SOUNDCRAFT CPS1000

Console Power Supply

User and Technical Manual

For your own safety and to avoid invalidation of the warranty all text marked with these Warning Symbols should be read carefully.

IMPORTANT: please read this manual carefully before connecting your Soundcraft console power supply to the mains for the first time.

Part No. ZM0101 - 01

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Contents

Introduction

Introduction

WARNING: THIS APPARATUS MUST BE EARTHED

The CPS1000 is a linear power supply which, like other linear supplies, produces DC voltages by rectifying, smoothing and regulating AC voltages from the secondary windings of a mains transformer. Soundcraft mixing consoles employ a number of dc voltage supply levels in their operation and these are all provided at the output of each supply unit.

In regulating these voltages there is considerable heat generated, the dissipation of which is achieved through a substantial heat sink on each side of the unit. An electronically controlled fan is incorporated which draws air over the heatsinks to provide adequate heat dissipation for the regulators and reduce the outer case temperature.

The CPS1000 is designed for installation in a 19" rack unit, occupying 4U of rack height. Refer to the section "RECOMMENDATIONS FOR INSTALLATION" on Page 5.

LED indication is provided on the front panel to show operation of the regulating circuits, and to monitor the mains supply voltage.

MAINS VOLTAGE SELECTION.

Special attention should be paid to the following information:

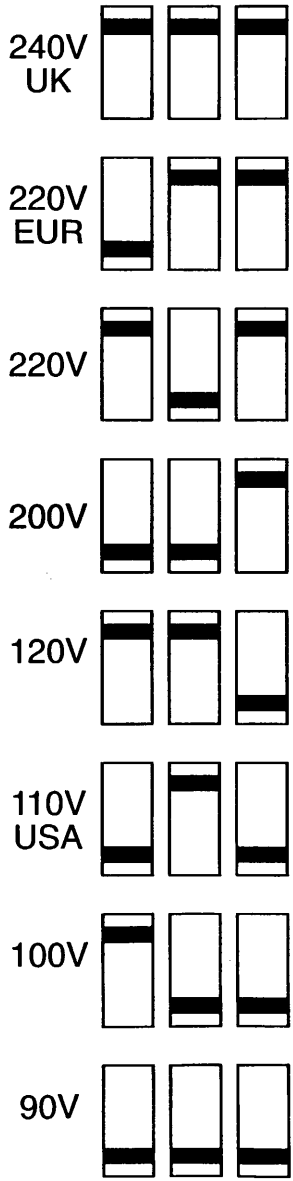
Do not change the voltage setting without first turning the unit off and unplugging the mains lead. Ensure that the cover plate over the mains voltage selection switches is replaced after correct voltage selection has been made and that the cover plate is positioned to show the correct mains voltage.

This unit is capable of operating over a wide range of mains voltages by means of a comprehensive set of selectable voltage settings. It is important to ensure that the correct voltage setting has been selected for the level of local mains voltage supply, for safe, uninterrupted operation of the unit.

There are three mains voltage selection switches behind a cover plate on the front of the unit. Voltage selection is achieved by moving the switches using a screwdriver blade, into the correct positions, as shown by the symbols marked on the front panel. In this way the unit is set up for operation at one of the following ranges of mains supply:

NOMINAL VOLTAGE	OPERATING VOLTAGE RANGE
Vrms AC	*Vrms AC*
240 UK	216-264
220 EUROPE	198-242
200	180-220
120	108-132
110 USA	99-121
100	90-110
90	81-99

Mains Voltage Selector Positions



OPERATING VOLTAGE RANGE

It is very important to use the correct mains voltage selection. A wide operating range of mains voltages is provided to enable the unit to function down to only 81Vrms on the mains supply. This facility is incorporated to overcome the problems that some power supplies have with internal regulation when operating from a poorly regulated mains supply.

Do not operate the PSU with a consistently high (above nominal) reading on the mains meter. Operation with the mains higher than +10% may cause serious damage

The mains meter is essentially a peak-reading device, as it is the peak value of the mains waveform which is the most important factor in providing the correct mains voltage to the power supply. For this reason, and because with long power cables it is common for the mains waveform to become distorted, the indication of the meter may not agree with readings taken with the usual types of quasi-RMS reading testmeter.

Note that the meter measures the voltage actually available at the PSU, and therefore will indicate any voltage drop on mains supply wiring.

REPLACING MAINS FUSE.

In the event of incorrect switching of the mains voltage selectors, a mains power surge or underrated fuse value, the mains fuse in the front panel will blow and the CPS1000 will not function. Switch the ON/OFF switch to the OFF position. Check the fuse and replace if necessary; also check that the voltage selection is correct for the mains supply level before switching the unit ON again.

To avoid risk of fire replace only with the correct value fuse, as indicated on the unit.

In the event of repeated failure of the mains fuse consult the Soundcraft dealer from where the unit was purchased.

This unit contains no user serviceable parts. Refer all servicing to a qualified service engineer, through the appropriate Soundcraft dealer.

Note that the cooling fan is thermostatically controlled and will therefore not switch on when the unit is cool, for instance when initially turned on or with no load connected.

Recommendations for Installation of the CPS 1000

FOR UK USERS ONLY

IMPORTANT WARNING
THIS APPLIANCE MUST BE EARTHED

The wires in the mains lead are coloured in accordance with the following code:

Green and Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

- The wire which is coloured Green and Yellow must be connected to the terminal in the plug which is marked with the letter E or by the earth symbol.
- The wire which is coloured Blue must be connected to the terminal in the plug which is marked with the letter N or coloured Black.
- The wire which is coloured Brown must be connected to the terminal in the plug which is marked with the letter L or coloured Red.

Recommendations for Installation

The CPS1000 power supply is provided with front panel fixing holes for 19" rack-mounting and will occupy 4U of rack space. Rear support should be provided when fitted in a 19" rack.

The CPS1000 is a heavy unit (34kg, 78lb) and should be regarded as a two-man lift. Take suitable precautions when lifting

As with any power supply that contains a large mains-voltage transformer, it is preferable to provide a degree of physical isolation of the unit from other electronic equipment, particularly that which carries low level audio signals, to avoid any possible hum pick-up. For this reason the unit is used with a long (6.5 metres) output cable to enable it to be positioned away from the mixing console.

For the same reason, when rack-mounting it is preferable to avoid locating the unit adjacent to signal processing equipment.

It should be noted that if a complete rack containing a CPS1000 unit is to be operated from a different mains supply level, then the unit should be withdrawn from the rack in order to reselect the mains voltage setting, at the same time as resetting any other equipment.

The other important consideration when rack-mounting the unit is the need for natural convection of air over the case and an unrestricted air flow through the unit. Note that air is drawn in at the rear of the unit and expelled through the front panel.

Good ventilation BELOW the unit, in the floor or back of the rack, and similarly ABOVE the unit, at the top of the rack, will ensure a path for continuous air flow.

Other equipment in the rack which is known NOT to produce a significant amount of heat should be mounted BELOW the unit. Equipment that also relies on good air flow within the rack (ie. most power amplifiers and other power supplies) should be given due consideration and some space should be provided between such units and between these and the CPS1000 unit. Forced convection, by means of a fan-tray, may be desirable in this situation.

The CPS1000 will operate as a free-standing unit without requiring any special cooling arrangement, but should not be allowed to be accidentally or deliberately covered over in any way.

Do not operate the unit with the top cover removed as this disrupts the forced airflow through the heatsinks.

The filter on the cooling fan must be inspected regularly and cleaned if necessary to maintain good airflow through the unit. This will be particularly important if the unit is used in a dusty environment.

Finally, some consideration should be given to the earthing arrangement of the system at the centre of which are the console and the CPS1000 (and any other Soundcraft power supply units). The console chassis is earthed, through the mains earth, via the power supply. When rack-mounting the CPS1000(and any other Soundcraft power supply units) care should be taken to avoid any possible 'ground loops' in the system which would introduce audible hum to otherwise clean audio signals. Ground loops may occur where signal processing equipment, patched to the console, has its signal earth commoned to the equipment chassis. The ground loop is formed if this chassis and the power supply chassis are in electrical contact through the fixing rails they share in the rack. To avoid this situation, standard isolating washers may be employed when fixing the power supply (or supplies) or any other unit into the rack.

W A R N I N G : THIS APPARATUS MUST BE EARTHED. Under no circumstances should the mains earth be disconnected from the CPS1000 power supply unit.

GENERAL

As with all electrical/electronic equipment care should be taken when handling this unit. Avoid general mishandling and do not drop. Avoid storage and operation in dusty locations and do not expose to corrosive atmospheres.

To avoid risk of fire do not expose this unit to rain or moisture.

Retain all packaging for transportation in the event of the unit requiring servicing. Retain this manual safely, along with all other relevant documents.

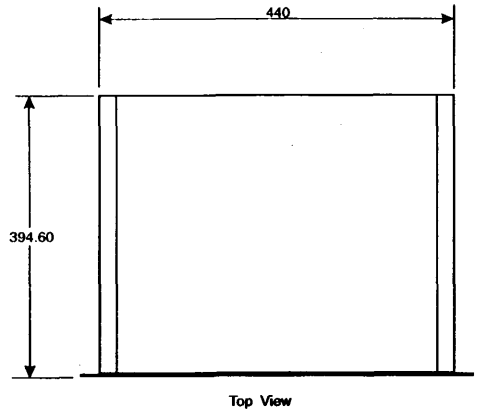
For touring/mobile transportation it is advisable to install the CPS1000 in a flight case to provide mechanical protection. Refer to your Soundcraft dealer for a suitable case.

Where the CPS1000 is enclosed in a touring case, provision must be made for adequate ventilation to the rear of the unit to ensure unrestricted supply of air for the cooling fan.

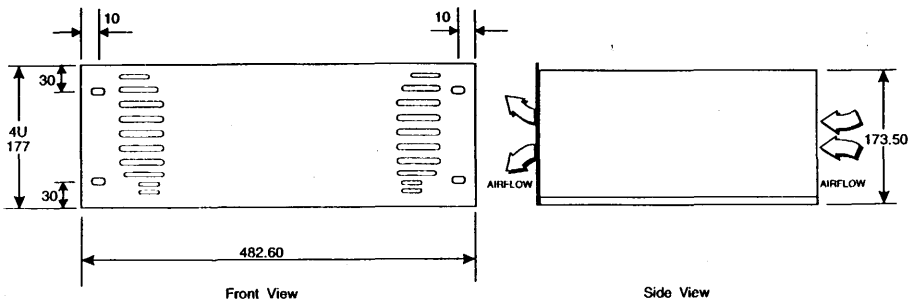
Use only the high-current mains lead supplied, not the more common 5A type supplied with other equipment.

The PSU is intended for use with the high-current version of the 16-way DC output lead, which is identified by a RED sleeve at one end. Although the normal lead would usually be satisfactory, the extra voltage drop may affect console operation in some marginal circumstances.

Note that the cooling fan is thermostatically controlled and will therefore not be operating when the unit is first switched on, or when no load is connected.



Top View



Front View

Side View

CPS1000 DIMENSIONS

All dimensions in millimeters

Technical Specification

Technical Specification

MAINS INPUT VOLTAGE RANGE:

240/220/200/120/110/100/90 V AC +/-10% @ 50/60Hz

RATED INPUT POWER (Max):

980 WATTS

MAINS FUSE RATING:

Use T6.3A/250V (slow-blow) for 240-200V
Use T10A/250V (slow-blow) for 120-90V

OUTPUTS

DC. VOLTAGE RAIL	MAX. OUTPUT CURRENT
+17V (A)	6.00 AMPS
-17V (A)	6.00 AMPS
+17V (B)	6.00 AMPS
-17V (B)	6.00 AMPS
+48V	0.35 AMPS
+24V (A)	3.00 AMPS
+24V (B)	1.50 AMPS
+7.5V	2.2 AMPS
-7.5V	2.2 AMPS
+15V	2.5 AMPS

All voltage and current measurements are to be taken at the console-end of the power supply cable.

OPERATING TEMPERATURE RANGE (Ambient):

-10 TO +40°C.

HUMIDITY:

Similar unit tested at 0-90% RH non-condensing +/-5% Relative Humidity at 40 °C for 16 hours. Load switched between 20% and 100% at regular 30 minute intervals.

OVERALL DIMENSIONS:

HEIGHT:		177.00mm. (4U)
WIDTH:	Chassis	440.00mm.
	Front panel	482.60mm.
DEPTH:	(excl. connectors)	394.60mm.

WEIGHT:

(Excl. packing): 34Kg

Circuit Description

Circuit Description

General

The CPS1000 is a linear power supply, the operation of which avoids the induction of switching noise, associated with switch-mode designs, in audio paths. The unit incorporates state-of-the-art solid state regulators to deliver high output currents from a wide range of mains supply voltages. A variable speed fan is controlled by the amount of cooling required for the load and ambient temperature, and begins operation when the temperature of either heatsink exceeds 35°C

Left-Hand Regulator PCB (SC3546-Z)

This PCB carries the **+48V** regulator, the two regulators for **+/-17V A**, and the positive regulator for **+/-17V B**. It also carries the LH heatsink temperature sensor.

The **+48v** regulator **REG1** is based on a specialised high-voltage regulator chip called the TL783C. The regulator maintains a constant 1.27V across **R1**, and therefore the total output voltage is set by the potential divider (R1)-(PR1+R2+R50) with **PR1** allowing for a limited range of output adjustment. **LED1** indicates that the supply is good; note that it is placed in the potential divider to avoid having to draw further current from the regulated +48V. **C20** improves ripple rejection, and **C1** ensures HF stability of the regulator. **D1** will conduct to prevent **REG1** from being reverse-biased if a large capacitance remains charged across the output when the PSU is turned off. **D2** will conduct to prevent the ADJ pin of **REG1** from being reverse-biased by the charge on **C20**, if the output should be short-circuited. The transformer secondary is protected by **F2**.

The **17V** regulators are all based on the LT1083, a high-performance high-current device that improves the efficency of the supply by allowing operation with a minimum voltage of 1.5V across it. The protection diodes described in the 48V regulator are built into the LT1083, but otherwise operation is very similiar. The bridge rectifiers for the 17V supplies are mounted on their associated heatsinks, as at these current levels their dissipation is substantial.

It is essential that the graphite-foil heat-conduction material is retained between the rectifiers and the heatsink.

In the case of **+17V A**, the regulator is **REG2**, which maintains a constant 1.25V across **R3** and therefore the total output voltage is set by the potential divider (R3)-(PR2+R7) with **PR2** allowing for a limited range of output adjustment. **C2** and **C22** ensure HF stability of the regulator. The transformer secondary is protected by **F3**.

If the +17V supply should fail for any reason, it is essential that its matching -17V supply is also shut down, to avoid damage to equipment being powered. This is assured by the mutual-shutdown circuitry **TR1,TR3,D3,R5,R6**. Normally **D3** is conducting, with both ends close to 0V, and **TR1,TR3** are both off. If the positive supply falls then **D3** goes negative and **TR3** is turned on via **R6**, shunting the bottom arm of the **REG3** potential divider, and reducing the output to approx 1.5 V, which is harmless to external equipment. Similarily, if the negative supply collapses then **D3** goes high, allowing **TR1** to be turned on via **R5**, and shunting the **REG2** potential divider to close down the positive rail.

LED2 indicates that the supply is good; no LED is provided for the -17V as the failure of either rail causes the other to close down.

The +/-17V B supplies operate exactly as for the +/- 17V A supplies, the only difference being that the -17V B regulator is on the RH PCB, and the mutual-shutdown line must therefore be carried between them in the wiring loom. If this line is disconnected then both positive and negative 17V B regulators remain permanently shut down.

Right-Hand Regulator PCB (SC3546-Y)

This PCB carries the negative +/-17V B regulator, the 24V A and 24V B regulators, and the unregulated +12V supply for the fan and mains meter. It also carries the RH heatsink temperature sensor.

The -17V B regulator is exactly as for the -17V A regulator, described above.

The +24V A supply (3 Amp) is based on TO3 regulator **REG7**, and operates in the same way as the regulators described above. **D13,D14** protect the regulator from reverse-biasing, as for the +48V regulator, and **F7** protects the transformer secondary.

The +24V B supply (1.5 Amp) is based on 24V regulator **REG6**. This is a fixed-output device with no voltage adjustment. **D15** will conduct to prevent **REG6** from being reverse-biased if a large capacitance remains charged across the output when the PSU is turned off.

The +7.5V supply (REG8), -7.5V supply (REG9) and +15V supply (remote mounted LM338K) are essentially identical circuits to that described for the +24V A supply above. Full-wave rectification and smoothing for these circuits is fitted on a separate PCB, **SC3221.**

Fan-Control & Mains Meter PCB (SC3546-W)

Both fan-control and mains meter are powered from an unregulated supply at approx +12V, and therefore make use of accurate reference voltages generated by IC reference **IC4** and **IC1-A**. **IC4** is a band-gap reference that generates a precise +5.00V across itself when fed with unregulated current via **R23**. **C55** removes HF noise. This voltage is used directly by the mains meter, and also scaled up by **IC1-A** to 7.4V, which is used both by the mains meter, and also as a "half-rail" by the fan controller.

The fan-control system monitors the temperature of the two heat sinks, and sets the fan speed to be appropriate to the hotter of the two. Heatsink temperature is measured by IC temperature sensors **TS1** and **TS2** (LM35DZ) mounted on the LH and RH regulator PCBs, where they are held in thermal contact with the heat sinks by small metal clips. The LM35DZ is in a transistor-style package, but is in reality an IC that provides a DC output proportional to temperature in degrees Centigrade (Celsius) at the rate of +10mV per degree C. This voltage is amplified by a factor of 10x, set by **R27,R31** and **R28,R32**. Diodes **D21,D22** ensure that only the most negative of the two op-amp outputs is applied to **R29**. If the output of **IC2-A** is marginally lower than that of **IC2-B**, due to its associated temperature sensor being hotter, then **D21** remains forward-biased, and its forward-voltage is servoed out by the open-loop gain of **IC2-A**. **D22** then becomes reverse-biased as the output of **IC2-B** saturates positively due to the voltage being applied through **R32** to its inverting input.

IC1-B compares the temperature-proportional voltage provided by either **IC2-A** or **B** with the reference voltage set up by **R30,R26**, and amplifies the difference by a further 10 times. The relevant voltage is that across **R30**, which defines the temperature at which the fan starts to run. This is approximately 3.5V, and corresponds to 35°C. The fan is controlled by **TR7**, driven from the output of **IC1-B** via **D26** & **R36**, which voltage-shift the op-amp output so it can fall low enough to turn **TR7** properly off. **C56** prevents any HF oscillation.

If the +12V supply voltage falls significantly, for example if the mains tappings are set incorrectly, the operation of the temperature sensors becomes uncertain, and the fan speed unpredictable. To ensure that the fan will be in its safest state (ie running at maximum speed) in this abnormal condition, a safety circuit is provided in the form of **TR5,D25** etc. The 7.4V rail remains unchanged as the supply voltage drops, and when the difference between them falls below about 2V, **TR5** is no longer kept conducting by **R35**, and its collector voltage falls until **D25** turns on and drives the output of **IC1-B** high, driving the fan with the full available voltage.

In some applications maximum cooling may be more important than minimising fan noise, and so jumper **J1** is provided so that **TR7** can be shorted out, leaving the fan running continuously at maximum speed.

The mains meter reads the voltage across a tap of one of the transformer primaries, so that voltage tapping changes are automatically taken into account. Safety isolation is provide by **R48,49** on the voltage-select PCB. These are specially-approved resistor types that limit the maximum current that can be drawn from the CON14 pins to a safe amount.

To maintain safety it is essential that these resistors are only replaced with the correct type

IC3-A is a differential amplifier that scales down the transformer primary voltage to a more manageable level. Its DC operating point is set by the 7.4V half-rail, via **R42**. The attenuated and isolated mains voltage is peak-rectified by **D23,24**, with **C58** as a reservoir capacitor. Calibration is set by preset **PR7**, with **R44** limiting the adjustment range.

IC5 (LM3914) is a multi-comparator IC normally used for driving audio bargraph meters. It contains ten comparator/led-drivers, with their switching points set by an internal potential divider (10x 1K resistors) connected between pins 4 & 6 (DIVL & DIVHI). This potential divider is connected between the +5.00V reference and the +7.4V half-rail to define the range over which the comparators switch.

If the mains voltage is more than 10% low, all comparators are off, and the top four LEDs (**LED6-9**) are not illuminated. **TR6** is off and so **LED10** is powered through **R45**. When the rectified voltage applied to the I/P pin of **IC5** rises above the first trip point, (which is -7.5%; halfway between -10% and -5%) pin 1 goes low and **LED9** comes on, drawing current through **R47**, and turning on **TR6** via **R41**, thus shunting current from **LED10** and extinguishing it. As the input voltage rises further, pin 1 goes high again and pin 18 now goes low to turn on **LED8**; this "one LED at a time" action is handled internally by **IC5**.

As the input voltage rises further, successive LEDs come on, until if the mains exceeds +10%, **LED6** remains on, due to pins 10-16 being commoned together.

When testing this circuit, do not apply a mains voltage to the psu that is more than 10% above nominal or damage may result

R46 sets the current through **LED6-9**, and **C60** locally decouples the supply rail.

Mains Voltage-select PCB

This board carries the transformer tapping switches, the mains backup fuse, inrush suppressor, and the mains-meter isolation resistors.

The mains voltage switching is conventional. On the 240,220, & 200 Volt settings the two transformer primaries are connected in series.

Note that there are two switch settings that give 220V, and these are functionally equivalent.

For the 120,110,100 & 90 Volt settings the transformer primaries are operated in parallel.

The mains backup fuse provides safety protection if the front panel fuse is replaced with an incorrectly high value. Under normal conditions a fault will only cause the front panel fuse to open, as the backup fuse has a higher rating.

Note that the front panel fuse should be replaced when changing from 240-200V ranges to 120-90V.

The correct value for 240-200V is T6.3A/250V (slow-blow) and for 120-90V is T10A/250V (slow-blow)

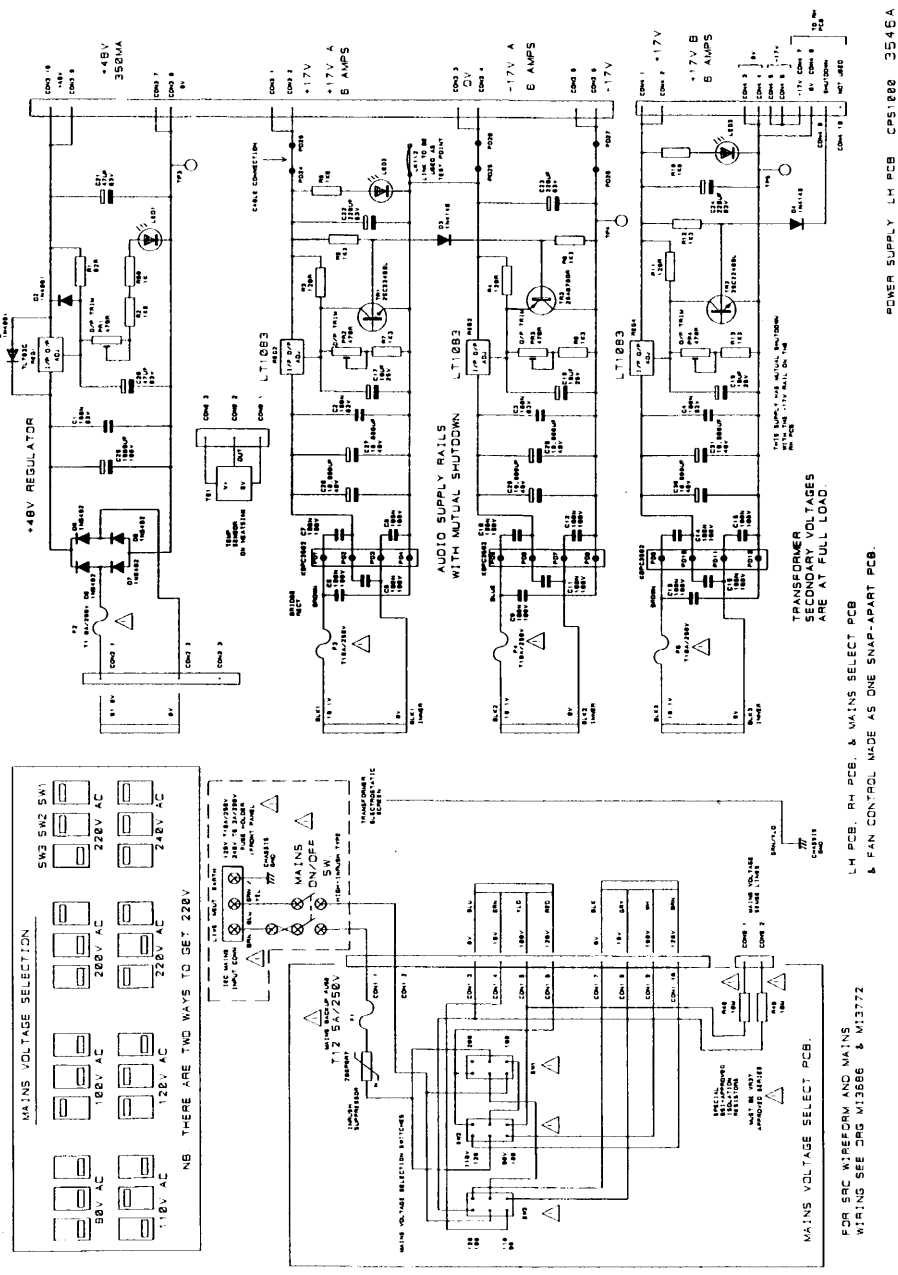
A large PSU such as this takes a sizeable inrush transient when first switched on. To minimise the chance of this operating external circuit-breakers, etc, an inrush suppressor is connected in series with the mains input. The resistance of this is high enough to limit the inrush current but drops to a very low value as the device heats up. **The inrush suppressor inherently runs very hot, at approx 160 deg C, and also carries mains live.**

Exercise great caution when working on this board.

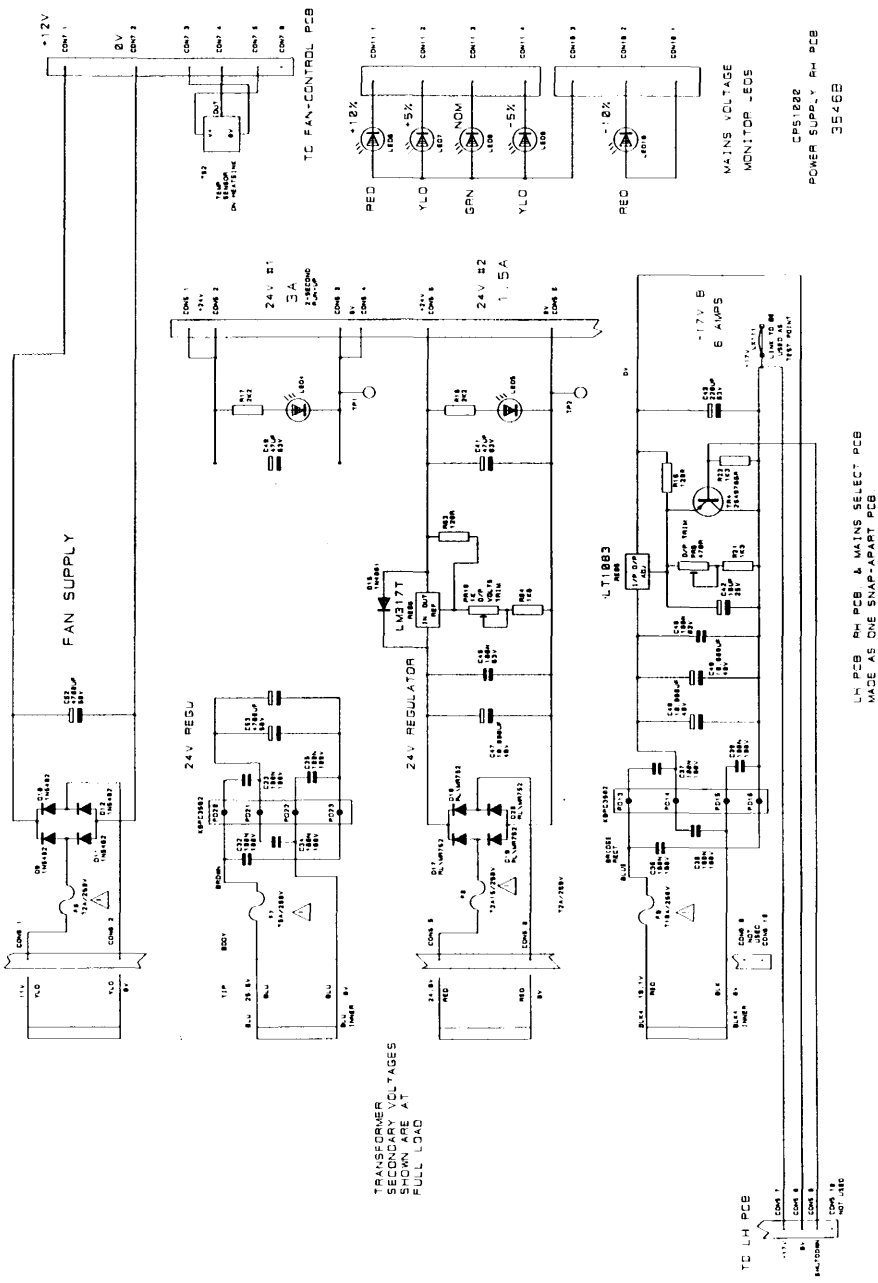
Mains-meter safety isolation is provide by **R48,49** on the voltage-select PCB. These are specially-approved resistor types that limit the maximum current that can be drawn from the CON14 pins to a safe amount.

To maintain safety it is essential that these resistors are only replaced with the correct type.

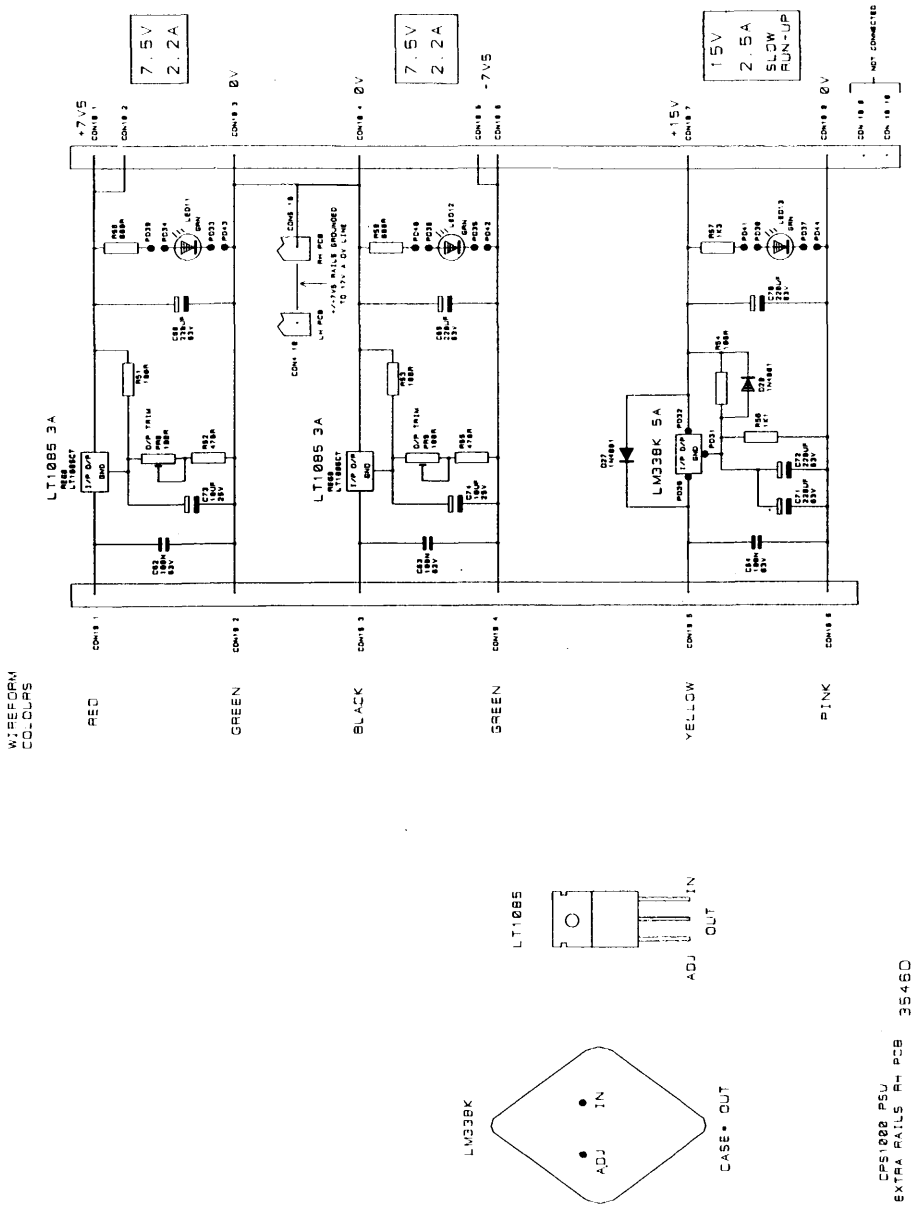
ED3546-Z LH PCB & ED3546-X Mains Voltage Select PCB



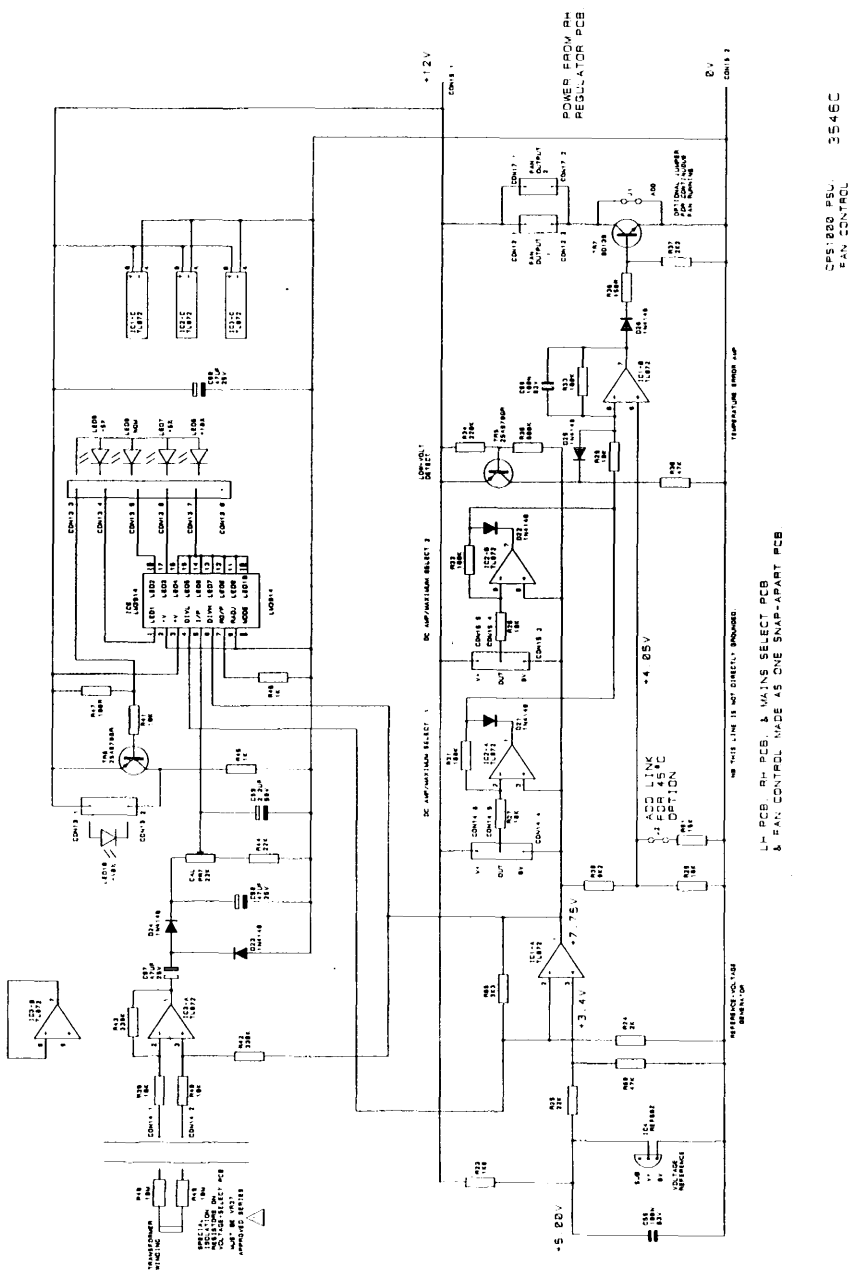
ED3546-Y RH PCB (SHEET 1 of 2)

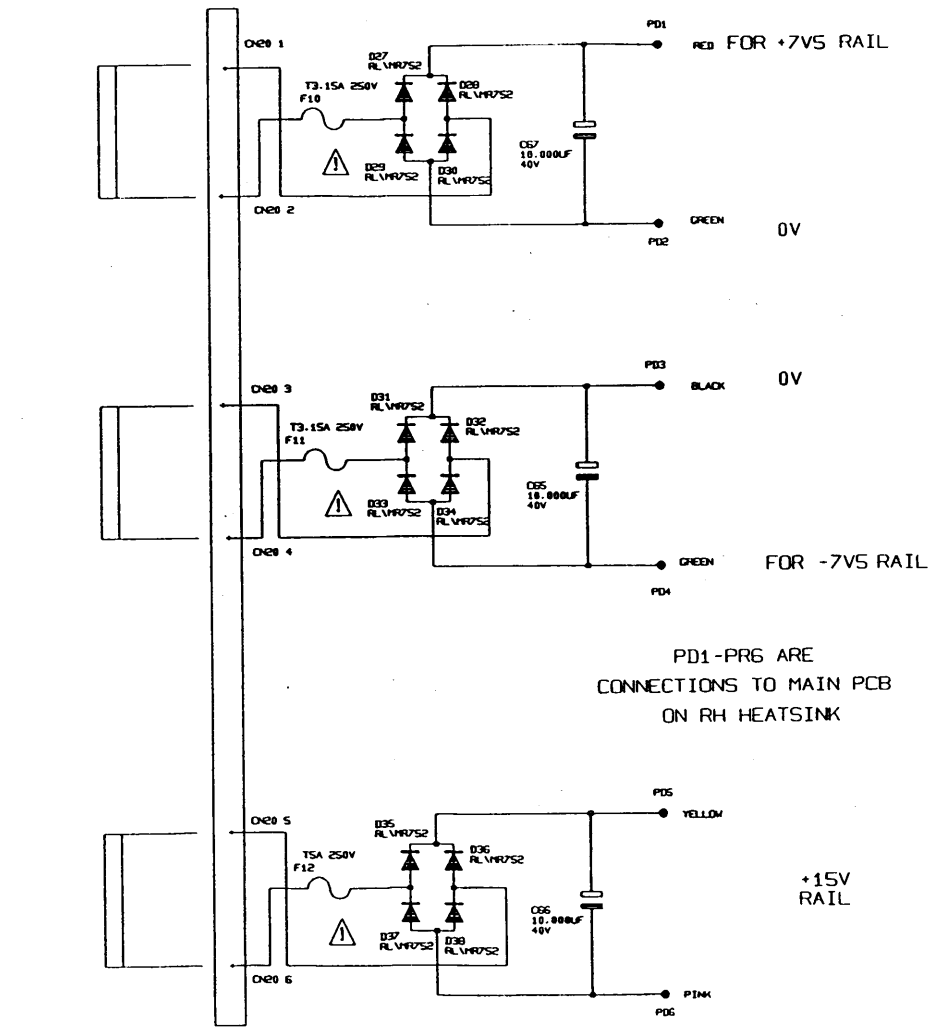


ED3546-Y RH PCB (SHEET 2 of 2)

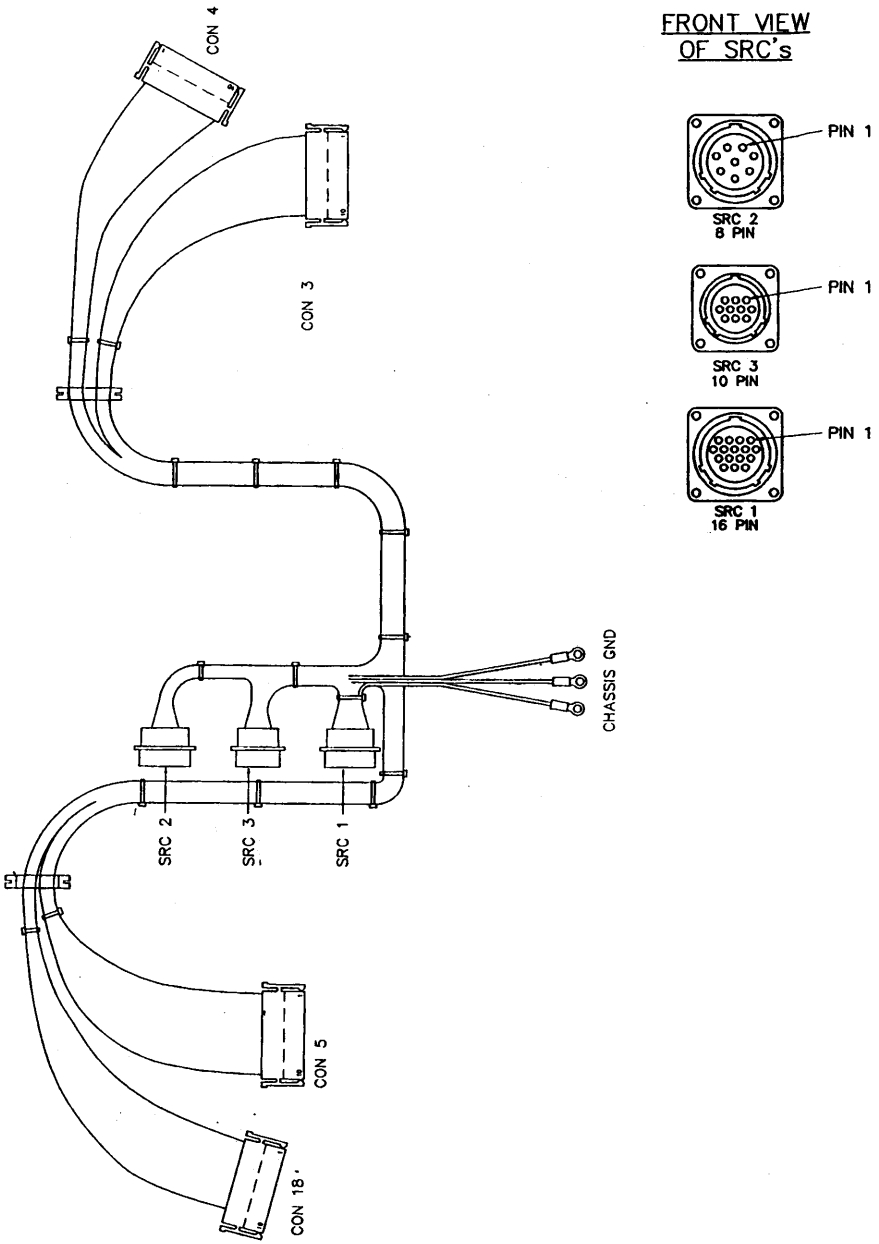


ED3546-W Mains Meter & Fan Control PCB




TRANSFORMER
SECONDARIES
CN20 1
CN20 2
CN20 3
CN20 4
CN20 5
CN20 6
D27 RLVHR7S2
D28 RLVHR7S2
D29 RLVHR7S2
D30 RLVHR7S2
D31 RLVHR7S2
D32 RLVHR7S2
D33 RLVHR7S2
D34 RLVHR7S2
D35 RLVHR7S2
D36 RLVHR7S2
D37 RLVHR7S2
D38 RLVHR7S2
T3.15A 250V
F10
T3.15A 250V
F11
T5A 250V
F12
C67 10,000UF 40V
C65 10,000UF 40V
C66 10,000UF 40V
PD1
RED
FOR +7V5 RAIL
GREEN
PD2
0V
PD3
BLACK
0V
GREEN
PD4
FOR -7V5 RAIL
PD1-PR6 ARE
CONNECTIONS TO MAIN PCB
ON RH HEATSINK
PD5
YELLOW
+15V
RAIL
PINK
PD6

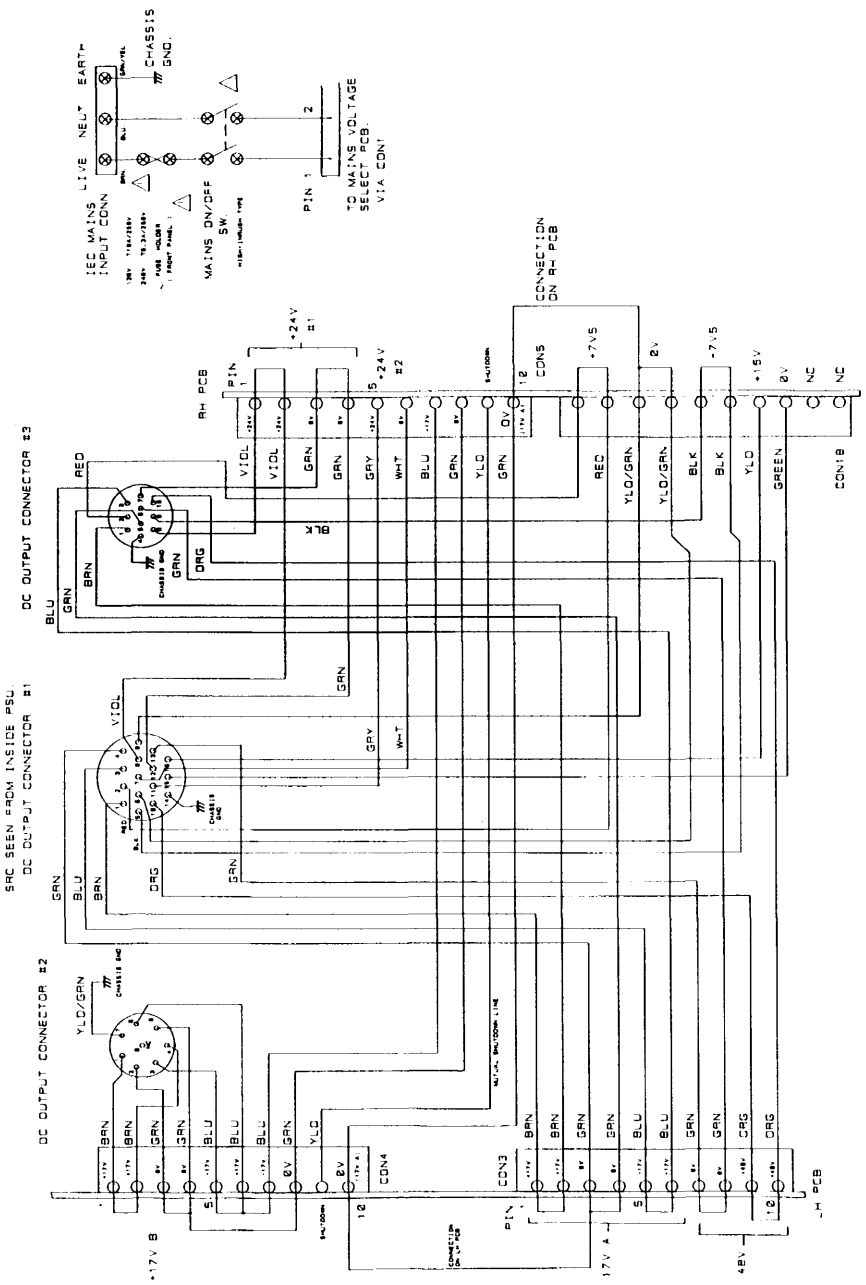
SRC Wireform Assembly



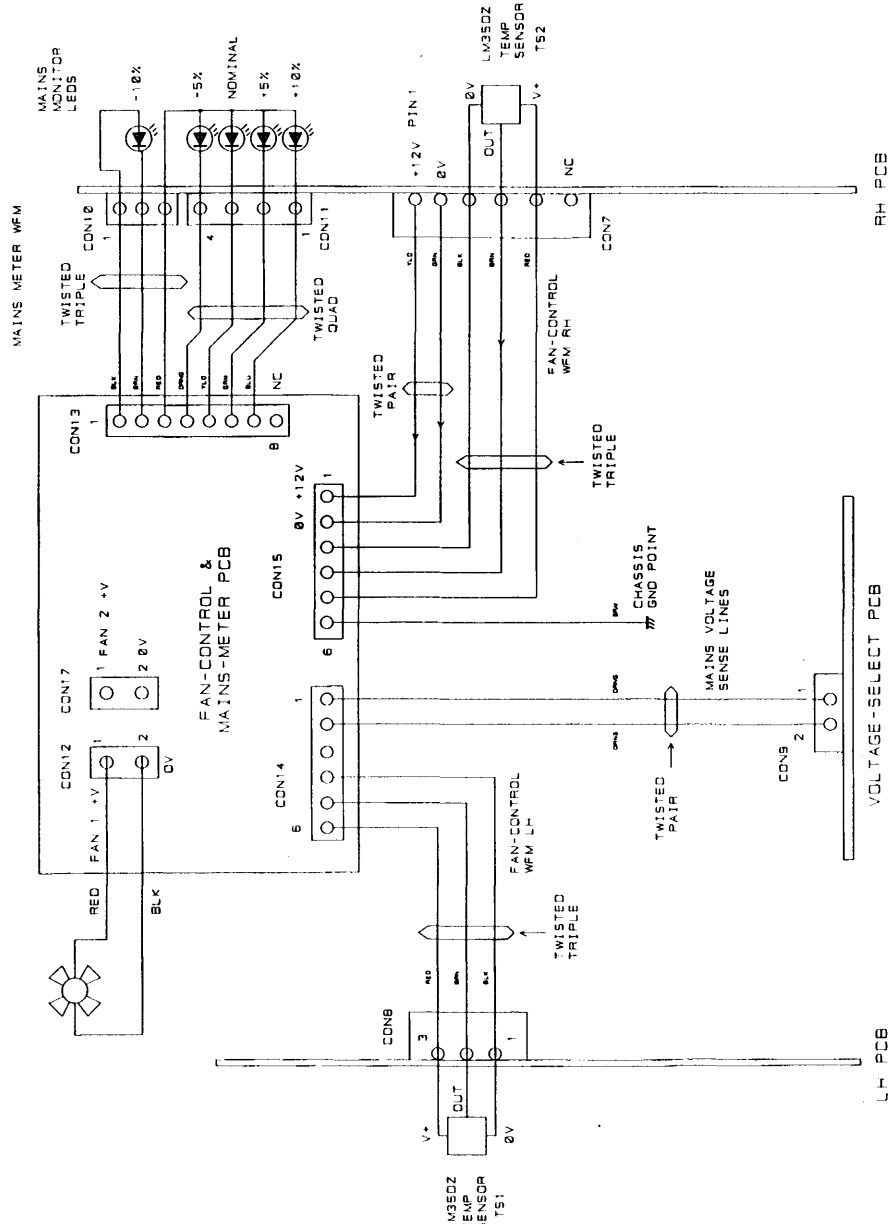
FROM	TO	COLOUR
SRC 1 – PIN 1	CON 3 – PIN 1	BRN
SRC 1 – PIN 2	CON 18 – PIN 1	RED
SRC 1 – PIN 3	CON 3 – PIN 5	BLU
SRC 1 – PIN 4	CON 3 – PIN 3	GRN
SRC 1 – PIN 5	CON 18 – PIN 5	BLK
SRC 1 – PIN 6	CON 18 – PIN 3	GRN
SRC 1 – PIN 7	CON 5 – PIN 6	WHT
SRC 1 – PIN 8	CON 5 – PIN 2	VIO
SRC 1 – PIN 9	CON 18 – PIN 4	GRN
SRC 1 – PIN 10	CON 3 – PIN 9	ORG
SRC 1 – PIN 11	CON 5 – PIN 5	GRY
SRC 1 – PIN 12	CON 5 – PIN 4	GRN
SRC 1 – PIN 13	CON 3 – PIN 7	GRN
SRC 1 – PIN 14	CHASSIS GND	GRN/YEL
SRC 1 – PIN 15	CON 18 – PIN 8	PINK
SRC 1 – PIN 16	CON 18 – PIN 7	YEL
SRC 2 – PIN 1	CON 4 – PIN 1	BRN
SRC 2 – PIN 2	CON 4 – PIN 3	GRN
SRC 2 – PIN 3	CON 4 – PIN 5	BLU
SRC 2 – PIN 4	CON 4 – PIN 2	BRN
SRC 2 – PIN 5	CON 4 – PIN 4	GRN
SRC 2 – PIN 6	CON 4 – PIN 6	BLU
SRC 2 – PIN 7	CHASSIS GND	GRN/YEL
SRC 2 – PIN 8		
SRC 3 – PIN 1	CON 3 – PIN 2	BRN
SRC 3 – PIN 2	CON 18 – PIN 2	RED
SRC 3 – PIN 3	CON 3 – PIN 6	BLU
SRC 3 – PIN 4	CHASSIS GND	GRN/YEL
SRC 3 – PIN 5	CON 3 – PIN 4	GRN
SRC 3 – PIN 6	CON 3 – PIN 8	GRN
SRC 3 – PIN 7	CON 5 – PIN 3	GRN
SRC 3 – PIN 8	CON 5 – PIN 1	VIO
SRC 3 – PIN 9	CON 18 – PIN 6	BLK
SRC 3 – PIN 10	CON 3 – PIN 10	ORG
CON 4 – PIN 7	CON 5 – PIN 7	BLU
CON 4 – PIN 8	CON 5 – PIN 8	GRN
CON 4 – PIN 9	CON 5 – PIN 9	YEL
CON 4 – PIN 10	CON 5 – PIN 10	GRN

WIRE MARK BOTH ENDS.

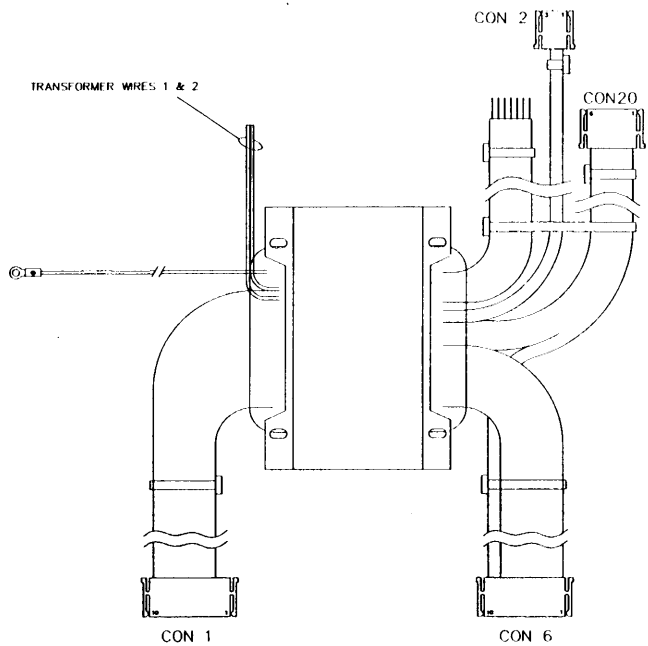
SRC Wireform and Mains Wiring Diagram



Fan & Mains Meter Wiring Diagram



Transformer Wireform



WIRE LIST		
FROM	TO	COLOUR
TRANSFORMER WIRE No. 11	CON 1 – PIN 3	BLK
TRANSFORMER WIRE No. 12	CON 1 – PIN 4	BLK
TRANSFORMER WIRE No. 13	CON 1 – PIN 5	BLK
TRANSFORMER WIRE No. 14	CON 1 – PIN 6	BLK
TRANSFORMER WIRE No. 21	CON 1 – PIN 7	BLK
TRANSFORMER WIRE No. 22	CON 1 – PIN 8	BLK
TRANSFORMER WIRE No. 23	CON 1 – PIN 9	BLK
TRANSFORMER WIRE No. 24	CON 1 – PIN 10	BLK
TRANSFORMER WIRE WHT	CON 2 – PIN 1	WHT
TRANSFORMER WIRE WHT	CON 2 – PIN 2	WHT
TRANSFORMER WIRE No. 1	F3 FUSE TIP	BLK
TRANSFORMER WIRE No. 1	RECT BRG AC PD3	BLK
TRANSFORMER WIRE No. 2	F4 FUSE TIP	BLK
TRANSFORMER WIRE No. 2	RECT BRG AC PD7	BLK
TRANSFORMER WIRE No. 3	F5 FUSE TIP	BLK
TRANSFORMER WIRE No. 3	RECT BRG AC PD11	BLK
TRANSFORMER WIRE YEL	CON 6 – PIN 1	YEL
TRANSFORMER WIRE YEL	CON 6 – PIN 2	YEL
TRANSFORMER WIRE BLU	F7 FUSE TIP	BLU
TRANSFORMER WIRE BLU	RECT BRG AC PD22	BLU
TRANSFORMER WIRE RED	CON 6 – PIN 5	RED
TRANSFORMER WIRE RED	CON 6 – PIN 6	RED
TRANSFORMER WIRE BLK4	F9 FUSE TIP	BLK
TRANSFORMER WIRE BLK4	RECT BRG AC PD15	BLK
TRANSFORMER WIRE GRN/YEL	EARTH TAG	GRN/YEL
CON 6–PIN 9	CON 20 – PIN 1	ORG
CON 6–PIN 10	CON 20 – PIN 2	ORG
TRANSFORMER WIRE GRY	CON 20 – PIN 3	GRY
TRANSFORMER WIRE GRY	CON 20 – PIN 4	GRY
TRANSFORMER WIRE BLK	CON 20 – PIN 5	BLK
TRANSFORMER WIRE BLK	CON 20 – PIN 6	BLK

Servicing

Servicing

This operation should only be carried out by a competent service engineer.

Initial operational tests on the power supply can be carried out by switching the unit ON and checking the voltages present on the output connectors on the back of the unit. While the unit remains disconnected from the mixing console the DC voltage rails are floating with respect to each other, that is they do not all have a common reference within the unit. When connection is made to the mixing console various output pins become earthed to a common star-point, which has a mains earth return in the power supply cable itself.

An indication of obvious fault condition is the failure of one or more of the front-panel LED's to light.

Any fault condition, with the exception of simple mains fuse failure due to underrating or an unusual mains input condition, will require removal of the top cover to enable fault correction. This is achieved using a cross-head screwdriver to remove the six retaining screws and washers. Carefully lift the cover to avoid the earth connecting lead to the cover from snagging. Place the cover face down behind the unit.

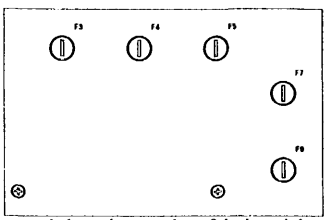
WARNING: At the front of the unit just behind the front panel is the MAINS VOLTAGE SELECT PCB, which carries HIGH VOLTAGES directly from the mains input. Care MUST be taken when carrying out any servicing operation with the top cover removed.

SERVICING COMPONENTS

Replacement of any components should be undertaken only after switching the power supply unit OFF and disconnecting the mains supply lead from the power supply unit.

Replacement of any of the fuses and regulators in the power supply units is possible without the removal of circuit boards.

The fuses are held in open fuseholders close to the top of the boards. These can be carefully removed by hand. Ensure that the insulating fuse covers are replaced with the new fuses. The exceptions to this are fuses F3,F4, F5, F7 and F9. These are held on the Fuse Support Plate which is mounted on the transformer.



The regulators are mounted along the top edge of the heatsink extrusions and may be replaced without removing the circuit boards. They can be removed by desoldering the 3 pins and unscrewing the M3 fixing screw, taking care to retain the small

insulating bush beneath the head of the screw. The correct high efficiency mounting pad must be used, and this should be replaced if it appears to be damaged (see the Parts Lists for the relevant Soundcraft Part Numbers). Use heatsink compound on both sides of the pad to ensure good thermal contact. When refixing or replacing the device, it is important to screw the device down before resoldering the pins to avoid stressing the pads on the circuit board.

NOTE : The heatsink bracket is earthed through its mechanical contact with the rest of the chassis and so a faulty mounting pad may cause the output of its regulator to be connected to earth.

To replace any other components in a regulation circuit it is necessary to gain access to both sides of the circuit board. Disassembly should be carried out carefully as follows, after removing power from the unit and disconnecting the output cables:

- Remove the top and bottom covers of the unit by releasing the six screws on each cover.
- Release the front and rear panels from the heatsink assemblies by unscrewing the 8 screws at the front and 4 screws at the rear. Lay the panels down, taking care not to strain any of the cable assemblies.

Each of the main circuit boards is released as follows:

- Remove the fixing screws on each regulator. Retain carefully the mounting pads and plastic insulating bushes where fitted. **THESE MUST BE CORRECTLY REFITTED TO AVOID DAMAGE TO THE UNIT.**
- Remove the fixing screws along the top of the circuit board and lift slightly to release the bottom of the board from the channel in the heatsink. The board may now be moved clear of the heatsink to gain access to both sides of the board.

Take care not to bend the pins on the regulators, or to strain the corresponding pads on the circuit board

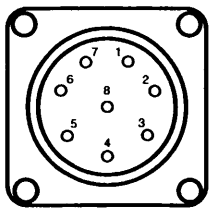
- The PSU may be tested under load with the heatsinks removed from the chassis, but for no longer than 5 minutes since there is no forced airflow through the heatsinks when the unit is disassembled and they will soon warm up.
- Reassembly is simply a reverse of the procedure above. Particular care should be taken when fixing the regulators, ensuring that the pins are not bent or the circuit board pads strained when the fixing screws are tightened. The regulator screws are tapped into a relatively soft aluminium heatsink. **DO NOT OVER-TIGHTEN** or you will strip the thread in the heatsink. High performance mounting pads must be fitted between the regulators and the heatsink and it is recommended that mounting compound is smeared on both faces of the pad to ensure good thermal contact. The regulators must be checked for isolation from the heatsink using a multimeter.
- Re-dress cable forms in their original positions and secure where applicable with cable ties.

GENERAL

Before replacing the top cover on the unit, carefully remove any dust from surfaces within the unit.

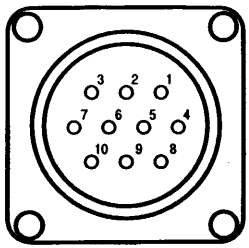
Carefully check all wiring connections and ensure that there are no loose parts lying around inside the unit.

Connector Configurations:



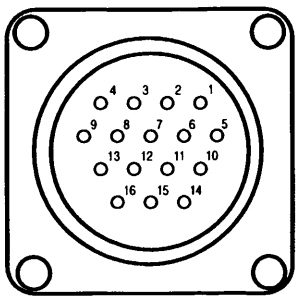
8W SRC Connector
viewed from rear of PSU

PIN No.	Description
1	+ 17V Audio Supply B
2	Ground Audio Supply B
3	-17V Audio Supply B
4	+ 17V Audio Supply B
5	Ground Audio Supply B
6	-17V Audio Supply B
7	Chassis Ground
8	No Connection



10W SRC Connector
viewed from rear of PSU

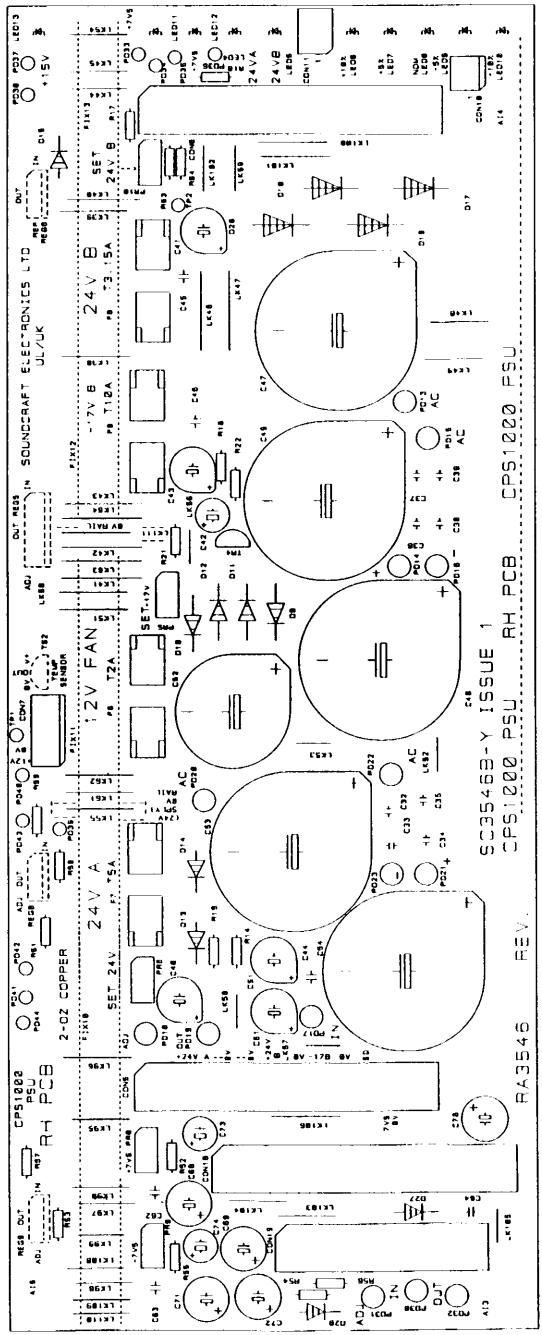
PIN No.	Description
1	+ 17V Audio Supply A
2	+ 7.5 Volts
3	-17V Audio Supply A
4	Chassis Ground
5	17V & 7V5 0V
6	0V (48V Supply)
7	+ 24V A (GND)
8	+ 24V Supply A
9	-7.5 Volts
10	+ 48V Supply

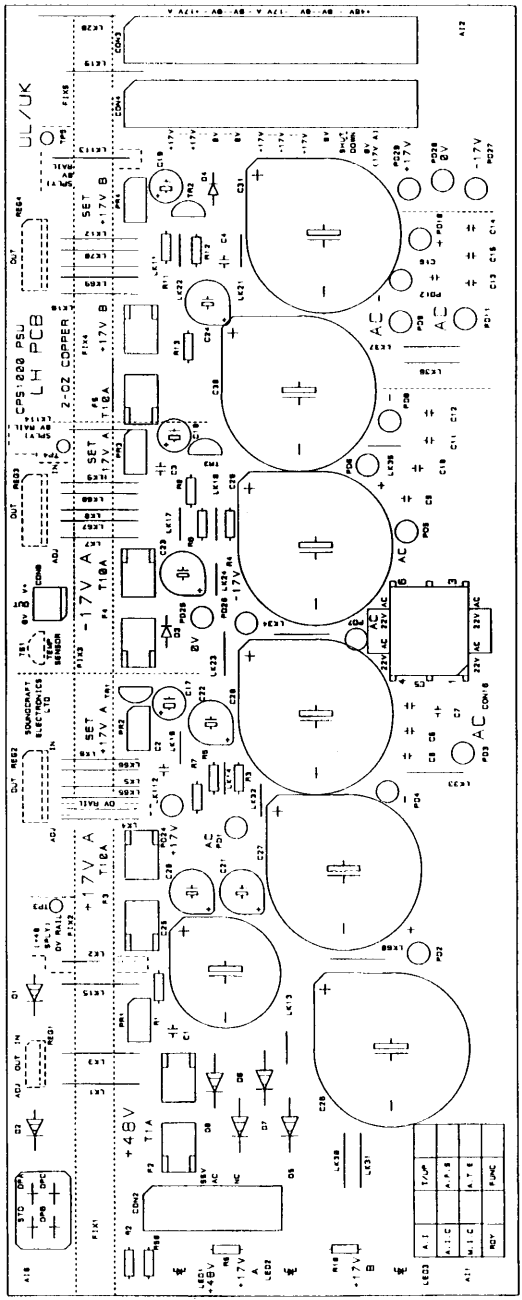


16W SRC Connector
Viewed from rear of PSU

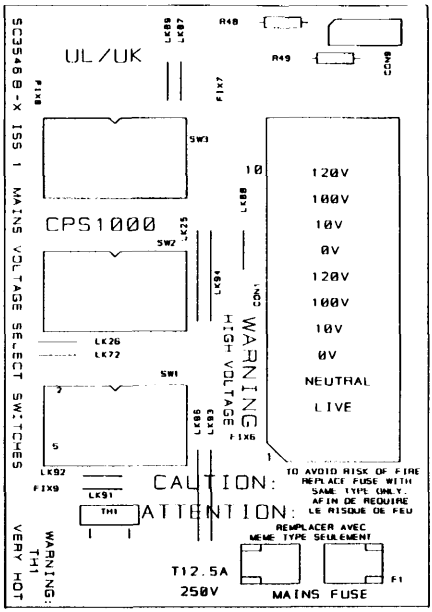
PIN No.	Description
1	+ 17 Volts A
2	+ 7.5 Volts
3	-17 Volts A
4	+ /-17 Volts A (GND)
5	-7.5 Volts
6	+ 7.5 Volts (GND)
7	+ 24 Volts B(GND)
8	+ 24 Volts A
9	-7.5 Volts (GND)
10	+ 48 Volts
11	+ 24 Volts B
12	+ 24 Volts A(GND)
13	+ 48 Volts(GND)
14	Chassis Ground
15	+ 15 Volts (GND)
16	+ 15 Volts

Note: In some diagrams the A and B supplies are referred to as No.1 and No.2.
Please regard A & No.1 as synonymous terms, and B & No.2 also as synonymous terms.

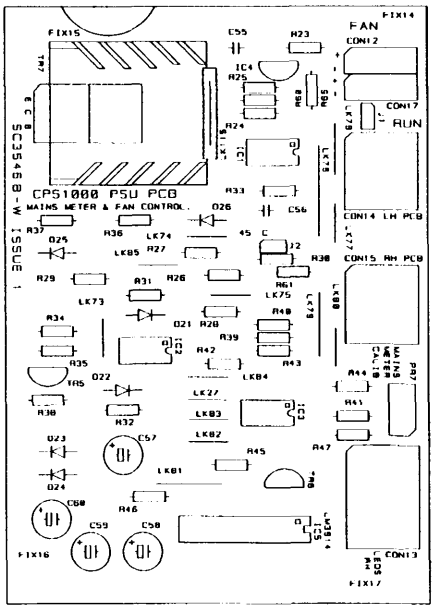

SOUNDCRAFT ELECTRONICS LTD
ULVUK
SC3546B-Y ISSUE 1
CPS1000 PSU RH PCB CPS1000 PSU
RA3546 REV.
CPS1000 PSU RH PCB
2-OZ COPPER
24V A
12V FAN
24V B
SET 24V
SET 12V


UL/UK
CPS-1200 PSU
LH PCB
2-OZ COPPER
SOUNDCRAFT ELECTRONICS
+17V A T10A
-17V A T10A
+48V T1A
SET +17V A
SET -17V A
SET +17V B
SET -17V B
AC
8V
-17V

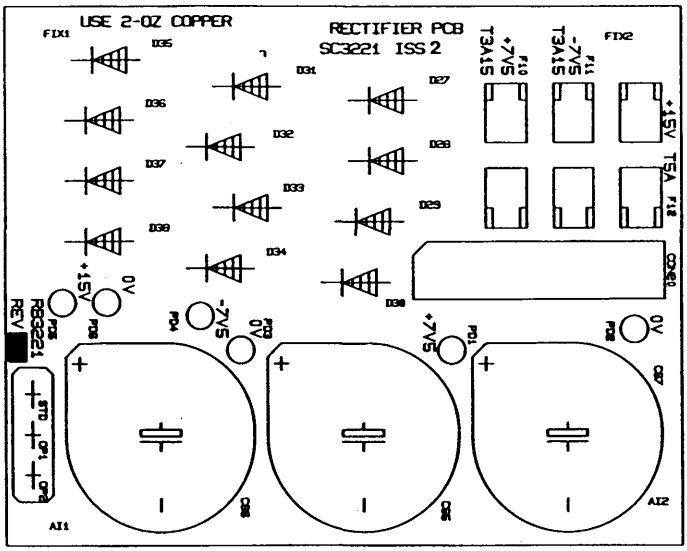
SC3546B-X Mains Voltage Select Switches PCB



SC3546B-W Mains Meter & Fan Control PCB



SC3221 Rectifier PCB



Spare Parts

—		M6X12MM PAN POZI SCREW	NA0096
—		M3 X 8MM PAN POZI BLCK SCRW	NA0130
—		M3.5X10 PAN POZI ZINC PLATED	NA0133
—		M4X10MM PAN POZI STL SCR BLACK	NA0146
—		NO.10X1" PAN POZI S/T AB BL CH	NA0209
—		NO10X1"TYP AB PAN POZI PLTD	NA0215
—		NO6X1/2" CSK POZI TYPE B CLEAR	NA0256
—		M4 NYLON INSERT NUT TYPE T	NB0127
—		M6 CAGE NUT	NB0138
—		M3 BLACK NYLON WASHER	NC0231
—		M4 BLACK PLASTIC WASHER	NC0250
—		1"X0.25" PCH M3.5 MS TPD STP	NZ2214
—		M3 1"X0.250 PITCH TAPPED STRIP	NZ2232
—		BARBED SPIRE CLIP DA/EN/6/A/2P	NZ2251
—		CPS900/950 LH REAR BRACKET	PG1151
—		CPS900/950 RH REAR BRACKET	PG1152
—		CPS900/950 SUPPORT BRACKET	PG1153
—		CPS900 PSU CVR	PJ1251
—		CPS950 TX AIR DEFLECTER	PZ2295
—		CPS1000 CHASSIS ASSY	RS5798
	—	MTHD 2WY .1" FML	FF0585
	—	IEC INLET SKT 16A PNL MNT	FJ8010
	—	FAN 120MM 12V DC (SUNON)	HD0001
	—	CABLE TIE 4.3"	LF0501
	—	M3 X 10MM PAN/POZI	NA0157
	—	M4X20 CSK POZI ZINC PLT SCR	NA0272
	—	M6X10MM PAN POZI CLR SCR	NA0315
	—	M3 NYLON INSERT NUT	NB0113
	—	M6 NYLON INSERT NUT	NB0117
	—	M4 NYLON INSERT NUT TYPE T	NB0127
	—	M4 PLAIN NUT ZINC CLEAR	NB0144
	—	M6 PLAIN WASHER	NC0219
	—	RIVET 1/8"X0.310" DOME HEAD	NF0505
	—	P-CLIP (9-14.3MM)	NZ2286
	—	P-CLIP (6.4MM)	NZ2287
	—	CPS950 PSU FAN CHASSIS	PG1149
	—	CPS950 RECTIFIER PCB ASSY	RB3221
	D27-38	DIODE RL/MR752 200V 6A PRFM.6"	BA0007
	C65	VERT ELEC 10MM 10,000MF/40V	CE0427
	C66	VERT ELEC 10MM 10,000MF/40V	CE0427
	C67	VERT ELEC 10MM 10,000MF/40V	CE0427
	F10	SCHURTER FUSE CLIP	ZD0317
	F11	SCHURTER FUSE CLIP	ZD0317
	F12	SCHURTER FUSE CLIP	ZD0317
	—	CPS950 BAFFLE PLATE ASSY	RS5393B
		— CPS900/950 BAFFLE PLATE	PA0237
	—	CPS1000 FUSE SUPPORT PLT ASSY	RS5802
		— H20X20MM HELSYN SLEEVE BLUE	LF0512
		— CPS1000 FUSE SUPPORT PLATE	PC1231-01
		— CPS1000 F3/5-BRIDGE WFM	RV3242
		— CPS1000 F4-BRIDGE WFM	RV3243
		— CPS1000 F9-BRIDGE WFM	RV3244
		— CPS1000 F7-BRIDGE WFM	RV3245
		— SCHRTR FUSEHOLDR F100031-1362	ZD8011
		— SHRTR FUSECARR'R FEK0031-1371	ZD8012
		— 5X20MM T5A/250V AS FUSE	ZD8105
		— 5X20MM T10A/250V AS FUSE	ZD8110
	—	CPS900 T/FAN MAINS WFM	RV2706

---		CPS950 SRC WFM		RV2713
---		CPS950 RECTIFIER PCB WFM		RV2719
---		CPS1000 TRANFORMER WFM		RV3240
F10		FUSE COVER SCHURTER 853-9561	!	ZD8013
F11		FUSE COVER SCHURTER 853-9561	!	ZD8013
F12		FUSE COVER SCHURTER 853-9561	!	ZD8013
F10		5X20MM T3.15A/250V AS FUSE	!	ZD8103
F11		5X20MM T3.15A/250V AS FUSE	!	ZD8103
F12		5X20MM T5A/250V AS FUSE	!	ZD8105
---		FAN FILTER & GUARD (120MM)		ZZ2833
—		**CPS1000 LH HEATSINK ASSY**		**RS5799**
---		BDG RECT KBPC3502		BC0215
C5-16		MICRO-BOX 5MM 5% 100V 100N		CC0250
---		M5X16MM PAN POZI SCREW		NA0092
---		M3 X 8MM PAN POZI PLTD SCREW		NA0116
---		M3.5X10 PAN POZI ZINC PLATED		NA0133
---		M3.5 X 4MM PAN POZI SCREW BLK		NA0193
---		NO6X3/8"TYP B PAN POZI ZINC		NA0217
---		NO 6X1/2" AB PAN POZI ZINC		NA0298
---		M5 S/PROOF WASHER		NC0217
---		PLASTIC SPACER 04X3.18 THICK		ND0354
---		1"X0.25" PCH M3.5 MS TPD STP		NZ2214
---		TENSION RETAINING CLIP		NZ2284
---		CPS900 PSU H/SINK EXTRU		PE1285
---		CPS900 PSU H/SINK COVER EXTRU		PE1286
---		CPS900 48V REG INSULATION		PZ2291
—		CPS1000 PSU PCB ASSY		RA3546
	R1	MF 0.25W RES 2% 82R		AD0423
	R47	MF 0.25W RES 2% 100R		AD0425
	R51	MF 0.25W RES 2% 100R		AD0425
	R53	MF 0.25W RES 2% 100R		AD0425
	R54	MF 0.25W RES 2% 100R		AD0425
	R3	MF 0.25W RES 2% 120R		AD0427
	R4	MF 0.25W RES 2% 120R		AD0427
	R11	MF 0.25W RES 2% 120R		AD0427
	R14	MF 0.25W RES 2% 120R		AD0427
	R16	MF 0.25W RES 2% 120R		AD0427
	R63	MF 0.25W RES 2% 120R		AD0427
	R36	MF 0.25W RES 2% 150R		AD0429
	R52	MF 0.25W RES 2% 470R		AD0441
	R55	MF 0.25W RES 2% 470R		AD0441
	R58	MF 0.25W RES 2% 680R		AD0445
	R59	MF 0.25W RES 2% 680R		AD0445
	R45	MF 0.25W RES 2% 1K		AD0449
	R46	MF 0.25W RES 2% 1K		AD0449
	R50	MF 0.25W RES 2% 1K		AD0449
	R56	MF 0.25W RES 2% 1K1		AD0450
	R5	MF 0.25W RES 2% 1K3		AD0452
	R6	MF 0.25W RES 2% 1K3		AD0452
	R7	MF 0.25W RES 2% 1K3		AD0452
	R8	MF 0.25W RES 2% 1K3		AD0452
	R12	MF 0.25W RES 2% 1K3		AD0452
	R13	MF 0.25W RES 2% 1K3		AD0452
	R21	MF 0.25W RES 2% 1K3		AD0452
	R22	MF 0.25W RES 2% 1K3		AD0452
	R57	MF 0.25W RES 2% 1K3		AD0452
	R2	MF 0.25W RES 2% 1K6		AD0454
	R9	MF 0.25W RES 2% 1K6		AD0454
	R10	MF 0.25W RES 2% 1K6		AD0454

R19	MF 0.25W RES 2% 1K8	AD0455
R23	MF 0.25W RES 2% 1K8	AD0455
R64	MF 0.25W RES 2% 1K8	AD0455
R24	MF 0.25W RES 2% 2K	AD0456
R17	MF 0.25W RES 2% 2K2	AD0457
R18	MF 0.25W RES 2% 2K2	AD0457
R37	MF 0.25W RES 2% 2K2	AD0457
R65	MF 0.25W RES 2% 3K3	AD0461
R30	MF 0.25W RES 2% 8K2	AD0471
R26	MF 0.25W RES 2% 10K	AD0473
R27	MF 0.25W RES 2% 10K	AD0473
R28	MF 0.25W RES 2% 10K	AD0473
R29	MF 0.25W RES 2% 10K	AD0473
R39	MF 0.25W RES 2% 10K	AD0473
R40	MF 0.25W RES 2% 10K	AD0473
R41	MF 0.25W RES 2% 10K	AD0473
R61	MF 0.25W RES 2% 15K	AD0477
R25	MF 0.25W RES 2% 22K	AD0481
R44	MF 0.25W RES 2% 22K	AD0481
R38	MF 0.25W RES 2% 47K	AD0489
R60	MF 0.25W RES 2% 47K	AD0489
R31	MF 0.25W RES 2% 100K	AD0497
R32	MF 0.25W RES 2% 100K	AD0497
R33	MF 0.25W RES 2% 100K	AD0497
R34	MF 0.25W RES 2% 220K	AD0505
R42	MF 0.25W RES 2% 330K	AD0509
R43	MF 0.25W RES 2% 330K	AD0509
R35	MF 0.25W RES 2% 680K	AD0517
R48	RES MF 10M 2% 0.25W VR37	AD8107
R49	RES MF 10M 2% 0.25W VR37	AD8107
D3	DIODE 1N4148	BA0001
D4	DIODE 1N4148	BA0001
D21	DIODE 1N4148	BA0001
D22	DIODE 1N4148	BA0001
D23	DIODE 1N4148	BA0001
D24	DIODE 1N4148	BA0001
D25	DIODE 1N4148	BA0001
D26	DIODE 1N4148	BA0001
D1	DIODE 1N4001	BA0005
D2	DIODE 1N4001	BA0005
D13	DIODE 1N4001	BA0005
D14	DIODE 1N4001	BA0005
D15	DIODE 1N4001	BA0005
D27	DIODE 1N4001	BA0005
D28	DIODE 1N4001	BA0005
D17	DIODE RL/MR752 200V 6A PRFM.6"	BA0007
D18	DIODE RL/MR752 200V 6A PRFM.6"	BA0007
D19	DIODE RL/MR752 200V 6A PRFM.6"	BA0007
D20	DIODE RL/MR752 200V 6A PRFM.6"	BA0007
D5	DIODE 1N5402 200V 3A PRFMD .6"	BA0009
D6	DIODE 1N5402 200V 3A PRFMD .6"	BA0009
D7	DIODE 1N5402 200V 3A PRFMD .6"	BA0009
D8	DIODE 1N5402 200V 3A PRFMD .6"	BA0009
D9	DIODE 1N5402 200V 3A PRFMD .6"	BA0009
D10	DIODE 1N5402 200V 3A PRFMD .6"	BA0009
D11	DIODE 1N5402 200V 3A PRFMD .6"	BA0009
D12	DIODE 1N5402 200V 3A PRFMD .6"	BA0009
TR3	PNP TRANS 2SA970GR (TAPED)	BD0301
TR4	PNP TRANS 2SA970GR (TAPED)	BD0301
TR5	PNP TRANS 2SA970GR (TAPED)	BD0301

TR6	PNP TRANS 2SA970GR (TAPED)		BD0301
TR1	NPN TRANS 2SC2240BL(TAPED)		BD0302
TR2	NPN TRANS 2SC2240BL(TAPED)		BD0302
TR7	NPN TRANS BD139		BD0337
IC1	TL072CP/NJM072BD DUAL OP AMP	❷	BE0413
IC2	TL072CP/NJM072BD DUAL OP AMP	❷	BE0413
IC3	TL072CP/NJM072BD DUAL OP AMP	❷	BE0413
IC5	LED BAR DRIVER IC LM3914		BE0427
IC4	REF50Z 5V VOLTAGE REF IC		BE0478
C1	POLY-CAP 5MM 5% 63V 100N		CC0252
C2	POLY-CAP 5MM 5% 63V 100N		CC0252
C3	POLY-CAP 5MM 5% 63V 100N		CC0252
C4	POLY-CAP 5MM 5% 63V 100N		CC0252
C44	POLY-CAP 5MM 5% 63V 100N		CC0252
C45	POLY-CAP 5MM 5% 63V 100N		CC0252
C46	POLY-CAP 5MM 5% 63V 100N		CC0252
C55	POLY-CAP 5MM 5% 63V 100N		CC0252
C56	POLY-CAP 5MM 5% 63V 100N		CC0252
C62	POLY-CAP 5MM 5% 63V 100N		CC0252
C63	POLY-CAP 5MM 5% 63V 100N		CC0252
C64	POLY-CAP 5MM 5% 63V 100N		CC0252
C57	VERT ELEC 0.2" TPD 47MF 25V		CE0401
C58	VERT ELEC 0.2" TPD 47MF 25V		CE0401
C60	VERT ELEC 0.2" TPD 47MF 25V		CE0401
C20	VERT ELEC 0.2" 47UF 63V		CE0402
C21	VERT ELEC 0.2" 47UF 63V		CE0402
C40	VERT ELEC 0.2" 47UF 63V		CE0402
C41	VERT ELEC 0.2" 47UF 63V		CE0402
C53	VERT ELEC 10MM 4700UF 50V		CE0414
C54	VERT ELEC 10MM 4700UF 50V		CE0414
C59	VERT ELEC 0.2"TPD 2.2MF 50V		CE0416
C17	VERT ELEC 0.2"TPD L-L 10MF 25V		CE0417
C18	VERT ELEC 0.2"TPD L-L 10MF 25V		CE0417
C19	VERT ELEC 0.2"TPD L-L 10MF 25V		CE0417
C42	VERT ELEC 0.2"TPD L-L 10MF 25V		CE0417
C51	VERT ELEC 0.2"TPD L-L 10MF 25V		CE0417
C73	VERT ELEC 0.2"TPD L-L 10MF 25V		CE0417
C74	VERT ELEC 0.2"TPD L-L 10MF 25V		CE0417
C25	VERT ELEC 10MM 1000MF/100V		CE0426
C26	VERT ELEC 10MM 10,000MF/40V		CE0427
C27	VERT ELEC 10MM 10,000MF/40V		CE0427
C28	VERT ELEC 10MM 10,000MF/40V		CE0427
C29	VERT ELEC 10MM 10,000MF/40V		CE0427
C30	VERT ELEC 10MM 10,000MF/40V		CE0427
C31	VERT ELEC 10MM 10,000MF/40V		CE0427
C47	VERT ELEC 10MM 10,000MF/40V		CE0427
C48	VERT ELEC 10MM 10,000MF/40V		CE0427
C49	VERT ELEC 10MM 10,000MF/40V		CE0427
C22	VERT ELEC 5MM 220MF/63V		CE0429
C23	VERT ELEC 5MM 220MF/63V		CE0429
C24	VERT ELEC 5MM 220MF/63V		CE0429
C43	VERT ELEC 5MM 220MF/63V		CE0429
C68	VERT ELEC 5MM 220MF/63V		CE0429
C69	VERT ELEC 5MM 220MF/63V		CE0429
C70	VERT ELEC 5MM 220MF/63V		CE0429
C71	VERT ELEC 5MM 220MF/63V		CE0429
C72	VERT ELEC 5MM 220MF/63V		CE0429
C52	VERT ELEC 4700MF/50V(22MM DIA)		CE0450
PR7	CERMET TRIMMER VERT 90V 22K		DE0404
PR8	CERMET TRIMMER VERT 90V 100R		DE0408

PR9	CERMET TRIMMER VERT 90V 100R	DE0408
PR6	CERMET VERTICAL TRIMMER 90V 1K	DE0409
PR10	CERMET VERTICAL TRIMMER 90V 1K	DE0409
PR1	CERMET TRIMMER VERT 470R	DE0418
PR2	CERMET TRIMMER VERT 470R	DE0418
PR3	CERMET TRIMMER VERT 470R	DE0418
PR4	CERMET TRIMMER VERT 470R	DE0418
PR5	CERMET TRIMMER VERT 470R	DE0418
SW1	ITW VOLTAGE SELECTOR SWT	DJ8000
SW2	ITW VOLTAGE SELECTOR SWT	DJ8000
SW3	ITW VOLTAGE SELECTOR SWT	DJ8000
J1	HONDA .1" 2WY SIL HDR (GOLD)	FF0613
J2	HONDA .1" 2WY SIL HDR (GOLD)	FF0613
TR7	M3 X 10MM PAN/POZI	NA0157
TR7	M3 NYLON INSERT NUT	NB0113
TR7	TO220,126 PWR FIN H/SNK TV1500	PN1224
—	1/4"CRIMP RCPTCLE CCT(CHAINED)	FG0629
—	CABLE TIE 4.3"	LF0501
—	CABLE TIE 4.3"	LF0501
—	H20X20MM HELSYN SLEEVE BLUE	LF0512
—	M3 SOLDER TAG STARRED	NE0410
—	H20X20MM HELSYN SLEEVE BLUE	LF0512
—	M3 SOLDER TAG STARRED	NE0410
—	24 AWG WIRE BLACK UL1007	LA8000
—	24 AWG WIRE BLUE UL1007	LA8001
—	24 AWG WIRE GREEN UL1007	LA8003
—	24 AWG WIRE ORANGE UL1007	LA8005
—	24 AWG WIRE VIOLET UL1007	LA8007
—	24 AWG WIRE YELLOW UL1007	LA8009
—	CABLE TIE 4.3"	LF0501
—	1/4"CRIMP RCPTCLE CCT(CHAINED)	FG0629
—	CABLE TIE 4.3"	LF0501
—	1/4"CRIMP RCPTCLE CCT(CHAINED)	FG0629
—	CABLE TIE 4.3"	LF0501
—	CPS1000 PSU PCB	SC3546-01
F1	SCHURTER FUSE CLIP	ZD0317
F2	SCHURTER FUSE CLIP	ZD0317
F6	SCHURTER FUSE CLIP	ZD0317
F8	SCHURTER FUSE CLIP	ZD0317
—	TIP INS BUSH	ZC0215
—	KOOL PAD LM317T/337T	ZC0217
—	30CMX30CM THERMALLY CNDCTV SHT	ZC0223
—	KOOL PAD TO3P (HI-EFFICIENCY)	ZC0227
F2	FUSE COVER SCHURTER 853-9561	ZD8013
F2	5X20MM T1A/250V AS FUSE	ZD8101
—	**CPS1000 RH HEATSINK ASSY**	**RS5800**
—	BDG RECT KBPC3502	BC0215
C32	MICRO-BOX 5MM 5% 100V 100N	CC0250
C33	MICRO-BOX 5MM 5% 100V 100N	CC0250
C34	MICRO-BOX 5MM 5% 100V 100N	CC0250
C35	MICRO-BOX 5MM 5% 100V 100N	CC0250
C36	MICRO-BOX 5MM 5% 100V 100N	CC0250
C37	MICRO-BOX 5MM 5% 100V 100N	CC0250
C38	MICRO-BOX 5MM 5% 100V 100N	CC0250
C39	MICRO-BOX 5MM 5% 100V 100N	CC0250
—	H20X20MM HELSYN SLEEVE BLUE	LF0512
—	M5X16MM PAN POZI SCREW	NA0092
—	M3 X 8MM PAN POZI PLTD SCREW	NA0116
—	NO10X1/2"PANPOZ TY A/B BLK S/T	NA0128
—	M3.5X10 PAN POZI ZINC PLATED	NA0133

---	M5 X 12 PAN/POZI SCREWS			NA0159
---	M3.5 X 4MM PAN POZI SCREW BLK			NA0193
---	NO6X3/8"TYP B PAN POZI ZINC			NA0217
---	M3X16MM PAN POZI SCRW ZNC			NA0245
---	M3 NYLON INSERT NUT			NB0113
---	M5 PLAIN WASHER			NC0216
---	M5 S/PROOF WASHER			NC0217
---	1"X0.25" PCH M3.5 MS TPD STP			NZ2214
---	TENSION RETAINING CLIP			NZ2284
---	CPS950 HEATSINK ANGLE BRKT			PD0427
---	CPS900 PSU H/SINK COVER EXTRU			PE1286
---	CPS900/950 RH H/SINK EXTRU FIN			PE1372
---	CPS900 RH H/S FLOW RESTRICTOR			PZ2293
---	CPS1000 PSU PCB ASSY			RA3546
	for details see earlier listing			
—	**CPS1000 FRONT PNL ASSY**			**RS5801**
---	NON.IL RK SWT DPST(2600HM11E)		!	DL8003
---	M3X6MM PAN POZI BLK SCREW			NA0084
---	M3 X 8MM PAN POZI BLCK SCRW			NA0130
---	M3 BLACK NYLON WASHER			NC0231
---	NYLON SPCR L=3.2,ID=3.7,OD=6.4			ND0376
---	CPS900 SWITCH COVER PLATE			PB0618
---	CPS1000 PSU FRONT FSC PNL			PJ1386-01
---	CPS900 SWITCH PCB INSULATION			PZ2292
---	CPS1000 PSU PCB ASSY			RA3546
	for details see earlier listing			
F1	SCHURTER FUSE CLIP		!	ZD0317
F2	SCHURTER FUSE CLIP		!	ZD0317
F6	SCHURTER FUSE CLIP		!	ZD0317
F8	SCHURTER FUSE CLIP		!	ZD0317
---	CPS1000 T/FAN FRONT PNL WFM			RV3241
---	1/4" CRIMP RCPTCLE CCT (BLUE)			FG0645
---	H20X20MM HELSYN SLEEVE BLUE			LF0512
---	FUSE COVER SCHURTER 853-9561		!	ZD8013
---	SCHRTR FUSEHOLDER		!	ZD8014
---	SCHRTR FUSE CARRIER		!	ZD8015
---	SCHRTR FUSEHOLDER INSULATOR		!	ZD8016
F1	5X20MM T12.5A/250V AS FUSE		!	ZD8112
—	**CPS900 FAN CONTROL LH WFM**			**RV2674**
—	**CPS900 MAINS METER WFM**			**RV2676**
—	**CPS950 FAN CONTROL RH WFM**			**RV2784**

Warranty

SOUNDCRAFT RECOMMENDED WARRANTY

This warranty applies to sales within the UK and should form the basis of the warranty offered by the overseas vendor of Soundcraft products.

Soundcraft means Soundcraft Electronics Ltd.

End User means the person who first puts the equipment into regular

Dealer means the person other than Soundcraft (if any) from whom the End User purchased the Equipment, provided such a person is authorised for this purpose by Soundcraft or its accredited Distributor.

Equipment means the equipment supplied with this manual.

If within the period of twelve months from the date of delivery of the Equipment to the End User it shall prove defective by reason only of faulty materials and/or workmanship (but not faulty design) to such an extent that the effectiveness and/or usability thereof is materially affected the Equipment or the defective component should be returned to the Dealer or to Soundcraft and subject to the following conditions the Dealer or Soundcraft will repair or at its option replace the defective components. Any components replaced will become the property of Soundcraft. Any Equipment or component returned will be at the risk of the End User whilst in transit (both to and from the Dealer or Soundcraft) and postage must be prepaid.

This warranty shall only be available if:-

a) The Equipment has been properly installed in accordance with instructions contained in Soundcraft's manual; and

b) The End User has notified Soundcraft or the Dealer within 14 days of the defect appearing; and

c) No persons other than authorised representatives of Soundcraft or the Dealer have effected any replacement of parts maintenance adjustments or repairs to the Equipment; and

d) The End User has used the Equipment only for such purposes as Soundcraft recommends, with only such operating supplies as meet Soundcraft's specifications and otherwise in all respects in accordance with Soundcraft's recommendations.

Defects arising as a result of the following are not covered by this Warranty: faulty or negligent handling, chemical or electro-chemical or electrical influences, accidental damage, Acts of God, neglect, deficiency in electrical power, air-conditioning or humidity control.

The benefit of this Warranty may not be assigned by the End User.

End Users who are consumers should note their rights under this Warranty are in addition to and do not affect any other rights to which they may be entitled against the seller of the Equipment.