

Ultrasonic Occupancy Detection System

UNPACKING THE OCC/U

All versions are supplied individually boxed with installation instructions.

INSTALLATION

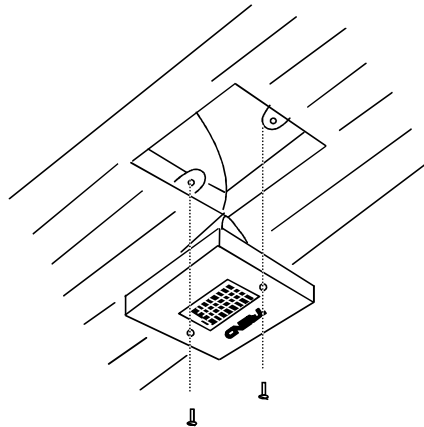
Mechanical

As the mechanical installation is different for each detector type, be sure to read each section carefully, and select the appropriate procedure for your installation.

OCC/UD/DC

The detectors should be mounted in the ceiling at a height of 2.4 to 3 m, in approximately the centre of the area that is to be monitored.

- (1) Ensure that a standard 25 mm single gang sinking box is fitted into the ceiling at the correct location.
- (2) Insert a length of 3 core cable into the sinking box and connect the three wires to the screw terminals on the back of the detector as shown in electrical section.
- (3) Insert the detector into the sinking box, and tighten the two screws.



INSTALLATION (continued)

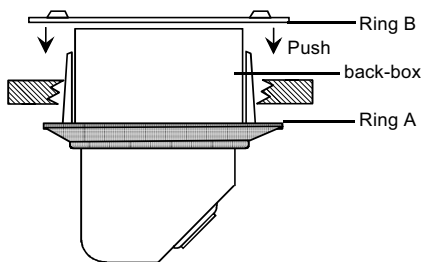
OCC/UDA/DC

The detector should be mounted in the ceiling at a height of 2.4 to 3 m. If surface mounting, the detector's 'viewing' angle should be carefully considered before fixing. When 'flush mounted' the viewing angle can be optimised after fixing. The housing can be surface mounted using the back-box provided, or 'flush-mounted' in a ceiling tile using the rings provided.

If flush mounted:

- (1) Make a 70 mm diameter hole where the detector is to be mounted.
- (2) Push out the cable entry at the top of the detector.
- (3) Pass a 3-core cable through ring B and the hole in the ceiling tile. Ring B should be above the ceiling.
- (4) Undo the screws holding the two halves of the detector together and separate them.
- (5) Pass the cable through the cable entry in the back-box and connect as shown in the electrical section.
- (6) Re-assemble the detector with Ring A sandwiched between the two halves.
- (7) Pass the tabs of Ring A through the ceiling hole and snap Ring B into place.
- (8) To remove detector simply rotate and pull down.

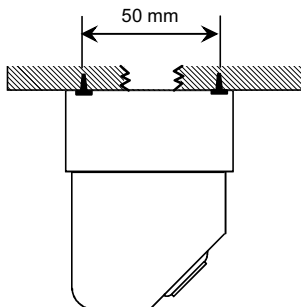
Flush Mounting diagram



If surface mounted:

- (1) Make a hole in ceiling and push a 3-core cable through.
- (2) Undo screws holding the two halves of the detector together and separate them.
- (3) Fix back-box directly to surface using 2 screws as shown in diagram right.
- (4) Pass the cable through the cable entry in the back-box and connect as shown in the electrical section.
- (5) Re-assemble the detector.

Surface Mounting diagram

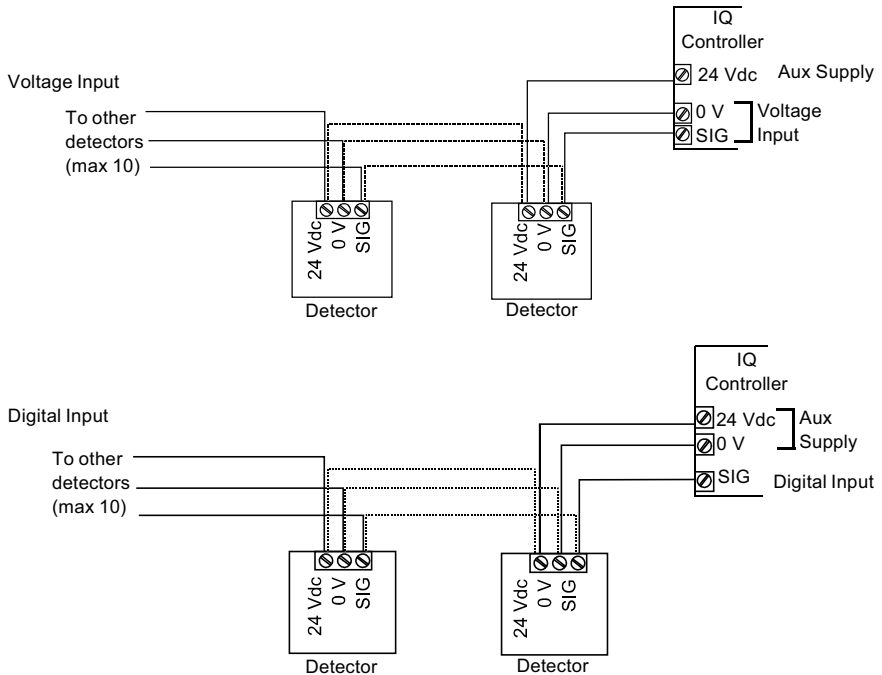


INSTALLATION (continued)

Electrical

- (1) Isolate the mains supply to IQ controller and lighting at source before commencing the electrical connections.
- (2) Wire the detector to the required IQ Controller as shown below. Up to 10 detectors may be wired in parallel to a single input channel.

Note that it is important to set the IQ Controller's input to digital (or voltage on an IQ70 series), see the appropriate controller data sheet for details.



- (3) Wire the output of the IQ Controller to the lighting relay/contactors.

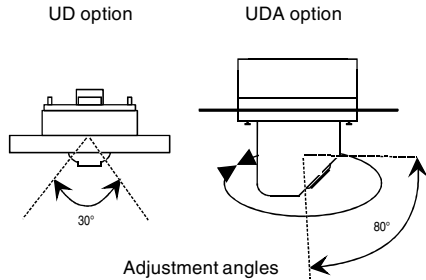
COMMISSIONING

Commissioning the Detectors

The commissioning of the detectors requires the detectors to be positioned so that they cover the required detection area, and may require their range to be adjusted.

Positioning the detectors

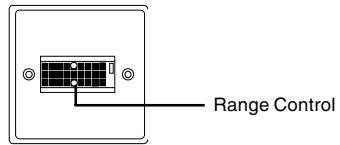
- (1) To position the detectors, move the detector head until the required area is covered (UD options move in one direction, UDA options move in two directions).



Adjusting the range

This is not normally necessary as the detector is factory set to suit most requirements, however sometimes it may be necessary to reduce/increase the detection pattern of the detector. To do this:

- (1) Turn the lower adjustment screw until the range is as required (clockwise reduces the range).



Setting Up the IQ Controller

If an IQ Controller is being used to process inputs from the OCC/U system, or to output a signal to it, its strategy must be configured to do this. If a digital input is used the necessary strategy should follow the rules for fast sequencing.

Information on how to configure an IQ controller can be found in the IQ Controller Configuration Reference Manual (90-1533).

It is also important that the input and output channels are configured to be of the correct type; this is described in the appropriate controller's data sheet.

Voltage Input Scaling Table

	IQ111, 131, 151 (non plus), 151+	OTHER IQ'S
U	10	10
L	0	0
T	5	10
B	-5	-10

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