



ADVANCED ACCESS CONTROL

**MODEL NUMBER:**

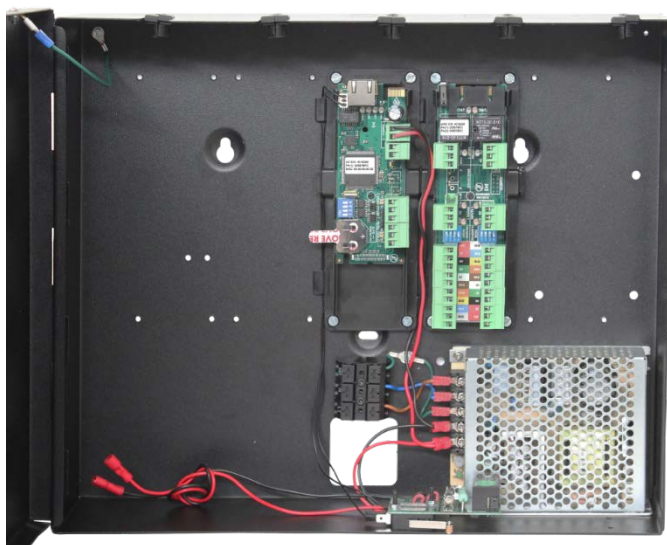
**HCW930-1-0-PM**

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# IPS Combo HCW930

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## INSTALLATION MANUAL



## Specifications

The PMTronics IPS Combo Group comes pre-installed with an integrated DC power supply, a Control Module and a Wiegand Reader Module. In case of primary power failure a 12V, 7.5 Ah battery (OPTIONAL, not included) should be installed. Sufficient space for the battery measuring 5.94" x 2.51" x 3.98" (151 mm x 65 mm x 101 mm) and wired connection cables are provided. Battery capacity for loss of primary power is at least 2 hours.

### Electrical Power Supply Wiring

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All electrical power supply wiring in this combo complies with the National Electrical Code, ANSI/NFPA 70.

### Working Environment

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<b>IPS enclosure</b> .....	Designed to work in an indoor (dry) environment similar to IP20, the housing is not sealed against water.
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### Access Control Levels

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<b>Destructive attack</b> .....	Level 2
<b>Line Security</b> .....	Level 1
<b>Endurance</b> .....	Level 3
<b>Standby Power</b> .....	No secondary power source

### Switched Mode Power Supply

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<b>Input Voltage</b> .....	110 V AC, 60 Hz
<b>Power Rating</b> .....	75 W
<b>Output Voltage</b> .....	13,8 V DC
<b>Max Current Output</b> .....	5 A continuous (1,15 A reserved for battery charging)

Net power consumption will depend on the type of modules and peripherals that are installed and connected. Refer to the installation manuals for the individual modules (and their peripherals) for this information.

## Communication

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The PMTronics IPS Combo may be connected to a Host Computer via RS485 or Ethernet (on the Control Module). For further details on communications, consult the Control Module Installation Manual.

## INSTALLATION INFORMATION

### Accessories

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**CAUTION:** **DO NOT use the included Metal-oxide Varistors (25 Vrms, 500 A, 77 V max clamping for the relays) with mains power applications.**

Find the following when unpacking the IPS Combo Group:

- Housing, consisting of the IPS Case and a Cover
- Housing Case is fitted with:
  - One DC Power Supply Unit
  - Power supply wiring harness with an integrated battery charging PCB and battery fuse.
  - One Control Module
  - One, two or three expansion modules
- Installation Manuals for the Controller Module and the Expansion Module type that is fitted.
- Ziploc bags, containing the following:
  - Metal-Oxide Varistors (MOVs) 25 V<sub>RMS</sub>, 500 A, 77 V max clamping - one MOV for each relay on the expansion modules.
  - Fixed Address Labels for each of the included Modules, for installation site mapping purposes (see on page 7)

**NOTE:** *No mounting hardware is included in the packaging - the installer should obtain fasteners that are appropriate for the mounting surface.*

### General

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#### AC Supply Connection

The installer will need to supply a 3-core mains power supply cable, which must be connected to the mains terminal block. (See Figure 1, on page 5, and "Connecting an AC mains power cable" on page 6)

## Mounting the IPS Combo

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Choose a position on a suitable firm mounting surface that is sheltered from the weather and allows for the convenient routing of cables and possible future expansion.

**CAUTION:**    **Make certain that you mount the IPS Combo on a vibration-free surface.**

*NOTE:*        *You can mount onto virtually any surface including metal.*

*NOTE:*        *During mounting, we recommend unplugging the IPS Enclosure Cover Earth Strap and removal of the housing lid. After installation, we strongly recommend you reattach the Earth Strap to the Lid.*

Hold the IPS housing against the wall/mounting surface and mark the position of the mounting holes on the mounting surface. Drill the mounting holes and secure the IPS housing to the mounting surface, using suitable screws and wall plugs, nuts and bolts or rivets.

## Wiring the IPS Combo

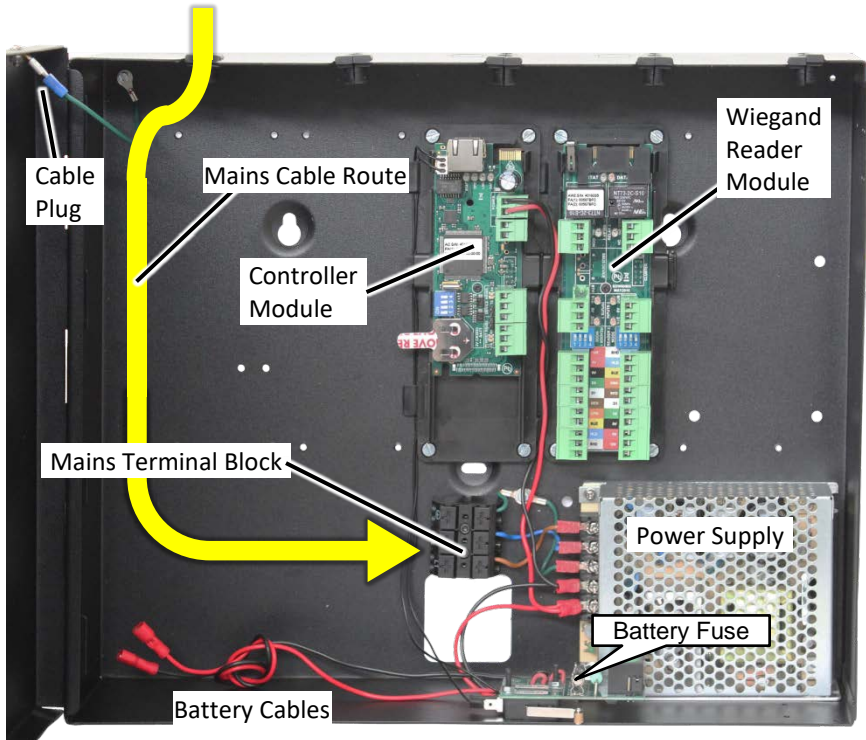
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1. Remove the Battery Tag from under the Button Cell on the Control Module
2. Follow the wiring instructions in the Installation Manuals for modules that are fitted in the IPS Housing.

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# ELECTRICAL CONNECTIONS

## Key Component Positions



**Figure 1: Key component positions, electrical mains connection highlighted**

**NOTE:** 110 VAC (Live, Neutral and Earth) Connections are available on the mains input terminal block.

*The HCW930 comes standard with one Wiegand Module. Additional Wiegand Modules may be added, as space permits.*

## Connecting an AC mains power cable

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1. Open the Cabinet.
2. Choose a mains power cable entry point that suites the installation and remove the corresponding knock-out tab from the IPS housing if necessary – or make use of one of the existing slotted glands
3. If using a knock-out, insert a suitable gland/grommet (not included) in the hole and pass the three-core mains cable though the gland/grommet, into the IPS housing.
4. Strip back the out sheath of the mains cable ~ 1.5" (38 mm)
5. Strip the Live, Earth and Neutral cores back by ~ 0.25" (6 mm) and clamp these onto the AC mains terminal block (top left in **Figure 1**).
6. If the earth strap between the lid and the main housing was disconnected to allow for the lid to be moved out of the way – then be sure to replace this earth strap when replacing the lid.

**NOTE:**     *The DC power to the Control Module and its expansion modules has been factory wired. The remainder of the module wiring is explained in the relevant Installation Manuals – these manuals are included with the hardware.*

## Fuse Information

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There is a 6.3 A, 20 mm x 5 mm, slow blow fuse on the battery charger PCB, close to the Power Supply at the bottom of the housing. This serves to protect the battery in the event of a short across the DC supply rail.

## Replacing the Battery Fuse

**CAUTION:**     **Ensure that you have disconnected the mains power supply to the Power Supply Combo before replacing the fuse.**

1. Disconnect the mains power supply to the Power Supply Combo.
2. Open the Cabinet.
3. Remove the old fuse from the fuse holder clips  
(Location shown in Figure 1, page 5)
4. Trace the cause of the short and clear the fault
5. Insert the new fuse into the fuse holder
6. Close the Cabinet.
7. Reconnect the mains power supply to the IPS Group.

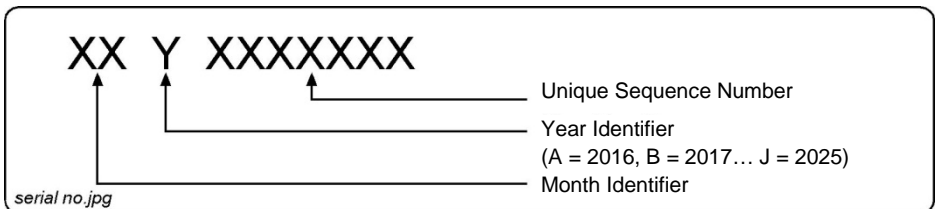
## Fixed Address Labels

On installation of each IPS Combo Group, do the following:

- Obtain, or prepare a sketched plan of the installation site.
- Attach the additional Fixed Address Labels (packaged with the IPS Combo) in the corresponding position on the sketched site plan.
- When the system installation is complete and all the IPS Combos are represented on the site plan by their Fixed Address Labels, file the site plan for future reference.

## Unit Serial Numbers

All units have a unique serial number. The format of the serial number is as follows:



**Figure 2: Unit Serial Numbers**

## GUARANTEE OR WARRANTY

This product conforms to our Guarantee or Warranty details placed on our Web Site, to read further please go to [www.amanosecurity.com](http://www.amanosecurity.com).

## ENVIRONMENTAL PROTECTION



Waste electrical products should not be disposed of with household/office waste. Please recycle where facilities exist. Check with your Local Authority or retailer for recycling advice.



ADVANCED ACCESS CONTROL

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**NOTE:** *This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.*

This manual is applicable to the HCW930-0-0-PM-XX (The last two digits of the stock code indicate the issue status of the product)		
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