

Expansion Kit Model: IA-410

For use with IM-4006 Radio-Intercom System to increase the number of speaker stations from 10 to 20.

NOTE: the IR-103 Rough-In Frame should already have been installed per the instructions packed with the IR-103 Rough-In. The 105T transformer originally packed with the IR-103 should not have been installed. If it has been installed, **TURN OFF POWER** to the transformer and remove both the transformer and transformer box from the IR-103 Rough-In. The transformer packed with this kit must be the one used.

Installing Transformer

Refer to Figure 1.

1. Place transformer box through adaptor plate.
2. Place transformer and adaptor plate into IR-103 rough-in frame.
3. Pull 120vAC house wiring through the hole in bottom of transformer box and secure with box connector (not supplied).
4. Connect transformer primary leads to 120vAC: white to white and black to black. Be sure bare ground wire is grounded to transformer box or the IR-103 rough-in frame.
5. Place transformer into the transformer box.
6. Set cover and screws aside, they will be installed later per IM-4006 Installation Instructions.

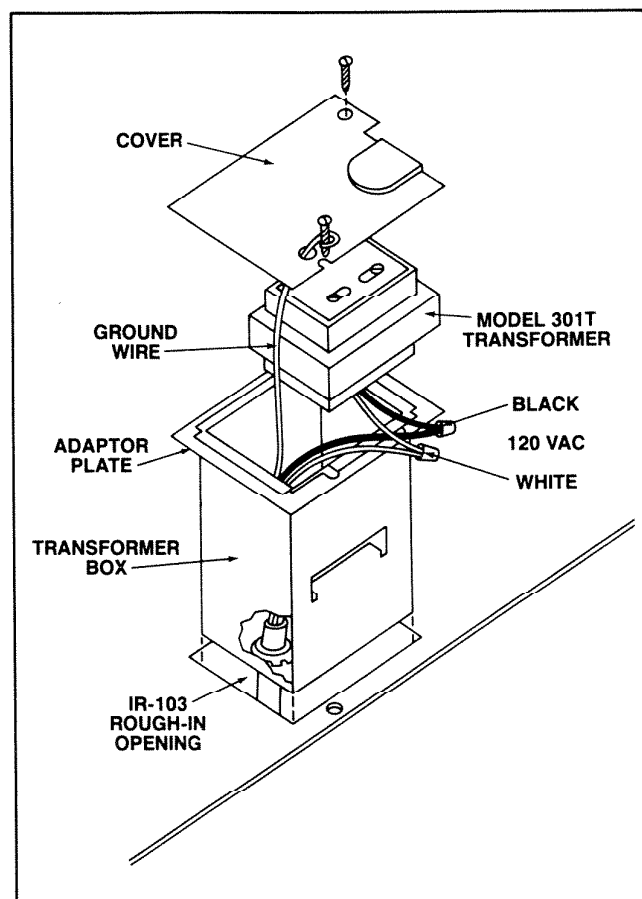


FIGURE 1

Installing the Terminal Board

Refer to Figure 2.

1. Locate the terminal board, Board (A), in the right rear section of the rough-in frame.
2. Use four (4) combination head screws supplied to secure terminal board to rough-in frame.
3. Make certain that the screw that goes through the ground lug is secure and snug against the ground lug. Do not bend ground lug—make sure it is positioned between mounting screw and terminal board.
4. Plug the Brown and White Ribbon Wire Connectors from IA-410 Terminal Board to matching Brown and White Plugs on adjacent IM-4006 Terminal Board.

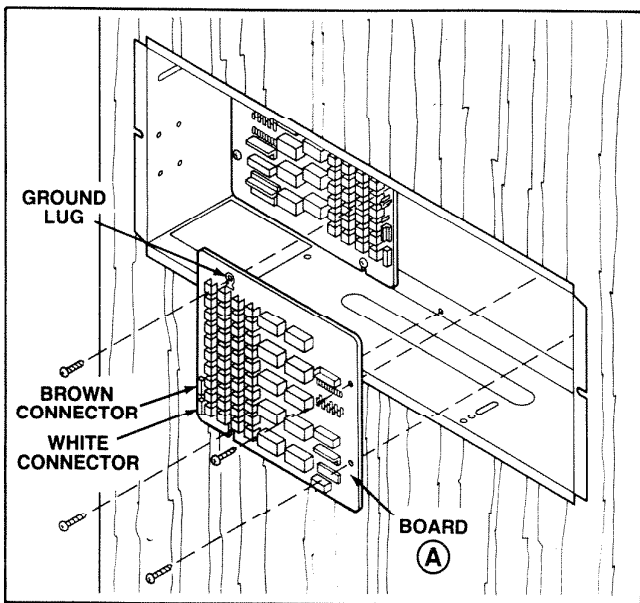


FIGURE 2

Installing Front Switch Panel

1. Removing blank panel. Refer to Figure 3.
 - (a) Open right front panel door.
 - (b) Insert screwdriver between the blank panel and the plastic housing and lift up to pull blank panel off.

CAUTION: DO NOT APPLY PRESSURE TO HINGE WITH SCREWDRIVER.
2. Attach new panel. Refer to Figures 4 and 5.
 - (a) Remove adhesive tape from back of panel. See Figure 4.
 - (b) Apply panel to location of previously removed blank panel. See Figure 5.

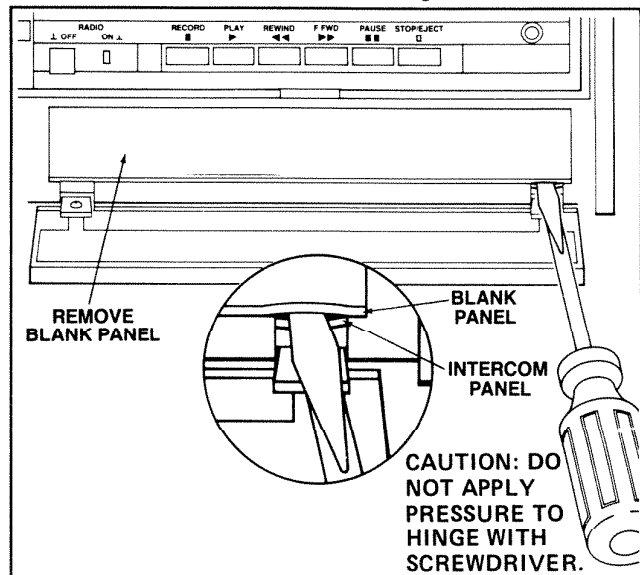


FIGURE 3

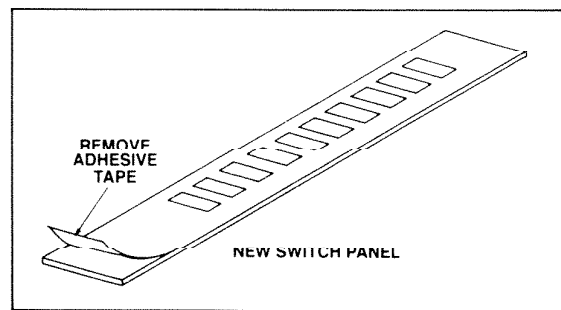
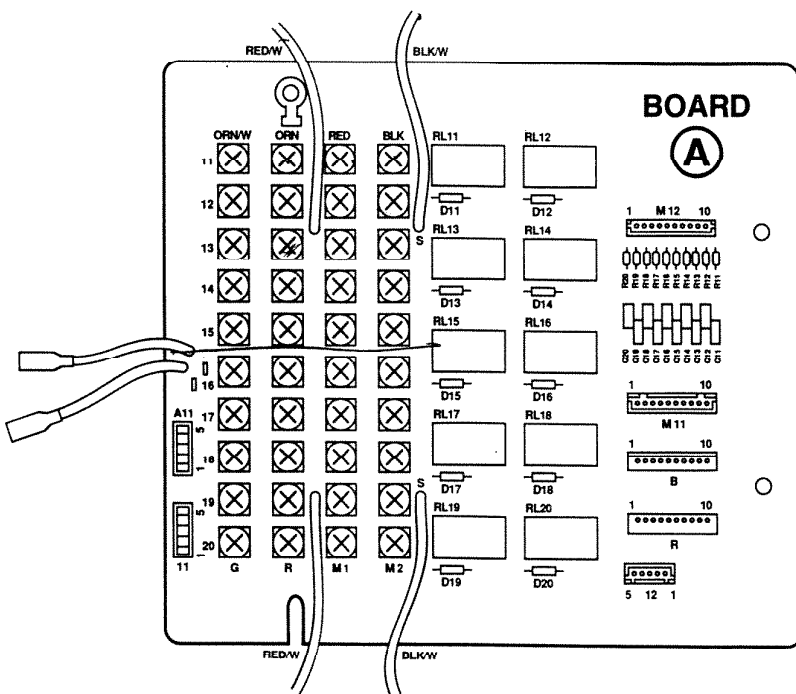


FIGURE 4

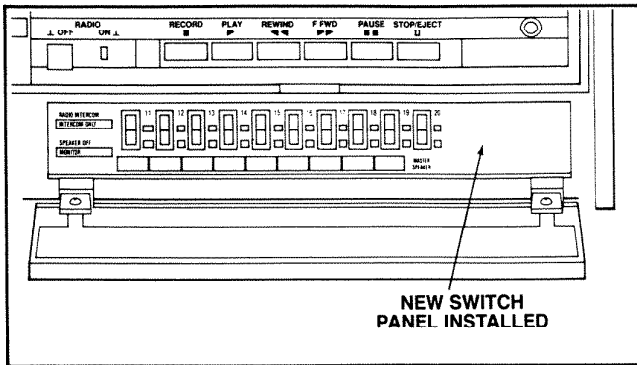


FIGURE 5

Installing the P.C. Boards

1. Lay radio-intercom on its face on a table with a surface that will not mar the front panel.
2. Locate Board (B) (already installed) in lower left hand side of unit. See Figure 6. This board will need to be temporarily removed and later relocated. To remove Board (B) proceed as follows:
 - (a) Cut wire tie that holds Board (B) in place during shipment and discard. See Figure 6.
 - (b) Remove screws that hold Board (B) to support brackets. See Figure 6.
 - (c) Remove screws that hold support brackets to radio-intercom and set brackets aside—they will need to be reinstalled later. See Figure 6.
 - (d) Turn Board (B) over and carefully lay on top, out of the way. See Figure 7.
 - (e) Remove upper left board retaining bracket and set it aside, it will be reinstalled later. See Figure 7.

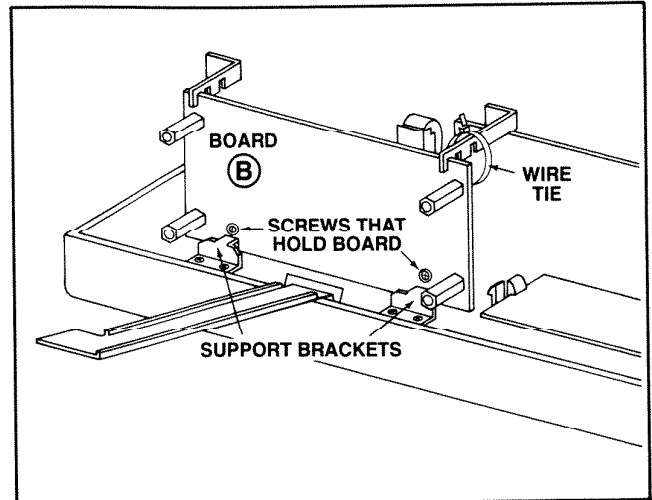


FIGURE 6

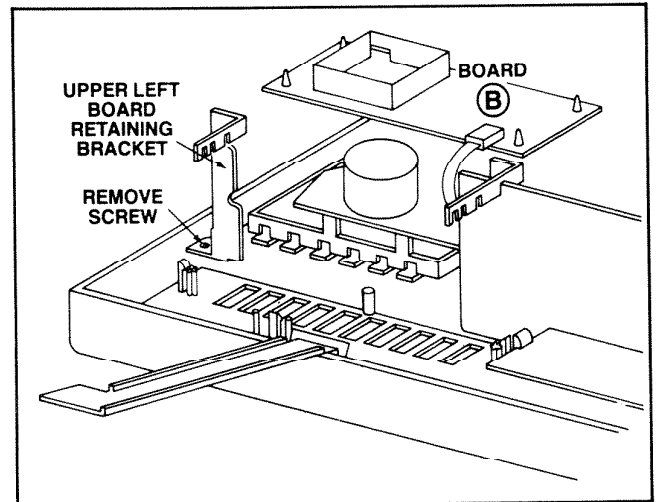


FIGURE 7

IMPORTANT - WHEN NUTONE MODEL IW-6R WIRING IS USED:

CONNECT TO SCREW ON PRINTED CIRCUIT BOARD MARKED:

	1	ORN
	2	BLK
	3	BLK/WHITE
	4	ORN/WHITE
	5	RED
	6	RED/WHITE

3. Install Board (C) supplied with the kit. Refer to Figures 8 and 9.
 - (a) Be sure board is located and seated on locator pins. See Figure 8.
 - (b) Make sure the board is secured beneath the three (3) locking tabs and fastened with the phillips head screw that is supplied. See Figure 9.
 - (c) Plug the two-wire and three-wire connectors on Board (C) to matching two and three wire plugs on the adjacent switch PC board. See Figure 9.

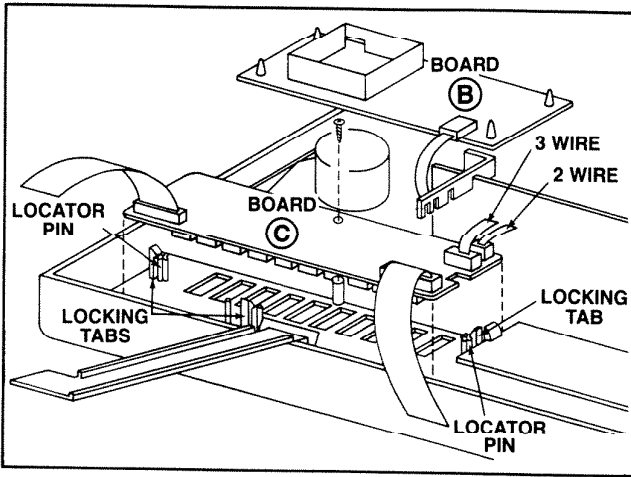


FIGURE 8

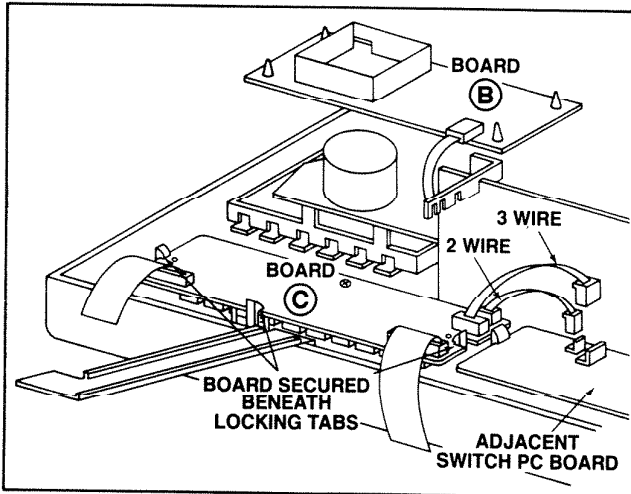


FIGURE 9

4. Reinstall Board (B) which had been previously removed. Refer to Figure 10.
 - (a) Return Board (B) to its original upright position and attach upper right hand section of Board (B) first by inserting nose of the board spacer into clearance hole in rear board and then inserting Board (B) into rear slot on the upper right board retaining bracket. See Figure 10.
 - (b) Temporarily leave Board (B) in this position.

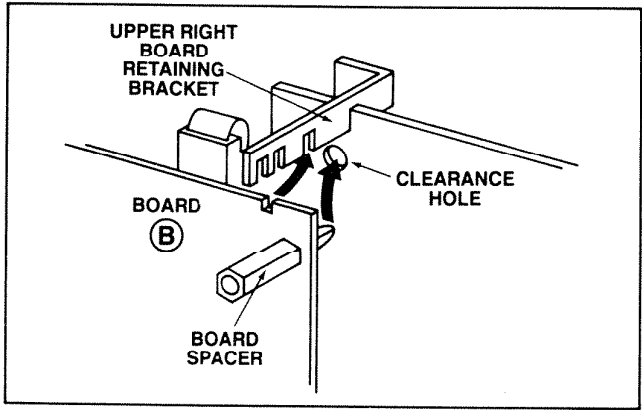


FIGURE 10

5. Install Board (D) supplied with kit. Refer to Figures 11 and 12.
 - (a) Insert right top corner of Board (D) into front slot of upper right retaining bracket. See Figure 11.
 - (b) Secure Board (D) to the lower board spacers of Board (B) with two (2) phillips head screws supplied. See Figure 11.
 - (c) Plug the ten (10) wire connector from Board (C) into matching plug on right side of Board (D). See Figure 11.
 - (d) Reinstall upper left board retaining bracket. See Figure 12.
6. Reinstall support brackets that had been previously removed. Refer to Figure 12.
 - (a) Insert neck of brackets under slots on Board (D). See Figure 12.
 - (b) Attach brackets to base of radio-intercom with four (4) screws.
 - (c) Attach brackets to Board (D) with two (2) screws. See Figure 12.

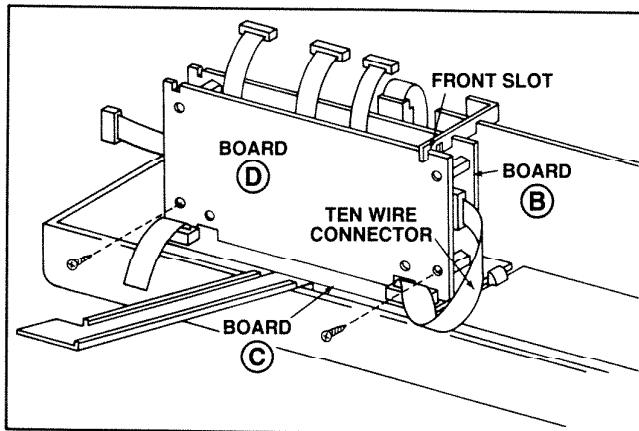


FIGURE 11

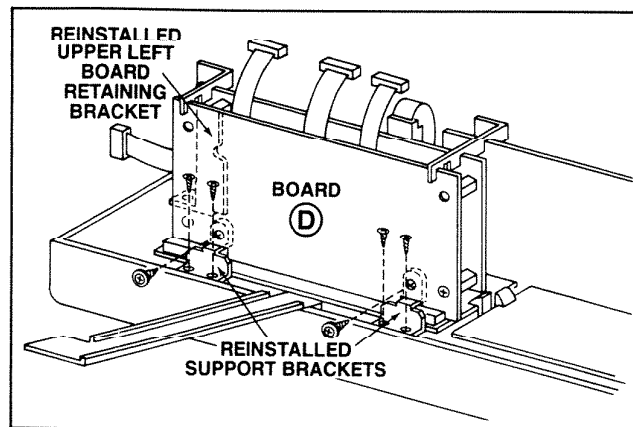


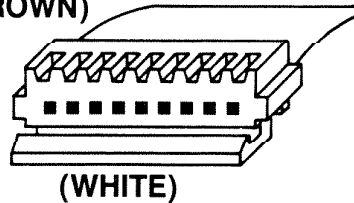
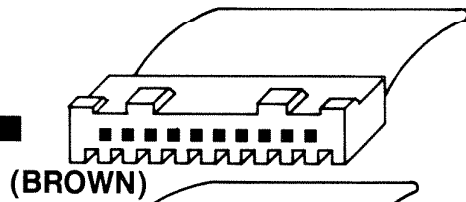
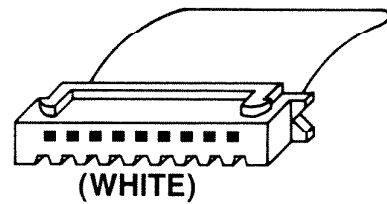
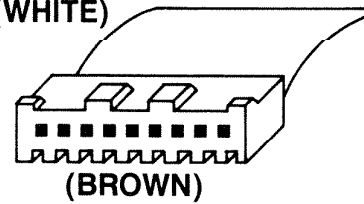
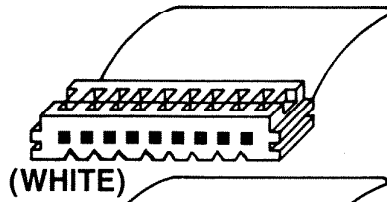
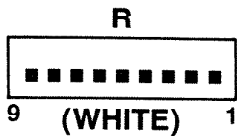
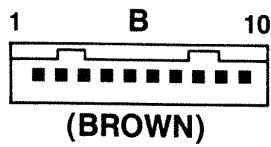
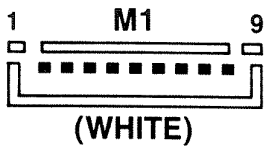
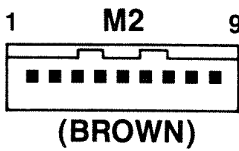
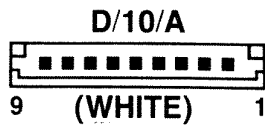
FIGURE 12

FOR INSTALLATION OF RADIO-INTERCOM REFER TO IM-4006 INSTALLATION INSTRUCTIONS (PACKED WITH RADIO-INTERCOM).

FOR CABLE CONNECTION LOCATIONS TO BOTH IM-4006 AND IA-410 TERMINAL BOARDS USE THE CABLE LOCATION GUIDES ON THE FOLLOWING PAGES OF THESE INSTRUCTIONS.

CABLE LOCATION GUIDE IM-4006 TERMINAL BOARD

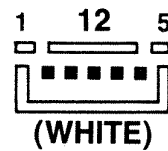
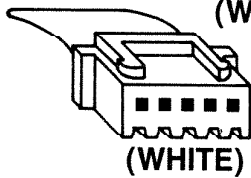
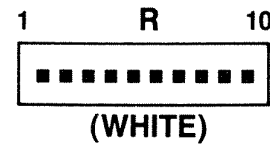
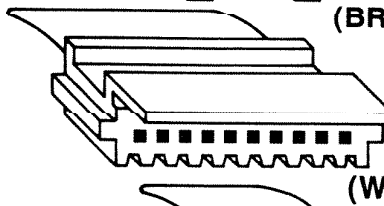
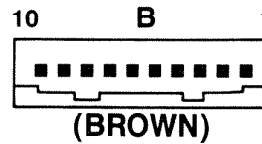
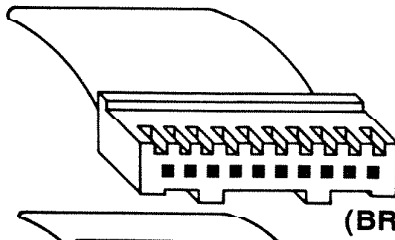
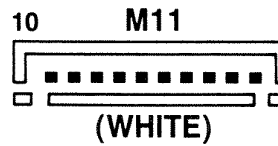
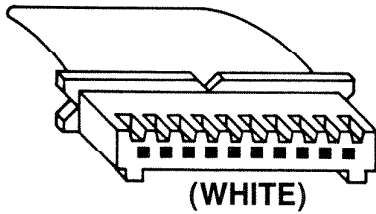
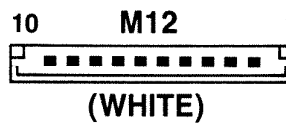
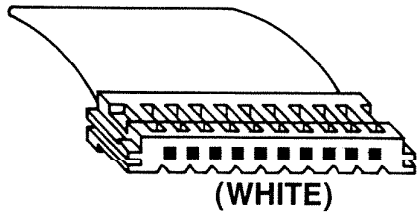
**IMPORTANT: INSTALL CABLES
STARTING AT
BOTTOM OF
BOARD AND
WORK UP.**



BOTTOM OF BOARD

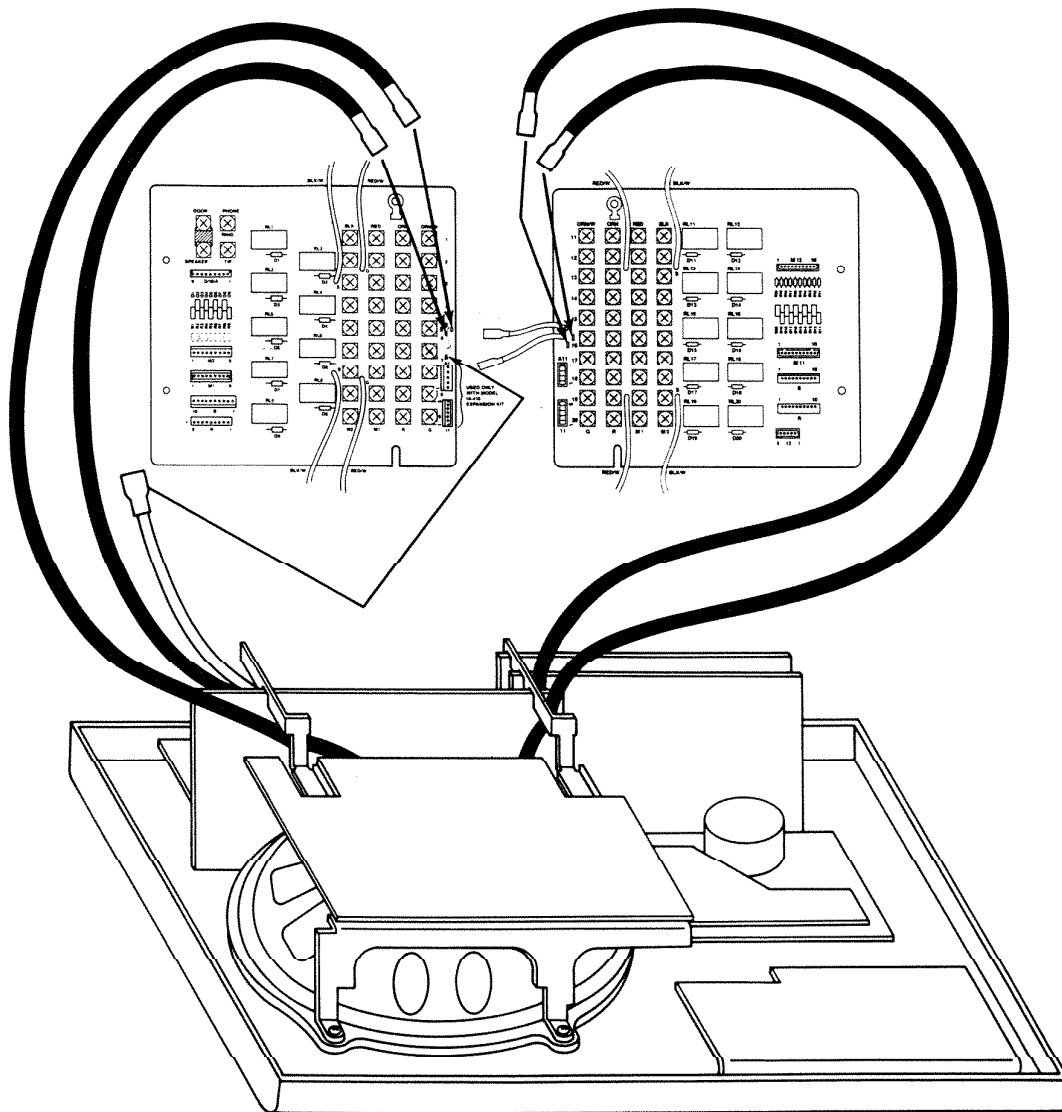
IMPORTANT: INSTALL CABLES STARTING AT BOTTOM OF BOARD AND WORK UP.

CABLE LOCATION GUIDE IA-410 TERMINAL BOARD



BOTTOM OF BOARD

EARTH GROUND LOCATIONS



Refer to the Radio-Intercom system's Operator's Manual for operating instructions and warranty information. If Operator's Manual has been misplaced, write to: NuTone, Madison and Red Bank Roads, Cincinnati, Ohio 45227. Attention: Department of National Field Service.

Product specifications subject to change without notice.

NuTone

Madison and Red Bank Roads, Cincinnati, Ohio 45227
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