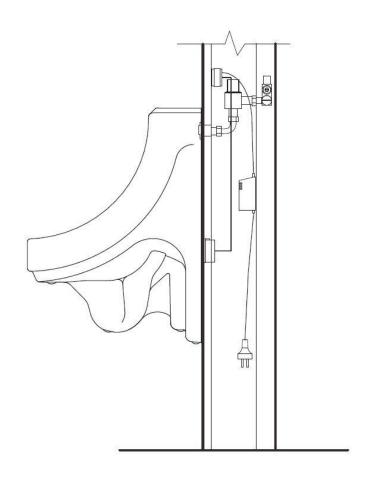


INSTALLATION INSTRUCTIONS

ET3-M Smart Demand Urinal Flushing System

Urine detecting sensor fixed to rear of ceramic for fully hands-free 6-Star WELS electronic activation.





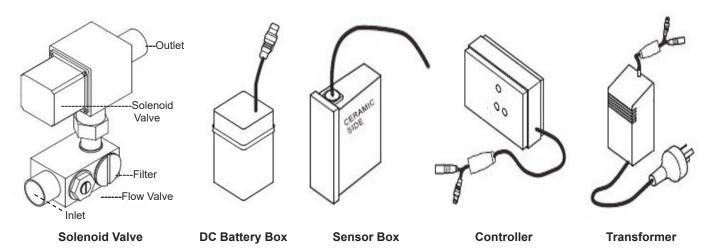
Thank you for purchasing this Enviro-Tech product.

INSTALLATION INSTRUCTIONS ET-3M URINAL FLUSH VALVE TECHNICAL SPECIFICATION

Function	ET3-M	
SMART Demand	Urine Sensing technology . Product will not detect movement in room, heat, light or any other method of activation	
Power Input	DC:6v (4X AA alkaline batteries) AC:220-240V 50/60Hz)	
Power Consumption	Static:<4mA; active:<500mA	
Water Pressure	100kPa-500kPa Maximum (recommended 350kPa)	
Inlet/Outlet Diameter	15mm 1/2G	
Flush Volume	Pre-set at 800mls at 350kPa	
Inductive Confirmation Time	Detects constant flow over sensor – 6 times in 5 seconds before flushing	
Confirmation Time After Use	5 seconds	
Flush Time	4 seconds	
Reset Time After Flush	10-20 seconds	
Automatic Stadium Mode	Increases confirmation time and flushes less often in times of high usage	
Trap Seal Protection	Automatic every 24hrs if not used	

IMPORTANT – Product is designed to operate as mains powered with battery back-up. If only batteries are installed, product will function, but batteries will run down quickly, and urinal will suddenly stop working. Surge protectors are recommended to avoid power spikes affecting the life of the transformer and the controller. Transformers should not be plugged in until all major electrical work has been completed on site. Ensure good access to components for maintenance.

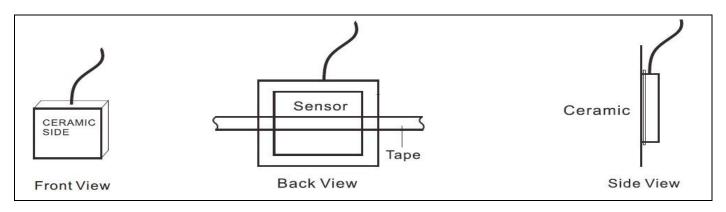
COMPONENTS



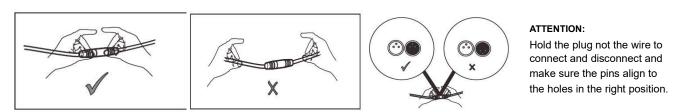
PREPARING FOR INSTALLATION

We strongly recommend that you use a qualified and registered plumber and electrician. You must ensure that all pipe work is flushed adequately, particularly in new builds or where lines have been disrupted. Components of sensor products are particularly susceptible to debris and will require more thorough flushing than a standard plumbing fixture. Installation must be in accordance with AS/NZS3500.

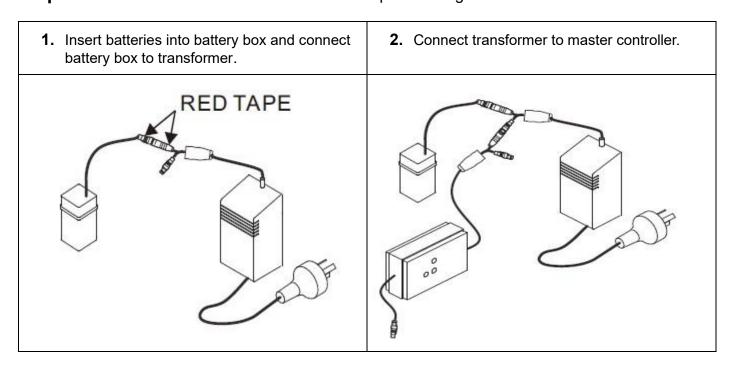
Step 1. Placement of the sensor is vital to ensure correct product function. Before hanging the urinal on the wall, place sensor on the lower rear of the urinal and tape in place, ensuring 'ceramic side' is placed against the urinal.



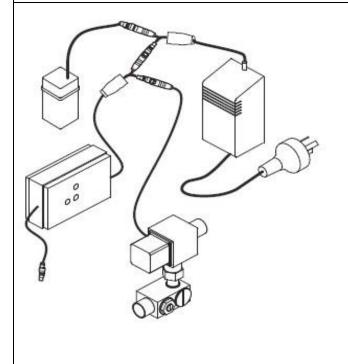
Step 2. Lay out all other components ready for connection testing. <u>WARNING:</u> Electronics will be damaged if connected incorrectly and will not be covered by your warranty.

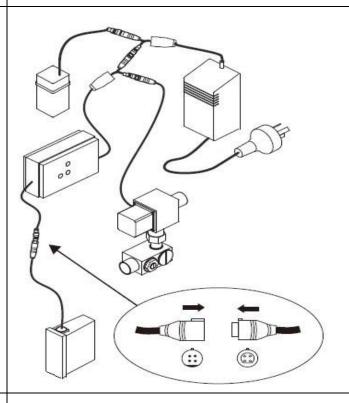


Step 3. Connect all cables in the correct order as per the diagrams below.

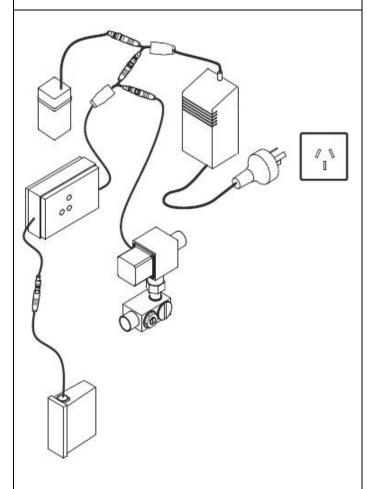


- 3. Connect master controller to solenoid valve
- 4. Connect sensor to master controller (include extension lead if using). Ensure that the raised ridge on the outside of each plug and the flat part of each plug matches together.





5. Connect the transformer to the power supply. Confirm there is power at the socket.



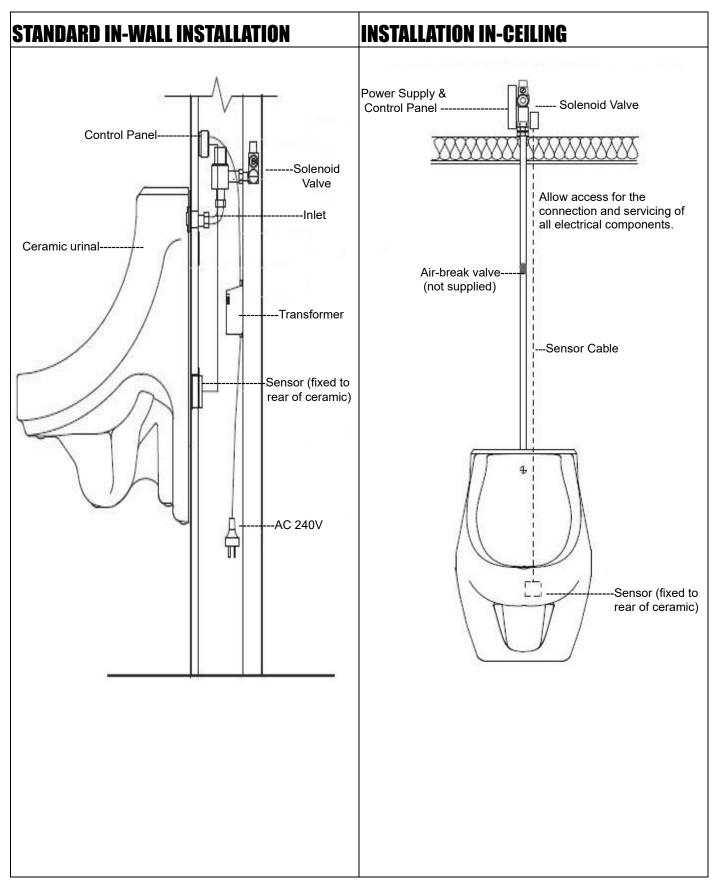
Step 4. Test that the sensor is sited correctly by spraying/pouring water on the surface of the front of the urinal (must run over the sensor location) for up to 20 seconds. There will be a red-light flashing on the controller, when you stop spraying/pouring water, the red light will stay on; there will be a short delay, but the solenoid will activate; you may hear the solenoid click (simulates the flush).

Step 5. Once you have confirmed that that the sensor is located correctly, and you are satisfied with the results of your component testing:

- Prepare area around sensor application site. Ensure site is free of dust and grease.
- Silicone sensor in place. NOTE: Attach using silicone around the edge of the sensor only. Ensure that silicone does not spread to sensing surface, as this will reduce sensitivity and compromise the effectiveness of product.
- Once sensor is secure, proceed with installation of remaining components. Refer to the installation diagrams over page.

INSTALLATION

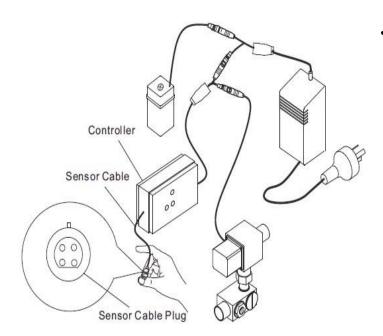
IMPORTANT: Flush valve must be installed vertically. Flush pipe must be DN20 copper pipe or equivalent and must be vertical and straight. DO NOT use flexi-hose and ensure no bends/kinks or horizontal pipework. If opting for the in-ceiling installation method – the Installation of an air-break valve is recommended (not supplied). Please note that - incorrect installation is NOT covered by your warranty.



COMMISSIONING OF INSTALLATION

<u>Note</u>: When testing the urinal – note confirmation times from the Technical Specification table. Repeated rapid testing will cause product to enter Stadium Mode, resulting in intermittent flushing.

<u>Connection Test</u> – this will confirm that the controller and solenoid are working correctly. It will confirm that there is power and that all connections are correct.



Unplug sensor cable and rub thumb over the 4 metal pins. The red light on the controller will flash, stop rubbing pins after 20 seconds, the red light will stop flashing, the solenoid will be activated, and the urinal will flush.

<u>Sensor Test</u> – Once silicone is dry, spray/pour water over the surface of the urinal (must run over sensor location) for 20 seconds. The red light on the controller will be flashing, when you stop spraying/pouring water, the light will remain on, there will be a delay, but the urinal will flush.

<u>Water-saving Test</u> – Silicone must be dry before performing this test. Spray/pour water over the surface of the urinal (in area where sensor is attached) for 20 seconds. On flush activation, collect the water in a measuring jug. The volume of water should be less than 1ltr. If necessary, adjust volume using the flow valve adjuster, next to inlet valve on solenoid. (Note: Flush volume of 800mls is pre-set at the factory using 350kPa)

SETTINGS

This 6-Star WELS rated product is tested at 350kPa and is pre-set as follows:

- Detection Zone 250mm
- Flush time/Volume 4 second flush delivering 800mls per flush. If this volume is not
 adequate for your setting, adjustment should be made to the flow valve on the inlet valve of
 the solenoid. NB. Any adjustment may reduce WELS rating for this product.

<u>DO NOT</u> attempt to make any adjustments to the controller. Product can be damaged, and this is NOT covered by your product warranty.

TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
No water out	Most common: Plugs not connected correctly. No water supply or no power. Blocked filter or solenoid.	 Check water and power supply. NB. If urinal has been working for some time but has suddenly stopped – likely cause is no power. Change batteries and check mains power supply. Unplug all cables, leave unplugged for 5 minutes, then reconnect everything carefully in the correct order. (See cable connection diagrams) Perform Connection and Sensor tests. (See Commissioning Installation section). If problem persist, call us for advice. Clean filter.
	Blocked filter or solehold.	Clean filter. Clean/replace solenoid.
Urinal will not flush	Commissioning tests not completed correctly.	Flush valve is urine sensing. It does not detect movement in the room, heat. Light or any other method of activation. Perform Connection and Sensor tests. (See Commissioning Installation section).
Too much or too little water flow	Water pressure is incorrect.	Adjust the water pressure.
	Flow valve needs adjusting. The filter or solenoid is blocked.	Adjust flow valve on solenoid. Clean the filter. Clean/replace the solenoid.
Second flush/Run- on shortly after installation	Incorrect installation method.	Check installation is correct. (See Installation instructions). Run-on after install is usually caused by debris in water supply preventing solenoid closing. Can also be caused by high water pressure of more than 500kPa. Clean solenoid, flush the pipework and retest. You may need to replace solenoid, which is not covered by product warranty.

For detailed troubleshooting advice, see the Troubleshooting page of our websites enviro-tech.com.au or enviro-tech.co.nz.



WARRANTY

This Enviro-Tech product is guaranteed for 12 months from the date of purchase. This is a parts only warranty and Enviro-Tech is not liable for any associated costs incurred in the replacement or repair of any item. For full details of the warranty conditions, see the Warranty page of our websites.

AFTERCARE

Ensure good water quality is maintained and the filter on the solenoid valve is cleaned out regularly. Failure to do so could result in blocked solenoid/impair product functionality and may invalidate your product warranty.

This Enviro-Tech product is manufactured strictly to adhere to the ISO9001 standard, WaterMark certification and WELS standards. Enviro-tech reserves the right to update product technology at any time.

CONTACT INFO:

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