

1/02

RELAY SWITCHING CARD

INSTALLATION & OPERATION MANUAL

MODELS COVERED

571B



www.protechaudio.com

The Model 571B Relay Switcher Card is designed to operate as a remote switching control in professional audio systems.

Typical applications are public address systems, broadcast studios, sales presentation rooms, headphone listening systems, multi-room audio systems, and recording systems. The actual application of the amplifiers is found in buildings such as airports, factories, courthouses, casinos, convention centers, libraries, hotels, racetracks, training systems, corporate boardrooms, etc.

The Model 571B incorporates 2 separate, double pole-double throw relay circuits, and, a 4 pole-double throw relay circuit.. The relays are mounted on a single, plug-in printed circuit board. Each relay has Form C contact arrangement. The relays are activated by grounding the control pin. Relay control pins may be ganged together to operate more than one relay from a single switch closure. Different combinations of relays may be created by isolating the remote switch closures through diodes.

The form C contacts allow switching between two independent audio sources, or, sending an audio signal to either of two separate destinations. By ganging several relay card in series, it is possible to create a larger audio switching matrix. The relay cards are designed to operate alone or in conjunction with other switching cards in the INTEGRA III SYSTEM. The Model 571B is designed to mount in the Models 857B or 858B Card Frames. The unit may be mixed or matched with other INTEGRA III SYSTEM cards to create a complete audio system.

The card frames will allow mounting of either 9 audio cards and plug-in power supply card (Model 858B), or 10 audio or switching cards when used with an external power supply (Model 857B). If additional information is needed, contact Applications Assistance by calling 631-584-5855.

The relay cards may be expected to provide years of uninterrupted, quality service.

Protech Audio Corporation, PO Box 597, 192 Cedar River Road, Indian Lake, New York, 12842, Voice 518-648-6410 Fax 518-648-6395

INSTALLATION

The 571B Relay Switching Card is designed to be mounted in the Model 857B, or 858B Card Frame Assembly.

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 will accommodate up to 9 audio cards, and has a built-in power supply card (Models 2000-PS-A).

Both card frames 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 backplane assembly to use in your project, was made prior to our factory receiving the order. The backplane assembly you have received will accomodate the group of cards you or your designer have specified.

The actual steps necessary for installation of the 571B Relay 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 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 POWER SUPPLY. If an external power supply is to be used, terminate the proper supply connections to pins 1, 2, & 3 of the DC 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 of the DC 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 plus and minus DC green LED's.

3- Terminate all input, output, and switch connections, using the card connection drawing on the facing page. 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. 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

manner:

The Model 571B does not require alignment.

Operation of the card may be checked in the following

1- Apply a signal representative of the actual signal level to

be used, to the relay.

- 2- While monitoring the output, ground the appropriate control pin, and check for proper signal continuity at the output pin.
- 3-Repeat steps 1 & 2 for each switch channel on the Model 571B.

This completes the installation and alignment of your Model 571B Relay Switching Card. The card(s) 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.

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PROTECH AUDIO®

INTEGRA III SYSTEM

CONNECTOR & PROGRAM DRAWING MODEL 571B

857B & 858B BACKPLANE CONNECTIONS

GROUND RELAY CONTROL PINS TO ACTIVATE RELAYS

K1 CONTROL	16	
K2 CONTROL	17	
K3 CONTROL	18	\oslash
K3 ARM A	19	\otimes
K3 ARM B	20	
K3 ARM C	21	
K4 ARM D	22	
K3 N/C A	23	
K3 N/C B	24	
K3 N/C C	25	
K3 N/C D	26	
K3 N/O A	27	
K3 N/O B	28	
K3 N/O C	29	
K3 N/O D	30	

\oslash	1	K1 ARM A
\oslash	2	K1 ARM B
\oslash	3	GROUND
\oslash	4	K1 N/C A
	5	K1 N/C B
	6	K1 N/O A
	7	K1 N/O B
	8	GROUND
	9	K2 ARM A
	10	K2 ARM B
	11	K2 N/C A
	12	K2 N/C B
	13	GROUND
	14	K2 N/O A
	15	K2 N/O B

Specifications - Model 571B

Number of Relays	2 Double-Pole, 1 Four-Pole
Contact Arrange-	
nent	0.2 Ohm
On Resis-	0.3 Amp 125 VAC
ance	0.3 Amp 110 VDC
Contact Rat-	1.0 Amp 30 VDC
ngs	5.0ms
_	2ms
	±15-24VDC @ 60ma Per
Operating	Module
Гime	2.5"H x 8.0"D x 1.1"W
Release	
Гіте	
Powerecifications serequire-	CHANGE WITHOUT NOTICE.
nents	
Size	