

1/06

OSCILLATOR CARDS

INSTALLATION & OPERATION MANUAL

MODELS COVERED

546B

562B

INTEGRA III SYSTEM



www.protechaudio.com

The Models 546B (1KHz), and 562B (25Hz) Au- Both cards feature Bridge-T circuitry, in order to dio Oscillator cards are designed for use in professional applications. Typical applications are multi-zone public address systems, emergency communications systems, training systems, paging systems, and intercom systems. The Model 546B is designed to provide a stable, low distortion 1KHz reference signal for aligning systems, or to provide audible signals or alarms.

The Model 562B is designed to provide a stable, lowdistortion signal for audio detection or supervision sytems (See Model 685 Tone Supervisor Card). This low frequency tone is usually not audible in sound systems, but may be readily detected by the supervisory card. This type of circuit is quite often found in systems where crowd control, or emergency communications are system requirements. The detector circuit monitors the system circuits, and automatically signals the failure of any component in the system. This facilitates proper maintenance of the audio system.

Both cards are designed to provide an adjustable -40 to 0dB signal level. The frequency is fixed, via circuit design.

provide extremely low distortion. The typical distortion measurement is less than 0.01%. The low distortion and constant output level are characteristic of this type of circuit, and makes the oscillator cards ideal for use as a reference signal when testing audio systems.

There are a number of INTEGRA III SYSTEM cards available to help mix the audio signals into the audio system. In the case of the 25HZ signal being used in conjunction with the Model 685 Tone Supervisor Card, mixing the signal into the system at the earliest possible point, will allow the supervisor card to monitor more equipment.

As with all INTEGRA III SYSTEM cards, both the Model 546B and 562B Oscillators Cards are designed to mount in either the Model 857B, or Model 858B Card Frame Packages. The oscillator cards may be mixed and matched with other system cards, within the same card frame, without fear of system degrada-

For additional information, or applications assistance, contact:

SALES ENGINEERING

Protech Audio Corp., 192 Cedar River Road, Indian Lake New York, 12842 Voice 518-648-6410 Fax 518-648-6395

INSTALLATION

The Models 546B & 562B Oscillator Cards are designed to be mounted in either the Model 857 or 858 Card Frame Package. The Model 857B Card Frame Package will accomodate up to 10 audio cards, and requires an external power supply. The Model 858B Card Frame Package will accomodate up to 9 audio cards, and has a built-in, unpluggable power supply card.

Both card frame assemblies bus the DC power to the individual card slots, and provide screw-type barrier termination points for audio and DC connections.

The determination as to which card frame assembly to use in your project, was made prior to our factory receiving the order. The card frame assembly you have received will accommodate the group of cards you or your designer have specified.

The actual steps necessary for installation of the Model 562B Oscillator card 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 sufficienttensile 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 POWER SUPPLY. If an external power supply is to be used, terminate the proper supply connections to pins 1,2, & 3 of the DC barrier connector, as shown in the card frame layout drawing, and the card connection drawing shown on the facing page. Turn on the power supply, and using a DC voltmeter, check for correct voltage and polarity at pins 1, 2, & 3 of the barrier connector.

INTERNAL POWER SUPPLY. If a plug-in power supply card is to be used, plug in the supply card, and check for proper illumination of both the positive and negative voltage LED's on 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.

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, 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 the remains is the alignment.

ALIGNMENT

There are no adjustments necessary to operate the Models 546B or 562B Oscillator cards. The operation of the card is automatic, and distribution of the output signal is determined via wiring or switching devices. The output level adjusting trimpot has been factory aligned to provide 0dB into 600 ohm loads.

The alignment procedures of INTEGRA III SYSTEM 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.

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PROTECH AUDIO®

INTEGRA III SYSTEM

CONNECTOR DRAWING MODEL 546B & MODEL 562B

