Enclosure dimensions

18" (457 mm)

34 7/64" (867 mm)

4 1/8" (105 mm)

12 39/64" (320 mm)

5 7/32" (133 mm)

Mounting hole

20 11/32" (517 mm)

Mounting hole

10 53/64" (275 mm)

Mounting hole

5 21/64" (135 mm)

2 1/2" (64 mm)

1 Mount the Enclosure

Attention: The 22" Touch Screen enclosure is heavy (80 lbs or 37 kg).
Never attempt to lift this product by yourself. At least two people should lift it together.

The enclosure mounts on the wall. Mount the enclosure right-side up (the Mircom logo on the door is in the lower right corner).
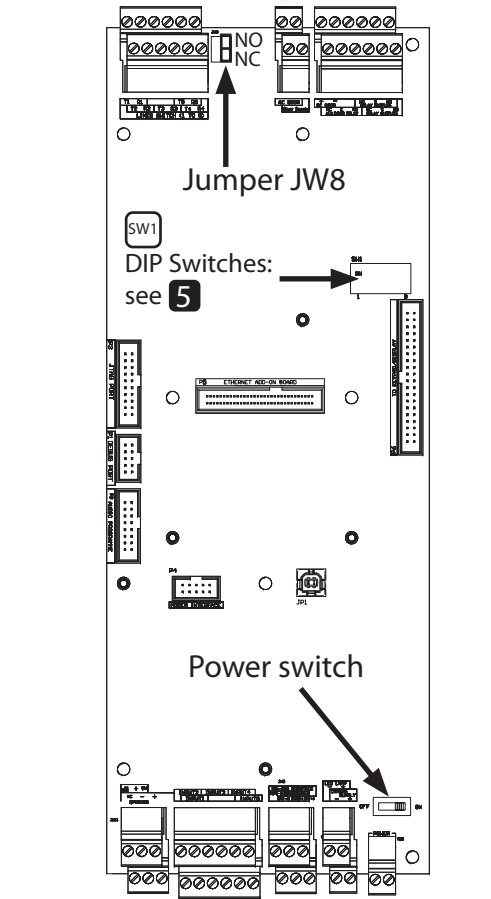
You need:
4 fasteners appropriate for the wall that you are mounting the enclosure on.

1. Find a suitable location for the enclosure. The wall must be able to support a weight of 80 lbs (37 kg).
2. Mark the back mounting locations of the two top screws. Ensure that at least one screw is over a wall stud.
3. Place the fasteners halfway into the wall in the two top keyhole locations and wall stud.
4. Place the enclosure onto the fasteners, then lower it so that the fasteners fit in the narrow part of the keyholes.
5. Screw the other fasteners into the remaining holes.
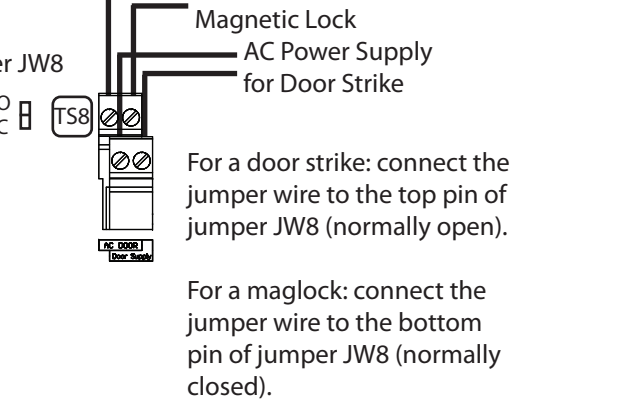6. Tighten all fasteners into place.

Maximum Power Supply Wire Distances

Gauge	Distance
16	125 ft (38.1 m)
14	200 ft (60.96 m)
12	320 ft (97.536 m)
10	500 ft (152.4 m)

Board layout

AC or DC Door Strikes: see **2** and **3**

Auxiliary Door Strike: see **4**

NO NC

Jumper JW8

SW1

DIP Switches: see **5**

ETHERNET ADD-ON BOARD

Power switch

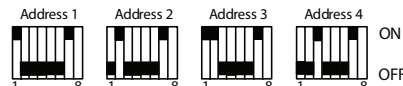**Warning: Turn the power off before wiring.**

Install all power supplies outside the enclosure.

Wiring Requirements
Unless specified otherwise, all wiring is a maximum length of 1000 ft (304.8 m).

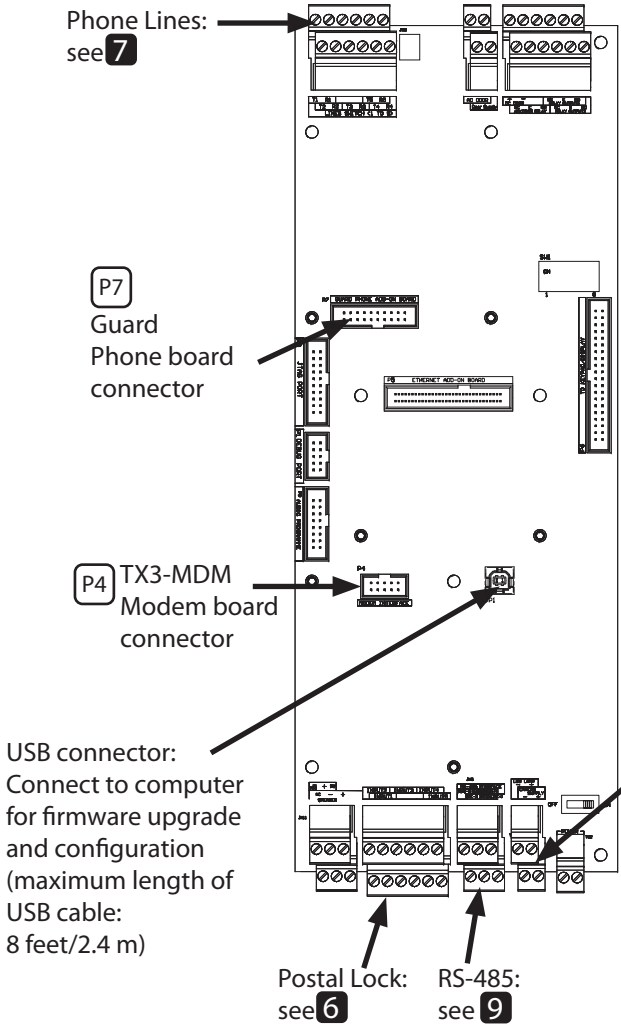**RS-485:** 22 AWG twisted pair, maximum length: 4000 ft (1219.2 m). Mircom recommends shielded cable.

Door Strike: The door strike power supply depends on the door strike power requirements.

2 AC Door Strike or Maglock
18 AWG

AC Door Strike or Magnetic Lock
AC Power Supply for Door Strike

Jumper JW8
NO
NC
TS8

For a door strike: connect the jumper wire to the top pin of jumper JW8 (normally open).

For a maglock: connect the jumper wire to the bottom pin of jumper JW8 (normally closed).

4 Auxiliary Door (Output 2)
18 AWG

TS9

− Door Strike
Note: Most door strikes are non-polarity.
+

+ −

Power Supply Note: If AC power supply is used, polarity does not apply.

Outputs 2-4

Output 4
Output 2
Output 3

Contact ratings for outputs 2-4:
125 VAC / 2 A
30 VDC / 1 A

3 DC Door Strike (Output 1)
18 AWG

AC or DC Power Supply for Door Strike

DC Output Door Strike or Magnetic Lock

Unused pin

TS8

TS9

The maximum supply for the AC or DC Power Supply for Door Strike must not exceed:
28 VAC / 1 A max
30 VDC / 1 A max

Alternative Wiring for Dry Contact

Trigger for door operator

Jumper JW8
NO
NC
TS8

Jumper JW8 controls whether the contact is normally open or normally closed.

5 DIP Switch Settings for RS-485 Address

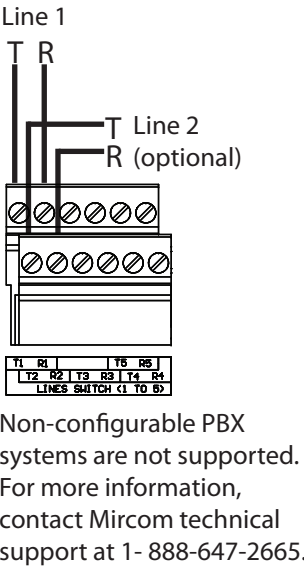Address 1   Address 2   Address 3   Address 4
ON
1 8   1 8   1 8   1 8
OFF

Each Touch Screen must have a unique RS-485 address.
Use DIP switches 1-6 to set the RS-485 network address. See LT-969 for details.
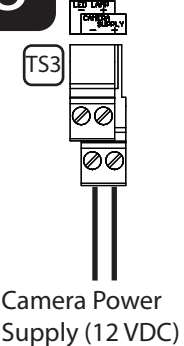Leave DIP switch 7 on.
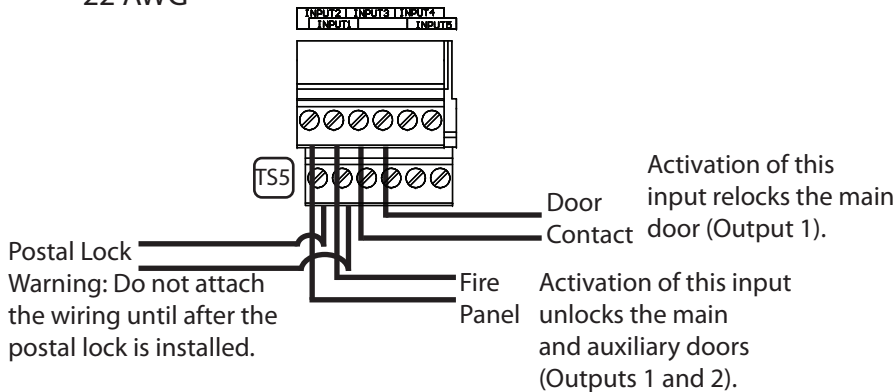
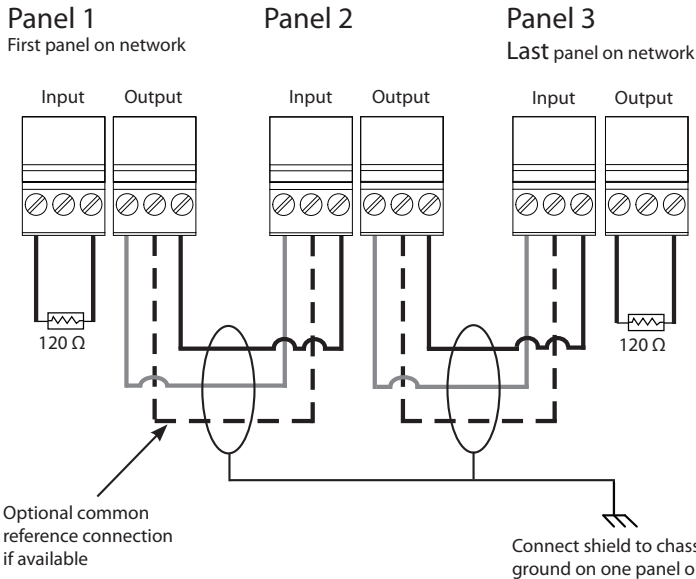**Warning: Turn the power off before wiring.**

Phone Lines: see **7**

P7 Guard Phone board connector

P4 TX3-MDM Modem board connector

USB connector: Connect to computer for firmware upgrade and configuration (maximum length of USB cable: 8 feet/2.4 m)

Postal Lock: see **6** RS-485: see **9**

6 Postal Lock (Input 1)
Fire Alarm Override (Input 2)
Door Contact (Input 3)
22 AWG

TS5

Postal Lock
Warning: Do not attach the wiring until after the postal lock is installed.

Door Contact
Fire Panel

Activation of this input relocks the main door (Output 1).

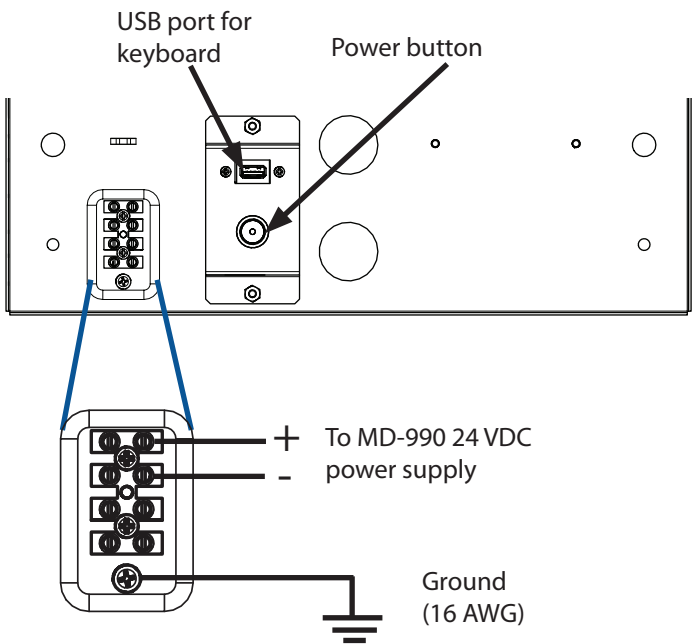Activation of this input unlocks the main and auxiliary doors (Outputs 1 and 2).

For more details, see LT-996 and LT-969 on the Mircom website and the USB flash.
Mircom technical support: 1-888-647-2665

7 Phone Lines
Line 1
T R

T Line 2
R (optional)

T1 R1 T5 R5
T2 R2 T3 R3 T4 R4
LINES SWITCH (1 TO 6)

Non-configurable PBX systems are not supported. For more information, contact Mircom technical support at 1- 888-647-2665.

8 Camera Supply
TS3

Camera Power Supply (12 VDC)

9 RS-485

22 AWG twisted pair, maximum length: 4000 ft (1219.2 m)
Mircom recommends shielded cable

Panel 1
First panel on network
Input Output
120 Ω

Panel 2
Input Output

Panel 3
Last panel on network
Input Output
120 Ω

Optional common reference connection if available

Connect shield to chassis ground on one panel only

10 Ground and Power

USB port for keyboard   Power button
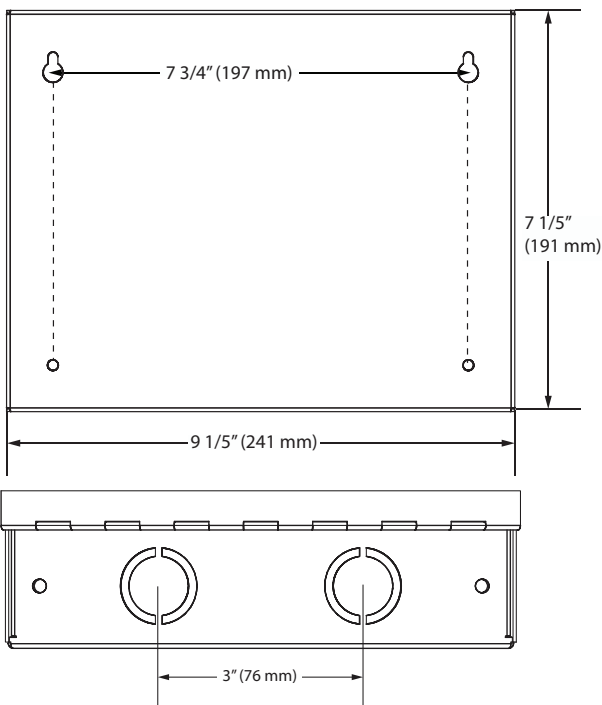
To MD-990 24 VDC power supply

Ground (16 AWG)

11 Mount the MD-990 24 VDC, 156 W Power Supply

Overall dimensions including door:
height: 7 23/32" (196 mm)
width: 9 53/64" (250 mm)
depth: 2 37/64" (66 mm)
Knockout dimensions: 1 1/8" (29 mm) and 7/8" (22 mm)

7 3/4" (197 mm)
7 1/5" (191 mm)
9 1/5" (241 mm)
3" (76 mm)

To surface mount the power supply enclosure:
1. Find a suitable location for the power supply enclosure, such as over a wall stud.
2. Using the power supply enclosure as a template, mark the back mounting hole locations. Ensure that at least one side is over a wall stud.
3. Remove the power supply enclosure and place the top two screws halfway into the marked hole locations and wall stud.
4. Place the power supply enclosure onto the two screws.
5. Screw the other two screws into the remaining holes.
6. Tighten all four screws into place.

   Note: The enclosure can also be mounted directly onto the drywall using anchors.

12 Connect the Power

1. Connect the MD-990 load power supply wires to the Touch Screen terminal screws as shown in step 10.
2. Connect the building power supply wires to the MD-990 line terminal screws as shown below.
3. Connect the other end of the building power supply wires the line voltage terminals.
4. Turn the power on by pressing the power button.

To building power   To Touch Screen

L N   -V -V +V +V   +V ADJ

Line   Load
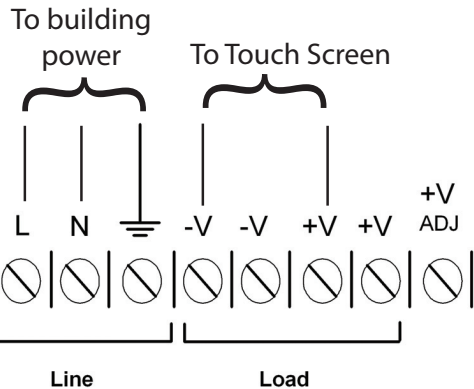
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