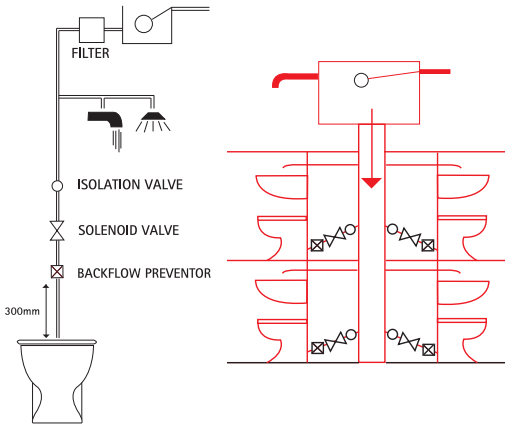
ELECTRONIC FLUSHING SYSTEMS FOR DEDICATED OR COMMON DOWN SERVICE TANK INSTALLATION

eco-logic uk

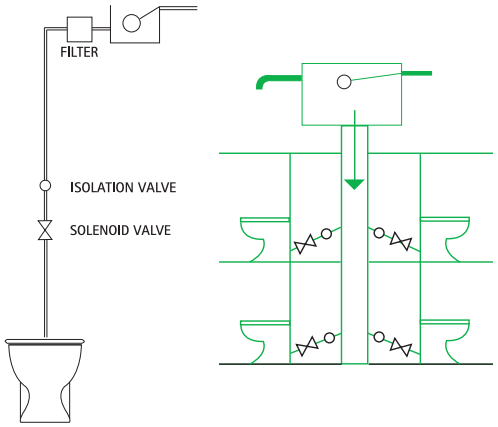
ECO-Logic Electronic Flushing Systems do not require cisterns behind each WC or urinal and can save pipework, space and money. They can work with gravity tanked supplies in three basic arrangements.

1. Common down service tanks



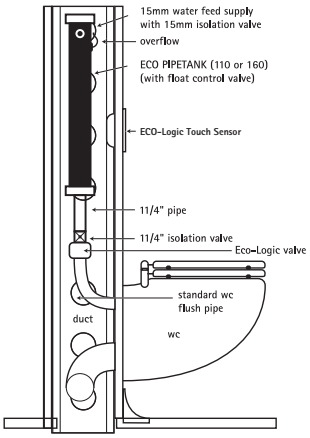
Using gravity tanks to supply WCs and other CWS outlets. This installation requires pipe interrupter to be fitted to the feeds on each WC to prevent any backflow contamination. This is a practical solution if localised water storage is required to serve WCs/Washrooms.

2. Dedicated down service tanks



A central gravity tank dedicated to WC flushing can serve several floors and save space.

3. ECO Pipetanks



ECO Pipetanks are installed vertically in ducts behind the WC, saving space (See Product Sheet W13).

Features & Benefits

- Enables rapid, repeat flushing for busy toilets.
- Fully compliant with flushing regulations.
- Does not require local WC cisterns or flushing tanks, releasing space behind WC's.
- Increases security and reduces flood risk.
- Allows concealment of all pipework and controls.
- Reduced pipework for faster installation & maintenance
- ECO-Logic Electronics have a 2 year guarantee.
- Safe 6vDC battery power or reduced-mains power via ECO-Logic transformers with battery back-up.

Optional Links

- Blockage Alert Systems provide security and maintenance benefits.
- BMS Systems.

Function

Users activate the ECO-Logic flush sensors, which are cable connected to the ECO Controller, then onto the flushing valve. The flush volume/time, mode of operation, lockouts and anti-tamper controls are setup on the Controller to building management requirements. When activated, the flush valve opens and closes to settings.

Flush times are simple to set using rotary switches. Timing can reflect water pressure at discharge point, sanitaryware design (i.e. low capacity pans) and can be adjusted to meet changes in water regulation.

An optional ECO Blockage Alert can be fitted to the WC/Urinal waste pipe which prevents flushing when a blockage is detected, avoiding flooding of contaminated water and maintaining hygiene standards. A warning light, alarm or BMS signal notifies management. After clearing the blockage, the system is restarted using a reset button.

ECO-Logic Controllers and Sensors

ECO Controllers provide the link between the sensors, valves and outlets. Flow/flush times, operational modes, temperature monitoring, lockouts and anti-tamper controls can all be set on the Controller. **Controller choice depends on several factors and early consultation with ECO-Logic is recommended.**

Single Controllers – some integrated with a sensor.

Multi-Channel Controllers
- to control banks of the same item.
- to control a number of different outlets. Typically in a bathroom with a WC, Basin and Shower.

Modular Controllers – offering total management control for accommodation or washrooms. Can include water, heating, lighting, communication, audio/visual and security systems. All with BMS links.

Sensor Type	ECO-Logic System	Application	Notes
Non Touch	Trans Sense	WC Y Urinal Y	Fully concealed sensor system, installed behind finished surfaces or urinal bowl, offering high vandal resistance and simple installation. Touch operation also available.
	Infra Sense	WC Y Urinal Y	Disc or plate mounted sensor. Usually close proximity sensing with variable range settings.
	Passive Infra Red (PIR)	WC N Urinal Y	Ceiling or wall sensors, for flush control to banks of urinal bowls, troughs or stalls. Operates only when it senses user activity. Duty Flush settings.
One Touch	Trans Sense	WC Y Urinal Y *	Fully concealed sensor system, installed behind finished surfaces or urinal bowl. Light touch sensors, offering high vandal resistance and simple installation.
	Touch Sense (TS) or React Sense (TA)	WC Y Urinal Y *	Touch sensors are solid state with no moving parts. React sensors have a light press action sensor.

* Products are available, but usually for overseas markets. Please contact info@ecologicuk.com for more info.

ELECTRONIC FLUSHING SYSTEMS FOR DEDICATED OR COMMON DOWN SERVICE TANK INSTALLATION

eco-logic uk

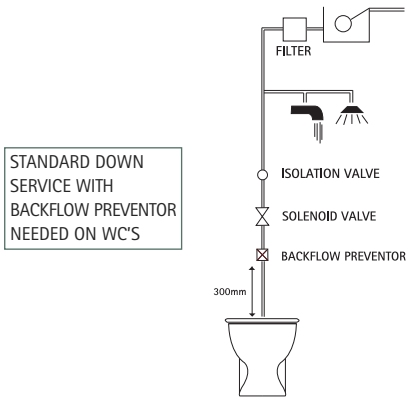
Installation Notes

Gravity tanked cold water can be supplied (Diagram A) direct from mains, or (Diagram B) from rainwater recovery system or local bore holes. Water from recovery systems need filtration to prevent clogging of WC valves and accessible strainers to each flush valve are recommended.

CWS pipe sizing from tanks needs to address heavy water demand, especially when a number of WCs and outlets may be used at the same time (i.e. schools, factories, stadia). ECO-Logic controls can introduce 'flush delays' to allow low pressure recovery or prevent misuse. Alternatively, ECO Pipetanks offer a local stored water option.

In compliance with water regulations, the WC installation will require backflow prevention fitting (ECO Pipe Interrupter DC 256A-025 WC) if the tank supplies other CWS outlets. These should be installed on the supply to each WC as Diagram A. To address different pressure issues ECO-Logic can supply various solenoid valves.

DIAGRAM A



ECO Solenoid Valves

ECO-Logic supply various solenoid valves for different pressures

WC Flushing

ECO 35P (0.05 to 1 bar) c/w isolation/flow adjusters.
ECO 28P (0.5 to 6 bar) c/w isolation/flow adjusters.

ECO D8 – 35mm (0.05 to 3 bar) Low Pressure
ECO D4 – 28mm (0.05 to 3 bar) Low Pressure
ECO D4 – 28mm (0.35 to 6 bar) High Pressure

Urinal Flushing

ECO 02 – 15mm (0 – 12 bar) High Pressure	Cistern Fill
ECO 04 – 15mm (0 - 5 bar) Low Pressure	Cistern Fill
ECO 15 (0 – 6 bar)	Urinal Bowls

Related Product Sheets

One Touch Sensor	ECO EW21TS or EW24TA	W19
Non Touch Sensor	ECO EW23CT Trans Sense	W18
	ECO EW22IR Infra Sense	W20
Flushing Systems	Mains/Pressurised System	W10
	Tanked Supplies	W11
	ECO Pipetanks	W13
ECO Transformers	230v/6vDC and 50HZ	TR15
Secure Sanitaryware	Heavy Duty Polymer	POL16
	Stainless Steel	ELC17
Other Fittings	1"/1¼" Lever Action Isolation Valve	
	Backflow Prevention ECO256A Type DC	

ECO-Logic provide solutions for:-

Handwashing • Bathfills • Showering • Flushing • Kitchens

Multi-Channel & Modular Controls for Ensuite Bathrooms & Washrooms

Secure sanitaryware • Lockout Systems • Shutdown Controls • BMS Links

Download at www.ecologicuk.com

Warranties

ECO-Logic Controllers and Sensor Electronics	2 years
ECO-Logic Solenoid Valves (if Strainer Protected)	2 years
Brassware and other fittings	1 year
ECO-Logic Pipetanks	1 year

All ECO electronic products are designed, tested and manufactured in the UK to CE standards

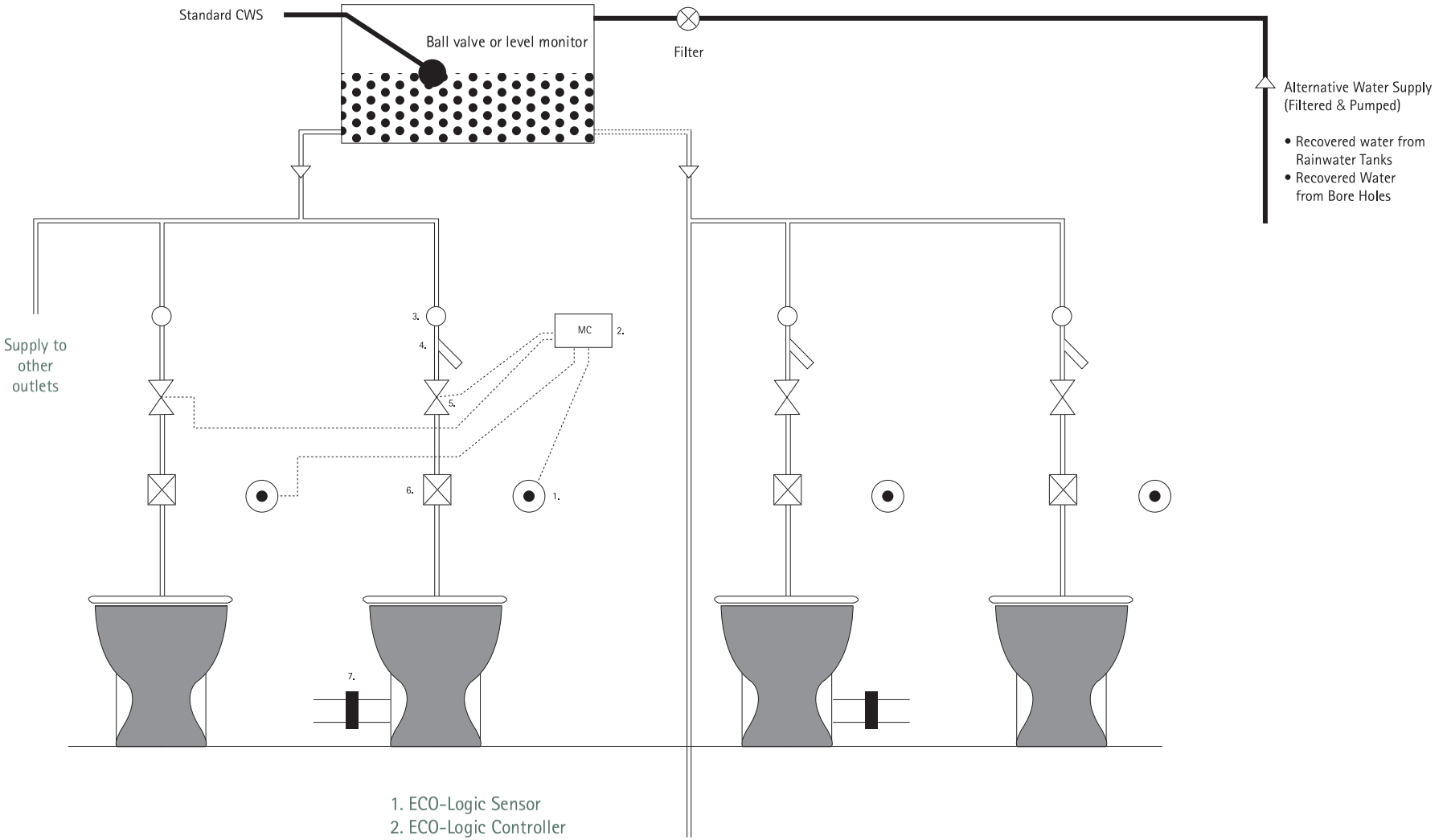
Maintenance

- The only moving component in an ECO Pipetank is the pre-fitted Float Valve. We recommend that this is cleaned/checked every 12 months, or when overflow discharge is observed. We recommend that outlet pipe seals are inspected every 12 months.
- Replacement parts, batteries and service kits are available direct from ECO-Logic UK.
- Allow for access to Sensors, Solenoid Valves & ECO Controllers
- Maintenance requirements are very low. All product warranties are dependent on fittings being installed in accordance with ECO-Logic instructions.
- Battery life usually between 3–5 years (not Infra Red). Battery in ECOTrans transformers should last upto 10 years, depending on usage.
- All ECO-Logic Controllers have a non-volatile memory which retain setup programmes if power is lost/switched off for maintenance.
- Pipetanks should be installed with inlet service valves to allow inspection and cleaning.
- Spares advice on individual installations are provided in maintenance guides.

eco-logic uk
Elite House, 70 Warwick Street,
Birmingham B12 0NL
T. +44 (0)121 766 3016 F. +44 (0)121 766 3064
E. info@ecologicuk.com W. www.ecologicuk.com

Electronic Flushing Systems for Direct Mains Fed or Pressurised Water.

DIAGRAM B



1. ECO-Logic Sensor
2. ECO-Logic Controller
3. Isolation Valve
4. Strainer (Y type) option
5. Solenoid Valve
6. Pipe Interupter fitting*
7. ECO-Logic Blockage Alert (optional)

* Not needed if tank is dedicated to WC flushing alone.