

# Entrada2DMK

IP Access FACP Adapter Kit

# **Kit Includes:**

### Entrada2DMR

- IP Access FACP Receiver

### Entrada2DMT

- IP Access FACP Transmitter

## **Installation Guide**



LT.F. 43KC

Doc. No. IIEntrada2DMK Rev. 062015



More than just power.™

Installing Company:	Service Rep. Name:		
Address:		Phone #:	

### Overview:

Altronix Entrada2DMK IP access FACP adapter kit is specifically designed to interface with Network Door Controllers. They route power (PoE/PoE+) from a PoE switch or Midspan to the Network Door Controller and accommodate up to two (2) Fail-Secure strikes or Fail-Safe mag locks. The receiver features a supervised Fire Alarm Disconnect which releases locking devices while maintaining power to the Network Door Controller. The Fire Alarm Interface feature allows multiple units to be interconnected enabling any or all to be affected from a single FACP trigger input.

### **Specifications:**

### **Agency Listings:**

• **UL 60950-1 UL/cUL Listed for Information** Technology Equipment.

UL 294 UL Listed for Access Control

System Units.

• **CSFM** California State Fire Marshal

Approved.

• **CE** European Conformity.

### **Input Power:**

• For UL 60950-1 applications, use a UL Listed Endspan/ Midspan LPS limited power source.

• For UL 294 applications, use a UL 294 Listed PoE Midspan or Endspan (IEEE 802.3af/at).

### **Power Output:**

 Both lock outputs are selectable for either 12VDC or 24VDC and rated @ 8W (12V/667mA, 24V/333mA) each maximum (16W combined).
 Total power rated @ 30W (PoE and lock power).

### **Trigger Input:**

- 12VDC-24VDC shutdown trigger (Receiver).
- Two (2) independent 12VDC-24VDC access control trigger inputs (Transmitter).

### **Fire Alarm Disconnect:**

 Supervised Fire Alarm Disconnect is selectable for Normally Open (N.O.) or Normally Closed (N.C.) trigger input.

### Ethernet:

- Connectivity: RJ45.
- Wire type: 4-pair CAT-5e or higher structured cable.
- Distance: 100m max.Speed: 10/100BaseT.

### **LED Indicators:**

### • Entrada2DMR:

Output to Entrada2DMT RJ45 connector: Green - Remote Aux. OFF, Yellow - N/A. Midspan/Endspan Input RJ45 connector: Yellow - PoE UP, Green - N/A.

### Entrada2DMT:

Network Door Controller RJ45 connector: Yellow - Output 1 ON, Green - Output 2 ON. Input from Entrada2DMR RJ45 connector: Green - PoE Output ON, Yellow - PoE Input ON.

### **Environmental:**

• See Temp. specifications and Humidity in Technical Specifications chart, pg. 3.

### Mechanical:

Dimensions (H x W x D approx.):
 3.5" x 3.5" x 1" (88.9mm x 88.9mm x 25.4mm).

### Installation Instructions:

Wiring methods shall be in accordance with the National Electrical Code/NFPA 70/ANSI, and with all local codes and authorities having jurisdiction.

Wiring should be UL Listed and/or Recognized wire suitable for the application.

Entrada is not intended to be connected to outside plant leads and must be installed indoors within the protected premises. Entrada is intended for indoor use only.

### Entrada2DMR (Fig. 1, pg. 4):

Mount Entrada2DMR Receiver in the desired location utilizing the unit's mounting hole. Use a #6 fastener
with the proper wall anchor (ie. Ribbed Plastic, Drywall Anchor) when securing Entrada2DMR to the wall.

Note: Anchoring fasteners should accommodate a minimum of 3 lbs.

Unit should be located in proximity to the Midspan/Endspan (head end).

Before connecting structured cable from midspan or endspan to RJ45 jack marked [Midspan or Endspan] shut power off on the Midspan or Endspan.

**Note:** Structured cable between the Midspan or Endspan and the Entrada2DMR should be a minimum of 26 AWG.

- 3. Connect structured cable from Entrada2DMT to RJ45 jack marked [Entrada2DMT Transmitter].
- 4. Connect FACP alarm output relay to terminals marked [Supervised Fire Alarm Input Trigger] on Entrada2DMR. Place a 10K resistor (supplied) at the FACP alarm output relay wired in series for a Normally Closed (N.C.)or wired in parallel for a Normally Open (N.O.) circuit (Fig. 4, pg. 6). To connect multiple units from a single FACP refer to (Fig. 5, pg. 7).
- 5. To manually release locking devices a 12VDC-24VDC trigger may be applied to terminals marked [Shutdown Trigger] (Fig. 1, pg. 4).

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Entrada2DMT (Fig. 1, pg. 4):

Factory Settings: FACP Disconnect is enabled and Lock power outputs are set for 12VDC.

If these settings meet your requirement, skip to Step 5.

1. Remove the four (4) screws from the Entrada2DMT cover.

2. For 24VDC lock outputs slide dip switch marked [SW1] to OFF (1) position, for 12VDC lock outputs slide dip switch marked [SW1] to ON position (Fig. 3a, pg. 5).

- 3. To disable FACP Disconnect for either or both lock outputs slide the corresponding dip switches marked [S2] to the ON position, to enable FACP Disconnect for either or both lock outputs slide the corresponding dip switches marked [SW2 (1), SW2 (2)] to the OFF position (*Fig. 3a, pg. 5*).
- 4. Replace cover and secure it with four (4) screws.
- Mount Entrada2DMT Transmitter in the desired location utilizing the unit's mounting hole.
   Use a #6 fastener with the proper wall anchor (ie. Ribbed Plastic, Drywall Anchor) when securing Entrada2DMR to the wall.

**Note:** Anchoring fasteners should accommodate a minimum of 3 lbs. Unit should be located in proximity to the Locking Devices.

- 6. Connect structured cable from Listed Door Controller to the RJ45 jack marked [Network Door Controller].
- 7. Connect locking devices to the terminals marked [Lock Power Outputs + 1 , + 2 ], carefully observing polarity.

**Note:** All interconnecting devices must be UL Listed and low-voltage Class 2 power-limited.

8. Connect wet trigger output(s) from Listed Door Controller to the terminals marked [Wet Trigger Input + 1 - , + 2 -], carefully observing polarity.

**Note:** To ensure proper operation the Listed Door Controller must be programmed to apply power to the Entrada2DMT terminals marked [Wet Trigger Input] to release Fail-Safe devices (Mag Locks) or programmed to remove power from the Entrada2DMT to release Fail-Secure devices (Strikes).

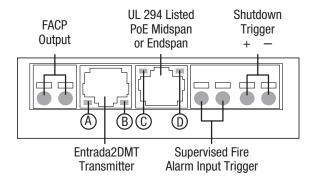
Connect structured cable from Entrada2DMR to RJ45 jack marked [Entrada2DMR Receiver].Note: System should be tested at least once a year.

### **Technical Specifications:**

Parameter	Description			
Input Power Requirements	For UL 60950-1 applications use a UL Listed Endspan/Midspan LPS limited power source. For UL 294 applications use a UL 294 Listed PoE Midspan or Endspan (IEEE 802.3af/at).			
Indicators	Entrada2DMR:  Midspan or Endspan RJ45 connector: Yellow - PoE UP. Entrada2DMT Transmitter RJ45 connector: Green - Remote Aux. OFF. Entrada2DMT: Listed Door Controller RJ45 connector: Green - Output 2 ON, Yellow - Output 1 ON. Entrada2DMR Receiver RJ45 connector: Green - PoE Output ON, Yellow - PoE Input ON.			
Environmental Conditions	Operating Ambient Temperature:  Entrada2DMR: 32°F to 122°F (0°C to 50°C).  Entrada2DMT: For 16W @ 12VDC or 24VDC output: - 20°C to 50°C (- 4°F to 122°F).  For 14W @ 12VDC or 24VDC output: - 20°C to 55°C (- 4°F to 131°F).  Storage Temperature: - 20°C to 75°C (- 4°F to 167°F).  Total power DC output plus PoE output not to exceed 30W.  Relative humidity: 85%, +/ -5%  Operating Altitude: -304.8 to 2,000m.			
Regulatory Compliance	<ul> <li>UL/cUL Listed for: Information Technology Equipment (UL 60950-1).</li> <li>UL Listed for: Access Control System Units (UL 294).</li> <li>Compliance with IEEE 802.3 (at or af) specifications were not verified as part of UL294/B.</li> <li>CSFM - California State Fire Marshal Approved.</li> <li>CE - European Conformity.</li> </ul>			
Weights (approx.)	Entrada2DMR: Product: 0.25 lb. (0.11kg)   Shipping: 0.42 lb. (0.19kg) Entrada2DMT: Product: 0.48 lb. (0.22kg)   Shipping: 0.66 lb. (0.30kg)			

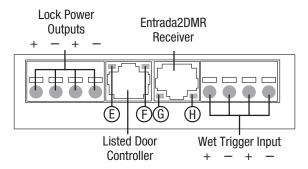
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### Entrada2DMR



- (A) Green Remote Aux. OFF
- B Yellow N/A
- C Yellow PoE UP
- (D) Green N/A

### Entrada2DMT



- E Yellow Output 1 ON
- (F) Green Output 2 ON
- (G) Green PoE Output ON
- H Yellow PoE Input ON

### **FACP Output, Output Voltage and Fire Alarm Disconnect Options:**

Entrada2DMR							
Switch		Description	ON (Factory Set)	0FF			
SW1		NC FACP Output	Dry Contact	Supervised			
Entrada2DMT							
Switch		Description	ON	0FF			
SW1		Output Voltage	12VDC Output	24VDC Output			
SW2	1 & 2	Fire Alarm Disconnect	Fire Alarm Disconnect Disabled	Fire Alarm Disconnect Enabled			

Fig. 2 - Entrada2DMR PC Board

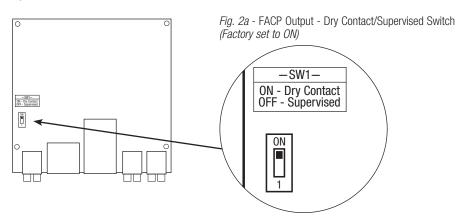
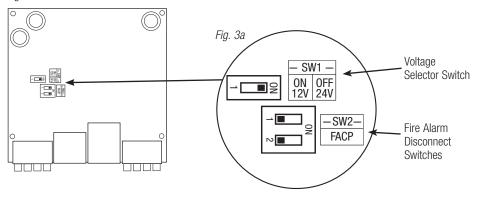
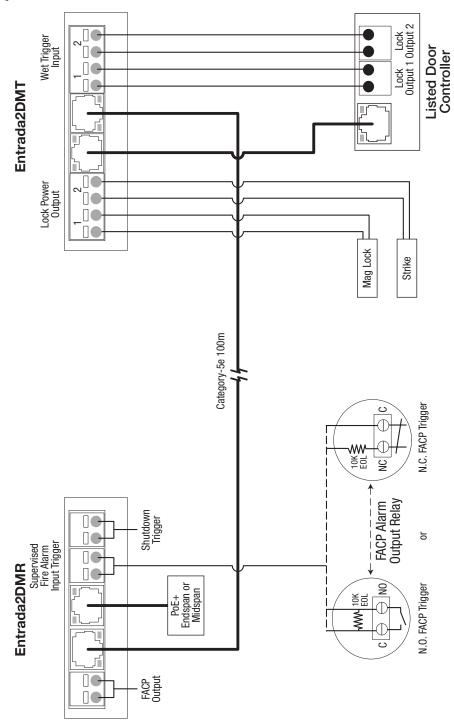


Fig. 3 - Entrada2DMT PC Board

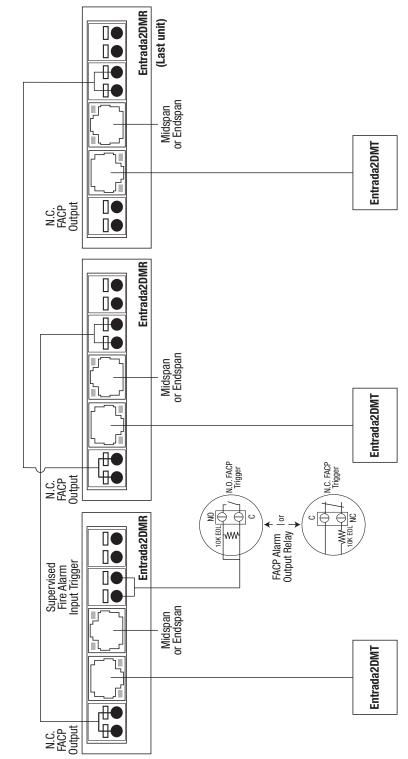


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# Typical Application:



# Connecting Multiple Units to a Single FACP:



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### **Notes:**