 15K
R2 18K
R3 18K
C2 0.1μ
C3 10μ 16V BP
IC4
C5 0.01μ
R4 5.6K
C4
a
b

+5V
C20 0.1μ
IC1
Vcc
GND
Vss
VDD
DO
LD
CLK
DI
AO 11
AO 12
AO 8
AO 9
AO 7
AO 6
AO 1
AO 4
AO 5
AO 2
AO 3
AO 10
HB 88346A
C31 22p
C32 22p

CH1 STEP BAL — 1 R42. C42
CH1 VAR 1 — 1 R69. C69
CH1 VAR 2 — 1 D15. C71
CH1 DC BAL — 4 R3. C3
CH1 GAIN — 4 R77. C77
CH2 STEP BAL — 2 R42. C42
CH2 VAR 1 — 2 R69. C69
CH2 VAR 2 — 2 D15. C71
CH2 DC BAL — 3 R3. C3
CH2 GAIN — 5 R77. C77
CH2 POLA BAL — 7 R51. C51
NC

30 R1 D/A CS1
30 R8 SER CLK 2
30 R9 SER DATA 2

+5V
C40 0.1μ
IC2
Vcc
GND
Vss
VDD
DO
LD
CLK
DI
C41
a
HB 88346A

NC
NC
X-Y GAIN — 13 R67. C67
X-Y POSI — 13 R64. C64
ADD BAL — 9 J4 # 13
NC
X CHARA GAIN — 30 J1 # 11
X CHARA POSI — 30 J1 # 13
Y CHARA GAIN — 30 J1 # 12
Y CHARA POSI — 30 J1 # 14

D/A CS2
30 R2

+5V
C60 0.1μ
IC3
Vcc
GND
Vss
VDD
DO
LD
CLK
DI
HB 88346A
C9
b

A TRIG ADJ — 17 R20. C20
NC
A LENGTH — 21 R26. C26
NC
A REF — 23 R1. C1
NC
A VAR — 23 R2. C2
NC
H NORM POSI — 25 R35.36, C35
H CAL REF — 27 R55. C55
INTEN ADJ — 28 R11. C11
NC

30 R3
D/A CS 3

+12V
C114 0.01μ
IC4
8
4
NJH 4558 H

J1 to CRT CONT B. 32 J1

ORTHOGO
CAL ADJ
INTEN
BEAM FIND
R/O INTEN
FOCUS
POWER OFF
R/O OFF
CAL CLK
+15V
+12V
-12V
GND

28 R7. 8. C8
9 J4 #12 24 Q9. C1
28 R33. C33
28 P1 # 3
30 J2 # 1
30 J2 # 2
20 R30
26 FL2. C104
NC

CO:CHANGE ORDER 3

名称 TITLE	SS-7805/04 ANA BOARD 8BIT D/A 31
図面番号 DWG.NO.	BBWSS11038105
頁 SHEET	1/1

CRT CONT BOARD

from ANA B. [31]
20pin FFC

J1

INTEN
BEAM FIND
R/Ō INTEN
R/Ō OFF
FOCUS
ORTHGŌ
POWER OFF
NC
CAL ADJ
CAL CLK
+15V
+12V
-12V
GND

INTEN: R1 10K, C1 0.01μ, Q1 DTA114EK, R10 18K, C10 0.01μ
READOUT: R2 10K, C2 0.01μ, C24 0.01μ, R24 100
FOCUS: R3 20K, C3 0.01μ
SCALE: D2 RD8.2M, R4 20K, R6 16K
TRACE R.: R5 20K, R8 10, Q6 2SC1815, Q7 2SA1015, R9 39, P2
[40] L1
TRACE ROTATION 1
TRACE ROTATION 2

R11 13K, R12 68K, R13 10K, C11 0.01μ, C14 0.01μ, R14 56K, IC1 (1/2), R15 10, Q8 IMZ1, R16 2.2K, P3
[40] L2
ORTHOGONALITY 1
ORTHOGONALITY 2

POWER: S1, RZ3 100, C23 0.01μ
C103 47μ 25V, C104 25V, C105 47μ 25V

R17 10K, R18 5.1K, R19 6.2K, R20 2.2K, C17 0.01μ, C18 0.01μ, C20 0.01μ, IC1 (2/2), Q2 DTA114EK, Q3 2SC2712, C21 220μ 25V, Q4 DTA114EK, RZ1 1K, D1 1SS272, RZ2 120, CZ2 100p, J4, 1K
[40] TA1
CAL OUT (0.6V 1kHz)

Q5 DTC114EK, C102
R7A.B.C 39 x 3, Q9 2SC2712, Q10A.B.C 2SC1815 x 3, MAX 150mA
[40] PL1
[40] PL2

C106 0.01μ, C107 0.01μ, IC1
NJM4558H

名称 TITLE	SS-7805/04 CRT CONT BOARD [32]
図面番号 DWG.NO.	BBWSS11025105
頁 SHEET	1/1

3 CO:CHANGE ORDER

from ANA B. [28]

Z SIG → a
FOCUS → b
GND

from POWER B.

+150V → +150V
+12V → FL1 → +12V
GND → FL2 → -12V
-12V
UN+50V
UN GND

L1 2.4μH
C1 47μ 100V
Q1 2SC3570
R1 470
D1 1SS120
R2 68K
Q2 2SC1815
R3 10K
CP3003

+12V
R4 2.2K
C6 0.1μ
R6 2.2K
R5 62
C5 0.01μ
Q3 2SC1815
R7 10K
R8 22K
-12V

IC1 (1/2)
R12 1K
R13 4.7K
R14 82K
R15 10K
C12 56p
C13 0.1μ
R9 220K
R10 91K
R11 1.3K

R21 10

U1 MSL3587
AC 2kV
1M
+14kV → Vg3

To CRT B [12]

P3
6 → Vh1
5 → Vh2 AC 6.3V
3 → Vg1
4 → Vk -1975V
2 → NC
1 → Vp1 -625 ±100V

R44 220
R65 0 JP +150V
R43 18M
NE1
D21 1SS83
D20 1SS83
C43 0.01μ 3kV
C44 1000p 3kV
D19 1SS83
R48 120K
R46 50K
Q6 2SC2551
R47 33K
D16 1SS83
D17 1SS83
D18 1SS83
C45 4.7μ 100V
R45 51K

T1
D2 SHV-06
R16 3.3K
R17 3.3K
R18 3.3K
R19 15M
C19 1000P 3kV
R20 100K
C16 0.01μ 3kV
C17 0.01μ 3kV
C18 0.01μ 3kV
C20 0.01μ 3kV

C34 220p 2kV
R34 330K
R35 330K
C32 220p 2kV
R32 330K
R33 330K
0 ~ +200V
C33 470p 2kV
D9 D10
D5 D7
D6 D8
D11 D12
D5 ~ 12 1SS83 x 8
R49 5.1M
C49 470p 2kV
C50 0.01μ 3kV
C51 1000P 3kV
R50 6.8M
R51 1M
R52 2.2M

+150V
C56 0.01μ 200V
R58
R59
Q7
Q8
R56
R62
C57
R57
R60
C60
R53 68K
R54 50K
R55 470
C54 0.01μ 200V

P4
4 → NC
5 → Vp2 +75 ~ -12V
3 → GND
2, 6 → NC
A → +29.5 ± 30V → Vg123+
B → -325 ± 50V → Vg12-

C28 0.047μ 630V
R28 A, B, C 91K x 3
R29 130K
C29 0.01μ 1kV
R61 180K
D3 SHV-0Z
D4 SHV-0Z
±12V
R30 24K
C30 0.01μ
R31 39K
Q5 2SC2752
R26 56K 1W
R27 56K 1W
C22 0.047μ 630V
R22 120K
R23 200K
R24 240K
R25 240K
C23 0.01μ 1kV

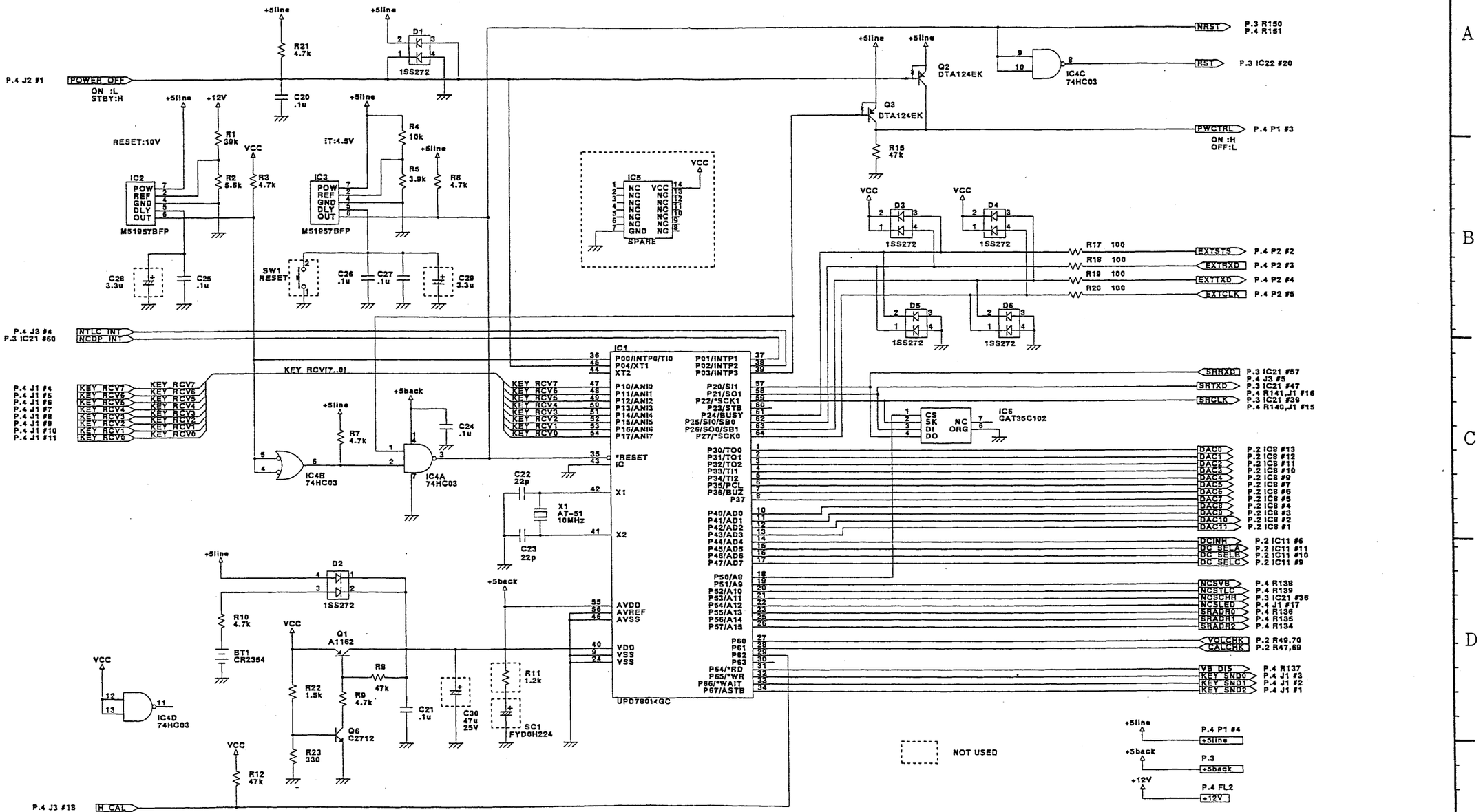
Q4 2SC2752
R38 330K
R39 330K
R40 24K
C38 0.047μ 630V
R41 5K
R37 2.2K
R36 2.2K
D13 1SS120
IC1 (2/2)
R42 22K
D14 1SS120
D15 1SS120
C39 3.3μ 400V

C100 0.01μ
C101 47μ 25V
4558
IC1
C102 0.01μ
C103 47μ 25V
-12V

R9, 11, 13, 14, 38, 39, 40 50ppm

名称 TITLE	SS-7805/04 [33]
	H. V. CIRCUIT
図面番号 DWG.NO.	BBWSS08073105
頁 SHEET	1/1

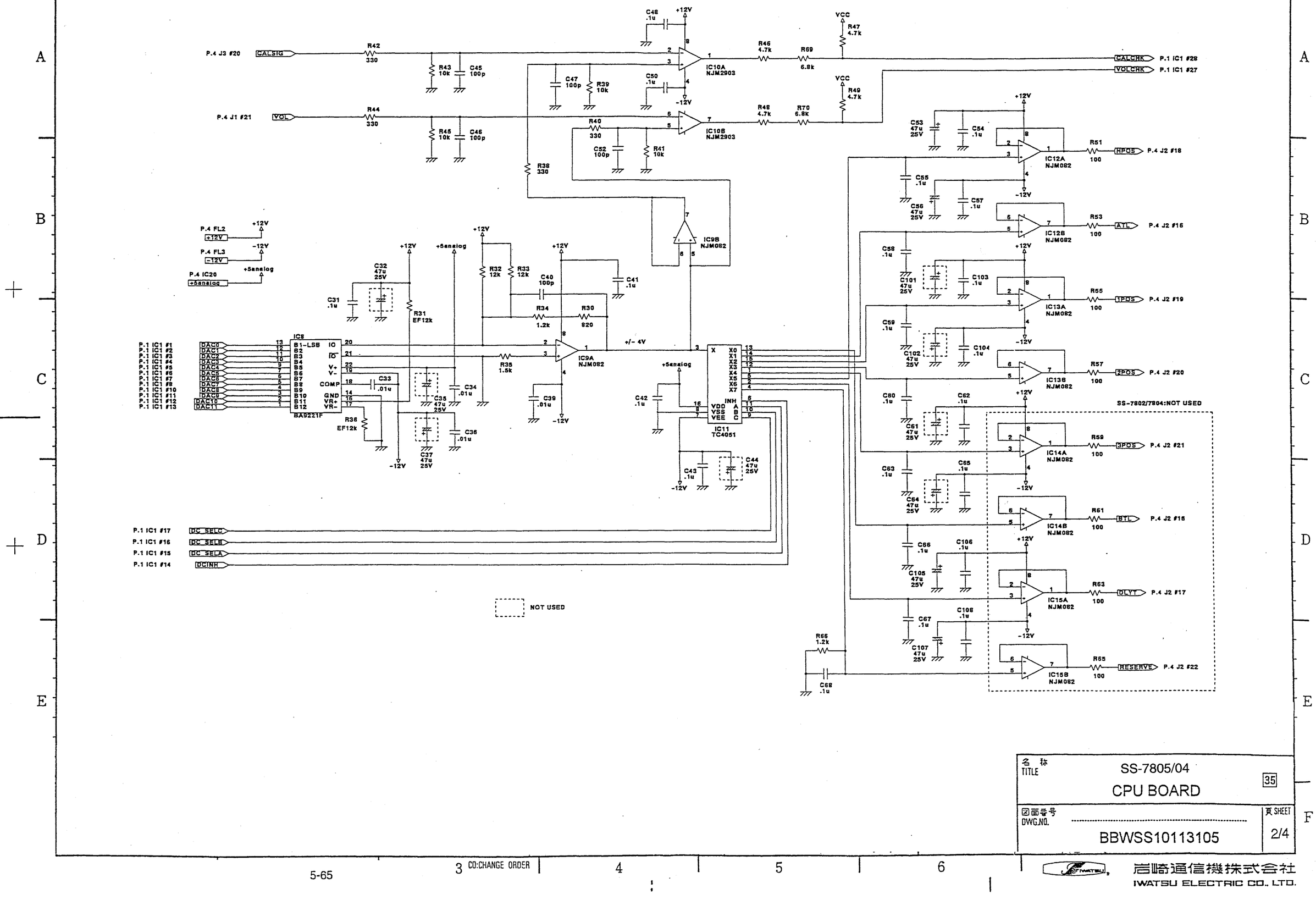
3 CO:CHANGE ORDER



名称 TITLE	SS-7805/04
	CPU BOARD
図面番号 DWG.NO.	BBWSS10113105
頁 SHEET	1/4

CO:CHANGE ORDER

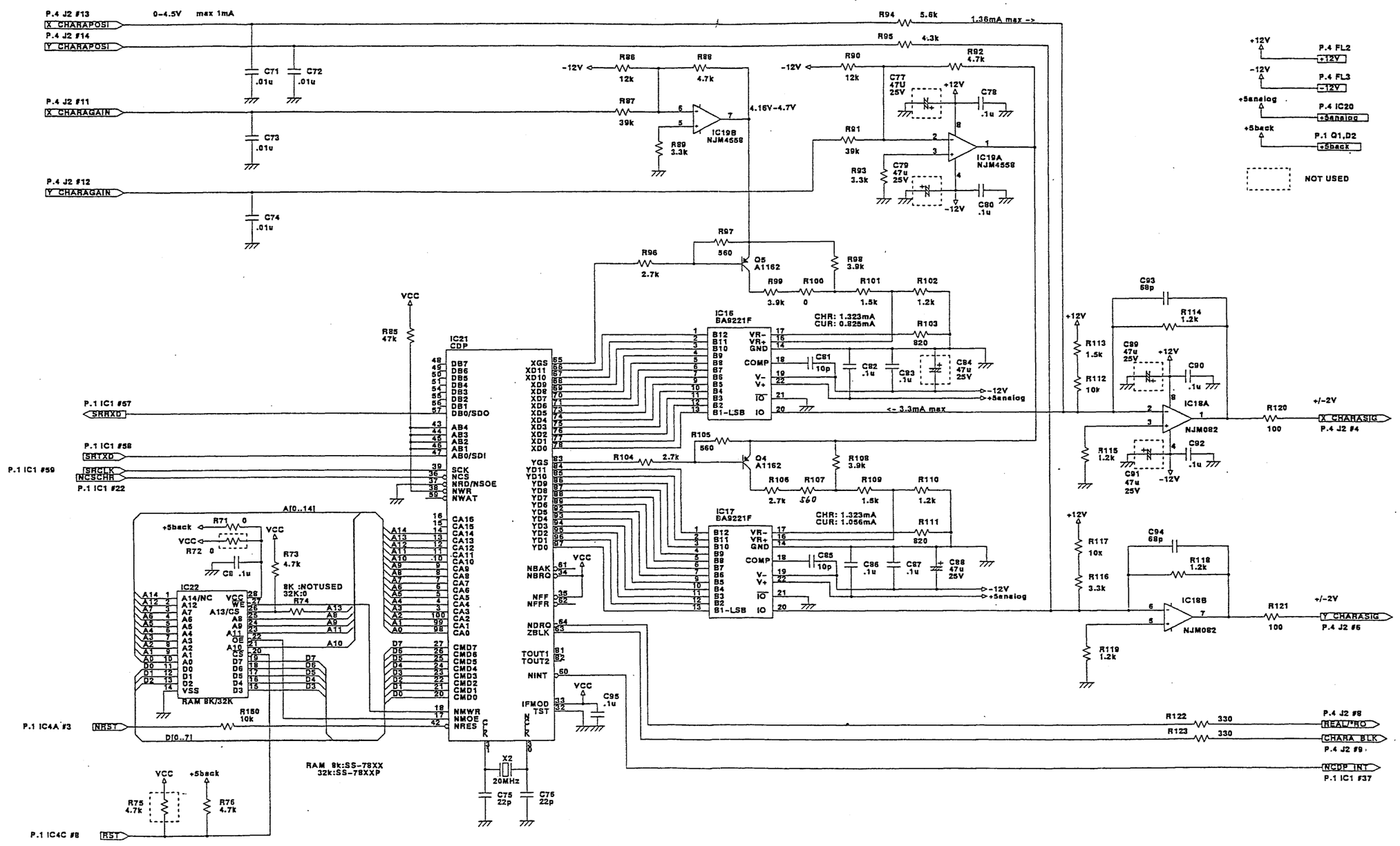
岩崎通信機株式会社
IWATSU ELECTRIC CO., LTD.



名称 TITLE	SS-7805/04 CPU BOARD 35
図面番号 DWG.NO.	BBWSS10113105
頁 SHEET	2/4

3 CO:CHANGE ORDER

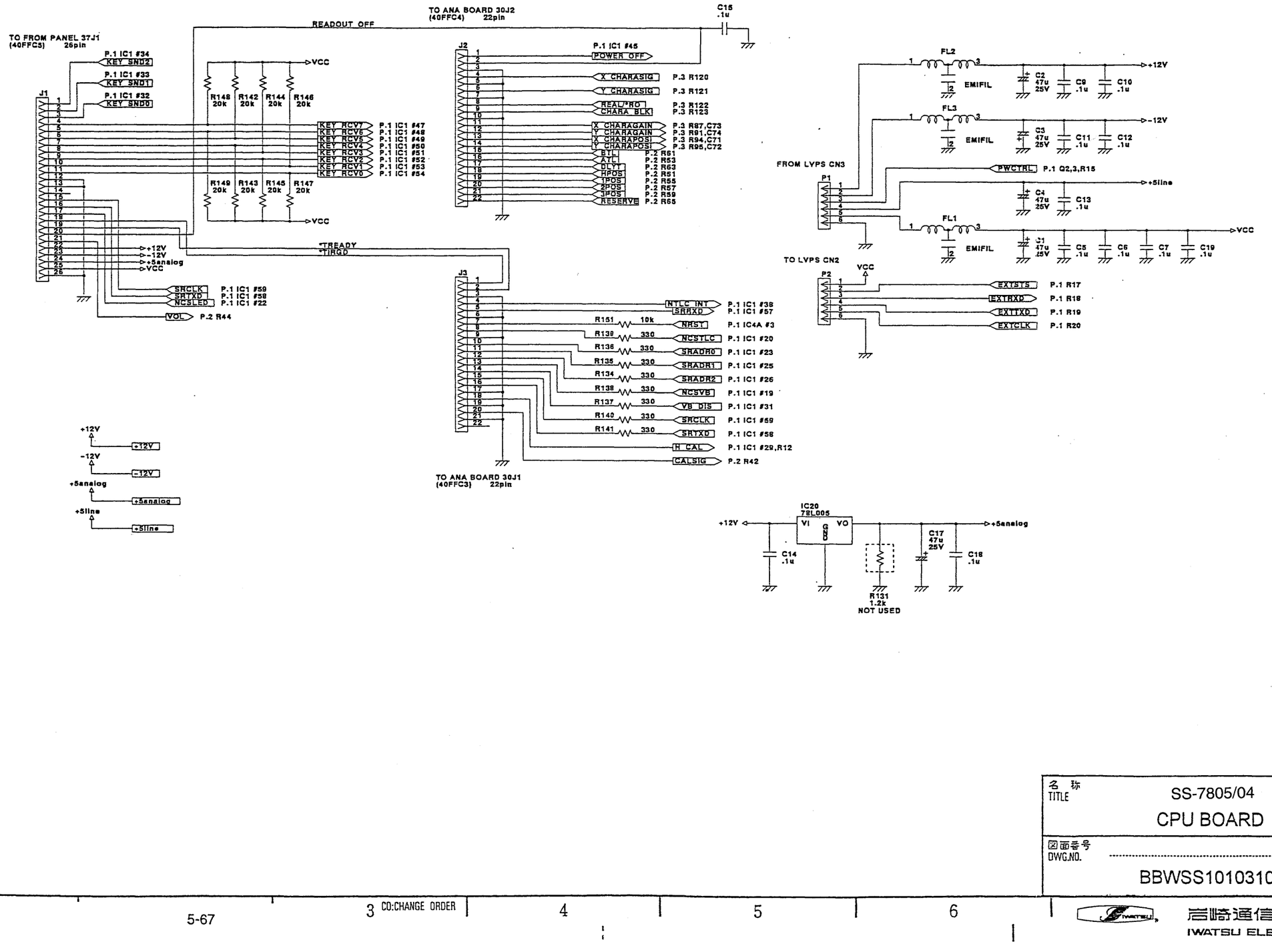
岩崎通信機株式会社 IWATSU ELECTRIC CO., LTD.



名称 TITLE	SS-7805/04 CPU BOARD
図面番号 DWG.NO.	BBWSS10113105
頁 SHEET	35 / 3/4

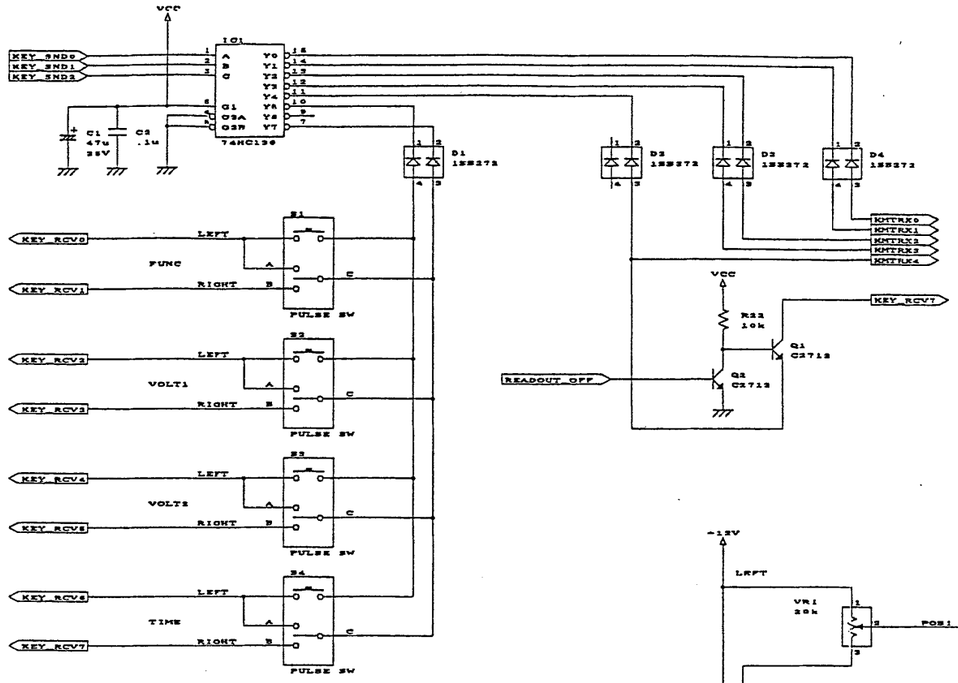
3 CO:CHANGE ORDER

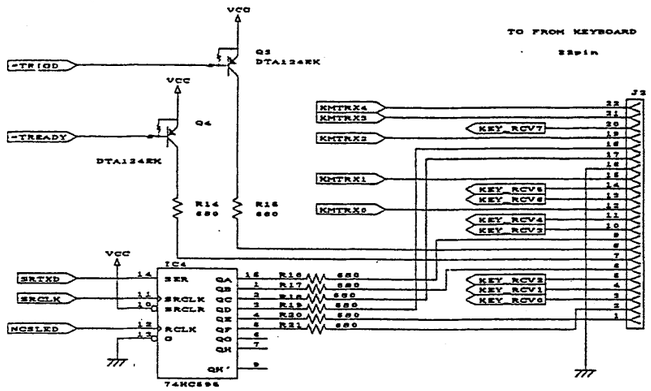
岩崎通信機株式会社
IWATSU ELECTRIC CO., LTD.

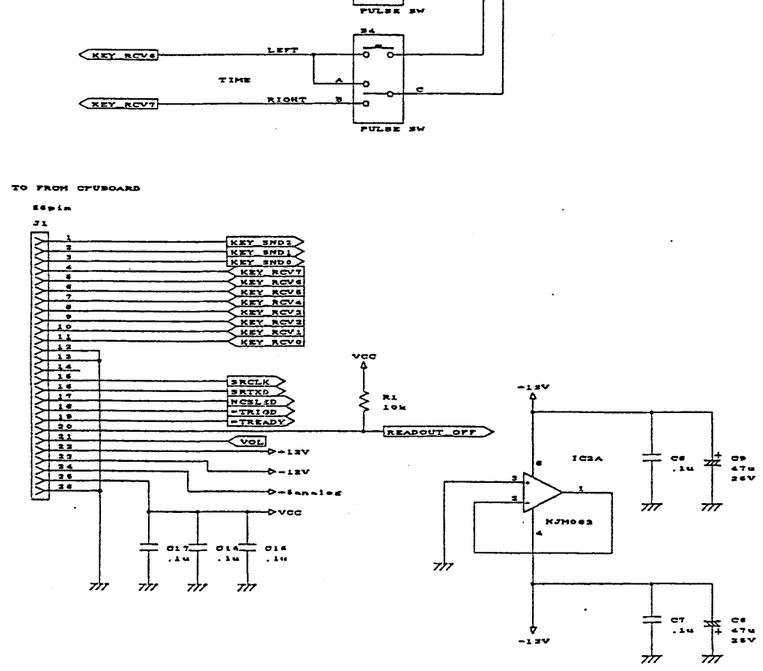


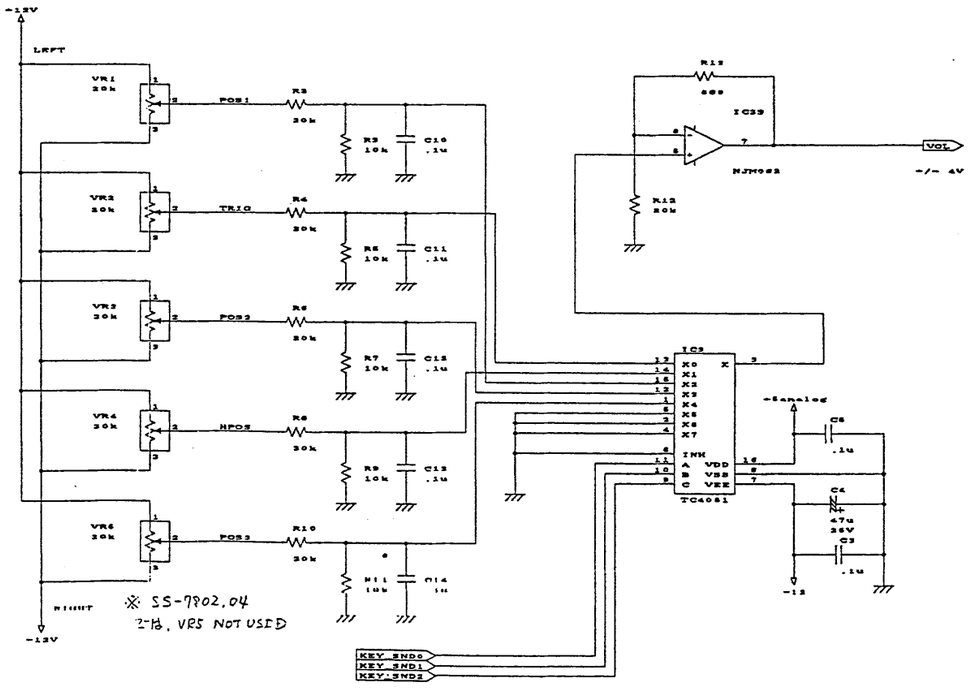
名称 TITLE	SS-7805/04 CPU BOARD 35
図面番号 DWG.NO.	BBWSS10103105
頁 SHEET	4/4

3 CO:CHANGE ORDER





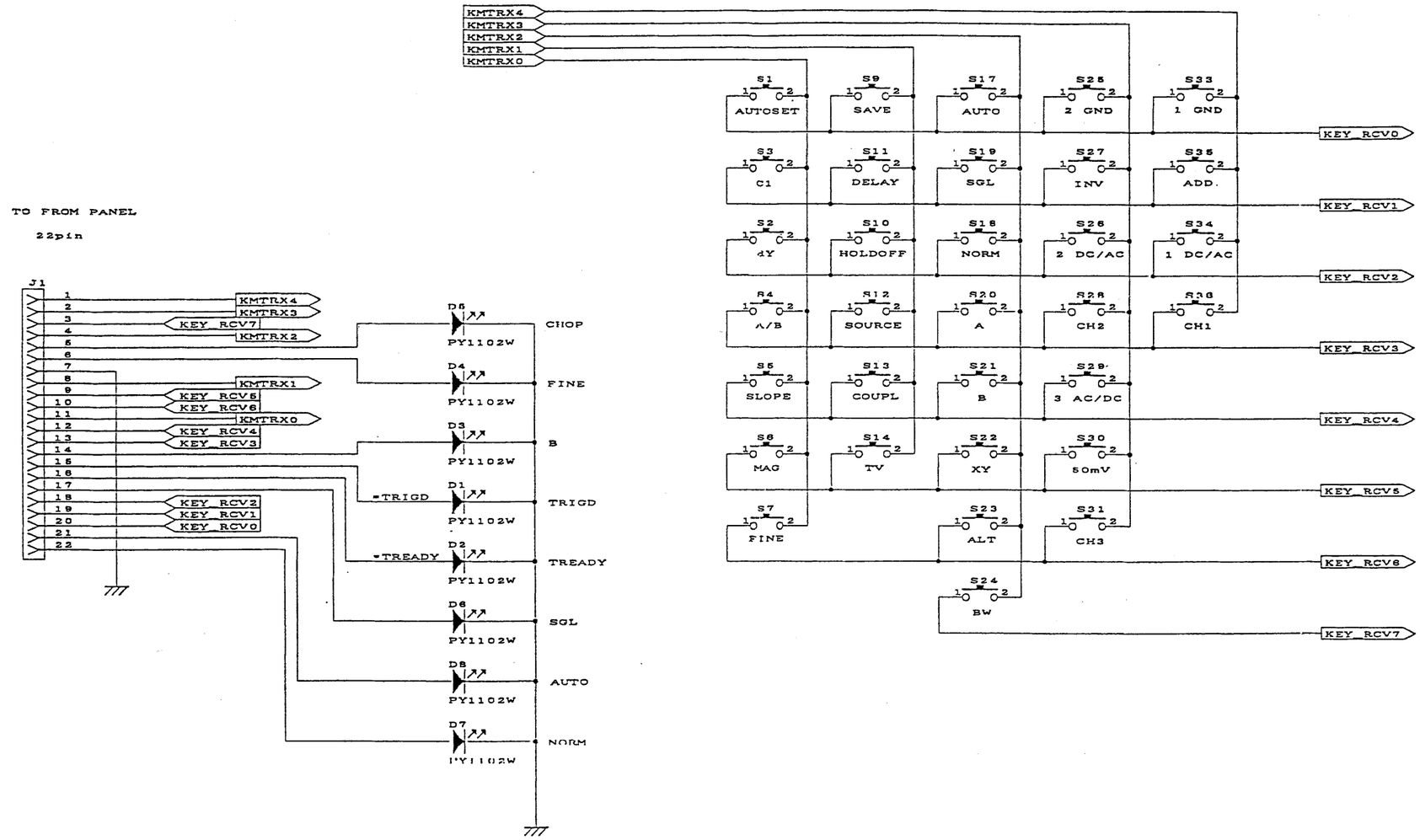




名称 TITLE	SS-7805/04 PANEL BOARD
図面番号 DWG.NO.	BBWSS11024105
頁 SHEET	37 1/1

3 CO:CHANGE ORDER

岩崎通信機株式会社
IWATSU ELECTRIC CO., LTD.



名 称 TITLE	SS-7805/04 KEY BOARD 38
図面番号 DWG.NO.	BBWSS11027105
頁 SHEET	1/1

3 CO:CHANGE ORDER

岩崎通信機株式会社
IWATSU ELECTRIC CO., LTD.

JP100, 101 : BL02RN2-R62

S: VOL SELECT
OPEN : 200V
SHORT : 100V

T1 FS44237

L8A ~ L11B : HF70BB 3.5X5X1.3
L106, L107 : ﾌｪﾗｲﾄ×4

( ) 20MHz only

AC(L)
AC(N)
FG
CN6
F1 2A SLOW
JP100
C100 4700P
C1 0.22μ
C101 4700P
JP101
C2 0.22μ
C3 2200P
C4 2200P
L1 FS44302
R1 68K
D1 D1NL40
IC1 TLP 521
D2 D3SB 60
TH1 SD13
R2 68K
C5 200V 330μ
C6
C7 0.1μ
200V 330μ
L107
D3 RG1C
L106
CN10
C70 2200P
R5 0.68
Q1 IRFPE40
R6
D5
R7 180
R8 82
C10 330P
R9 15K
R10 20K
R11 24K
R12 150
R13 15K
R14 51
C11
C12 0.01μ
C13 0.022μ
C14 0.068μ
R15 100K
R16 470K
D8 RG1C
D7 D1NL20U
T2 FS44238
C9 25V 100μ
WHT
BLK
IC4 M51955
0V FB CF C VCC OUT VF CL E
TOFF TON CT ON OFF DET G -CL
IC2 TLP 521-2
C102 2200P
50V 1μ
R17 150
C15 0.047μ
R18 220
R19 1K
R20 1
C16 0.22μ
Q2 C4311
Q3 C1815
D9 1SS120
D10 1SS120
D11 RD7.5ESB
C17 16V 100μ
C57 2200P
D13 D1NL20U
D12 D1NL20U
IC5 78L05
C19
C20 10V 100μ
D14 1SS120
CN2 CN1
#1 #1
#2 #2
#3 #3
#4 #4
#5 #5
#6 #6

NOT USE : R3, R64, VR2, C18, C23, C31, C39, L2, D35

LAST USE
C55, R64, D32
L7, T2, Q15
IC9

(L6) FS44253
(D30) RG1C
(WHT)
(R62) 100
(C52) 220P
(C53) 100V 47μ
C54 100V 47μ
(BLK) D28
S2L60 L8B
L8A
R59 100
C48 220
L7 FS44263
C49 160V 47μ
L5 FS44263
C50 200V 22μ
D24
(R63) 33K
Q13 A1668
C111 100V 0.1μ
R103 150
R102 220
R50 3.9
Q15 A1091
D29 D1NL20U
(C55) 0.1μ
L105
R61 150K
C113
C51 200V 22μ
D3L60
L9
C43 220P
R49 470
C44 63V 100μ
C45 63V 220μ
Q9 K373 OR
Q10 C2551
Q11 2SD1407
Q12 C2551
R50 47K
R51 1.3K
R52 4.7
D25 RD4.7
R53 1K
C46 IC8 0.1μ
R55 11K
R56 35K
R54 10K
C47 63V 220μ
D25 EM01
D27 RD47
R57 1K
IC8
R58 11K
C61 0.1μ 100V
L10 D22 D5LC20U
L4 FS44263
C34 220P
R33 2.2K
C35 16V 680μ
R36 680
IC2
R55 0
C9 NJM431L
C37
C36 0.1μ
R34 10K 16V 1000μ
R35 10K
C30 16V 1000μ
R38 10K
R39 220
L103
Q8 2SJ143
Q7 A1015
IC7 TA75559S
D32 RD6.8ESB
R41 6.8K
R40 47
R100 2.2K
R43 12K
R42 12K
C110
C40 16V 1000μ
R44 12K
R45 12K
R47 12K
R48 TK
C60 0.1μ
R45 16K
IC1
C42 0.1μ
C41 0.1μ
LINE TRIG
R32 1K
C21 25V 220μ
C103 25V 100μ
C39 0.1μ
C33 0.1μ
C32
R30 3.4K
R31 8.2K 16V
VR1 2K
D20 EM01
D23 EM01
C27 0.1μ
L101
C106 0.1μ
C104 25V 100μ
C29 16V 680μ
R35 10K
C28 220P
R25 2.2K
L3 FS44263
D19 D5LC20U
R26 220
D31 RD6.8ESB
Q5 2SB571
R29 1K
R27 47
Q6 TA75559S
C1815
IC100 NJM431L
L11
D17 F
D1NL20U
L104
IC5 7P24A
R23 6.8K
C22 220
C24 16V 330μ
D18 1SS120
C25 10V 220
R24 750
IC2 TLP521
Q4 DTC114E
R70 12
C102 0.01μ
C56 0.01μ
TO FAN
CONT SIG
LOW : OUT PUT
HIGH : OUT PUT
OFF
ON

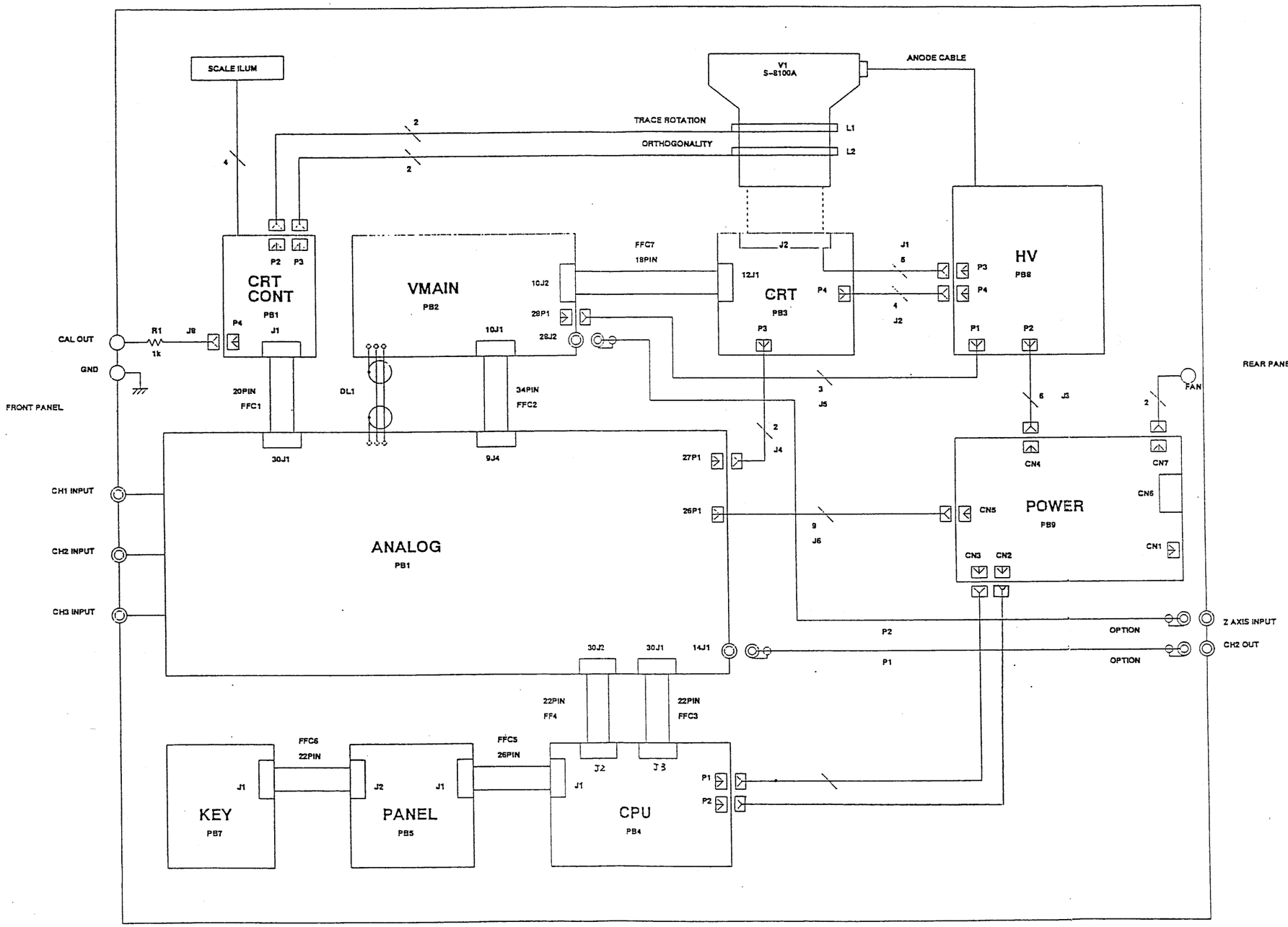
CN5#1 200V
CN4#1
CN5#3 150V
CN5#2 NC
CN5#4 NC
CN5#5 50V
B UN50V CN4#7
CN3#1
CN4#6 +12V CN5#7
G CN5#6
CN4#3
CN4#4
CN5#11 UN12V
CN5#8
-12V
CN5#5 +5V
+5V FOR CPU CN3#4
CN3#5
CN3#3
CN7#2
CN7#1

名称 TITLE	SS-7805/04 POWER BOARD
図面番号 DWG.NO.	BBWSS08074105
頁 SHEET	1/1

3 CO:CHANGE ORDER

5-70

岩崎通信機株式会社
IWATSU ELECTRIC CO.,LTD.



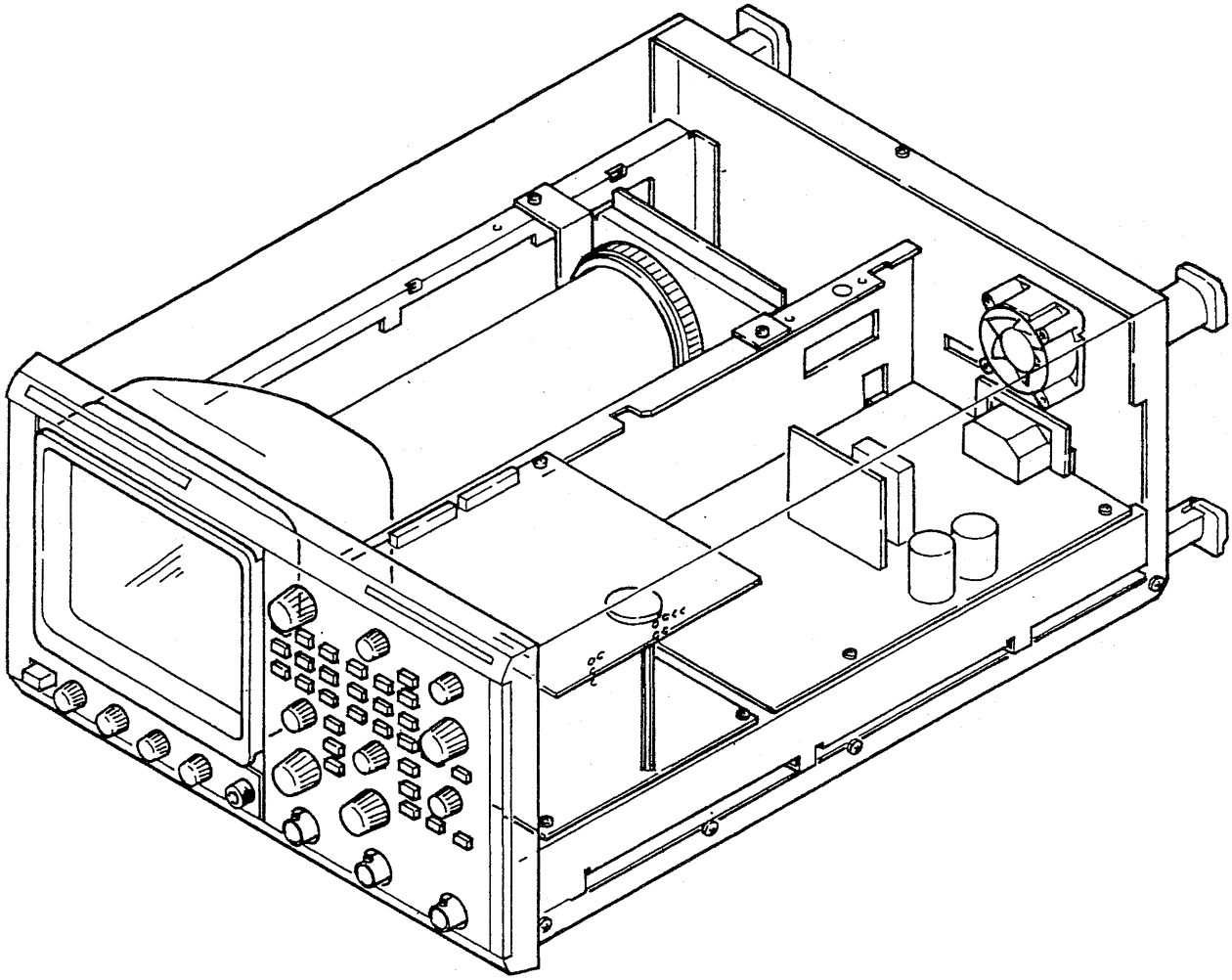
3 CO:CHANGE ORDER

名称 TITLE	SS-7805/04 OVER ALL 40
図面番号 DWG.NO.	BBWSS02041105
頁 SHEET	1/1

岩崎通信機株式会社
IWATSU ELECTRIC CO., LTD.

Section 6 Mechanical Parts List and Illustration

General View

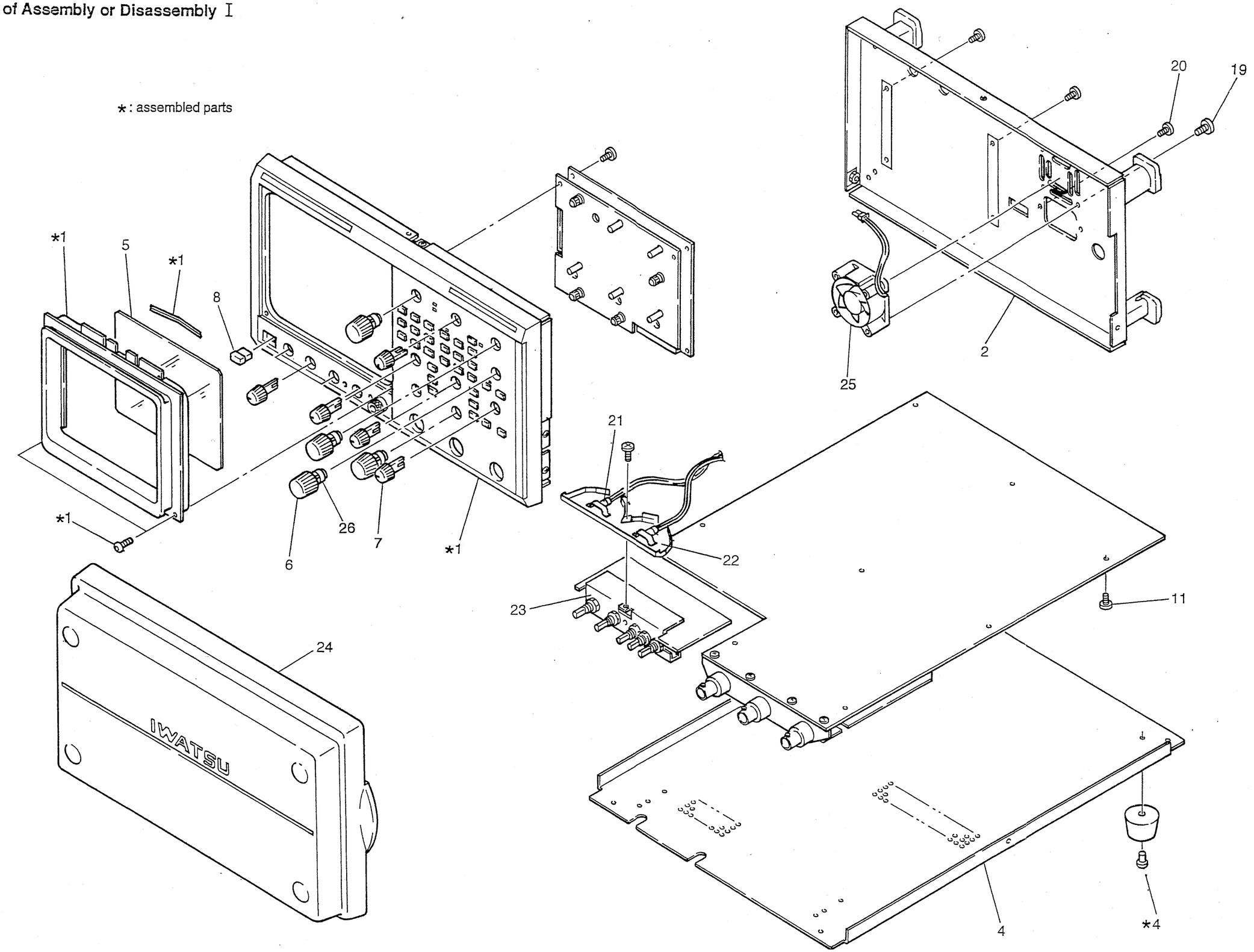


Parts List I

INDEX NO.	NAME & DESCRIPTION	Q'TY	IWATSU PART NO.
1	FRONT PANEL ASSY (include KEY BOARD)		
	SS-7810	1	21302-3264
	SS-7805/04	1	21302-3260
2	REAR PANEL ASSY	1	21302-3261
4	LOWER COVER ASSY	1	21302-3263
5	BLUE FILTER	1	KPL141311
6	KNOB M152660SG UL-I	4	KCM132221
7	KNOB M12760SG UL-I	9	KCM137821
8	PS KNOB C2 UL-I	1	KCM139811
19	TAP SCREW 3×6S	2	MSQ902751
20	SCREW SM4-3×10	2	MSM430101
21	LAMP BQ064-22012B-ST UL-I	2	DLP016093
22	LIGHT REFLECTOR	1	KCM109111
23	VR ATTATCHMENT BOARD	1	KPA760461
24	PANEL COVER	1	KCM137711
25	FAN MOTOR(KDE1204PKS2)	1	DMT620631
26	COMPRESSION RING	4	M0060

Illustration of Assembly or Disassembly I

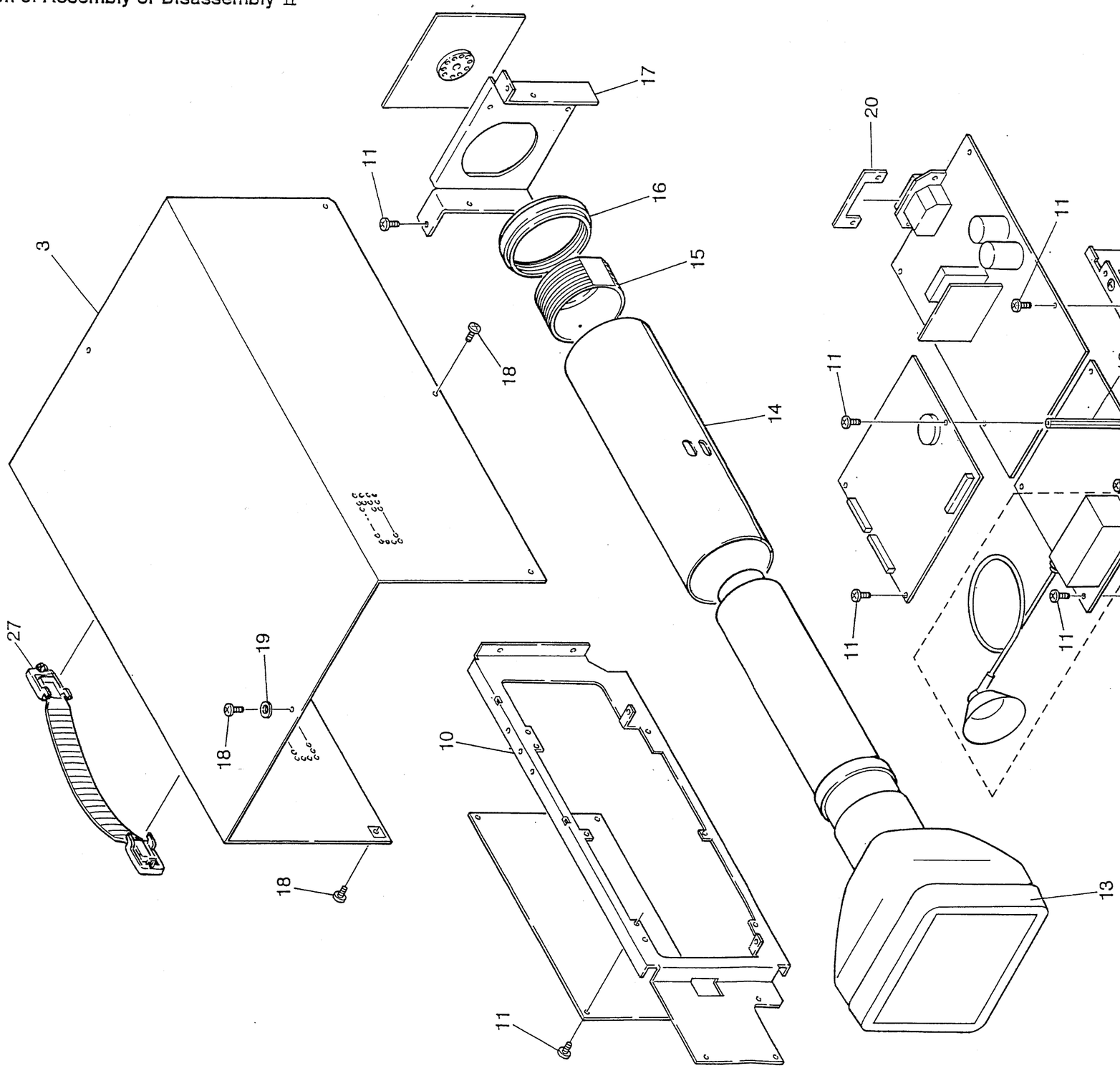
*: assembled parts



Parts List Ⅱ

INDEX NO.	NAME & DESCRIPTION	Q'TY	IWATSU PART NO.
3	UPPER COVER ASSY	1	21302-3262
9	MAIN CHASSIS	1	KBA777211
10	LEFT SIDE CHASSIS	1	KBA759831
11	TAP SCREW 3×6S	43	MSQ902751
12	METAL SUPPORTER PSC60	1	MZT903161
13	CRT FRAME	1	KGM020421
14	CRT SHIELD CASE (SS-7805/04)	1	KBA674521
15	CRT HOLDER	1	KCM108521
16	CRT FIXING SCREW	1	KCM108621
17	CRT FIXING BOARD	1	KBA759941
18	SCREW KB(+) 3×6B	1	MKB230062
19	INLET WASHER	1	KBA526511
27	THA246 NO.2 (HANDLE)	1	KAS102511

Illustration of Assembly or Disassembly Ⅱ



IWATSU TEST INSTRUMENTS CORPORATION

Address: 7-41 Kugayama 1-chome Suginami-ku, Tokyo, 168-8501 Japan
Phone: +81 3 5370 5483
Facsimile: +81 3 5370 5492
Homepage: http://www.iti.iwatsu.co.jp