

## Domestic Installation Instructions

A **Scale Manager 2** kit comprises of the following:

- One computerised electronic water descaler
- One 12 volt power supply, cable length 1.8m – 6'
- Optional when ordering, 5m - 16½' power supply extension lead
- Antenna cable with **red** plug
- Antenna cable with black plug
- Five plastic cable ties (1 spare)
- One attachable Black antenna plug
- One attachable Red antenna plug

**Please Note:** - **Ensure antennae cables do not come into contact with each other**  
**The gap between the coils must be in excess of 60mm - 2½" no upper limit**  
**Coils require a minimum of 50mm - 2" each side of uninterrupted straight pipe**  
**Direction of coils are essential - see over**  
**Ideally a 125mm + (5"+) straight run of pipe is required for each antenna coil**  
Direction of Water Flow is immaterial  
Connect red plugs to red sockets and black to black  
Scale Manager is effective on all pipes (copper, plastic, lead, steel etc)  
Performance is not impaired if the pipe is painted  
The Control Unit can be fitted at any angle or plane  
A 13-amp socket is required for the power supply

The ideal location to install Scale Manager is near the entry point of the rising main, before any junctions. The antennae coils operate independently and can be positioned on separate pipes should you not have an uninterrupted pipe run of 250mm - 10". Should the inlet pipe T off within 125mm – 10" of the stopcock, position the coils as fig 1 overleaf. If the inlet pipe available is over 125mm - 5" but under 250mm - 10" position as fig 2 overleaf.

**The antennae coils require a minimum gap between them of 50mm - 2". It is also necessary that the coils are at least 40mm -1½" from elbows and junctions.**

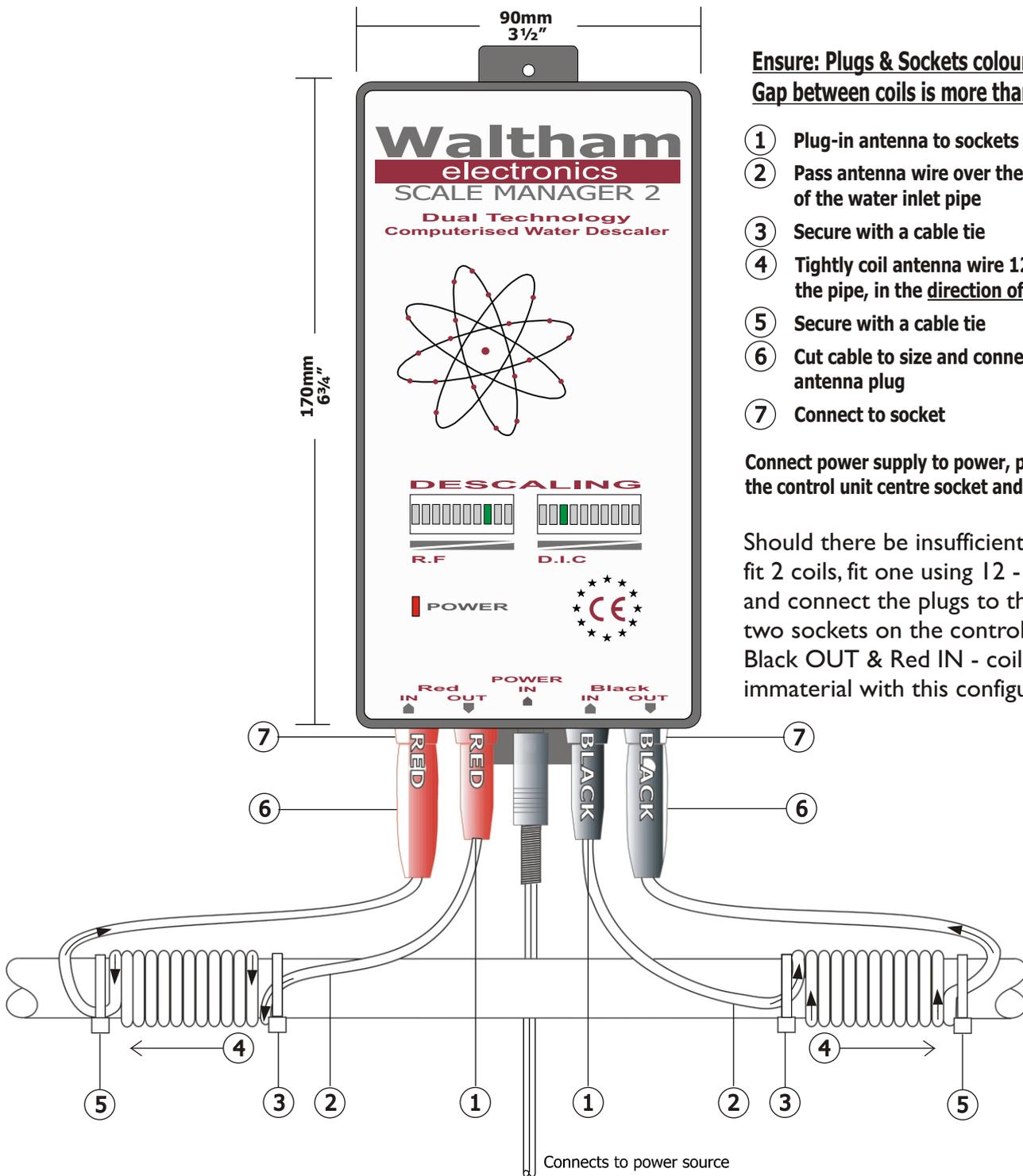
**Fitting:** - The diagram overleaf may be of assistance.

- 1 Position the Scale Manager control unit close to the water inlet pipe, allowing sufficient space to connect the antennae and power plugs
- 2 Connect the RED plugged antenna to a RED socket marked **Red OUT**
- 3 Pass the antenna cable over the front of the pipe and secure with a cable tie
- 4 Closely coil the wire around the pipe 12 times - see over **in the direction of the arrows**.
- 5 Tighten the coil and secure with a cable tie.
- 6 Leave sufficient wire to reach the remaining **Red IN** socket - **trim off the excess**. Connect the loose RED antenna plug to the cable by pulling off the plastic insulation cover (pliers may be needed) if not already removed - thread wire through the insulation cover - trim off 5mm -¼" of insulation from the wire - connect to the plug via the screw terminal - replace the insulation cover - connect to the **Red IN** socket on the control unit.

Repeat the same process with the BLACK plugged antenna starting by connecting to the **Black IN** socket, making sure to coil in the direction of arrows– see over.

Plug the power supply into a 13-amp socket, connect to the socket on the control unit and switch on.

The power LED will illuminate pulsing for a few seconds whilst carrying out a self-diagnostic routine. The R.F. & D.I.C descaling bar graph LED's will then illuminate showing de-scaling is in progress. They will cycle at a rate of 1.26 seconds. Each LED represents 650 magnetic pulses, totalling 6,500 per second through each of the antenna coils.

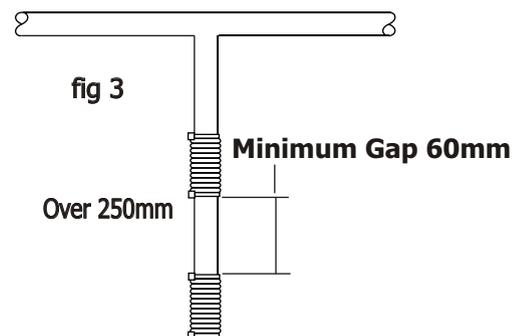
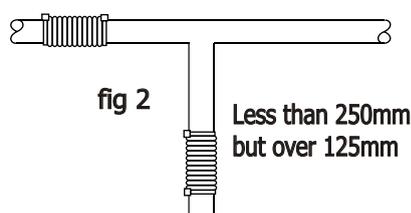
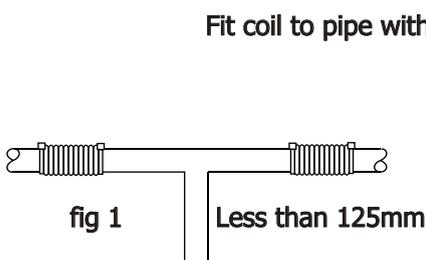


**Ensure: Plugs & Sockets colour match & the Gap between coils is more than 60mm - 2 1/2"**

- ① Plug-in antenna to sockets
- ② Pass antenna wire over the front of the water inlet pipe
- ③ Secure with a cable tie
- ④ Tightly coil antenna wire 12 times around the pipe, in the direction of arrows
- ⑤ Secure with a cable tie
- ⑥ Cut cable to size and connect loose antenna plug
- ⑦ Connect to socket

Connect power supply to power, plug into the control unit centre socket and switch on

Should there be insufficient pipe to fit 2 coils, fit one using 12 - 16 turns and connect the plugs to the outer two sockets on the control unit - Black OUT & Red IN - coil direction immaterial with this configuration.



Coils may be positioned touching or close to floor