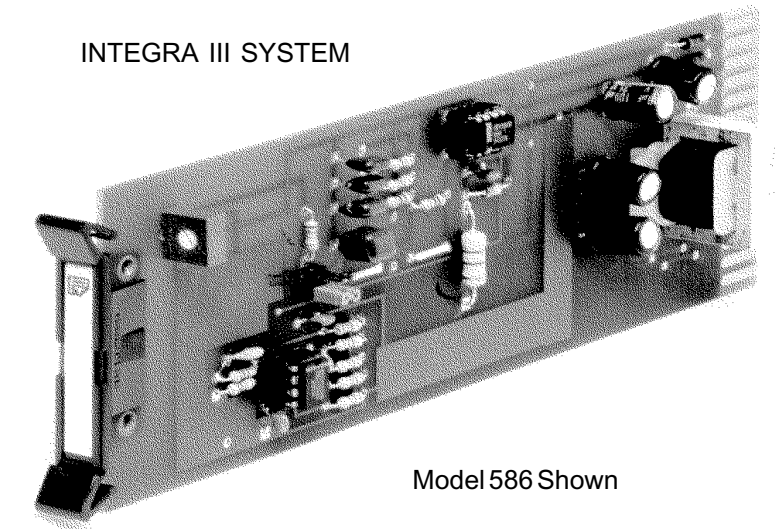


MODELS COVERED

586

INTEGRA III SYSTEM



Model 586 Shown

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

The Model 586 Noise Generator card is designed pink or white noise for use in masking or alignment of audio systems.

Typical applications are public address systems, sound reinforcement systems, and room combining systems. The actual application of the noise generator card is found in such buildings as airports, factories, courthouses, casinos, convention centers, hotels, race-tracks, training systems, corporate boardrooms, and office buildings.

The model 586 consists of two separate circuits. The first section is a digital noise generator. The output of the noise generator circuit is standard white noise.

The white noise is fed to a push-on jumper area of the card, and to a filter, the output of which is standard pink noise. The pink noise is also fed to the push-on jumper area. By placing the push-on jumper on the desired pins, the user may select either white or pink noise. The card is shipped from the factory strapped for pink noise. To select white noise, simply move the red push-on jumper to the other set of pins. The jumpers are located in the middle of the PC board assembly, next to the output section.

The second circuit consists of a balanced line output, with adjustable gain. The gain is adjusted via the trimpot mounted on the front of the PC board assembly. The maximum output level for the pink noise is -5dB into 600 ohms. The maximum output of the white noise is +15dB into 600 ohms. The output section of the card is transformer isolated, and should be terminated into a 600-10K ohm load.

The Model 586 may be mixed or matched with other INTEGRA III SYSTEM components, within the same card frame, without degradation in performance. For larger installations, the output of the Model 586 may be fed into the audio distribution amplifier cards, to serve more areas. As one of the INTEGRA III SYSTEM audio cards, the Model 586 may be mounted in any of the system enclosures manufactured by Protech Audio Corp. The Model 586 Noise Generator Card may be expected to provide the user with years of dependable, uninterrupted quality service. For additional information, or design assistance, contact:

APPLICATIONS ASSISTANCE

## INSTALLATION

The 586 Noise Generator Card is designed to be mounted in the Model 857B Card Frame, or the Model 858B Card Frame.

The Model 857B Card Frame will accommodate up to 10 audio cards, and requires an external power supply (Model 66708). The Model 858B Card Frame Package will accommodate 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 586 Noise Generator 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 tensile 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 POWERSUPPLY.

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. 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 POWERSUPPLY.

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. Terminate each unused input with a 1K ohm resistor.

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 noticed 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

The Model 586 has been shipped from the factory strapped for pink noise output and -20dB into 600 ohms output level.

If additional gain or white noise output is required, the following alignment procedure is recommended;

- 1 - Remove card from frame, move push-on jumper to white noise position, and turn trimpot completely counterclockwise. Replace card in frame
- 2 - While monitoring the output channel, turn the output gain trimpot clockwise until the desired output level is reached.

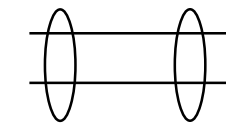
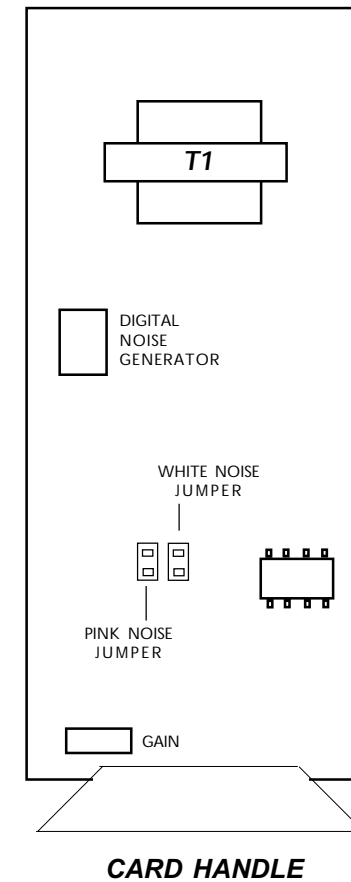
This completes the installation and alignment of your noise generator cards. The cards may be expected to deliver years of uninterrupted service.

Note 1 - The alignment procedures for 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.

**PROTECH AUDIO®**

INTEGRA III SYSTEM  
CONNECTOR & TRIMPOT DRAWING  
MODEL 586

### 857B & 858B BACKPLANE CONNECTIONS

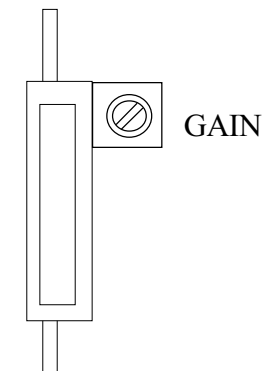


GND  
OUTPUT HI  
OUTPUT LO

GND

GND

⊗	1
⊗	2
⊗	3
⊗	4
○	5
○	6
○	7
○	8
○	9
○	10
○	11
○	12
○	13
○	14
○	15



GAIN