

## Step 5 : Operation

The mains supply can now be connected. The display segments will all be lit.

The control unit goes through a simple test, the warning lamp will flash twice and if connected, the remote contacts will close for 2 seconds.

After this the display will count from 1-20. In normal operation each of the display digits will have a dot that flashes when a switch operates, the corresponding number for that switch will display, this may take several seconds.

The number of the float switches can then be cross referenced using the locations marked on the lid label.

The space provided on the front of the control box should be populated with the corresponding cistern numbers i.e. cistern 1 = space 1, cistern 2 = space 2 and so on.

The float switches can be tested by lifting the float up this will trigger the alarm.

If an overflow situation occurs the corresponding cistern number will flash on the control box if there are more than one cistern overflowing the cistern numbers will flash alternately, also during an overflow situation the remote LED warning light will flash if fitted.

Once the overflow has been stopped the control box can be reset. To reset the control box press buttons A & B together for a five seconds this should clear & reset the display.

The digits will display 7's when reset normal operation will then continue.

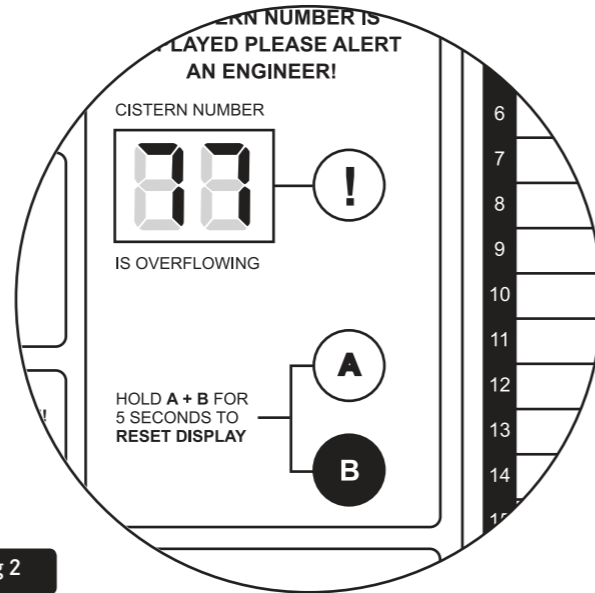


Fig 2

## Step 6 : Specifications & Notes

### Specifications

The control box has two fuses fitted:

- Primary fuse (G) T50mA L 250V
- Secondary Fuse (J) F100mA L 250V

IP Rating: IP X4

230V a.c. 50Hz

Current: 0.04A

Operating: 5V d.c.

For any further information, parts or help please contact the manufacturer.

**NOTE :** It is recommended that the entire installation and sensor function be checked periodically.

## Step 7 : Warranty Disposal & Support

### Warranty

The Overflow Detection System is guaranteed for 2 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.

### Support

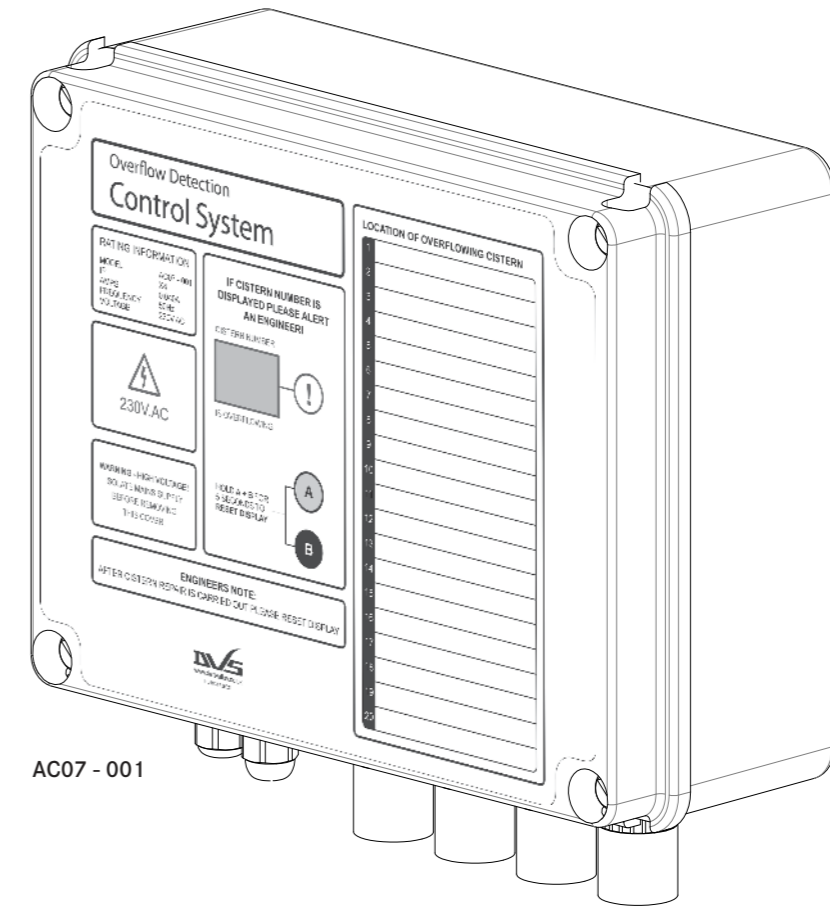
For technical support please visit our technical pages on our website at [www.dartvalley.co.uk](http://www.dartvalley.co.uk), contact us by email at [techsupport@dartvalley.co.uk](mailto:techsupport@dartvalley.co.uk) or alternatively call us direct on 01803 529021.

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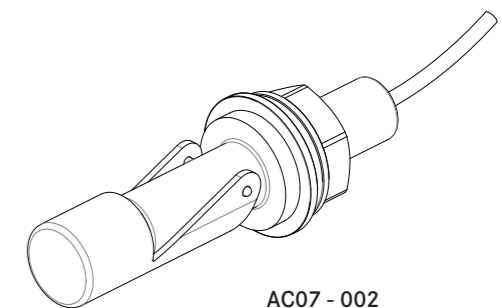
# Overflow Detection System Installation, Maintenance & Operating Instructions



AC07 - 001



AC07 - 004



AC07 - 002

## Step 1 : Safety First

These instructions relate to the use of the Overflow Detection Unit 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 an electronic device which must be installed correctly to perform correctly.

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



## Step 2 : Parts Required

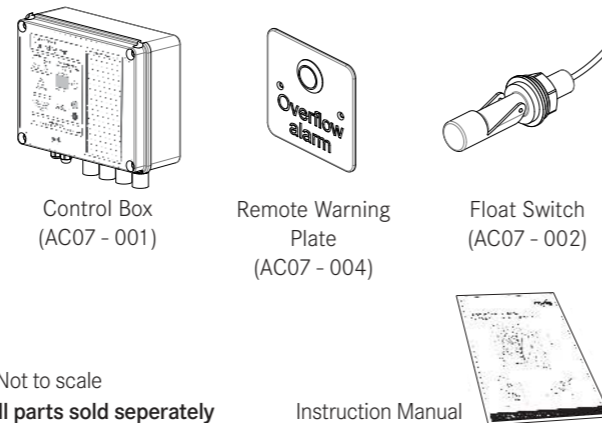
The Overflow Detection System comprises of a control box allowing up to 20 float switches & 1 LED remote warning light to be connected.

(AC07 - 001) **Control Box:**  
Controls up to 20 float switches and 1 LED warning light.

(AC07 - 004) **Remote Warning Plate:**  
For mounting outside the duct area a warning light flashes to indicate an overflow situation.

(AC07 - 002) **Float Switch:**  
Standard float switch fits into WC cistern or water tank.

A typical system will comprise of the parts below:



## Step 3 : Control Box Installation

### Locating a suitable position

The control box displays fault information on the front panel, therefore the control box must be fitted in an accessible place.

The control system should be located in a dry location, away from extremes of moisture and temperature and not exposed to dirt, dust or damp.

The unit should be accessible when required, but not within easy general reach of unauthorised persons. Secure access areas and duct spaces are recommended. **Please note - Maximum cable runs (see Step 4 : Wiring)**

Routing of cables back to the control box should be planned at this stage.

### Mounting the control box

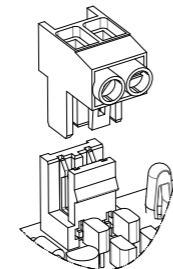
The control box should be mounted horizontally so that the cables exit from the bottom, remove lid to expose four fixing locations around the back edge of the enclosure.

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

Securely mount the control box in a horizontal position (with the cable outlets exiting the bottom).

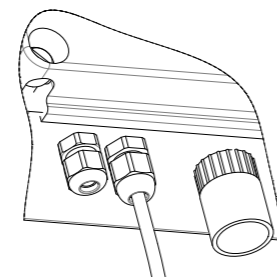
### Connector plugs

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!



### Cable glands

Always fit cables through the glands provided. Tighten until rubber touches the cable completely and then tighten with a further 1/2 turn (180°).



## Step 4 : Wiring

The control box is supplied with 1.2 metres of mains flex, this should be connected to a 3 amp fused spur.

Should the mains lead become damaged, do not use the product, please contact the manufacturer.

**IMPORTANT** : It is important that the float switches are fitted in the correct position, to high they will not activate, to low they will activate all the time (please see Fig 1)

The cables from the float switches on each WC cistern are connected to the control box via the pre-fitted 20mm conduit adaptors. Therefore, it is expected that the cable runs are installed into conduit for protection where possible.

When connecting the float switches always start from switch connection 1, i.e. if you have five switches in the system, these should be fitted from connector 1 through to 5. The location of each

float switch, (WC cistern) can be marked on the control box lid in the spaces provided.

The float switch should be connected using a cable with a section of at least 0.3mm and must be no longer than 30 metres. The remote warning plate should be mounted in a suitable position, where it will be seen during a fault. The plate must be within 10 metres of the control box.

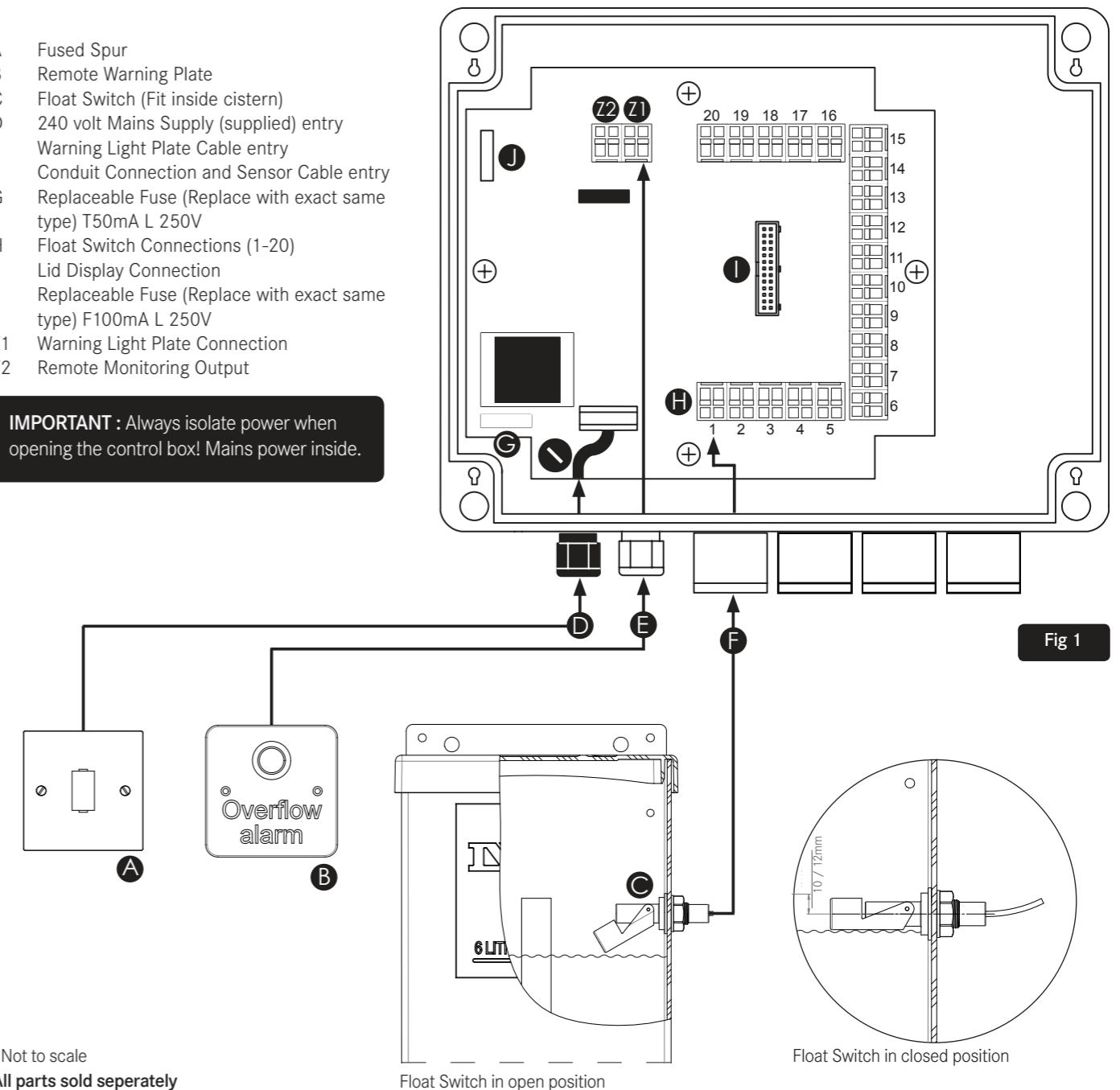
The remote warning plate should be connected to the terminal marked Z1.

An output is available with Normally Open contacts for remote monitoring (BMS) during a fault. These should be connected to Z2.

When all connections have been made, the enclosure lid cable should be connected to the ribbon socket in the middle of the back box, and the lid fixed into position.

- A Fused Spur
- B Remote Warning Plate
- C Float Switch (Fit inside cistern)
- D 240 volt Mains Supply (supplied) entry
- E Warning Light Plate Cable entry
- F Conduit Connection and Sensor Cable entry
- G Replaceable Fuse (Replace with exact same type) T50mA L 250V
- H Float Switch Connections (1-20)
- I Lid Display Connection
- J Replaceable Fuse (Replace with exact same type) F100mA L 250V
- Z1 Warning Light Plate Connection
- Z2 Remote Monitoring Output

**IMPORTANT** : Always isolate power when opening the control box! Mains power inside.



\*Not to scale  
All parts sold separately