

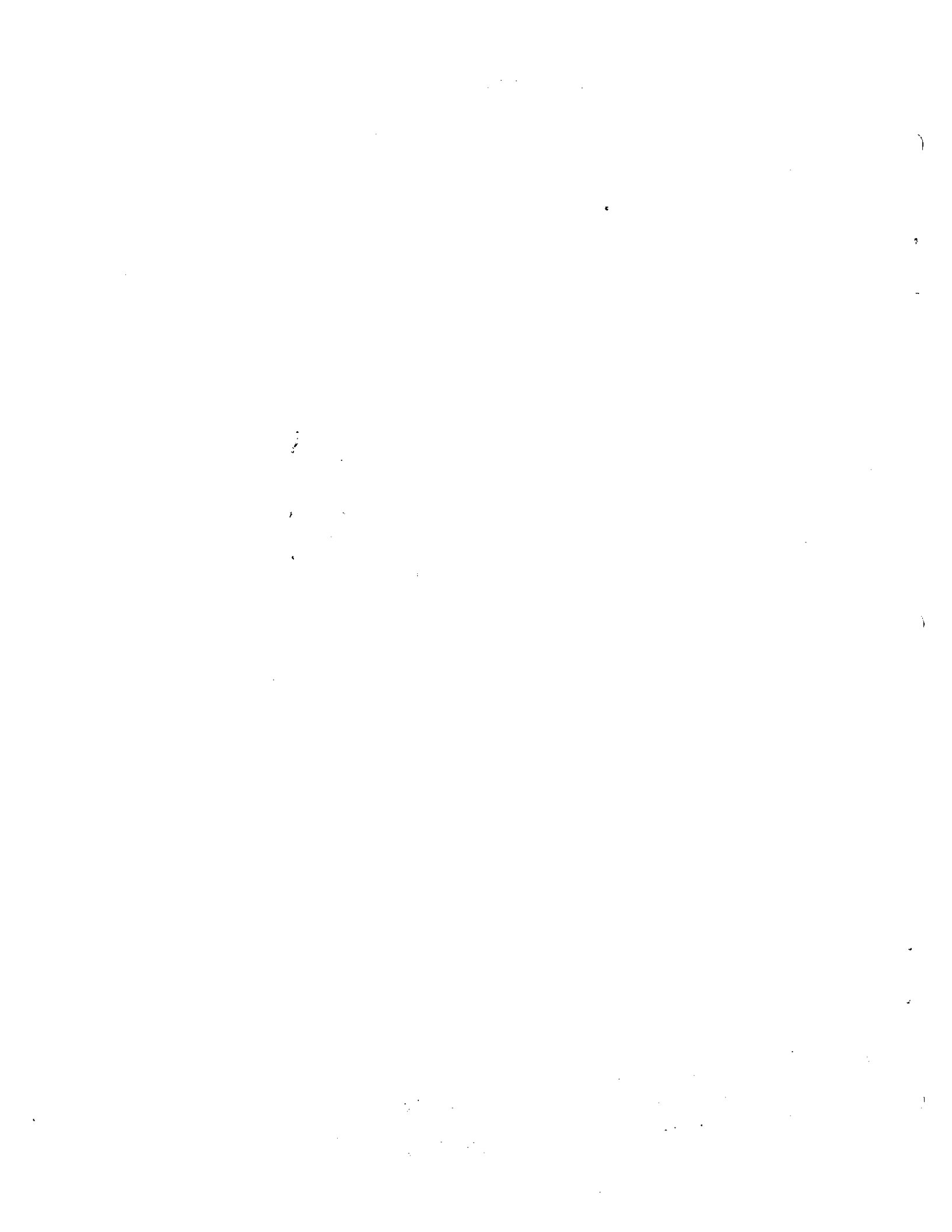
audio~metrics

mic/line amplifier



RADIO SYSTEMS
DESIGN &
MANUFACTURING

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INTRODUCTION

The MLA-1 is a compact and versatile mic/line amplifier. The unit will accept 2 mic or hi level inputs and incorporates up to 60 db of amplification and active balancing circuitry to provide line level, balanced outputs. A switch combines the 2 inputs for mono-mixer applications.

APPLICATIONS

Mic pre-amp (inputs-mic level / mode-stereo)

The rear XLR connectors provide a balanced, low impedance mic input. The output may be applied directly to a phone line for remote applications or to a line level console input to convert it to mic level.

Buffer amp (inputs-line level / mode-stereo)

Unbalanced or balanced signals may be connected to the rear barrier strip input screws. This application is useful in adapting consumer equipment to balanced, broadcast input level standards.

Line Amp (inputs-line level / mode-stereo)

Balanced or unbalanced signals may be given up to a 20 db gain boost by routing through the MLA-1.

This application is especially useful when signals must be routed through long Telco lines.

Mixer/Amp (inputs-mic or line / mode-mono)

Two mic, two line or a mic and line level signal may be mixed together by activating the front panel switch. In this mode, the front panel level controls act to set the overall operating level and input mix ratio. The same mono audio output is available at both sets of output terminals.

OPERATION

Controls

Power switch—activates the internal DC power supply & front panel LED.

Level pots—attenuate each channel output level and control the balance in the mono mode.

Mono Switch—combines both inputs so that each appears at both output channels.

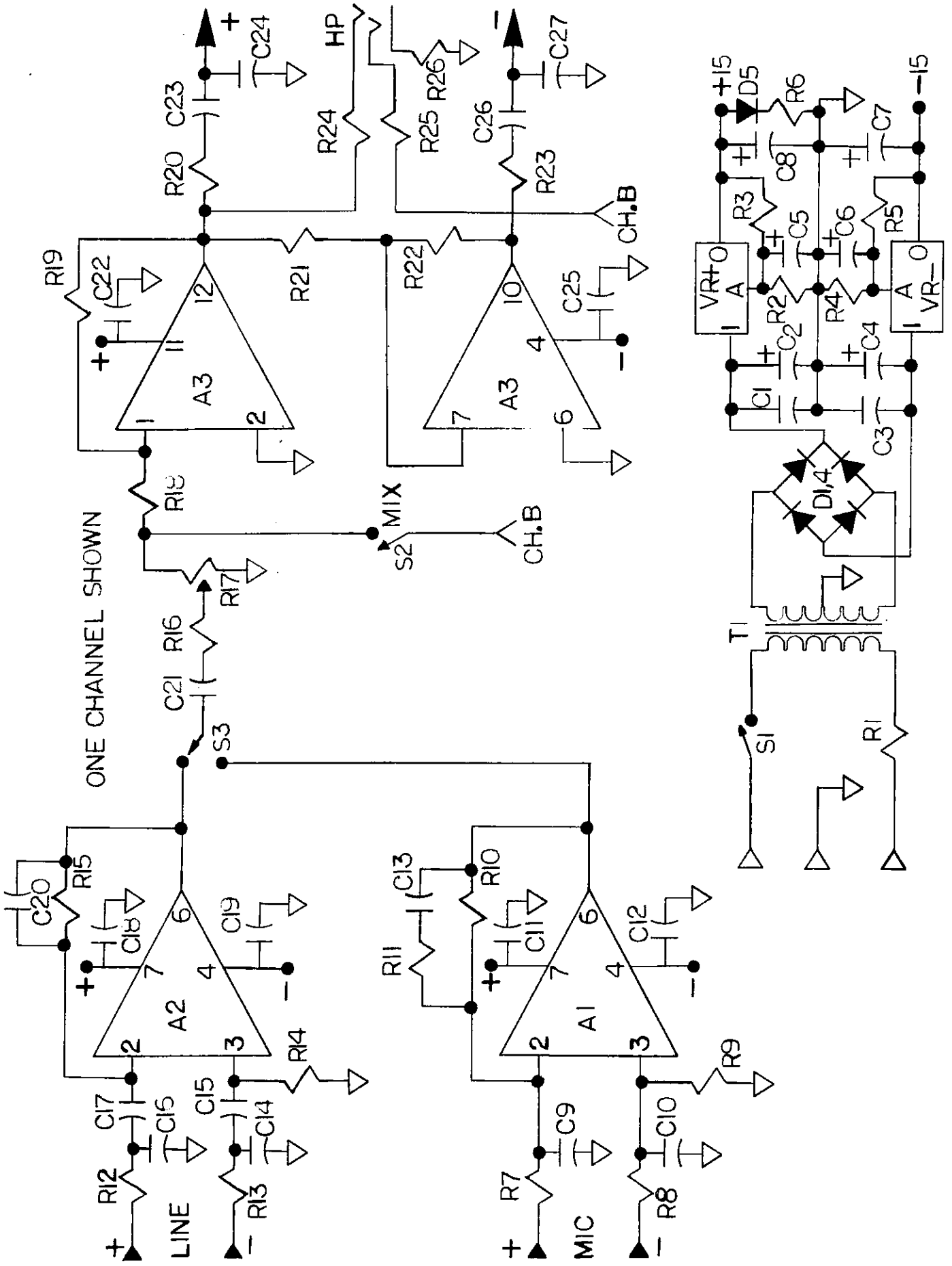
Headphone Jack—stereo phones may be inserted here to monitor the output(s). This output “follows” the mono switch and level controls.

Connections

Mics—mic level inputs should be applied to the XLR connectors. Pin 1 is ground, pin 2 high and pin 3 low.

Line inputs—For unbalanced connections, tie the negative terminal and ground terminals together.

Outputs—These actively balanced, low impedance output terminals may be connected to any broadcast equipment inputs. Unbalanced connections should be made between the plus and ground terminals; the negative terminals are left unused.



MLA SPECIFICATIONS

Mic Input	— 400 ohms balanced Nom. level 2.5 mv Max. input 80 mv
Line Input	— 40K ohms balanced Nom. level -10 dbm Max. input +20 dbm
Output	— 200 ohms active balanced Nom. level +8 dbm Max. output +25 dbm
Distortion	— T.H.D. .03% max. IM. .03% max.
Noise	— Mic - 75 db below 2.5 mv ref. 20-20 kHz 150 ohms Line - 80 db below -10 dbm ref. 20-20 kHz 600 ohms
Slew Rate	— 13V/micro sec.
Common Mode Rej.	— 60 db @ 60Hz
Freq. Response	— $\pm .2$ db 20-20 kHz
Gain	— Mic. 60 db max. Line 20 db max.

