

EXHIBIT E
SYSTEM MANUAL

ProxPoint Reader Installation Manual

Installation Requirements

The following instructions will explain the installation procedure for the ProxPoint Reader. The instructions include these sections:

Mounting Instructions

Connecting the Reader To The Host

Testing and Operation of the ProxPoint

Parts List (Included)	Quantity
1) ProxPoint Reader w/ cover	1
2) #4-40 x 1" self tapping, Type T or 23	2
3) Installation Directions	1
Parts Recommended (not Included)	
1) Wire Splice	5
2) DC Power Supply 5.0VDC or 12VDC, 60mA	1

Important Product Specifications

Power Requirements (Linear Supply)

➤ Power supply	Linear type recommended
➤ Operating Voltage Range (+DC)	4.75VDC -16.0VDC
➤ Absolute Maximum (+DC non-operating)	18.0VDC
➤ Peak Current 5V or 12V (maximum)	60mA
➤ Average Current 5V or 12V (maximum)	35mA

Operating Parameters

Maximum Cable Distance to Host	500 feet (152 meters)
--------------------------------	-----------------------

Mounting Instructions

Mount the ProxPoint Reader with the screws provided when mounting on metal mullions or junction boxes. On other materials use appropriate fasteners.

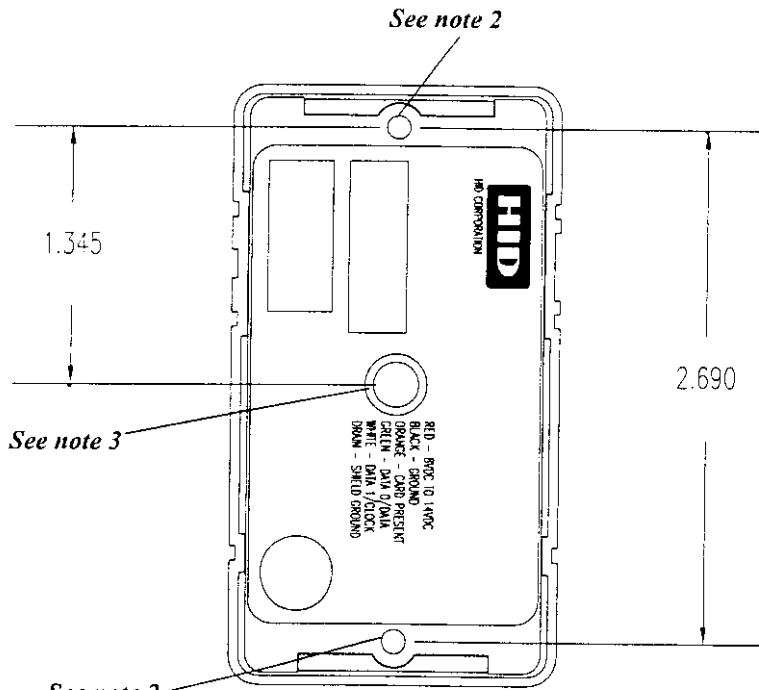


Figure 1

1. Determine an appropriate mounting placement for the Reader.

2. Drill two 3/32th (.093) inch holes for mounting the Reader to the surface.

3. Drill a 3/8" to 1.0" hole for the cable.

4. Route the interface cable from the Reader and /or power supply to the Host. Linear type power supply is recommended.

Secure the cover to the base only after testing.

Check all electrical codes for proper cable installation.

Connecting the Reader To The Host

Connect the Reader to the Host according to the wiring diagram and the Host installation guide. (Not Supplied)

The legend for wiring is color coded according to the "Wiegand Standard" for the recommended cable.

Pigtail termination is the standard configuration for this Reader. The Pigtail is an 18" cable with 5-conductors.

Pigtail - Prepare the new cable by cutting the cable jacket back 1-1/4" and strip the wires 1/4".

Splice the cable and the pigtail together and seal the splice. **Trim and cover all conductors that are not used.**

Wiring Table

Wiegand	Clock & Data	
+DC	+DC	Red
Ground	Ground	Black
—	Card Present	Orange
Data 0	Data	Green
Data 1	Strobe/ Clock	White
Shield Ground	Shield Ground	Drain

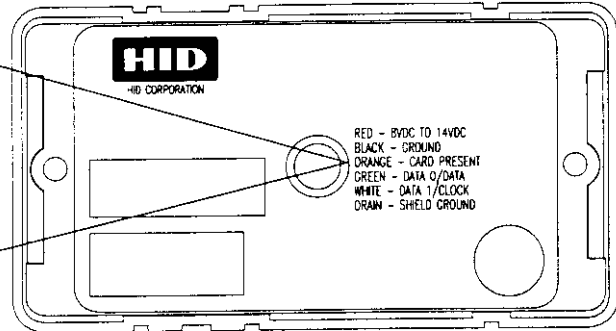


Figure 2

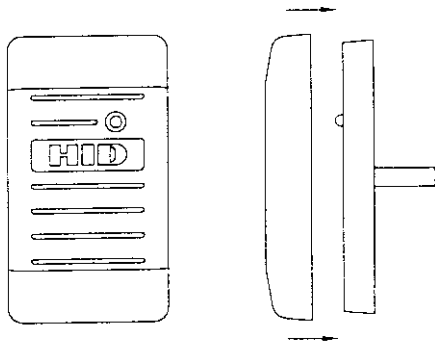
Cable Notes

When using a separate power supply for the ProxPoint Reader, the power supply and Host should have a common ground (voltage reference).

Testing and Operation of the ProxPoint Reader

After wiring the Reader and power supply, the Reader is ready to be tested.

1. Power up the Reader and the LED flashes green to red to green to red. This indicates that the micro-controller unit is working properly.
2. Present an ID card to the Reader and the LED should momentarily turn green, indicating a read of the card. After that, the LED returns to red.
3. Secure the cover to the base as shown below in Figure 3.



NOTES:
**THE ABOVE ARE RECOMMENDED
 INSTALLATION PROCEDURES.
 ALL LOCAL, STATE AND
 NATIONAL ELECTRICAL CODES
 TAKE PRECEDENCE.**

Figure 3