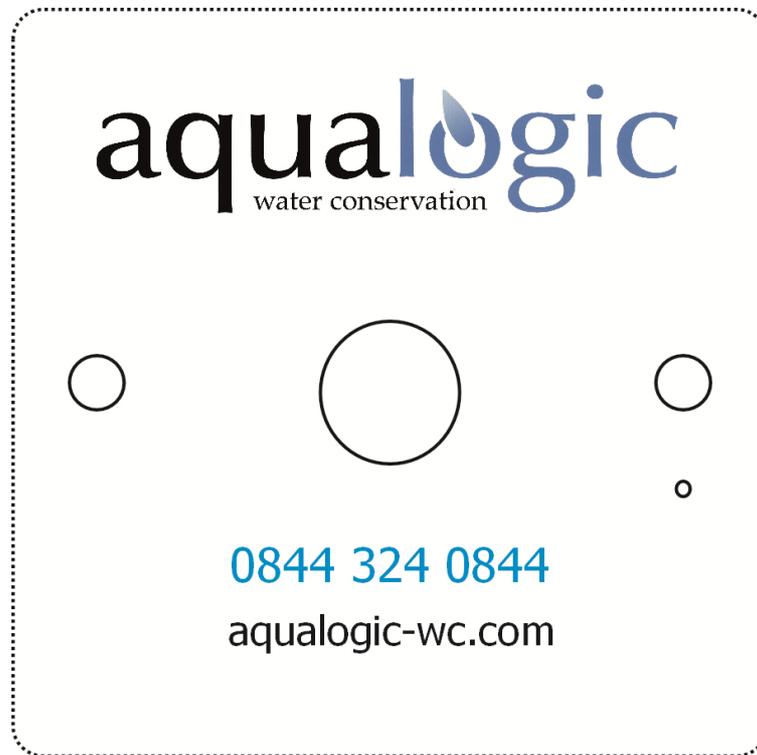


Installation Instructions

Hydrocell12 & Ultra

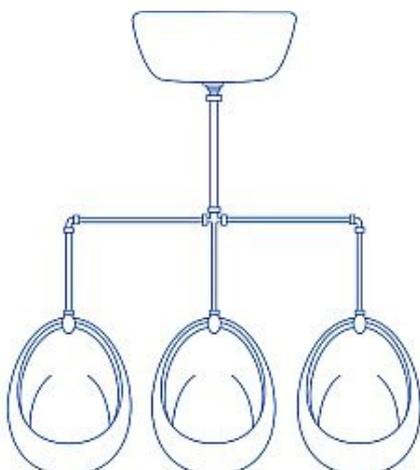


Please check your box has the following

1 x Hydrocell12 control unit including back box and 6v battery



1 x 15mm 6v Solenoid Valve with 1m flex and wired plug



You will require the following:

Cable Clips , Trunking or Conduit,
Fixing Screws, plugs,
A selection of hand tools.

You may also need 2 core 0.75mm flex and a 5A connector block to extend cable if the Control Unit is to be mounted further than 1 metre from valve

Following these guidelines will help you to get the most from your product.

Hydrocell12 Standard Features Explained

Flush Frequency explained.

Set at 10 mins, the urinal will flush 10 minutes after detecting the first user. Set at 40 mins, the urinal will flush 40 mins after detecting first user. This can be altered at any time after set up.

Hygiene Flush. During periods of non occupancy the Hydrocell will instigate a hygiene flush every 6 or 12 hours of non-occupancy.

Long Battery Life The 6v battery supplied will give 3+ years of service.

Reset. A reset button is located next to the blue DIL switches within the Hydrocell. This is used to clear memory ready for reprogramming.

Low Battery Warning. The Unit will flash Red in the PIR on detection as the battery life nears it's end.

'Fail-Safe Shut-off'. The unit ensures that the valve closes just before the battery life expires. Thus saving water.

Hydrocell12 Ultra Features

The Ultra has features of the standard model, plus the following additional features:

Inteli-flush - Set at 40 mins this clever unit reduces the time between flushes in excessively busy periods. This time will continue to be reduced as more people are detected within the 40 min period, down to a minimum of 5 mins.

More flush frequency options - 8 different time settings from 5 to 40 mins

6 Hour Hygiene flush option - With Dil switch 4 in the 'on' position, the unit will perform a hygiene flush if the area has been unoccupied for 6 hrs. This will revert to 12 hrs with switch 4 in the 'off' position.

Installation

Tips before commencing:

The solenoid valve is suitable for installations with a 15mm supply and operating pressures between 0.35 bar and 10 bar. We recommend a suitable isolation valve be fitted to the supply pipe before the location where the solenoid valve is to be mounted.

Mount PIR Control unit as close to the urinal as possible. This will aid in detecting users of the urinals and not WC or wash basins. **Be careful not to obscure field of detection with cistern.**

The white standard fascia has been manufactured to be mounted on the back box supplied with the **battery in the bottom left corner** or bottom centre, either position will guarantee closure.

1. Locate a section of pipe work that will accept the valve . This needs to be inline with the supply pipe to the cistern.
2. Decide on a location to site the Hydrocell control box. Ideally this should be in a position that ensures occupancy detection for the urinals only. The effective sensing angle is up to 30° and the sensing range up to 5 metres. The distance between control box and solenoid valve can be up to 30 metres.
3. Isolate the water supply and install the valve (observing the correct direction of flow indicated on brass body of valve), at the desired location.
4. Make suitable cable entry hole in back box then mount the control back box in the desired position. Fit cable plug to valve & secure using screw supplied. NB: If 1m cable supplied is not long enough you will need to extend using 2 core flex and a suitable connector block (not supplied)
5. Trim cable to correct length, strip & braid cable ends & connect to terminals indicated in control unit. Colour coded Blue(1) & Brown(2)
6. Reinstate water supply and test for leaks.



Ensure all cable connections are made secure to the unit & valve before connecting the battery.

Hydrocell12 Standard – identification and settings

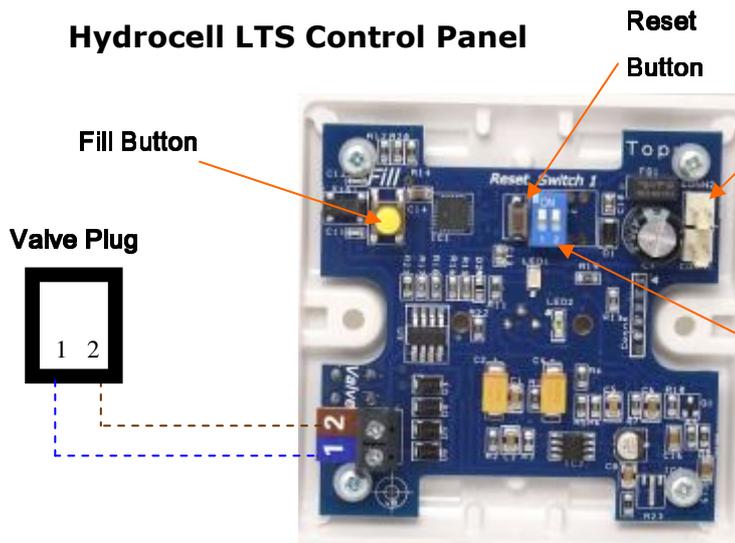


Table 3

2 DIL Switch Standard Flush Table

Sw 1	Sw 2	Flush Delay
off	off	10 mins
on	off	20 mins
off	on	30 mins
on	on	40 mins

For ULTRA flush settings refer to table 4 (next page)

Hydrocell 12 & Ultra Programming

1. Using the Blue DIL Switches, select the flush frequency, see above table for frequency options for standard model or table 4 for Ultra model.

2. Connect the Lithium battery pack to either Battery terminal

3. **Press the reset button.** The Valve will briefly open & close, **Green & Red LED** will alternately **flash for 8 secs** as unit performs self testing. **Wait** while this test completes before moving onto step 4.

 **If valve briefly closes then remains open, this indicates incorrect wiring. If no activity occurs re-check connections between valve and unit then press Brown Reset button.**

4. The Hydrocell is now in programming mode. The PIR will now flash Red, open & close valve on detection at 8 secs intervals. You can now set the Fill time (*the length of time it takes to fill your cistern to cause it to flush*).

 **If the unit is not programmed after the 12th detection the unit will default to 3 mins fill time and 40 mins flush frequency.**

5. Before setting the flush time the cistern must be empty. If cistern is **empty** go to **step 6**. (If the cistern is **not empty**: Press and release the Yellow fill button to cause the valve to open. When the cistern begins to flush, press and release the Yellow fill button again to close the valve. Go back to stage 3.

6. Setting Fill Time

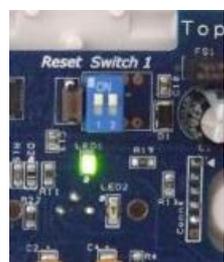
With the unit in programming mode (**Red LED** flashes on detection), press and release the Fill button once. The solenoid valve will open and allow water to flow into the cistern. During fill time programming the **Green LED** will flash. **Note:** If green LED does not flash, press the fill button again.

Note: To re-enter programming mode at any time, go back to stage 3.

7. When the cistern begins flushing, press and release the fill button within a few seconds to close the valve (Green LED will cease flashing). Your Hydrocell is now set and will be armed in 50 seconds.

8. Carefully refit the fascia to the housing and secure with supplied screws.

 Take **EXTRA** care when fitting fascia that internal buttons are not depressed causing reprogramming.



Reprogramming

- Should you require to increase or decrease flush frequencies, simply alter the DIL switch positions. No further programming is required as per table 3 or table 4 for Ultra model.
- To alter the fill time you must press the reset button, then follow procedure from stage 3.

Ultra12 Flush Settings:

Table 4



inteliflush

4 DIL Switch ULTRA Flush Table				Hygiene	Flush Delay
Sw 1	Sw 2	Sw 3	Sw 4		
off	off	off	on = 6hr off = 12hr	5 mins	
on	off	off		10 mins	
off	on	off		15 mins	
on	on	off		20 mins	
off	off	on		25 mins	
on	off	on		30 mins	
off	on	on		35 mins	
on	on	on		40 mins	

Quick Setup Guide

- 1) Isolate water supply & Fit Solenoid Valve
 - 2) Mount PIR control Unit in suitable position
 - 3) Secure Solenoid valve plug on to valve pins.
 - 4) Connect 2 core flex to brown & blue terminals in the Control unit
 - 5) Battery should be positioned bottom left of surface box (as you look at it) then connect battery lead to either of the 2 white connector plugs in control unit.
 - 6) Adjust delay time as per time table on table 3 for Standard unit or table 4 for Ultra model.
 - 7) Press reset button, valve will briefly open & close, perform **self-test** during which Red & Green LED will alternate flash for about 8 secs, finally the valve will briefly open & close.
- ⚠ Wait until self-test is complete before moving onto next stage.**
- 8) If cistern is **empty** proceed to **point 9**, if **not empty** move to **point (8a)**.
 - a) Press yellow fill button to open valve to fill cistern, when cistern begins to flush, press yellow fill button again to close valve, (cistern is now empty).
 - b) Return to point 7.
 - 9) Press yellow fill button to open valve to fill cistern. NB: The Green LED must Flash while setting fill time.
 - 10) When cistern begins to flush, press yellow fill button again to close valve, cistern fill time is now set. Green light should stop flashing on pressing.

Self Test & Diagnostics

The Hydrocell 12 & Ultra has a self test and diagnostic facility. (This also allows users to carry out a single flush operation if required.)

To enter Diagnostic mode:

Using a 'unbent' paper clip, insert one end into the entry hole (below RHS screw) to start diagnostics process.

Stage 1: Unit Performs Detection test:

Wait for up to 30 secs while moving in detection zone. The PIR unit sensor will flash **Red** on detection for up to 3 times at 8 secs intervals. The unit will then move into Stage 2

Stage 2: Valve Test. PIR unit will illuminate Red for 3 secs then open the valve for the programmed fill time in order to flush the cistern then close valve.

If unit performs both tests successfully the unit is working normally. On Failure of either test call our Technical helpline for further assistance.



Insert Paper clip here

For further information or Technical assistance contact us on: Tel 0844 324 0844 or Email: info@aqualogic-wc.com