## WATERWATCH INSTALLATION INSTRUCTIONS (BATTERY or MAINS) - PICTORAL

Steps required to install and calibrate a Marnic Waterwatch.

**Step 1:** Connect Brown and Blue wires to the circuit board (PCB) and solenoid plug as shown. **ENSURE that polarity is the same at both ends. Brown to 1 and Blue to 2.** 

## CIRCUIT BOARD END



# SOLENOID PLUG END



Step 2: Connect the plug from the battery or mains transformer to the

**Step 3:** Set the jumper links to match your required hygiene period and maximum flush frequency.



### Step 3: Set up the fill time.

The fill time is set using the **SLIDER SWITCH** on the top right hand corner of the circuit board. This is next to the terminal block where the brown and blue wires were attached.



PCB

### Procedure

- 1. Ensure that you start with a EMPTY cistern. If necessary, manually fill the cistern with a jug and allow to flush.
- 2. With the cistern empty, move the **SLIDER SWITCH** down to the open position.
- 3. The valve should open and the cistern begin to fill.
- 4. Leave the **SLIDER SWITCH** in the open position while the cistern fills.
- 5. When the cistern begins to flush wait 10-15 seconds to allow the flush to fully establish.
- 6. Once the flush is fully established return the **SLIDER SWITCH** to the closed (up) position.
- 7. Leave the **SLIDER SWITCH** in this position.
- 8. This will lock the FILL TIME on the circuit board.
- 9. Calibration is now complete. Fit the main case over the wall plate and secure using the dome headed bolt.

### **OPERATION EXPLAINED**

It is important to understand that the valve will not open immediately the PIR sensor first detects movement.

There is a **delay period** which is the **difference** in time **between** the **flush frequency** and the **fill- time**.

**Example:** If 4 flushes per hour are required (15 min cycle) and the fill time is 5 minutes then the delay period will be 10 minutes (15 mins less 5 mins).

- If 3 flushes per hour are required (20 minute cycle) the delay time (on a 5 min fill) would be 15 mins.
- If 2 flushes per hour are required (30 minute cycle) the delay time (on a 5 min fill) would be 25 mins.
- If 1 flush per hour is required (60 minute cycle) the delay time (on a 5 min fill) would be 55 mins.

This is illustrated below.

- 1. First person enters washroom.  $\Lambda$  Sensor 💴 detects the movement but the solenoid stays closed. K
- 2. After the delay period the valve opens and the cistern begins to fill. The valve stays open for the last 5 minutes of the chosen cycle (see bullets above).
- 3. After the fill time has elapsed the cistern should flush and the valve will close again.
- 4. Any number of additional persons can enter the washroom during the whole of the cycle period without affecting the cycle which was triggered by the first person.
- 5. The next cycle will only be triggered when the next person enters the washroom  $\Lambda$







