

Multi-technology Readers Installation Guide

Description

The Multi-technology Readers feature a rugged design and can be installed almost anywhere. Durable, weatherproof, UV-resistant materials, along with advanced electronics and circuitry, protect readers against inclement weather and exposure to sunlight.

Figure 1. Multi-technology Readers



Mounting the Reader

1. Find a suitable mounting position on the door frame or wall.
2. Drill two mounting holes a minimum of 3.25" (82.6 cm) apart on the mounting surface of the door frame or wall. Refer to Figure 2.
3. Drill one .625" (1.587 cm) diameter hole in wall for the pigtail wire connection.
4. Follow the cable connection chart. Connect power at the panel when installation is complete.
5. Mount the base plate to the wall using the supplied screws.
6. Install top cover straight on to the reader base. Do not force the cover on. The four cover guides should ensure the connector seats correctly.

Figure 2.

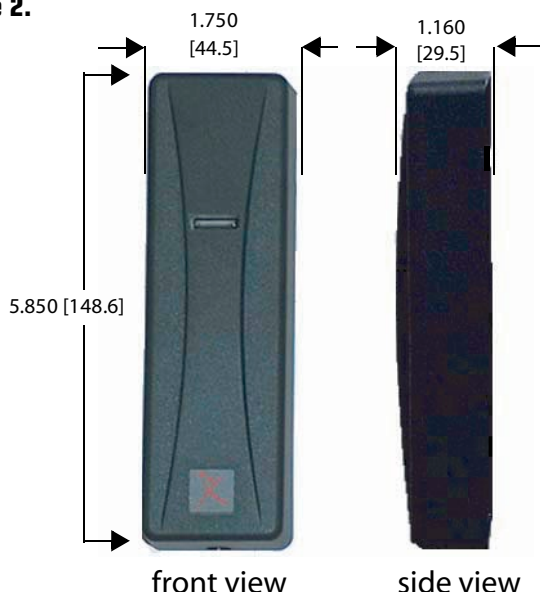


Figure 3. Aligning base plate and top cover



7. Verify the connection is secure and install the security screws at the top and bottom of the reader.
8. Place a screw head cover over each of the screws. The screw head cover should be flush with the reader once in place.

Connecting the Cable

1. The readers are supplied with a 12-conductor cable pigtail. Ensure the reader wiring is disconnected at the host panel until all connections are made at the reader. Use the cable connection chart below:

Yellow	Beeper
Blue	Hold
Purple	Future
Green	Wiegand Data 0 or RS485A
White	Wiegand Data 1 or RS485A
Orange	Green LED
Brown	Red LED
Red	Power + DC (6-16 VDC)
Black	Ground
Pink	Not Used
Gray	Not Used
Tan	Tamper Output (External)
Drain	Shield Ground

2. Use a DC Power source between 8-16 volts.
3. Verify the reader is properly grounded by attaching the ground wire to an earth ground connection at the power supply or panel end of the cable.

Testing the Reader

1. Power up the reader. A red LED will light followed by a beeper tone, which indicates the reader is ready.
2. Present a proper card, which has been programmed to operate the reader.
 - * A green LED indicates a registered badge read.
 - * A red LED indicates idle (ready to read) state in the Wiegand mode.

Removing the Cover

1. Remove the plugs and security screws.
2. Slide cover off perpendicular to base.

Trouble Shooting

1. If reader does not behave normally upon installation, verify that cover and base are connected properly:
The reader is shipped unassembled. To assemble, pull cover away from base and rotate until the connector port on the base is aligned with the connector port on the cover. Snap shut.
2. Only connect wires necessary for use. Cut and/or isolate unused wires. Connecting unnecessary wires may lead to unexpected reader behavior.
3. If multiple reader units are installed in close proximity or back to back, RF interference may result in reduced read range performance.
4. A recurrent triple beep audio sequence may indicate that the cover is not seated properly. Remove cover and check for bent or broken pins in the connector.

Specifications

Colors	Black (standard), charcoal
Power supply	Linear DC
Voltage range	8 - 16 VDC
Temperature range	-31 F to 149 F -35 C to 65 C
Card read distance	Distance can vary depending on reader, installation conditions and credential type.
Cable distance to panel	200 ft. max. (22 gauge) 300 ft. max. (20 gauge) 500 ft. max. (18 gauge)
Wiegand output	Up to 200 bits depending on configuration and card technology
Tamper output	Open Collector
Regulatory approvals and standards	UL, CE, and FCC (part 15)
ISO Standards	ISO 14443A ISO 15693

The voltage specification for this reader is 8-16 VDC. Higher voltage with the specifications provides better performance and cable run distances.

The recommended cable gauge is 18-gauge to 22-gauge. Check with the cable supplier to determine the best choice for the application and installation distance.

FCC compliance

The FCC requires the following statement: This reader uses radio frequency energy and has been tested, and complies with the limits of FCC testing. Changes, modification, or disregard of proper installation and instructions not expressly approved by XceedID, and is strictly prohibited by the FCC and could void the user's authority to operate the equipment.

Ordering Information

Product	Description
XF-1100-B (Standard Black)	Mullion mount; Wiegand output
XF-2100-B (Standard Black)	1-Gang US mount; Wiegand output
XF-2110-B (Standard Black)	1-Gang US mount; Keypad; Wiegand output
XF-1100-C (Charcoal)	Mullion mount; Wiegand output
XF-2100-C (Charcoal)	1-Gang US mount; Wiegand output
XF-2110-C (Charcoal)	1-Gang US mount; Keypad; Wiegand output