41095

ORDER WIRE CONTROL AND SPEAKER MONITOR PANELS

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About this Practice:

This practice has been reissued to:

- Incorporate all addendums.

Reissued Practices: Updated and new content can be identified by a banner in the right margin.

UPDATED

Issue date: August 1998

CAUTION

- Install or remove modules from the shelf only when the power is off. If you install a module in the shelf with the power on, the internal circuitry may suffer damage and the product warranty will be void.
- Remove and install circuit boards only in a static-safe environment (use antistatic wrist straps, smocks, footwear, etc.).
- Keep circuit boards in their antistatic bags when they are not in use.
- Do not ship or store circuit boards near strong electrostatic, electromagnetic, magnetic, or radioactive fields.
- For more complete information on electrostatic discharge safety precautions, refer to Bellcore™ Technical Reference # TR-NWT-000870.

ORDERING INFORMATION

NOTE: This section lists the different options available for this product. To order any of the available options, contact Dantel Inside Sales through our toll-free number, **1-800-432-6835.**

OPTION NUMBER	FEATURES
B13-41095-10	Six-Circuit Monitor/Control Panel w/ Audible Signaling
C13-41095-01	12-Circuit Monitor/Control Panel

GENERAL DESCRIPTION

The Dantel 41095 Order Wire Control and Speaker Monitor Panel (41095 Panel) provides centralized monitoring facilities for six or twelve selective signaling order wire terminals. You can use the 41095 Panel to orginate a call or answer an incoming call on an individual order wire channel.

The 41095 Panel mounts in an EIA standard 19" rack next to or near the order wire terminal. The 41095 Panel occupies 5¼" of vertical rack space and operates from -21 to -56 VDC power.

The 41095 Panel consists of a monitor section and a control section. The monitor section includes:

- A push-button channel selector
- Two speaker with amplifiers
- Two volume controls
- A fuse
- A fuse alarm LED

The monitor section provides monitoring of all associated order wire channels over one of the speakers. The other speaker can monitor one channel (41095-10) or two channels (41095-01).

The control section includes:

- A push-button channel selector
- DTMF dial
- Handset
- Handset cradle
- Headset jacks

The control section originates a call or answers an incoming call on an individual order wire channels.

CIRCUIT DESCRIPTION

Fig. 1 shows a 41095 Panel block diagram.

FIG. 1 - BLOCK DIAGRAM, 41095

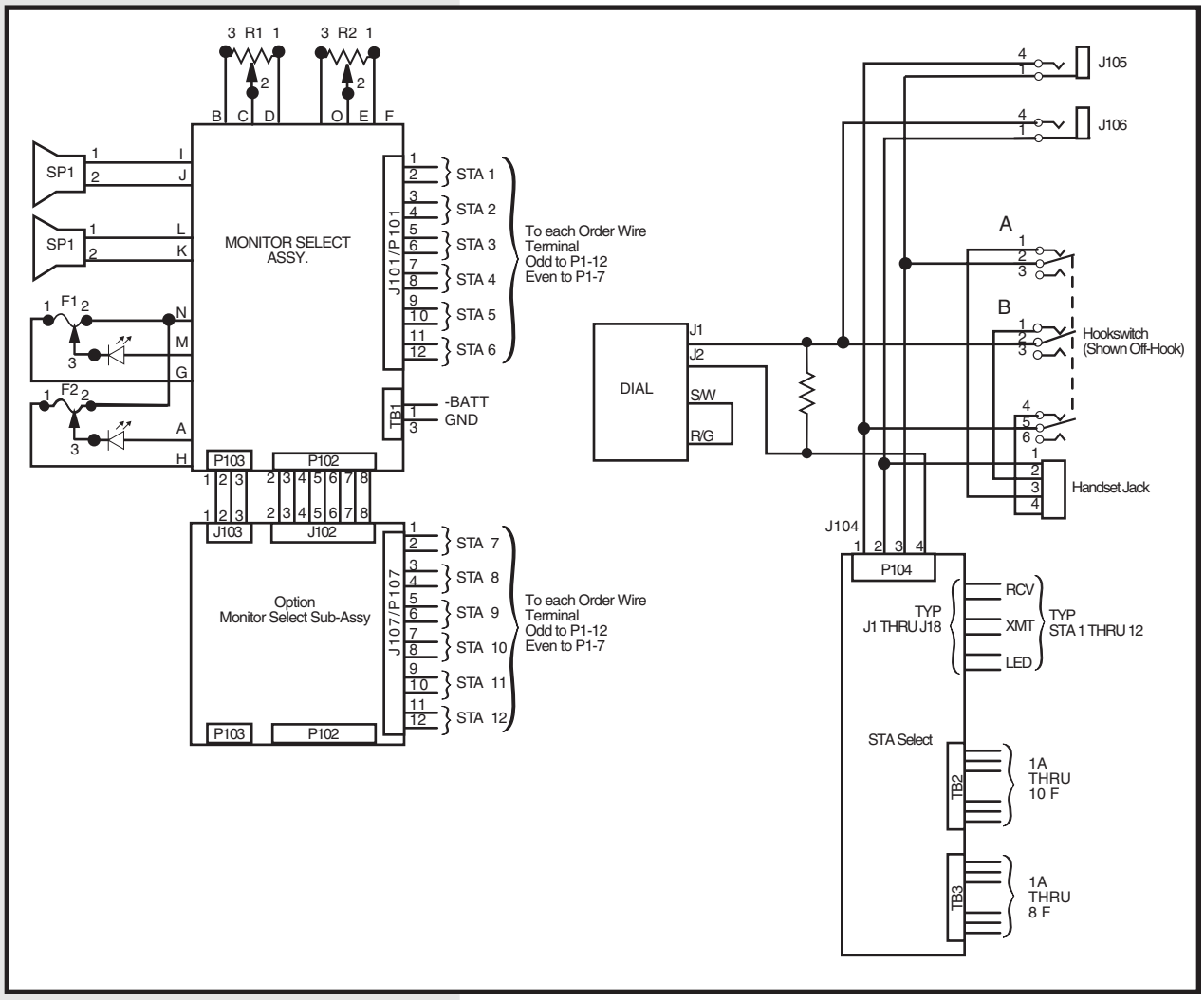


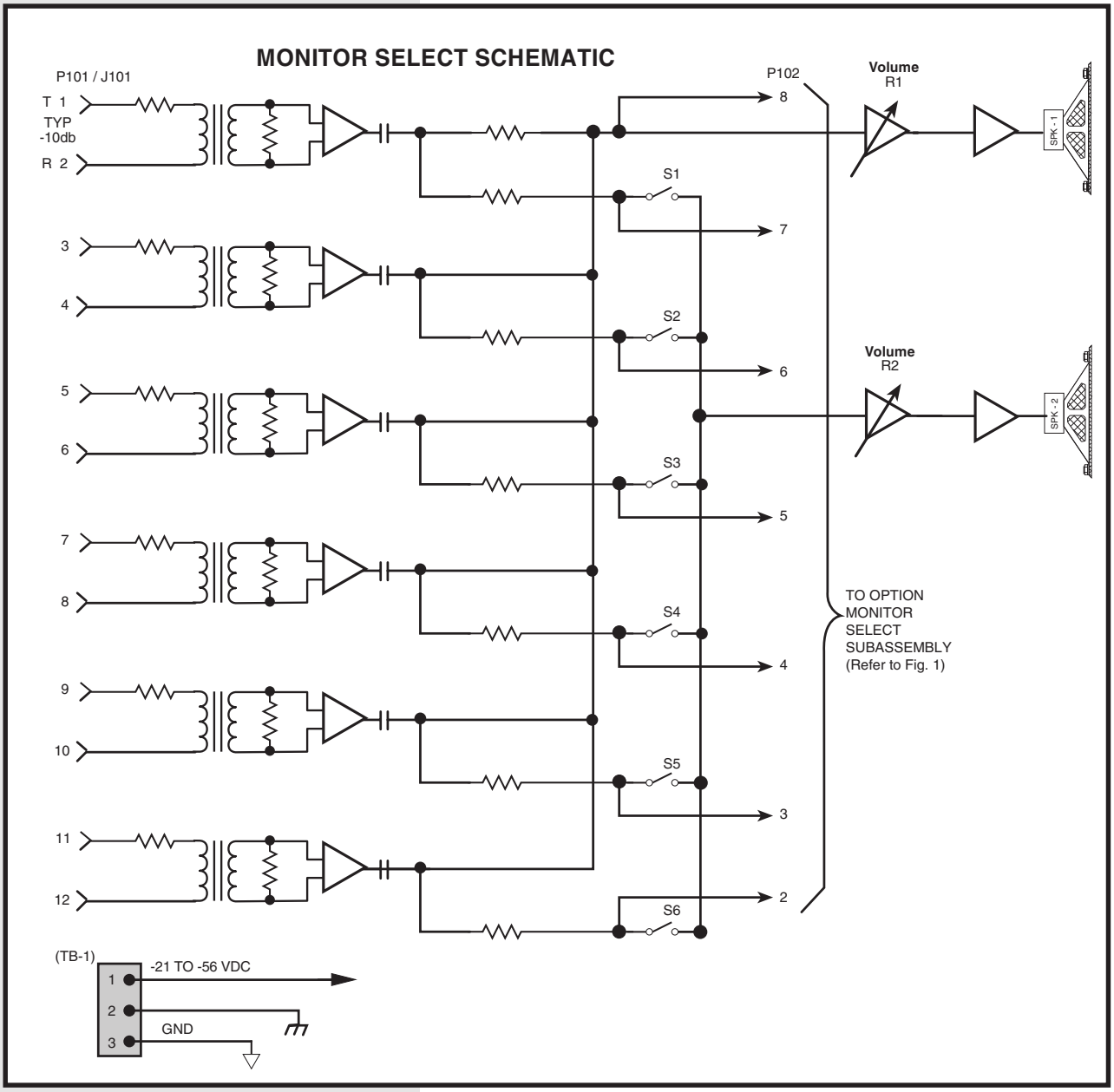
Fig. 2 shows the 41095 Order-Wire and Speaker Monitor Panel functional schematic.

The 41095 Panel monitoring section monitors all associated order wire channels over the speaker. Incoming calls couple through transformers to operational amplifiers, and a volume control potentiometer to feed speaker amplifiers.

The push-button speaker monitor channel selector monitors any one or two channels through an additional volume control potentiometer. You can monitor the selected channel(s) at a louder level and monitor unselected channels over the speaker at a quieter level.

A fuse and fuse alarm indicator LED are on the front panel. When the fuse blows, the alarm indicator LED lights up.

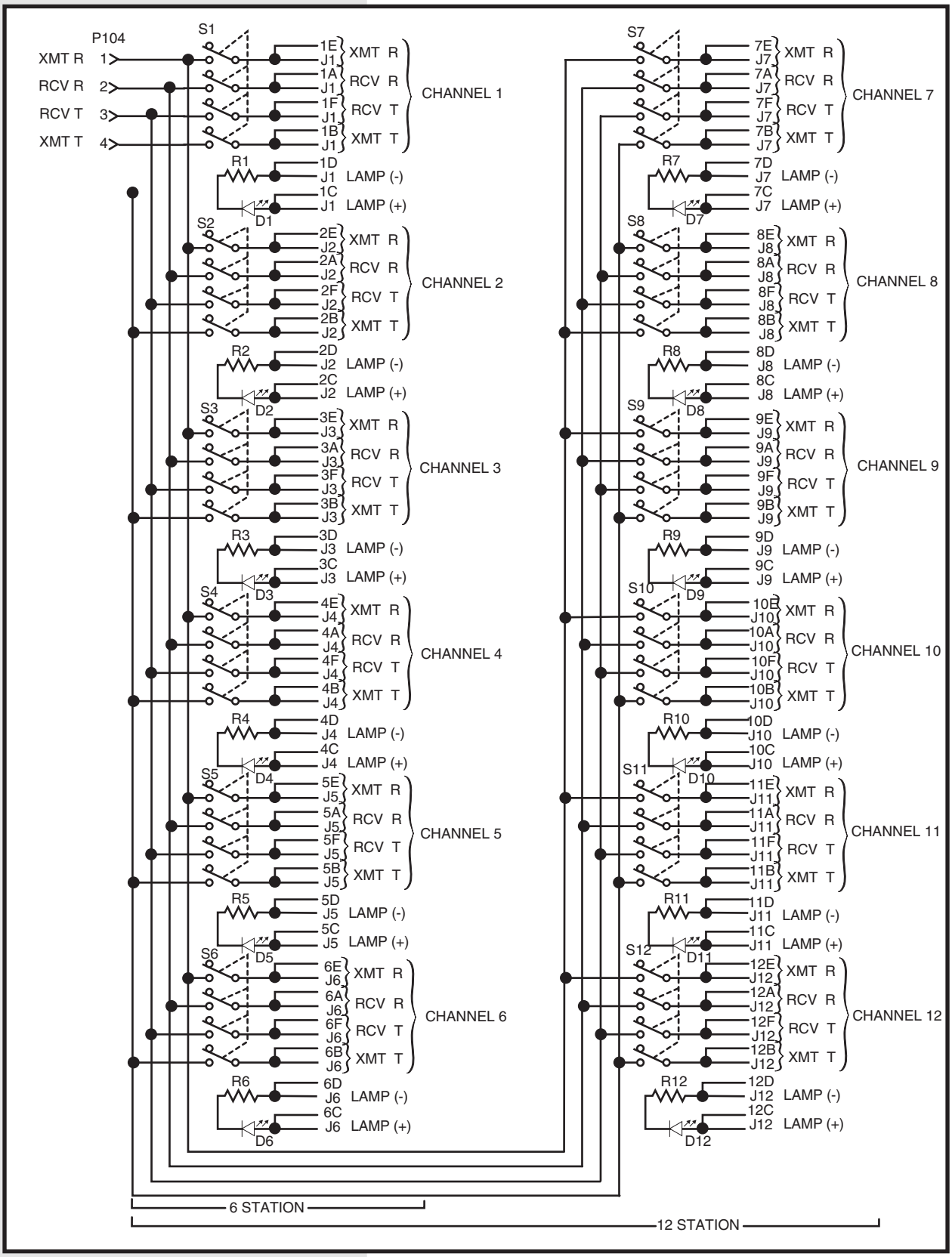
FIG. 2 - SCHEMATIC, MONITOR SELECT, 41095



The control section originates a call or answers an incoming call on an individual order wire channel. A flashing LED above the channel button indicates an incoming call. (The order wire terminal provides an audible indication.) Pressing the channel button connects the handset to the respective order wire channel. You can use a headset instead of the handset.

Fig. 3 shows the 41095 Panel channel select schematic for wiring six order wire terminals (41095-10) or twelve order wire terminals (41095-01).

FIG. 3 - SCHEMATIC, CHANNEL SELECT, 41095



INSTALLATION

Installation consists of wiring a jumper for modular cords, connecting the speaker leads, connecting power, connecting signaling leads, and wiring to the DTSS3A order wire terminal.

1. Wire the Modular Cords Jumper.

Refer to Fig. 4. A board behind the panel provides modular-type telephone jacks, labeled J1 through J12. Each order wire telephone jack connects to one of the jacks (J1-J12) using a six-lead extension phone cord. These jacks carry the four-wire signal leads and the lamp leads.

When you use the modular cords, you must install a jumper on each order wire terminal from pin P3-1 to pin P1-5 and from pin P3-2 to pin P1-7.

Use wire-wrap terminal blocks (TB2 and TB3) when you do not use modular-type cords.

2. Connect Speaker Leads.

Refer to Fig. 4 and Fig. 6. Separate wire-wrap terminals (J101, J107 and J108) are available to hook up the speaker lines from the DTSS3A terminals.

3. Connect Power.

Refer to Fig. 4. Power (-21 to -56 VDC) connects at screw terminal strip TB1.

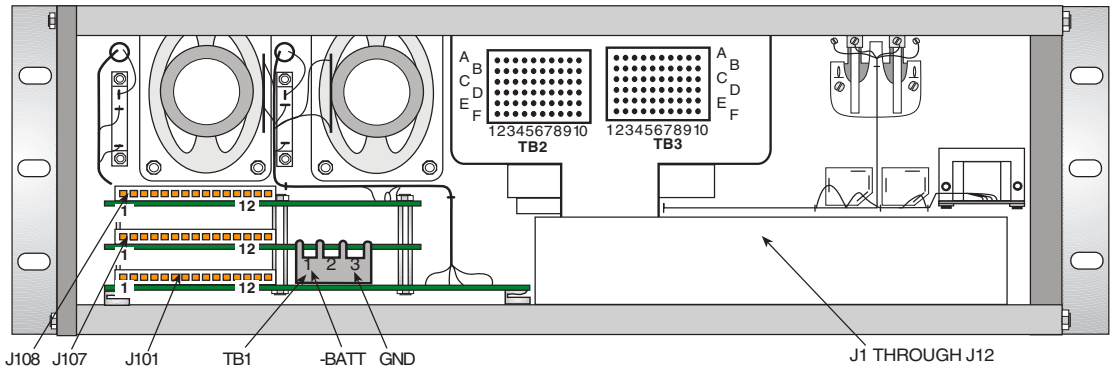
4. Connect Signaling Leads.

For a six-circuit 41095 Panel (41095-10) connect signaling leads from any of the pins at TB2-9 (A-E) or TB2-10 (A-E) to pin P1-1 on each order wire terminal. Jumper pins P1-2 to P1-6 on each order wire. Refer to Table A and Fig. 5.

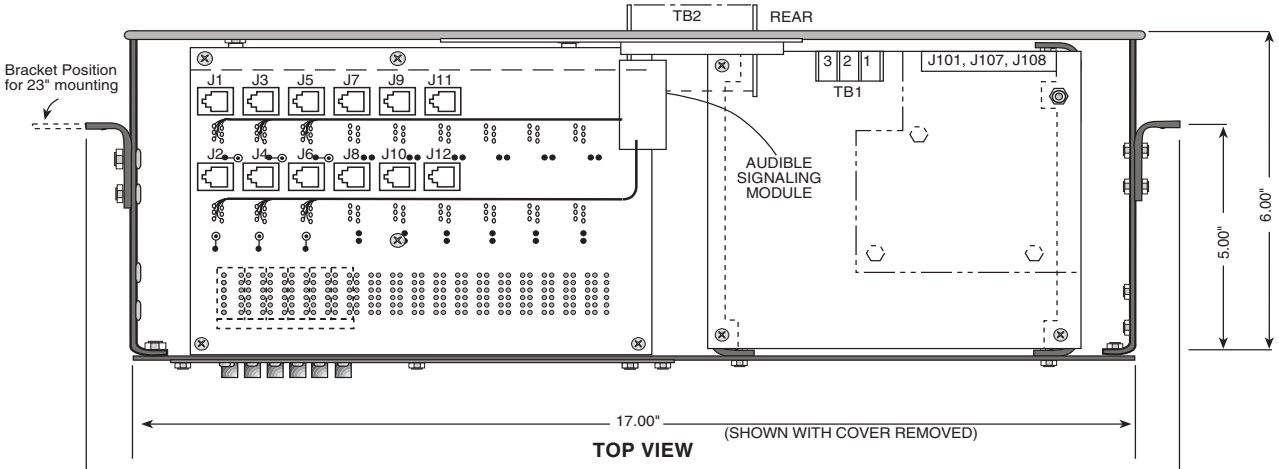
5. Wire to the DTSS3A terminal.

Wire the 41095 Panel to the DTSS3A with modular cords or wire-wrap connections. Refer to Fig. 6.

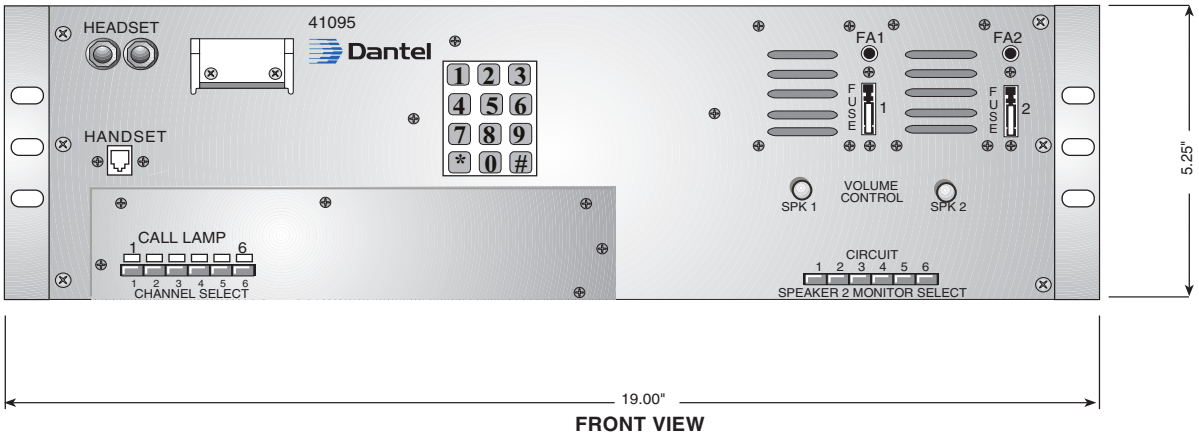
FIG. 4 - CONTROL AND JACK LOCATIONS AND DIMENSIONS



REAR VIEW SHOWING TERMINAL LOCATIONS

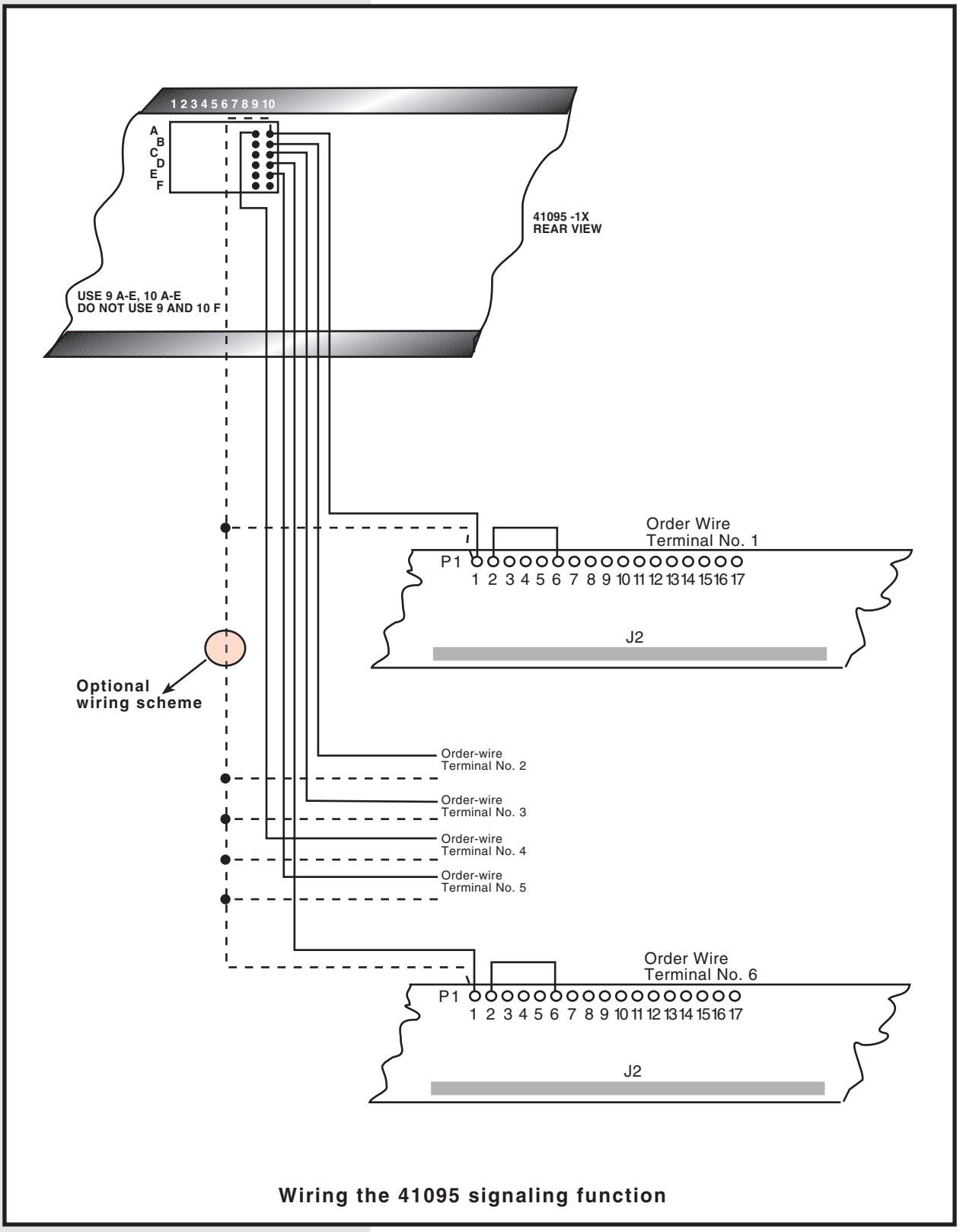


TOP VIEW



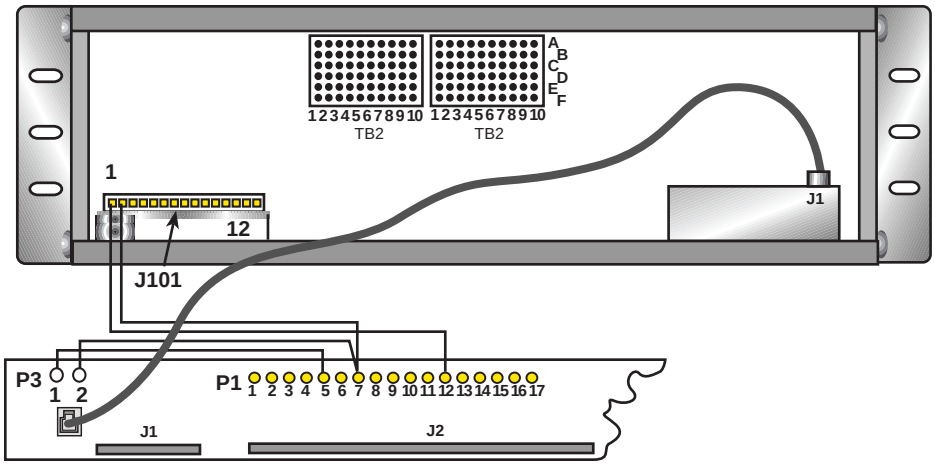
FRONT VIEW

FIG. 5 - SIGNALING FUNCTION WIRING

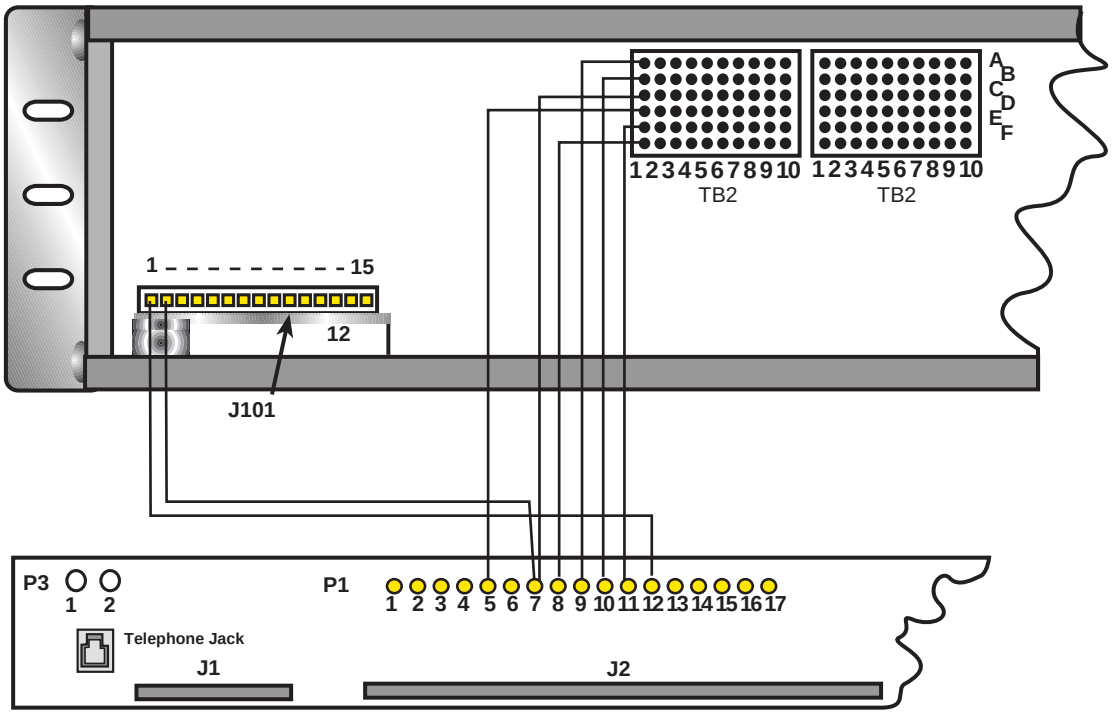


Wiring the 41095 signaling function

FIG. 6 - WIRING TO DTSS3A USING MODULAR CORDS AND WIRE-WRAP CONNECTIONS



Wiring the 41095 to the DTSS3A Using Modular Cords
(Signaling Wiring not shown)



Wiring the 41095 to the DTSS3A Using Wire-Wrap Connections
(Signaling Wiring not shown)

INSTALLATION

TABLE A - CHANNEL CONNECTIONS

FROM:									
SPEAKER MONITOR CONNECTIONS (USE TB AND J CONNECTIONS *OR* JACKS, NOT BOTH)									
Channel	RCV Ring	XMT Tip	+ Lamp	- Lamp	XMT Ring	RCV Tip	Ext. Spkr	Spkr Gnd	Jack
1	TB2-1A	TB2-1B	TB2-1C	TB2-1D	TB2-1E	TB2-1F	J101-1	J101-2	J1
2	TB2-2A	TB2-2B	TB2-2C	TB2-2D	TB2-2E	TB2-2F	J101-3	J101-4	J2
3	TB2-3A	TB2-3B	TB2-3C	TB2-3D	TB2-3E	TB2-3F	J101-5	J101-6	J3
4	TB2-4A	TB2-4B	TB2-4C	TB2-4D	TB2-4E	TB2-4F	J101-7	J101-8	J4
5	TB2-5A	TB2-5B	TB2-5C	TB2-5D	TB2-5E	TB2-5F	J101-9	J101-10	J5
6	TB2-6A	TB2-6B	TB2-6C	TB2-6D	TB2-6E	TB2-6F	J101-11	J101-12	J6
7	TB2-7A	TB2-7B	TB2-7C	TB2-7D	TB2-7E	TB2-7F	J107-1	J107-2	J7
8	TB2-8A	TB2-8B	TB2-8C	TB2-8D	TB2-8E	TB2-8F	J107-3	J107-4	J8
9	TB2-9A	TB2-9B	TB2-9C	TB2-9D	TB2-9E	TB2-9F	J107-5	J107-6	J9
10	TB2-10A	TB2-10B	TB2-10C	TB2-10D	TB2-10E	TB2-10F	J107-7	J107-8	J10
11	TB3-1A	TB3-1B	TB3-1C	TB3-1D	TB3-1E	TB3-1F	J107-9	J107-10	J11
12	TB3-2A	TB3-2B	TB3-2C	TB3-2D	TB3-2E	TB3-2F	J107-11	J107-12	J12
TO:									
ORDER WIRE TERMINAL CONNECTIONS									
Each Order Wire	P1-9	P1-10	P1-7	P1-5	P1-11	P1-8	P1-12	P1-7	--

OPERATION

Initiate a call by pressing the desired channel push-button, lifting the handset (or plugging in a headset) and dialing the desired station code. Answer an incoming call by pressing the channel push-button below the flashing CALL LAMP LED and lifting the handset (or plugging in a headset).

Monitor all three order wire channels by turning the SPK 1 VOLUME CONTROL clockwise until you hear a sufficient level.

Monitor a single channel by pressing the desired SPEAKER MONITOR CHAN SELECT push-button and turning the SPK 2 VOLUME CONTROL clockwise until you hear a sufficient level.

On the 12-channel 41095 Panel (41095-01), the MONITOR SELECT push-buttons connect the following channels to the following circuits:

- Circuit 1: Channels 1 and 7
- Circuit 2: Channels 2 and 8
- Circuit 3: Channels 3 and 9
- Circuit 4: Channels 4 and 10
- Circuit 5: Channels 5 and 11
- Circuit 6: Channels 6 and 12

TECHNICAL SPECIFICATIONS

DESCRIPTION	VALUE
Input Voltage Range	-21 to -56 VDC
Input Current	
Idle	
@ -24 VDC	190 mA
@ -48 VDC	210 mA
Maximum	
@ -24 VDC	
Speaker 1	350 mA
Both speakers	500 mA
@ -48 VDC	
Speaker 2	380 mA
Both speakers	540 mA
Heat Dissipation	
Idle	
@ -24 VDC	15.5 BTU/Hr
@ -48 VDC	34.4 BTU/Hr
Maximum	
@ -24 VDC	41.0 BTU/Hr
@ -48 VDC	88.4 BTU/Hr
Weight	7 pounds
Physical Dimensions	17.75" wide; 5.4" high; 6.4" deep (plus mounting hardware). Handset projects 2.5" in front of panel.
Mounting Projection	5" or flush
Operating Temperature Range	0° to 55° C.
Output Power (per speaker)	1 watt
Maximum Input Level	-10 dBm
Frequency Response	300 to 8 KHz $\pm$ 1 dB @ 1 watt
Input Impedance	600 ohm sourcing from low impedance

WARRANTY

LIMITED WARRANTY

The Seller warrants that the standard hardware products sold will be free from defects in material and workmanship and perform to the Seller's applicable published specifications for a period of 18 months for hardware, and 3 months for software, from the date of the original invoice. The liability of the Seller hereunder shall be limited to replacing or repairing, at its option, any defective products which are returned F.O.B. to the Seller's plant, (or, at the Seller's option, refunding the purchase price of such products). In no case are products to be returned without first obtaining permission and a customer return authorization number from the Seller. In no event shall the Seller be liable for any consequential or incidental damages.

Equipment or parts which have been subject to abuse, misuse, accident, alteration, neglect, unauthorized repair or installation are not covered by warranty. The Seller shall make the final determination as to the existence and cause of any alleged defect. No warranty is made with respect to custom equipment or products produced to the Buyer's specifications except as specifically stated in writing by the Seller in the contract for such custom equipment.

This warranty is the only warranty made by the Seller with respect to the goods delivered hereunder, and may be modified or amended only by a written instrument signed by a duly authorized officer of the Seller and accepted by the Buyer.

Warranty and remedies on products not manufactured by the Seller are in accordance with warranty of the respective manufacturer. THE SELLER MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED; AND ALL IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEEDS THE AFORESAID OBLIGATIONS IS HEREBY DISCLAIMED BY THE SELLER.

IN CASE OF DIFFICULTY

If you experience difficulty with this equipment, check the following, as appropriate:

1. **Switch settings**
2. **Signal levels**
3. **Software configuration**
4. **Connections between Dantel's equipment and your equipment.**

If there is still a problem, substitute equipment that is known to be good. For additional assistance, call Dantel's Technical Field Service Department weekdays, 6 A.M. to 5 P.M. pacific time:

1-800-4DANTEL (1-800-432-6835).

If a thorough checkout shows a piece of equipment has malfunctioned, you may return it to the factory. For repairs and emergency replacements, obtain a Return Material Authorization (RMA) number from the Customer Service Representative at **1-800-4DANTEL** (1-800-432-6835).

To ensure expedient processing of your order, provide a purchase order number and shipping and billing information when requesting an RMA number. Also, when the units are returned to Dantel, include a description of the failure symptoms for each unit returned. Send defective equipment to:

Dantel, Inc. • 2991 North Argyle Avenue • Fresno, California 93727-1388

Dantel

P.O. Box 55013 • Fresno, CA 93747-5013 Phone (209) 292-1111 Fax (209) 292-9355 http://www.dantel.com