# PRO-SW6/12 INSTALLATION GUIDE

Issue 003 - March 2022



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### **Installation Specification**

It is the responsibility of the installer to follow Entrotec's installation and cable specification as well as ALL relevant wiring regulations. Failure to comply with Entrotec's installation and cable specification may result in erratic operation of equipment and could invalidate any warranty.

Installations must comply with the following applicable standards:

- BS 7671: Requirements for electrical installations. IET Wiring Regulations 18th Edition.
- The Electricity at Work Regulations 1989
- ANSI/TIA-568.0-D: Generic Telecommunications Cabling for Customer Premises.
- ANSI/TIA-568.1-D: Commercial Building Telecommunications Cabling Standard.

IET Wiring Regulations 18th Edition: Regulation 444 (MEASURES AGAINST ELECTROMAGNETIC DISTURBANCES) imposes requirements for segregation of circuits.

IET Wiring Regulations 18th Edition: Regulation 528 (PROXIMITY TO WIRING SYSTEMS TO OTHER SERVICES) imposes requirements for segregation of door entry / access control circuits (Band I), 230VAC mains circuits (Band II) and other higher voltage circuits.

IET Wiring Regulations 18th Edition: Regulations 541 and 542 impose requirements for earthing and bonding conductors. Ensure ALL metalwork is bonded to the buildings earth, this includes call panels, exit switches, cabinets and metal conduit. Ring terminals and earth points are provided on call panels and cabinets to terminate earth cables, ensure these connections are made.

#### **WARNING - ISOLATION OF ELECTRICAL EQUIPMENT**

In compliance with **The Electricity at Work Regulations 1989**, electrical equipment should be made dead to prevent danger while work is carried out on or near that equipment. No person shall be engaged in any work activity on or so near any live conductor.

### Warranty and Support

Entrotec systems are renowned for their reliability and have a 2-year warranty on all Entrotec manufactured products as standard. This warranty does not cover water damage, vandalism, mains electrical faults, lightning strikes, damage caused by miswiring or cable faults.

Entrotec offer complimentary training courses and telephone support:

**01506 886 235 -** 8:30am to 5pm Mon-Thurs and 8:30am to 4pm Friday.

technicalsupport@entrotec.co.uk

### **Contents**

1	Cable Specification		4
	1.1	Typical Configuration	4
2	Over	view	5
3	Power Supply		
	3.1	Mains Supply Connections	6
4	UPS Battery Connections		7
5	Apartment Station Connections		

### 1 Cable Specification

The cabling system is based on Unshielded Twisted Pair **Category 5e** (Cat5e) or **Category 6** (Cat6). The cable must be **annealed pure copper**, meeting or exceeding the requirements defined in the standard ANSI/TIA 568 C.2.

Failure to comply with this cable specification may result in erratic operation of equipment.

The specification below shows the minimum cable requirements, allow for extra cabling if redundancy is required.

	Connection	Cable
A	Switch to each Apartment Station:	1x Cat5e or Cat6.
В	Between Switches:  Up to 32 can be cascaded	1x Cat5e or Cat6.

#### 1.1 Typical Configuration

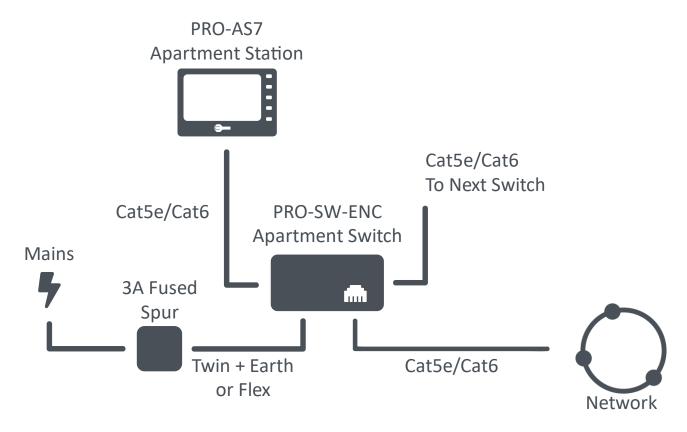


FIGURE 1-1

#### **NOTE**

For setup of the Apartment Station refer to the PRO-AS\* Installation Guide.

### 2 Overview

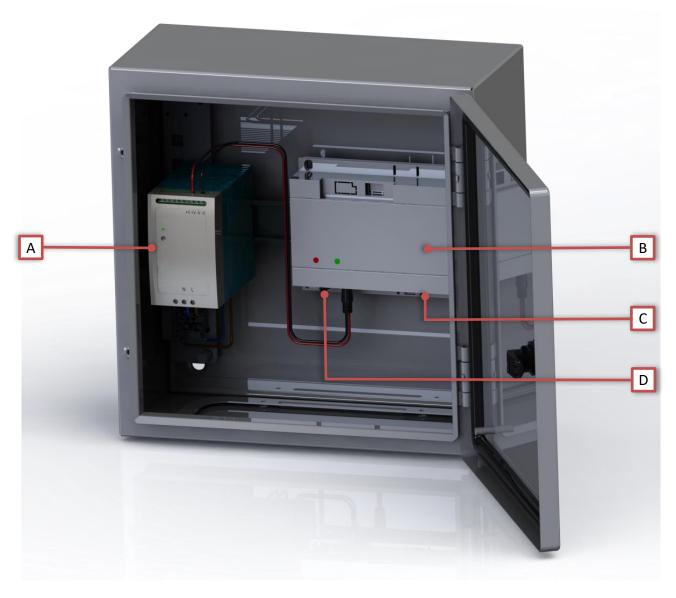
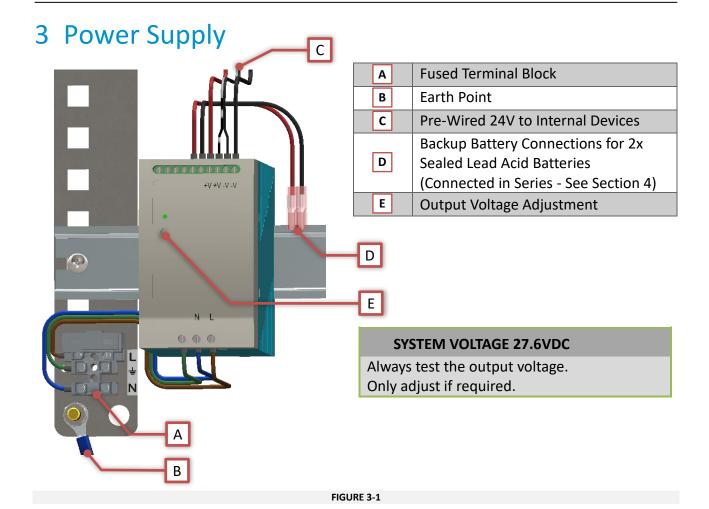
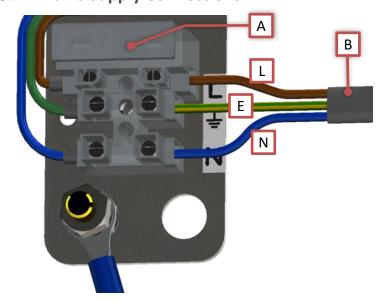


FIGURE 2-1

	Item	Connection Detail
Α	Power Supply Unit (PSU)	Section 3 - Page 6
В	Network Switch	
С	<b>Apartment Station Connections</b>	Section 5- Page
D	Apartment Station Network Power	
	Isolation Switch	



3.1 Mains Supply Connections



A	Fuse Holder
	Mains Supply Cable from
В	Fused Spur
	1.5mm² Twin + Earth
L	LIVE - BROWN
N	NEUTRAL - BLUE
E	EARTH - GREEN/YELLOW
ا ا	Sheath

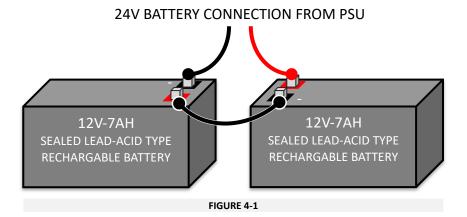
FIGURE 3-2

#### **WARNING**

Isolate mains supply before connecting.

### **4 UPS Battery Connections**

The Power Supply is 24V nominal. For UPS function, two 12V sealed lead acid batteries are connected in series to create a 24V circuit.



### **5** Apartment Station Connections

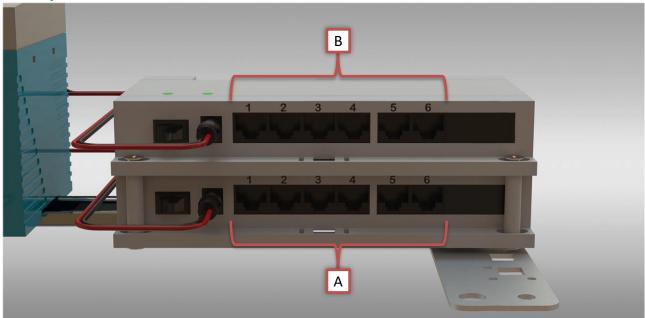


FIGURE 5-1

	Connection	Cable Type	Detail
Α	Ethernet to Apartment	1x Cat5e or Cat6 to each	RJ45 - T568B
	Stations 1 - 6	Apartment Station	
	Ethernet to Apartment	1x Cat5e or Cat6 to each	RJ45 - T568B
В	Stations 7 - 12	Apartment Station	
	(PRO-SW12-ENC only)		



FIGURE 5-2 - EIA/TIA-568B COLOUR CODE

## **CAME T ENTROTEC**

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