

**GLENSOUND
ELECTRONICS LTD**

GSGC2 & 3

COMMENTATORS

SYSTEM

PRODUCT DETAILS

GLENSOUND ELECTRONICS LTD

GSGC2&3 MULTIWIRE COMMENTATORS SYSTEM

HANDBOOK CONTENTS

DATE 05/05/98

WP06-133

ISSUE No. 4

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MULTI-WIRE COMMENTATORS SYSTEM

GlenSound CO-AXIAL commentators equipment is an industry standard for international events with a large number of commentators. We have now developed equipment for use with fewer commentators but where sound quality is of particular importance. The system consists of 1, 2 or 3 commentators boxes type GSGC2 along with a base station. There is a choice of base station. The first and simplest is a GSGC3 which is basically a power unit and break out box to handle up to 3 GSGC2s. A more comprehensive base station is our GSGC11 whose facilities include mixing and monitoring circuits.

SYSTEM FEATURES

- ◆ Use with 1,2 or 3 Commentators / Producers
- ◆ Wide bandwidth and low noise
- ◆ High headphone levels possible
- ◆ Very flexible
- ◆ Interfaces with a standard audio mixer
- ◆ Compact and Robust

GSGC2 FEATURES

- ◆ Separate 5 channel mixer provided for each ear
- ◆ TB switches cut programme output
- ◆ Massive Headroom
- ◆ Connected to base station with a single multi-pair cable
- ◆ Connectors fitted for Headset or separate Mic and Headphones

GSGC3 FEATURES

- ◆ 3 separate programme outputs - 1 for each GSGC2
- ◆ 3 separate TB outputs - Each box can talk to any or all of the others
- ◆ All inputs and outputs balanced
- ◆ Each GSGC2 can be fed from 1 of 2 Talk Back inputs
- ◆ Each GSGC2 can be fed from 1 of 2 Feed Back inputs

GSGC11 FEATURES

- ◆ All the features of the GSGC3
- ◆ Contains a 4 channel mixer to balance the 3 GSGC2s and international sound
- ◆ Contains a LED PPM and headphone amp to monitor all inputs and outputs
- ◆ Input level controls fitted for the two feedback inputs
- ◆ Constructed in a 1U subrack with rear panel varicons





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ISSUE	DATE
1	21-10-93
2	27-10-93
3	19-01-94
4	25-08-94

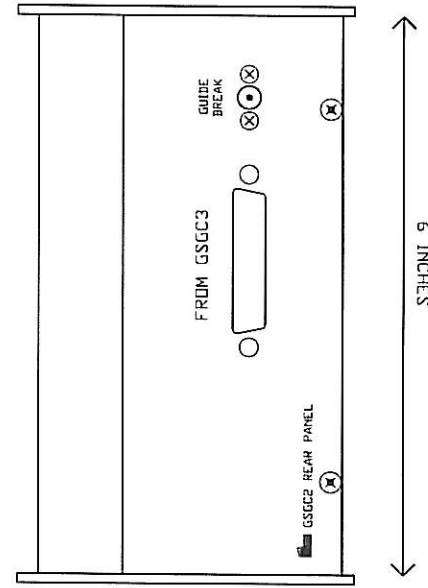
COMMS BOX
TYPE GSGC2
VIEWS

DRAWING NUMBER

A2-12506

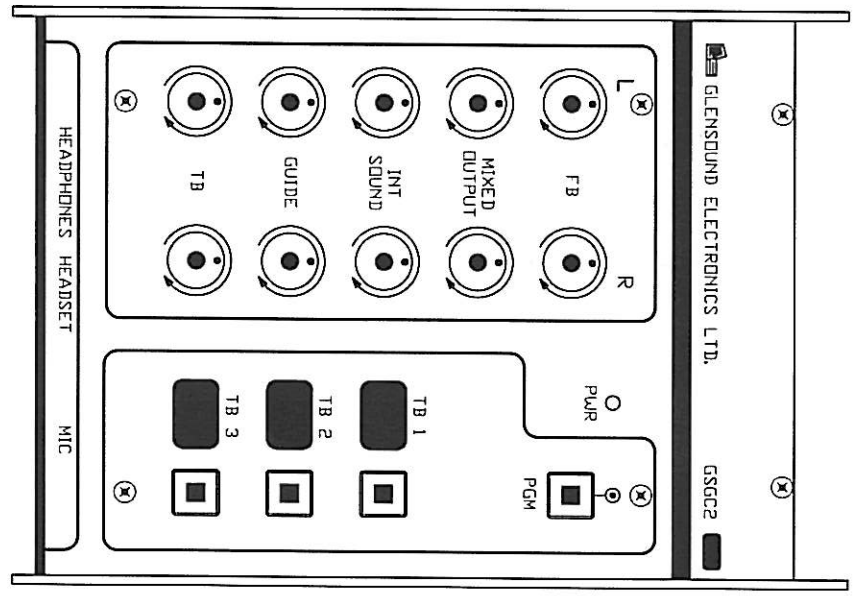
ORIGINALLY DRAWN USING EASYTRAX

REAR
PANEL



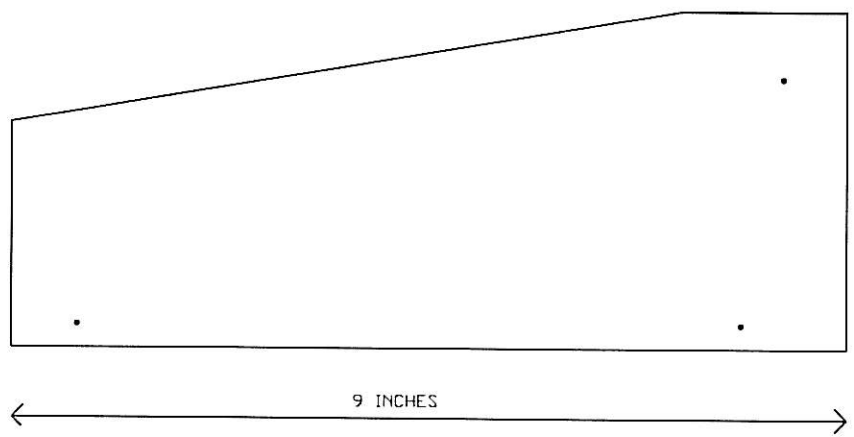
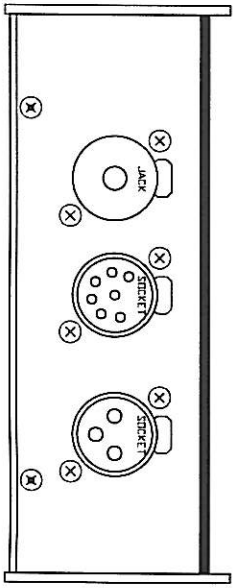
6 INCHES

SLOPING
PANEL



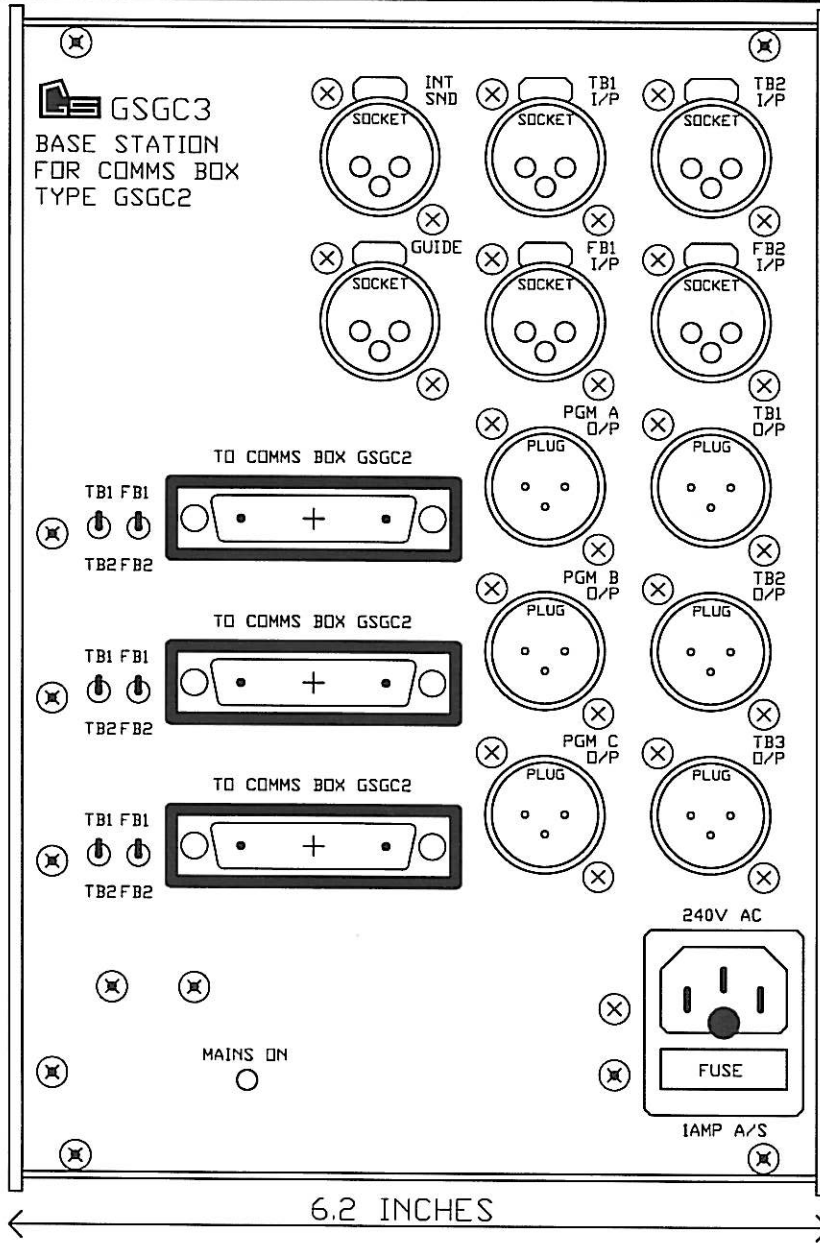
3.6 INCHES

FRONT
PANEL



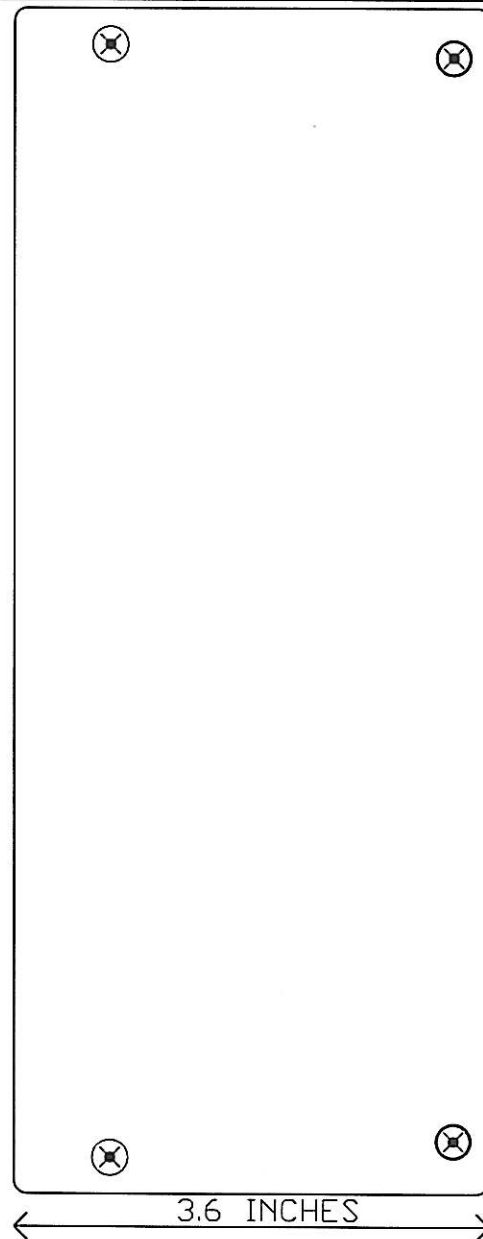
SIDE VIEW

TOP VIEW



9 INCHES

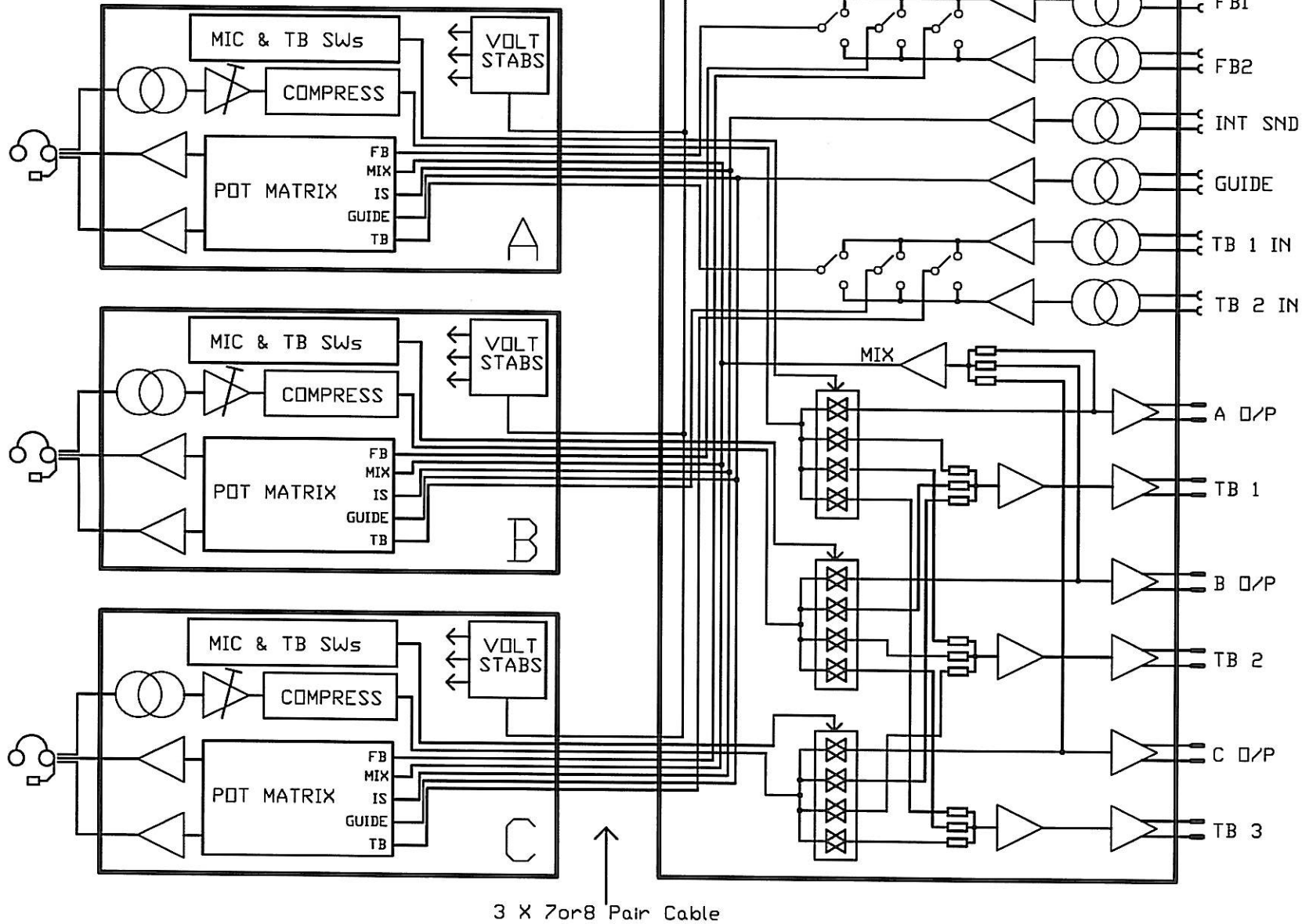
SIDE VIEW



ISSUE	DATE	DRAWING NUMBER
1	22/10/93	A3-12507
2	25/10/93	
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GSGC3

3 X GSGC2



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ISSUE	DATE
1	21/10/93

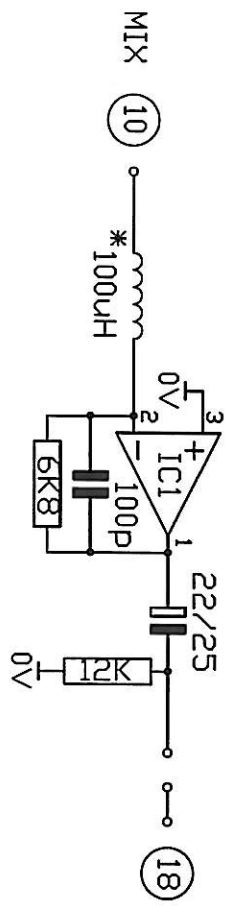
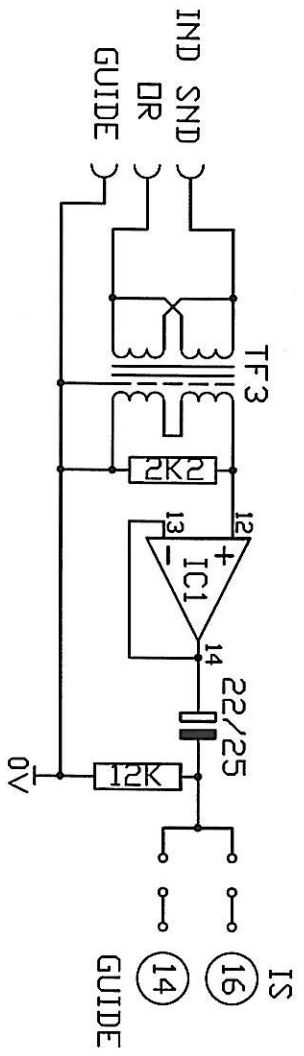
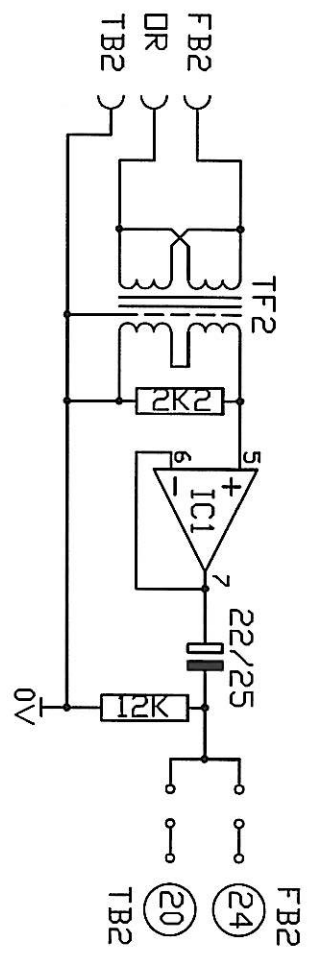
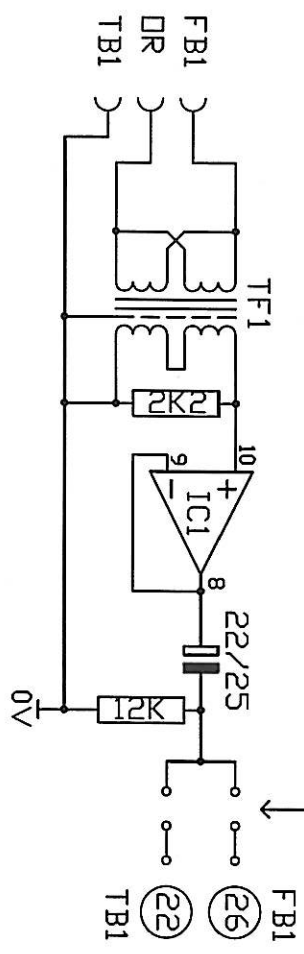
GSGC2 & 3
BLOCK DIAGRAM

DRAWING NUMBER

A4-12508

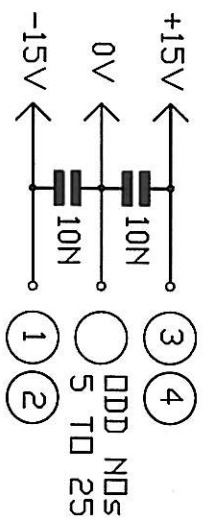
ORIGINALLY DRAWN USING EASYTRAX

LINKS
LINK POSITION DEPENDS
ON PHYSICAL POSITION
OF PCB ON FRONT PANEL



NOTES:

- (No) = 26 PIN IDC PIN NO
 - IC1 = HA4741 DR RC4156
 - TF1 2 & 3 = RS STDCK No 228-400
- * ONLY FITTED TO INT SND CARD



ISSUE	DATE	DRAWING NUMBER
1	11/11/93	A4-12514
2	21/04/94	
		DRAWN BY LO
		DRAWN USING PROTEL EASYTRAX

NOTES:

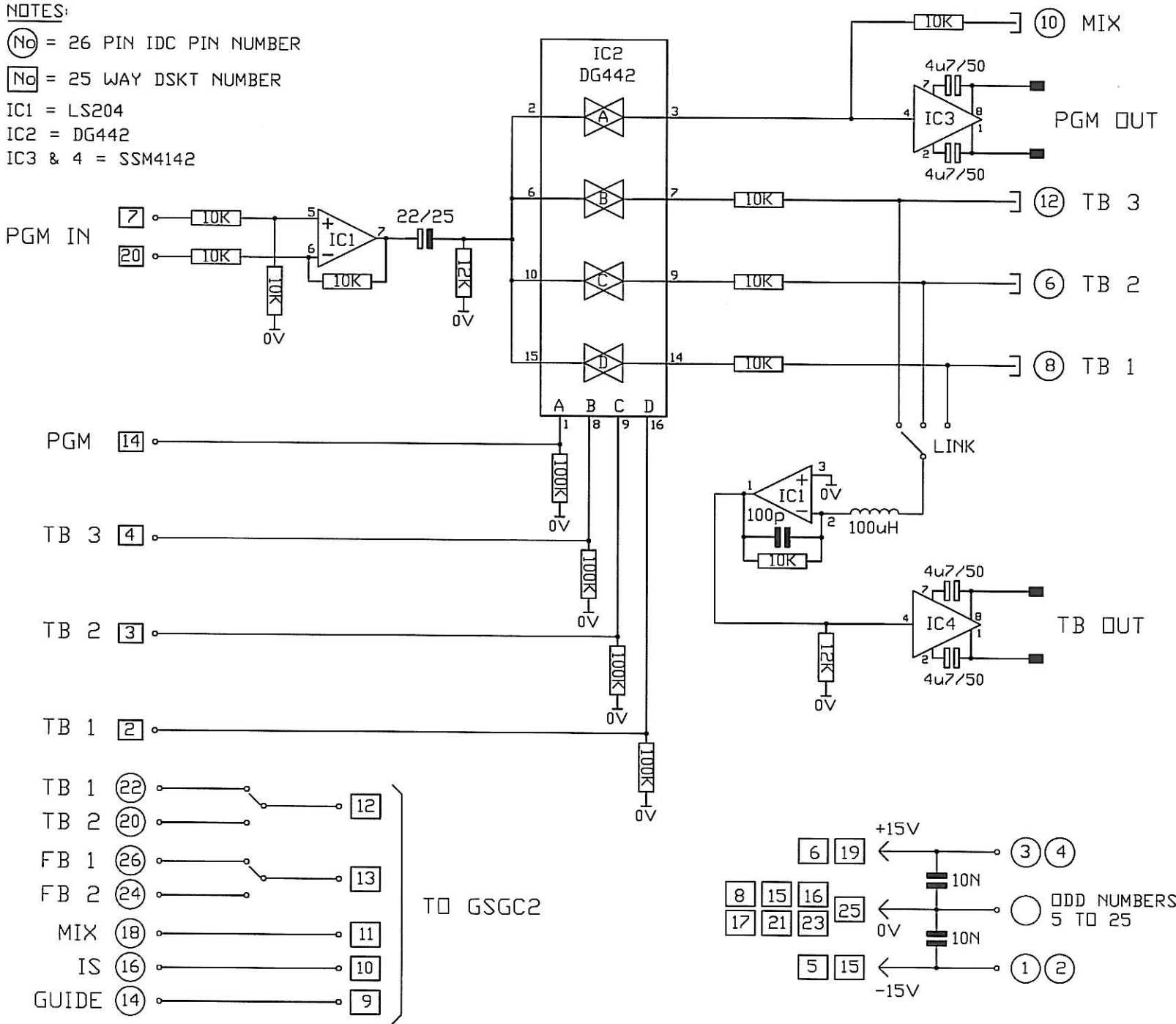
(No) = 26 PIN IDC PIN NUMBER

[No] = 25 WAY DSKT NUMBER

IC1 = LS204

IC2 = DG442

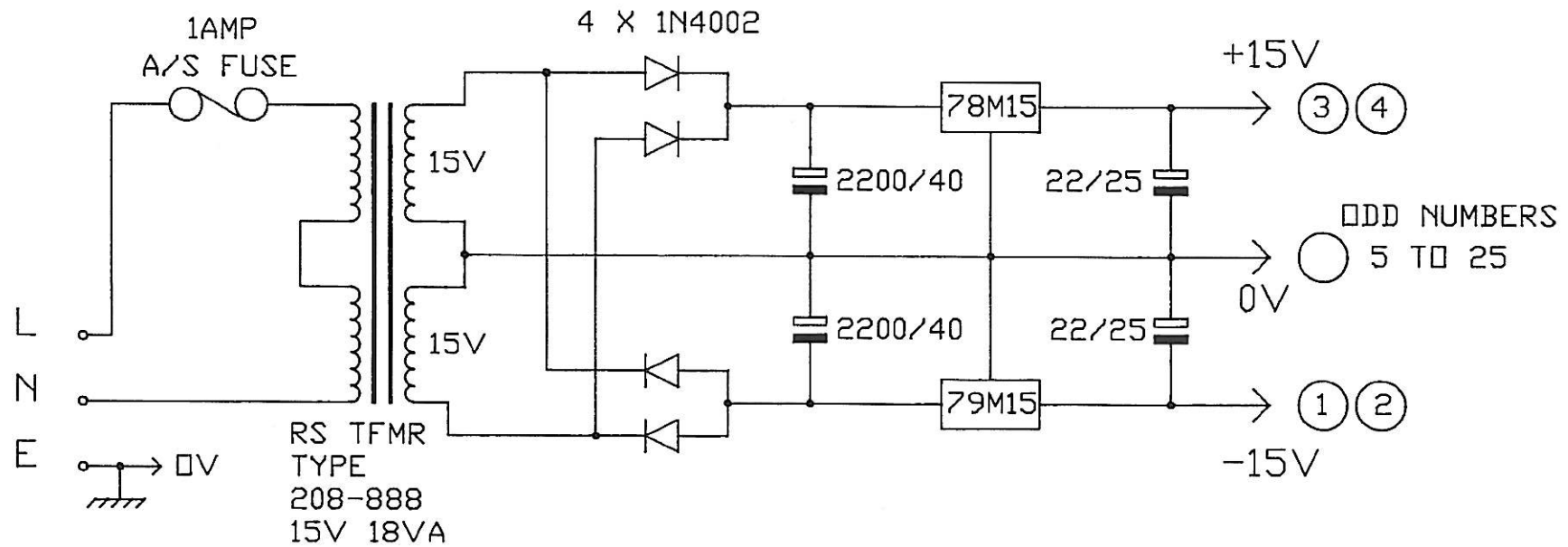
IC3 & 4 = SSM4142



ISSUE	DATE
1	11/11/93
2	21/04/94

O/P CARD FOR
 GSGC3
 GSH79
 CIRCUIT DIAGRAM

DRAWING NUMBER	
A3-12516	
DRAWN BY	LO
DRAWN USING PORTEL EASYTRAX	



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PSU FOR GSGC3
GSH77 CIRCUIT DIAGRAM

ISSUE	DATE	DRAWING NUMBER
1	08/11/93	A4-12512
2	26/05/94	
3	19/08/98	DRAWN BY LO
		DRAWN USING PROTEL EASYTRAX

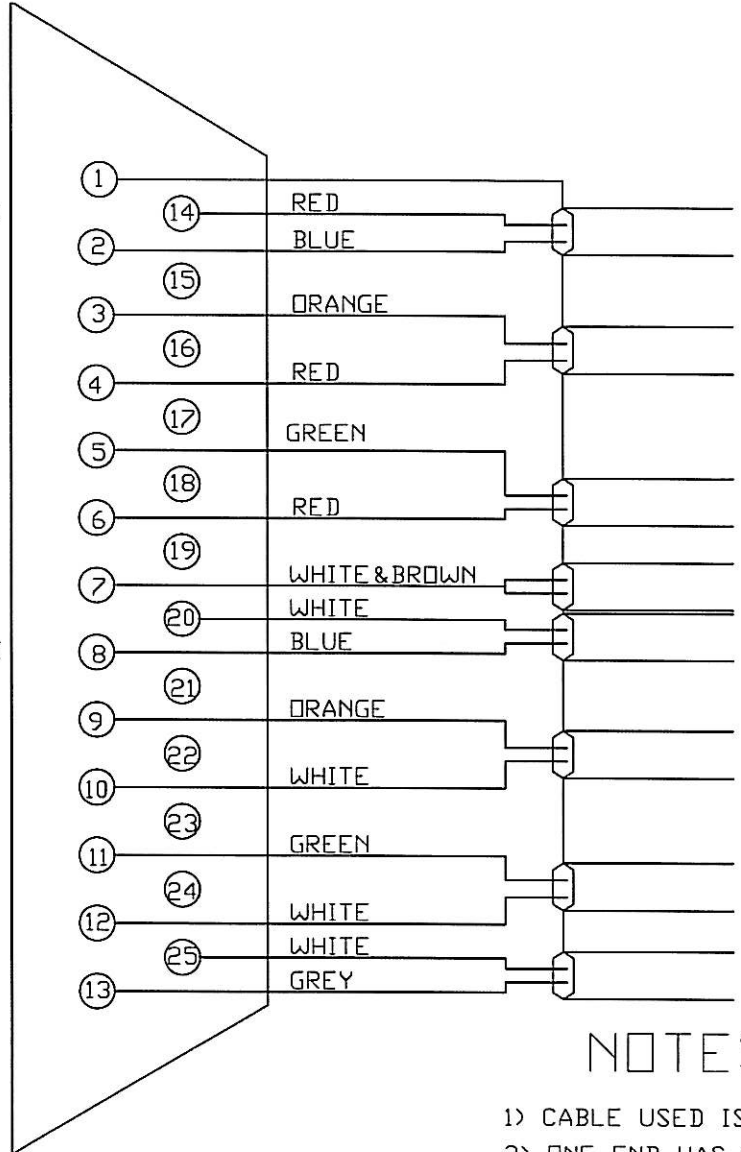


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ISSUE	DATE
1	22/04/94

CHASSIS
 SPK TO PGM LOGIC
 TB1 LOGIC
 N/C
 TB2 LOGIC
 N/C
 TB3 LOGIC
 0V
 -15V
 -15V
 +15V
 +15V
 0V
 PGM O/P MATE
 PGM O/P IN PHASE
 0V
 GUIDE
 0V
 INT SND
 0V
 MIX
 0V
 TB
 0V
 FB



NOTES

- 1) CABLE USED IS CANFORD FSM8
- 2) ONE END HAS 25WAY D PLUG
- 3) OTHER END HAS 25WAY D SOCKET
- 4) BOTH ENDS WIRED THE SAME

WIRING DETAILS
 FOR GSGC2 & 3
 INTERCONNECTING
 LEADS

DRAWING NUMBER	
A3-12517	
DRAWN BY	AMD
ORIGINALLY DRAWN USING EASYTRAX	

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WIRING INFORMATION FOR GSGC2 COMMENTATORS BOX

CONN TYPE FUNCTION
No

1 XLR7 Headset Socket

Pin 1	= Ground
Pin 2	= MIC in Phase
Pin 3	= MIC Mate
Pin 4	= L Ear in Phase
Pin 5	= L Ear Mate
Pin 6	= R Ear in Phase
Pin 7	=R Ear Mate



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GSGC2&3 MULTI WIRE COMMENTATORS SYSTEM SPECIFICATION

GSGC2 MIC INPUT (MEASURED at GSGC3 OUTPUT)

Input Impedance	1k-1k5 ohms transformer balanced
Frequency Response	40Hz-15kHz +/- 1dB
Pre-set Gain Range	-45dBu to -70dBu for 0dBu output
THD with 0dBu out	< 0.1% (Any freq. 100Hz-10kHz)
Noise at max.. gain	< -47dBu Quasi peak (20Hz-20kHz) (i/p = 300 ohms)
Noise at min gain	< -66dBu Quasi peak (20Hz-20kHz) (i/p = 300 ohms)
Max.. i/p at max.. gain	-30dBu
Max.. i/p at min gain	0dBu
Connector	XLR 3pin fixed socket

GSGC2 GUIDE BREAK JACK INPUT

Input Impedance	> 20k ohms electronically balanced
Level	0dbu
Connector	Bantam Jack socket

ALL GSGC3 OUTPUTS

Output Impedance	nominal 50 ohms electronically balanced
Level	0dBu at line up +8dBu programme peaks
Compressor Threshold	+3dBu
Compression Ratio	Starts gently and increases to 4:1 max..
Connectors	XLR 3pin fixed plugs

ALL GSGC3 INPUTS (MEASURED at HEADPHONE OUTPUT)

Input Impedance	> 15k ohms transformer balanced
Frequency Response	20Hz-15kHz +/- 1dB
Nominal Input Level	0dBu
Connectors	XLR 3pin fixed sockets

GSGC2 HEADPHONE OUTPUTS

This equipment is designed to be used with medium to high impedance headphones in the range of 200 ohms to 2K ohms

Output Impedance	< 10 ohms
Max. Output	+20dBu into bridging load +17dBu into 300 ohms
Connector	B gauge Tip Ring Sleeve Jack socket

MAINS POWER

Mains Voltage	230 volts AC +/- 10%
Frequency	45 to 60 Hz
Consumption	< 20VA

The GSGC3 uses a mains transformer with two primary windings connected in series. It is possible, by the use of tools and a soldering iron to reconnect these primary windings in parallel. Then the input voltage would be 115volts +/- 10%

DIMENSIONS

GSGC2 Height = 92mm Width = 153mm Depth = 229mm
Weight = 1.2 Kilos

GSGC3 Height = 92mm Width = 158mm Depth = 229mm
Weight = 2.4 Kilos

ACCESSORIES INCLUDED

One x 3M long multiway D lead is supplied with each GSGC2
For UK sales only - One IEC mains lead is supplied with each GSGC3
Other mating connectors are not included.

ACCESSORIES AVAILABLE

GlenSound can supply polycarbonate or aluminium cases to house various combinations of units with or without the cables.

Interconnecting D leads can be supplied up to 50M long.

Suitable closed or open ear broadcast quality headsets.

The GSGC2 front panel is punched for a multipin XLR connector for a headset. Because there are no fixed standards for the number of pins or the pin outs of headset connectors, this connector is not normally fitted. It is possible for us to fit any XLR connector as an extra, wired to your specification.