

## Technical support / Firmware updates

### Support

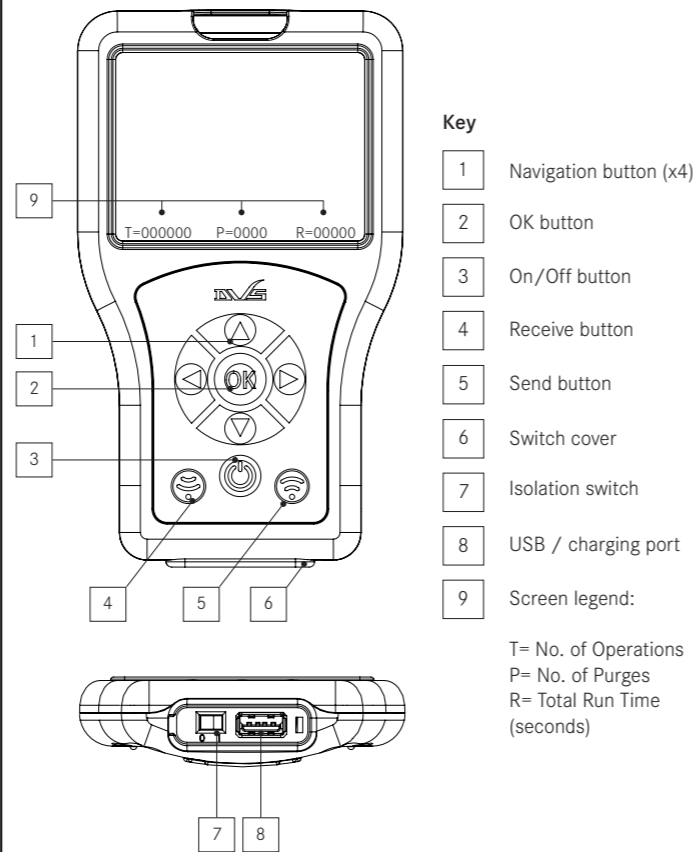
For technical support please visit our technical pages on our website at [www.dartvalley.co.uk](http://www.dartvalley.co.uk)  
Or contact us by e-mail at [techsupport@dartvalley.co.uk](mailto:techsupport@dartvalley.co.uk)  
Alternatively, you can telephone us direct on 01803 529021 and our customer service team will be pleased to help you.

### Firmware Updates - Contact Dart Valley for latest version.

To update the firmware on your DVS Handheld Programmer, follow the steps below;

1. Plug the programmer into your PC via USB and press OK to "enter mass storage mode"
2. Open programmer files on your PC and drag new software file into the first files folder.
3. **EJECT**, then unplug the programmer.
4. Turn the programmer on.
5. Scroll to system menu, and scroll down to "Firmware Update" then press OK.
6. Select new firmware version and press OK, then wait for screen to load.
7. Follow the on screen instructions to complete.

## Programmer layout




## Warranty and End of Life Disposal

### Warranty


The DVS Handheld Programmer is guaranteed for 5 years from purchase against defective material and assembly.

### Disposal of electrical and electronic equipment

 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 council for collection centre details.

### Disposal of waste batteries

 The use of this crossed out wheeled bin logo indicates that the battery 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 waste batteries. 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 battery correctly. Please contact your local council for collection centre details.

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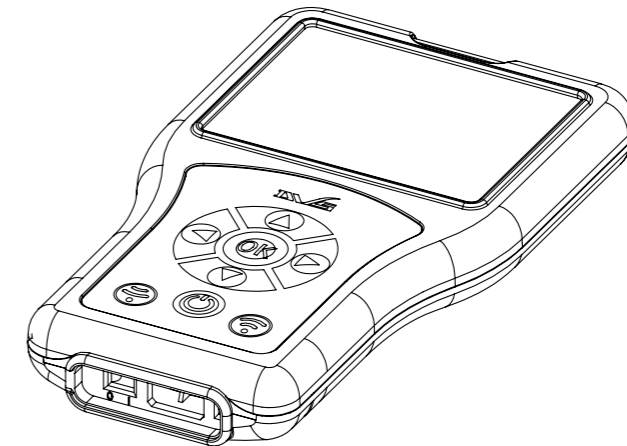


# DVS Handheld Programmer

## Operating Instructions



AC01-001



### Step 1 : Basic operation

To turn on the programmer, lift the switch cover on the base, this will expose the switch and USB connection, move the switch in to the ON position. Be sure to refit the switch cover afterwards. Once powered ON, the Date and time must be set to ensure readings are chronologically correct when downloading usage information.

**Please Note;** It is recommended that the Power Switch is turned OFF when NOT in use to avoid premature battery drain.

Use the left & right navigation arrows to scroll through menus. Use the down & up arrows to highlight setting, then left & right arrows to adjust. (See page 4 for Programmer layout)

Once you have selected the menu you wish to change, use the up and down buttons to enter the part of the program you wish to change, when you have done this, use the left and right buttons to change the settings.

To adjust sensor settings, point the IR port at 90° to the DVS sensor at a distance of no more than 30cm, and press the receive button (see Programmer layout). When the sensor is read a confirmation tick will appear on the screen. The correct menu for the sensor will then be displayed and settings can be adjusted accordingly.

To send new settings to the sensor, point the IR port at the sensor as above, then press and hold the send button until the green tick appears. Sensor is now set with the new settings.

**Note;** When Reading/Sending to Aquarius taps you may need to adjust the angle of the IR Port slightly.

**IMPORTANT:** You must point the programmer away from the sensor and leave for a minimum of 30 seconds before attempting to use, this allows the sensor to recalibrate. Attempting to use before this time may cause the sensor to lock up or false trigger.

### Step 2 : Data processing

To upload data from the programmer, ensure it is switched ON, then connect the programmer to your computer via USB.

When prompted press 'OK' on programmer keypad to enter mass storage mode.

Find USB drive in 'My Computer' area.

Navigate through the data folders to find Excel CSV files for relevant product readings.

### Step 3 : Charging

The Programmer requires a universal USB charging device. If being charged by computer connect the USB cable to the Programmer and then to the computer. The Programmer will then display a menu giving the option to 'download' or 'charge', follow prompts to 'press any button' to begin charging and display 'charging' on screen. Allow to charge for a minimum of 8 hours.

**IMPORTANT:** Charging for longer than 8 hours will not affect battery life or cause damage to the Programmer.

## Step 4 : Menu options

NOTE : The default settings above can be restored at any time if needed via the 'System Settings' menu on the Programmer.

	DEFAULT SETTINGS	OPTIONAL SETTINGS
<b>SETUP CLOCK</b> Day of the week Month Year Hour Minutes Seconds	(Date and time must be set correctly to provide accurate download information)	Mon, Tues, Wed, Thurs, Fri, Sat, Sun 1 - 12 Current year onwards 0 - 23 0 - 59 0 - 59
<b>V2 TAP MENU</b> Run On Time Range Anti-vandal time Automatic Purge Purge run time	2 Seconds 5 30 seconds OFF 1 Minute	2, 5, 10, 20, 30, 40 & 60 Seconds 1-10 30, 60, 75, 90 Seconds & 2 Minutes OFF, 3, 6, 12, 24, 36 & 48 Hours 30 Seconds, 1, 2, 4 & 8 Minutes
<b>TAP MENU</b> Run Time Range Wave On/Off Anti Vandal Time Automatic Purge Purge Run Time Lock Outs	2 Seconds 5 OFF 1 Minute OFF 1 Minute OFF	2, 5, 10, 20 & 30 Seconds 1 - 10 ON/OFF 30 Seconds, 1, 2, 4 & 8 Minutes OFF, 3, 6, 12, 24, 36 & 48 Hours 30 Seconds, 1, 2, 4 & 5 Minutes OFF, 4, 6, 8 & 10 Ops
<b>DUAL WASHROOM MENU</b> Channel Number Channel Function Run On Time Wave On-Off Lock Outs Anti Vandal Time Automatic Purge Purge Run Time	01 Basin *2 Seconds* OFF OFF *1 Minute* OFF *1Minute*	01-12 Basin, Bath, Shower, Direct Flush *According to relevant channel selection* ON/OFF ON/OFF *According to relevant channel selection* ON/OFF *According to relevant channel selection*
<b>TIMED FLUSH SET UP</b> Fill Start / Stop Day Of Week First Flush At Last Flush At No of Flushes Flushing Off Flushing On Test / Hygiene Flush	Press OK (and follow on screen instructions) Mon *07:00* 18:30 15(046min)	Mon, Tue, Wed, Thu, Fri, Sat, Sun, Mon-Fri *Set via 15min increments* *Set via 15min increments* 1-40
<b>URINAL MENU</b> Pre-Flush Wait Pre-Flush Time Main Flush Time Sensor Range Automatic Purge Purge Run Time	1 Second OFF 2.0 Seconds 5 OFF 4 Seconds	1 & 2 Seconds OFF, 1, 2 & 3 Seconds 2 - 10 Seconds in 0.5 second increments 1 - 10 OFF, 6, 12, 24, 36, 48 & 72 Hours 2, 4, 6, 8 & 10 Seconds
<b>SHOWER MENU</b> Run Time Sensor Range Wave On/Off operation Anti Vandal Time Automatic Purge Purge Run Time Lock Outs	1 Minute 2 OFF Run+10s OFF 1 Minute OFF	30 Seconds, 1, 2, 3, 4 & 5 Minutes 1 - 3 ON/OFF Run+10s OFF, 3, 6, 12, 24, 36 & 48 Hours 30 Seconds, 1, 2, 4 & 8 Minutes OFF, 4, 6, 8 & 10 Ops
<b>BATH MENU</b> Run Time Sensor Range Wave On/Off operation Anti Vandal Time Automatic Purge Purge Run Time Lock Outs	2 Minutes 2 OFF Run+10s OFF 1 minute OFF	1, 2, 3, 4, 8 & 10 Minutes 1 - 3 ON/OFF Run+10s OFF, 6, 12, 24, 36, 48 & 72 Hours 30 Seconds, 1, 2, 4 & 8 Minutes OFF, 2, 4, 6 & 8 Ops

## Step 4 : Menu options continued..

NOTE : The default settings above can be restored at any time if needed via the 'System Settings' menu on the Programmer.

	DEFAULT SETTINGS	OPTIONAL SETTINGS
<b>AUTO FLUSH VALVE MENU</b> Range User Detect Time Dual Detect Time Flush Time(s) Walk Away Time Automatic Purge Purge Run Time Lock Outs	5 5 Seconds 20 Seconds 4 Seconds 2 Seconds OFF 4 Seconds OFF	1-10 1-10 Seconds 10, 12, 14, 16, 18, 20, 22, 24, 26 & 28 Seconds 2, 2.5, 3, 3.5, 4, 3/4.5, 3/5, 3.5/5.5, 4/6 & 6.5 Secs 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5 & 5.5 Seconds OFF, 3, 6, 12, 24, 36, 48 & 72 Hours 2, 3, 3.5, 4, 4.5, 5, 5.5, 6 & 6.5 Seconds OFF, 2-10 Ops
<b>WAVE FLUSH VALVE MENU</b> Flush Type Flush Time(s) Range Automatic Purge Purge Run Time Lock Outs	Single 4 Seconds 2 OFF 4 Seconds OFF	Single or Dual 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6 & 6.5 Seconds 1-3 OFF, 3, 6, 12, 24, 36, 48 & 72 Hours 2, 3, 3.5, 4, 4.5, 5, 5.5, 6 & 6.5 Seconds OFF, 2-10 Ops
<b>CHLORINATE MENU</b> Chlorination Time Abort and Reset Washroom Channel	2 Minutes  1-12	1, 2, 3, 4, 5, 10, 20 & 30 Minutes
<b>CONTROLLER MENU</b> Start Hot Purge 1 Start Hot Purge 2 Start Hot Purge 3 Hot Purge Durn. Mix Purge Durn. Mix Purge Period Run On Time Controller ID	   OFF OFF OFF 2 Seconds Undefined	   OFF, 1, 2, 3, 5, 10, 15, 20 Minutes OFF, 1, 2, 3, 5, 10, 15, 20 Minutes OFF, 1, 2, 3, 6, 12, 24, 48 Hours OFF, 2, 5, 10, 20, 30, 40, 50, 60 Seconds
<b>CONTROLLER SETUP</b> Controller Reset Controller Default Controller Test Controller Calibrate 20C Controller Calibrate 45C Controller Calibrate 70C		
<b>SYSTEM MENU</b> Standby Mode Reset Stats Count Firmware Update Battery Voltage Firmware Version Programmer ID Device ID	OFF 0  *Check programmer status* *Check programmer status* *Check programmer status* Blank	ON