

# URINAL CONTROL SYSTEMS

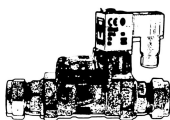
## Hydrocell & HC Ultra

### Installation & Setup



**Please check your box has the following contents**

1 x Hydrocell / HC Ultra inc standard surface mount box.



1 x 15mm 6v Solenoid Valve.



1 x Lithium CR-P2 Battery.

**You will require the following:**

0.75mm Twin Core Cable  
Cable Clips / Trunking / Conduit  
Fixing Screws  
A selection of hand tools.

**Recommended:**

6L / min flow regulator / isolation valve— available from Aqualogic



Thank you for purchasing Aqualogic's Hydrocell. Following these guidelines will help you to get the most from your product.

## Hydrocell 2006 Features Explained Refer to next section for ULTRA

**Flush Frequency.** 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 12 hours if 30 or 40 min flush frequency is selected. Every 6 hours if 10 or 20 min flush frequency is selected.

**Dual Battery Connectors.** When you order your new lithium battery from Aqualogic, it can be changed without losing any settings.

**Plug & Play.** If the battery is connected and no programming takes place, the Hydrocell after 5 mins will revert to a default mode of 40 min flush frequency and a fill time of 5 mins.

**Reset.** A reset button is located within the Hydrocell to aid with maintenance and programming. Memory will be cleared and ready for reprogramming.

## Hydrocell Installation (& HC Ultra)

### **Tips before commencing:**

The solenoid valve is suitable for installations with a 15mm supply and operating pressures between 0.35 bar and 16 bar.

The detector in the Hydrocell should be placed in a position as close to the urinal as possible. A good place is usually the ceiling in front of the cistern. This will aid in detecting users of the urinals and not wc's or wash basins. **Be careful not to obscure field of detection with cistern.**

### **Note:**

**The fascia has been manufactured to be mounted on the back box with the battery in the bottom left corner, this position will guarantee closure.**

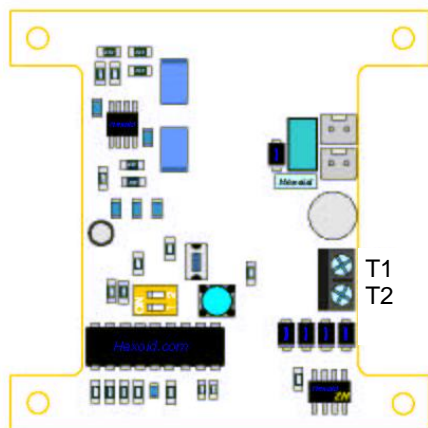
**Before commencing, fill and flush the cistern, then isolate the water supply. This will help when it comes to setup.**

1. Locate a section of pipe work that will accept the solenoid & combined flow regulator/isolation 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. Locate the stopcock/valve which will isolate the water supply and check its operation.
4. Mount the control back box in the desired position. Prepare the cable between the valve and control box, leaving surplus at each end for connection preparation.
5. Connect T1 on Hydrocell to 1 terminal on solenoid plug. Connect T2 on Hydrocell to 2 terminal on solenoid plug. **Note:** The correct polarity must be ensured. (see dia 2). **TEST mode will ensure this.**
6. Isolate the water supply and install the solenoid & combined flow regulator/isolation valve, (observing the correct direction of flow), at the desired location.
7. Reinststate water supply and test for leaks.
8. Tip: When changing batteries, connect the new battery to the free connector before disconnecting the old one. This way the settings may be retained.



# Hydrocell – identification of controller and settings

## Hydrocell 2006 Control Panel Dia 1



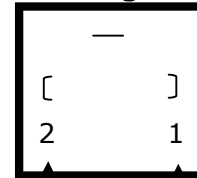
## Solenoid Valve Connections Dia 2

### Switch

1	2	
Off	Off	10 mins
On	Off	20 mins
Off	On	30 mins
On	On	40 mins

- Fill Time
- Battery
- Reset

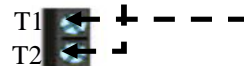
### Plug



**! IMPORTANT !**

T1 Must be connected to (1) on plug or (-) on Valve

**! IMPORTANT !**



## Hydrocell & HC Ultra Programming

- Using the Blue DIL Switch, select the flush frequency, see above table for frequency options.
- Connect the Lithium battery pack to one of the Battery Connector terminals. Once a connection is established, the Hydrocell will deliver a one second burst of water to test polarity or press the reset button to commence TEST MODE.



**IMPORTANT NOTE:** If the valve does not close during this cycle. **STOP** and check valve polarity. This is a vital part of setup.

- The Hydrocell will enter test mode and not permit programming before three pulses of the valve have been delivered. On detecting movement the valve will pulse open and closed very quickly. The PIR sensor will continue to detect movement for another 5 occasions every 8 seconds.

**If no activity occurs re-check connections between valve and unit.**



**If the unit is not programmed after the 8th detection the unit will default to 5 mins fill time and 40 mins flush frequency.**

- Before setting the flush time the cistern must be empty. If the cistern is not completely empty at this stage, undertake stage 5, then press and release the reset button. Once empty proceed to stage 5.

### 5. Press the Re-set button (important before programming)

- Press and release the Fill Time button once. The solenoid valve will open and allow water to flow into the cistern. When the cistern begins flushing, press and release the fill button within a couple of seconds to close the valve. Your Hydrocell is now set and will be armed in 50 seconds.

- 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 repro-

## Reprogramming

- Should you require to increase or decrease flush frequencies, simply alter the switch positions. No further programming is required.
- To alter the fill time you must reset the system prior to undertaking stage 5.

# Hydrocell Ultra Features Explained

**Flush Frequency.** Set at 10, 20 or 30 minutes, the urinal will flush 10, 20 or 30 minutes after detecting the first user. Set to Intelliflush, the urinal will flush a maximum of 40 minutes from detecting the first user. This time will be reduced through frequent usage and high ambient temperature.

**Hygiene Flush.** During periods of non occupancy the Hydrocell will instigate a hygiene flush every 6 hours if 10 or 20 min flush frequency is selected. If 30 or 40 min flush frequency is selected the hygiene flush will be every 12 hours but will automatically reduce when the ambient temperature is high.

**Dual Battery Connectors.** When you order you new lithium cell from Aqualogic, it can be changed without losing any settings.

**Plug & Play.** If the battery is connected and no programming takes place, the Hydrocell after 5 minutes will revert to a default mode of 10 min flush frequency and a fill time of 5 minutes.

**Reset.** A reset button is located within the Hydrocell to aid with maintenance and programming. Memory will be cleared and ready for reprogramming.

**Single Flush.** After your system has been correctly set up, the square orange button on the board can be used to test functionality. Once depressed the valve will open for the programmed fill time and the urinal should flush.

**Low Battery.** A L.E.D will flash through the fresnel lens when the battery level is low, at this time the urinals will flush a further fifty times before the valve is closed and the controller shut down.

**Temperature Control.** The ambient temperature of the washroom is constantly monitored by the controller and both the flush and hygiene flush frequency will be affected to avoid malodours.

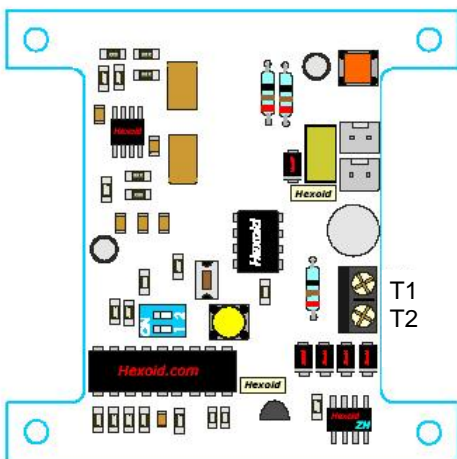
**Fail Safe.** If the battery is not changed before exhausted the controller will ensure that the solenoid valve closes to avoid any uncontrolled flushing.

## Hydrocell Ultra—identification of controller and settings

### Note:

The Hydrocell Ultra has more features but the programming and set up of the Ultra is completed in the same way to that of the Hydrocell. Notably it is the **intelliflush** setting.

### Hydrocell Ultra Control Panel Dia 1

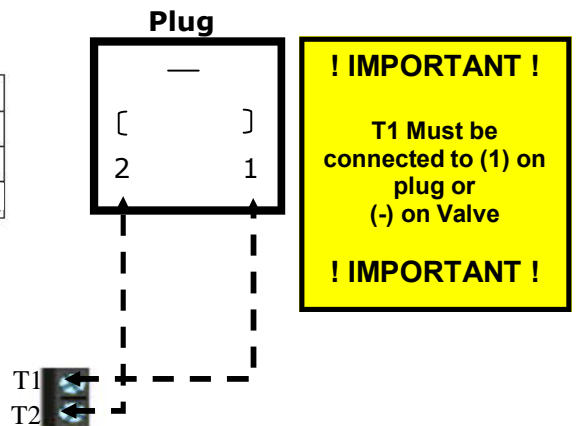


Switch		
1	2	
Off	Off	10 mins
On	Off	20 mins
Off	On	30 mins
On	On	Intelliflush

	Fill Time
	Battery
	Reset
	Single Flush

### Solenoid Valve Connections Dia 2



## Care

1. Wiping the fascia of the Hydrocell with non-abrasive cleaners will help to keep the Hydrocell in good condition.
2. Unexpected interruptions or pressure differentials with your water supply may cause fill times to drift over time.
3. Your Hydrocell will offer trouble free operation for many years. Remember to check battery life and filter condition annually.