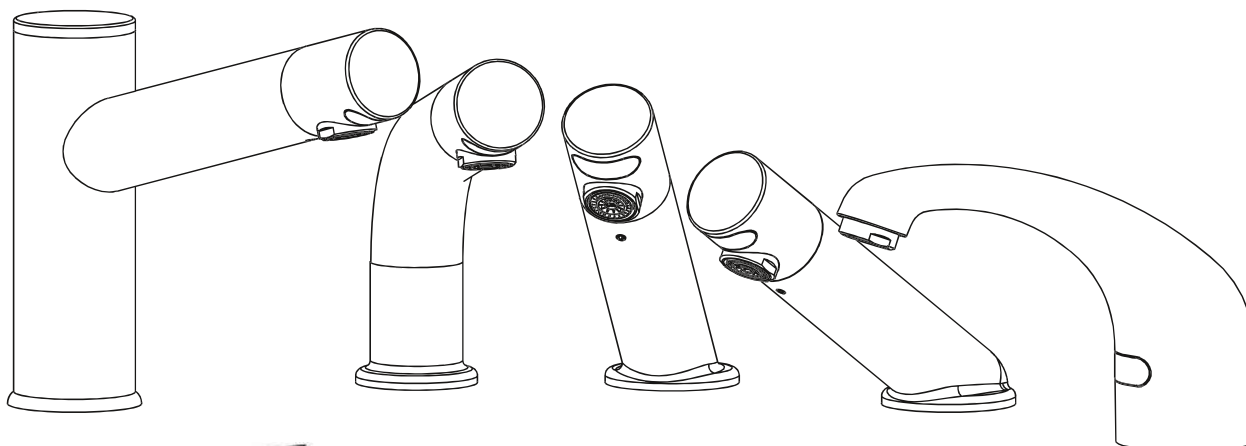


## No-Touch Automatic Taps

### Installation & Operating Instructions



### Step 1 : Safety First

These instructions relate to the use of the **No-Touch Automatic Tap System** only, any external or 'add-on' parts will be supplied with separate instructions.

Appropriate personal protective equipment must be worn when installing, calibrating and commissioning this product.

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 an electronic device which must be installed correctly to perform correctly.

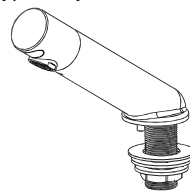
If the appliance is used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, they must be given adequate supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised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



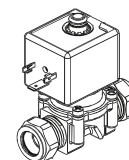
**IMPORTANT** : Please read these instructions carefully and follow each stage in order!

### Step 2 : Parts

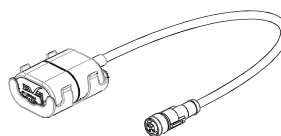
A typical system will comprise of the parts\* below:



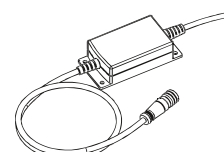
Automatic Tap  
(may vary in appearance)



Solenoid Valve  
AC17-006 or AC17-004

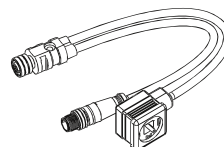


Battery Box  
AT00-024



DVS Power Supply  
AT00-029

or



Y Splitter Lead  
AT00-202



Optional Y Distributor  
AT00-212  
(See Fig.3 for connection leads for 2 station and 3 station kits)

Instruction Manual x1

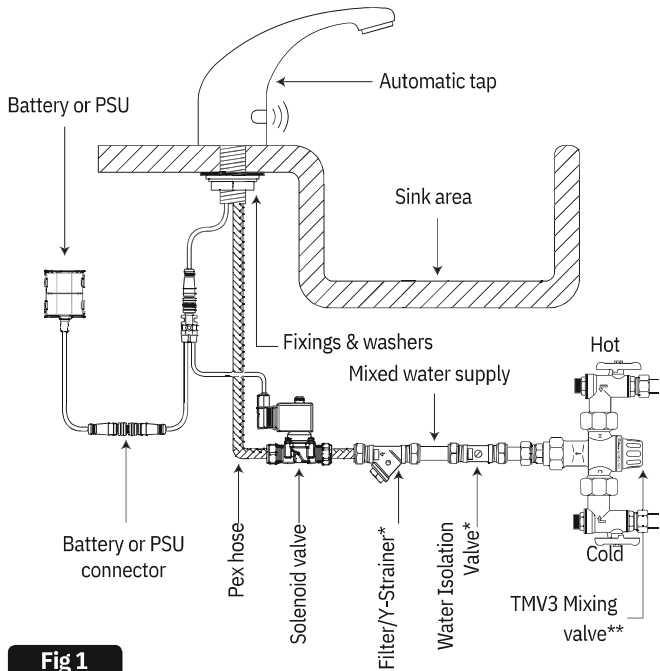
\*Not to scale **All parts sold separately**

# Step 3 : Single and Multiple Tap Installation

**Caution! For mains powered setups you must use the DVS AT00-029 power supply unit. Do not attempt to use any other device or power supply system.**

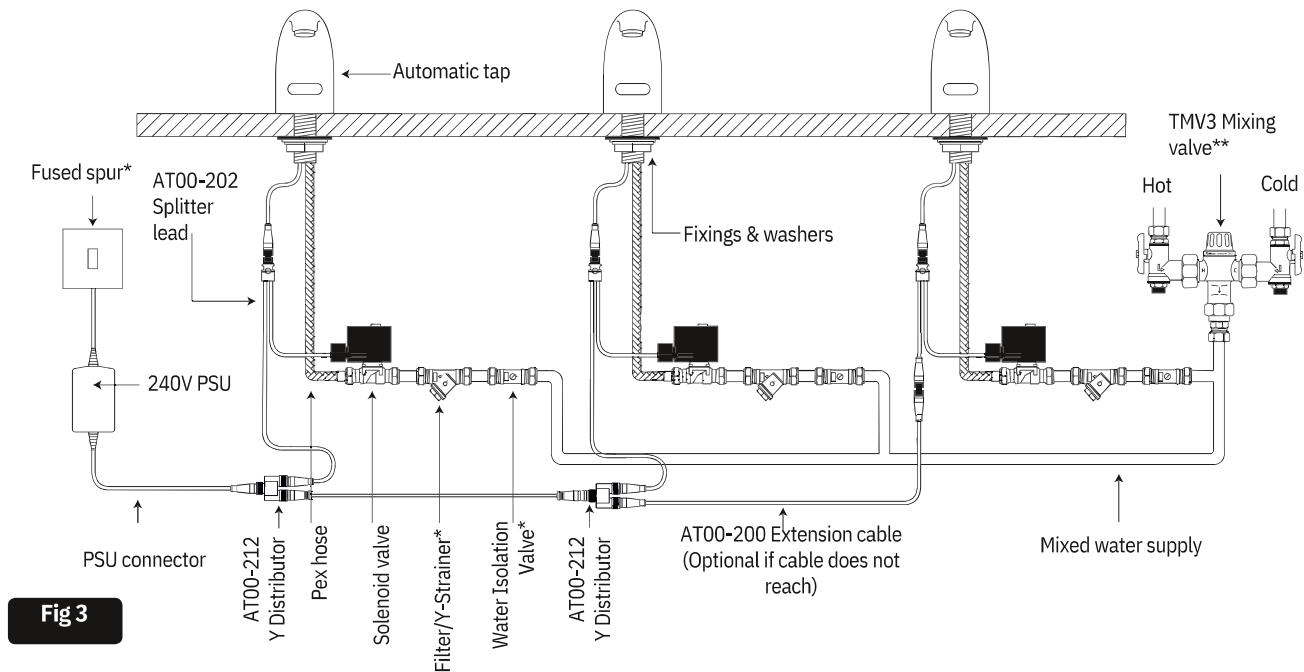
Ensure the battery box or power supply is left disconnected at this stage.

## Standard Setup



**Fig 1**

## Multiple Setup



**Fig 3**

\*Not supplied. Can be ordered separately from DVS.

\*\*Not supplied. Required for warm water output and to comply with current water byelaws. Can be ordered separately from DVS.

Pressure Notes: All automatic taps come standard with a 12.7mm solenoid valve which requires 1 BAR to operate. If the water pressure is less than 1 BAR, low pressure valves should be fitted - To contact DVS technical support please refer to page 4.

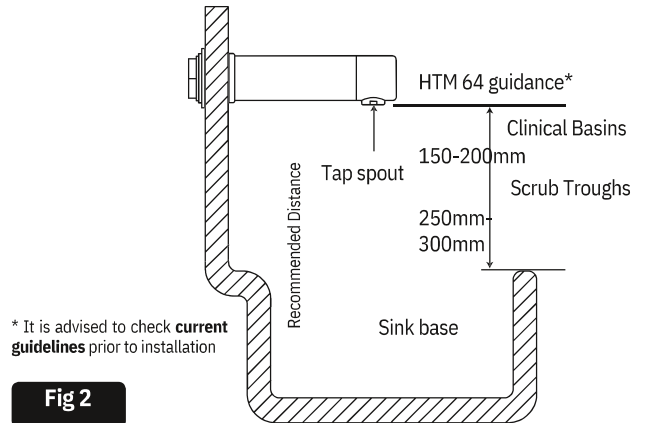
A maximum of three taps should be run from a single PSU.

Note for Multiple Installation kits:

2 Station Kits contain one AT00-036.

3 Station Kits contain two AT00-036's and one AT00-033 extension.

## Important installation details for wall mount taps to avoid reflection problems.



\* It is advised to check **current guidelines** prior to installation

**Fig 2**

The minimum recommended distance from the tap spout to the sink base is normally 250mm for basins or 300mm for troughs. This will be greater if there is excessive reflection which can be caused by bright surfaces such as chromed wastes and/or bright lights mounted above the basins.

## Step 4 : Preparation

You must read these instructions thoroughly before attempting to install this tap. First check the solenoid valve supplied is suitable for the sites water pressure and conditions.

The standard valve requires 1 - 10 BAR water pressure and 5 - 55°C water temperature. If your water pressure is low (1.0 BAR or less) low pressure valves should be obtained from your supplier. See Section 8: General Cleaning.

### Pre-Fitting

First turn off the water supply. If possible select an upright position for the solenoid valve. Check correct water flow direction on installation of the solenoid valve. The fitting of an isolator and Y Strainer (AC03-019) prior to the solenoid valve is highly recommended (not supplied).

All infra-red taps can be affected by highly reflective surfaces. Avoid mounting too close to reflective surfaces or direct sunlight.

**IMPORTANT :** Before installing the tap itself, please be aware that wherever possible you must use the anti-rotation pins supplied for the tap base. Non-use of the anti-rotation pins in suitable areas can result in void of warranty.

## Step 5 : Installation

**IMPORTANT :** Plumbing compound should not be used to seal the pipework as oils leaching from the compound will prevent the solenoid valve from functioning correctly.

Cut the pipework with a plumbers pipe cutter, remove sharp edges and burrs. The diaphragm in the solenoid valve will be damaged by oil, grease and debris. The valve should be used on oil free pipework only.

To prevent long term contamination the pipework must be thoroughly purged prior to fitting the solenoid valve.

Fit the isolator, Y strainer and solenoid valve and ensure pipes are fully engaged in joints. Take care that the valve is fitted with the correct direction of flow as indicated on the valve. Be careful not to over tighten any joints.

For mixed water output, a TMV mixing valve is needed to safely control the hot water temperature. See Fig.1 'Standard Setup' for typical TMV installation.

Fit the automatic tap to the required position. Secure the tap with the nut and washers provided and connect pipework from the solenoid valve and turn on the water supply, checking for leaks.

## Step 6 : Plug and Socket Connections

**Caution! Mount the battery box or power supply with care, in a dry location, away from extremes in temperature and not exposed to dirt, dust or damp.**

**Ensure the battery box or power supply is left disconnected at this stage.**

### Electrical cable connection for Power Supply Unit (PSU)

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

A 1m length of 0.5mm 2 core flex is supplied with the PSU - this must not be extended.

Each PSU should be connected separately via a **3 amp** fused spur.

The PSU must be permanently connected to the supply. A suitable means of disconnection should be provided, in accordance with local electrical regulations. If the mains lead becomes damaged, the product should not be used. Contact DVS for replacement parts.

**NOTE :** Incorrect fuses may void warranty.

### Final Stage

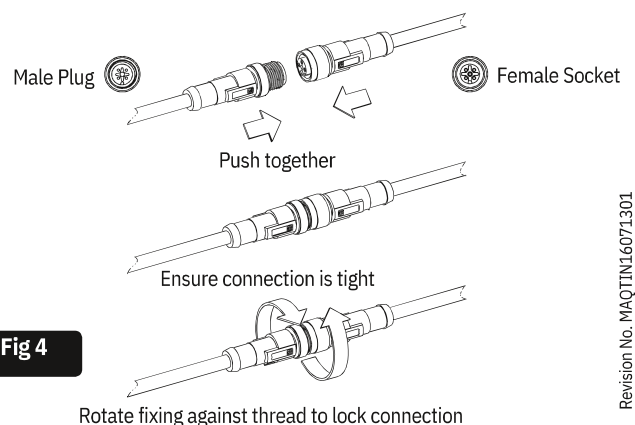
Ensure all cable sockets and plug connections are clean and dry, then connect the tap to the split connector and solenoid valve firmly, ensuring all connections are secured tightly.

Connect the battery pack or power supply unit to the remaining split connector socket.

Once the tap is powered up, allow 30 seconds for the sensor to calibrate. Attempting to operate the tap within this period may cause the sensor to false trigger. If false triggering occurs, disconnect power for 1 minute, then reconnect and allow the sensor to calibrate.

### Plug and Socket Connections

Optional extension cables (1 and 2 metre) are all available from the manufacturer to extend the low voltage output of the PSU to the vicinity of the taps. See Section 8: General Cleaning.



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## Step 7 : Fault Finding

### 1. TAP WILL NOT OPERATE AT ALL

- Check all connections (see Fig 4 on page 3).
- Check fuse (Mains/PSU model only) max 30amp fuse
- Voltage too low. Check tap input voltage (PSU output voltage - 6v DC). - Voltage too low. Replace battery DVS code AT00 - 026 (CRP2 or DL223A) Lithium Cell only.
- Check / Clean all connectors (shown in Fig 3).
- Check for cable damage.
- Check water is turned on.
- Check the solenoid valve is fitted correctly.
- Check valve operation.
- Check for dirt or debris in the solenoid valve.
- Water pressure is too high.
- For mains/PSU and battery models, disconnect for 1 minute then reconnect and allow sensor to recalibrate.

### 2. TAP OPERATES IN REVERSE

(Water runs when hand is moved away from sensing area and stops when returned to sensing area)

- Reversed valve polarity (contact Dart Valley Systems)

### 3. TAP OPERATES INTERMITTENTLY

- Clean sensor lens (with nonabrasive materials only).
- Tap may be installed too close to an R.F. interference source).
- Tap may be installed too close to very bright lighting or highly reflective surfaces. For reflective surfaces use the DVS hand held programmer to reduce sensor range.
- Water pressure too low for valve to operate reliably (minimum 1.0 BAR required) for standard solenoid valves.
- Voltage too low. Check tap input voltage (PSU output voltage - 6v DC). - Voltage too low. Replace battery, CRP2 or DL223A Lithium Cell only.
- For mains/PSU and battery models, disconnect for 1 minute then reconnect and allow sensor to recalibrate.

## Step 8 : General Cleaning

### General Cleaning

**IMPORTANT :** Do not use abrasive materials or cleaners. Only use soap and water or nonabrasive cleaners.

### Valve Servicing

The valve will require periodical servicing and cleaning, please contact manufacturer for servicing.

Do not attempt to dismantle the valve if you are unfamiliar with electronic solenoid valves.

### Optional Parts

AC03-019 Standard 'Y' strainer - 15mm compression  
AC17-004 Low pressure 0-1.0 Bar 6V 4mm solenoid valve  
AT00-200 1m PSU cable extension  
AT00-201 2m PSU cable extension

## Warranty, Support and End of Life Disposal

### Warranty


The automatic tap spout, lead system and PSU is guaranteed for 2 years from purchase against defective material and assembly.

The solenoid valve is guaranteed for 12 months, subject to water condition, however it is expected that the valve internals will operate efficiently for many years.

### 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.

### 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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a FRANKE company

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