

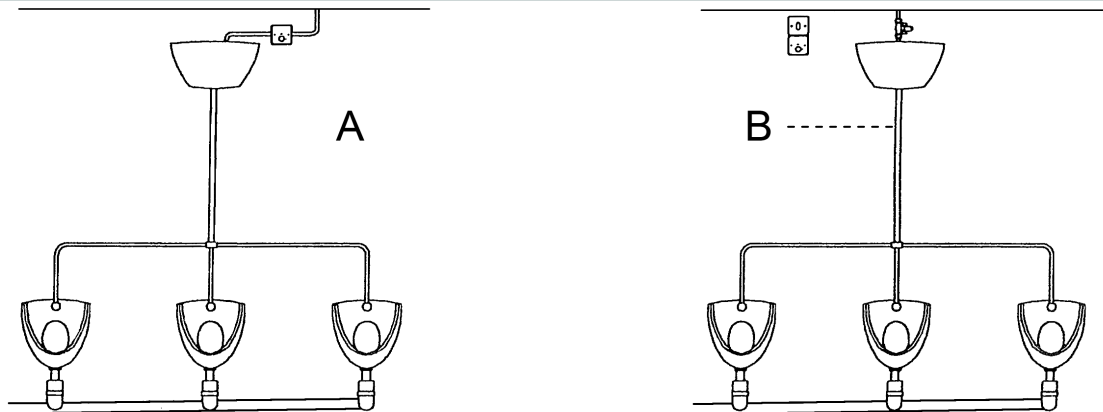
INSTALLATION GUIDE

Infrared Control (IRC)



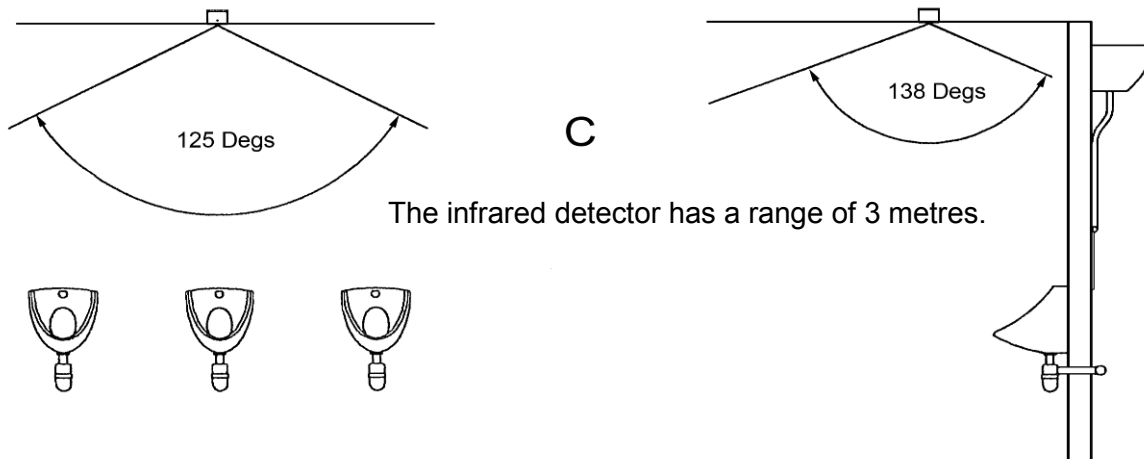
Urinal Flush Control Valve for Cistern Installations

1



The IRC can be installed with the Sensor Unit mounted directly on the valve as in A or remote from the valve, exposed as in B above or concealed as in C below. For option A the unit must be battery powered. For options B and C or if the auto flush cistern is sited in a service duct, either batteries or the integral mains transformer may be used. NB. Where the IRC is mains powered it must either be mounted on the wall above a height of 2.25 metres as in B or in the ceiling as in C.

2



The infrared detector has a range of 3 metres.

How the IRC Operates

If the IRC detects movement, the valve opens and its 30 minute fill cycle commences. If after 30 minutes no movement is detected, the valve closes preventing the normal fill and flush cycle of the auto flush cistern. If no body movement is detected for 12 hours after the valve closes, the program automatically runs a hygiene flush cycle and continues to do so every 12 hours until the washroom is next used. In most cases this will prevent odours and the build up of uric acid in the pipework. During normal operation the red LED does not indicate detection; it only acts as a **low battery indicator**.

Low Battery or Mains Power Loss

Battery Powered: When battery power is low, the red LED will flash briefly once every 3 seconds indicating the need to replace the batteries.

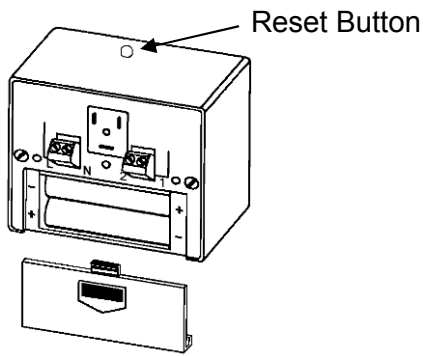
Mains Powered: In the event of a power failure, the unit will restart automatically when power is restored.

NOTE: IF MAINS POWERED DO NOT FIT BATTERIES



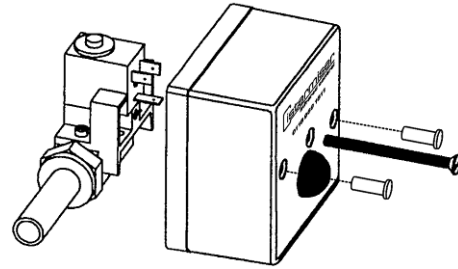
Sensor Mounted Directly to Valve: **BATTERY POWERED ONLY**

3a



If the sensor is to be mounted directly onto the Valve Unit, fit four AA batteries. The program will immediately enter *valve test* mode (see page 4). The test mode may be restarted by pressing the reset button at any time.

3b

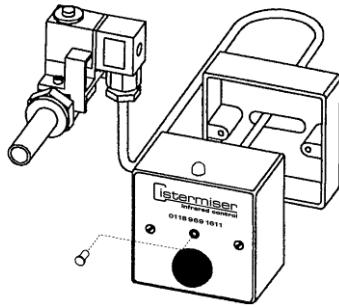


Plug the Sensor Unit onto the Valve Unit and secure with one of the long screws provided. Plug the unused holes with the 2 long White Blanking Plugs provided.

NOTE: WHEN SENSOR UNIT IS MOUNTED DIRECTLY ON THE VALVE BATTERIES MUST BE USED

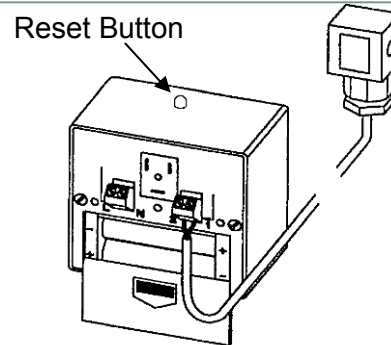
Sensor Mounted Remotely from Valve and Battery Powered

4a



When battery powered and fitted remotely from the valve assembly, fit the Sensor Unit onto a single 16mm pattress/back box and connect it as described in the next diagram with a twin cable (not supplied with this unit). Plug the unused screw hole with the short White Blanking Plug.

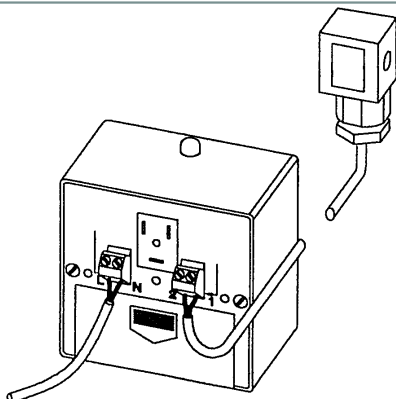
4b



Connect terminal 1 of the Remote Valve Plug to terminal 1 on the Sensor Unit. Similarly, connect terminal 2 of the Remote Valve Plug to terminal 2 on the Sensor Unit. Attach the Remote Valve Plug to the Valve Unit sandwiching the Gasket with Screw #4

Mains Powered: **SENSOR MUST BE REMOTE FROM VALVE**

5a

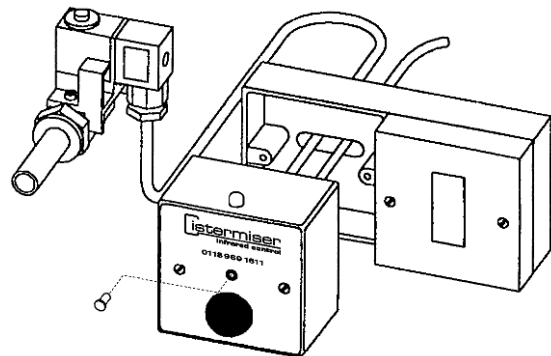


Connect the Remote Valve Plug to terminals 1 & 2 with twin cable as in 4b above.

The mains supply (230V AC 50Hz) is to be connected to the pair of terminals marked L & N.

Note: CONNECTION OF THE MAINS SUPPLY TO THE TERMINALS MARKED 1 & 2 WILL IRREPARABLY DAMAGE THE ELECTRONICS.

5b

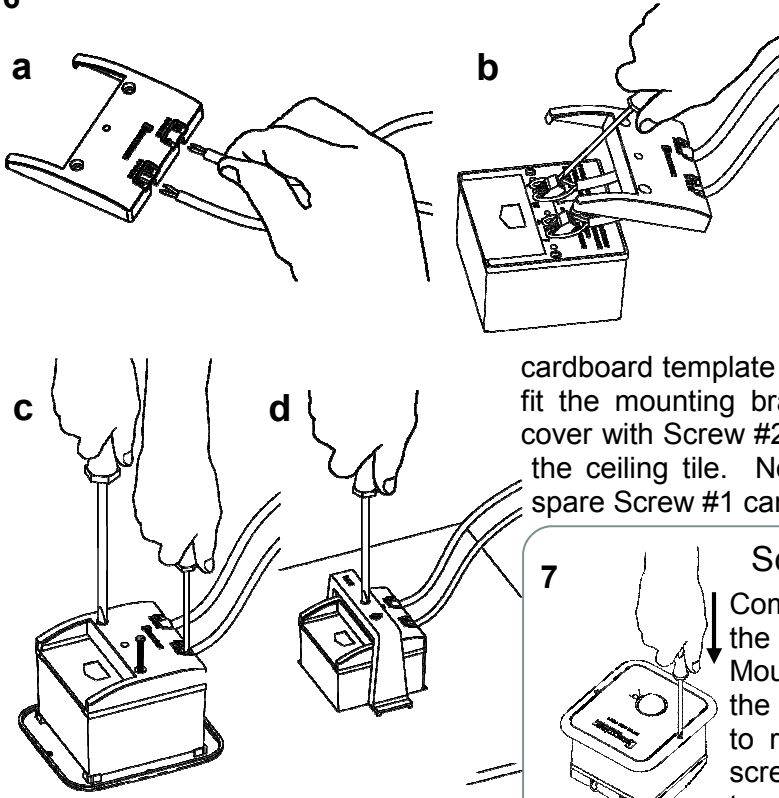


It is recommended that the sensor is mounted onto a dual pattress/back box and connected to a fused spur mounted above or alongside. Protect the supply with a 1 amp fuse. The fused spur must be installed by a qualified electrician.

Plug the unused hole with the short White Blanking Plug.

Flush Mounting

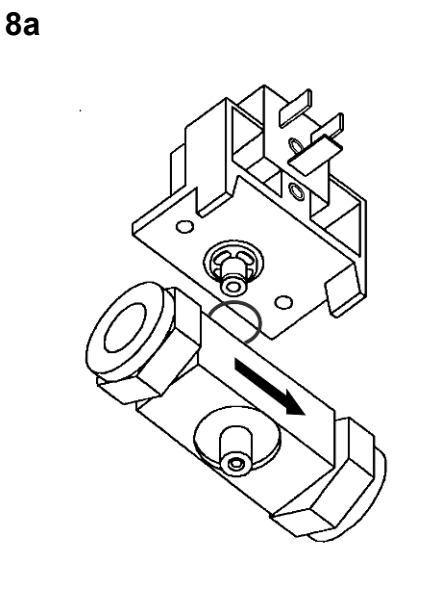
6 When fixing the sensor to a suspended ceiling use the Flush Mounting Kit provided.



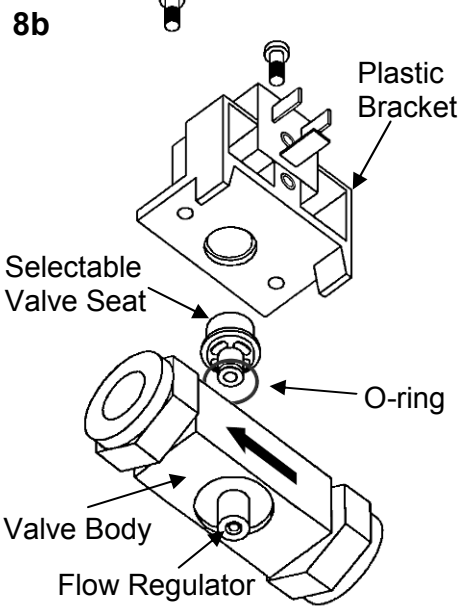
- a. Feed the mains power and valve cables into the Terminal Cover through the access holes.
- b. Fix the cables into the terminal blocks as described on page 2.
- c. Fit the Flush Mount Plate on the front of the unit and the Terminal Cover to the rear, fastening with 2 x Screw #1. Tighten the screws holding the cable clamps onto the cables.
- d. Cut a square hole in a tile using the cardboard template as a guide. Push the unit up from beneath and fit the mounting bracket over the top, securing it to the terminal cover with Screw #2. Tighten the screw to bring the unit up against the ceiling tile. Note: If the ceiling tile is thicker than 25mm the spare Screw #1 can be used in place of Screw #2.

7 **Screw Mounting in Solid Ceilings or Walls**
 Complete up to step c. above then drill or push out the mounting holes where indicated on the Flush Mount Plate. Once the square hole has been cut in the plaster board, slip the Clip Nuts on to reinforce the plaster board before screwing the IRC into place with the two Screws #3.

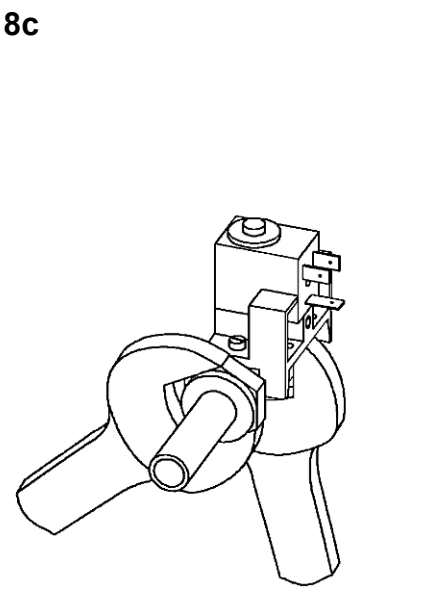
Valve Set-Up and Adjustment



If the water pressure is less than ½ Bar; it may be necessary to exchange the 1.5mm 'Selectable Valve Seat' for the larger 3mm one provided, to achieve maximum flow.



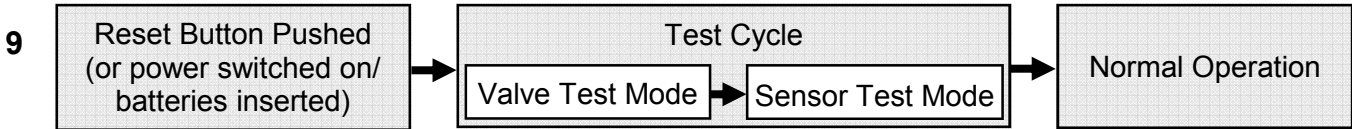
If the Sensor Unit is to be fitted directly to the Valve Unit, the sensor lens must face into the room. Check that the flow is in the direction of the arrow, if it is not, rotate the valve body through 180 degrees. *



Fit the Valve Unit to the feed pipe and then adjust the built in flow regulator with a small screwdriver to provide the correct flush rate.

* To assemble: Fit the 'Selectable Valve Seat' into the plastic bracket; add the O-ring and then attach the brass Valve Body.

Setting Up



Valve Test Mode: Valve opens and closes five times - Water should be heard to flow.

Sensor Test Mode: Valve closed for 1 minute. Body movement causes the red (battery low) LED to flash. Check this by walking around the room.

Normal Operation: Body movement causes valve to open for 30 minute duration.

To test that valve is closed when the washroom is not in use, cover the sensor, leave the room for 30 minutes, when re-entering the room the valve should remain closed until the sensor is uncovered.

Specification

Power

Voltage: 6V DC. Current: Nominal 54µA, Peak 750mA for 50ms

Mains Supply: Nominal 230V 50Hz 20mA.

Battery Supply: 4 x 1.5V Alkaline Type AA (LR6)

Batteries (rec.): Duracell Plus (Gold Top) MN1500 Capacity 2700mAh

Operating Life: Up to 3 years with recommended batteries

Solenoid Valve 6V Latching Valve: UK WRAS approved. One valve per sensor unit.

Pressure range: 0.1 - 6.0 Bar. (Covered by selectable valve seat). In-built slow fill flow regulator.
If supply pressure is above 6.0 Bar, fit a pressure reducing valve.

	Pressure	Flow Max.	Flow Min.
1.5mm Selectable Valve Seat	6 Bar	2.7 Ltr/m	0.03 Ltr/m
1.5mm Selectable Valve Seat	2 Bar	1.6 Ltr/m	0.01 Ltr/m
3.0mm Selectable Valve Seat	2 Bar	3.0 Ltr/m	0.05 Ltr/m
3.0mm Selectable Valve Seat	0.1 Bar	0.9 Ltr/m	No flow

Parts Supplied

