INTEGRA III SYSTEM

MODELS COVERED
702-LL
702-ML
702-MM

Model 702-LL Shown

www.**protechaudio**.com

The Protech Audio Switchable Input Mixer cards are designed for use by audio professionals. Each unit is carefully designed and constructed to provide highly reliable, quiet switching of audio signals to an on-board output, and a link output. The unit may be used to control paging systems, provide signal routing in broadcast facilities, or sound system configuration in live venues.

All 3 models are configured as a two input mixer cards. Different input combinations (mic or line) are available as follows;
Model 702LL = 2 Line Inputs.
Model 702ML = 1 Mic Input, 1 Line Input.
Model 702MM = 2 Mic Inputs.
The Model 702 cards are linkable, allowing larger systems to be configured. By applying ground to the individual channel control pins, each input channel may be assigned to the on-board output, or the link out. The on-board output is balanced, transformer-isolated. The output is designed to drive 600-15K ohm loads.

The link output for each input channel has a separate switch from the on-board output switch. This feature allows the input channel signal to be assigned to the link output, or the on-board output, separately.
The gain of each input channel is adjustable, via on-board, or backplane mounted trimpots. For backplane mounted trimpots, simply add the suffix "BP" to the part number (see back page of this sheet for additional part number information).
As one of the INTEGRA III SYSTEM modules, the Model 702 Mixer cards may be mounted in any of the system enclosures manufactured by Protech Audio. The Model 858B Card Frame Package will allow up to 9 plug-in cards plus a plug-in power supply, in just 3.5" of vertical rack space. The Model 857B allows mounting of up to 10 cards in 3.5" of rack space, and requires an external power supply (Model 66708).
For additional information, or applications assistance, contact:

SALES-ENGINEERING

INSTALLATION

The Model 702 cards are designed to be mounted in the Models 857B or 858B Card Frame Assemblies. The Model 857B will accomodate up to 10 audio cards, using an external power supply (Model 66708), and the Model 858B will accomodate or up to 9 audio cards, and uses a plug-in power supply card The power supply card used in the Model 858B card frame assembly is designed to deliver 600ma of power to a card frame.

The actual steps necessary for installation of the Switchable Input Mixer cards, are comparable to those necessary for any of the Integra III System 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- A determination has been made as to which type of power supply will be used on your system. Follow the instructions for the type of power supply you will be installing.

EXTERNAL POWERED CARD FRAME Model 857B.
If an external power supply (Model 66708) is being used, terminate the supply connections to pins 1, 2, & 3 of the DC barrier connector, as shown in the card frame layout drawing, and the Model 66708 Installation and Operation Manual. Turn on the power supply, and using a DC voltmeter, check for correct voltage and polarity at pins 1, 2, & 3 of the DC barrier connector.

INTERNALLY POWERED CARD FRAME Model 858B
Plug in the external power transformer, and connect to card frame. Plug in the powersupply card, , and check for proper illumination of both the positive and negative voltage LED's, on the front of the power supply 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. Output connections should be made using 22AWG wire or heavier.

4- Unpack each individual card, inspect for shipping damage, and assuming none is found, slide the card
half-way into the appropriate slot. After all cards have been installed half-way 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 Switchable Mixer card has been shipped from the factory aligned for unity gain on line inputs, and 45dB of gain on microphone inputs. This alignment level helps expedite setup. If additional adjustments are required, the following alignment procedure is recommended;

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

2- Ground the control pin for the channel being aligned, and while monitoring the output level, turn the channel trimpot until the desired level is achieved.
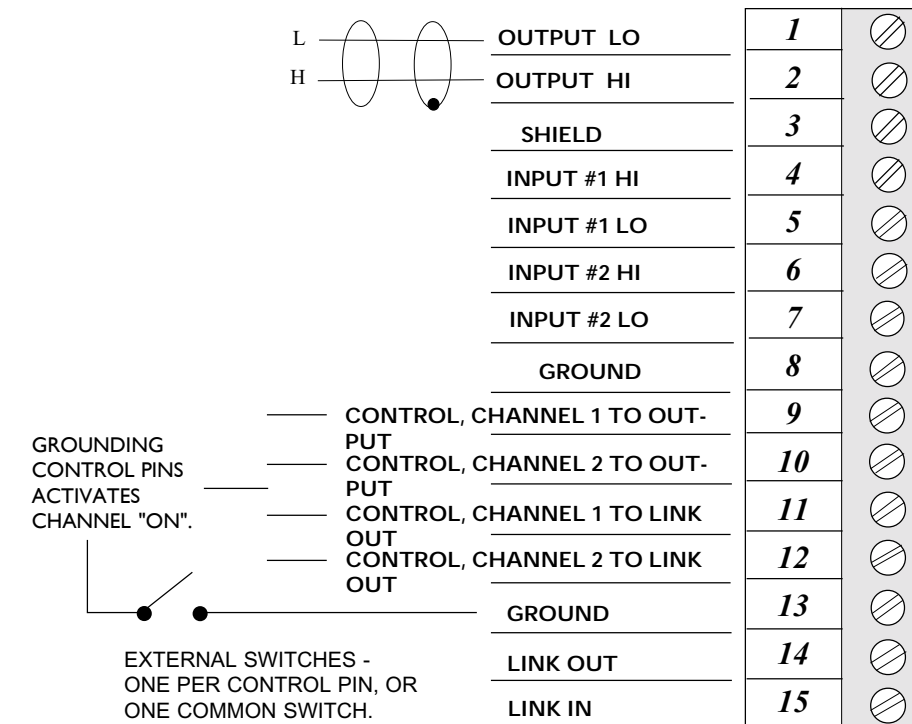
3- Repeat step #2 for each input in your system.

This completes the installation and alignment of your Switchable Input Mixer Cards. The mixers may be expected to deliver years of uninterrupted service.

Note #1-
The alignment procedures 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 fifferent card types.
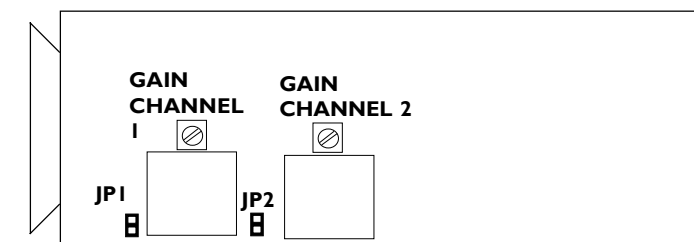

PROTECH AUDIO®

INTEGRA III SYSTEM
CONNECTOR & TRIMPOT DRAWING
MODELS 702LL, 702ML, 702MM

857B & 858B Backplane Connections

OUTPUT LO	1
OUTPUT HI	2
SHIELD	3
INPUT #1 HI	4
INPUT #1 LO	5
INPUT #2 HI	6
INPUT #2 LO	7
GROUND	8
CONTROL, CHANNEL 1 TO OUTPUT	9
CONTROL, CHANNEL 2 TO OUTPUT	10
CONTROL, CHANNEL 1 TO LINK OUT	11
CONTROL, CHANNEL 2 TO LINK OUT	12
GROUND	13
LINK OUT	14
LINK IN	15

GROUNDING CONTROL PINS ACTIVATES CHANNEL "ON".

EXTERNAL SWITCHES - ONE PER CONTROL PIN, OR ONE COMMON SWITCH.

Model 702LL = 2 line inputs.
Model 702ML = Channel 1 Line, Channel 2 Microphone
Model 702MM = 2 Microphone Inputs

GAIN CHANNEL 1   GAIN CHANNEL 2

JP1   JP2

JP1 & JP2 -
PHANTOM POWER JUMPERS ON MODELS 702ML (JP2) & 702MM (JP 1 & JP2).