

# 900-203 CONTROL PANEL INSTALLATION

## For Audio/Visual Master

1. Remove 100-884 control panel cabinet from shipping box.
2. Locate keys to control cabinet in zip lock bag on outside of cabinet. Open cabinet lock, lift door up from bottom and push toward top to remove cabinet door.
3. Remove (4) 7/16" nuts holding 900-203 control panel in cabinet and remove control panel.
4. Remove all support packing and ties.
5. Mount 100-884 cabinet in proper location approximately 6'4" to top of cabinet.
6. Install 900-203 control panel back into cabinet and tighten the 4 7/16" nuts.
7. Install 110vac line in bottom left hand corner of cabinet under electrical box labeled high voltage, and connect to power switch. **(Important – Do Not bring 110VAC supply through top of cabinet.)**
8. Turn power switch to the on position and make sure LED-1, LED-2, and LED-3 on 500-158 power supply is illuminated; also verify that LED 11, LED 12, and LED 13 on top of 500-170 flasher board is flashing in sequence.
9. Turn power switch to the off position.
10. Install 500-057 interconnect cables between 900-203 Control Panel and Annunciator. Mark one cable "A" on each end and one "B".
11. Plug "A" cable into "A" position and "B" cable into "B" position on back of Annunciator PCB. **DO NOT** plug cables into terminal board in control panel at this time.
12. Before connecting field wiring to control panel, check each wire with an ohm meter for continuity reading to earth ground. All lines should be free of any ground reading. Correct before proceeding.
13. Connect field wiring and point wires. **NOTE:** It is recommended that one common run be connected at a time.
14. Using an ohm meter connect one lead to the +24 volt field wire and other lead to check each point wire connection on 500-172 terminal board. Any reading less than 25 ohms indicates a short on the point wire. **(DO NOT CONNECT THIS LINE UNTIL PROBLEM IS RESOLVED.)**
15. Turn power switch to on position.
16. Make sure all LEDs are illuminated as in step 11.

17. Do following check prior to plugging in Annunciator Cable A & B on 500-172 terminal board.
  1. Activate room patient station
    - a. LED on station illuminates
    - b. White dome lamp illuminates
  2. Activate Emergency bath station.
    - a. LED on station flashes
    - b. Red dome lamp flashes.
18. Turn power switch to off position.
19. Plug cable "A" into "A" position and cable "B" into "B" position on 500-172 terminal board located in 900-203 control panel.
20. Turn power switch on and check to see if green power LED is illuminated on Annunciator.
21. With field wire connected adjust output voltage to 24vdc. Using voltage meter:
  - A. Put positive lead on +24v FLD terminal.
  - B. Put negative lead on room common terminal.
  - C. Using small standard screwdriver adjust +24v FLD adjust potentiometer located at top of 500-158 Power Supply to read 24 VDC. Small adjustments are all that are required.  
**DO NOT OVER ROTATE POTENTIOMETER.**
22. Do complete system check out.
23. It is recommended that a complete system checkout of all devices be performed on a regular basis of at least once a month for life of system.

### **Test to verify 900-203 operation without connecting field wiring**

1. Connect red wire of a dome lamp to +24 fld terminal on field connection buss.
2. Connect white wire of dome lamp to field connection buss as follows:
  1. **Room Common** – Steady room light with slow tone.
  2. **Emergency Low** – Fast flashing room light, with flashing emergency light, and synchronized tone.
  3. **Emergency Mid** – Faster flash room light, with flashing emergency light, and synchronized tone.
  4. **Emergency High** – Rapid flash room light, with flashing emergency light, with synchronized tone.
3. To verify Annunciator LED operation from control panel, use short piece of wire – jump from room common on field connection buss to points 1-80 on 500-172 terminal board.

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## **SPECIAL FEATURES**

**ZONING**: Sixteen 8-position dipswitches are located on 500-172 Terminal Board. Each terminal switch corresponds to five consecutive points (1-5) (6-10) (11-15) etc. Each switch position corresponds to one of 8 zone outputs (Z1-Z8). (**Example**: Setting number 5 position on switch labeled 21-25 to the on setting will turn on Zone 5 output whenever any device connected to points 21-22-23-24-25 are activated.)

**DIALER**: Dry contacts, which can be set in normally open for normally closed position by JP1 Jumper, located on 500-170 Flasher Board. Contacts are maintained open or closed in alarm condition.

## **AUDIO/VISUAL INSTALLATION**

1. Use amplifier 500-175. (**FOR DS2000 ONLY**)
2. Complete steps 1 through 15 in Control Panel installation.
3. Plug Amplifier 500-175 into EC 2 Card Edge connector located above field connection terminals on 500-174 board.
4. Plug handset into modular jack located on front of Master.
5. Check audio lines with an ohm meter for any continuity reading to earth ground. All lines should be free of any ground readings before continuing.
6. Connect one wing of audio lines to audio terminals as shown on drawing 301-102. Check for proper operation. **Refer to Master operation.**
7. Continue connecting and checking one wing at a time.
8. It is recommended that a complete system checkout be performed on a routine basis of at least one a month for life of the system.

## **AMPLIFIER ADJUSTMENTS**

1. Plug Master handset in six position J1 Jack on 500-175 Amplifier board.

2. Select room station on Master.
3. Adjust talk and listen pot accordingly.
4. Gain potentiometer is set at factory and should not be adjusted unless necessary.
5. Plug handset into Master and do final adjustment to talk and listen potentiometer.
6. Adjust Panel Speaker potentiometer while Master is in hands free mode. **(DS2000 ONLY - See Master Operation)**

### **Field Connection Wiring Note:**

Our cable installation drawings are typical and, at your option, may be altered to fit your needs. Basically the common conductors are shown being installed from our control panel and through each dome light box. From the dome light a separate run should be made directly to each device such as patient station, emergency station, code station and smoke detector. Point wires should run from dome lights back to control panel. Separate common conductor runs should be made from the control panel. For example, wiring to a corridor should have two cables, one for the right side and one for the left side. This method of cable installation will greatly simplify installation and required service. By installing individual common conductors to various sections of the building a service problem may be found by separating commons at the control panel. By using the dome lights for junction boxes, most service work can be completed in the corridors and not require service men to enter each patient room. Systems, which are complete conduit type systems, may vary in some way. If assistance is needed, we will be happy to assist you in system layouts.

### **OWNER'S RESPONSIBILITY**

**It is recommended that a complete system checkout of all devices be performed on a regular basis of at least once a month for life of system.**

