

AHB CMC RANGE SERVICE HANDBOOK

SCHEMATICS PUBLISHED AS SEPRATE DOCUMENT

CMC SERVICE HANDBOOK

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SCHEMATICS PUBLISHED AS SEPARATE DOCUMENT.

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1) INTRODUCTION:

- 1) This handbook is provided for the guidance of service personnel in the repair of faults and the reconfiguration of customer options.
- 2) The following CMC products are covered by the current handbook, new products will be followed up with additional data sheets available on request from AHB Ltd.

- CMC16 mixer
- CMC24 mixer
- CMC32 mixer
- MPS 9 power supply
- CMV/P 16 meterpod
- CMV/P 24 meterpod
- CMV/P 32 meterpod
- CMI64 computer interface
- CMS64 synchroniser

- 3) It is our experience that CMC products show high reliability and it is a feature of the design that except for meter calibration there are no sections which require trimming or adjustment for continued high performance.
- 4) CMC products are one component in the complex recording signal path. It is our experience that recording system faults appear due to a number of causes including connection errors, misoperation of controls, failure of connecting lead and electronic hardware faults. We encourage the thorough analysis of apparent faults prior to attempts at repair. Simple tests should be made by substitution of connecting leads and alternative signal paths through the equipment. Refer to the block diagrams for an illustration of the signal paths.
- 5) Owners can assist in product service by providing the maximum guidance on the conditions and nature of any fault that occurs, preferably in writing. Since CMC products are interconnected it is helpful to make available the full system of interconnected components for diagnosis of any fault. In the event of goods being returned to a service department any optional units in use should be included. In all cases the power supply should be included.
- 6) Overseas agents are encouraged to carry a stock of recommended spare parts to avoid service delays. Note that complete tested pcb assemblies are available for use by service agents, see recommended spares list.
- 7) The majority of CMC products may be serviced with normal electronic workshop tools and techniques. In the case of the computer assemblies CMC MICRO and CMI64 ASSEMBLY, microprocessor test and repair techniques are appropriate.

-
- 8) The guarantee policy extended by AHB Limited and AHBUSA Limited is as follows:

CMC products are made in the UK by ALLEN and HEATH BRENNELL LIMITED and are guaranteed against defective parts and workmanship for a period of ONE YEAR from the date of purchase by the original owner.

This guarantee is void if:

1. The unit has been abused by careless handling, incorrect installation, or accidental damage.
2. The unit has been powered from a Power Unit not supplied with it or powered from an incompatible main supply.
3. The unit has been dismantled or modified in any way other than the work specified in Section 6 of the owner handbook and Section 3.5 of this handbook.

A guarantee claim must be accompanied by evidence of the date and place of purchase.

Units to be returned should, preferably, be packed in the original AHB packing and be accompanied by the Power Unit.

2) RECOMMENDED SPARE PARTS LIST

The following items are the spares which can be obtained via your local service agent or from our factory:

<u>ITEM</u>	<u>PART NO.</u>
Small grey knob - push on	AJ0057
Dual knob base grey	AJ0059
Dual knob top grey	AJ0058
Fader knob	AJ0048
Knob cap red	AJ0063
Knob cap yellow	AJ0062
Knob cap green	AJ0061
Knob cap blue	AJ0066
Knob cap grey	AJ0064
Knob cap orange	AJ0060
Knob cap brown	AJ0065
Red LED T1	AE0086
Yellow LED T1	AE0084
Green LED T1	AE0085
Red LED rectangular	AE0082
Yellow LED rectangular	AE0088
Green LED rectangular	AE0149
Push Switch 2PCO	AL0162
Jack socket stereo PC mount	AL0009
Op Amp TL072	AE0046
Op Amp NE5534	AE0081
3.6V battery	AP0019
Key switch	TL0041
Key switch cap	AJ0049
Screws M4 x 12	AB0081
Cable harness 18-way 18 position	AL0229
Cable harness 18-way 26 position	AL0223
Cable harness 18-way 34 position	AL0230
Micro cable harness 18-way	AL0231
Input/output channel assembly	ZS700-007
Echo input channel assembly	ZS700-006
Master left assembly	ZS700-004
Master right assembly	ZS700-003
RIAA assembly	ZS700-005
Micro PCB assembly (CMC 24)	ZS700-002
Micro PCB assembly (CMC 16)	ZS700-015
Micro PCB assembly (CMC 32)	ZS700-018
Display PCB assembly (CMC 24)	ZS700-001
Display PCB assembly (CMC 16)	ZS700-014
Display PCB assembly (CMC 32)	ZS700-017
Display pod moulding (CMC 24)	ZS700-010
Display pod moulding (CMC 16)	ZS700-016
Display pod moulding (CMC 32)	ZS700-020
Grey switch button	AJ0069
XLR 3 pin socket	AL0165

MPS 9 PCB assembly	ZS700-012
Fader	AI0091
JIII fet	AE0081
LM3915 display driver	AE0136
4051 CMOS IC	AE0118
4076 CMOS IC	AE0054
4011 CMOS IC	TE0038
BC 214C transistor	AE0031
CMOS memory 2k x 8	AE0132
Microprocessor 8048/8035	ME0001
CMC 1 EPROM	AX0142
BC 109C transistor	AE0020
BC 107 transistor	AE0019
24V Zener BZY88C24V	AE0150
IN4148 diode	AE0007
Isostat switch (display PCB)	AL0112
Shaft extenders	AJ0035
Cap for isostat	AJ0038
+5V regulator 7805	ME0015
-5V regulator 7905	AE0122
+15V regulator 7815	AE0047
-15V regulator 7915	AE0048
Mains fuse. 1A UK & Europe 20 x 5mm	AL0305
+48V regulator L146	AE0141
TIP 31 A transistor	AE0073
Fuse carrier 20 x 5mm UK & Europe	AL0314
5 pin chassis skt XLR	AL0049
Screws self tap 6AB	AB0195
Spire clips	AB0111
Mains fuse 3A USA & Japan 1.1/4 inch	AL0330
Fuse carrier 1.1/4 inch UK & Europe	AL0313
CMC extender	ZS700-021

3) SERVICE NOTES: CMC Mixer - All Models

3.1 BASE REMOVAL AND REPLACEMENT

Tools required: Screwdriver type POZI no.2 blade. Disconnect the power supply, audio connectors and computer connectors.

Clear a bench top for working on the unit. A trolley which allows access from all sides is the most efficient working surface.

Invert the unit so it is supported on the control knobs. A soft surface is desirable to avoid marking the controls. The raised display pod must be allowed to overhang the work surface.

DO NOT SUPPORT THE UNIT INVERTED ON THE DISPLAY POD.

Release screws along the rear edge.

Release screws along each side.

Grip the base at the armrest and apply gentle force to pull the base horizontally so that it comes clear of the panel edge and releases the jack socket bushes there.

DO NOT ATTEMPT TO REMOVE THE BASE BY LIFTING THE BACK EDGE.

Once the base is free of the jack sockets and the panel at the front edge (fader side) it may be lifted clear and put to one side.

The internal assemblies are now exposed. Be warned that any stray material, both metallic and otherwise, must not be allowed to enter the assemblies or damage and degraded performance may result.

Avoid handling liquids and friable materials over the exposed unit.

REPLACEMENT OF BASE

Commence with the unit inverted as at the start of service access.

It is recommended that the assembly is inspected to ensure tools and foreign material have been removed. Inspect the panel side flanges and check that at five positions on each flange the screw retaining clip (spire clip) is in position. Inspect the base armrest section. You will find a slot across the full width. This slot will engage over the mixer panel edge below the faders.

Offer up the base to the fader side of the panel. Let the base rest on the panel sides and slide it towards the rear. Make adjustments of position until the panel enters the slot beneath the armrest. Then push the base until it touches the jack sockets between the faders. Make adjustments of position until all jack sockets enter the corresponding holes in the base. This is made easier if a slight side to side movement is made with the base.

Apply steady pressure on the base towards the rear of the unit pushing the jack sockets through the holes. The base is in its correct position when the rear edge meets the back flange of the mixer main panel.

If difficulty is encountered with jack socket positions, use a finger or pen to centre each in turn starting at one end and working across the front.

Insert and tighten the rear fixing screws.

Insert and tighten the side fixing screws.

Invert the panel to the normal operation position.

NOTE: Removal and repair of internal assemblies is not recommended for owners without service experience.

3.2 CHANNEL REMOVAL AND REPLACEMENT

The following note applies to the individual printed circuit assemblies fitted to the CMC panel, which are:

Channel PCB (Input/Output channels)
Echo PCB (Return channels)
Master Left PCB) Master Section
Master Right PCB) Master Section

Service removal of the micro PCB assembly is dealt with separately.

The items listed above may need to be removed temporarily for repair or replaced if repair is unsuccessful.

In any event, the procedure is as follows:

Tools required:

Pot nut wrench 10mmAF (3/8AF)
Pot nut wrench 11mmAF (7/16AF)
Crosspoint screwdriver Pozi No.1 (fader screws, if necessary)
Crosspoint screwdriver Pozi No.2 (base securing screws)

- 1 Remove all pot knobs from the channels which require attention. These are push-on, pull-off type.
- 2 Release all pot nuts from channels which require attention. Leave one nut in place, finger-tight, at each end of the channel.
- 3 Follow the procedure for removal of the base, work with the unit inverted and check that the "CARS" display and meter pod is not taking the load of the inverted mixer. Disconnect power.
- 4 Remove the bussbar harnesses A, B, C. At least remove sufficient headers to expose the channel which requires attention. Fold back out of the way.
- 5 Release the 7-way plug-on input/output connector (input/output channels). Desolder the screened input cable (return channels).
- 6 For complete release of the PCB assembly, disconnect the associated fader wires, three per fader, by desoldering. Early models have the fader secured to the PCB. Later models have panel mounted faders. Only later models require disconnection of fader for PCB removal.
- 7 Release the two remaining pot nuts and lift the circuit board out of the panel.

NOTE: MASTER LEFT and MASTER RIGHT assemblies are joined to make a pair. It is necessary to remove these two items from the panel as a pair.

-
- 8 Each CHANNEL and ECHO PCB assembly has an electrical identity necessary to its correct function with the CARS system and multitrack mixing system. For this reason, each is identified with a number label. When placing the assemblies in the panel, check the number identity and select the correct physical position.

If it is necessary to replace a faulty channel, the correct electrical identity must be set up. Refer to the technical note CHANNEL ASSIGNMENT for details.

- 9 Replacement is achieved by reversal of the above sequence.

NOTE: If knobs become mixed, it may be necessary to re-position the coloured market caps which are released with a finger nail.

- 10 IMPORTANT NOTE: Busbar harnesses must be replaced with care. These are not polarised and two faults are possible:

- a) pin/socket mismatch, the pin falls outside the socket. Usually results from a bent pin.
- b) Out of step insertion by one or two pins to one side. THE RESULT OF THIS FAULT MAY BE CATASTROPHIC IF POWER IS APPLIED. DOUBLE CHECK HARNESS INSERTION BEFORE APPLYING POWER.

3.3 MICRO PCB ASSEMBLY REMOVAL AND REPLACEMENT

Tools required: Crosspoint screwdriver Pozi no.2 (base screws)
Nut driver M4. Flat blade screwdriver.

The micro pcb assembly can be lifted from the mixer panel to enable service access for changing IC's and other components. It requires careful manipulation, if no other pcb's are removed, to avoid damage.

The first step is to remove the moulded cover from the keyboard and display. This is achieved by carefully sliding a screwdriver under the cover near the front edge and prising the clips free. The cover can then be lifted up and the cover unclipped from the rear and removed. It is worth noting at this stage that all the LED's and switches can now be replaced with no further dismantling of the micro PCB assembly.

Next, carefully prise off the meter ballistic switch extender. Now turn the mixer over and remove the base as previously described. The fasteners holding the micro PCB in place can now be removed. Unscrew the RIAA PCB mounting and remove the PCB from its plug. Unscrew all the self-locking nuts (M4). Now unscrew the nut holding the footswitch jack socket to the panel if it is an early model. The 18-way flat cable connector should then be unplugged from the micro PCB and the connectors of the main cable harness going to the left and right master PCB's and the four I/O channels adjacent to the LEFT PCB should be unplugged.

The micro PCB should now be loose. Carefully lift the micro PCB away from the panel until the phono sockets are clear.

Now lift the edge nearest the last I/O channel and carefully ease the display PCB through the cutout in the panel. This part requires a certain amount of care and patience. Once the display PCB is through the panel, lift the computer connector tongue over the return flange of the panel and then fold the PCB towards the back of the mixer.

Both sides of the micro PCB can now be accessed.

In the event of difficulty in releasing the micro PCB, first release the two self-tapping screws which secure the display PCB to its brackets.

Replacement is the reverse of the above procedure.

If the micro PCB is being changed for a spare, care should be taken to ensure it is correctly wired. Refer to the wiring lists and plans.

3.4 CHANNEL ASSIGNMENT DETAILS

Each channel, whether an input/output or return; has its own identity. This identity is required so that the computer knows which channel it is communicating with. The input/output channels need an extra assignment to set the required output group identity.

INPUT/OUTPUT CHANNEL ONLY

Link X - buss assignment for group (see fig 1)

INPUT/OUTPUT AND RETURN CHANNELS

Link Y - channel select 1-8 sets the channel number within a particular block. (see fig 2)

Link Z - channel select block A-D sets block

A - channels 1- 8
B - channels 9-16
C - channels 17-24
D - channels 25-32

(see fig 3)

Channel assignments for particular models:

CMC 16

<u>Channel No.</u>	<u>Link Z</u>	<u>Link Y</u>
1	A	1
2	A	2
3	A	3
4	A	4
5	A	5
6	A	6
7	A	7
8	A	8
9	B	1
10	B	2
11	B	3
12	B	4
13	B	5
14	B	6
15	B	7
16	B	8

CMC 24

<u>Channel No.</u>	<u>Link Z</u>	<u>Link Y</u>
1	A	1
2	A	2
3	A	3
4	A	4
5	A	5
6	A	6
7	A	7
8	A	8
9	B	1
10	B	2
11	B	3
12	B	4
13	B	5
14	B	6
15	B	7
16	B	8
17	D	1
18	D	2
19	D	3
20	D	4
21	D	5
22	D	6
23	D	7
24	D	8

CMC 32

<u>Channel No.</u>	<u>Link Z</u>	<u>Link Y</u>
1	A	1
2	A	2
3	A	3
4	A	4
5	A	5
6	A	6
7	A	7
8	A	8
9	B	1
10	B	2
11	B	3
12	B	4
13	B	5
14	B	6
15	B	7
16	B	8
17	C	1
18	C	2
19	C	3
20	C	4
21	C	5
22	C	6
23	C	7
24	C	8
25	D	1
26	D	2
27	D	3
28	D	4
29	D	5
30	D	6
31	D	7
32	D	8

3.5 CUSTOMER OPTIONS

This section describes variations from the standard configuration which can be made after manufacture. All require access to the internal assemblies and the work can be carried out successfully by any competent electronic technician. If you are not skilled in the use of hand tools and soldering, we recommend you enlist skilled assistance; your audio dealer will be pleased to help. We now give details of service access techniques followed by the procedure to vary the optional formats.

OPTION: Phantom Power disconnection

All INPUT/OUTPUT channel assemblies provide +48v power at MIC input terminals 2 and 3.

This may be disconnected on any number of channels desired as followed:

1. Proceed as for SERVICE ACCESS above, 3.1 Base removal.
2. Inspect the INPUT/OUTPUT channel assemblies and identify the circuit board wire link marked "PP" which is located on the corner of the pcb behind the GAIN control.
3. Using instrument cutters make a break in the wire link.

Remove any scrap wire and position the cut ends so that they cannot touch each other or any other part. The supply of +48v is now interrupted for the MIC input of the channel(s) modified.

AUX SEND OPTIONS

Input/Output Channel:

Refer to circuit diagram MBD 112. Lk1 allows the aux B send control to send post fade signals (position A) or signals determined by the pre/post switch S4 (position B). The units are factory wired to position A.

Lk2 allows the aux C send control to send pre monitor signals (position B) or post monitor signals (position A) when the aux sends are in the monitor path. The units are factory wired to position B.

This work requires the channel pcb assy to be removed from the panel.

Refer to the description of this task earlier in the section.

Refer to component overlay BW 102 for the position of the aux send links.

3.6 CMC FAULT FINDING NOTES

The CMC mixer is unlike most audio mixers available because it employs a microprocessor to control the signal routing and to turn the channel mutes on and off. This means that there is a certain amount of logic circuitry in the mixer which you may not be familiar with. To help you with fault finding the following notes are provided:

As a simple test for channel decoding logic and microprocessor operation, select channel mute function and check that each channel can be muted with the use of the correct numbered key. If one channel fails to respond, the fault probably lies with that channel. To confirm, check the memory data by selecting that channel and checking the mute status indicator. If the mutes operate randomly, not at all, or intermitantly, then the micro PCB is suspect. Remember the solo system and microprocessor mutes are separate systems operating on the same mute circuits. Check you are only using one system at a time. If the back-up battery is completely run down, it may take a while for the microcomputer system to stabilise as the battery is recharged.

If you suspect the micro PCB is at fault, you can use the CMI 64 interface to directly control the mixer digital buss and prove your suspicions. The signal routing is handled by separate solid state switches (4051) for odd and even routes. If only one channel incorrectly routes, but the mute works correctly, check the switching elements. If the switching element is operating, the data latch (4076) is probably faulty. If all channels appear to route incorrectly, again suspect the micro PCB.

If the yellow LED even route 16 on the display comes on brightly when the mixer is switched on and remains on, the microprocessor is not operating and is probably faulty.

If banks of LED's or switches don't operate, examine the keyboard/display matrix. If only one switch or LED is not operating, the LED or switch is probably the faulty component.

METER CIRCUIT NOTES

The meter ladders operate with the LED's driven in a series configuration. A faulty LED would show itself by the ladder failing to light as the column reaches and passes the faulty LED. Operation at levels below the faulty LED would appear normal.

MPS 9

The MPS 9 power supply uses two linear regulator IC's in parallel to provide the current needed to run the CMC mixers. If a power supply problem is suspected, check carefully that both regulators are operational as one faulty regulator will put the other under excessive strain and may not be immediately apparent.

Use a digital voltmeter to check for voltage drop across the output series resistors for each regulator. Make this test on-load. The current drain for the mixers is approximately as follows:

	Amps Per Rail			MPS9 R1,2,3,4 Forward volt drop under normal conditions
CMC 16	0.75	to	1.1	20mV
CMC 24	1.0	to	1.5	25mV
RMC 32	1.25	to	1.8	33mV

3.7 CMC WIRING SCHEDULES

CMC16 WIRING SHEDULE (REFER TO CABLEFORM DRAWING) 19/11/84

ITEM	SOURCE CONNECTOR	PIN	ITEM	DESTINATION CONNECTOR	PIN	CLR/LNG
USING 7/0.2 STRANDED WIRE						
CHAN1	D	1	CHAN1	XLR	1	GRN/120
CHAN1	D	3	CHAN1	XLR	3	RD /120
CHAN1	D	2	CHAN1	XLR	2	BLK/120
CHAN1	D	5	MICRO	M	17	GRY/400
CHAN1	D	6	MICRO	O/P	17	BLU/600
CHAN1	D	7	MICRO	I/P	17	ORG/600
CHAN2	D	1	CHAN2	XLR	1	GRN/120
CHAN2	D	3	CHAN2	XLR	3	RD /120
CHAN2	D	2	CHAN2	XLR	2	BLK/120
CHAN2	D	5	MICRO	M	18	GRY/350
CHAN2	D	6	MICRO	O/P	18	BLU/580
CHAN2	D	7	MICRO	I/P	18	ORG/580
CHAN3	D	1	CHAN3	XLR	1	GRN/130
CHAN3	D	3	CHAN3	XLR	3	RD /130
CHAN3	D	2	CHAN3	XLR	2	BLK/130
CHAN3	D	5	MICRO	M	19	GRY/350
CHAN3	D	6	MICRO	O/P	19	BLU/560
CHAN3	D	7	MICRO	I/P	19	ORG/560
CHAN4	D	1	CHAN4	XLR	1	GRN/130
CHAN4	D	3	CHAN4	XLR	3	RD /130
CHAN4	D	2	CHAN4	XLR	2	BLK/130
CHAN4	D	5	MICRO	M	20	GRY/280
CHAN4	D	6	MICRO	O/P	20	BLU/540
CHAN4	D	7	MICRO	I/P	20	ORG/540
CHAN5	D	1	CHAN5	XLR	1	GRN/130
CHAN5	D	3	CHAN5	XLR	3	RD /130
CHAN5	D	2	CHAN5	XLR	2	BLK/130
CHAN5	D	5	MICRO	M	21	YEL/260
CHAN5	D	6	MICRO	O/P	21	BLU/520
CHAN5	D	7	MICRO	I/P	21	ORG/520
CHAN6	D	1	CHAN6	XLR	1	GRN/140
CHAN6	D	3	CHAN6	XLR	3	RD /140
CHAN6	D	2	CHAN6	XLR	2	BLK/140
CHAN6	D	5	MICRO	M	22	YEL/220
CHAN6	D	6	MICRO	O/P	22	BLU/500
CHAN6	D	7	MICRO	I/P	22	ORG/500

CHAN7	D	1	CHAN7	XLR	1	GRN/140
CHAN7	D	3	CHAN7	XLR	3	RD /140
CHAN7	D	2	CHAN7	XLR	2	BLK/140
CHAN7	D	5	MICRO	M	23	YEL/220
CHAN7	D	6	MICRO	O/P	23	BLU/480
CHAN7	D	7	MICRO	I/P	23	ORG/480

CHAN8	D	1	CHAN8	XLR	1	GRN/140
CHAN8	D	3	CHAN8	XLR	3	RD /140
CHAN8	D	2	CHAN8	XLR	2	BLK/140
CHAN8	D	5	MICRO	M	24	YEL/200
CHAN8	D	6	MICRO	O/P	24	BLU/460
CHAN8	D	7	MICRO	I/P	24	ORG/460

LEFT	D	1	MICRO	O/P	A6	BLU/630
LEFT	D	2	MICRO	O/P	A5	GRN/620
LEFT	D	3	MICRO	O/P	A4	YEL/610
LEFT	D	4	MICRO	O/P	A3	ORG/600
LEFT	D	5	MICRO	O/P	A2	RD /600
LEFT	D	6	MICRO	O/P	A1	BRN/590
LEFT	D	7	MICRO	TAPE1 O/P	L	BLK/300

MICRO	TAPE1 O/P	L	MICRO	TAPE2 O/P	L	BLK/150
MICRO	TAPE1 O/P	R	MICRO	TAPE2 O/P	R	RD /150

RIGHT	F	1	MICRO	TAPE2 I/P	R	ORG/580
RIGHT	F	2	MICRO	TAPE2 I/P	L	BRN/570
RIGHT	F	4	MICRO	TAPE1 I/P	R	YEL/560
RIGHT	F	5	MICRO	TAPE1 I/P	L	VIO/550
RIGHT	F	7	MICRO	TAPE1 O/P	R	RD /580

RIGHT	H	2	MICRO	MON O/P	R	RD /450
RIGHT	H	3	MICRO	MON O/P	L	GRN/470

USING TWIN SCREENED WIRE:

RIGHT	G	1	DISPLAY		L	RD /350
RIGHT	G	2	DISPLAY		R	BLK/350
RIGHT	G	3	----- SCREEN			

USING 16/0.2 STRANDED WIRE:

MICRO	POWER	+48	DC POWER	XLR	5	YEL/220
MICRO	POWER	-15	DC POWER	XLR	1	BLK/280
MICRO	POWER	+15	DC POWER	XLR	4	RD /290
MICRO	POWER	0	DC POWER	XLR	2&3	GRN/330
DC POWER	XLR	2&3	DC POWER	XLR	CHASSIS	GRN/40

RIGHT	E	1	RIGHT	E	2	BLK/30
RIGHT	E	2	MICRO	POWER	-15	BLK/250
RIGHT	E	3	RIGHT	E	4	RD /30
RIGHT	E	4	MICRO	POWER	+15	RD /250
RIGHT	E	5	MICRO	POWER	+48	YEL/310
RIGHT	E	6	RIGHT	E	7	GRN/30
RIGHT	E	7	MICRO	POWER	0	GRN/220

USING SINGLE SCREENED WIRE:

MICRO	I/P	A	ECH01	INPUT PINS		760	
MICRO	I/P	B	ECH02	INPUT PINS		720	
MICRO	I/P	C	ECH03	INPUT PINS		675	
MICRO	I/P	D	ECH04	INPUT PINS		635	
MICRO	I/P	E	ECH05	INPUT PINS		595	
MICRO	I/P	F	ECH06	INPUT PINS		550	
MICRO	I/P	G	ECH07	INPUT PINS		510	
MICRO	I/P	H	ECH08	INPUT PINS		470	
RIGHT	F	6	MICRO	M	TB	LIVE	
RIGHT	F	3	-----				SCREEN

END OF WIRING LIST

CMC24 WIRING SCHEDULE (REFER TO CABLEFORM DRAWINGS)

ITEM	SOURCE CONNECTOR	PIN	ITEM	DESTINATION CONNECTOR	PIN	CLR/LNG
USING 7/0.2 STRANDED WIRE:						
CHAN1	D	1	CHAN1	XLR	1	GRN/110
CHAN1	D	3	CHAN1	XLR	3	RD /110
CHAN1	D	2	CHAN1	XLR	2	BLK/110
CHAN1	D	5	MICRO	M	9	VIO/620
CHAN1	D	6	MICRO	O/P	9	BLU/740
CHAN1	D	7	MICRO	I/P	9	ORG/740
CHAN2	D	1	CHAN2	XLR	1	GRN/110
CHAN2	D	3	CHAN2	XLR	3	RD /110
CHAN2	D	2	CHAN2	XLR	2	BLK/110
CHAN2	D	5	MICRO	M	10	VIO/560
CHAN2	D	6	MICRO	O/P	10	BLU/720
CHAN2	D	7	MICRO	I/P	10	ORG/720
CHAN3	D	1	CHAN3	XLR	1	GRN/110
CHAN3	D	3	CHAN3	XLR	3	RD /110
CHAN3	D	2	CHAN3	XLR	2	BLK/110
CHAN3	D	5	MICRO	M	11	VIO/560
CHAN3	D	6	MICRO	O/P	11	BLU/700
CHAN3	D	7	MICRO	I/P	11	ORG/700
CHAN4	D	1	CHAN4	XLR	1	GRN/110
CHAN4	D	3	CHAN4	XLR	3	RD /110
CHAN4	D	2	CHAN4	XLR	2	BLK/110
CHAN4	D	5	MICRO	M	12	VIO/500
CHAN4	D	6	MICRO	O/P	12	BLU/680
CHAN4	D	7	MICRO	I/P	12	ORG/680
CHAN5	D	1	CHAN5	XLR	1	GRN/110
CHAN5	D	3	CHAN5	XLR	3	RD /110
CHAN5	D	2	CHAN5	XLR	2	BLK/110
CHAN5	D	5	MICRO	M	13	BRN/500
CHAN5	D	6	MICRO	O/P	13	BLU/660
CHAN5	D	7	MICRO	I/P	13	ORG/660
CHAN6	D	1	CHAN6	XLR	1	GRN/120
CHAN6	D	3	CHAN6	XLR	3	RD /120
CHAN6	D	2	CHAN6	XLR	2	BLK/120
CHAN6	D	5	MICRO	M	14	BRN/450
CHAN6	D	6	MICRO	O/P	14	BLU/660
CHAN6	D	7	MICRO	I/P	14	ORG/660
CHAN7	D	1	CHAN7	XLR	1	GRN/120
CHAN7	D	3	CHAN7	XLR	3	RD /120
CHAN7	D	2	CHAN7	XLR	2	BLK/120
CHAN7	D	5	MICRO	M	15	BRN/460
CHAN7	D	6	MICRO	O/P	15	BLU/640
CHAN7	D	7	MICRO	I/P	15	ORG/640

CHAN8	D	1	CHAN8	XLR	1	GRN/120
CHAN8	D	3	CHAN8	XLR	3	RD /120
CHAN8	D	2	CHAN8	XLR	2	BLK/120
CHAN8	D	5	MICRO	M	16	BRN/400
CHAN8	D	6	MICRO	O/P	16	BLU/620
CHAN8	D	7	MICRO	I/P	16	ORG/620
CHAN9	D	1	CHAN9	XLR	1	GRN/120
CHAN9	D	3	CHAN9	XLR	3	RD /120
CHAN9	D	2	CHAN9	XLR	2	BLK/120
CHAN9	D	5	MICRO	M	17	GRY/400
CHAN9	D	6	MICRO	O/P	17	BLU/600
CHAN9	D	7	MICRO	I/P	17	ORG/600
CHAN10	D	1	CHAN10	XLR	1	GRN/120
CHAN10	D	3	CHAN10	XLR	3	RD /120
CHAN10	D	2	CHAN10	XLR	2	BLK/120
CHAN10	D	5	MICRO	M	18	GRY/350
CHAN10	D	6	MICRO	O/P	18	BLU/580
CHAN10	D	7	MICRO	I/P	18	ORG/580
CHAN11	D	1	CHAN11	XLR	1	GRN/130
CHAN11	D	3	CHAN11	XLR	3	RD /130
CHAN11	D	2	CHAN11	XLR	2	BLK/130
CHAN11	D	5	MICRO	M	19	GRY/350
CHAN11	D	6	MICRO	O/P	19	BLU/560
CHAN11	D	7	MICRO	I/P	19	ORG/560
CHAN12	D	1	CHAN12	XLR	1	GRN/130
CHAN12	D	3	CHAN12	XLR	3	RD /130
CHAN12	D	2	CHAN12	XLR	2	BLK/130
CHAN12	D	5	MICRO	M	20	GRY/280
CHAN12	D	6	MICRO	O/P	20	BLU/540
CHAN12	D	7	MICRO	I/P	20	ORG/540
CHAN13	D	1	CHAN13	XLR	1	GRN/130
CHAN13	D	3	CHAN13	XLR	3	RD /130
CHAN13	D	2	CHAN13	XLR	2	BLK/130
CHAN13	D	5	MICRO	M	21	YEL/260
CHAN13	D	6	MICRO	O/P	21	BLU/520
CHAN13	D	7	MICRO	I/P	21	ORG/520
CHAN14	D	1	CHAN14	XLR	1	GRN/140
CHAN14	D	3	CHAN14	XLR	3	RD /140
CHAN14	D	2	CHAN14	XLR	2	BLK/140
CHAN14	D	5	MICRO	M	22	YEL/220
CHAN14	D	6	MICRO	O/P	22	BLU/500
CHAN14	D	7	MICRO	I/P	22	ORG/500

CHAN15	D	1	CHAN15	XLR	1	GRN/140
CHAN15	D	3	CHAN15	XLR	3	RD /140
CHAN15	D	2	CHAN15	XLR	2	BLK/140
CHAN15	D	5	MICRO	M	23	YEL/220
CHAN15	D	6	MICRO	O/P	23	BLU/480
CHAN15	D	7	MICRO	I/P	23	ORG/480
CHAN16	D	1	CHAN16	XLR	1	GRN/140
CHAN16	D	3	CHAN16	XLR	3	RD /140
CHAN16	D	2	CHAN16	XLR	2	BLK/140
CHAN16	D	5	MICRO	M	24	YEL/200
CHAN16	D	6	MICRO	O/P	24	BLU/460
CHAN16	D	7	MICRO	I/P	24	ORG/460
LEFT	D	1	MICRO	O/P	A6	BLU/630
LEFT	D	2	MICRO	O/P	A5	GRN/620
LEFT	D	3	MICRO	O/P	A4	YEL/610
LEFT	D	4	MICRO	O/P	A3	ORG/600
LEFT	D	5	MICRO	O/P	A2	RD /600
LEFT	D	6	MICRO	O/P	A1	BRN/590
LEFT	D	7	MICRO	TAPE1 O/P	L	BLK/300
MICRO	TAPE1 O/P	L	MICRO	TAPE2 O/P	L	BLK/150
MICRO	TAPE1 O/P	R	MICRO	TAPE2 O/P	R	RD /150
RIGHT	F	1	MICRO	TAPE2 I/P	R	ORG/580
RIGHT	F	2	MICRO	TAPE2 I/P	L	BRN/570
RIGHT	F	4	MICRO	TAPE1 I/P	R	YEL/560
RIGHT	F	5	MICRO	TAPE1 I/P	L	VIO/550
RIGHT	F	7	MICRO	TAPE1 O/P	R	RD /580
RIGHT	H	2	MICRO	MON O/P	R	RD /450
RIGHT	H	3	MICRO	MON O/P	L	GRN/470
USING TWIN SCREENED WIRE:						
RIGHT	G	1	DISPLAY		L	RD /350
RIGHT	G	2	DISPLAY		R	BLK/350
RIGHT	G	3	----- SCREEN			
USING 16/0.2 STRANDED WIRE:						
MICRO	POWER	+48	DC POWER	XLR	5	YEL/220
MICRO	POWER	-15	DC POWER	XLR	1	BLK/280
MICRO	POWER	+15	DC POWER	XLR	4	RD /290
MICRO	POWER	0	DC POWER	XLR	2&3	GRN/330
DC POWER	XLR	2&3	DC POWER	XLR	CHASSIS	GRN/40
RIGHT	E	1	RIGHT	E	2	BLK/30
RIGHT	E	2	MICRO	POWER	-15	BLK/250
RIGHT	E	3	RIGHT	E	4	RD /30
RIGHT	E	4	MICRO	POWER	+15	RD /250
RIGHT	E	5	MICRO	POWER	+48	YEL/310
RIGHT	E	6	RIGHT	E	7	GRN/30
RIGHT	E	7	MICRO	POWER	0	GRN/220

USING SINGLE SCREENED WIRE:

MICRO	I/P	A	ECH01	INPUT PINS	760
MICRO	I/P	B	ECH02	INPUT PINS	720
MICRO	I/P	C	ECH03	INPUT PINS	675
MICRO	I/P	D	ECH04	INPUT PINS	635
MICRO	I/P	E	ECH05	INPUT PINS	595
MICRO	I/P	F	ECH06	INPUT PINS	550
MICRO	I/P	G	ECH07	INPUT PINS	510
MICRO	I/P	H	ECH08	INPUT PINS	470
RIGHT	F	6	MICRO	M TB	LIVE
RIGHT	F	3	----- SCREEN		

END OF WIRING LIST

CMC32 WIRING SHEDULE (REFER TO CABLEFORM DRAWING) 19/11/84

ITEM	SOURCE CONNECTOR	PIN	ITEM	DESTINATION CONNECTOR	PIN	CLR/LNG
USING 7/0.2 STRANDED WIRE:						
CHAN1	D	1	CHAN1	XLR	1	GRN/110
CHAN1	D	3	CHAN1	XLR	3	RD /110
CHAN1	D	2	CHAN1	XLR	2	BLK/110
CHAN1	D	5	MICRO	M	1	PNK/820
CHAN1	D	6	MICRO	O/P	1	BLU/900
CHAN1	D	7	MICRO	I/P	1	ORG/900
CHAN2	D	1	CHAN2	XLR	1	GRN/110
CHAN2	D	3	CHAN2	XLR	3	RD /110
CHAN2	D	2	CHAN2	XLR	2	BLK/110
CHAN2	D	5	MICRO	M	2	PNK/780
CHAN2	D	6	MICRO	O/P	2	BLU/880
CHAN2	D	7	MICRO	I/P	2	ORG/880
CHAN3	D	1	CHAN3	XLR	1	GRN/110
CHAN3	D	3	CHAN3	XLR	3	RD /110
CHAN3	D	2	CHAN3	XLR	2	BLK/110
CHAN3	D	5	MICRO	M	3	PNK/780
CHAN3	D	6	MICRO	O/P	3	BLU/860
CHAN3	D	7	MICRO	I/P	3	ORG/860
CHAN4	D	1	CHAN4	XLR	1	GRN/110
CHAN4	D	3	CHAN4	XLR	3	RD /110
CHAN4	D	2	CHAN4	XLR	2	BLK/110
CHAN4	D	5	MICRO	M	4	PNK/720
CHAN4	D	6	MICRO	O/P	4	BLU/840
CHAN4	D	7	MICRO	I/P	4	ORG/840
CHAN5	D	1	CHAN5	XLR	1	GRN/110
CHAN5	D	3	CHAN5	XLR	3	RD /110
CHAN5	D	2	CHAN5	XLR	2	BLK/110
CHAN5	D	5	MICRO	M	5	WHT/720
CHAN5	D	6	MICRO	O/P	5	BLU/820
CHAN5	D	7	MICRO	I/P	5	ORG/820
CHAN6	D	1	CHAN6	XLR	1	GRN/120
CHAN6	D	3	CHAN6	XLR	3	RD /120
CHAN6	D	2	CHAN6	XLR	2	BLK/120
CHAN6	D	5	MICRO	M	6	WHT/680
CHAN6	D	6	MICRO	O/P	6	BLU/800
CHAN6	D	7	MICRO	I/P	6	ORG/800
CHAN7	D	1	CHAN7	XLR	1	GRN/120
CHAN7	D	3	CHAN7	XLR	3	RD /120
CHAN7	D	2	CHAN7	XLR	2	BLK/120
CHAN7	D	5	MICRO	M	7	WHT/680
CHAN7	D	6	MICRO	O/P	7	BLU/780
CHAN7	D	7	MICRO	I/P	7	ORG/780

CHAN8	D	1	CHAN8	XLR	1	GRN/120
CHAN8	D	3	CHAN8	XLR	3	RD /120
CHAN8	D	2	CHAN8	XLR	2	BLK/120
CHAN8	D	5	MICRO	M	8	WHT/620
CHAN8	D	6	MICRO	O/P	8	BLU/760
CHAN8	D	7	MICRO	I/P	8	ORG/760
CHAN9	D	1	CHAN9	XLR	1	GRN/120
CHAN9	D	3	CHAN9	XLR	3	RD /120
CHAN9	D	2	CHAN9	XLR	2	BLK/120
CHAN9	D	5	MICRO	M	9	GRY/620
CHAN9	D	6	MICRO	O/P	9	BLU/740
CHAN9	D	7	MICRO	I/P	9	ORG/740
CHAN10	D	1	CHAN10	XLR	1	GRN/120
CHAN10	D	3	CHAN10	XLR	3	RD /120
CHAN10	D	2	CHAN10	XLR	2	BLK/120
CHAN10	D	5	MICRO	M	10	GRY/560
CHAN10	D	6	MICRO	O/P	10	BLU/720
CHAN10	D	7	MICRO	I/P	10	ORG/720
CHAN11	D	1	CHAN11	XLR	1	GRN/130
CHAN11	D	3	CHAN11	XLR	3	RD /130
CHAN11	D	2	CHAN11	XLR	2	BLK/130
CHAN11	D	5	MICRO	M	11	GRY/560
CHAN11	D	6	MICRO	O/P	11	BLU/700
CHAN11	D	7	MICRO	I/P	11	ORG/700
CHAN12	D	1	CHAN12	XLR	1	GRN/130
CHAN12	D	3	CHAN12	XLR	3	RD /130
CHAN12	D	2	CHAN12	XLR	2	BLK/130
CHAN12	D	5	MICRO	M	12	GRY/500
CHAN12	D	6	MICRO	O/P	12	BLU/680
CHAN12	D	7	MICRO	I/P	12	ORG/680
CHAN13	D	1	CHAN13	XLR	1	GRN/130
CHAN13	D	3	CHAN13	XLR	3	RD /130
CHAN13	D	2	CHAN13	XLR	2	BLK/130
CHAN13	D	5	MICRO	M	13	YEL/500
CHAN13	D	6	MICRO	O/P	13	BLU/660
CHAN13	D	7	MICRO	I/P	13	ORG/660
CHAN14	D	1	CHAN14	XLR	1	GRN/140
CHAN14	D	3	CHAN14	XLR	3	RD /140
CHAN14	D	2	CHAN14	XLR	2	BLK/140
CHAN14	D	5	MICRO	M	14	YEL/450
CHAN14	D	6	MICRO	O/P	14	BLU/660
CHAN14	D	7	MICRO	I/P	14	ORG/660
CHAN15	D	1	CHAN15	XLR	1	GRN/140
CHAN15	D	3	CHAN15	XLR	3	RD /140
CHAN15	D	2	CHAN15	XLR	2	BLK/140
CHAN15	D	5	MICRO	M	15	YEL/460
CHAN15	D	6	MICRO	O/P	15	BLU/640
CHAN15	D	7	MICRO	I/P	15	ORG/640

CHAN16	D	1	CHAN16	XLR	1	GRN/140
CHAN16	D	3	CHAN16	XLR	3	RD /140
CHAN16	D	2	CHAN16	XLR	2	BLK/140
CHAN16	D	5	MICRO	M	16	YEL/400
CHAN16	D	6	MICRO	O/P	16	BLU/620
CHAN16	D	7	MICRO	I/P	16	ORG/620
CHAN17	D	1	CHAN17	XLR	1	GRN/140
CHAN17	D	3	CHAN17	XLR	3	RD /140
CHAN17	D	2	CHAN17	XLR	2	BLK/140
CHAN17	D	5	MICRO	M	17	VIO/400
CHAN17	D	6	MICRO	O/P	17	BLU/600
CHAN17	D	7	MICRO	I/P	17	ORG/500
CHAN18	D	1	CHAN18	XLR	1	GRN/140
CHAN18	D	3	CHAN18	XLR	3	RD /140
CHAN18	D	2	CHAN18	XLR	2	BLK/140
CHAN18	D	5	MICRO	M	18	VIO/350
CHAN18	D	6	MICRO	O/P	18	BLU/580
CHAN18	D	7	MICRO	I/P	18	ORG/580
CHAN19	D	1	CHAN19	XLR	1	GRN/150
CHAN19	D	3	CHAN19	XLR	3	RD /150
CHAN19	D	2	CHAN19	XLR	2	BLK/150
CHAN19	D	5	MICRO	M	19	VIO/350
CHAN19	D	6	MICRO	O/P	19	BLU/560
CHAN19	D	7	MICRO	I/P	19	ORG/560
CHAN20	D	1	CHAN20	XLR	1	GRN/150
CHAN20	D	3	CHAN20	XLR	3	RD /150
CHAN20	D	2	CHAN20	XLR	2	BLK/150
CHAN20	D	5	MICRO	M	20	VIO/280
CHAN20	D	6	MICRO	O/P	20	BLU/540
CHAN20	D	7	MICRO	I/P	20	ORG/540
CHAN21	D	1	CHAN21	XLR	1	GRN/150
CHAN21	D	3	CHAN21	XLR	3	RD /150
CHAN21	D	2	CHAN21	XLR	2	BLK/150
CHAN21	D	5	MICRO	M	21	BRN/260
CHAN21	D	6	MICRO	O/P	21	BLU/520
CHAN21	D	7	MICRO	I/P	21	ORG/520
CHAN22	D	1	CHAN22	XLR	1	GRN/150
CHAN22	D	3	CHAN22	XLR	3	RD /150
CHAN22	D	2	CHAN22	XLR	2	BLK/150
CHAN22	D	5	MICRO	M	22	BRN/220
CHAN22	D	6	MICRO	O/P	22	BLU/500
CHAN22	D	7	MICRO	I/P	22	ORG/500

CHAN23	D	1	CHAN23	XLR	1	GRN/160
CHAN23	D	3	CHAN23	XLR	3	RD /160
CHAN23	D	2	CHAN23	XLR	2	BLK/160
CHAN23	D	5	MICRO	M	23	BRN/220
CHAN23	D	6	MICRO	O/P	23	BLU/480
CHAN23	D	7	MICRO	I/P	23	ORG/480

CHAN24	D	1	CHAN24	XLR	1	GRN/160
CHAN24	D	3	CHAN24	XLR	3	RD /160
CHAN24	D	2	CHAN24	XLR	2	BLK/160
CHAN24	D	5	MICRO	M	24	BRN/200
CHAN24	D	6	MICRO	O/P	24	BLU/460
CHAN24	D	7	MICRO	I/P	24	ORG/460

LEFT	D	1	MICRO	O/P	A6	BLU/630
LEFT	D	2	MICRO	O/P	A5	GRN/620
LEFT	D	3	MICRO	O/P	A4	YEL/610
LEFT	D	4	MICRO	O/P	A3	ORG/600
LEFT	D	5	MICRO	O/P	A2	RD /600
LEFT	D	6	MICRO	O/P	A1	BRN/590
LEFT	D	7	MICRO	TAPE1 O/P	L	BLK/300

MICRO	TAPE1	O/P	L	MICRO	TAPE2	O/P	L	BLK/150
MICRO	TAPE1	O/P	R	MICRO	TAPE2	O/P	R	RD /150

RIGHT	F	1	MICRO	TAPE2	I/P	R	ORG/580
RIGHT	F	2	MICRO	TAPE2	I/P	L	BRN/570
RIGHT	F	4	MICRO	TAPE1	I/P	R	YEL/560
RIGHT	F	5	MICRO	TAPE1	I/P	L	VIO/550
RIGHT	F	7	MICRO	TAPE1	O/P	R	RD /580

RIGHT	H	2	MICRO	MON	O/P	R	RD /450
RIGHT	H	3	MICRO	MON	O/P	L	GRN/470

USING TWIN SCREENED WIRE:

RIGHT	G	1	DISPLAY	L	RD /350
RIGHT	G	2	DISPLAY	R	BLK/350
RIGHT	G	3	-----SCREEN		

USING 16/0.2 STRANDED WIRE:

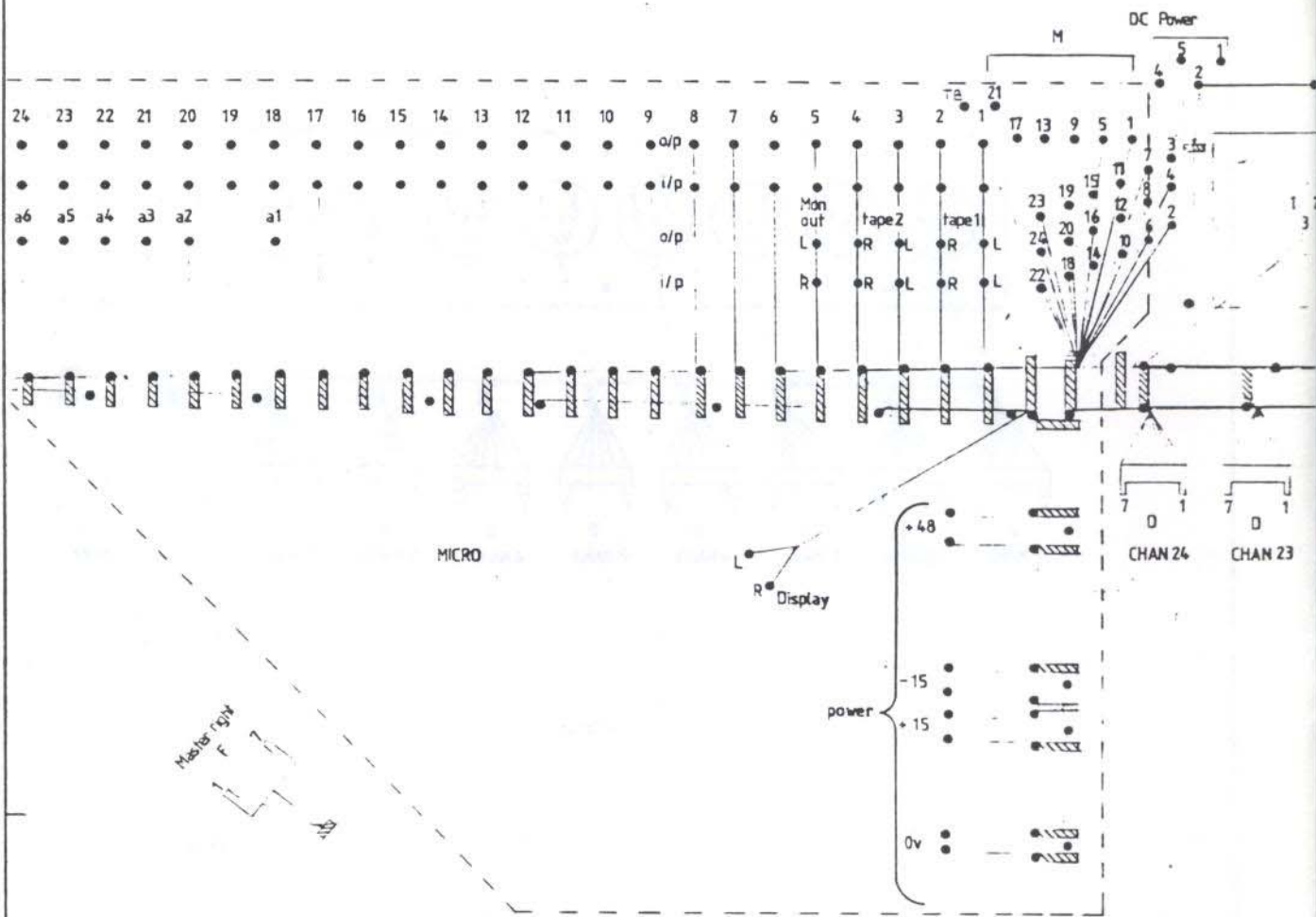
MICRO	POWER	+48	DC POWER	XLR	5	YEL/220
MICRO	POWER	-15	DC POWER	XLR	1	BLK/280
MICRO	POWER	+15	DC POWER	XLR	4	RD /290
MICRO	POWER	0	DC POWER	XLR	2&3	GRN/330
DC POWER	XLR	2&3	DC POWER	XLR	CHASSIS	GRN/40

RIGHT	E	1	RIGHT	E	2	BLK/30
RIGHT	E	2	MICRO	POWER	-15	BLK/250
RIGHT	E	3	RIGHT	E	4	RD /30
RIGHT	E	4	MICRO	POWER	+15	RD /250
RIGHT	E	5	MICRO	POWER	+48	YEL/310
RIGHT	E	6	RIGHT	E	7	GRN/30
RIGHT	E	7	MICRO	POWER	0	GRN/220

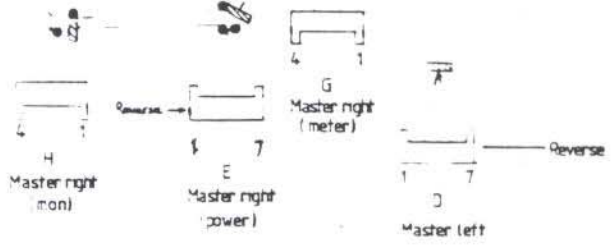
USING SINGLE SCREENED WIRE:

MICRO	I/P	A	ECH01	INPUT PINS	760	
MICRO	I/P	B	ECH02	INPUT PINS	720	
MICRO	I/P	C	ECH03	INPUT PINS	675	
MICRO	I/P	D	ECH04	INPUT PINS	635	
MICRO	I/P	E	ECH05	INPUT PINS	595	
MICRO	I/P	F	ECH06	INPUT PINS	550	
MICRO	I/P	G	ECH07	INPUT PINS	510	
MICRO	I/P	H	ECH08	INPUT PINS	470	
RIGHT	F	6	MICRO	M	TB	LIVE
RIGHT	F	3	-----			SCREEN

END OF WIRING LIST



● Targets for nails
 ▨ Cable tie

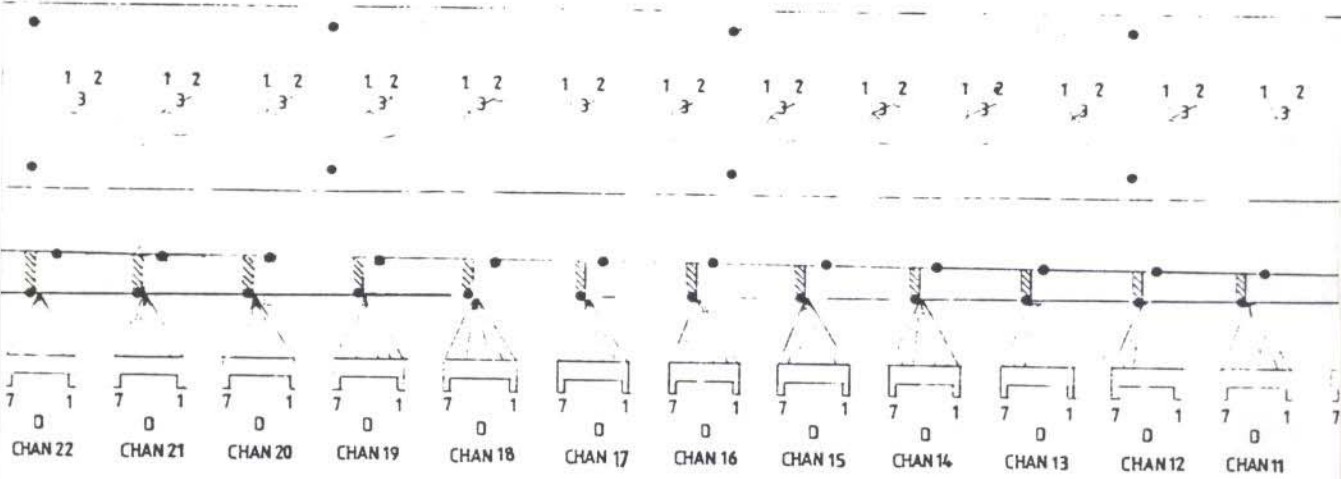


C.M. 10 | 10 | 20 | 30

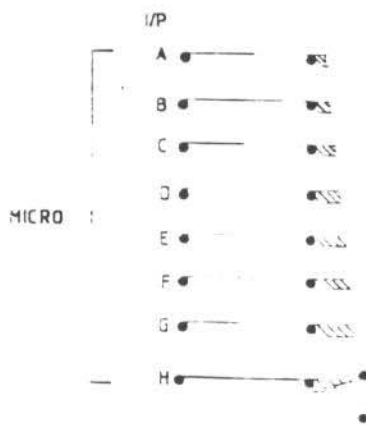
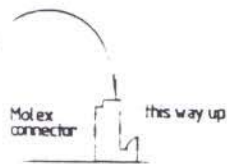
		STANDARD NOTES		MATERIAL		TOLERANCES	
		ALL DIMENSIONS IN mm				GENERAL ±0.25 mm	
		DO NOT SCALE DRAWING				HOLE CENTRES ±0.15 mm	
		THIRD ANGLE PROJECTION				HOLE SIZES ±0.10 mm	
		REMOVE ALL BURRS & SHARP EDGES				UNLESS STATED OTHERWISE	
SCALE		DATE		CHECKED			
DRW	DESIGN						
	REVISION						

XLR CHASSIS CONNECTION

XLR's mounted in their bracket



COLOUR	REF
WHITE	WHT
PINK	PNK
RED	RD
BLACK	BLK
GREEN	GRN
BLUE	BLU
ORANGE	ORG
YELLOW	YEL
BROWN	BRN
VIOLET	VID
GRAY	GRY

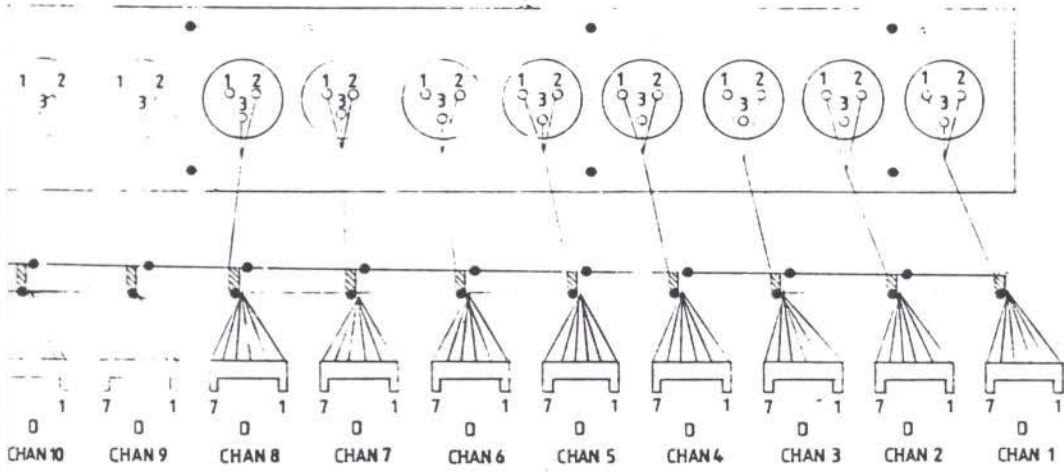


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FINISH	NOTES To be mounted onto chipboard or block-board	UNIT TITLE CMC 32	 <small>48 P STREET, BRIGHAM TON, UTAH</small>
		DRAWING TITLE wiring diagram	



VP
ECHO 1

ECHO 2

ECHO 3

ECHO 4

ECHO 5

ECHO 6

ECHO 7

ECHO 8

70

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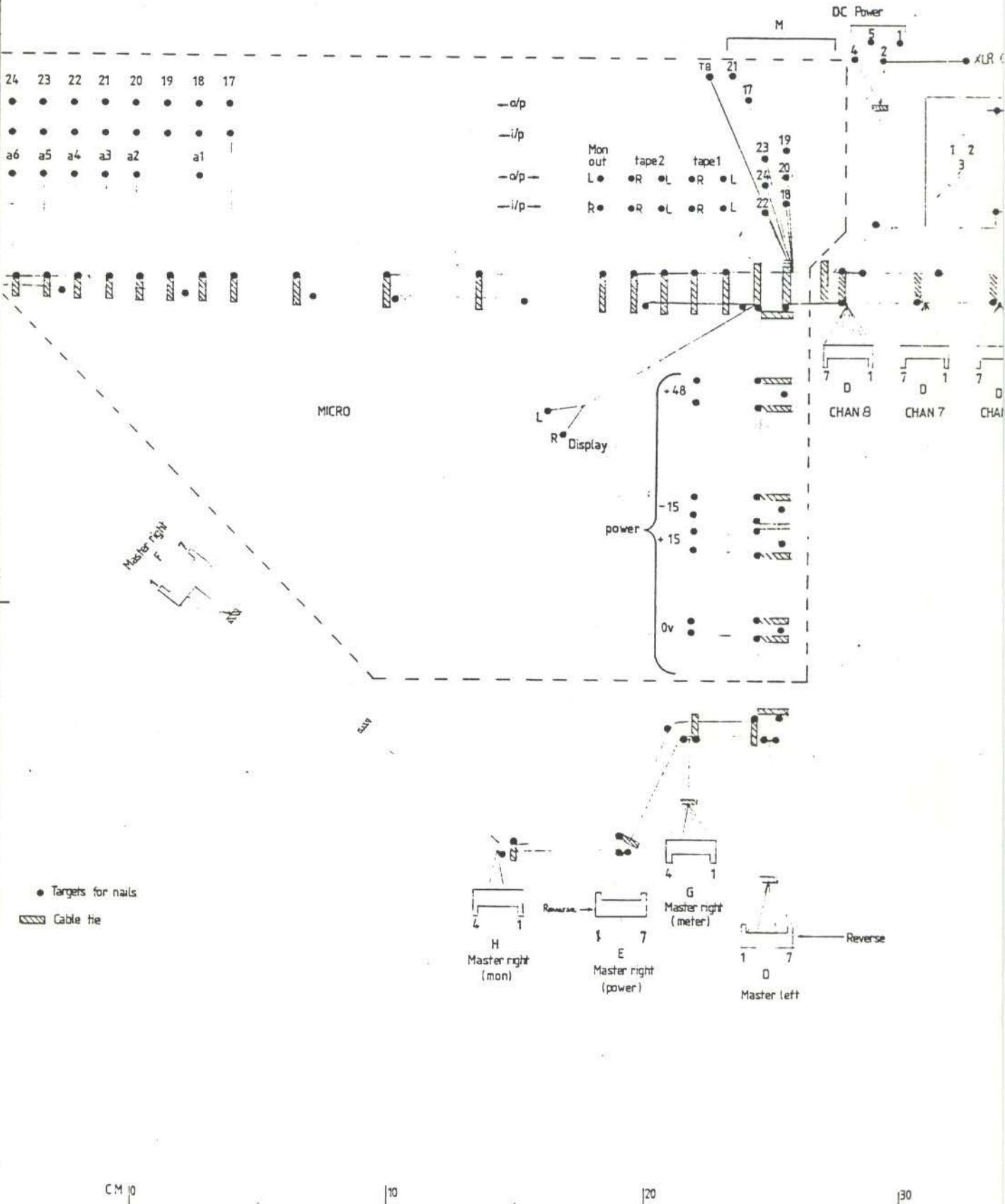
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ALLEN & HEATH BRENNELL LTD.
PROFESSIONAL AUDIO EQUIPMENT
MANUFACTURERS

TEL. No. 0273-24928

SS 1



● Targets for nails

▨ Cable tie

C.M. 10

10

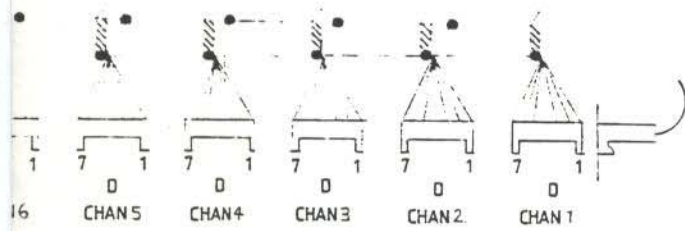
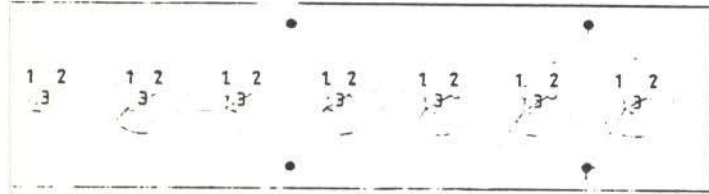
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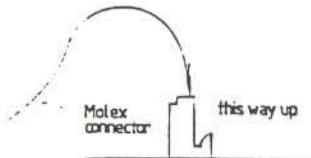
STANDARD NOTES				MATERIAL	TOLERANCES
ALL DIMENSIONS IN mm					
DO NOT SCALE DRAWING				GENERAL	±0.25 mm
THIRD ANGLE PROJECTION					HOLE CENTRES
REMOVE ALL BURRS & SHARP EDGES				HOLE SIZES	±0.10 mm
SCALE					UNLESS STATED OTHERWISE
KRP	ORIGIN	DATE	CHECKED		
DRAWN	REVISION	DATE	CHECKED		

HASSIS CONNECTION

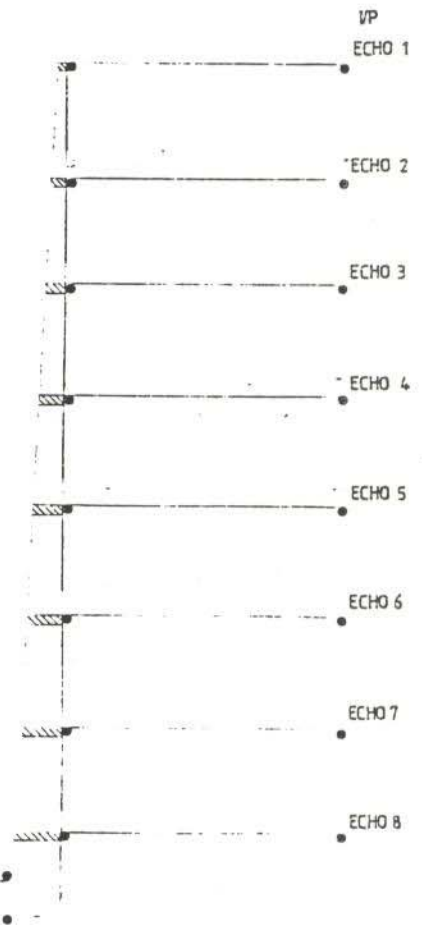
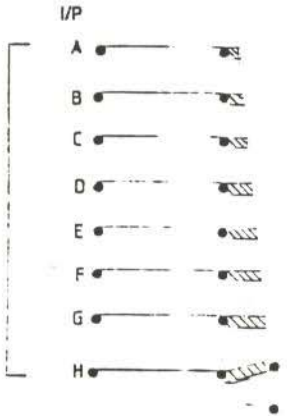
XLR's mounted in their bracket



COLOUR CHART	Ref
RED	RD
BLACK	BLK
GREEN	GRN
BLUE	BLU
ORANGE	ORG
YELLOW	YEL
BROWN	BRN
VIOLET	VIO
GRAY	GRY

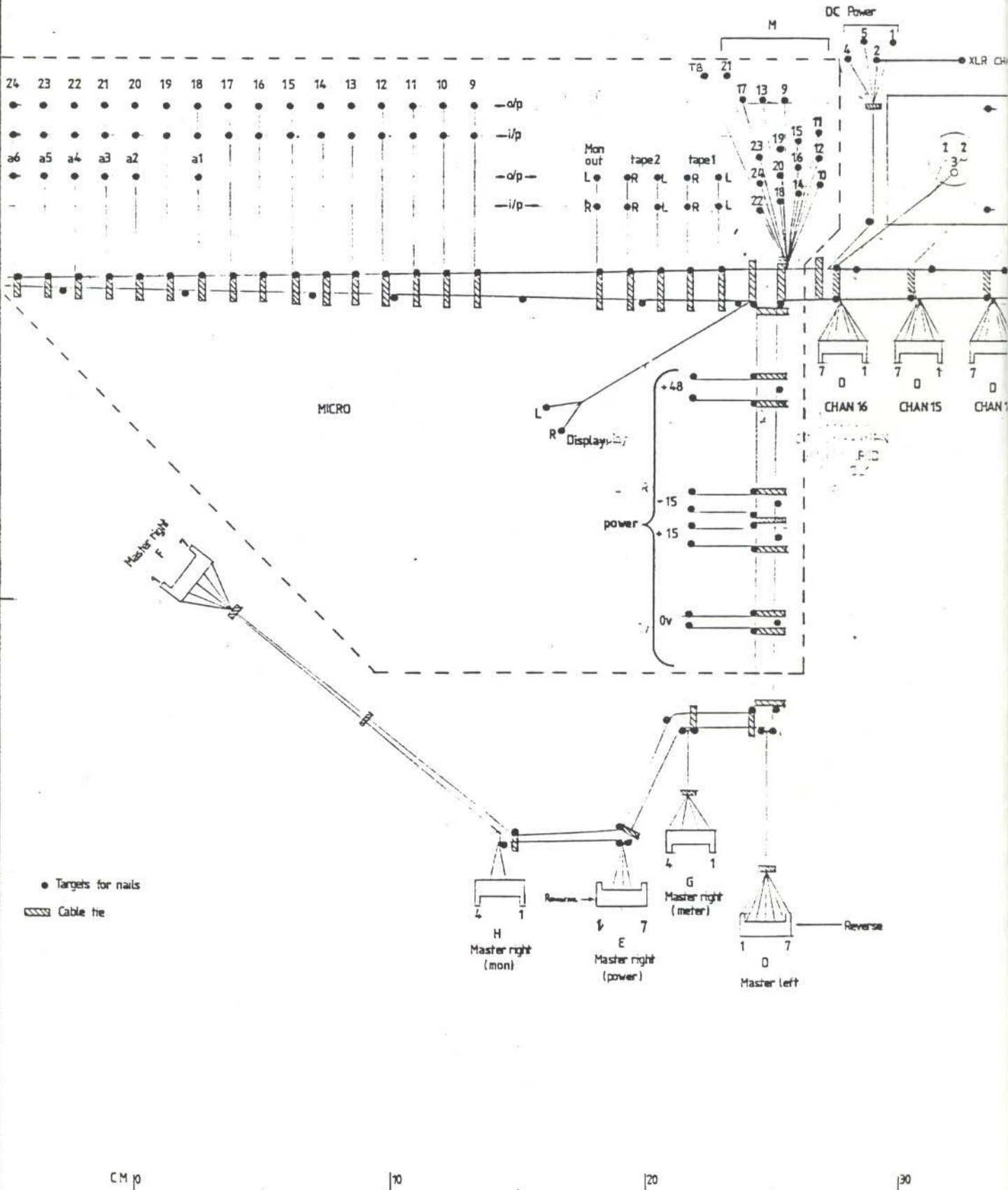


MICRO



40 50 60 70

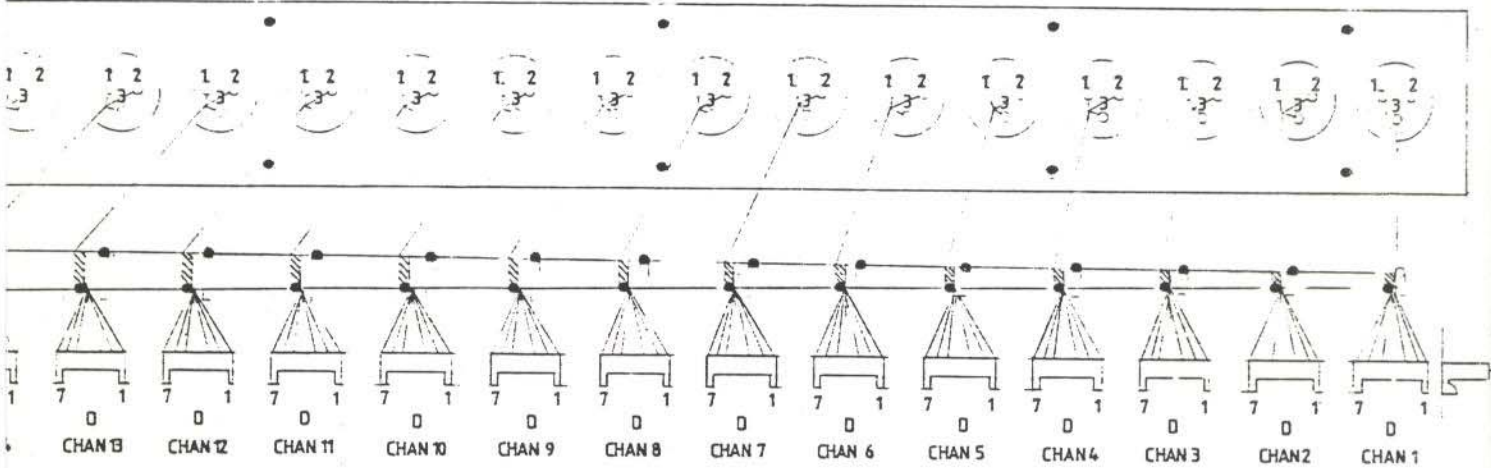
FINISH	NOTES To be mounted onto chipboard or block-board.	UNIT TITLE CMC16	<p>ALLEN & HEATH BRENNELL LTD. PROFESSIONAL AUDIO EQUIPMENT MANUFACTURERS 69 SHIP STREET, BRIGHTON BN1 1PE Phone 0273-24928</p>
		DRAWING TITLE wiring diagram.	



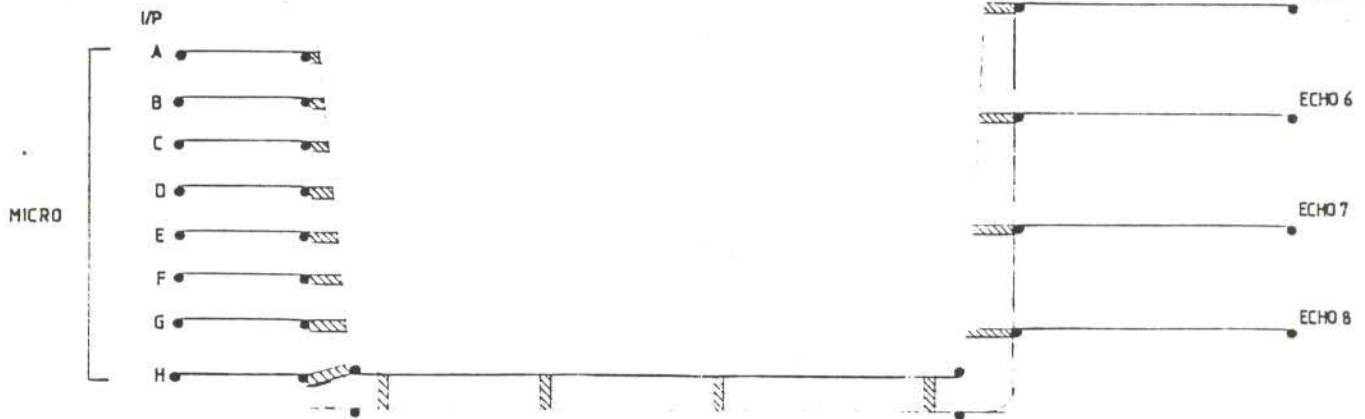
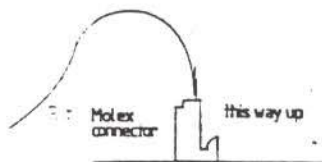
STANDARD NOTES			MATERIAL	TOLERANCES	FIN
ALL DIMENSIONS IN mm DO NOT SCALE DRAWING THIRD ANGLE PROJECTION REMOVE ALL BURRS & SHARP EDGES					
INSP	XLR DELIVERY AND MOUNTING TO THE CABINET	15/11/85	SCALE	GENERAL ±0.25 mm HOLE CENTRES ±0.15 mm HOLE SIZES ±0.10 mm	UNLESS STATED OTHERWISE
KRP	ORIGIN	21.9.84			
DRAWN	REVISION	DATE	CHECKED		

ISS16 CONNECTION

XLR's mounted in their bracket



COLOUR CHART	Ref
RED	RD
BLACK	BLK
GREEN	GRN
BLUE	BLU
ORANGE	ORG
YELLOW	YEL
BROWN	BRN
VIOLET	VIO
GRAY	GRY



40 50 60 70

HSH	NOTES To be mounted onto chipboard or block-board.	UNIT TITLE CMC 24	ALLEN & HEATH BRENNELL LTD. PROFESSIONAL AUDIO EQUIPMENT MANUFACTURERS 59 SHIP STREET, BRIGHTON BN1 1AE TEL. No. 0273-24928
		DRAWING TITLE wiring diagram.	