

TX3-CX-1NP-256 Installation

These instructions explain how to install the TX3-CX-1NP-256 single door controller module in the following TX3 units:

- | | | | |
|-----------------------|-----------------------|-------------------|-------------------|
| TX3-TOUCH-F15-B/C/D | TX3-200-8U-B/C | TX3-1000-8U-B/C | TX3-2000-8U-B/C |
| TX3-TOUCH-S15-B/C/D | TX3-200-8C-B/C | TX3-1000-8C-B/C | TX3-2000-8C-B/C |
| TX3-TOUCH-F22(-C/D/E) | TX3-TOUCH-S22(-C/D/E) | TX3-2000-8U-C-256 | TX3-2000-8C-C-256 |
| TX3-TOUCH-S15B-WR | TX3-TOUCH-S15S-WR | | |

A. Contents of Kit

- Qty 1... TX3-CX-1NP-256
- Qty 2... Nuts for attaching TX3-CX-1NP-256 to the TX3 unit
- Qty 1... USB cable for programming TX3-CX-1NP-256
- Qty 1... USB flash containing TX3 software and manuals

B. Mount TX3-CX-1NP-256

1. Mount TX3-CX-1NP-256 on the two posts as shown in Figure 1.
2. Secure it with the provided nuts.

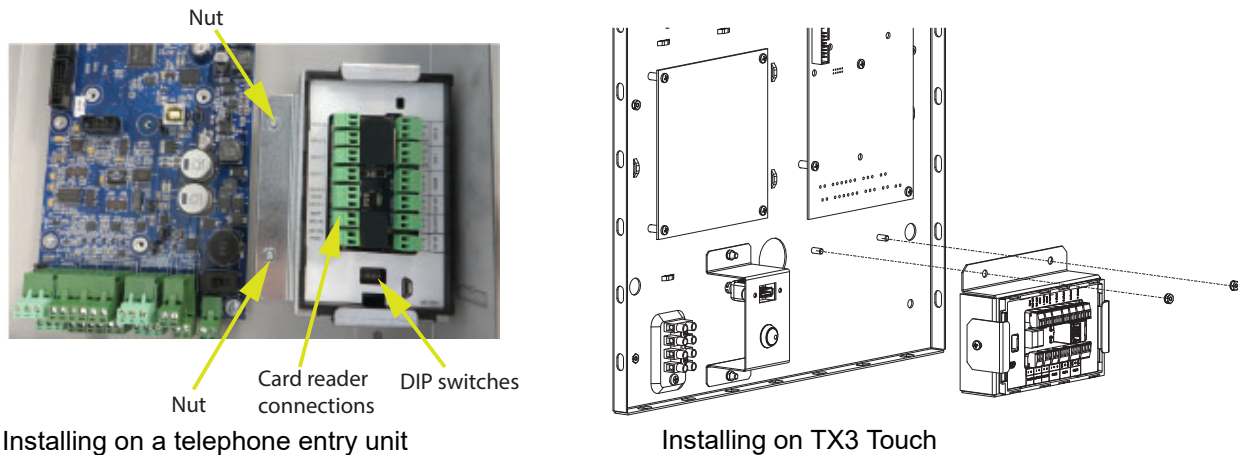


Figure 1 Mount TX3-CX-1NP-256

C. Set the RS-485 Address

- Use DIP switches 1-6 (shown in Figure 1) to set the RS-485 network address.



Figure 2 Set the RS-485 address

Note: You must set the RS-485 address even if you are not using RS-485.

- DIP switch 7: keep off.
- DIP switch 8: Set open (off) to get an IP address from the DHCP server, and set closed (on) to set a fixed IP address using the TX3 Configurator software. The default setting is off.

For more information and the complete list of RS-485 addresses, see LT-980, the TX3 Card Access System Manual, on the Mircom website (www.mircom.com) or the USB flash.

D. Wiring

- RS-485 wiring maximum total length: 1219.2 m (4000 ft)
- Wiegand connection maximum length: 152.4 m (500 ft)

Note: TX3-CX-1NP-256 has no IP or Power over Ethernet capability. Use the IN 12V terminal for power.

Set ON if unit is used as first or last controller on RS-485 network. Otherwise set OFF. The default setting is OFF.

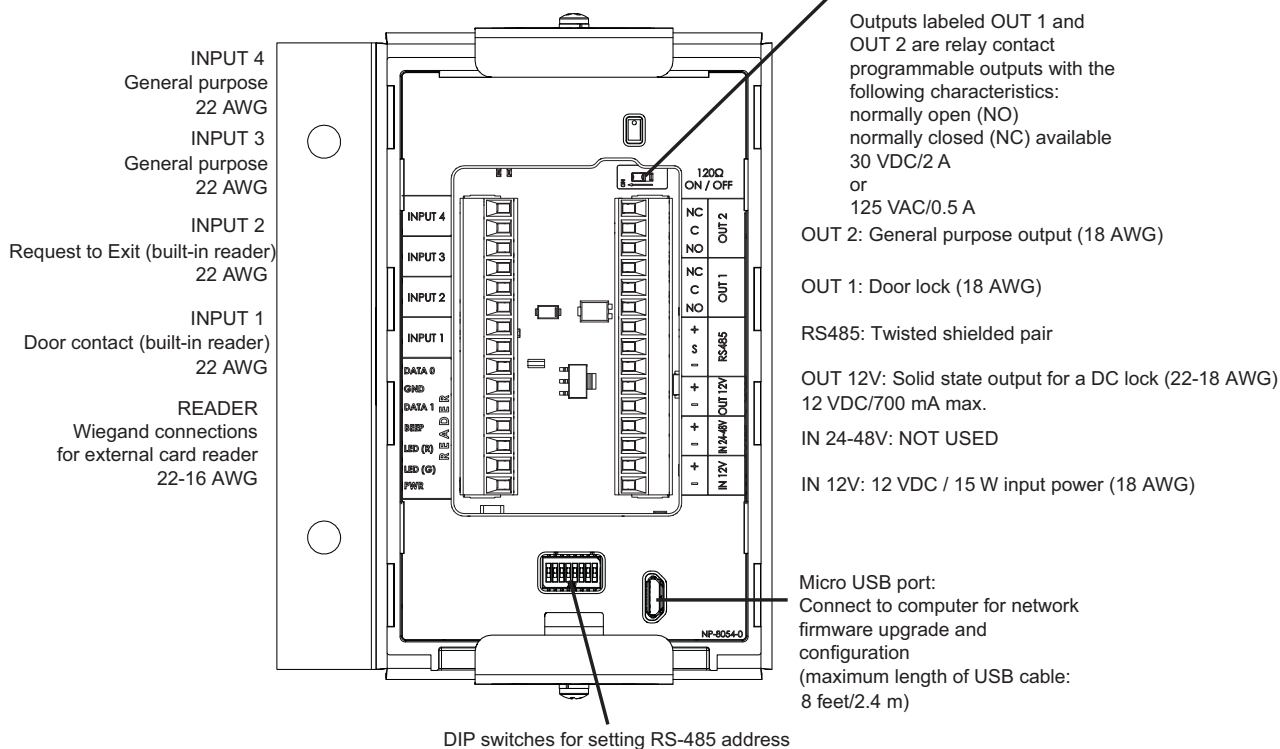


Figure 3 Wiring TX3-CX-1NP-256

RS-485

Connect the RS-485 input terminal to the RS-485 output terminal of another controller. See Figure 4.

Set the 120Ω switch ON (shown in Figure 3) if unit is used as first or last controller on RS-485 network. Otherwise set OFF. The default setting is OFF.

Note: Use twisted shielded pair.

Recommended cables:

- RS485 cables
 - Belden 3109A RS-485, (4 pr) 22 AWG (7x30) or equivalent
 - Belden 9842 RS-485, (2 pr) 24 AWG (7x32) or equivalent
 - Belden 9841 RS-485, (1 pr) 24 AWG (7x32) or equivalent
- CAT5 Cables
 - Belden 72001E ETHERNET Cat 5e 2 Pair, 24 AWG or equivalent
 - Belden 70006E Cat 5e, 100Mb/s, Quad, AWG 22 (1) or equivalent

Maximum total length:

- 4000 feet (1244 m) for 22 AWG
- 2500 feet (762.5 m) for 24 AWG

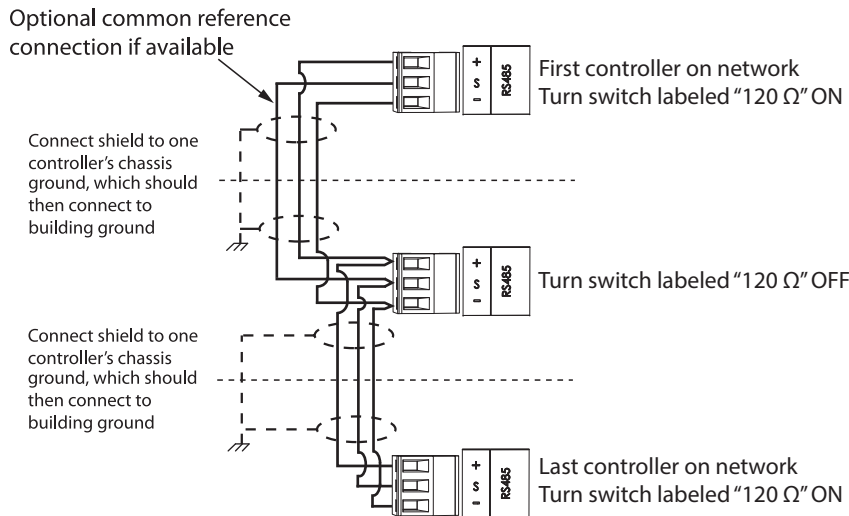


Figure 4 RS-485

USB Port

The USB port provides a connection to a PC, for configuring the Card Access System and upgrading the firmware.

Inputs

Inputs 1 to 4 are programmable inputs. For details on the active state and supervision of the inputs, see LT-980 on the Mircom website (www.mircom.com) or the USB flash.

For details on programming the inputs, see LT-995 on the Mircom website (www.mircom.com) or the USB flash.

Outputs

For details on programming the outputs, see LT-995 on the Mircom website (www.mircom.com) or the USB flash.

E. Connect the Power

The Single Door Controller is powered by the **IN 12V** terminal. You can supply power from the camera supply on the lobby board.

- 12 VDC/15 W - use 18 AWG

F. Card Reader Beeper

The beeper indicates specific events at different beep rates as follows:

- **Card Presented.** One short beep.
- **Access Granted.** Two short beeps.
- **Access Denied.** One short beep and one long beep.
- **Mode of Operation Changed.** Three short beeps indicate a change in the on or off state for the high security or the unlock mode.
- **Alarm.** Continuous short beeps.

G. Update Firmware

Refer to LT-995 on the Mircom website (www.mircom.com) or the USB flash for instructions on how to upgrade the firmware.

H. Install the TX3-P300-HA Card Reader

See LT-969 the Telephone Access Installation and Operation Manual on the Mircom website (www.mircom.com) or the USB flash for instructions on installing the TX3-P300-HA card reader in the lobby control units.

I. Wire the TX3-P300-HA Card Reader to TX3-CX-1NP-256

Color of Reader Wire	Terminal on TX3-CX-1NP-256
Green	DATA0
Black	GND
White	DATA1
Blue	BEEP
Brown	LED (R)
Orange	LED (G)
Red	PWR

Card reader requirements

Card readers must meet the following minimum requirements in order to be compatible with Mircom's Card Access System:

- Standard Wiegand interface
- LED status indicator
- Warning or alarm buzzer
- 12 Volt operation
- Maximum distance 500 ft (152.4 m)
- Use 20 AWG for 500 ft (152.4 m)
- Use 22 AWG for 250 ft (76.2 m)
- For other card readers, consult your reader installation manual for recommended distances and gauges

See LT-980 the Card Access System Manual on the Mircom website (www.mircom.com) or the USB flash for more information.