

1 TX3-TOUCH-S15B-WR and TX3-TOUCH-S15S-WR Installation

For field wiring, refer to LT-996 TX3 Touch Screen Installation Manual. For configuration, refer to LT-995 TX3 System Configuration and Administration Manual. These manuals are available on **http://www.mircom.com**

1.1 Installation

The enclosure mounts on the wall. Mount the enclosure with the right side up (the Mircom logo on the door is on the bottom).

To mount the enclosure

You need:

4 fasteners appropriate for the wall that you are mounting the enclosure on.

- 1. Find a suitable location for the enclosure.
- 2. Using the enclosure as a template, mark the back mounting locations of the two keyholes shown in Figure 1. Ensure that at least one side is over a wall stud.
- 3. Remove the enclosure and place the fasteners halfway into the wall into the marked hole locations.
- 4. Place the enclosure onto the fasteners and lower it so that the fasteners fit in the narrow part of the keyholes.
- 5. Screw the other two fasteners into the two remaining holes.
- 6. Tighten all fasteners into place.

Warning: To prevent water from entering the unit, use an elbow connector to run the wires to one of the three knockouts on the back. The elbow connector must point downwards.





Figure 1. Mounting Hole Dimensions (inches)



Figure 2. Overall Dimensions (inches)



1.2 Inside Door, Boards, and Grounding

1.2.1 Inside Door

The inside doors contain the following components as shown in Figure 3:

- Camera
- Microphone
- P300 Card Reader



Figure 3. Inside Door

Note: Mircom sells a postal lock adapter: part number DO-CR3.





1.2.2 Controller Boards

The TX3-TOUCH-S15B-WR and TX3-TOUCH-S15S-WR contain the following components and controller boards as shown in Figure 4:

- Power Switch
- USB Port
- Lobby Controller
- PC Sub Compact Board with Ethernet Port
- Power Supply and Audio Mixer Board
- Fan
- Speakers

To access the panel, unlock the door and swing it open.



Figure 4. Controller Board Panel



1.3 Grounding

Grounding reduces the risk of electrical shock by providing an alternate escape route for the electrical current.

To ground the Touch Screen

The ground terminal is shown in Figure 4.

1. Attach the ground screw to a suitable grounding wire and connect it to the site ground, as shown in Figure 4.

1.4 External Power Supply Installation

The Touch Screen external power supply is a 156 W, 24 V single output switching power supply inside a metal enclosure.

For best operation install the external power supply into its own dedicated electrical outlet to protect it from excessive power surges and current fluctuations.

All Touch Screen controller boards use the MD-990 for their power supply. The door strike power supply depends on the door strike power requirements.

Attention: See the included document LT-1094 TX3 Power Supply Voltage Selection for instructions on how to change the voltage from 115 Volts to 230 Volts.

Attention: Install the power supply indoors.

Overall dimensions: 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)





Figure 5. Power Supply Enclosure Dimensions (inches)

To mount the power supply enclosure

Attention: Install the power supply indoors.

You need:

4 fasteners appropriate for the wall that you are mounting the enclosure on.

- 1. Find a suitable location for the power supply enclosure, such as over a wall stud.
- 2. Using the enclosure as a template, mark the two top mounting hole locations as indicated in Figure 5. Ensure that at least one side is over a wall stud.
- 3. Remove the enclosure and place two wall fasteners halfway into the marked hole locations.
- 4. Place the enclosure onto the fasteners and lower it so that the fasteners fit in the narrow part of the keyholes.
- 5. Screw the other two fasteners into the two remaining holes.
- 6. Tighten all four fasteners into place.

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



1.5 External Power Supply Wiring

Attention: Install the power supply indoors.

The power supply terminal block on the Touch Screen is shown in Figure 4. It receives 24 VDC from the external power supply.

The external power supply connects to the building power AC power supply. A voltage selectable switch is located on the side of the unit and is factory set to 120 V.

The power supply terminals are located at the bottom of the external power supply as shown in Figure 6.



Figure 6. MD-990 Terminal Block Wiring

To connect the power supply

- 1. Connect the load power supply wires to the Touch Screen Controller board terminal screws as shown in Figure 4.
- 2. Connect the other end of the load power supply wires to the **Load** terminal screws as shown in Figure 6.
- 3. Connect the building power supply wires to the **Line** terminal screws as shown in Figure 6.



1.5.1 Maximum Power Supply Wire Distances

The distance from the Touch Screen to the power supply is a function of the wire gauge and the resistance generated by the cable by the power draw.

Do not exceed the maximum distances from the Touch Screen to the power supply as indicated in Table 1.

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)

 Table 1:
 Maximum Power Supply Wire Distances

1.6 Turning the Touch Screen On and Off

Note: Never turn off power when the system is operational.

To turn on the Touch Screen

1. Press the power switch (see Figure 4).

To shut down the Touch Screen

- 1. On the Touch Screen display, enter 9999.
- 2. Enter your administrator password, and then press **OK**.
- 3. Select **File > Shut down > Shut down**.
- 4. Do not disconnect the power until the full shut down process has been completed.



1.7 Factory Wiring for TX3-TOUCH-S15B-WR and TX3-TOUCH-S15S-WR

In these diagrams, WX and WR refer to the Mircom part numbers of the cables.







Figure 8. Wiring the button









Figure 10. Factory connections on the PC board MD-1288

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Figure 11. Display connections



Figure 12. Ground wires

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2 Specifications

External Power Supply

MD-990 156 W, 24 V single output switching power supply Input voltage: 88 VAC to 132 VAC

Door Strikes

Select the appropriate door strike as required by your system applications. We recommend using the following Mircom door strikes below and its compatible power transformer.

• Mircom Model M-10. DC (silent) or AC (buzzing) Door Strike. (Use PS-3B transformer)

Note: The door strike must have its own separate power transformer. Do not tap or use the system power transformers. When using a different door strike and door strike transformer, the maximum strike load that may be switched through the control unit is 28 VAC or 1 Amp DC.

The maximum supply for the AC or DC Input Door Strike must not exceed:

- 28 VAC / 1 A max.
- 30 VDC / 1 A max.

Outputs 2-4

Relays with these contact ratings:

- 125 VAC / 2 A
- 30 VDC / 1 A

Telephone Lines

Use only Loop Start telephones (not ground start), check with your local telephone company.

Operating Temperature

-20°C (-4°F) to 50°C (122°F)

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