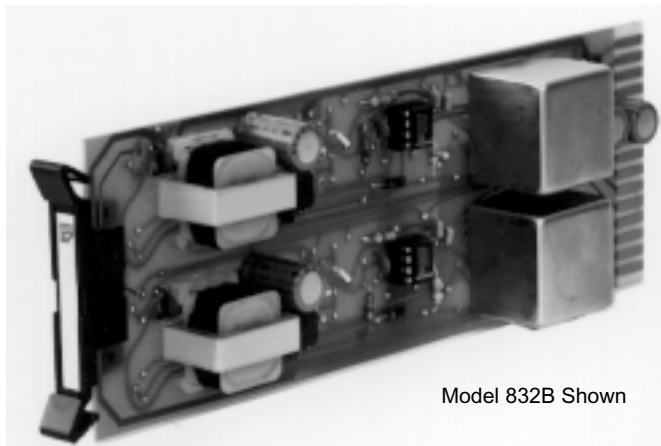


# LIMITER/MICROPHONE PREAMPLIFIERS

## LIMITER/LINE AMPLIFIERS

- Single or Dual Channel
- Adjustable Gain and Threshold
- Choice of Input Types
- Independent Circuits
- Transformer Isolated Inputs and Outputs



Model 832B Shown

[www.protechaudio.com](http://www.protechaudio.com)

LIMITER/MICROPHONE PREAMPS & LINE AMPLIFIERS

The INTEGRA III SYSTEMS Limiter/Microphone Preamplifiers and Limiter/Line Amplifiers are designed for professional audio applications.

There are six different models, 3 single channel models, and 3 dual channel models. Dual channel cards have two identical channels constructed on one printed circuit board assembly.

The INTEGRA III SYSTEM Limiter/Microphone Preamplifiers come in two different models, a single channel model, and a dual channel model. Both models have low impedance transformer isolated inputs. A push-on jumper supplies 15VDC phantom power on each channel. The gain, and limiter level, of each model is adjustable, via trimpots mounted on the on the backplane assembly. The output section on all models is balanced, transformer-isolated.

The INTEGRA III SYSTEM Limiter/Line Amplifiers offer four different models, 2 single channel versions, and 2 dual channel versions.

The input section of the line amplifiers is available in two different impedances. They are; 10K ohm balanced, transformer-isolated, and 600 ohm balanced, transformer-isolated. This allows the user to match the line amplifiers to a variety of professional audio equipment.

Again, the gain, and limiter level, of each model is adjustable, via trimpots mounted on the backplane assembly. Mounting the gain adjusting, and limiter threshold trimpots on the backplane allows the system gain settings to remain, even when an amplifier card is removed from a slot, and a spare unit is plugged into that slot.

The output section on all four models is balanced, transformer-isolated.

The alignment procedure of all units, is quite easy. Simply turn threshold trimpot, to the maximum position, adjust the gain of the channel, and readjust the threshold trimpot to the desired level. The channel is now completely aligned. The limiter circuit will automatically activate when the output level of the gain stage exceeds the preset threshold.

As modules of the INTEGRA III SYSTEM, the Limiter/Microphone Preamplifiers and Limiter/Line Amplifiers may be mounted in any of the system enclosures manufactured by Protech Audio.

For additional information or applications assistance contact:

**SALES ENGINEERING**

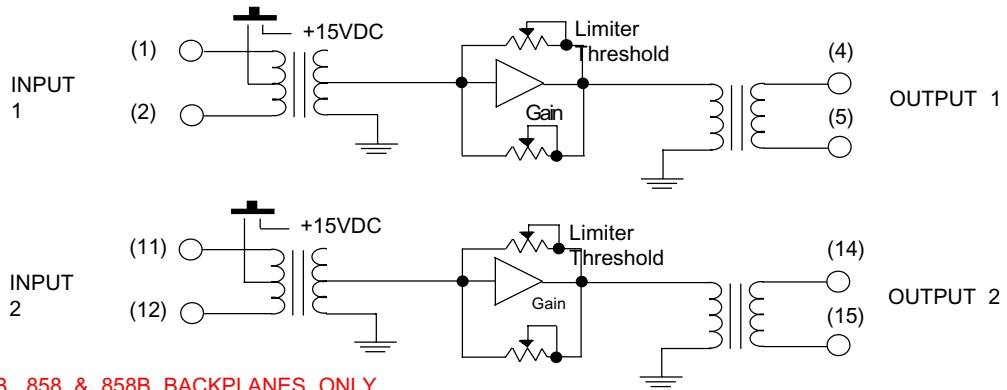
**PROTECH**<sup>®</sup>

Engineering Data 1/03

# LIMITER/MICROPHONE PREAMPLIFIERS & LINE AMPLIFIERS

## Block Diagram

Phantom Power  
Jumpers On Mic  
Input Units Only.



PIN NUMBERS FOR 857, 857B, 858 & 858B BACKPLANES ONLY.

## Specifications

MAXIMUM INPUT.....	Line Amps = +20dB, Mic preamp = -5dB
GAIN.....	Line Amp = -10dB To +20dB, Adjustable Mic Preamp = 17-56dB, Adjustable
THRESHOLD RANGE.....	Line Amp = -20 To +8dB, Preamp = -37 To +8dB
MAXIMUM OUTPUT.....	+20dBm, All Models
FREQUENCY RESPONSE.....	30Hz To 20KHz, +0dB, -1dB
DISTORTION.....	0.1%, Maximum
THD + NOISE.....	Mic Preamp = -74dB Below +4dBm, 50dB Gain Line Amp = -89dB
POWER REQUIREMENTS.....	30ma, ±15-18VDC
SIZE.....	2.5"H x 8.0"D x 1.1"W

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.

## Model Numbers & Descriptions

	MODEL NUMBER	SINGLE CHANNEL	DUAL CHANNEL	INPUT TYPE	
LIMITERS WITH MICROPHONE PREAMPS	MODEL 824B	X		150 OHM	
	MODEL 832B		X	150 OHM	
LIMITERS WITH LINE AMPLIFIERS	MODEL 822B	X		600 OHM	
	MODEL 823B	X		10K OHM	
	MODEL 830B		X	600 OHM	
	MODEL 831B		X	10K OHM	

## Architect's & Engineer's Specifications

The limiter/(line or pre) amplifier shall be constructed as a plug-in printed circuit board module. It shall be designed to allow up to 10 modules to fit in a rack mount card frame, requiring no more than 3.5 inches of vertical rack space. The (line or pre) amplifier shall be unpluggable from the front of the card frame, without the need to disconnect wires attached to the rear connector. Each (line or pre) amplifier module shall contain (one or two) input(s).

The input(s) shall be balanced, transformer-isolated. The gain and limiter threshold of each channel shall be independently adjustable via a trimpot mounted on the corresponding backplane assembly. The output(s) shall be balanced, transformer-isolated, capable of driving a 600 ohm-15K ohm line to +20dBm (Ref. 1 KHz). The (line or pre) amplifier shall be PROTECH AUDIO CORP. Model -822B, 823B, 824B, 830B, 831B, 832B

## Accessories

CARD FRAME PACKAGE.....Model 858B  
Includes Card Frame, Backplane, and Plug-In Power Supply Card. Allows mounting of up to 9 audio cards.

CARD FRAME PACKAGE.....Model 857B  
Includes Card Frame and Backplane Assembly. For use with external power supply Model 66708. Allows mounting of up to 10 audio cards.

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**AUTHORIZED DEALER**