

## **IMPROX 016**

#### ImproX O16 16 Channel Output Terminal INSTALLATION MANUAL

#### **SPECIFICATIONS**

Working Environment	Mounted vertically, with the Cable Entry Gland at the lower side, the Terminal is designed to work in an indoor or outdoor environment similar to IP43.		
Input Voltage	10 V DC to 30 V DC, polarity sensitive.		
Power Requirements	Current (mA)	Power (W)	
-			
Input Voltage 10 V DC Relays and Indicators all OFF	35.40	0.36	
Input Voltage 30 V DC			
Relays and Indicators all OFF	16.50	0.49	
Input Voltage 10 V DC			
Relays and Indicators all ON	400	4	
-			
Input Voltage 30 V DC	131	3.90	
Relays and Indicators all ON			
Relays			
Relay Output	16 Relays, each with NO, COM and NC contacts.		
Relay Contact Ratings	1 A at 30 V DC.		
· · ·	2 A at 125 V AC.		
Status Indicators			
Relay Status	16 Red LEDs (On when Relay operates), (externally visible).		
Power Polarity Indicator	Red LED (internally visible).		
Incoming RS485 Data	Flashing Green LED (externally visible).		
Outgoing RS485 Data			
	Flashing Red LED (externally visible).		
Unit Status	Red LED (Software cor visible).	itroliable) (externally	

#### **INSTALLATION INFORMATION**

#### Accessories

Find the following when unpacking the Terminal:

- An ImproX O16 16 Channel Output Terminal housed in a Black powder-coated Aluminium extruded Cabinet. The Cabinet is sealed at each end with a Nylon End Plate, secured with 4 Allen Head Screws (M3 x 12 mm).
- Two Plastic Bushing Plugs (20.6 mm).
- A 2.5 mm Allen Key.
- Four Brass Wood Screws (3.5 mm x 25 mm).
- Four Wall Plugs (7 mm).
- An extra Fixed Address Label.

#### General

Remember the following when installing the Terminal:

#### **Communications Distance**

The RS485 communications distance between the first ImproX Controller and the LAST ImproX unit in a cable run, MUST NOT exceed 1 km (1 094 yd). Achieve this by using good quality screened twisted pair cable, with the screen EARTHED at one end.

#### Jumper Links

Long transmission lines or multiple "star" connections, may cause communication problems. Placing a Jumper Link across the jumper [LNK1] in the LAST UNIT AT THE END OF THE CABLE RUN should solve the problem.

#### EARTH Connection

Connect the Terminal to a good EARTH point. Using the RS485 Port, connect the EARTH Lead to the 'ETH' Terminal. Mains EARTH can be used, but electrical noise may exist.

Blank Space

#### **Arc Suppression**

Snubber devices are recommended for EMF Flyback and Arc Suppression when driving an inductive load with the Relay, see Figure 1.

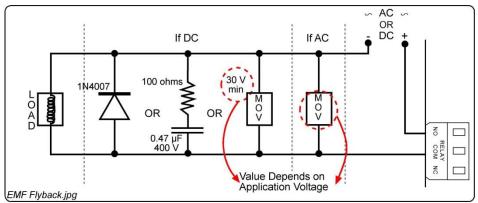


Figure 1: EMF Flyback and Arc Suppression on the ImproX O16 Mounting the Terminal

### CAUTION: Make certain that you mount the ImproX O16 on a vibration-free surface.

Select the mounting position of the Terminal, considering accessibility, routing of wires and visibility of the externally visible LEDs.

Secure the enclosure to the mounting surface, using four suitable screws and wall plugs (supplied), nuts and bolts or rivets.

Blank Space

#### **ELECTRICAL CONNECTIONS**

#### **Connecting the Terminal**

Figure 2 shows a detailed electrical connection diagram for the Terminal.

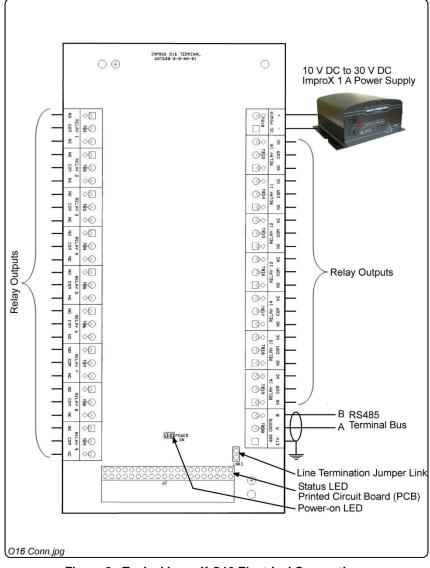


Figure 2: Typical ImproX O16 Electrical Connections

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#### **Fixed Address Label**

Once the ImproX O16 is installed, sketch a rough site plan. Attach the loose (additional Fixed Address Label packaged with the Terminal) Fixed Address Label in the position of the Terminal on the sketched site plan. When the system installation is complete and all the units are represented on the site plan by their Fixed Address Labels, file the site plan for future reference.

#### **GUARANTEE OR WARRANTY**

This product conforms to our Guarantee or Warranty details placed on our Web Site, to read further please go to www.impro.net.

**USER NOTES** 

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# CE

This manual is applicable to the ImproX O16 16 Channel Output Terminal, XOT900-0-0-GB-00.				
(The last two digits of the Impro stock code indicate the issue status of the product).				
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