



TZ25 and TZC25 Time Panels Installation

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Preliminary

Description

The TZ25 Time Zone Panel works with any of the selector switch panels used in Director® Series Systems to connect remote room speakers for time-tone signaling.

The TZC25 Time Zone Panel is similar to the TZ25, except that it is designed for rack mounting and is used without a selector switch panel. It is primarily used for special functions in Telecenter® Security Systems.

Time Signaling

A ground signal from the zone relay contacts of a programmable clock, such as the Rauland 2424, is the "Z" input to the Zone Patch Panel for time-signal distribution. The output of the Zone Patch Panel to the "R" connector on the TZ25 energizes relays for the selected remote station in order to send the time tones there. A TCM5 time-zone oscillator plus a suitable power amplifier supplies the time signal to the "S" connector on the TZ25.

Installation

Bracket Modification

As was announced in Tech Bulletin no. 191 (June 25, 1987), the mounting bracket of the TZ25 has been modified so that it can be used "as is" on SW25 and SWL25 panels. However, it must be modified before it will fit properly on SWT425 and SWL425 panels.

Refer to the attached IL0269 for the following steps:

Step 1. Remove and set aside the two sheet-metal screws that secure the board-support bracket to the side brackets.

Step 2. Rotate the support bracket 180° vertically: the card holders will still face frontward but the tabs that fit against the side brackets will now be on top.

Step 3. Rotate the support bracket 90° axially, so that the tabs now point to the rear and the card holders face upward.

Step 4. Unsnap the card holders, then snap them into the adjacent holes in what is now the rear side of the support bracket.

Step 5. Use the two screws that you set aside in Step 1 to re-secure the support bracket to the side brackets.

Output Connections

Both the TZ25 and the TZC25 are equipped with 110 square-pin terminals on the rear edge of the printed circuit board. The field wiring can be connected directly here, or

equipment such as the TW25 Two-Wire Adapter can be plugged onto the terminals ("piggy-backed").

In factory-wired systems, terminals *OFF-1*, *OFF-2*, *A-1*, *A-2*, *B-1*, *B-2*, *C-1*, and *C-2* are interconnected. These interconnections provide loop-through for common functions; they are described in the manuals provided with the related program and intercom panels.

To connect the field wiring directly to the TZ25, refer to the wiring installation procedures below.

Cable Requirements

A shielded cable with one twisted pair connected to terminals *E* and *D* and the shield connected to terminal *G* is required for each remote station. Terminals *T*, *K*, and *L* are used only when the selector switch panel has call-in circuitry. The *T* terminal requires a third wire to the station.

Use 22-AWG solid conductors. The diameter of the individual wires, including insulation, should not exceed 0.095 inches for insulation-piercing connections. The field wiring must be totally supported with cable ties or clamps secured to the chassis cut-outs or extrusions.

Wiring

The connections to the panel's rear terminals may be made by insulation-piercing connectors, wire-wrapping, or crimp connectors. These methods are taken up in the following sub-sections.

Insulation-Piercing Connectors

The Rauland SK-2522 includes 25 connectors. See the attached manual, KI-1564, for installation instructions.

Modified Wire-Wrapping

You will need a wire-wrap tool such as the Gardner-Denver Model 144-1C or Model A-205577-31.

Step 1. Strip back the cable sheathing and the shield about 1½ inches from the end of the cable.

Step 2. Strip back about one inch of the insulation on the individual wires.

Step 3. Use a wire-wrap tool to wrap each bare wire around the appropriate terminal; be sure to add one complete turn of the insulated part of the wire as a necessary strain

relief. Leave about two inches of slack in each wire to accommodate possible future connections.

Crimped Connectors

The Rauland CTA25 Terminal Adapter Kit consists of 25 four-terminal adapter housings and 100 crimp connectors. To make good connections, use a Molex Model HTR-2445-A crimping tool (Order Number 11-01-0026).

Step 1. Strip back the cable sheathing and the shield about 1½ inches from the end of the cable.

Step 2. Strip about ¼ inch of insulation from each individual wire.

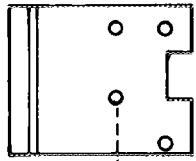
Step 3. Use a crimping tool to fasten the wires to the connectors.

Step 4. Insert the connectors into proper terminals of the adapter housings.

FIGURE 2

**MOUNTING INSTRUCTIONS FOR:
TZ 25 TIME ZONE ADAPTER WITH SWL 25, SW 25, SWT425, SWL 425.**

**SW 25 OR
SWL 25
SIDE BRACKET**

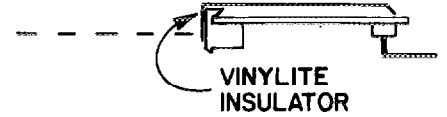


**TZ 25
SIDE BRACKET**



MOUNTING HOLE PAIR

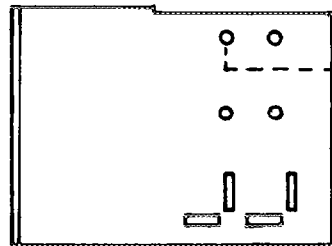
TW 25 (SEE NOTE 1.)



**VINYLITE
INSULATOR**

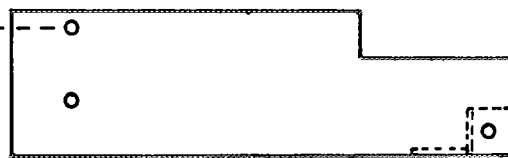
**TW 25 TWO-WIRE ADAPTOR IS NOT
USED WITH SW 25 WHICH IS NOT
EQUIPPED WITH ANNUNCIATOR
OR LED'S.**

**SWT 425
SIDE BRACKET**



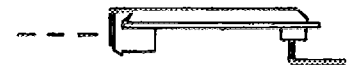
MOUNTING HOLE PAIR

**TZ 25
SIDE BRACKET**

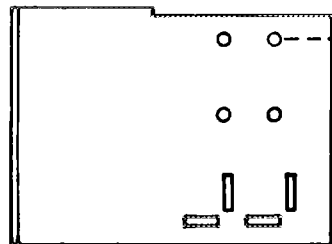


MOUNTING HOLE PAIR

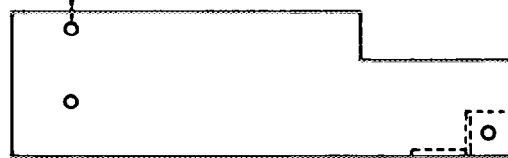
TW 25



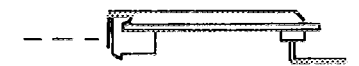
**SWL 425
SIDE BRACKET**



**TZ 25
SIDE BRACKET**



TW 25



NOTE:

**1. TW 25 ADAPTOR MAY BE PLUGGED DIRECTLY INTO THE ROOM SELECTOR SWITCH
IN ALL INSTANCES, IF TZ 25 IS NOT USED.**

1. Rotate 180° from right to left.

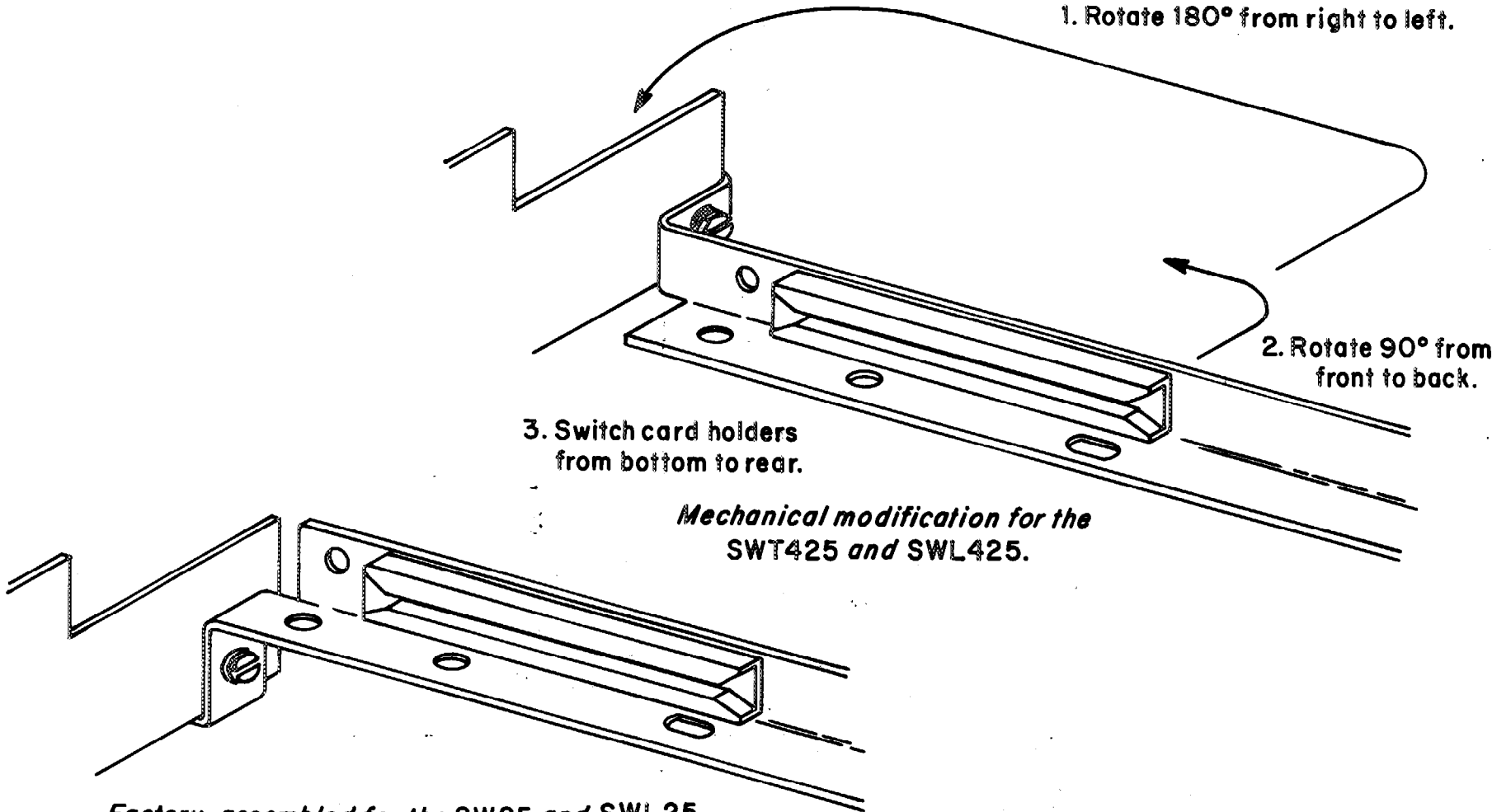
2. Rotate 90° from front to back.

3. Switch card holders from bottom to rear.

*Mechanical modification for the
SWT425 and SWL425.*

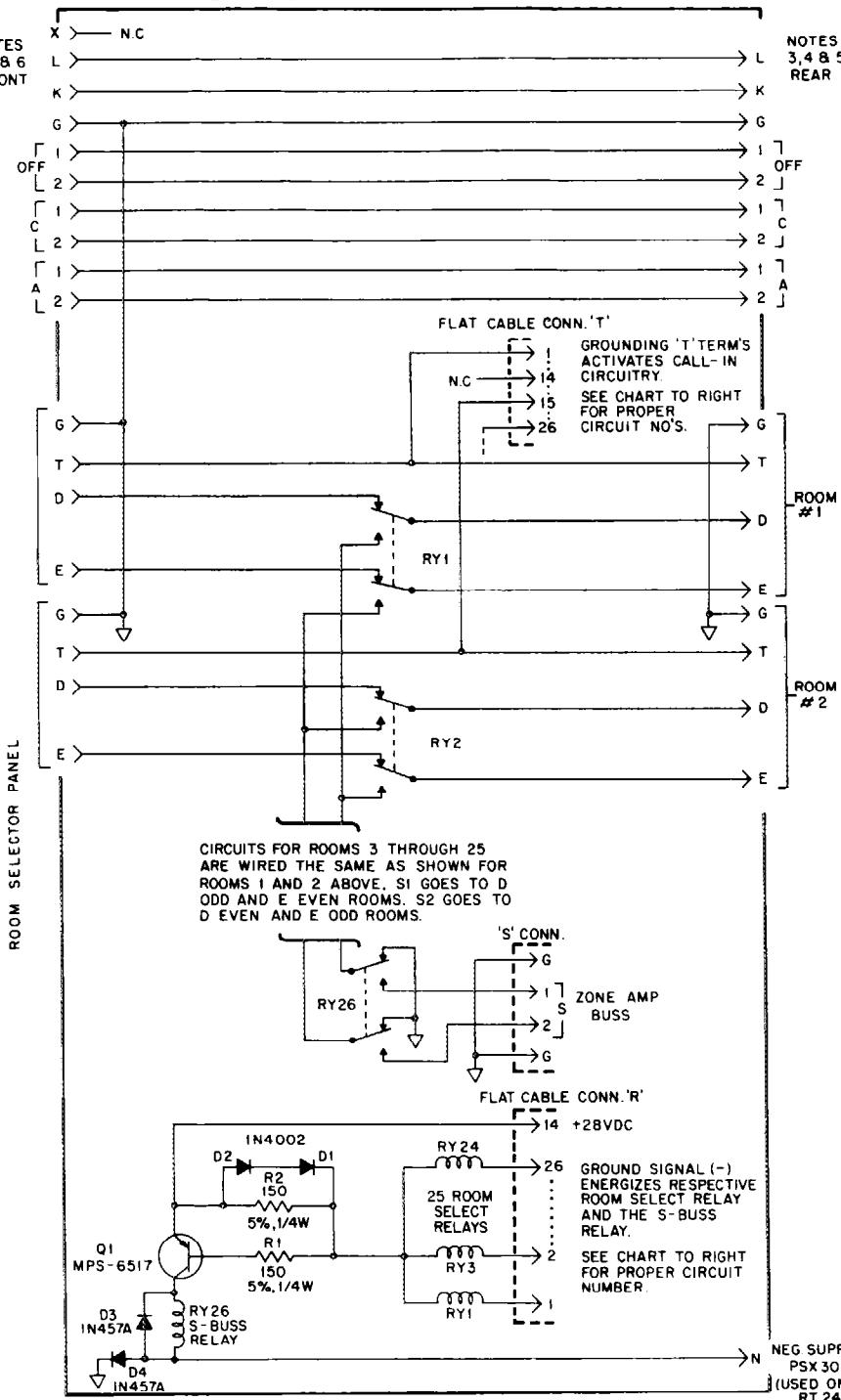
Factory-assembled for the SW25 and SWL25

TZ25 Bracket Adjustment
ILO269



TZ25 AND TZC25 TIME ZONE ADAPTERS

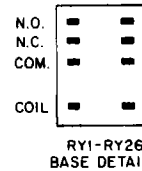
NOTES
1, 2 & 6
FRONT



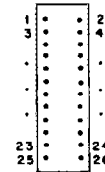
NOTES
3, 4 & 5
REAR

NOTES:

1. THE MODEL TZ25 CAN BE USED WITH ROOM SELECTOR PANELS SW25, SWL25, SW425 AND SWL425. IT ATTACHES TO THE REAR OF THE ROOM SELECTOR PANEL.
2. THE MODEL TZC25 CAN BE USED WITHOUT A ROOM SELECTOR PANEL. BUSSING STRIPS ARE PROVIDED WITH THE MODEL TZC25 INSTEAD OF RECEPTACLES TO CONNECT ALL NORMALLY CLOSED ROOM RELAY CONTACTS TO THE OFF 1 AND OFF 2 TERMINAL PAIR.
3. THE MODEL TW25 TWO-WIRE ADAPTER MAY BE USED TO PROVIDE TWO-WIRE ANNUNCIATION THROUGH THE T TERMINALS TO AN ASSOCIATED ROOM SELECTOR PANEL OR TO THE TELECENTER II SYSTEM.
4. FIELD WIRING TERMINATES DIRECTLY WITH THE TZ25 OR TZC25, OR TO THE TW25 IF USED IN THE SYSTEM.
5. 110 SQUARE PIN TERMINALS (0.045) ARE PROVIDED ON REAR OF THE TZ25 OR TZC25 FOR FIELD WIRING OR PLUG-IN OF ASSOCIATED PIGGYBACK-MOUNTED EQUIPMENT.
6. 110 SQUARE PIN FEMALE RECEPTACLES (0.045) ARE PROVIDED ON FRONT OF THE TZ25 FOR PLUG-IN ON REAR OF ASSOCIATED ROOM SELECTOR PANEL.



EACH RELAY HAS TWO SETS OF FORM 'C' CONTACTS. ALL RELAYS ARE PART NUMBER D-0236; COIL RESISTANCE IS 1.6 KΩ; 28 VDC.

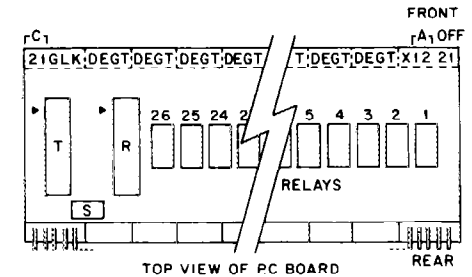


R & T CONNECTORS MATING PINS SHOWN. SEE CHART BELOW FOR CIRCUIT NUMBERS. TOP VIEW

R AND T CONNECTOR PIN TO ROOM CIRCUIT CROSS-REFERENCE CHART

PIN OR WIRE NUMBER **	ROOM NUMBER	PIN OR WIRE NUMBER **	ROOM NUMBER
1 RED	1	14	*
2	3	15	2
3	5	16	4
4	7	17	6
5	9	18	8
6	11	19	10
7	13	20	12
8	15	21	14
9	17	22	16
10	19	23	18
11	21	24	20
12	23	25	22
13	25	26	24

- * R14 IS +28VDC.
- ** FLAT RIBBON CABLE WIRES ARE NUMBERED 1 (RED) TO 26 CONSECUTIVELY AND ARE WIRED TO CORRESPONDING PIN NUMBERS OF RESPECTIVE R OR T CONNECTOR.



TIME ZONE ADAPTERS MODELS TZ25 AND TZC25

RAULAND-BORG CORP.
CHICAGO, ILL.
MADE IN U.S.A.

KC-1347- C

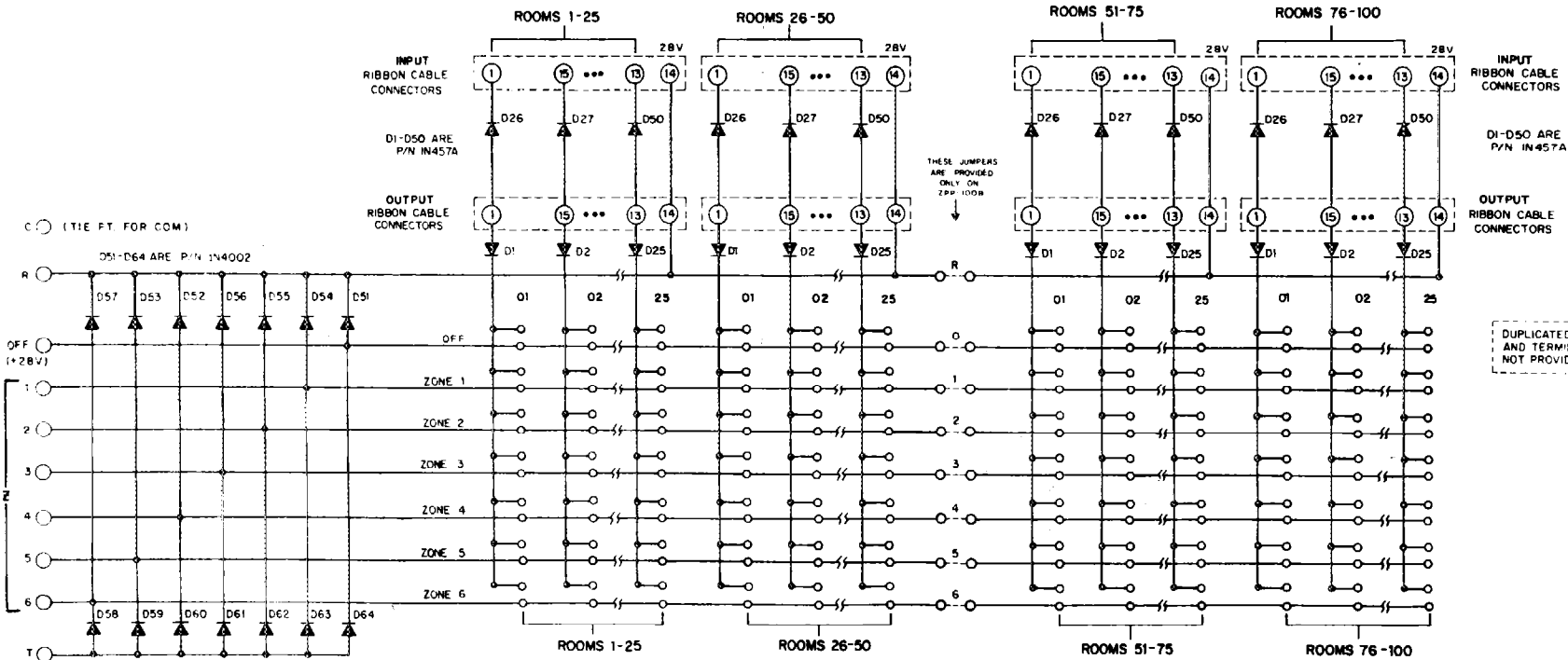
DRG. NO.		KC-1347		C	
DATE:		7-9-1979			
ISSUE		CHANGE			
A	NOTE: 2, OFF 1 AND OFF 2 WAS A1 AND A2. 4-28-80				
B	ADDED D4 TERM 'N' WAS 'X'.				
C	NOTES 4, 8, 10 *CORRECTED. 10-6-81				

NEG SUPPLY
PSX30
(USED ONLY ON
RT 2402/6)

ZPPC50 ZONE PATCH PANEL (50 ROOMS)

ADDITIONAL CIRCUITRY PROVIDED FOR ZPPC100 ZONE PATCH PANEL (100 ROOMS)

DRG NO	KC-1367
DATE	7-26-79
ISSUE	CHANGE



DUPLICATED DIODES D51 - D64 AND TERMINALS Z1 - Z6 ARE NOT PROVIDED WITH ZPPC100

PIN OR WIRE NUMBER X	ROOM NUMBER	PIN OR WIRE NUMBER X	ROOM NUMBER
1 (RED)	1	14	28 V
2	3	15	2
3	5	16	4
4	7	17	6
5	9	18	8
6	11	19	10
7	13	20	12
8	15	21	14
9	17	22	16
10	19	23	18
11	21	24	20
12	23	25	22
13	25	26	24

* FLAT RIBBON CABLE WIRES ARE NUMBERED 1 (RED) TO 26 CONSECUTIVELY AND ARE WIRED TO CORRESPONDING PIN NUMBERS OF RESPECTIVE CONNECTOR.

PROGRAMMING INSTRUCTIONS

TO PROGRAM ROOM FOR DESIRED ZONE OR NO ZONE (OFF), INSERT JUMPER ●—● INTO ONLY ONE OF THE SEVEN POSITIONS PROVIDED FOR THAT PARTICULAR ROOM. REPLACEMENT JUMPERS MAY BE OBTAINED IF NEEDED, ORDER P/N AB-3176—. THE MAXIMUM NUMBER OF JUMPERS PERMITTED FOR EACH ZONE IS 125 WHEN USING THE PSX30 POWER SUPPLY OR OPERATED WITH THE RT2001 TELECENTER® II ADMINISTRATIVE TELEPHONE SYSTEM.

ZPPC100 / ZPPC50
 ZONE PATCH PANEL
 RAULAND BORG CORP
 CHICAGO, ILL
 MADE IN U.S.A.
 KC-1367-