

# Irisys 3000 Series IP Counter Installation Guide

## 1 Installation

1.1 Detach the counter head from its base by twisting anticlockwise slightly then pulling apart to expose the counter base (Figure 1) and interface board (Figure 2).

1.2 Select a suitable location for mounting the counter base. Refer to the 'Applications Notes' document, IPU40184, for details on suitable locations. Ensure that the 'Traffic Flow Direction Arrows' (Figure 1) of all units are pointing in the same direction in the case of wide opening installations (parallel to each other), preferably in the direction of traffic flow. Ensure that the mounting position will not exceed the 100m (328ft) maximum cable length for the IP connection.

1.3 A 3-5cm hole in the ceiling should be provided for cable access. If mounting on solid ceilings, a number of alternative cut-out areas are provided in the base perimeter to allow for wiring access. The slot in the base marked for serial connection (see Figure 1) should not be used for this. Install the base using the mounting holes provided; these holes allow for a limited amount of movement of the base – once aligned correctly, secure the base using the locking screw position.

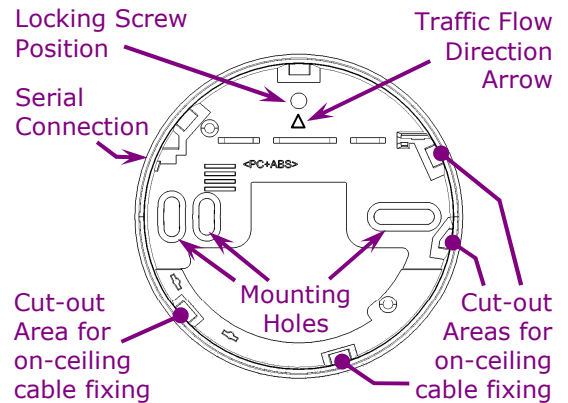


Figure 1 – Counter Base

1.4 The IP base interface board allows for IP and serial connection for configuration purposes (Figure 2). If previously removed from the base, the board must be re-inserted 'serial connector' first, and clipped in place. Ensure the interface board is properly seated inside the base.

1.5 Power is supplied via the dedicated power terminal block (12 – 28V dc) OR via the (silver) IP connector but only when the Irisys

	Power Supply	Max No Of Units
Power via Terminals	12V	6
	24V	7
Power via CAT5	15V	4
	24V	5

Table 1 – Maximum No Of Units

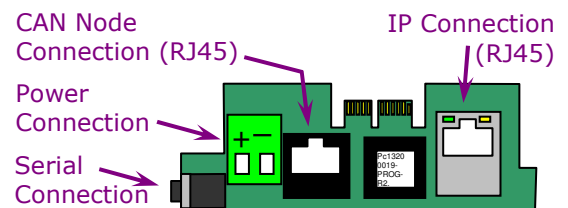


Figure 2 – IP Interface Board

Power Injector is used (part number IWC3060) (15 – 28V). The power supply should also be grounded. Power over Ethernet (PoE) is NOT supported. **ENSURE POWER IS OFF** before connecting the power and data cables to the base boards. Once connections are made, the counter 'head' can be 'hot-plugged' onto the base.

1.6 If CAN nodes are to be utilized, connect together using RJ45 terminated cables connected between the black RJ45 CAN connectors as below in Figure 3 - use either socket on CAN nodes.

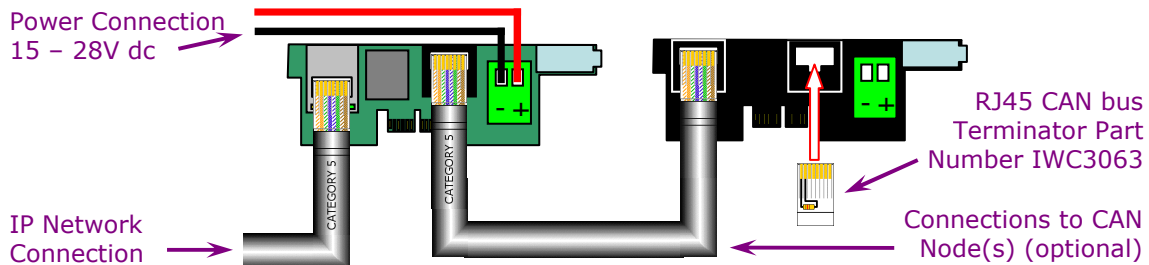
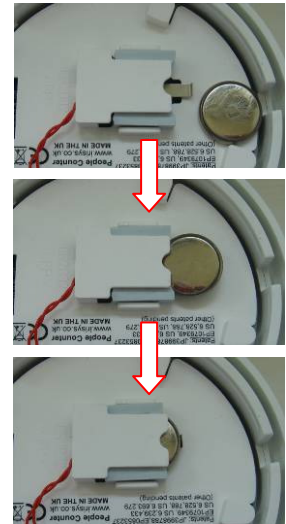


Figure 3 – IP Master to CAN Node Connections

1.7 Providing power requirements are met (Table 1), up to 7 nodes can be connected to each IP Master on a wide opening network (8 units total). These are connected in a 'daisy-chain' style (max cable length 60m/196ft). The last CAN node must be terminated correctly by inserting the included RJ45 terminator connector (part number IWC3063) into the last free RJ45 socket. Consequently, there should be no RJ45 sockets which do not have either a cable, or the RJ45 terminator. If additional node units are not being used, the RJ45 terminator should be left inserted in the black RJ45 connector on the IP masters base.

1.8 The button cell battery, supplied, must now be inserted into the battery holder on the underside of the master unit. This will keep the time and date if power fails and is required for correct time stamped count data. Do not force the battery into the holder as it is keyed so that the battery will only fit one way around with little pressure. Only master units require this battery, [Figure 4](#). Note: this may not be required if your data retrieval software time-syncs the clock at every connection attempt and also reconciles any count data logged against the wrong time interval following a power outage.



**Figure 4**

1.9 After making all connections, the counter head can then be installed onto its base. To do this push the counter head up into the base and turn anticlockwise until the tabs engage into position and then turn clockwise a few degrees to lock. Power can then be applied and the counter will begin its warm up routine, indicated by alternate flashing of the two LEDs.

1.10 The 'Link Indicator' on your network switch should now illuminate. If it does not, ensure that the connection cable is the correct type - 'straight through' type and not 'crossover' type. If connected to a managed switch, ensure that it is not locked to 100Mbps as this can prevent a connection from being established. Change to 10Mbps or enable auto-negotiation.

## 2 Configuration

All counters require configuring before use. Connecting to the IP master counter allows configuring of all counters connected to that master via the CAN bus.

2.1 The preferred method of configuring IP counters is to use your Internet browser to connect over the network to the counters integral web server configuration program which uses the Microsoft Silverlight plug-in. Alternatively, if Silverlight is not available, you can use the installed version of the setup tool which allows both an IP connect or a serial connection when using the Irisys USB/serial cable accessory (IWC3062), see below. All the common internet browsers now support Silverlight following a free download.

2.2 Simply enter the IP address in the address bar of your Internet browser. By default, a new counter will have an IP address of 192.168.0.10. You may need to temporarily change your laptops IP address so that it is within this range in order to communicate with the counter. See your network administrator for details of this procedure if required. If the IP address has been changed to an unknown value then you will need to configure via serial connection, see below.

2.3 Once the IP address is entered, you will need to provide the correct login information in order to connect to the Irisys 'Welcome' screen and be able to proceed with the configuration. The username is 'admin' and the default password is 'installer'. If the password has been changed to an unknown value you then you will need to configure via serial connection, see below.

2.4 If you are configuring the counter via serial connection, simply connect the IWC3062 USB/serial cable from the 'headphone' type jack on the counter to your laptop's USB/serial port and run the software. You must enter the correct COM port number and then you will be connected to the counter.

For details on configuring options and functions, as well as how to trouble shoot connection problems, see document IPU 40183.



**Warning:** 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.