

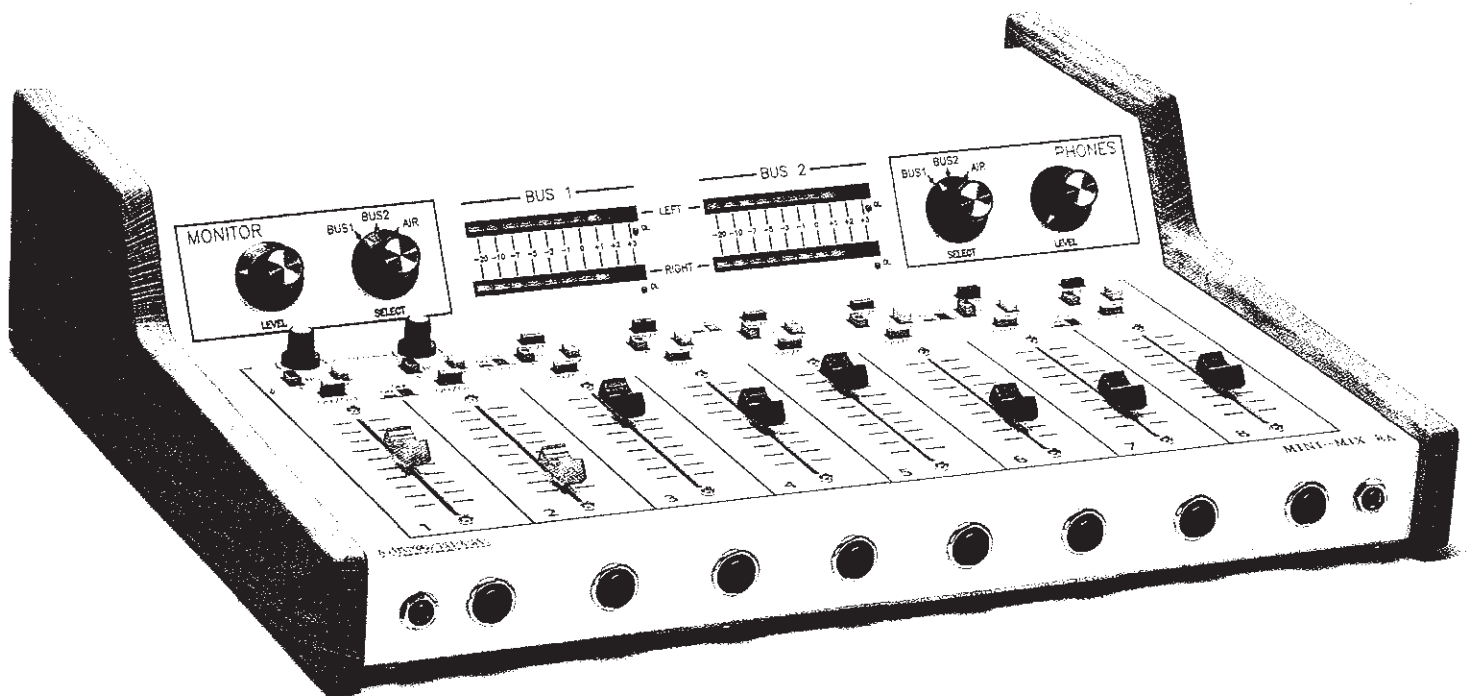
Autogram/CRL

Mini-Mix AUDIO CONSOLES INSTRUCTION MANUAL TABLE OF CONTENTS

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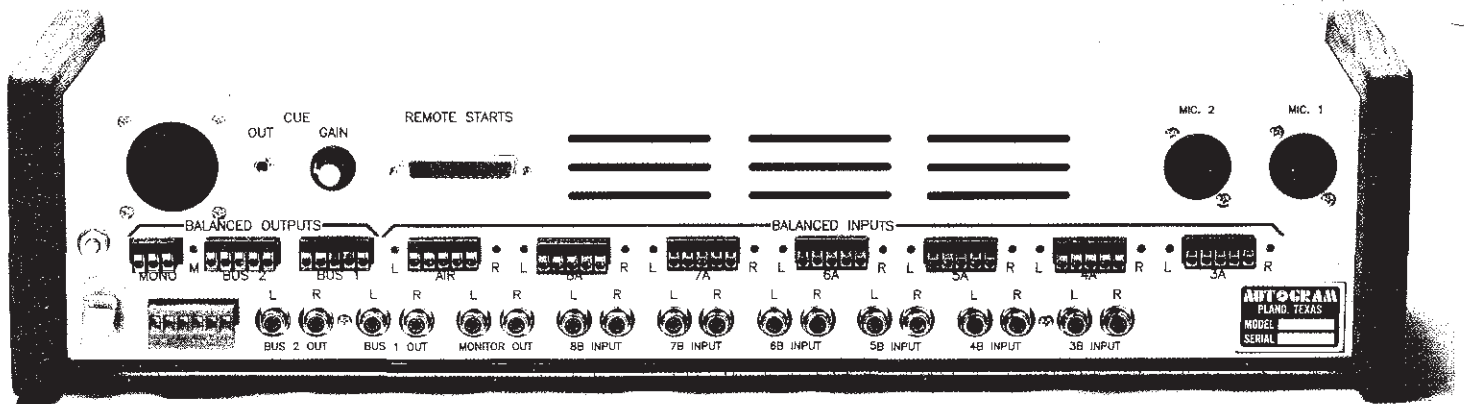
Mini-Mix 8A

GOOD THINGS COME IN SMALL PACKAGES



The new compact console by
Autogram/CRL

Mini-Mix 8A



Features

Professional audio console:

- Aluminum case - Oak endbells
- 2 Stereo output buses
- Mono output
- 8 plug-in slide pots
- 12 Stereo inputs
 - 6 Unbalanced Stereo Phono Jacks for Consumer Equipment
 - 6 High-level balanced Pro-stereo inputs
- 2 Dedicated mike pots with pan
- All VCA operated
- Cue amplifier/speaker built in
- Light weight/Compact size
- Made in the USA — Plano, Texas

Autogram/CRL

920 Edison Ave
Benton, AR 72015
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Email: support@autogram-crl.com

Specifications

Input Characteristics

Sources:

- 12 Stereo Inputs
- 6 Unbalanced Consumer
- 6 Balanced Professional
- 2 Dedicated Mike inputs

Impedances:

- Microphone, 150 ohm
- High-level, 20k
- External monitor, 20k

Levels:

- Microphone, -65 to -50 dBm
- High-level -10 to +10 dBv
- External Monitor, -10 to +10 dBv

SNR:

- Programs, better than -90dB at +18 dBm out

Power Source:

- 117 or 230 volt ac, 50-60 Hz

Mounting & Dimensions:

- Table top with back connections
- Height: 4.75 inches (12.07 cm)
- Depth: 15.5 inches (39.37 cm)
- Width: 19.38 inches (49.21 cm)
- Weight: 9.5 lbs. (4.31 kg)
- Shipping Weight: 25 lbs. (11.34 kg)

Output Characteristics

Outputs:

- Stereo balanced, 2 buses
- Stereo Unbalanced, 2 buses
- Mono, balanced
- Monitor amp feed, unbalanced
- 2 Headphone jacks

Impedances:

- Programs 600 ohm balanced
- 10k unbalanced
- Monitor 10k unbalanced
- Phones 100 ohm
- Cue 300 mw at 8 ohm

Levels:

- Programs, +8 dBm nominal
- +24 dBm maximum
- Monitor -10dBv
- Phones, 10 volts at 100 ohms

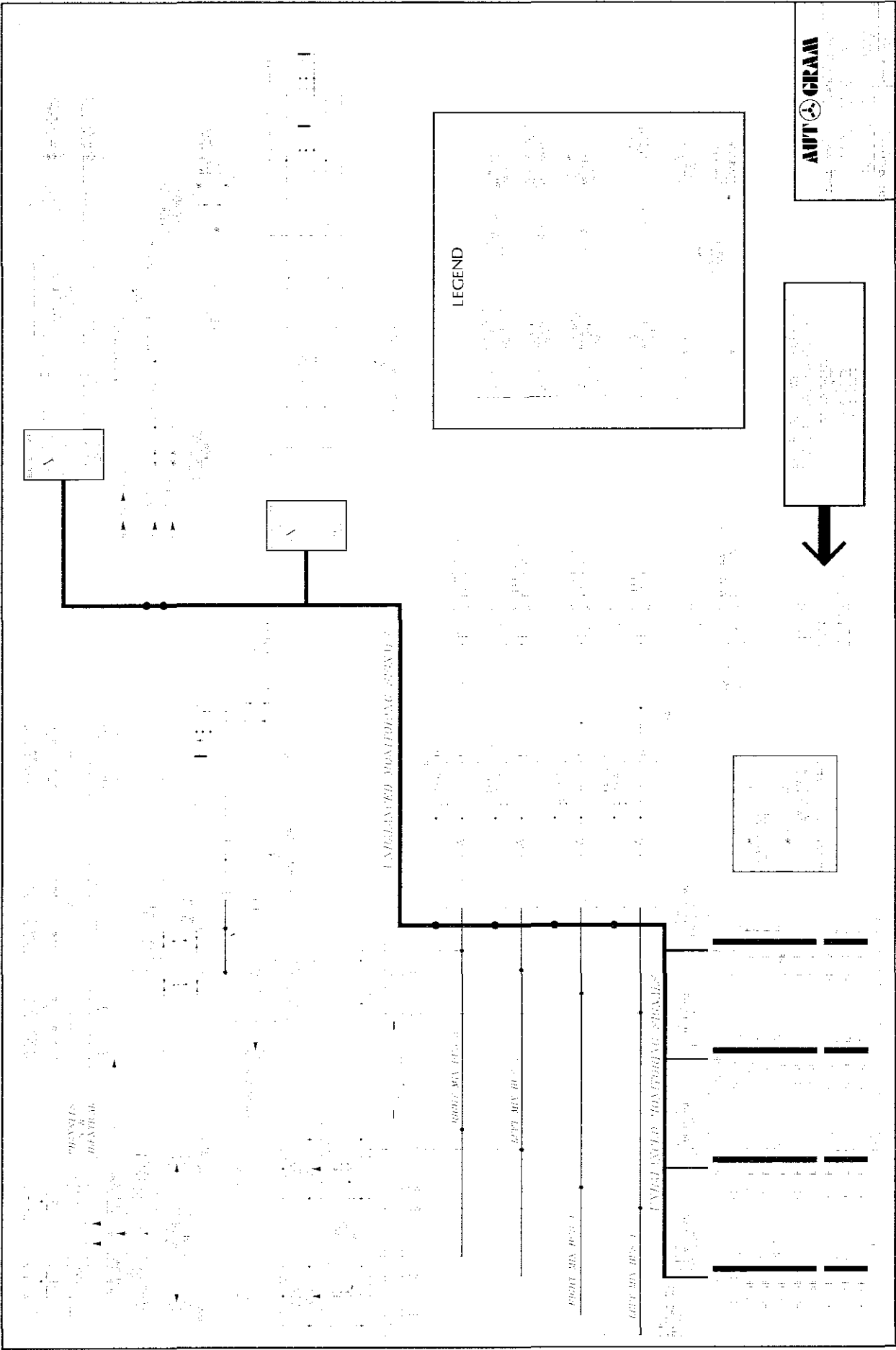
Distortion:

- Programs/Monitor, less than .05% THD and IMD
- Headphones less than 1% THD and IMD

Frequency Response:

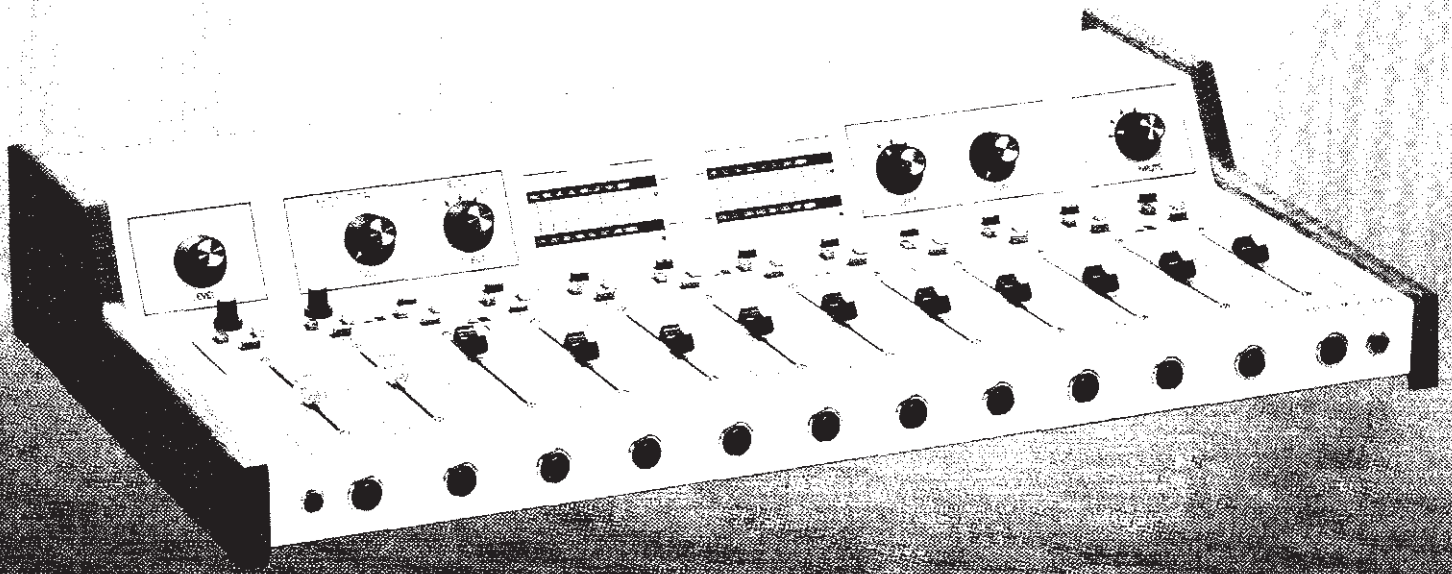
- Programs, ± 0.2 dB 20 to 20 kHz
- Monitor, ± 0.2 dB 20 to 20 kHz
- Phones, ± 0.5 dB 20 to 20 kHz

All specifications subject to change without notice.
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Mini-Mix 12-A

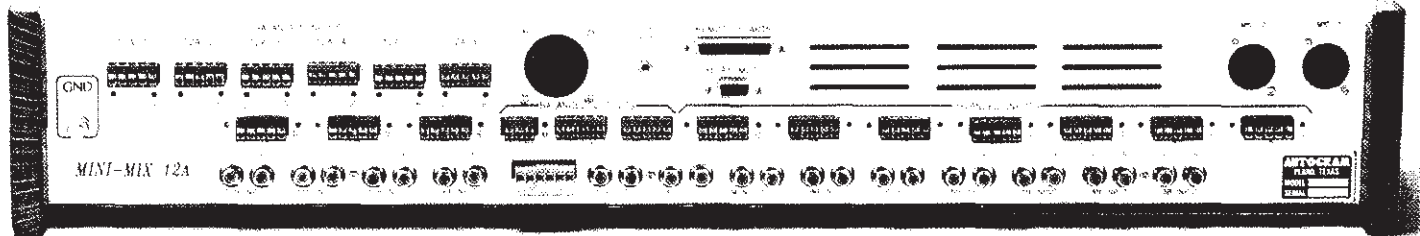
GOOD THINGS COME IN SMALL PACKAGES



The New Compact Console By

Autogram/CRL

Mini-Mix 12-A



FEATURES

Professional audio console:

- Aluminum case - Oak endbells
- 2 Stereo output buses
- Mono output
- 12 plug-in slide pots
- 25 Stereo inputs
- 10 Unbalanced Stereo Phono Jacks for Consumer Equipment
- 15 High-level balanced Pro-stereo inputs
- 2 Dedicated mike pots with pan
- All VCA operated
- Cue amplifier/speaker built in
- Light weight/Compact size
- Made in the USA - Plano, Texas

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SPECIFICATIONS

Input Characteristics

Sources:

- 25 Stereo inputs
- 10 Unbalanced Consumer
- 15 Balanced Professional
- 2 Dedicated Mike inputs

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- Microphone, 150 ohm
- High-level, 20k
- External monitor, 20k

Levels:

- Microphone, -65 to -50 dBm
- High-level -10 to +10 dBv
- External Monitor, -10 to +10 dBv

SNR:

- Programs, better than -90dB at +18 dBm out

Power Source:

- 117 to 230 volt ac, 50-60 Hz

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- Table top with back connections
- Height: 4.75 inches (12.07 cm)
- Depth: 15.5 inches (39.37)
- Width: 27.25 inches (69.21 cm)
- Weight: 14 lbs. (6.35 kg)
- Shipping Weight: 29.5 lbs. (13.38 kg)

Output Characteristics

Outputs:

- Stereo balanced, 2 buses
- Stereo Unbalanced, 2 buses
- Mono, balanced
- Monitor amp feed, unbalanced
- 2 Headphone jacks

Impedances:

- Programs 600 ohm balanced
- 10k unbalanced
- Monitor 10k unbalanced
- Phones 100 ohm
- Cue 300 mw at 8 ohm

Levels:

- Programs, +8 dBm nominal
- +24 dBm maximum
- Monitor -10dBv
- Phones, 10 volts at 100 ohms

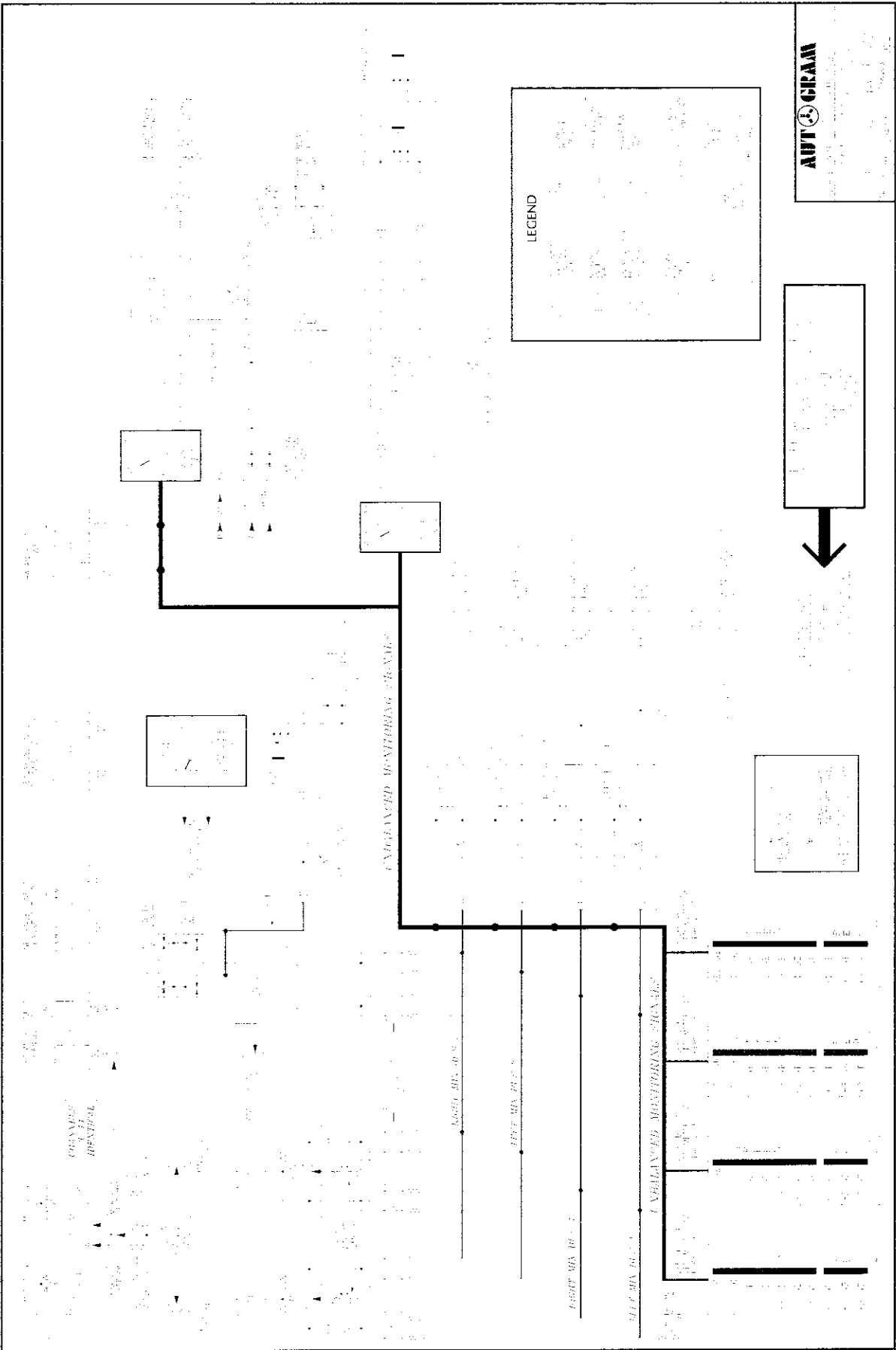
Distortion:

- Programs/Monitor, less than .05% THD and IMD
- Headphones less than 1% THD and IMD

Frequency Response:

- Programs, ± 0.2 dB 20 to 20kHz
- Monitor, ± 0.2 dB 20 to 20 kHz
- Phones, ± 0.5 dB 20 to 20 kHz

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Autogram/CRL

Mini-Mix AUDIO CONSOLES

AUTOGRAM PRODUCT WARRANTY

AUTOGRAM warrants that all products manufactured by AUTOGRAM CORPORATION and sold hereunder, will at the date of delivery, meet or exceed all current published specifications for that product and will be free from defects in workmanship and material.

AUTOGRAM agrees to repair or replace equipment of its manufacture, which fails to meet the warranty set forth above for two (2) years after delivery with the exception of lamps, fuses, and other expendable items. All major parts, such as, VU meters, attenuators, switches, etc., sold hereunder which are not of AUTOGRAM CORP. manufacture are sold subject to the supplier's warranty.

Warranties may not be honored when failure is caused by improper use or abuse, maintenance, repair or alteration by unauthorized persons.

In no event shall AUTOGRAM have any liability for consequential damages, or for the loss, damage, or expenses directly or indirectly arising from the use of the products, or any inability to use them either separately or in combination with other equipment or materials, or from any other cause.

Parts under warranty must be returned to AUTOGRAM per instructions. Warranted parts will be shipped freight prepaid by UPS regular or by US Mail, First Class. Any other method of shipment, such as AIR EXPRESS, will be shipped freight collect.

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WARNING!

FAILURE TO INSTALL POWER CONNECTORS CORRECTLY WILL
DAMAGE CONSOLE AND MAY VOID WARRANTY.

CONSOLE CONNECTION

POWER SUPPLY CONNECTION

NOTE: POWER CONNECTOR
IS INVERTED.

6 5 4 3 2 1
REAR
VIEW

1 CHASSIS GROUND
2 -16 VDC
3 +16 VDC
4 +6 VDC (VDSP)
5 DIGITAL GROUND
6 AUDIO GROUND

6 5 4 3 2 1
1 CHASSIS GROUND
2 -16 VDC
3 +16 VDC
4 +6 VDC (VDSP)
5 DIGITAL GROUND
6 AUDIO GROUND

**POWER CONNECTOR ON CONSOLE ONLY IS INVERTED.
THE SCREWS SHOULD POINT DOWN!**

*The connectors are keyed to prevent incorrect installation. Do not force
a connector into its socket.*

AUTOGRAM MINI-MIX AUDIO CONSOLE

INSTRUCTION MANUAL

SECTION 1

INTRODUCTION

The Mini-Mix console is a full-functioned professional audio mixing system. Space and cost saving measures have yielded a small package along with an attractive price without giving up the features needed in today's active studio.

BASIC FEATURES

Input

The Mini-Mix features either eight or twelve channels; the first two are dedicated to microphones while the remaining channels provide 2 stereo inputs each. Channel 12 (on the Mini Mix 12A) has a total of 7 stereo inputs. Each channel may be assigned to either **Mix Bus One** and/or **Mix Bus Two**. Both buses may be fed simultaneously.

The slide faders are DC operated and drive an associated V.C.A. (voltage controlled amplifier) for level control.

A unique feature of the Mini-Mix is that the "A" input on channels 3-8 (3-12 on Mini Mix 12 A) is an electrically balanced professional-type while the "B" input uses **Phono-Jacks** to be directly compatible with consumer-type equipment.

The balanced inputs use miniature plug-in screw-type connectors, which make installation very simple. Sources may be moved around easily for different configurations. Each balanced input is adjustable to accept levels between -15 dBv and +15 dBv. A balanced adjustable input is provided for connecting an external air-monitor source.

The microphone inputs use convenient XLR type connectors and feature **Pan Pots** for controlling the spatial positioning. The pan pots may be disabled if this feature is not desired. A front panel switch turns the microphone channel **ON** and **OFF** while activating the **Mute** circuit when the channel is **ON**. The muting may be programmed for either microphone channel.

Output

Balanced and unbalanced outputs are provided for the two mixing buses. As with the inputs, the balanced outputs use miniature plug-in screw-type connectors while the unbalanced outputs use phono jacks.

A balanced output is provided for the **MONO** sum of Mix bus 1.

Monitoring

Separate select switches and level controls are provided for the headphone and monitor circuits. Bus 1, Bus 2, or an external Air signal may be selected. An external monitor power amplifier is required which may be whatever power range desired. The monitor driver output appears on phono jacks and is compatible with consumer type amplifiers. Muting for the monitor output is included and may be programmed to operate from either/or both microphone channels.

The headphone outputs are on two standard 1/4-inch phone jacks and are designed to accommodate modern higher impedance headphones with ample volume.

A cue speaker and amplifier are built-in to provide cue monitoring. A front panel switch, on non-microphone channels, selects **CUE**. When **CUE** is selected, that channel will be removed from the output buses.

Metering

Four LED bar graphs provide visual indication of output level for the Left and Right channels of Bus 1 and Bus 2. A special circuit enables the graphs to respond with "ballistics" which correspond to the standard Vu meter. Additional LEDs are used to give indication of an Overload condition (10 dB above 0 reference, adjustable) and are designed to give fast response to audio peaks.

Other Features

Front edge switches provide dry contacts, which can be used, for remote starting equipment or for other purposes. Connections for the switches are on a rear mounted sub D type connector.

An internal relay is included to activate On-Air lights and may be programmed to either/or both microphone channels. The relay follows the monitor muting assignments.

A small jack is provided to give access to the cue output. When a plug is inserted into the jack, the internal cue speaker will be disabled.

SECTION 2

INSTALLATION

The Mini-Mix console is small enough to be installed in almost any location and may be used in permanent as well as temporary situations. The Mini-Mix console can be used at remote sites and in remote vehicles.

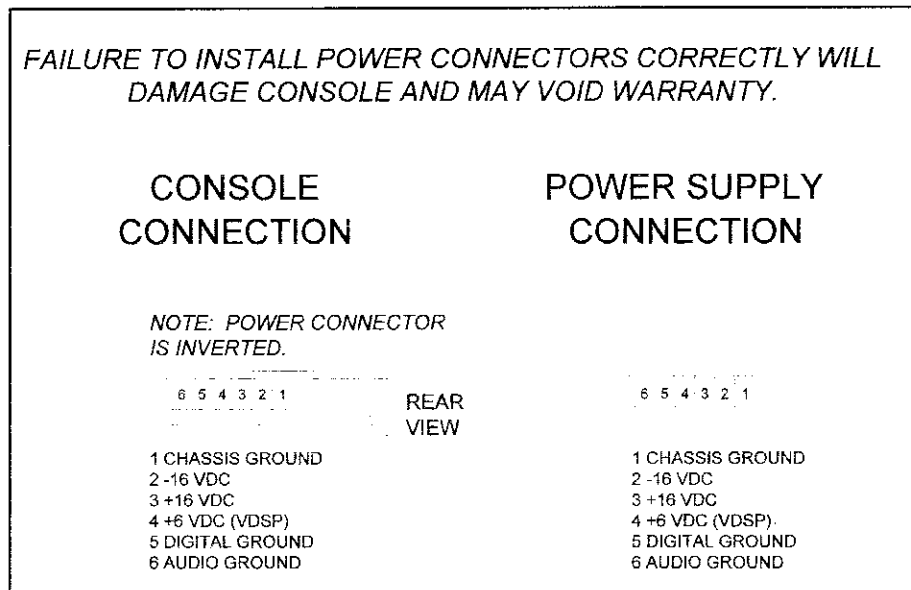
POWER SUPPLY CONNECTIONS

The Mini-Mix power supply can be mounted up to eight feet from the console. A shielded interface cable is provided for this purpose. Unless requested, the power supply is wired for 115 v.a.c. / 60hz mains. The transformer can be rewired for 230 v.a.c. 50hz mains.

BEFORE APPLYING POWER:

Connect each end of the shielded power supply cable.

**Note: The connector at the console end is inverted and will plug in upside down.*



WARNING: DO NOT ALLOW ANYTHING TO FALL INTO VENT OPENINGS!

Connect the IEC power cord to the proper outlet and the power supply IEC filter. The power switch may now be turned on.

POWER CABLE PIN-OUT

PIN	FUNCTION	WIRE COLOR
1	CHASSIS GROUND	GREEN
1	(POWER SUPPLY END ONLY)	SHIELD
2	- 16 VOLTS DC	WHITE
3	+ 16 VOLTS DC	RED
4	+ 6 VOLTS DC	ORANGE
5	DIGITAL GROUND	BLUE
6	GROUND	BLACK

MICROPHONE CONNECTIONS

Any standard balanced low-impedance microphone may be used with the Mini-Mix console; however, the preamplifiers are optimized for 150-ohm source impedances. Pin 3 on the XLR connector is considered high or + while pin 2 is low or -. Pin 1 is ground. An unbalanced microphone can be used by wiring the center conductor to pin 3 and the shield to pin 1.

PAN POTS

The pan pots are used to adjust the position of the microphone in the stereo image. Turn the pot to the left to make the microphone appear to be on the left or turn the pot to the right to position the sound on the right. This feature is useful in interviews where the interviewer might be placed on the left and the subject placed on the right.

To DISABLE the pan pot, remove the four screws along the underside of the front panel lip. The front panel can then be raised up (it is hinged at the rear). There are jumper-headers located near each microphone pre-amplifier (refer to main parts layout drawing MM1021). Simply move the jumper to the other pin or just remove the jumper.

Muting of the monitor and the mute relay will be covered later.

BALANCED INPUT CONNECTIONS

(Refer to drawing at the end of this section for connector hookup.)

Balanced professional equipment can be connected to the plug-in screw-type connectors on channels 3-8. Levels between -10 dBv and +10 dBv may be accommodated. The inputs are 20k ohm bridging. If a terminated input is required, a 600-ohm resistor must be placed on the connector along with the wiring for both left and right channels. To connect a mono source, simply connect to the left channel then jumper to the right channel.

BALANCED CONNECTIONS

PIN 1	+ LEFT CHANNEL
PIN 2	- LEFT CHANNEL
PIN 3	GROUND
PIN 4	+ RIGHT CHANNEL
PIN 5	- RIGHT CHANNEL

***Note: Pin 1 is on the left side looking at console rear.

After the sources are connected, the levels may be trimmed by means of the small pots, which are located on either side of the balanced input connector and are accessible through the respective small holes. A 3/32-inch "Greenie" screwdriver works nicely for adjusting the Mini-Mix input level.

UNBALANCED INPUT CONNECTIONS

Connect consumer-type equipment directly to the phono-jack inputs. No adjustments are required.

OUTPUT CONNECTIONS

BUS 1 AND BUS 2 MAIN OUTPUT CONNECTIONS

****DO NOT GROUND + OR - OUTPUT CONNECTIONS****

(Refer to drawing at the end on this section for connector hookup.)

The balanced outputs for the Mini-Mix console are calibrated at the factory for +8 dBm into a 600-ohm load. The actual output impedance is approximately 100 ohms. Internal master gain controls allow the output to be adjusted to another reference value; however, the metering system will require re-calibration if these levels are changed. Do not ground either + or - output terminal. If an unbalanced feed is required, use the + terminal and ground.

BALANCED CONNECTIONS

PIN 1	+ LEFT CHANNEL
PIN 2	- LEFT CHANNEL
PIN 3	GROUND
PIN 4	+ RIGHT CHANNEL
PIN 5	- RIGHT CHANNEL

***Note: Pin 1 is on the left side looking at console rear.

MONO OUTPUT

The balanced MONO output provides the monaural sum of Bus 1. The output characteristics are identical to the main bus outputs. A level control is located adjacent to the connector.

Note: The MONO output could be used to interface to a telephone system. In this case use Bus 2 as the main output and use Bus 1 as an assignable MIX-MINUS output. Do not ground either + or - output terminal. If an unbalanced feed is required, use the + terminal and ground.

MONO CONNECTIONS

PIN 1	GROUND
PIN 2	- OUTPUT
PIN 3	+ OUTPUT

UNBALANCED OUTPUT CONNECTIONS

Unbalanced outputs are provided for BUS 1, BUS 2, and MONITOR. These outputs will interface directly to consumer type equipment.

CUE

While a cue speaker is built in, it may be desirable to employ a larger speaker or a more powerful external amplifier and speaker. A 1/8-inch mini-phone jack is provided to allow access to the cue amplifier output. When a plug is inserted into this jack, the internal cue speaker will be disconnected. The level will still be adjusted by the CUE GAIN control.

AUXILIARY FUNCTIONS

MUTING ASSIGNMENTS

The muting for the MONITOR output as well as the activation of the mute relay can be programmed to operate from either microphone channel.

Muting requires that the DB-25 male connector (supplied) be inserted into the REMOTE START connector on the rear panel. The connector is factory wired to provide muting for both microphones. To modify the assignment, the jumper between pins 13 and 25 is removed to disable the muting for microphone channel 2. Remove the jumper between pins 12 and 24 to disable the muting for microphone channel 1.

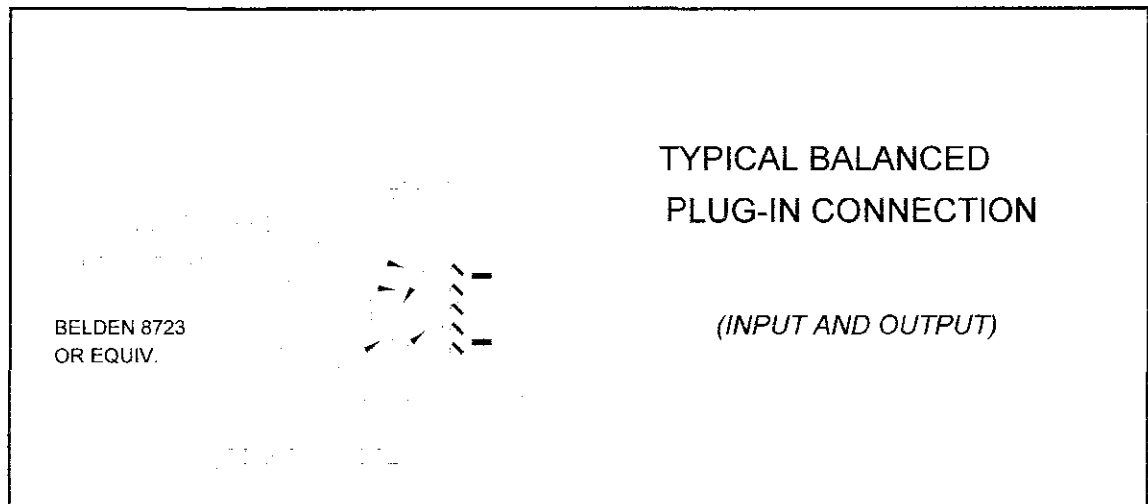
MUTE RELAY CONNECTIONS

Contacts for the MUTE RELAY are brought out to the REMOTE START connector on the rear panel. These contacts can be used to activate an ON AIR light. Refer to the REMOTE START table for connection.

CAUTION

THE RELAY CONTACTS ARE RATED FOR 1 AMP D.C. AND 25-WATTS A.C MAX. IF LARGER LAMPS ARE TO BE USED AN EXTERNAL CONTROLLER MUST BE INSTALLED.

TYPICAL HOOKUP



AUXILIARY CONNECTIONS Mini-Mix 8A

J35 REMOTE STARTS (DB25 CONNECTOR ON REAR PANEL)

WIRING TABLE 1

FUNCTION	PIN OUT
Remote Start Switch #1	1 and 14
Remote Start Switch #2	2 and 15
Remote Start Switch #3	3 and 16
Remote Start Switch #4	4 and 17
Remote Start Switch #5	5 and 18
Remote Start Switch #6	6 and 19
Remote Start Switch #7	7 and 20
Remote Start Switch #8	8 and 21
RELAY/MUTE	
MUTE RELAY COMMON	23
MUTE RELAY NORMALLY CLOSED	11
MUTE RELAY NORMALLY OPEN	10
Mute Microphone Channel 1	12 and 24 (Jumper)
Mute Microphone Channel 2	13 and 25 (Jumper)

Note: Both microphone channels are factory assigned to mute.

****REMOVE RESPECTIVE JUMPER TO DISABLE MUTING ****

AUXILIARY CONNECTIONS Mini-Mix 12A

J35 REMOTE STARTS (DB25 CONNECTOR ON REAR PANEL)

WIRING TABLE 2

FUNCTION	PINS
Remote Start Switch 1	1 and 14
Remote Start Switch 2	2 and 15
Remote Start Switch 3	3 and 16
Remote Start Switch 4	4 and 17
Remote Start Switch 5	5 and 18
Remote Start Switch 6	6 and 19
Remote Start Switch 7	7 and 20
Remote Start Switch 8	8 and 21
Remote Start Switch 9	9 and 22
Remote Start Switch 10	10 and 23
Remote Start Switch 11	11 and 24
Remote Start Switch 12	12 and 25

J36 RELAY/MUTE (DB9 CONNECTOR ON REAR PANEL)

WIRING TABLE 3

MUTE RELAY COMMON	6
MUTE RELAY NORMALLY CLOSED	2
MUTE RELAY NORMALLY OPEN	1
Mute Microphone Channel 1	5 and 9 (Jumper)
Mute Microphone Channel 2	4 and 8 (Jumper)

Note: Both microphone channels are factory assigned to mute.

****REMOVE RESPECTIVE JUMPER TO DISABLE MUTING ****

MINI-MIX 8A CABLING RUN LIST

(J35) DB-25 FEMALE REMOTE START CONNECTOR

PIN	#	COLOR	LENGTH	FUNCTION	TO
1	X	GRN		REMOTE START 1+	SW1 PIN 1
14	X	WHT/GRN		REMOTE START 1-	SW1 PIN 3
2	X	BLU		REMOTE START 2+	SW2 PIN 1
15	X	WHT/BLU		REMOTE START 2-	SW2 PIN 3
3	X	YEL		REMOTE START 3+	SW3 PIN 1
16	X	WHT/YEL		REMOTE START 3-	SW3 PIN 3
4	X	VIO		REMOTE START 4+	SW4 PIN 1
17	X	WHT/VIO		REMOTE START 4-	SW4 PIN 3
5	X	BRN		REMOTE START 5+	SW5 PIN 1
18	X	WHT/BRN		REMOTE START 5-	SW5 PIN 3
6	X	ORG		REMOTE START 6+	SW6 PIN 1
19	X	WHT/ORG		REMOTE START 6-	SW6 PIN 3
7	X	GRY		REMOTE START 7+	SW7 PIN 1
20	X	WHT/GRY		REMOTE START 7-	SW7 PIN 3
8	X	BLK		REMOTE START 8+	SW8 PIN 1
21	X	WHT/BLK		REMOTE START 8-	SW8 PIN 3

RELAY CONNECTIONS

10	282	RED		RELAY N.O.	P/J15 PIN 4
11	282	GRN		RELAY N.C.	P/J15 PIN 3
23	282	WHT		RELAY COMMON	P/J15 PIN 2
X	282	BLK		X	P/J15 PIN 1

MUTE CONNECTIONS

12	283	RED		MUTE 1	P/J4 PIN 1
13	283	GRN		MUTE 2	P/J4 PIN 2
NC	283	SHIELD			P/J4 PIN 3
24	283	BLK		MUTE 3	P/J4 PIN 4
25	283	WHT		MUTE 4	P/J4 PIN 5

MICROPHONE CONNECTORS

MIC. 1 CONNECTOR (MJ1)

PIN	#	COLOR	FUNCTION	TO
3	285	RED	MIC. 1 +	P/J13 PIN 2
2	285	BLK	MIC. 1 -	P/J13 PIN 3
1	285	SHIELD	MIC. 1 GND	P/J13 PIN 1
G	285	GRN	MIC. 1 SHELL	P/J13 PIN 4

MIC. 2 CONNECTOR (MJ2)

PIN	#	COLOR	FUNCTION	TO
3	284	RED	MIC. 2 +	P/J14 PIN 2
2	284	BLK	MIC. 2 -	P/J14 PIN 3
1	284	SHIELD	MIC. 2 GND	P/J14 PIN 1
G	284	GRN	MIC. 2 SHELL	P/J14 PIN 4

MINI-MIX 8A CABLING RUN LIST

CONTD.

CUE GAIN CONTROL

PIN	#	COLOR	FUNCTION	TO
1	286	RED	CUE GAIN INPUT	P/J16 PIN 4
2	286	GRN	CUE GAIN OUTPUT	P/J16 PIN 3
3	286	BLK	CUE GAIN COMMON	P/J16 PIN 2
NC	286	SHIELD	SHIELD	P/J16 PIN 4

CUE SPEAKER/OUTPUT JACK WIRING

CUE JACK

1	287	RED	CUE AMP OUTPUT	P/J18 PIN 1
1	287	BLK	CUE AMP OUTPUT	P/J18 PIN 2
2	X	ORG	CUE SPEAKER+	SPKR 1
3	X	WHT/ORG	CUE SPEAKER-	SPKR 2
3	287	GRN	CUE AMP GND	P/J18 PIN 4
NC	287	SHIELD	SHIELD	P/J18 PIN 5

HEADPHONE JACK WIRING

HJ2 (NEAREST CHANNEL 8)

1	288	RED	LEFT HEADPHONE OUT	P/J7 PIN 2
2	288	GRN	RIGHT HEADPHONE OUT	P/J17 PIN 1
3	288	BLK	LEFT GND	P/J17 PIN 3
3	288	WHT	RIGHT GND	P/J17 PIN 4

JUMPER TO HJ1 NEAREST CHANNEL 1

HJ1

1	289	RED	LEFT HEADPHONE	HJ2 PIN 1
2	289	GRN	RIGHT HEADPHONE	HJ2 PIN 2
3	289	BLK	LEFT GND	HJ2 PIN 3
3	289	WHT	RIGHT GND	HJ2 PIN 3

MINI-MIX 12A CABLING RUN LIST

(J35) FEMALE DB-25 REMOTE START CONNECTOR

PIN	#	COLOR	FUNCTION	TO
1	272	GRN	REMOTE START 1+	SW1 PIN 1
14	272	WHT	REMOTE START 1-	SW1 PIN 2
2	272	BLU	REMOTE START 2+	SW2 PIN 1
15	272	GRY	REMOTE START 2-	SW2 PIN 2
3	272	YEL	REMOTE START 3+	SW3 PIN 1
16	272	TAN	REMOTE START 3-	SW3 PIN 2
4	272	VIO	REMOTE START 4+	SW4 PIN 1
17	272	PNK	REMOTE START 4-	SW4 PIN 2
5	272	BRN	REMOTE START 5+	SW5 PIN 1
18	272	BLK	REMOTE START 5-	SW5 PIN 2
6	272	ORG	REMOTE START 6+	SW6 PIN 1
19	272	RED	REMOTE START 6-	SW6 PIN 2
7	273	GRN	REMOTE START 7+	SW7 PIN 1
20	273	WHT	REMOTE START 7-	SW7 PIN 2
8	273	BLU	REMOTE START 8+	SW8 PIN 1
21	273	GRY	REMOTE START 8-	SW8 PIN 2
9	273	YEL	REMOTE START 9+	SW3 PIN 1
22	273	TAN	REMOTE START 9-	SW3 PIN 2
10	273	VIO	REMOTE START 10+	SW4 PIN 1
23	273	PNK	REMOTE START 10-	SW4 PIN 2
11	273	BRN	REMOTE START 11+	SW5 PIN 1
24	273	BLK	REMOTE START 11-	SW5 PIN 2
12	273	ORG	REMOTE START 12+	SW6 PIN 1
25	273	RED	REMOTE START 12-	SW6 PIN 2

J36 DB-9 RELAY/MUTE FEMALE CONNECTIONS

10	266	RED	RELAY N.O.	P/J15 PIN 4
11	266	GRN	RELAY N.C.	P/J15 PIN 3
23	266	WHT	RELAY COMMON	P/J15 PIN 2
3	266	BLK	X	P/J15 PIN 1

MUTE CONNECTIONS

12	267	RED	MUTE 1	P/J4 PIN 1
13	267	GRN	MUTE 2	P/J4 PIN 2
NC	267	SHIELD		P/J4 PIN 3
24	267	BLK	MUTE 3	P/J4 PIN 4
25	267	WHT	MUTE 4	P/J4 PIN 5

MINI-MIX 12A CABLING RUN LIST
 CONTD.

MICROPHONE CONNECTORS

MIC. 1 CONNECTOR (MJ1)

PIN	#	COLOR	FUNCTION	TO
3	285	RED	MIC. 1 +	P/J13 PIN 2
2	285	BLK	MIC. 1 -	P/J13 PIN 3
1	285	SHIELD	IC. 1 GND	P/J13 PIN 1
G	285	GREEN	MIC. 1 SHELL	P/J13 PIN 4

MIC. 2 CONNECTOR (MJ2)

PIN	#	COLOR	FUNCTION	TO
3	284	RED	MIC. 2 +	P/J14 PIN 2
2	284	BLK	MIC. 2 -	P/J14 PIN 3
1	284	SHIELD	MIC. 2 GND	P/J14 PIN 1
G	284	GREEN	MIC. 2 SHELL	P/J14 PIN 4

MINI-MIX 12A CABLING RUN LIST
 CONTD.

CUE GAIN CONTROL

PIN	#	COLOR	FUNCTION	TO
1	274	RED	CUE GAIN INPUT	P/J16 PIN 4
2	274	GRN	CUE GAIN OUTPUT	P/J16 PIN 3
3	274	BLK	CUE GAIN COMMON	P/J16 PIN 2
NC	274	SHIELD	SHIELD	P/J16 PIN 4

CUE SPEAKER/OUTPUT JACK WIRING
 CUE JACK

PIN	#	COLOR	FUNCTION	TO
1	287	RED	CUE AMP OUTPUT	P/J18 PIN 1
1	287	BLK	CUE AMP OUTPUT	P/J18 PIN 2
2	X	ORG	CUE SPEAKER+	SPKR 1
3	X	WHT/ORG	CUE SPEAKER-	SPKR 2
3	287	GRN	CUE AMP GND	P/J18 PIN 4
NC	287	SHIELD	SHIELD	P/J18 PIN 5

HEADPHONE JACK WIRING
 HJ2 (NEAREST CHANNEL 12)

PIN	#	COLOR	FUNCTION	TO
1	288	RED	LEFT HEADPHONE	P/J7 PIN 2
2	288	GRN	RIGHT HEADPHONE	P/J17 PIN 1
3	288	BLK	LEFT GND	P/J17 PIN 3
3	288	WHT	RIGHT GND	P/J17 PIN 4

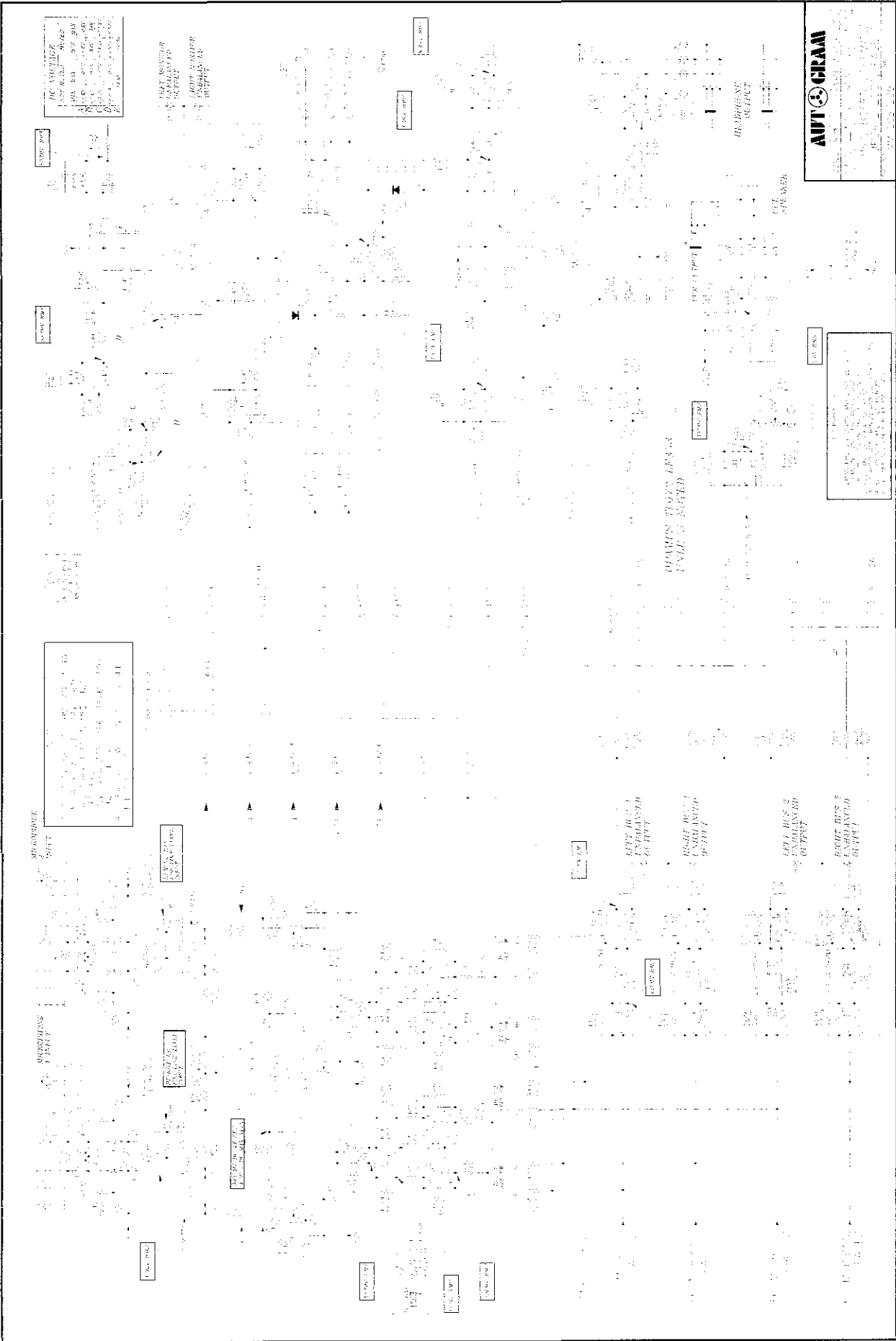
JUMPER TO HJ1 NEAREST CHANNEL 1

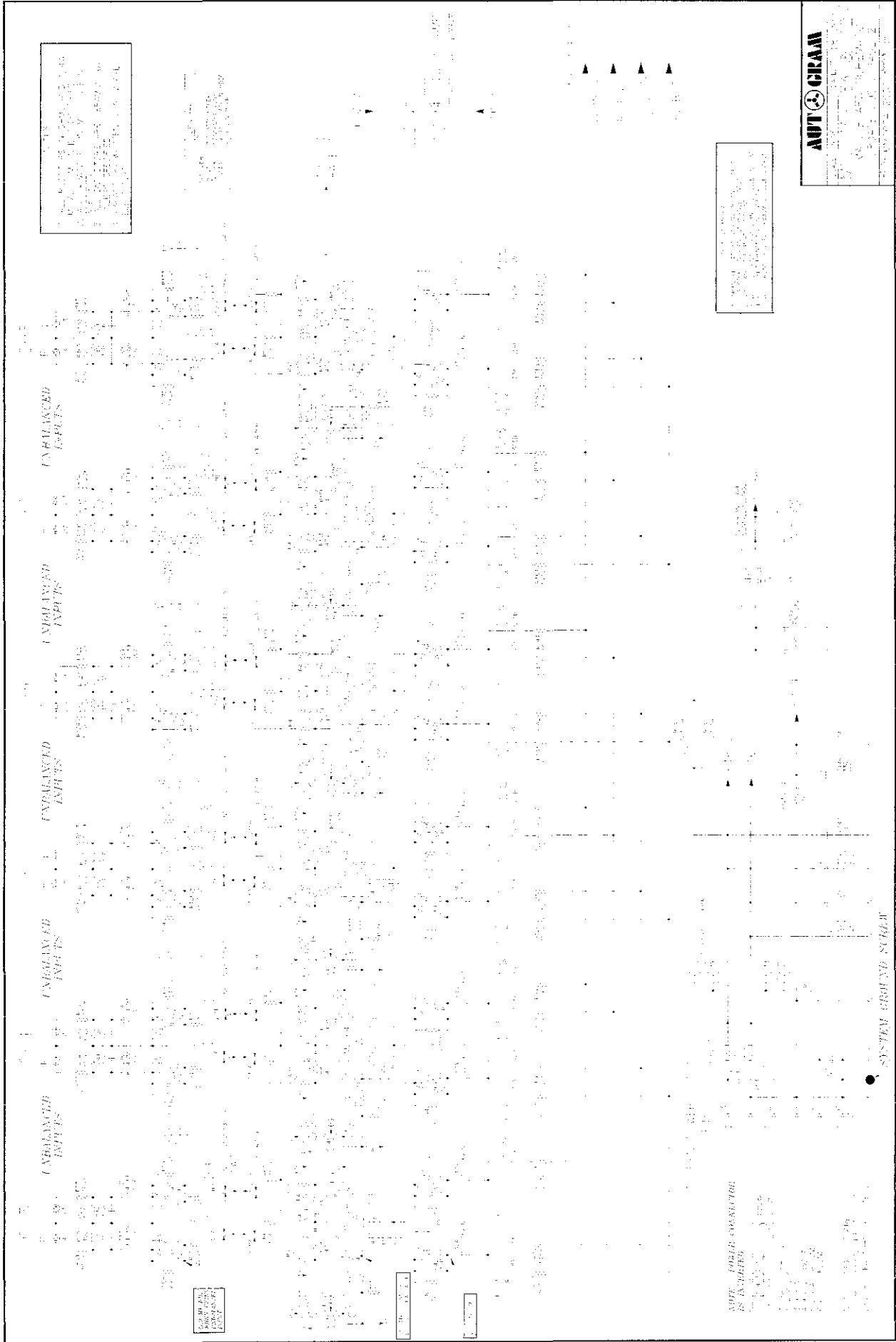
HJ1

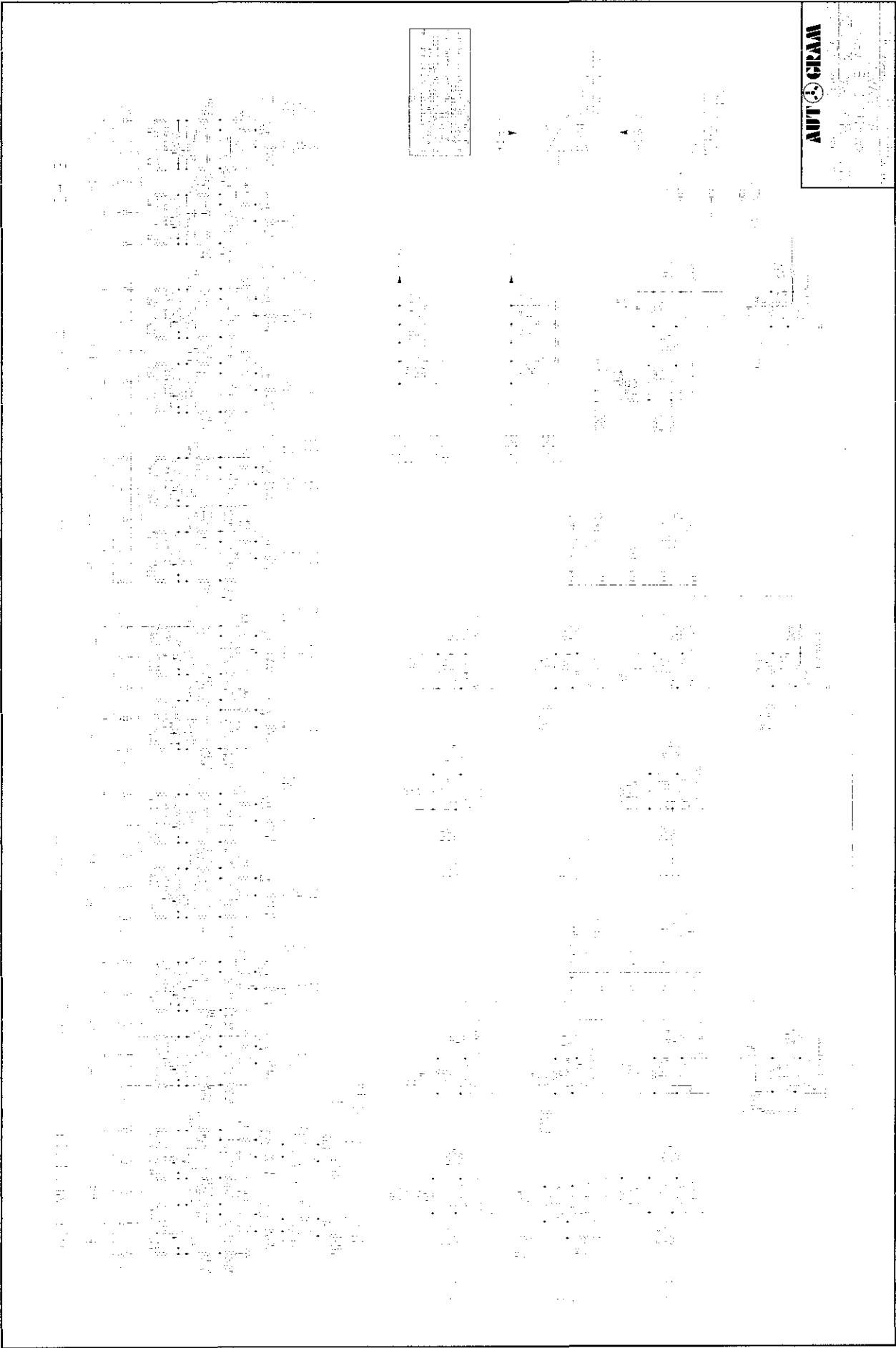
PIN	#	COLOR	FUNCTION	TO
1	289	RED	LEFT HEADPHONE	HJ2 PIN 1
2	289	GRN	RIGHT HEADPHONE	HJ2 PIN 2
3	289	BLK	LEFT GND	HJ2 PIN 3
3	289	WHT	RIGHT GND	HJ2 PIN 3

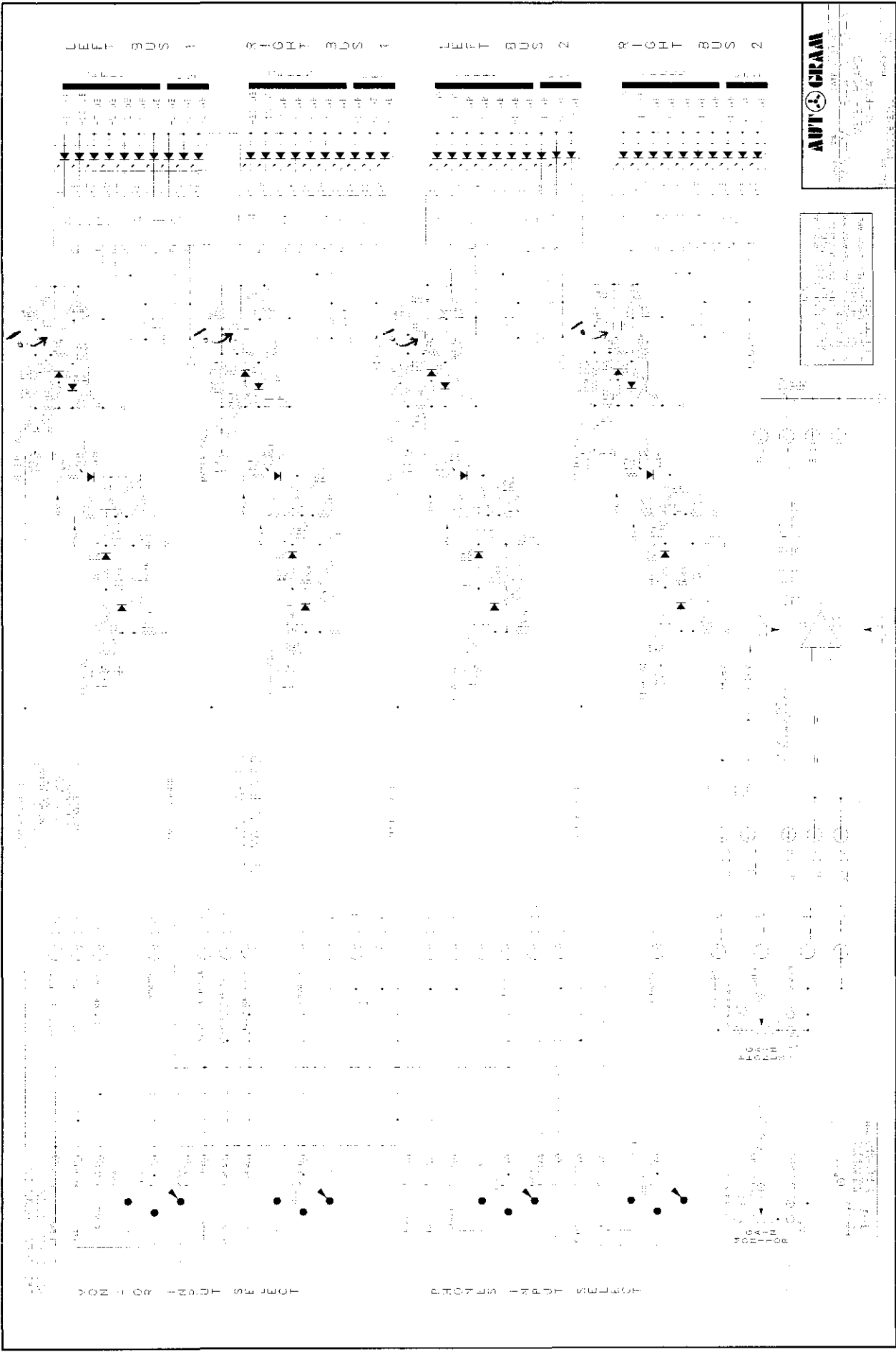
LIST OF DRAWINGS

#1	MM1003	MINI-MIX 8A & 12A MAIN BOARD SCHEMATIC, PAGE 1
#2	MM1004	MINI-MIX 8A & 12A MAIN BOARD SCHEMATIC, PAGE 2
#3	MM1005	MINI-MIX 8A & 12A BALANCED BOARD SCHEMATIC
#4	MM1006	MINI-MIX 8A & 12A METER BOARD SCHEMATIC
#5	MM1008	MINI-MIX 8A & 12A POWER SUPPLY SCHEMATIC
#6	MM1021	MINI-MIX 8A & 12A PC BOARD PARTS LOCATION MAIN BOARD, BALANCED BOARD, METER BOARD
#7	MM1201	MINI-MIX 12A MAIN EXTENSION BOARD SCHEMATIC
#8	MM1202	MINI-MIX 12A BALANCED EXTENSION AND MULTILINE BOARDS SCHEMATIC
#9	MM1204	MINI-MIX 12A PC BOARD PARTS LOCATION MAIN BOARD EXT., BALANCED BOARD EXT., MULTILINE BOARD



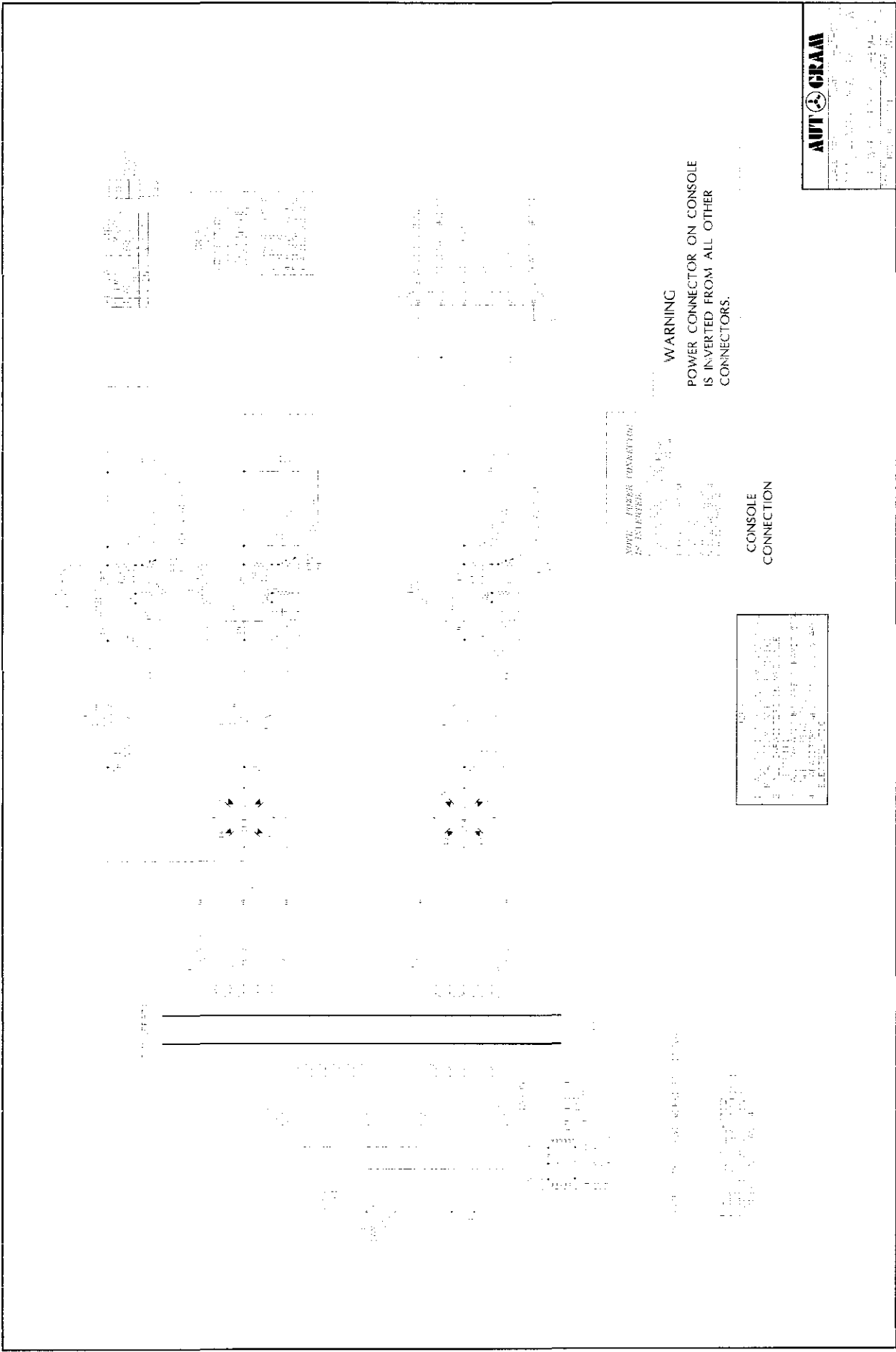




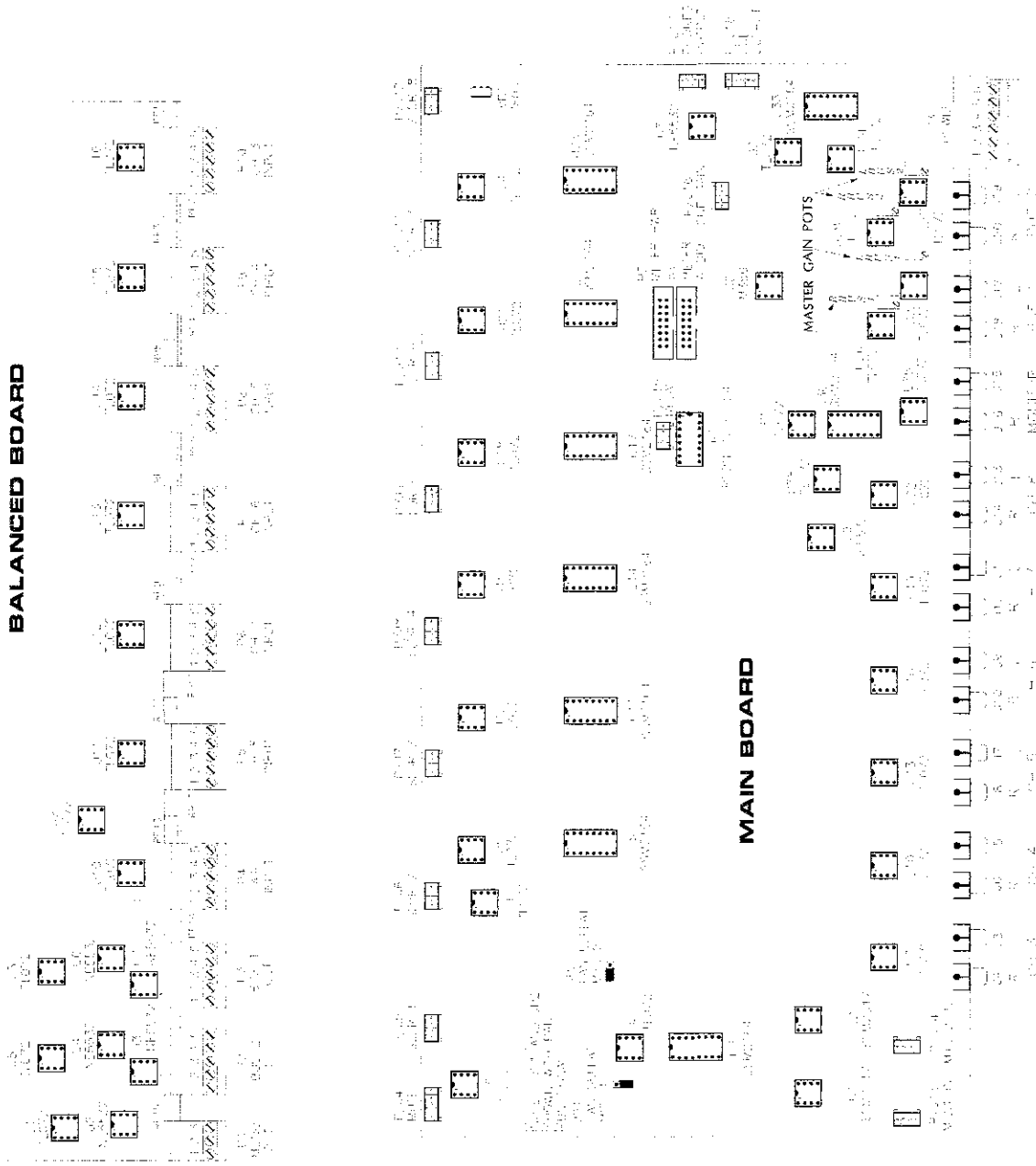


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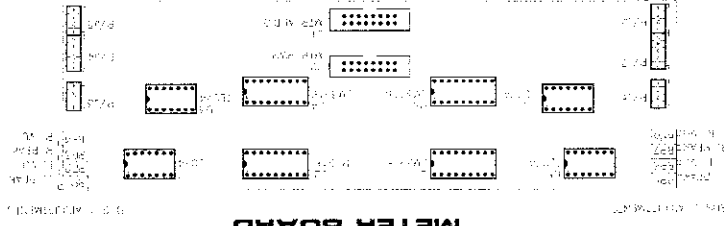
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BALANCED BOARD

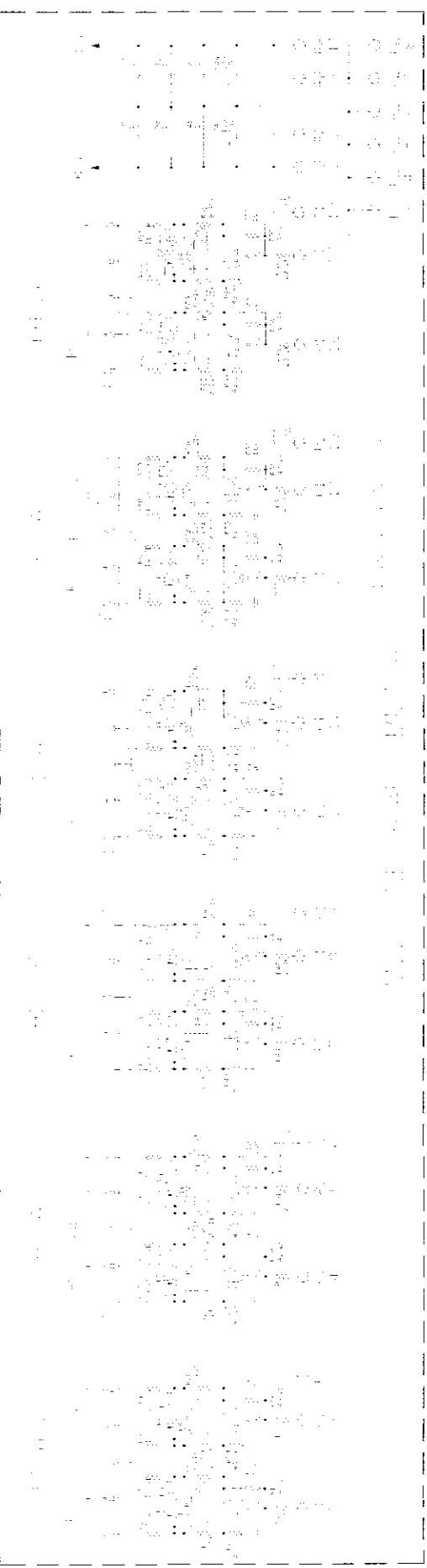
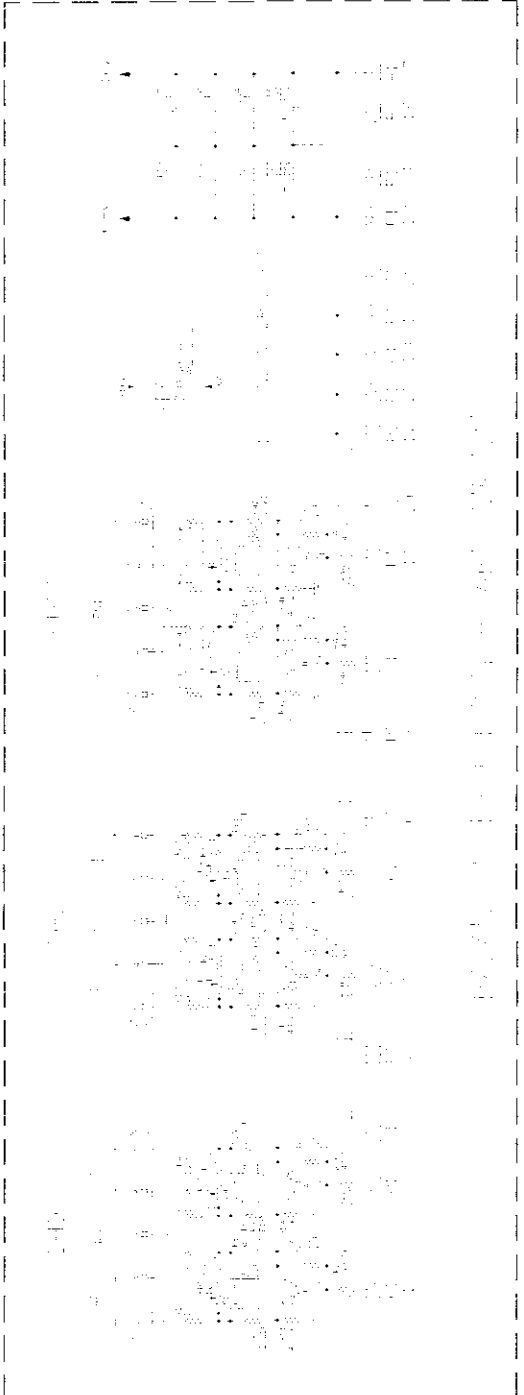
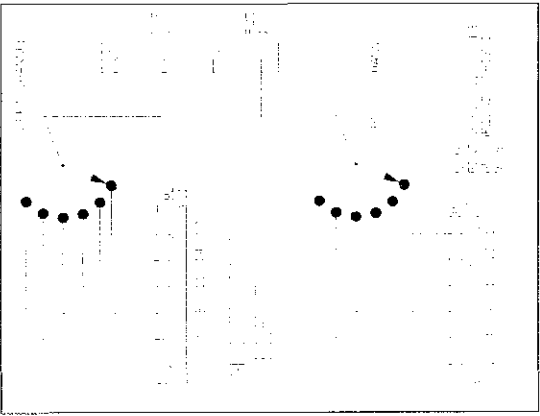


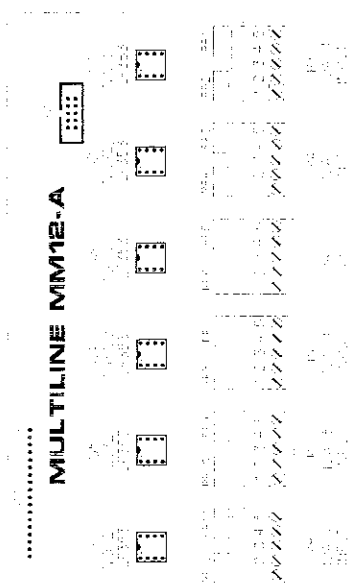
METER BOARD



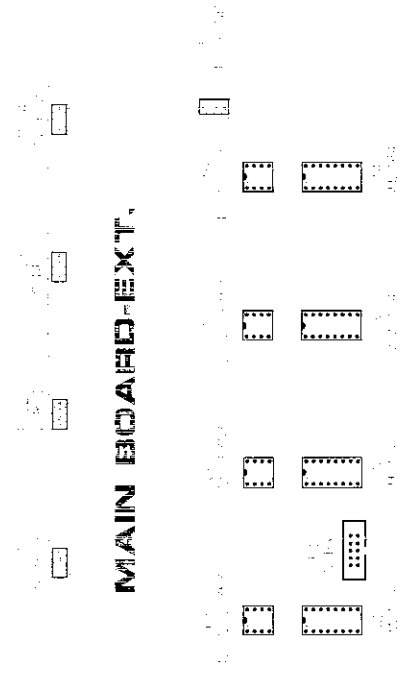
AUTOCORAM

100% QUALITY
100% SERVICE
100% SUPPORT
100% DELIVERY





MAIN BOARD-EXT.



BALANCED BOARD-EXT.



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