

ARCHITECT'S & ENGINEER'S SPECIFICATION

The audio (Mixer, Distribution Amplifier, Etc.) shall be constructed as a single printed circuit board assembly designed to mount in a nonconductive rigid PVC extrusion, requiring no more than 3.500" of vertical rack space. The (Mixer, Distribution Amplifier, Etc.) shall have a UL approved wall mount power supply.

The (Mixer, Distribution Amplifier, Etc.) shall have a built-in fuse, which disconnects the unit from the power supply, in the event of an over-ampage condition. The unit shall have on-board power rectification, filtering, voltage regulation, and "POWER ON" indicator. The unit shall have provision for ground lift via push-on jumper assembly.

The audio (Mixer, Distribution Amplifier, Etc.) shall have gain adjustment via trimpots. All operational amplifiers used on the unit shall be socketed, to allow replacement or updating of circuitry.

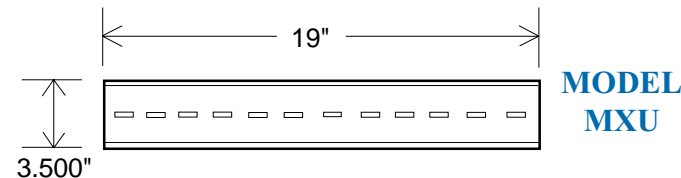
The audio (Mixer, Distribution Amplifier, Etc.) shall be Protech Audio Corporation Model - MX401 (1 x 4 Line Level), MX402 (2 x 3 Line Level), MX403 (3 x 2 Line Level), MX404 (4 x 1 Line Level), MX405 (1 x 4 Mic In, Line Out), MX407 (4 x 1, 2 Mic, 2 Line In, Line Out), MX408 (4 x 1, 3 Mic, 1 Line In, Line Out), MX409 (4 x 1, Mic In, Line Out), MX410 Mixer/Power Amplifier, Model MX411 Audio Controlled Relay, Model MX412 Dual Channel Line Amplifier, MX 413 Dual Channel Microphone Preamp, MX414 Remote Controlled VCA/Mixer

SPECIFICATIONS, QUICKTRACK PRODUCTS

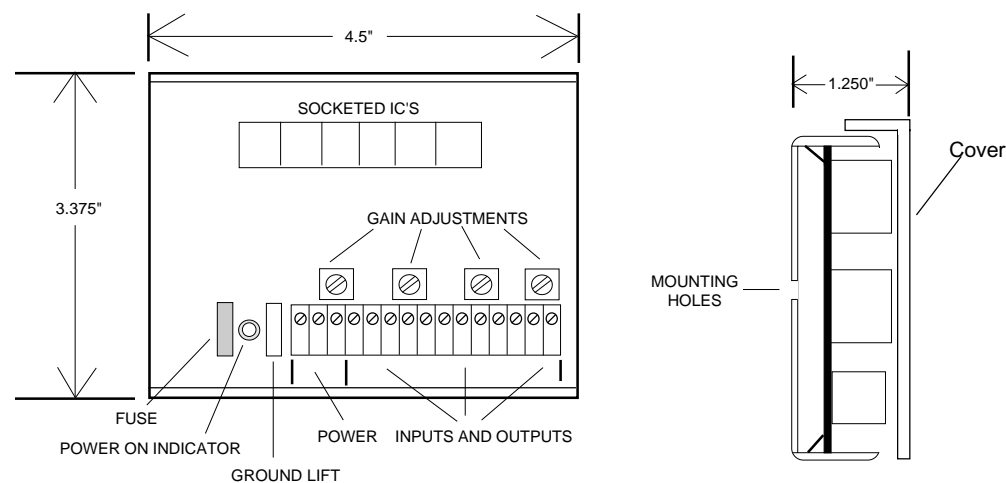
Gain, Mic Input.....	55dB
Gain, Line Input.....	±15dB Into 15K Load, 10dB Into 600 Ohm Load
Maximum Input Level, Mic Input.....	-10dB
Maximum Input Level, Line Level.....	+18dB
Input Impedance, Mic Input.....	1000 Ohms, Nominal
Input Impedance, Line Input.....	15K Ohms, Nominal
Maximum Output Level.....	+22dBv
Distortion + N.....	0.1% Maximum @ Rated Output, 20Hz To 20KHz
Noise.....	78dB Below +4dBv Out
Frequency Response.....	20Hz To 20KHz, ±0.1dB
Operating Temperature.....	0 To +70 Degrees C
Power Requirement.....	0.350 Amps/16VAC
Dimensions.....	3.375"H x 4.5"W x 1"D
Shipping Weight.....	Approx. 1 lb.

ACCESSORIES

The MXU mounting extrusion is 19 inches in length, and is designed to allow mounting of up to 4 QUICKTRACK products. The 19 inch length is based on the standard mounting dimension for audio rack rails. The MXU is available in other lengths. Contact the factory for additional information.



ALL QUICKTRACK PRODUCTS USE CONSISTENT GROUNDING SCHEMES AND PACKAGING



QUICKTRACK AUDIO PRODUCTS®



- Mic Preamps
- Line Amps
- Mic Mixers
- Line Mixers
- Distribution Amps
- Mixer/DAs
- Mixer/Power Amps
- Mixer/ACR
- Remote Controls

QUICKTRACK AUDIO PRODUCTS

The QUICKTRACK audio products from Protech Audio are designed to provide professional audio performance in a cost-effective utility package. Each of the new products is designed with features required in most audio applications.

There are 13 models in the new QUICKTRACK audio product group. There are 4 mixers, 2 distribution amplifiers, 2 mixer/distribution amplifiers, a mixer/power amplifier, an audio controlled relay with built-in mixer, a dual channel microphone preamplifier, a dual channel line amplifier, and a remote controlled VCA/Mixer. The Quicktrack products may be used to mix and distribute line level signals, microphone level signals or both. Block diagrams of each product are shown on pages 2 and 3.

Each of the 13 models incorporates electronically balanced inputs and outputs, which may be used in either balanced or unbalanced configurations. The gain for most inputs and outputs is individually adjustable. The only exception is the Model MX410, which has 4 unbalanced inputs for CD and tape players, plus a balanced input for paging, to a power amplifier output. On this unit, the levels are matched thru two level controls.

The circuitry used in all sections of each model, is derived from years of experience in designing equipment for professional audio contractors. All units have socketed IC's, to facilitate servicing, should it become necessary. Every unit has it's own built-in power supply section, including rectification and filter circuit, plug-in fuse and power "ON" indicator. Wall mount, UL recognized, AC transformers supply power for up to 4 Quicktrack modules.

The circuit grounding architecture used in the QUICKTRACK units is based on industry standards, and does not change from model to model. The ground circuit even includes a push-on ground lift jumper for increased versatility.

The unique mounting system employed in the QUICKTRACK products allows for up to a 50% reduction in mounting time, and a 30% reduction wiring time, while still providing professional performance. Each module comes complete with a 4.5" length of extrusion. To facilitate mounting, 19" lengths are available.

For additional information, contact:

SALES/ENGINEERING

www.protechaudio.com

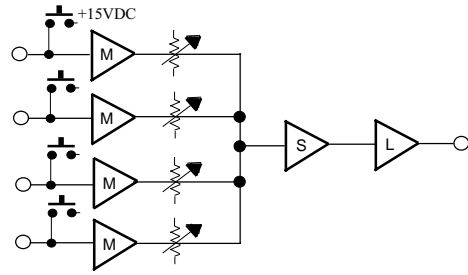
PROTECH®

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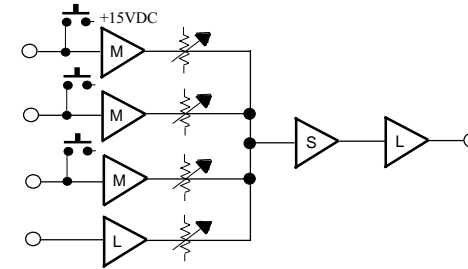
Engineering Data 1/06

**MODEL
MX409**



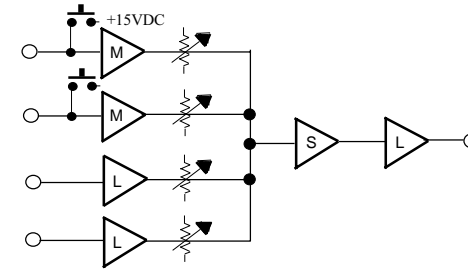
The Model MX409 has four microphone inputs, mixed to a common line output. Each microphone input incorporates a 15 volt phantom power circuit, which is activated by a push-on jumper. Each input has adjustable gain. All inputs and the output are electronically balanced. The output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.

**MODEL
MX408**



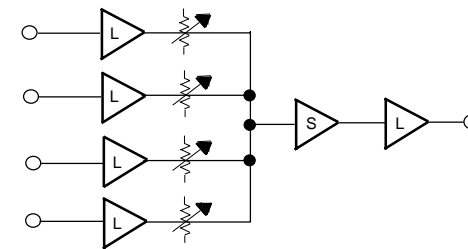
The Model MX408 has three microphone inputs and one line input, mixed to a common line output. Each microphone input incorporates a 15 volt phantom power circuit, which is activated by a push-on jumper. Each input has adjustable gain. All inputs and the output are electronically balanced. The line in and the output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.

**MODEL
MX407**



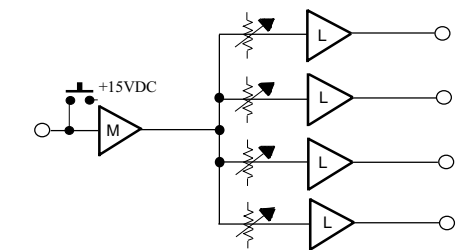
The Model MX407 has two microphone inputs and two line inputs, mixed to a common line output. Each microphone input incorporates a 15 volt phantom power circuit, which is activated by a push-on jumper. Each input has adjustable gain. All inputs and the output are electronically balanced. Both line inputs and the output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.

**MODEL
MX404**



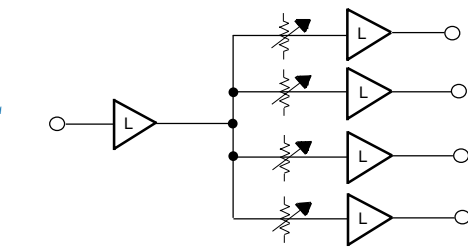
The Model MX404 has four line inputs, mixed to a common line output. Each input has adjustable gain. All inputs and the output are electronically balanced. Each input and the output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.

**MODEL
MX405**



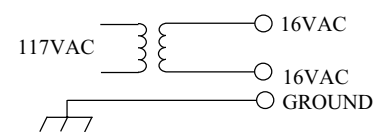
The Model MX405 has one microphone input and four line outputs. The microphone input incorporates a 15 volt phantom power circuit, which is activated by a push-on jumper. The input and three outputs have adjustable gain. All inputs and the output are electronically balanced. The outputs may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.

**MODEL
MX401**



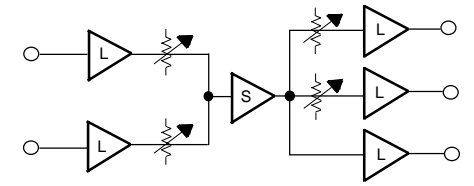
The Model MX401 has one line input, and four line outputs. The input and three outputs have adjustable gain. All inputs and the output are electronically balanced. The input and all outputs may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.

**POWER
SUPPLIES**



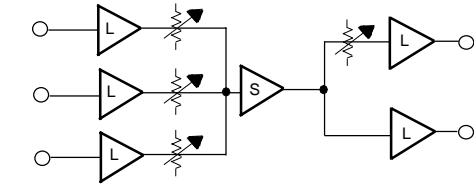
The MXT and MXT-1 wall mount transformers supply low voltage AC to all QUICKTRACK models. One MXT will power up to 2 QUICKTRACK units. One MXT-1 will power 4 units, or 1 MX410 Power Amp unit. The MXT's allow earth ground to be brought directly to the QUICKTRACK units, providing a stable ground environment. The MXT and MXT-1 are UL recognized.

The Model MX402 has two line inputs, mixed to a common signal, and distributed to three line outputs. Both inputs and two outputs have adjustable gain. All inputs and the output are electronically balanced. Each input and output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.



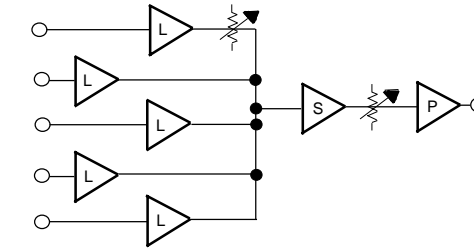
**MODEL
MX402**

The Model MX403 has three line inputs, mixed to a common signal, and distributed to two line outputs. Each input and one output has adjustable gain. All inputs and the output are electronically balanced. Each input and output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.



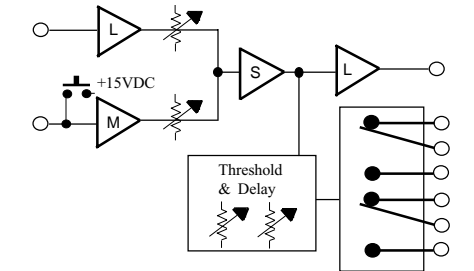
**MODEL
MX403**

The Model MX410 has 4 unbalanced line inputs, for CD and tape players, and 1 balanced input for paging. The balanced input and power amplifier output have adjustable gain. The unit is designed for low wattage (7 watts) listening systems. The output may be used to drive 4 to 8 ohm loads. Requires low voltage AC power (See MXT-1). 4.5" mounting extrusion supplied.



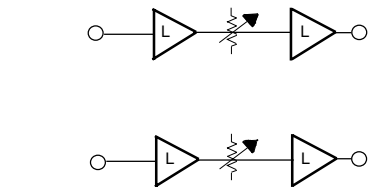
**MODEL
MX410**

The Model MX411 has one line input, one microphone input, and a line output. The inputs have adjustable gain. Both inputs may control relay activation. Adjustable threshold and dropout delay. Both inputs, and the output are electronically balanced. The line input and output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.



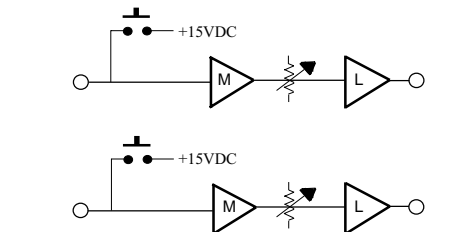
**MODEL
MX411**

The Model MX412 is a dual channel line amplifier. It is designed for impedance and level matching. Both channels have adjustable gain. Inputs and outputs are electronically balanced. Each input and output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.



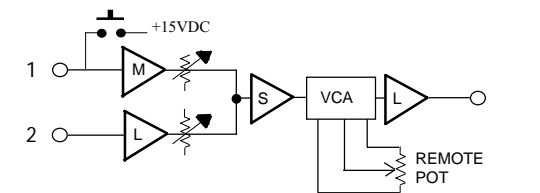
**MODEL
MX412**

The Model MX413 is a dual channel microphone preamplifier. Each input has individual phantom power capability. Each channel has a separate gain control. All inputs and the output are electronically balanced. The outputs may be used in either balanced or unbalanced configuration. Requires low voltage AC power (See MXT). 4.5" mounting extrusion supplied.



**MODEL
MX413**

The Model MX414 is a remote control unit. It has one mic input, and one line input, mixed to a common output. Both inputs have adjustable gain. The microphone input has selectable 15 volt phantom power. An on-board trimpot adjusts the range of the remote pot. Both inputs and the output are electronically balanced. The output may be used in either a balanced or unbalanced configuration. Requires low voltage AC power (See MXT).



**MODEL
MX414**