Step 6 : Option setup

IMPORTANT : Changes to settings can only take place when power has been disconnected for at least 5 seconds.

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

Settings

Switch A ON = Adds 15 seconds to the valve open time, as selected on the DIP switches.

Switch B ON = Adds 30 seconds to the valve open time, as selected on the DIP switches.

Switch A & B can be used together if required, this will allow 15, 30 and 45 seconds to be added.

Switch C ON = Selects dual valve operation. Switch C OFF = Selects single valve operation.

Dual valve operation (Switch C ON)

This allows two solenoid valves to be connected and operated by two sensors, each valve can be operated independently. The open time selected applies to both valves.

Step 7 : Time settings and basic operation

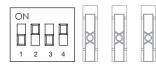
IMPORTANT : Changes to settings can only take place when power has been disconnected for at least 5 seconds.

When all DIP switches are set to OFF, the system enters a test routine. This should only be used when advised.

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 = 1 minute Switch 2 ON = 2 minutes Switch 3 ON = 3 minutes Switch 4 ON = 4 minutes

Any combination of DIP switches can be set to ON, the settings add up so that the range available is 1-10 minutes.



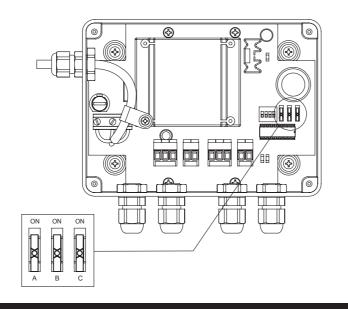
Example above shows switch 2 and switch 4 ON, giving a total valve open time of 6 minutes.

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

Single valve operation (Switch C OFF)

When single valve operation is selected, a solenoid valve is connected to channel 1 only. With two sensors connected the valve is either opened for the selected time (channel 1 sensor) or for half the selected time (channel 2 sensor).

In both operating modes each solenoid can be closed before the set time is reached by operating the corresponding sensor again.



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

After installation of external equipment, such as sensors and valves etc, the supply should be connected.

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 10 minutes.

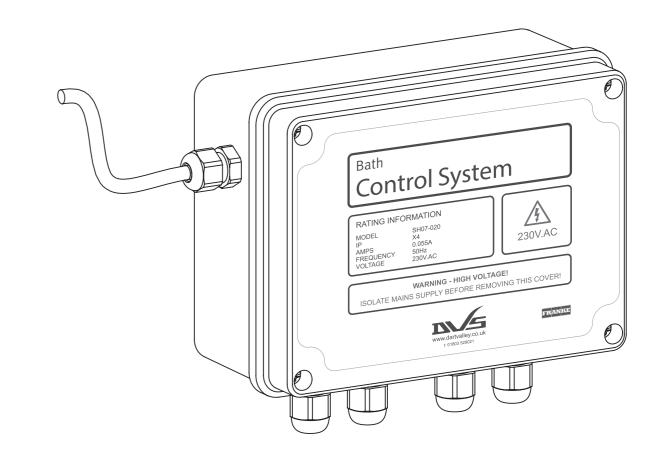
When a sensor is operated the corresponding valve will open for the set time, if DIP switch 4 has been set to on, the valve can be closed before the set time by operating the sensor a second time.

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

Bath Control System

Installation & Operating Instructions

SH07-020





Step 1: Safety First

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

IMPORTANT : The control should be connected to a clean, dedicated mains supply, via a 3A rated spur

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!





Always isolate power when opening the control unit!

Step 2 : Contents

Bath Control System box only*:

(Spare Secondary Fuse Included)



Control box



Step 3 : Typical installation

The control box 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 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.

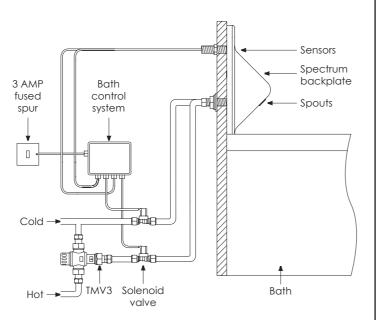
The routes that cables will take when connecting external equipment to the control box should also be planned at this stage.

The bath control system is typically used with a bath filling back plate or spout

Important: Thermostatic mixing valve

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

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

	0
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	Mains supply
10	Time setting switches
11	Option switches
12	LED 1 - For engineers / testing only
13	LED 2 - For engineers / testing only
14	LED 3 - For engineers / testing only
15	Fuse (replace with exact same type)
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

DO ask for advice if / when necessary

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 unit 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 unit with suitable fixings.

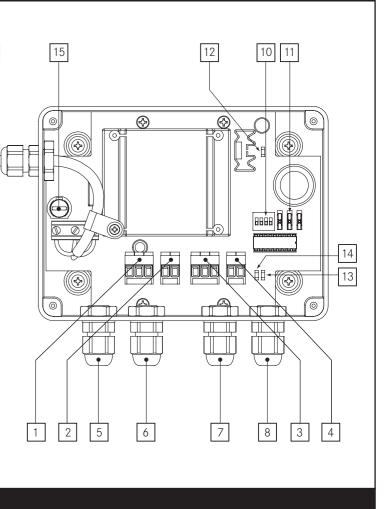
Connect the mains supply lead to a 230V ac supply via a fused spur, the fuse rating should be 3 Amps. The mains supply should NOT be initiated until all external equipment has been installed and wired.

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.

9



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.

