



ES51-E-FLUSH WATER MANAGER

WITH VALVE INSTRUCTIONS

- INTELLIGENT URINAL FLUSH CONTROL
- LOW BATTERY ALARM
- 9v BATTERY (as standard) or AC MAINS* (*with optional extra ES50.9 transformer)
- OPTIMISES FLUSH CONTROL
- EASY INSTALLATION AND SET-UP
- WATER AUDIT FEATURE
- SAVES WATER AND MONEY
- MAXIMISES THE FUNCTIONALITY OF THE URECO & BIOBALL



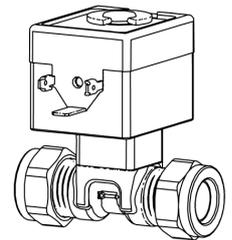
INTRODUCTION

Thank you for purchasing our affordable and easy to install electronic water timer for use with the Ureco & Bioball urinal product range, or any other urinal that requires flushing in an economical method.

The ES50 is designed to be fitted to an approved 6 volt DC latching solenoid water valve which is at least serviceable but preferably in a new condition. Lists of approved valves are available from WES but for UK indirect cistern applications we recommend the use of a 2mm orifice bi-stable latching valve (ES50.3).

Please take a moment to check that you have the following:

- 1 x ES50 Urinal Flush Timer
- 1 x 9v Battery
- 1 x Battery Sheath (attached)
- 1 x Retaining Screw
- 1 x Screw Cover
- 1 x Valve - ES50.3



FITTING THE SOLENOID VALVE

The most difficult part of the overall installation is installing the valve efficiently and correctly, in most cases there will be a water isolator (stop cock) on the water supply to the cistern and the solenoid valve has to be fitted between the stop cock and the cistern, preferably in a position out of normal reach by the general public.

First turn off the water supply to the cistern, and mark the pipe where the valve is to be fitted, the valve needs to be installed in an upright position wherever possible to maximize reliability and performance. The valve must be fitted in the correct orientation otherwise it will not work correctly, all our solenoid valves are marked on the underside of the valve with either an "IN" mark or 1 for "in" & 2 for "out" to indicate direction of water flow, which will allow the ES50 to be vertically mounted.

Cut the water pipe and install the valve correctly, reinstate the water supply and ensure there are no water leaks. Please check again that the solenoid valve is installed in the correct orientation before proceeding further, if a drip feed regulator is fitted to the outlet into the cistern, then it needs to be removed and replaced with pipe to ensure a controlled discharge into the cistern without splashing etc.

Do not fit the ES50 controller to the valve at this stage. You will notice on the black part of the solenoid valve 3 metal connectors, 2 small and 1 large central earth pin. Now use the battery supplied with the ES50 to check the correct operation of the valve by briefly touching the contacts of the battery onto the 2 small connectors. If the valve does not open and water start to flow into the cistern, reverse the polarity of the battery and repeat to let the water flow into the cistern until it completely fills and starts to flush, now immediately close the valve with the battery as described above, **as you must have an empty cistern before moving to the next stage of the set up and installation procedure.**

You are now ready to continue with the ES50 set-up as overleaf.

SET UP PROCEDURE

CISTERN FLUSHING SYSTEM

The next step is programming the ES50. In cistern mode, (the most popular in UK) the set up process involves timing how long it takes to fill your urinal flushing cistern with water, because every site will be different due to cistern size and water pressure differences.

Firstly remove the ES50 from its packaging, and carefully lift the rubber gasket (D) over the 3 metal valve connectors, to reveal the battery tray (**IMPORTANT ensure cistern is empty before commencing with cistern fill time settings**). Carefully fit the battery (B) observing the correct battery polarity and replace the rubber gasket, then immediately (within 20 seconds) fit the ES50 (A) to the solenoid valve head (H). Attach the M3 securing screw (I) and lightly tighten. Replace the screw cover (J).

You will notice if the battery has been fitted correctly a letter "C" will be displayed on the front of the ES50 which means it is ready to be set up for use with a cistern fed urinal.

Ensuring your cistern is still empty and the letter "C" is being displayed on the front of the ES50, press the "F" button so the screen displays "F-S", meaning the system is ready to start filling. Press "F" again which will then open the valve and water will flow into the cistern, (while the cistern is filling a small dot will flash on the front of the ES50 to indicate the cistern fill time is being recorded). Once the cistern has filled, the flush will start at which point you simply press the "F" button again to record the total cistern fill time. The fill time is now set into the ES50's memory.

ADJUSTING THE FLUSH CYCLE (CISTERN FLUSH SYSTEM)

The ES50 will now display "T - 0 - 0". As an example, T - 0 - 4 would mean 4 flushes per day, attained by pressing the "T" button 4 times. T - 1 - 2 would mean 12 flushes per day.

After you have selected the desired amount of flushes wait 20 seconds and the display will extinguish after a "beep" and this confirms the setting has been accepted. Your ES50 is now set up and will flush your urinals to the desired rate per day until the battery expires, in approximately 2 years OR when 'battery low' alarm sounds.

If you fail to set-up the ES50 correctly, a factory default setting will be automatically selected (6 minutes fill time, 4 flushes per day).

DIRECT FLUSHING SYSTEM

If you wish to set the ES50 for use with a Direct Flush System hold any button down while connecting the battery and it will display a letter "D" now you have selected the Direct Flushing mode, you are ready to set up the ES50. Ensuring the letter "D" is being displayed on the front of the ES50 press the "F" button so the screen displays "F-S", meaning the system is ready to start filling. Press "F" again which will then open the valve and water will flow into the cistern. Press the "F" button again which will then open the valve and start to flush the urinal, (while the urinal is flushing with water a small dot will flash on the front of the ES50 to indicate the timing is in progress) after about 5-10 seconds you simply press the "F" button again to record the total urinal flush time.

Important In Direct mode "D" it is only normally recommended to flush a urinal for about 5 – 10 seconds duration.

For Direct Flushing Systems you will require a larger orifice valve (ES50.6) (please seek advise from the manufacturer).

ADJUSTING THE FLUSH CYCLE (DIRECT FLUSH SYSTEM)

The ES50 will now display "T - 0 - 0" (where T12 would mean 12 flushes per day) and this is attained by pressing the "T" button 12 times, after you have selected the desired amount of flushes wait 20 seconds and the display will extinguish after a "beep" and this confirms the setting has been accepted.

Important; In Direct mode "D" it is only normally recommended to flush a urinal with more frequency than with a cistern due to the lower flush volumes.

If you fail to set-up the ES50 correctly, a factory default setting will be automatically selected (12 x 5 second flushes per day).

CARE AND MAINTENANCE

- * Only fit and use prime quality batteries such as 'Energizer' or 'Duracell'
- * Replace the battery every 2 years OR when 'battery low alarm' sounds, to ensure the product functions correctly.
- * Ensure the device is always kept clean and away from the elements, as the ES50 is not designed for exterior applications.
- * To check the current cistern FLUSH TIMING frequency press "T"
- * For the number of FLUSHES since installation press "F"
- * To RESET remove the battery and leave for approx. 10 minutes for current to drain and memory to reset or you can remove the battery and place your fingers across the contacts whilst holding one of the buttons down for approx. 10 seconds to drain the current.
- * If a TEST FLUSH is required press and keep holding "T" then at the same time press and hold the "F", keep both buttons pressed whilst the display goes through its software version, once it displays "UER" let go of both buttons and a test flush will be performed after which the ES50 will revert back to your previous programming.

WARRANTY

The ES50 is covered by a manufacture defect 2 year warranty. We offer a 2 year part replacement only. No responsibility can be taken for failure of the device or valve resulting from contaminated water supplies or improper installation of the ES50 device. The ES50.3 valve warranty is expressly the responsibility of the valve manufacturer, details of which are applied for via ourselves.

For any assistance required with this product please either call your distributor or get in touch directly with the manufacturer; Washroom Efficiency Services Ltd TEL: UK +44 (0) 1803 521415.

KEY
A - ES50
B - BATTERY (PP3/MN1604)
C - DISPLAY
D - SHEATH/GASKET
F - FUNCTION BUTTON
T - TIME BUTTON
G - SOLENOID VALVE
H - SOLENOID HEAD
I - RETAINING SCREW
J - SCREW COVER

