

# Irisys 3000 Series OUTDOOR Relay Counter Installation Guide

## 1. Installation

1.1 Unscrew the four corner screws on the front of the counter (shown in [Figure 1](#)) to access the mounting holes ([Figure 2](#)) and connectors ([Figure 3](#)) inside.



Figure 1 – Counter Front

1.2 Select a suitable location for mounting the metal back box. Refer to the 'Applications Notes' document, IPU40184, for details on suitable locations. Ensure that the 'Traffic Flow Direction Arrows' ([Figure 2](#)) of all units (in the case of wide opening installations) are pointing in the same direction (parallel to each other), preferably in the direction of traffic flow.

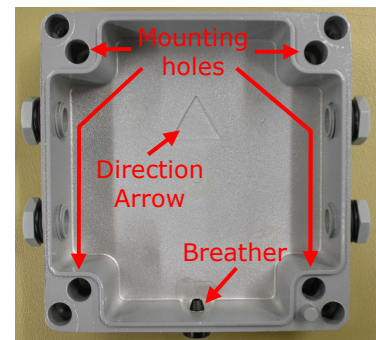


Figure 2 – Back Box

1.3 Use the four inner screw holes to mount the back box of the counter to the ceiling, alternatively, an optional ball joint mount is available (part no. IWC2030), if required. Do not drill holes in any part of the unit as this will cause water ingress and invalidate the warranty. All cable connections must go through the sides of the unit using the holes provided.

1.4 A number of cable glands are supplied with the unit to provide wiring connections whilst maintaining the weather resistant integrity of the counter. You must use a separate gland for each cable connection into the unit. Notice that one of the holes in the housing is marked with a triangle to show where the optional setup cable connects; this hole cannot be used for wiring connections. Cable glands should be secured tightly to create a watertight seal up to the housing. Insert a single cable through each cable gland, as required, and connect the signal wires to the corresponding connector block terminals.

1.5 Power is supplied via the dedicated power terminal block (12 – 28V dc). The power supply should be grounded. **ENSURE POWER IS OFF** before connecting the power and data cables to the counter connectors. Do not over tighten any terminal screw connections.

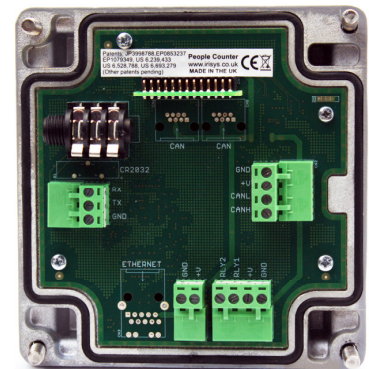


Figure 3 – Relay Counter

1.6 If CAN nodes are to be utilized, connect these together using standard CAT5 cable connected between the corresponding CAN connections on each counter as below in [Figure 4](#).

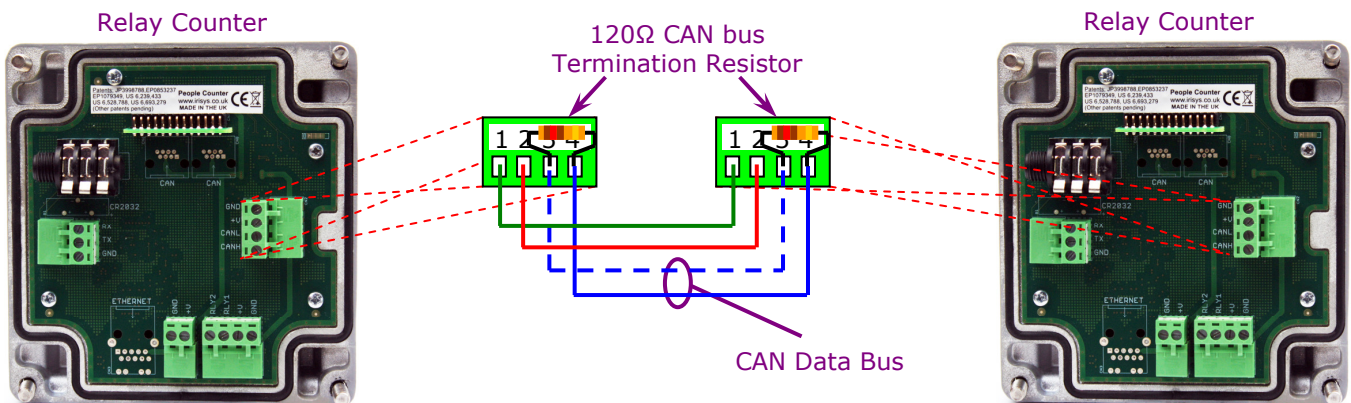
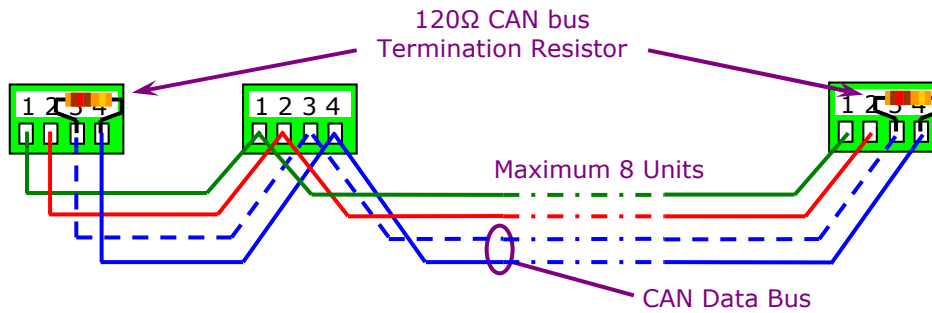



Figure 4 – Relay Counter connections for Wide Openings



**Figure 5 – Relay Counter connections for Wide Openings**

- 1.7 There can be maximum number of 8 units in total, if required, connected together in a 'daisy-chain' style, along a single length of CAT5 cable, see Figure 5, above. The first and last counter on the CAN bus must always be terminated correctly by inserting an (included) 120Ω termination resistor into the terminal block across the CAN lines.
- 1.8 Once the counter is reassembled in place, power can be applied and it will begin its warm up routine, indicated by alternate flashing of the two LEDs.


 Never drill holes in any part of the metal casing as this will invalidate the warranty and will inevitably lead to water ingress. Each cable connection into the counter should go through its own cable gland inserted into one of the holes on the side of the counter, and then tightened down onto the cable. This will secure the cable and maintain the counters water resistance.

## 2 Configuration

All counters require configuring before use. Connecting to any one of the units (if configured as a wide opening network) provides the means of configuring all of the counters connected to that unit at the same time. Outdoor counters are configured in exactly the same way as the equivalent indoor counter.

- 2.1 To configure a Relay enabled counter use the installed version of the setup tool which allows a serial connection to the counter using the built in serial connector block on the back of the counter, the Irisys USB/serial cable accessory (IWC3062), or the older IWC2031 cable if available.
- 2.2 Simply run the setup tool and 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 IPU40183.

 **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.