AC02 - 047
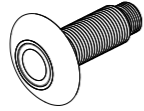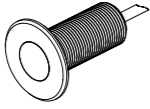Tactile switch with 50mm stainless
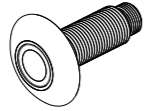steel bezel and Red insert (Hot)
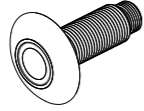
AC02 - 046
Tactile switch with 50mm
stainless steel bezel and Blue
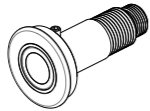insert (Cold)

SH00 - 001
Shower Sensor

AC02 - 040
Anti vandal WC wave on sensor
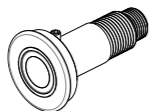with 50mm stainless steel bezel

The following sensors are specifically designed for use with the
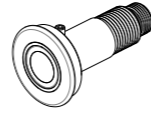High Security basin and backplate.

VR00 - 002
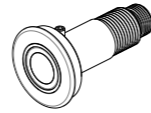Wave on sensor for backplates
with Red insert (Hot)

VR00 - 001
Wave on sensor for backplates
with Blue insert (Cold)

VR00 - 006
Push sensor for backplates
with Red insert (Hot)

VR00 - 005
Push sensor for backplates
with Blue insert (Cold)

Sanitaryware alternatives are detailed in our catalogue.

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Dart Valley Systems
a **FRANKE** company

DVS
Dart Valley Systems
a **FRANKE** company

Washroom Control System
Installation & Operating Instructions

Washroom
Control System

WARNING - HIGH VOLTAGE!
ISOLATE MAINS SUPPLY BEFORE REMOVING THIS COVER!

MODE SELECT MENU

POWER

ENTER/STORE ADVANCE

Rating Information
MODEL   VR07-002
IP   54
AMPS   0.11A
FREQUENCY   50Hz
VOLTAGE   230V a.c.

CE

www.dartvalley.co.uk
t: 01803 529021

FRANKE

QM S✓		QM S✓		
ISO 9001 REGISTERED FIRM		**ISO 14001** REGISTERED FIRM		CE
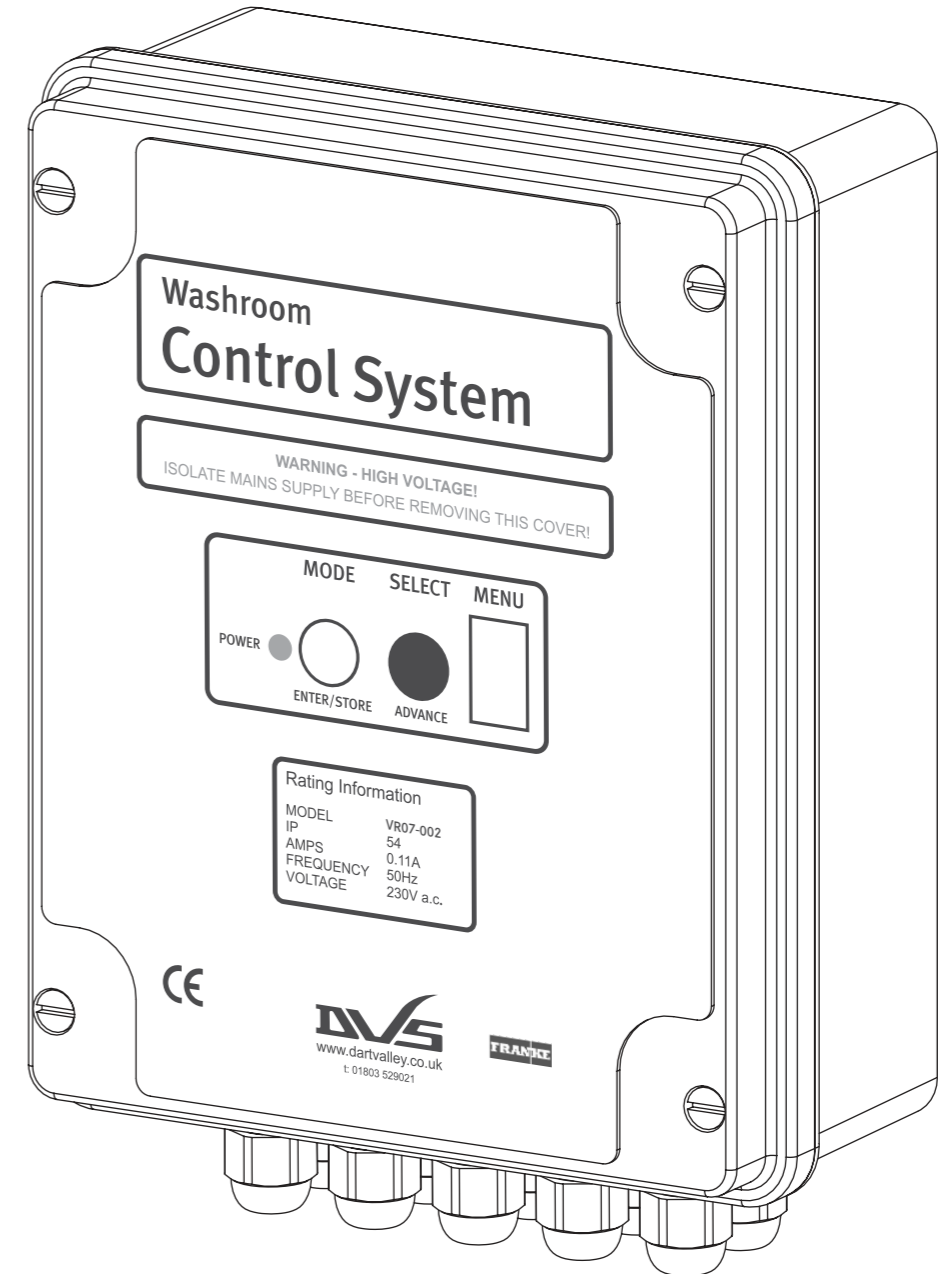
Step 1 : Safety First

These instructions relate to the use of the Washroom Control System only, any external or 'add-on' parts will be supplied with separate instructions.

It is recommended that the electrical part of the installation be carried out by a qualified electrician in accordance with the latest electrical regulations. It is also recommended that any plumbing is carried out by a qualified plumber.

This is a sophisticated electronic device which must be installed correctly to perform correctly.

If the appliance is used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, they must be given adequate supervision or instruction concerning use of the appliance by a person responsible for their safety.
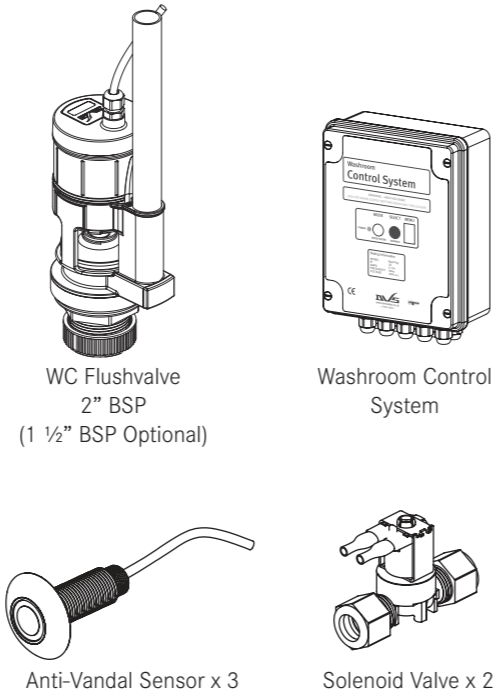
Children should be supervised to ensure that they do not play with the appliance.

IMPORTANT: Please read these instructions carefully and follow each stage in order!

Step 2 : Parts

Typical contents:

WC Flushvalve
2" BSP
(1 ½" BSP Optional)

Washroom Control System

Anti-Vandal Sensor x 3

Solenoid Valve x 2

*Not to scale

Instruction Manual **x** 1

Step 3 : Siting

The control unit should be located in a dry location and not exposed to dirt, dust or damp. The unit should be accessible when required, but not within easy general reach of unauthorised persons.

It will be necessary to make adjustments and service the control unit after installation, and in the future. Secure access areas and duct spaces are recommended.

The control unit is not designed for direct surface mounting into washroom areas. Never open the cover with the supply live.

The routes that cables will take when connecting external equipment to the control unit should also be planned at this stage.

1. High Security Basin
2. Solenoid Valve
3. TMV Thermostatic Mixing Valve
4. Control Box
5. WC Flushing Sensor
6. WC Flushvalve and Concealed Cistern
7. Side in-fill (optional)
8. High Security WC Pan
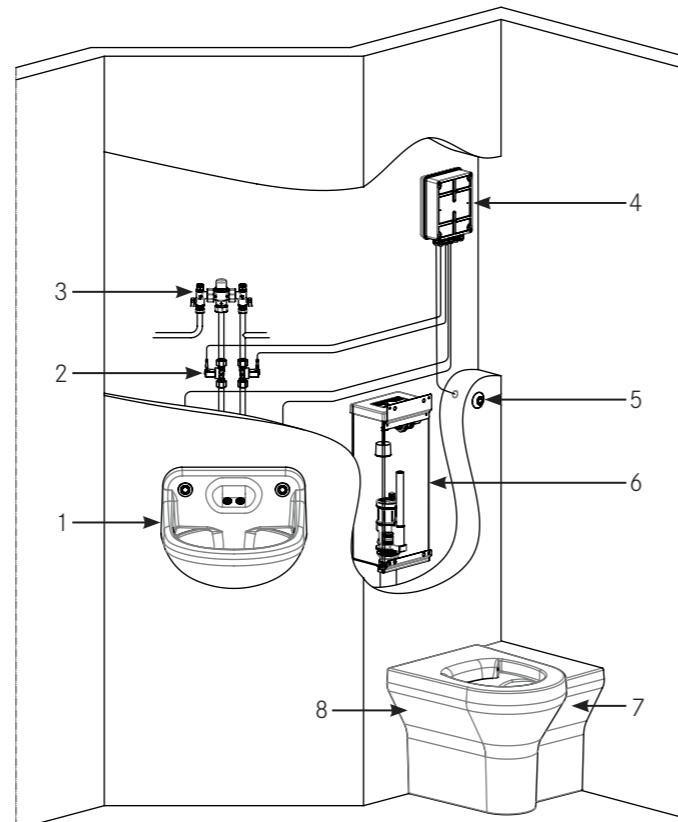
Step 12 : Chlorination

A Chlorination cycle can be initiated from the front panel by pressing and holding the 'SELECT' button for approximately 2 seconds during normal use.

All current operations will be stopped. The shower, hot and cold valves will open for 2 minutes and in the final 5 seconds the flushvalve will open.

When all valves close normal operation will resume.

Repeat if further chlorination is required.

Step 13 : End of Life Disposal

The use of this crossed out wheeled bin logo indicates that this product needs to be disposed of separately to any other household waste.

Within each of the European Union member countries, provisions have been made for the collection and recycling of unwanted electrical and electronic equipment. Outside of the EU it will be necessary to dispose of this product at your local community waste collection or recycling centre.

In order to help preserve our environment we ask that you dispose of this product correctly.
Please contact your local city council for collection centre details.

Step 14 : Parts List

The following parts are compatible with the VR07 - 002 Washroom Control System. The actual parts supplied will vary according to the detail of the kit you have ordered.
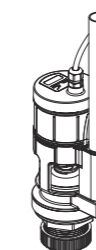
VR07 - 002
Washroom Control System

AC04 - 016
Key switch for Washroom Control System

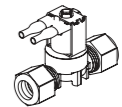WC01 - 023
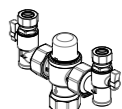Slimline flushvalve with in-built overflow (2 inch base)

WC01 - 022
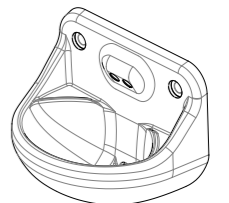Slimline flushvalve with in-built overflow (1 ½ inch base)

AC17 - 009
12 volt normally closed valve
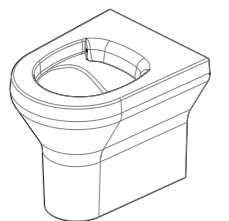
AC17 - 047
4 in 1 thermostatic mixing valve

VR01 - 030
High security basin with integrated backplate

VR01 - 010
High security WC pan

Other options:

VR01 - 017
Wall hung WC pan

VR01 - 011
Disabled height WC pan

Step 9 : Automatic Purge

The automatic purge is enabled through the Front Panel Menu. The default setting is disabled. See 'Customising Settings' Section 7 and Menu Settings guide Section 8 for instructions on how to enable this feature.

When the purge feature is enabled each channel (Flushvalve, Hot and Cold Water and Shower) is independently monitored.

If a channel has been inactive for 24 hours a single operation of that channel will be carried out.

When a purge operation is carried out the time used for that operation will be the time set in the menu.

Step 10 : Lock Out

The Lock Out feature is enabled through the Front Panel Menu. The default setting is disabled. See Customising Settings Section 7 and Menu Settings guide Section 8 for instructions on how to enable this feature.

When enabled the system monitors each channel (Flushvalve, Hot and Cold Water and Shower) independently in blocks of 15 minutes.

If 4 operations of a single channel are carried out within that 15 minute block the system will lock out that particular channel for the remainder of that block.

Step 11 : Optional Key Switch - Cancel and Reset

The optional key switch is used to cancel, disable and reset all options and needs to be ordered separately.

When key switch is ON for approximately 2 seconds all current operation is cancelled, all lockouts are cleared and purging is reset.

Normal operation is resumed by turning the key switch off.

The cancel feature is only available during 'normal' use, not during any other program routine.

Wiring Guide
Connect the blue and brown lead from the key switch to the correct position on the connector plug as illustrated in the diagram.

Control Box Inside

Blue cable to the left connector plug
Brown cable to the middle connector plug
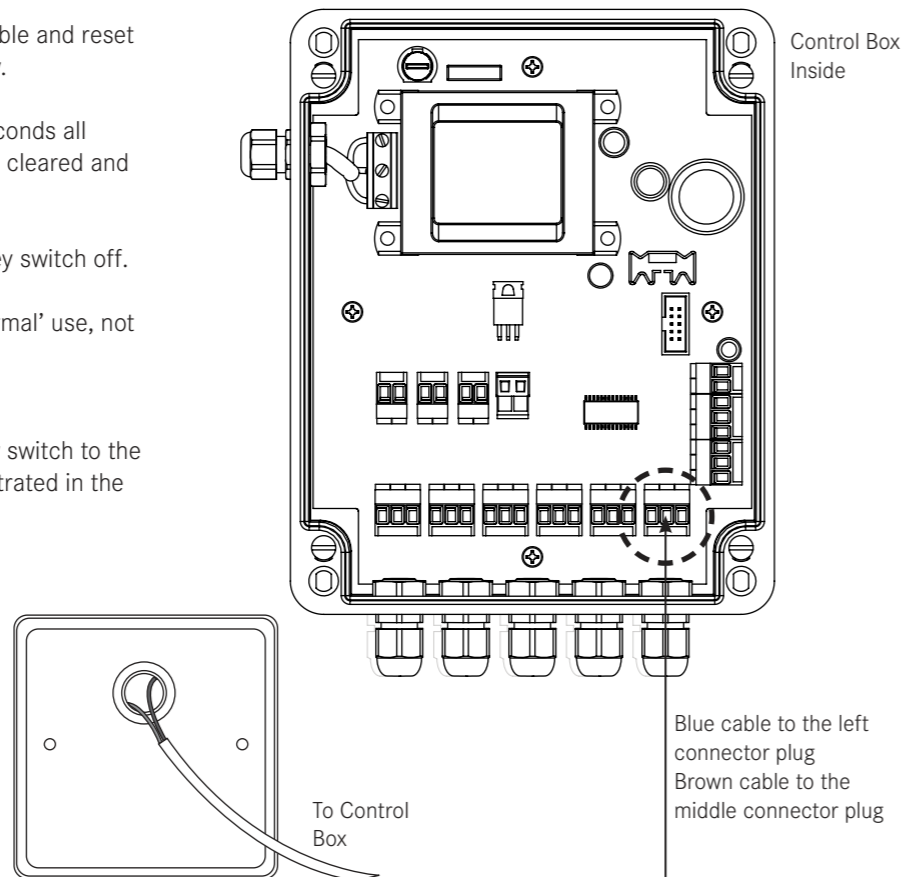
To Control Box

## Step 4 : Control Box - Board Layout

1. Shower Valve Output
2. Cold Water Valve Output
3. Hot Water Valve Output
4. Flushvalve Output
5. Shower Valve Sensor Input
6. Cold Water Valve Sensor Input
7. Hot Water Valve Sensor Input
8. Flushvalve Full Flush Sensor Input
9. Flushvalve Half Flush Sensor Input
10. Lockout Set / Reset Sensor Input
11. Fuse T160mA L250v
12. Mains Supply
13. Expansion Terminals
14. Lid Display Panel Connection
15. Secondary Fuse TR5 F500mA

Recommended - Sensor Cable Entry (front row conduits) and Valve Cable Entry (back row conduits).

Safety

- CAUTION! 220-240V A.C.
- NEVER open the cover with the supply live.
- DO NOT extend cables.
- DO NOT leave badly fitted cables.
- DO NOT leave slack cables in the enclosure.
- DO NOT interfere with the mains flex.
- DO check all cables and connections.
- DO ask for advice if/when necessary.

Ensure the LED is extinguished before entering the enclosure.
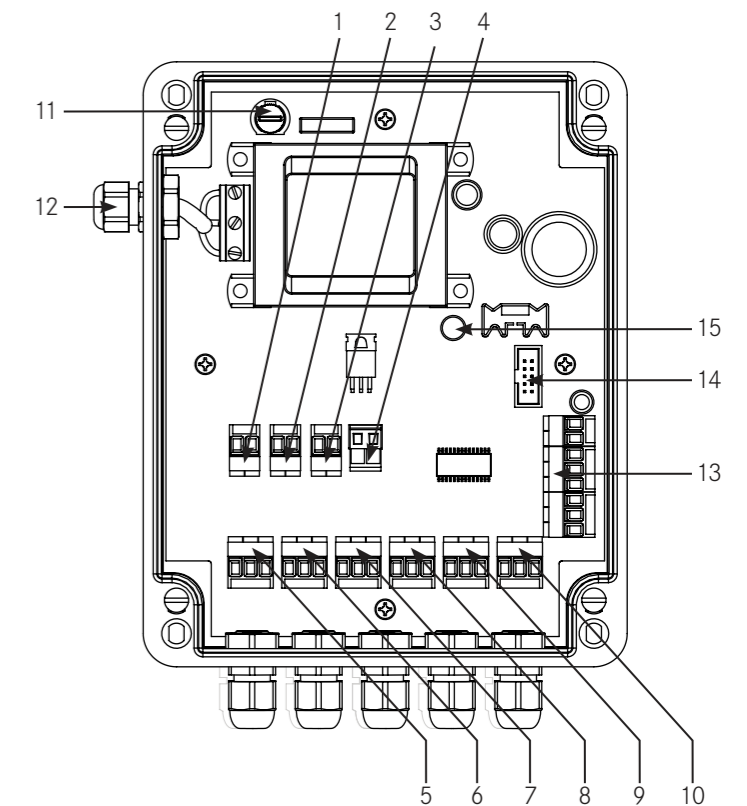
Step 5 : Fixing and Wiring

The unit should be securely fixed in a suitable location in a vertical orientation, so that the front label is read correctly.

Remove lid and detach connection plug to expose four fixing holes around the edge of the enclosure. These holes allow the fastening of the unit without removing the printed circuit board. Mark the wall through these fixing holes and fix the control unit with suitable fixings.

The mains supply should NOT be initiated until all external equipment has been installed and wired.

Connect the mains supply lead to a 230V a.c. supply via a fused spur, the fuse rating should be 3 Amps.

Always read instructions supplied with external components and ensure that only the supplied equipment is connected to the control box.

Valve cables should enter the enclosure from the top row of cable glands. The sensor cables should enter the enclosure through the bottom row of cable glands. Keep all connections tidy and do not allow cable to finish or hang in the transformer area.

It is recommended that each cable is fed through the relative cable gland into the enclosure; the cable can then be pulled out towards the fitter to allow the plug to be fitted. The plug is disconnected from the mating socket, when wiring external equipment to the plug, double check positions with the plug orientation as the plug only fits one way!

When each plug has been wired the cable can be pulled back through the cable gland, and the plug re-connected to the corresponding socket. Allow space in the centre of the enclosure for the lid display connection. Cables should not be left to torte or slack.

Safety

- CAUTION! 220-240V A.C.
- NEVER open the cover with the supply live.
- DO NOT extend cables.
- DO NOT leave badly fitted cables.
- DO NOT leave slack cables in the enclosure.
- DO NOT interfere with the mains flex.
- DO check all cables and connections.
- DO ask for advice if/when necessary.

When all connections are made and checked, replace the lid and secure.

Step 6 : Power On

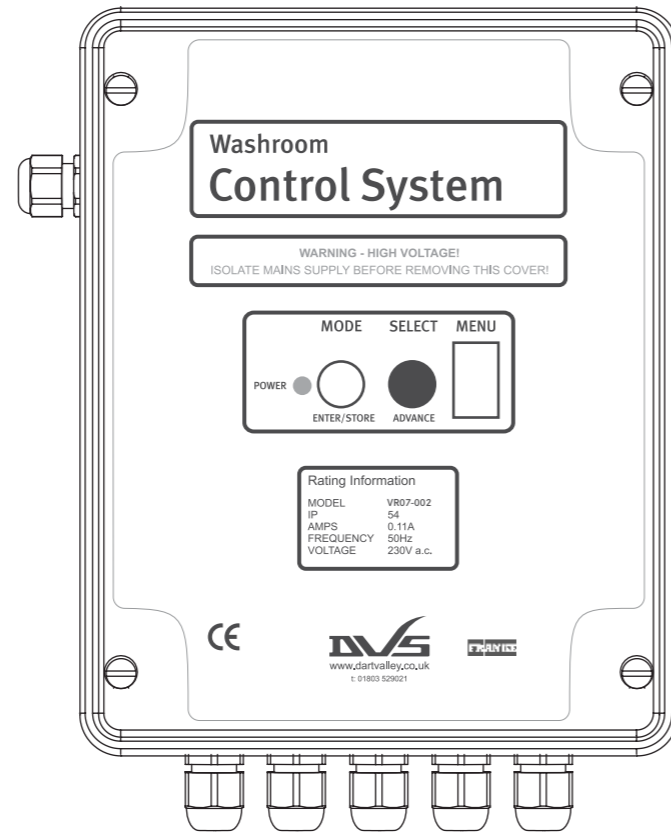After all external equipment is installed, the mains supply can be connected.

When connecting to mains always make sure that the lid is tightly closed and secure.

NEVER open the cover with the supply live.

When the control unit is first powered on, an 8 symbol appears in the LED display followed by a 1 and then a further 8 The function LED will then flash once and the 8 symbol turn off. The function LED then turns on as the flushvalve charges. Once the charging is complete the function light flashes during normal operation unless the flushvalve is charging during which the function light remains on.

To save on commissioning time, the control unit will load default settings to enable the system to be used immediately. These settings are;

Flushvalve open time:	4 seconds
Cold water on time:	15 seconds
Hot water on time:	15 seconds
Shower on time:	1 minute
Purge and lockout:	Disabled

Washroom
Control System

WARNING - HIGH VOLTAGE!
ISOLATE MAINS SUPPLY BEFORE REMOVING THIS COVER!

MODE   SELECT   MENU

POWER
ENTER/STORE   ADVANCE

Rating Information
MODEL   VR07-002
IP   54
AMPS   0.11A
FREQUENCY   50Hz
VOLTAGE   230V a.c.

CE

DVS
www.dartvalley.co.uk
t 01803 529021

Step 7 : Customising Settings

To customise the individual settings, the user can enter the setting menu. Press and hold the MODE button for up to 10 seconds until an F symbol appears.

The settings can only be moved in the set sequence, which is shown on stage 8 of these instructions.

Pressing the MODE button sequences through the various MODE settings. Options for each MODE setting are selected by pressing the SELECT button. Once the required option is selected the next MODE setting is accessed by pressing the MODE setting twice.

If no buttons are pressed within 20 seconds all alterations are lost and settings remain unchanged.

If changes are made by mistake, the user should wait for 20 seconds. This will abandon all changes and the menu will exit.

If you intend to save any changes whilst in the menu, be sure to go to the - symbol at the end of the sequence. Press and hold the SELECT button to save the changes.

It is recommended that the user enters the menu and moves through the various settings without making any adjustments to familiarise themselves with the system.

1. LED
2. MODE (Cycles through Modes)
3. SELECT (Cycles through Mode options)
4. LED Display

MODE   SELECT   MENU

POWER

ENTER/STORE   ADVANCE

1   2   3   4
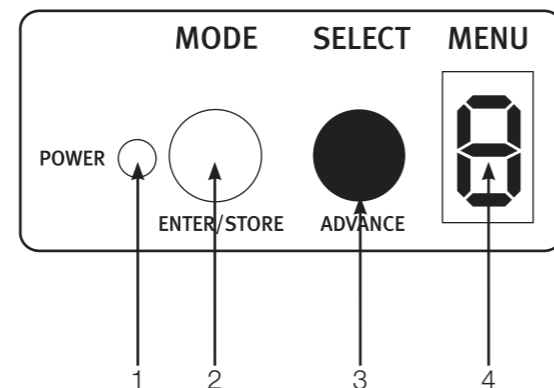
Step 8 : Final Stage - Menu Settings Guide

Press SELECT to view and change settings

F FLUSHVALVE SETTINGS
Setting: 1- 6 seconds

DEFAULT: 4 seconds   4

h FLUSHVALVE FINE TUNING SETTINGS
Setting: 1 – 9 tenths second

DEFAULT: 0 tenths   0

Typically used with
WC01 - 023 or
WC01 - 022
WC Flushvalve

C COLD WATER ON/OPEN TIME
Setting: 1-9 seconds + 10 second offset

DEFAULT: 5 (equalling 15 seconds)   5

H HOT WATER ON/OPEN TIME
Setting: 1-9 seconds + 10 second offset

DEFAULT: 5 (equalling 15 seconds)   5

Typically used with
VR01 - 030 high
security wash basin
with in-built
hot and cold sensors
and spouts.

S SHOWER ON/OPEN TIME
Setting: 1-3 minutes

DEFAULT: 1 minute   1

Typically used with
SH07 - 040
anti-ligature
showerhead and
sensor.

P PURGE AUTOMATIC
Setting: 0 - Disable, 1 - Enable

DEFAULT: 0 (Disabled)   0

L OPERATIONS LOCKOUT
Setting: 0 - Disable, 1 - Enable

DEFAULT: 0 (Disabled)   0

U UTILITY OPTIONS
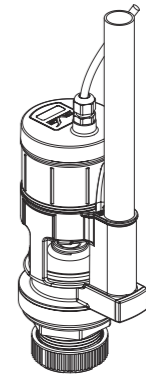Setting: 0 = Disable 1 = Enable

DEFAULT:
0 (Disabled)   0

d RESTORE DEFAULTS
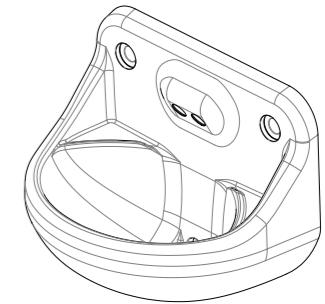Press and hold SELECT button until the green LED comes on to restore default settings.

- SAVE CHANGES
Press and hold SELECT button until the green LED comes on to save changes.

Please Note: The operations lockout is over a 15 minute period