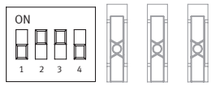
Step 7 : Time settings and basic operation

IMPORTANT : Changes to settings can be made at any time. Press the Reset button on the board to confirm the changes.

Changes to settings can be made at any time. Press the Reset button on the board to confirm the changes.

The numbers printed on the switches (1, 2, 3, 4) simply identify the switch number; the actual time settings available are shown below:

Switch 1 ON = 2 seconds
Switch 2 ON = 4 seconds
Switch 3 ON = 8 seconds
Switch 4 ON = Wave-on / Wave-off operation



DIP switches

The default run-time is 6 seconds, any DIP switches set to ON will add additional seconds to this, making the range available 6-20 seconds.

Example above (Fig 5) shows switch 2 and 3 ON. This adds an additional 12 seconds to the default 6 seconds, giving a total run-time of 18 seconds.

When all connections and settings are made and checked, replace lid and secure. After installation and external equipment set, e.g. sensors, valves etc. the supply should be connected.

Wave-on / Wave-off settings
Switch 4 ON enables Wave-on / Wave-off operation which allows the valves to be waved off before the set time has finished. If not waved off manually the valves will close automatically at the set time as usual.

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

Operation
When the control box is powered any connected valves will be opened for 2 seconds, the valves will close and after a short period normal operation will begin.

The time period between the valves opening and normal operation will depend on the set time, therefore this could be up to 20 seconds.

When a sensor is operated the corresponding valve will open for the set time.

Each of the two channels operate independently, but both use the same settings.

Step 8 : Start-up routine

After installation of external equipment, such as sensors and valves etc, the battery or mains power supply unit (PSU) should be connected.

Battery Operated version

The battery operated system requires 6 AA or C cell batteries. The connector from the battery pack should be connected to the battery terminal on the PCB. The control box is fitted with a battery low indicator which emits a beep every 30 seconds to indicate the batteries require replacing.

Mains PSU version

The connector from the mains PSU should be connected to the battery terminal on the PCB. A fused spur is required for installation and PSU should be connected according to section 3. The control box is fitted with a mains failure or battery low indicator which emits a beep every 30 seconds to indicate the unit requires attention.

Alarm disable

The battery low or mains failure alarm can be disabled by removing the Alarm jumper.

Start Up

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

When the control panel is powered any connected valves will be opened for 2 seconds, the valves will close and after a short period normal operation will begin.

When a sensor is operated the corresponding valve will open for the set time.

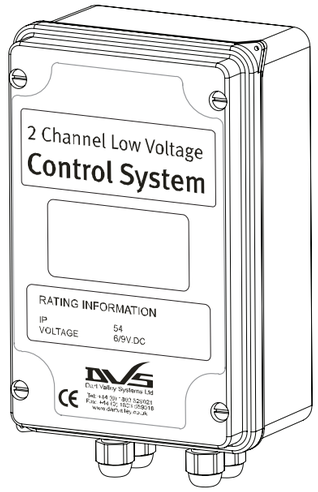
Each of the two channels operates independently, but both use the same settings.

Dart Valley Systems
a **FRANKE** company

2 Channel Low Voltage Tap Control System

Installation & Operating Instructions

AT07-002 (C/W 6x AA batteries)
AT07-003 (C/W 6x C Cell batteries)



Step 1 : Safety First

These instructions relate to the use of the 2 Channel Low Voltage Tap Control System only, any external or 'add-on' parts will be supplied with separate instructions.

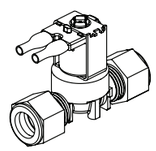
It is recommended that the electrical part of the installation be carried out by a qualified electrician in accordance with the latest electrical regulations. It is also recommended that any plumbing is carried out by a qualified plumber.

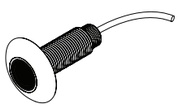
IMPORTANT : Please read these instructions carefully and follow each stage in order!

Step 2 : Kit Contents

A typical kit will consist of the following parts*:

Control box


Solenoid valve


Sensor

*Not to scale

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Step 3 : Typical installation

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

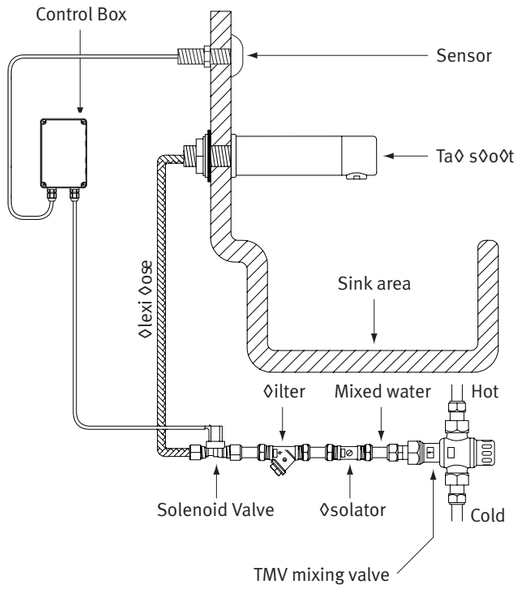
It will be necessary to make adjustments and service the control box after installation, and in the future. Secure access areas and duct spaces are recommended.

The control box 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 box should also be planned at this stage.

The tap control system is typically used with a DVS WM tap.

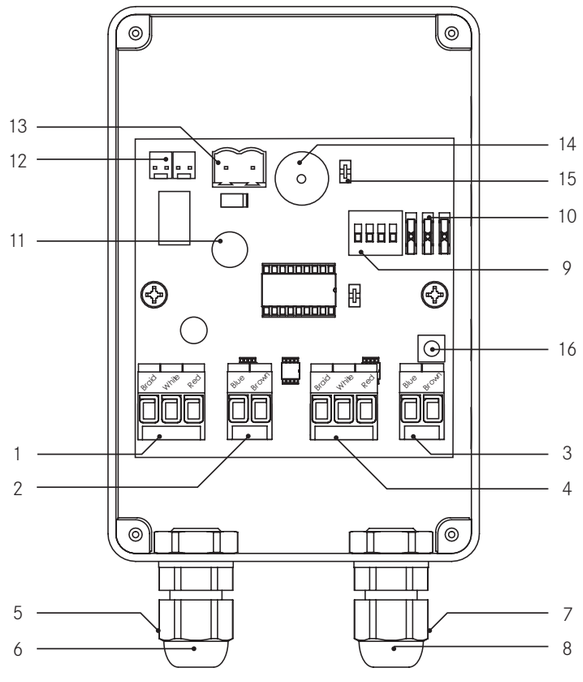
IMPORTANT : It is recommended that hot water is supplied through an approved TMV3 thermostatic mixing valve (sold seperately), in order to prevent scalding.



Step 4 : Board layout

1	Input connection - Sensor 1
2	Output connection - Valve 1
3	Input connection - Sensor 2
4	Output connection - Valve 2
5	Cable entry - Sensor 1
6	Cable entry - Valve 1
7	Cable entry - Sensor 2
8	Cable entry - Valve 2
9	Time setting switches
10	Option switches
11	Fuse
12	Battery connector
13	PSU connector (mains only)
14	Low battery alarm sounder
15	Alarm jumper
16	Reset button

DO NOT extend cables
DO NOT leave badly fitted cables
DO NOT interfere with the mains flex
DO check all cables and connections



Step 5 : Fixing & wiring

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

Remove lid to expose four fixing locations around the edge of the enclosure (see Fig. 3). These areas allow the fastening of the box without removing the printed circuit board.

Drill through these marked areas away from the wall to avoid dust entering the control box, then hold control box in position against the wall and mark holes with a pencil. Remove box, drill and plug marked areas and fix the control box with suitable fixings.

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

Cables should enter the enclosure through the 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 connector plugs to be fitted.

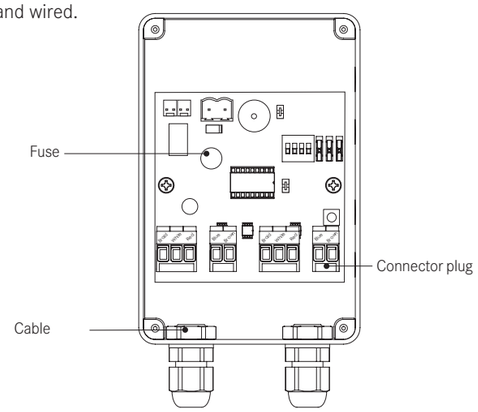
The connector plugs can be disconnected from the mating sockets when wiring external equipment, double check positions with the plug orientations as they only fit one way!

When each plug has been wired the cables can be pulled back through the cable glands, and the plug re-connected to the corresponding socket. Cables should not be left to torte or slack.

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

PSU connection (mains version only)

Connect the mains supply lead to a 230V ac supply via a fused spur, the fuse rating should be 3 Amps. The mains supply should NOT be initiated until all external equipment has been installed and wired.



Step 6 : Option setup

IMPORTANT : Changes to settings can be made at any time. Press the Reset button on the board to confirm the changes.

Option Setup

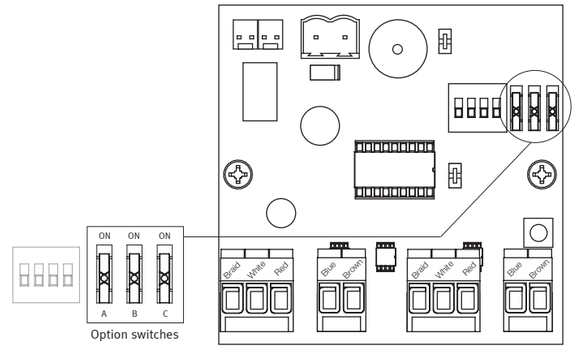
On the board you will notice three in-line switches fitted to the right side of the DIP switches (Fig. 4).

Before using the unit or making any changes please check that option switch A is set to ON. This will set the control box to TAP mode.

Option switches B and C control the built-in automatic purge controller. This opens the valves for the set open time automatically if the valves have note been operated during the purge time. Each valve has independent purge operation, but the settings relate to both.

Settings:

Switch B and C OFF = No purging
Switch B ON = Purge will occur after 1 day
Switch B OFF and C ON = Purge will occur after 3 days
Switch B and C ON = Purge will occur after 7 days



Option switches