

The 600 Series Mixer/Line Amplifiers are designed for use in professional audio applications. Each model is designed to accept multiple audio signals in, and combine the individual signals into one common output signal.

Typical applications are public address announcements with background music or different paging stations, program material that must be combined from different studios, headphone listening systems where the user can select different program material must be fed to the recorders at the same time. The actual application of the Mixer/Line Amplifiers is found in buildings such as airports, factories, courthouses, casinos, convention centers, libraries, racetracks, training systems, and corporate boardrooms, to mention just a few.

The 2000-600 Series Mixer/Line Amplifier are designed to incorporate a combination of features that will allow the units to deliver maximum performance and reliability. Each circuit is designed with a minimum of components, to reduce the possibility of failure, while still maintaining performance and feature criteria.

Each one of the 2000-600 Series Mixer/Line Amplifiers is designed with the same combination of features, with the

exception of the link capabiltiy. The number of inputs is the only variable between models.

The gain structure of the 2000-600 Mixer/Line Amplifiers allows the gain of each input section, and the output section to be adjusted on an individual basis. The units are shipped from the factory adjusted for unity gain, with respect to the input level. If a higher output level is required from the unit, the output gain should be adjusted. If an unusually low input level is present, and more gain is required for that input channel, each input section has an additional 15dB of adjustable gain. The trimpots used to adjust the input and output levels are mounted on the module printed circuit board. A drawing showing the location and function of each gain trimpot is provided later in this manual.

Since the 2000-600 Mixer/Line Amplifiers are designed to be used in high quality installations, the input sections and the output section on each unit are individually isolated using the highest quality audio transformers.

These products are designed to provide the user with high quality audio, for years of uninterrupted service.

## INSTALLATION

The 2000-600 Series Audio Mixer/Preamplifiers are designed to be mounted in the Model 2000-CH Card Frame .

The actual steps necessary for installation of the Model 2000-600 Mixer/Line Amplifier cards, are comparable to those necessary for any of the 600 series cards. They are as follows;

- 1- Mount the card frame in an appropriate EIA 19" width rack, using 4 screws of sufficient strength to provide secure mounting.
- 2- Select the card slot to be used for the distribution amplifier card. Slots 1 to 8, starting with slot 1 on the left side of the card frame, as viewed from the front of the card frame, will accept any of the four models of distribution amplifier card.
- 3- Terminate all audio input and output connections, using the card connection drawing on the facing page. Double conductor shielded cable is recommended for all audio connections.

4- Unpack each individual card, inspect for shipping damage, and assuming none is found, slide the card <u>half-way</u> into the appropriate slot. After all cards have been installed <u>half-way</u> into the card frame, plug in one card at a time and turn on the power supply. Make sure no unusual loading is indicated at the power supply. If loading is noticed, turn off the power supply, unplug the card and recheck terminations. If no loading is noticed, continue inserting each card in the card frame, checking power supply loading as each card is plugged in. When all the cards have been plugged in, the installation is complete, and all that remains is the alignment.

## ALIGNMENT

Each 2000-600 Series Mixer/Line Amplifier card has been shipped from the factory aligned for unity gain. This alignment optimizes headroom. If additional gain is required in the mixer/Line Amplifiers, the following alignment procedure is recommended;

1 - Remove the Mixer/Line Amplifier from the card slot, plug in the Model 516 Extender Card, and plug the card into the extender card connector.

2-Apply a signal representative of the actual signal level to be used, to the #1 input.

3 - While monitoring the output channel, turn the input gain trimpot clockwise, until the output signal reaches the desired level.

4 - Repeat step #3 for each input on your Mixer/Line Amplifier

This completes the installation and alignment of your 2000-600 Series Mixer/Line Amplifier. The mixer may be expected to deliver years of uninterrupted service.

## Note #1 -

The alignment procedure outlined above will almost always provide the desired output level. However, when an unusually low input signal level is present, the installer may wish to use the additional gain available in the output gain stage.

## Note #2 -

The alignment procedures for 2000-600 Series Cards, differ from card type to card type. Therefore it is necessary to consult the alignment procedure for each type of card being installed, to properly align a card frame using different card types.

