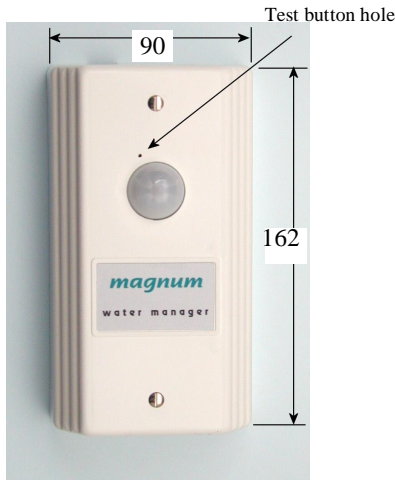


# INSTALLATION INSTRUCTIONS FOR YOUR WATER MANAGER USING THE ASCO VALVE.



## Description and Operation

The Magnum series of water management products provide automatic effective control for water flushing applications, eliminating unnecessary water consumption when flushing urinal systems.

The units work by sensing occupancy using a PIR detector. The sensor then waits for a preset *wait time* before opening the solenoid valve. The cistern then fills for the preset *fill time* before shutting off the valve. The valve remains shut until another occupant is detected, or the hygiene flush is activated (12 hours after the last flush). The *wait* and *fill* times are set using thumbwheels within the unit.

A test mode and test LED provide an easy means of set up, whilst a power level detector gives warning when the batteries need changing.

## Installation and Wiring

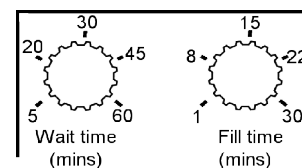
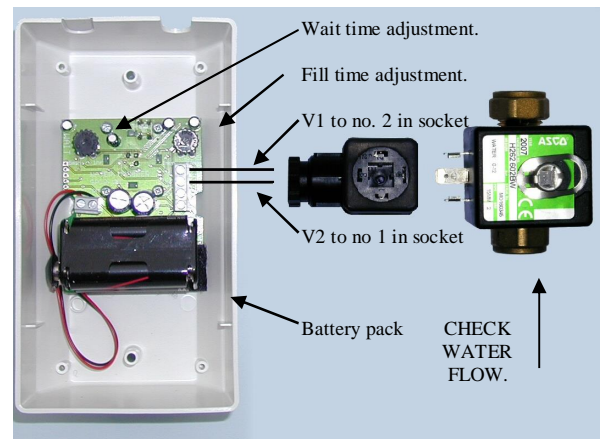
The diagrams opposite show the wiring of the battery powered sensors. **Note that the valve is polarity sensitive.**

The detector should be sited so that the occupants of the room fall inside the detection pattern shown overleaf, at a recommended height of 1.5 to 2.5m for wall mounting and 2.8m ó 3m for ceiling mounting.

1. Turn off the water
2. Fit valve to cistern inlet pipe. Ensure the water flow is in the correct direction. See -INØr arrow marked on the valve.
3. Remove cover from the chassis and fit metal chassis in the desired position noting the points below and taking the detection pattern into consideration.

Avoid direct sunlight entering the sensor  
 Do not site within 1m of forced air heating or ventilation.  
 Do not site within 1m of any lighting.  
 Do not fix to a vibrating surface.

4. Wire up between the sensor and valve plug as shown in diagram. **NOTE: The Asco valve wiring is V1 in the detector to 2 in the socket and V2 to 1 in the socket.** Do not plug onto valve yet.
5. Fit 4 alkaline batteries into the battery holder supplied ensuring the polarities are the correct way round. Connect the battery pack to the sensor. The battery pack is placed on the end of the circuit board using the fitted Velcro. Proceed to -Set Up Instructionsø



Approx setting times

## Set Up Instructions

- 1 Turn water on. Open the valve (if not already open). This can be done by using a PP3 battery across the two similar contacts, or use the battery pack supplied.
- 2 **Determine the time that the cistern takes to fill and flush from empty. This is important.**
- 3 Set this time on the fill time adjuster. This must be slightly more than the time it takes to fill the cistern.
- 4 Decide the *wait time* required and set this on the -wait time adjusterø
- 5 Connect the battery and fit the sensor to the back plate.

## Test Mode

### ENSURE THE VALVE IS CLOSED BEFORE INITIATING TEST MODE

- 1 Use a pin or piece of wire to press the test mode switch through the front plate. Press the switch for 2 seconds, but **not** more than 4 seconds. The lens will flash when you have activated the test mode.
- 2 In test mode, when occupancy is detected the valve will open immediately and close after 10 seconds. After a 4 second gap the valve will open again if an occupant is detected.
- 3 In test mode the LED will flash behind the lens to show occupancy.
- 4 The test mode will disengage after 2 minutes or press the test button again.
- 5 An LED blink during operation (not in test mode) indicates that the batteries need changing.

**Fault Finding.**

Ensure the batteries are inserted the correct way round and are good quality alkaline.

**Valve closes when an occupant is detected and opens at all other times.**

Valve is wired in reverse. Connect V1 on the circuit board to the terminal marked 2 on the valve and V2 to the terminal marked 1 on the valve plug. (Asco Valve)

**Valve does not open**

Check that the batteries are in good condition.

Enter test mode:

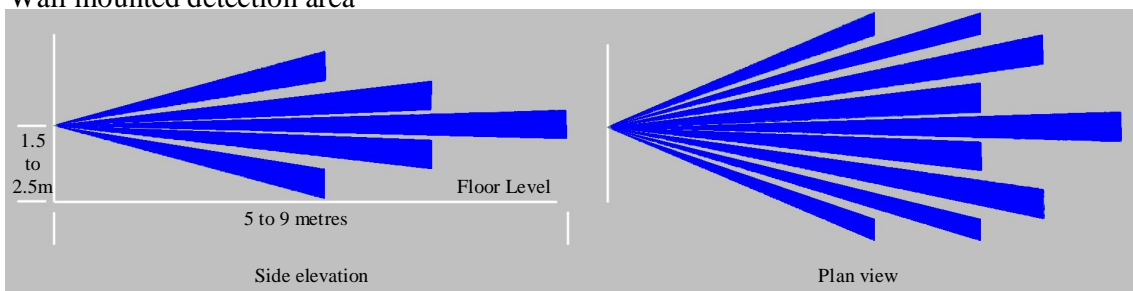
Check that the LED flashes with occupancy. If the valve opens and closes in this mode then ensure that the wait time is set correctly.

**Valve does not close**

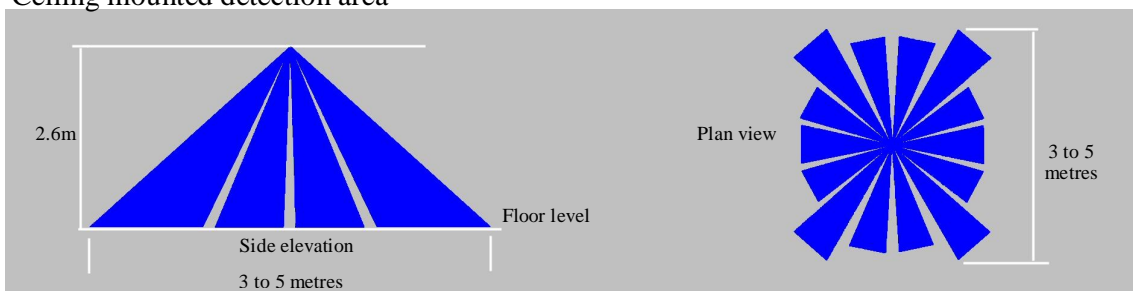
Check that the batteries are in good condition.

Check that the fill time is set correctly.

**Wall mounted detection area**



**Ceiling mounted detection area**



**Specification**

**Load**

Use only with valves supplied.

**SUPPLY**

Powered 4 x AA size alkaline battery

**BATTERY LIFE**

Up to 3 years from good quality alkaline batteries.

**CONNECTING WIRE (not supplied)**

0.5 mm sq. 2 core or similar

**TIME OUT PERIOD**

Wait time 5 minutes ó 1 hour

Fill time 1 minute ó 30 minutes

**TERMINAL CAPACITY**

1.50mm

**MATERIAL**

Flame retardant ABS

**TYPE**

Class 2

**VALVE**

2.0mm orifice rated up to 7 bar pressure

**CONFORMITY**

EMC-89/336/EEC

LVD-73/23/EEC

