

2-WIRE ANNUNCIATOR INSTALLATION PROCEDURE MARCH 28, 1995

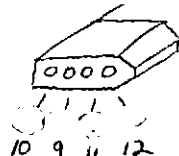
I. Annunciator Receiver / 16 Light board.

A. Receiver board diode configuration.

Determine the system voltage. 12 VDC unit, remove 1N4003 diode from D4 and place it in D5 location (D4 should be left empty). 24 VDC unit, remove 1N4003 diode from D5 and place it in D4 location (D5 should be left empty).

B. Receiver board quick disconnect plug wiring.

Cut 4-20 gauge wires 15 inches in length. Strip one end of each wire and solder in locations J9, J10, J11 and J12. Cable tie J11 and J12 together and lay it around the back side of the transformer (opposite side of voltage regulator). Join at wires J9 and J10, cable tie all 4 together and trim ends even. Strip the other ends of each wire 3/16" and apply female .062" crimp terminals to each. Insert the terminals into a 4 position female connector starting from pin 1 (~~Pin 2~~ ^{SIDE}) of connector; J10, J9, J12 and J11 respectively. Finish cable tying the wires together as needed. Approximately two more.



NOTE: If a backup battery is going to be used, cut 2-20 gauge wires 11 inches in length. Strip both ends of each wire 1/4". On one end of each wire crimp a female push on lug. Solder one wire in location J5 and the other in location J6. Cable tie in the middle of the wires to secure. Place an Attention At the end of J5 wire place a plus label. At the end of J6 wire place a minus label.

C. Receiver board terminal connectors and coaxial connectors.

Solder 5-position connectors into locations J2 and J3. Connector openings should be facing away from the transformer.

Solder a coaxial cable connector into location J8. If the receiver board is to be used in a relaying configuration, another coaxial cable connector must be soldered into location J7.

D. Receiver board connector labels.

Place connector labels J2, J3, J8 and J7 near their respective locations. If coaxial connector J7 is not used, DO NOT place label on PC Board.

E. Drill Receiver board mounting holes.

Drill the 8 Printed Circuit Board mounting holes to .189". This provides additional tolerances for mounting.

F. Drill annunciator panel box.

Using the template, drill the ⁴~~8~~ holes in the bottom of the annunciator panel box to .189". The template should be placed on the bottom of the box so that the mounting holes for the transformer are to the left side with the box opening facing away from you.

G. PC Board standoff installation.

Using #6/32 3/8" pan head screws and 3/8" male to female standoffs, install 1 standoff in each mounting hole previously drilled using lock-tight sealer.

NOTE: DO NOT mount battery so as to obstruct any face plate mounting holes.

Battery backup mounting bracket installation.

Use #32 drill bit for holes

Drill appropriate size mounting holes on the upper right side (when opening is facing you) of the annunciator box for mounting brackets. Use 3 sheet metal screws to mount the brackets.

Clip and file the sheet metal screws to eliminate sharp edges.

Place a plus and minus sticker on the backup battery near the appropriate terminals.

H. Receiver board mounting.

Place the Receiver board in the annunciator panel box on top of the standoffs. Using #6/32 1/4" O.D. hex nuts and lock washers, secure the PC board in place.

NOTE: If the backup battery is used, connect the minus battery wire to the backup battery.

I. Annunciator panel box labels.

4 labels must be placed in the back left of the annunciator box 3/4" below top left mounting hole. These are 120 VAC connection, 240 VAC connection, signal connection and Warning about cable connection.

J. 16 Light board connectors and L.E.D.s.

Using a special uncut 16 Light board with resistors and transistors located on the bottom, solder a standard 8 position side terminal connector to the board. Solder a 20 position, dual row, male header at the bottom of the board. Cut and solder the determined amount of L.E.D.s as requested by the customer. Also remove required buzzer diodes. (lowest holes)

K. 16 Light board mounting.

Using the standard 16 Light board face plate (surface or flush mount), mount the PC board as always.

L. 16 Light board wiring and quick disconnect plug wiring.

Wire the 16 Light annunciator panel face as always leaving the battery positive and battery negative wires open (bottom two terminals on 8 position side connector. Bottom most terminal is negative and 2nd from bottom terminal is positive). Cut 2-20 gauge wires 10 inches in length. Strip one end of each wire and place 1 in the positive and the other in the negative locations on the 8 position side connector of the 16 Light board. Strip the other ends of each wire 3/16" and apply male .062" crimp terminals. Cut 1-20 gauge wire 3 inches in length. Strip both ends of the wire 3/16" and apply male .062" crimp terminals. Insert the terminals into a 4 position male connector starting from pin 1 (flat spot) of connector; battery negative (bottom most terminal of 8 position side connector), battery positive (2nd from bottom terminal of 8 position side connector), 1 end of 3" wire, other end of 3 inch wire respectively.

II. Panel Transmitter / 16 Light board.

A. 16 Light board connectors and L.E.D.s.

Using a standard cut 16 Light board, solder a standard 8 position side terminal connector to the board. Solder a standard 16 position bottom connector to the board. Solder a 20 position, dual row, female header above the 16 position connector. Cut and solder the determined amount of L.E.D.s as requested by the customer. Also remove required buzzer diodes.

B. 16 Light board mounting and wiring.

Mount the 16 light board as always with the following exception. Instead of using 4 lock washers and 4 1/4" O.D. hex nuts, use 4 male-female 3/8" standoffs. Connect wiring to 16 Light board as always

C. Transmitter board mounting.

Mount the Transmitter board over the 16 Light board aligning the 20 position male header on the transmitter board with the 20 position female header on the 16 light board. Firmly press the 2 boards together making sure a good connection has been made. Using 4 lock washers and 4 1/4" O.D. hex nuts, secure the 2 boards together.

III. Transmitter and Receiver board testing connections.

NOTE: Be sure that no AC or DC power is applied to either the Transmitter or receiver boards in any way.

A. Transmitter connections.

Connect 1 end of a coaxial cable to the coaxial cable connector labeled J2 on the Transmitter board.

B. Receiver connections

Connect the other end of a coaxial cable to the coaxial cable connector labeled J8 on the Receiver board.

DC OPERATION:

Connect a test wire from the control panel #200 ^{POSITIVE #103 or #6} terminal to the Receiver board terminal J3-5. Connect a test wire from the control panel #9 terminal to the Receiver board terminal J2-5. ^{NEGATIVE #5}

AC OPERATION:

Connect an AC power source to connector J3 determining the proper voltage being used by referring to the labels affixed to the back of the annunciator box.

Set DC output at 13.7

C. Final power connections.

Connect battery negative to the control panel #9 terminal. Connect battery positive (12 VDC or 24 VDC as required) to control panel #48 terminal.

IV. Testing Transmitter and Receiver boards.

A. Testing.

Initiate standard 16 Light board testing procedures making sure that all L.E.D.s light and the buzzer sounds on appropriate failures.

B. Battery charging circuit.

Adjust potentiometer until disconnected battery leads read 13.7VDC.

C. Testing complete.

Note-make sure all power is remove from the Transmitter and Receiver boards before disconnecting coaxial cable. Disconnect battery positive from control panel #48 terminal. Disconnect battery negative from control panel #9 terminal. Disconnect test wire from Receiver board J3-5. Disconnect test wire from Receiver board J2-5. Disconnect coaxial cable from Receiver board coaxial cable connector J8. Disconnect coaxial cable from Transmitter board coaxial connector J2.