# MODEL 882

# TONE CONTROL/ LINE AMPLIFIER



The Model 882 Tone Control Card is designed for use in professional audio applications. The Model 882 allows adjustment of the frequency response of the audio program, in order to increase intelligibility, and reduce unwanted reverbation effects.

The Model 882 is designed for systems including public address systems, sound systems, paging systems, boardroom systems, headphone listening systems, training systems, and intercom systems, The actual application of the 882 may be found in such buildings as Airports, Railway Stations, Office Buildings, Arenas, Power Plants, Corrections Facilities, Meeting Rooms, and Convention Centers.

The input stage of the Model 882 consists of a high quality bridging line transformer, followed by a op-amp buffer stage. The gain of the buffer stage is fixed at unity. The frequency adjusting stage has separate controls for the low frequency, and the high frequency. Both controls are capable of adjusting the frequency response  $\pm 10$ dB, for their respective frequency areas. The frequency adjustments are made via trimpots mounted on the front of the printed circuit board assembly. Trimpots adjusted for a 9:00 position will provide a flat frequency response.

The output section of the Model 882 consists of a lownoise op-amp gain stage, followed by a high quality audio line transformer. The gain of this stage is adjustable via a trimpot mounted on the corresponding backplane assembly, allowing insertion of a spare unit, without the need to readjust the gain.

The balanced input and output, combined with the adjustable gain stage, allow the Model 882 to function as a bridging line amplifier, as well as a tone control. This combination of features is very cost effective, particularly in large installation where many zones may require separate frequency response adjustments. With the 882 doing double service, as both a bridging line amp, and a tone control, substantial savings may be realized in both installation time, and equipment cost.

As one of the INTEGRA III SYSTEM audio cards, The Model 882, Tone Control, may be mounted in any of the system enclosures manufactured by Protech Audio. The Model 858B Card Frame Package allows mounting of up to 9 audio cards in just 3.5" of vertical rack space. The Model 857B Card Frame Package will allow mounting of up to 10 audio cards in the same rack space. For additional information or applications assistance contact:

#### SALES ENGINEERING



Engineering Data 1/03

## TONE CONTROL/LINE AMPLIFIER

#### **BLOCK DIAGRAM** Gain Trimpot Mounted Low Frequency Adjustment On Backplane Bridging Input (2) $(\Lambda \Lambda)$ Balanced Line С Output ₹ (1) () (3) **High Frequency** Adjustable Gain Adjustment Stage PIN NUMBERS FOR 857B & 858B BACKPLANES ONLY **SPECIFICATIONS** GAIN..... -10 To +20dB, Adjustable MAXIMUM INPUT LEVEL..... +18dB MAXIMUM OUTPUT LEVEL..... +18dBm INPUT IMPEDANCE..... 10K Ohms, Balanced Transformer Isolated OUTPUT IMPEDANCE..... 300 Ohms LOW FREQUENCY ADJUSTMENT...... ±10dB, Shelving Type, Centered @ 1KHz HIGH FREQUENCY ADJUSTMENT..... ±10dB, Shelving Type, Centered @ 400Hz FREQUENCY RESPONSE..... +0, -1dB, 20Hz To 20KHz DISTORTION..... 0.25% Maximum NOISE..... -88dB Below Full Output POWER REQUIREMENTS..... +15-18VDC @ 25ma per side. SIZE..... 2.5"H x 8.0"D x 1.1"W OPERATING TEMPERATURE..... 0 To +70 Degrees C SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE **ARCHITECT'S & ENGINEER'S SPECIFICATIONS** The Tone Control Card shall be constructed as a plug-in printed circuit The tone control card shall separate adjustment controls for low frequency board module. It shall be designed to allow up to 10 modules to fit in and high frequency. Both controls shall be continuously adjustable form a rack mount card frame requiring no more than 3.5" of vertical rack 10dB to +10dB. space. The tone control card shall be unpluggable from the front of the The tone control card shall have an adjustable output gain stage capable of card frame, without the need to disconnect wires attached to the rear adjusting the output level from -10dB to +20dB. The gain trimpot shall be connector. mounted on the corresponding backplane, to allow insertion of a spare card, The tone control card shall have a balanced-bridging transformer without the need to realign the gain. The output section of the tone control isolated input, capable of accepting audio input signals from -25dBv card shall be balanced transformer isolated. The tone control card shall be: Protech Audio Corporation Model 882 to +18dBv. **ACCESSORIES**

RACK MOUNT CARD FRAME PACKAGE......MODEL 858B Includes Model 561 Card frame, Model 858B Backplane Assembly, and Power Supply Card. For use with up to 9 audio cards. RACK MOUNT CARD FRAME PACKAGE......MODEL 857B Includes Model 561 Card Frame, and Model 857 Backplane Assembly. For use with up to 10 audio modules and external power supply Model 66708.

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### AUTHORIZED DEALER

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