

# GUARANTEE

Terms and Conditions for UK (outside UK contact your local distributor)

We, Applied Energy Products Limited, guarantee this product for domestic use only, for the period of 36 months\* from the date of purchase.

Within the guarantee period we will resolve, **free of charge**, any manufacturing defects in the product resulting from faulty workmanship or material on condition that:-

- The appliance has been correctly installed in accordance with our instructions and is being used on the supply circuit or voltage printed on the rating plate.
- The appliance has been used in accordance with these instructions and has not been tampered with or otherwise subject to misuse, neglect or accident.
- The appliance has not been taken apart, modified or repaired except by a person authorised by us.
- Evidence of the date of purchase in the form of an invoice or receipt will be required in order to qualify for an in-guarantee repair.
- The guarantee period for the products used in commercial applications will be limited to 12 months.
- For the service work to be undertaken free of charge, the work must be only undertaken by Applied Energy Products Limited, or our approved agents.
- Service under guarantee has no effect on the expiry date. The guarantee on any exchanged parts or product ends when the original guarantee period ends.

## EXCLUSIONS

This guarantee **DOES NOT** cover damage or defects arising from poor or incorrect installation, improper use or lack of maintenance, including build-up of limescale. It is the responsibility of the installer to check that the installation parameters meet the requirements of the product, and any relevant regulations.

If we are called out to a fault, which is subsequently identified as being an installation fault, we will make a charge. It is important that the routine checks are completed before calling us out, as many issues can be simply diagnosed and resolved.

We make no guarantees as to response times for repairs. We will endeavour to achieve the most timely response possible but while we indicate an average response time, this should not be taken as a guarantee.

The guarantee applies to a repair or replacement (at our discretion) of the product subject to the conditions above, and **DOES NOT** cover compensation for the loss of the product or consequential loss of any kind.

The guarantee does not apply to the repair or replacement of pressure relief devices, sprayheads, hoses, accessories, isolating switches, electrical cable, fuses and/or circuit breakers.

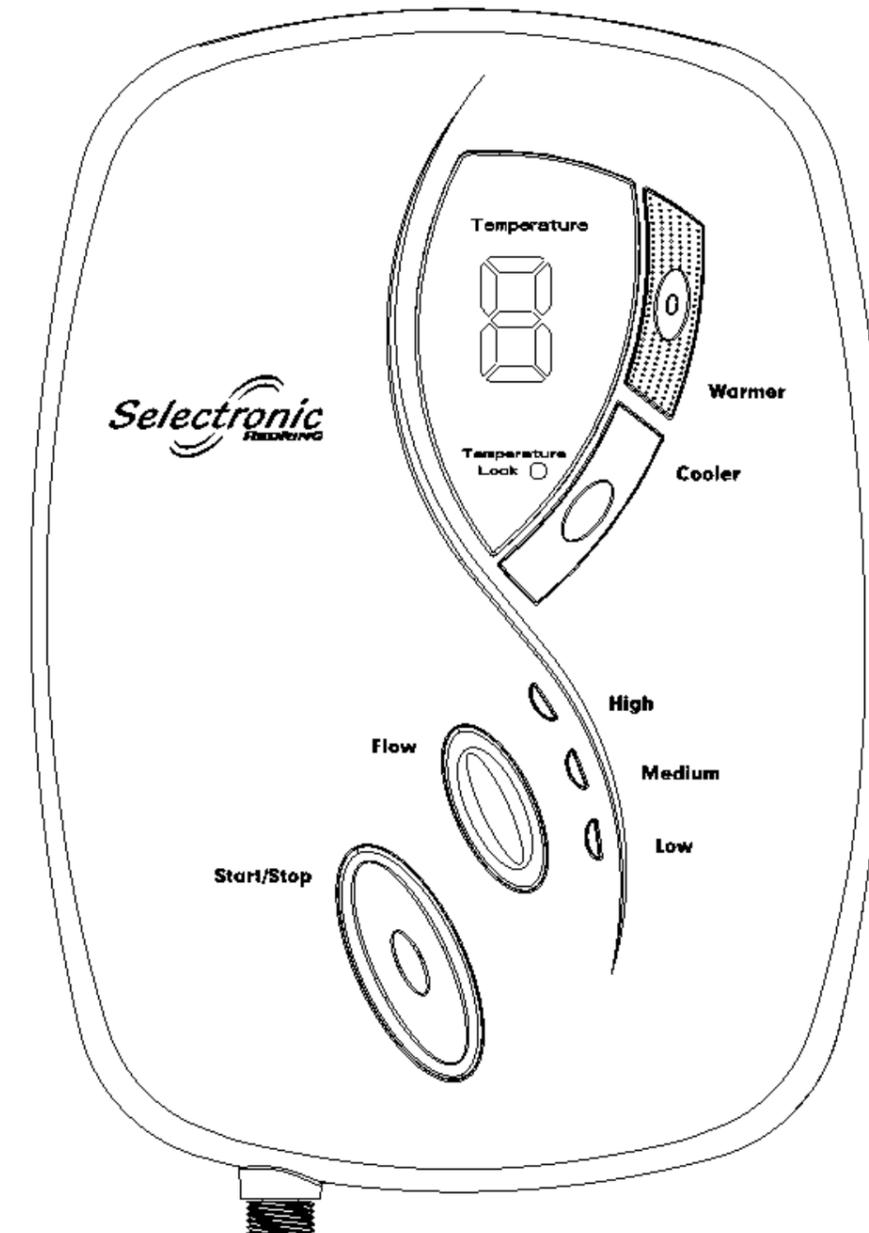
This guarantee does not affect your statutory rights.

\* Months 25 to 36 of your free guarantee are conditional on the registration of your product at the time of purchase. Product registration helps us to identify when products are installed, and in what location in order to facilitate a more efficient response to your requests.

*Selectronic*  
REDRING

Affix  
Handbook Label  
559-8012-74  
Over this box

## SHOWER HANDBOOK



### After Sales Service

We offer a technical advisory service on the telephone to installers and other customers with problems in the field.

### RING 0844 372 7766 (UK ONLY)

Remember to quote the exact type of shower, as written on the front of the shower and on this leaflet.

The model and serial number are located on the bottom face of the shower.

Make a note of those numbers here, and be sure to quote them if you call for advice.

**Model Number:** 53 - \_\_\_\_\_ / **Serial Number:** \_\_\_\_\_

**Note:** You may be charged for a service call if you do not have the serial number.

Full details of terms and conditions are available on request from: -

**REDRING**

Applied Energy Products Ltd, Morley Way, Peterborough, PE2 9JJ  
Website: [www.redring.co.uk](http://www.redring.co.uk)

### IMPORTANT

This booklet should be given to the customer  
after installation and demonstration.

Thank you for choosing a quality "Redring" product manufactured in Peterborough, England.

## Contents

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**Warning! Do Not Switch The Shower On If You Suspect It Of Being Frozen, Wait Until You Are Sure That It Has Been Completely Thawed Out.**

## How To Use Your Shower

Your shower has two modes of operation, **Normal** and **Temperature Lock**. The temperature lock feature ensures a factory preset maximum temperature is not exceeded. This is achieved by limiting the adjustment of the temperature control buttons, so that the less-able, elderly and children cannot accidentally adjust the shower so that it is too hot.

The mode of operation is set on commissioning / installation (see page 10). The unit leaves the factory in temperature lock mode.

Button function	Location	Shape / Texture
Start /stop	At The Bottom Of The Shower	Large, A Raised Pip In The Centre, Made From Soft Rubber
Flow	Above And To The Right Of The Start/Stop	Same Shape As The Start/Stop But, Smaller Smooth With No Raised Pip, Recessed. Made From Soft Rubber
Warmer	Towards The Top Right Of The Shower	Textured Front And A Central Recess With A Raised Pip In The Centre. Made From Hard Plastic
Cooler	Underneath The Warmer Button following curve	Same Shape As Warmer However Smooth With A Central Recess, No Raised Pip. Made From Hard Plastic

## Normal Operation

**Switch On Electricity** at ceiling / isolating switch.

**Press Start /Stop Button** in the centre.  
(Confirmed with a **single bleep**)

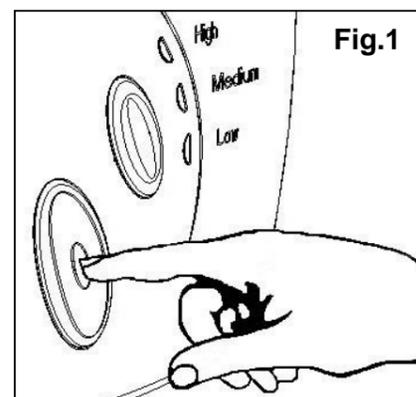
The unit will start and the motorised valve will reset. Display will show the target temperature (6) for two seconds and then change to the actual temperature (Usually "L").

The digit will flash and increase until display shows number 6.  
(The average showering temperature).

When the unit has got close to this setting it stops flashing and **sounds a double bleep** and the unit is **ready for use**.

The unit will only count up & double bleep once per shower session.

**Flow light** (green) will be on **high**.



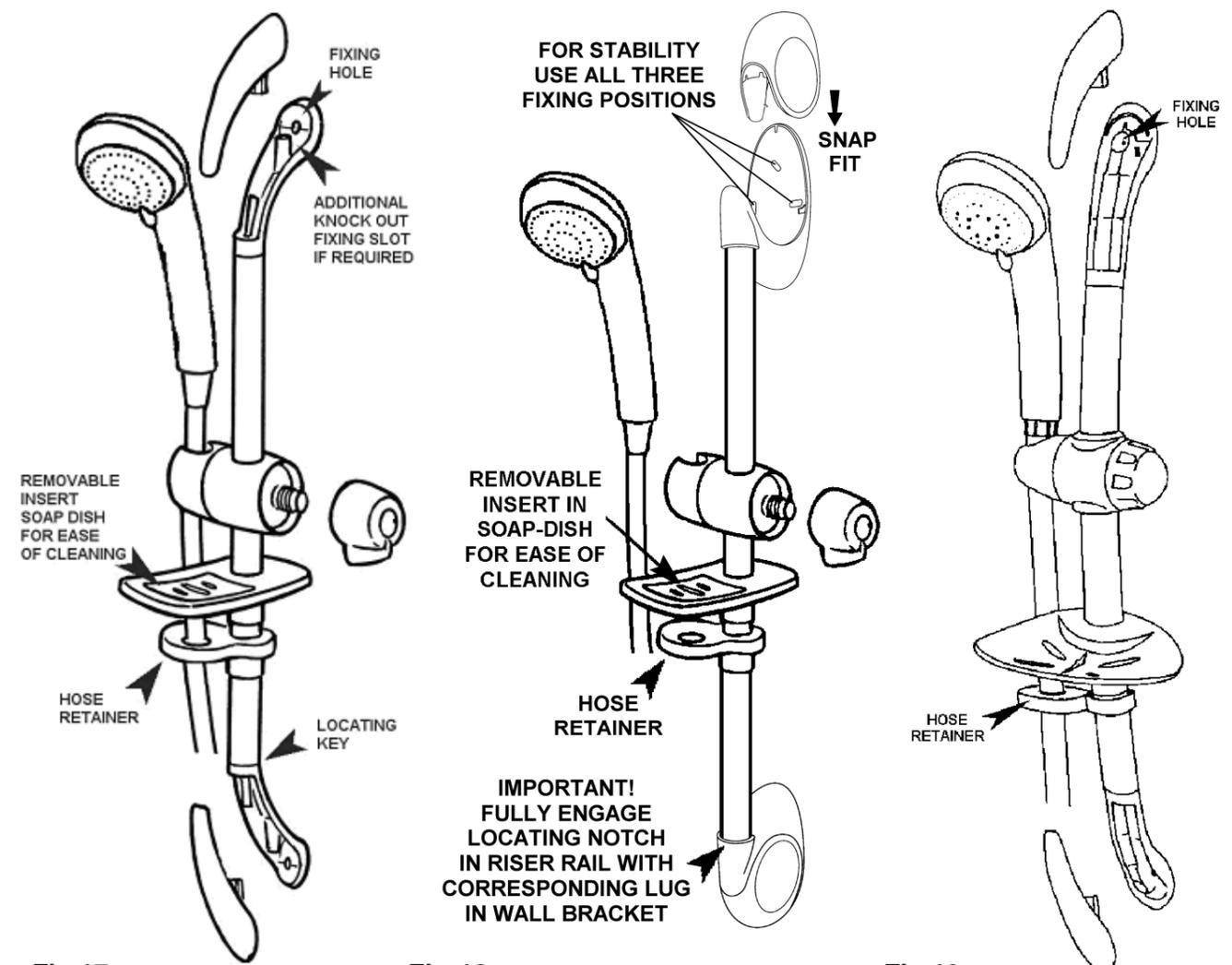
## Optional Accessories - standard fittings only (RING 0844 372 7750 UK ONLY)

2 Metre smooth shower hose	83-595308
Care pack (1m rail / 2m smooth hose)	83-792354
2 metre convoluted shower hose	83-593529
Grab rail	83-593568
1 Metre riser rail	83-593530

## Spares (RING 0844 372 7750 UK ONLY)

Please Note:- The fitting of all spares should be supervised by a suitably qualified person.

Solenoid valve + seals	93-594101	Cable entries (top / bottom)	93-594111
Triac PCB	93-594102	Side section	93-594112
Flow transducer	93-594103	Logic PCB	93-594143
Flow valve assy (no outlet)	93-594104	Front cover assy complete	93-594114
Valve motor	93-594105	PRV housing complete	93-594115
Cutout assy + cables	93-594109	Cable pack (all internal cables)	93-594116
Hose outlet assy complete	93-594110	Multi-mode handset	93-593565
1.25m Chrome Shower Hose	93-797641	1.25m White Shower Hose	83-593538



**Fig.17**  
Standard  
accessories

**Fig.18**  
Plus  
accessories 11

**Fig.19**  
Style  
accessories

## Changing the operating mode : TEMPLOCK / NORMAL

**Warning. Switch Off The Electricity At The Isolating Switch Before Removing The Cover.**

On the extreme right hand side of the PCB mid way up is the “4 Way Temp Limit Slider Switch” (See Fig 16)

**PLEASE NOTE!** The Selectronic shower is factory set with the “Temp Limit Slider Switch” set at “Locked Position 1”.

You have the option of choosing from any of three different lockable settings plus normal operation.

Remove the front cover taking care not to strain the flying lead.

Change the switch to the desired temperature control position.

	Locked Position 1 (Extreme Left)	Locked Position 2 (First “Click” from the Extreme Left)	Locked Position 3 (Second “Click” from the Extreme Left)	Unlocked Position 4 (Extreme Right)
Adjustment Range	34-40°C Nominal	34-41°C Nominal	34-43°C Nominal	25-46°C Nominal

Replace and refasten the front cover.

Switch on electricity. Check that the unit operates correctly.

**PLEASE NOTE!** The Temperature Lock light on the front cover of the shower will not illuminate if Unlocked **Position 4** has been selected.

### d) Commissioning

Ensure the water and electricity are switched on to the unit.

Press and hold the **Cooler button** until confirmed with **one audible bleep**.

The digital display will illuminate with a capital “C”.

If the button does not respond, ensure that the flying lead from the PCB has been connected to the front cover.

Allow the unit to fill and wait for the water to come out of the handset, then press the **Start / Stop** button turning the shower OFF. (Confirmed with **three audible bleeps**).

Re-start – **Press Start / Stop button in the centre.** (Confirmed with a **single bleep**).

Check that the outlet temperature increases to a comfortable temperature and check for leaks.

Press **Start / Stop** button to switch the unit OFF. (Confirmed with **three audible bleeps**).

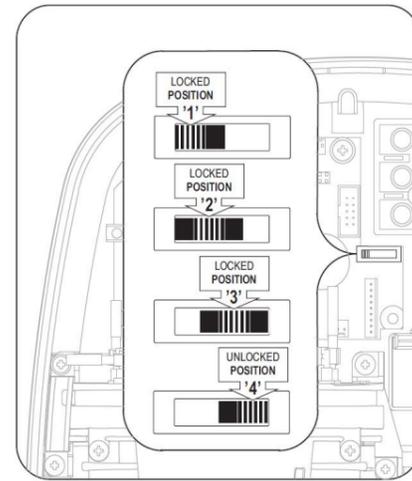
**Demonstrate Operation To User** and leave the user with these instructions for future reference.

### BEAB Care Wash Scheme

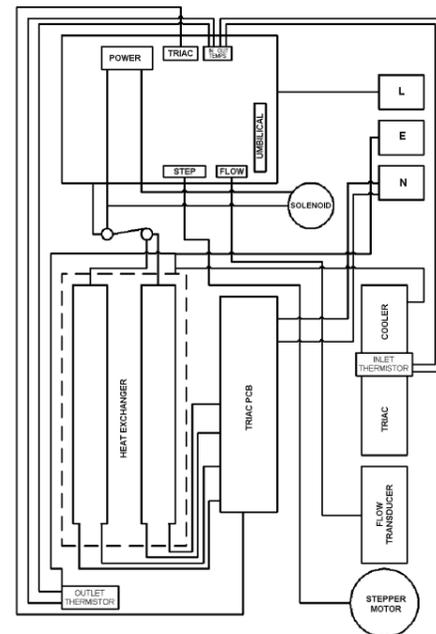
**Note:** For Care Wash installations the Temperature Lock Switch MUST be set to either 1 or 2.

Where the BEAB Care Scheme is required please refer to separate handbook “Commissioning, In Service Testing and Maintenance of the Selectronic Shower for BEAB Care wash schemes”

Fig.16



Wiring Diagram



### To Increase Temperature

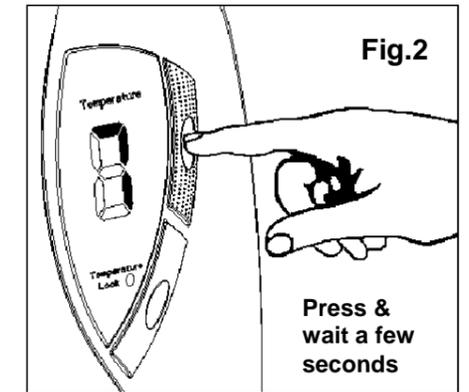
**Press the warmer button** once in the centre (Confirmed with a **single bleep**).

The number will change to the new setting.

i.e. Display will change from digit 6 to digit 7 (See Fig 2)

**Wait for a few seconds** for the shower to increase the temperature to the new setting.

**Repeat this for your ideal setting** waiting each time for the temperature to be achieved. (Maximum setting is letter H).



### To Decrease Temperature

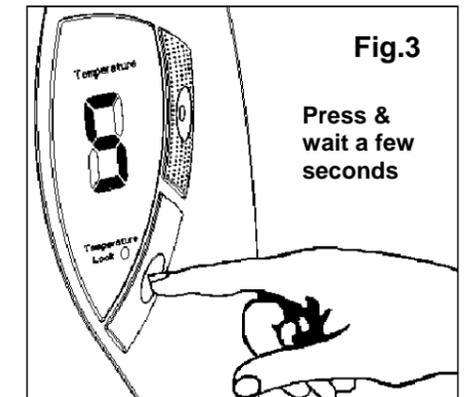
**Press the cooler button** once in the centre (Confirmed with a **single bleep**).

The number will change to the new setting.

i.e. Display will change from digit 6 to digit 5 (See Fig 3)

**Wait for a few seconds** for the shower to decrease the temperature to the new setting.

**Repeat this for your ideal setting** waiting each time for the temperature to be achieved.



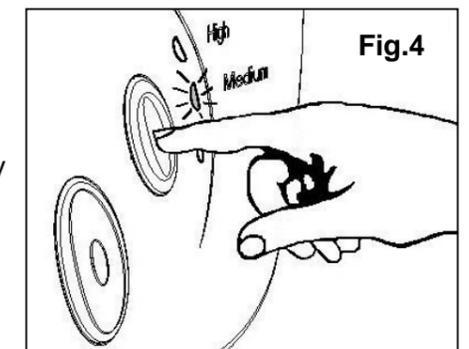
### To Change Flow Rate

**Press the flow button** in the centre (Confirmed with a **single bleep**).

This reduces the flow without changing the temperature setting. (Note: As the flow changes, the water temperature may go up and down slightly)

**Press once** and the flow will reduce to **medium**. (See Fig 4)  
**Press it again** and it will reduce to **low**.

On switching on the shower, the flow always comes on in the **high** flow condition.



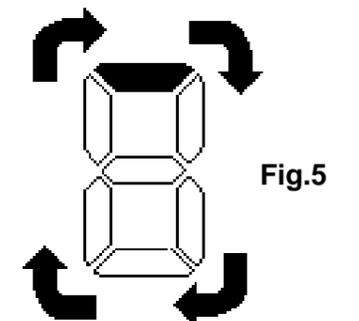
### Switching Off

**When you have finished showering press the start /stop button** in the centre. See fig.1 (Confirmed with **3 short bleeps**)

The water will continue to run for a few seconds so that the unit is cooled down ready for the next time the shower is used. While this is happening the display will circle round and round (see fig.5).

The unit will then switch off automatically.

**Switch Off Electricity** at ceiling / isolating switch.



## Important Note

Always use the Start / Stop button to switch the shower OFF.

If the ceiling isolator is used to stop the shower running, without first pressing the Stop button, then the shower may go into Over Temperature Shutdown the next time it is used.

## Over Temperature Shutdown

If an abnormal condition occurs which causes the water to get too hot.

The **unit will automatically shutdown straight away and the water will stop flowing.**

This is to prevent any hot water coming out of the handset.

This is indicated by **8 short bleeps** and the display flashing a lowercase “o” and then “t” (see Fig.6).

This will continue until the water is at a safe temperature.

The unit will then switch off automatically and will need to be restarted in the normal way (see “normal operation” section)

It can take a long time for the unit to reach a safe temperature. To speed this temperature reduction up, the hot water **can be purged** from the unit.

## Purging

While the unit is in **Over Temperature shutdown mode** press the **cooler** button for **more than 3 seconds**. (See fig.7)

This will switch the water on **only** while the button is pressed.

**Caution!! Water Will Be Hot** stand clear of the spray.

The unit will then **switch off automatically** with **3 short bleeps** when a safe water temperature has been reached.

## Temperature Lock Operation

This mode is **selected on installation** to prevent the temperature being set too hot or too cold. (See Page 10)

All the controls are the same as previously described.

However, the **warmer and cooler** adjustment is **locked** to the digit range shown in the table on page 10 and the temperature lock light will come on (See Fig.8).

## Automatic switch off

With temperature lock selected, the shower will automatically switch off after 30 minutes.

Near the end of the 30 minutes the shower will bleep several times and the display will change to “t”.

In order to stop the shower automatically switching off, press either the warmer or cooler button.

## Temperature Lock Override

Temperature lock can be over ridden so that the shower runs normally : Press the warmer and cooler buttons together, while shower is running, for more than 3 secs (See Fig.9).

The shower will return to Temp Lock mode the next time it is used.

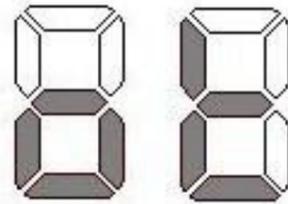
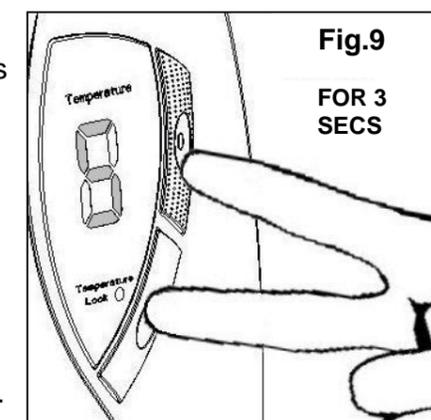
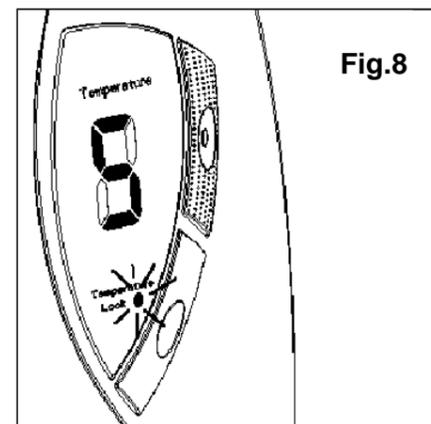
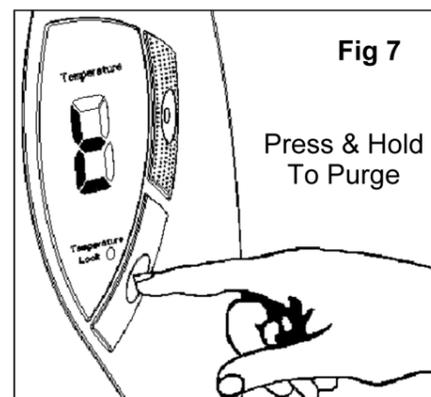


fig. 6



## b) Plumbing

We recommend that a WRAS (Water Regulations Advisory Scheme) listed isolating valve be fitted between the rising main and the unit. This will allow the unit to be serviced without having to turn off the house water at the stop valve.

The unit should be connected to the mains cold water supply. This must have a minimum running pressure of 0.07 MPa (0.7bar / 10 p.s.i.) and a maximum pressure of 1MPa (10bar /145 p.s.i.)

The unit can be fed from a header tank provided this has a minimum head of 7 metres (23ft).

Standard Ø15mm copper or stainless pipe should be used. Connection to the unit is via a Ø15mm plain shank on the solenoid valve.

A compression elbow or push fit connector can be used. (Stainless pipe is not recommended for push fit).

Using an isolating valve, **flush the pipe work through to remove particles etc**, before making the final connection to the shower.

A blockage in the waterways (particularly the spray plate and solenoid valve) will prevent the unit from working correctly.

The shower is designed to have an open outlet and should only be used with the fittings recommended by the manufacturer.

**Warning! Do Not Fit A Tap On The Shower Outlet. Take Care To Avoid Restricting The Outlet Of The Pressure Relief Device (see fig. 11 for location).**

## c) Electrical Connections

The electrical installation must be in accordance with the current BS7671 (I.E.E. wiring regulations) and “Part P” of the Building Regulations and/or local regulations.

The unit is designed for a single phase 50 Hz a.c. electrical supply. Please check the rating plate on the unit to see what details apply to your unit.

A means for disconnection in all poles **must be** incorporated in the fixed wiring in accordance with the wiring rules.

**We recommend ceiling switches.**

The cable connected to the appliance must be fixed wiring, and should be stripped back according to fig. 13

Connect the cable to the terminal block. Ensure that all the retaining screws are **VERY** tight and that no cable insulation is trapped under the screws.

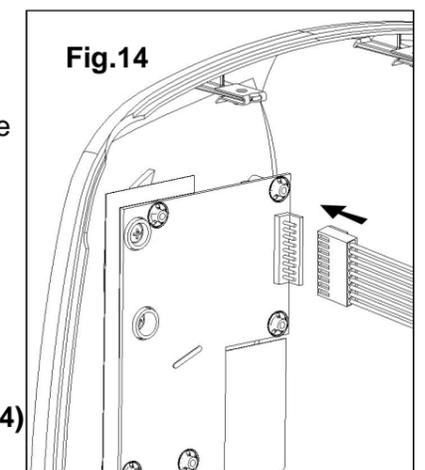
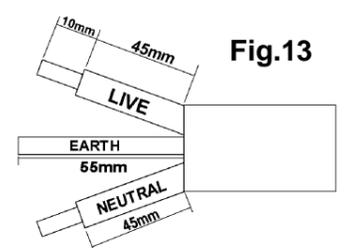
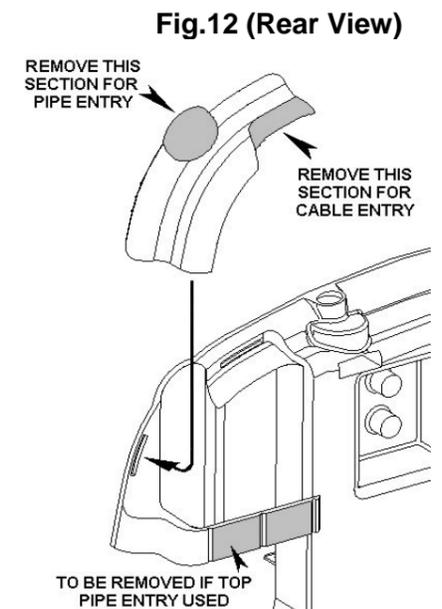
**Warning! Failure To Comply With These Instructions Could Result In A Failure Of The Terminal Block.**

**Warning! This Appliance Must Be Earthed**

Replace the side section along with seal.

**IMPORTANT Connect flying lead from PCB to front cover (fig. 14)**

Replace the front cover and fasten in position with three screws.



## Installation Instructions

**ALL WIRING AND INSTALLATION MUST BE SUPERVISED BY A SUITABLY QUALIFIED PERSON.**

We recommend that the installation be done in the following sequence: -

- Fix the shower to the wall
- Plumbing
- Electrical connections
- Commissioning

**Warning! Do Not Install The Shower In A Room Where It May Be Subject To Freezing**

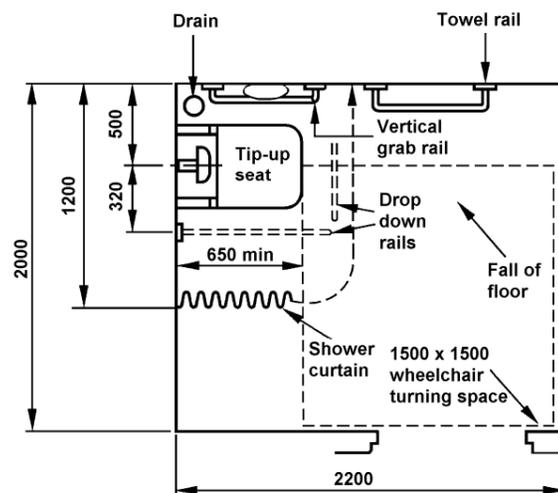
### a) Fix The Shower To The Wall

(To assist, a mounting template is printed on the shower carton - "Selectronic-Plus" only)

When deciding where to place the unit a few things need to be taken into consideration: -

- The unit must not be mounted directly in the path of the spray from the handset**
- The handset could be used over a sink for hair washing.
- The handset does not come into contact with the used water in the cubicle, bath or basin. A hose retainer is supplied with the accessories (see fig.17, 18 & 19).
- The unit can be mounted at a lower level for less able users combined with optional extended hose and riser rail. The installation must comply with BS 8300: 2001. (Design of buildings and their approaches to meet the needs of disabled people. Code of practice). Remembering to adhere to point 1.
- Choose a flat piece of wall to avoid the possibility of distorting the backplate and making the front cover a poor fit.

**Typical guideline dimensions used for less-abled bathroom installations**



Remove the three cover screws and lift the cover off.

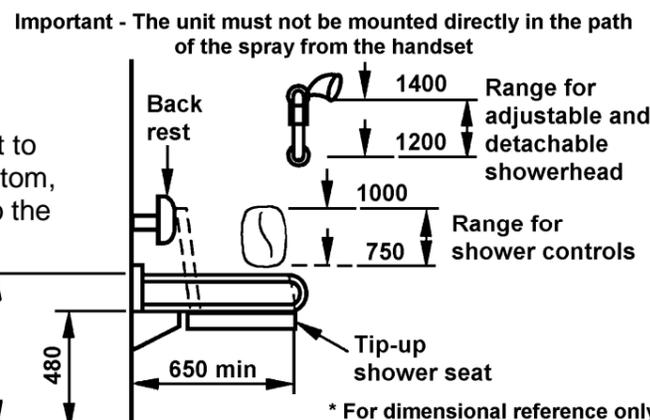
Remove side section complete with seal.

Depending on which water entry is being used (top or bottom) break out the relevant rear support rib using a pair of pliers (see fig.12).

Identify which pipe and cable entry needs to be cut to enable the services to enter the shower (top or bottom, no trimming required for rear entry) then fit them to the backplate (see fig.12).

Hold the shower vertically against the wall and mark the top hole first.

Drill the hole to take the rawl plug provided (taking care to keep dust away from the shower).



Put the top screw in first leaving it proud by 5mm approximately.

The shower can now be hung on this screw.

Position the shower so that it is vertical then mark and drill the other two holes.

Then fix the shower to the wall. **DO NOT** use any silicone sealant on the backplate.

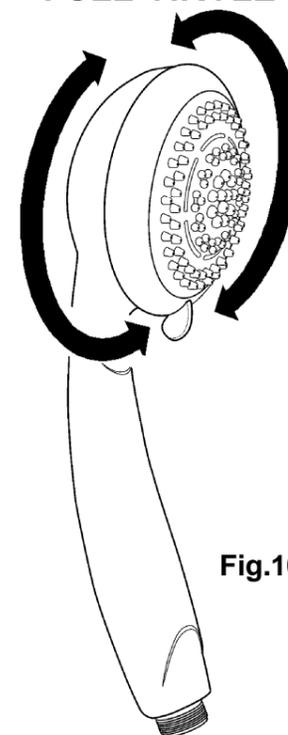
Assemble the accessories as shown in fig. 17 (or fig. 18 for plus or fig. 19 for style accessories).

Fix the riser rail with screws provided. The fixing holes are revealed by removing the plastic fronts.

**Note:** For "plus accessories" ensure that the notch in the riser rail is **fully engaged** into the corresponding lug in the wall bracket. This has been made a **firm fit** to aid stability and stop rotation.

## Handset Operation

**360° FULL CIRCLE**



**Fig.10**

There are a number of defined spray plate setting modes (patterns) adjustable by rotating the spray plate (see Fig.10).

These modes (patterns) have a positive click to identify them.

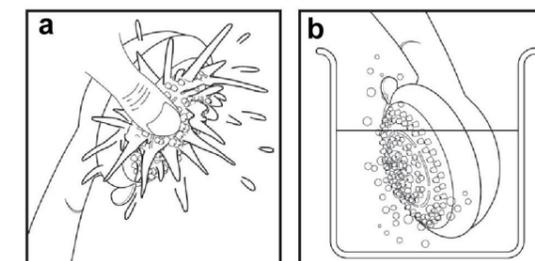
The spray plate rotates through a full circle (360°) in either direction to change the spray pattern.

**In Order To Maintain The Performance Of Your Shower You Must Clean The Shower Head Regularly.**

All water contains particles of lime-scale, which build up in the showerhead and unit reducing the performance.

It is therefore important to clean the showerhead by simply rubbing the rubber nozzles or soaking in proprietary lime-scale remover and rinsing thoroughly before use.

The frequency of this will vary from weekly to quarterly depending on the water hardness and experience.



In some winter conditions, when the incoming mains water is particularly cold it may be necessary to select the inner or outer spray pattern only; this will ensure correct operation of the shower with a slightly lower water flow rate.

After use it is normal for some water to drip from the spray head for a few moments. This helps prevent scale build up over prolonged use.

## Routine Maintenance

It is recommend that as well as checking the showerhead as detailed above, the shower unit, riser rail, hose etc. be cleaned using a soft cloth and that the use of abrasive or solvent based cleaning fluid be avoided, especially on any plated finishes.

We recommend that before any cleaning, the isolating switch be turned off, thus avoiding accidentally switching on the shower.

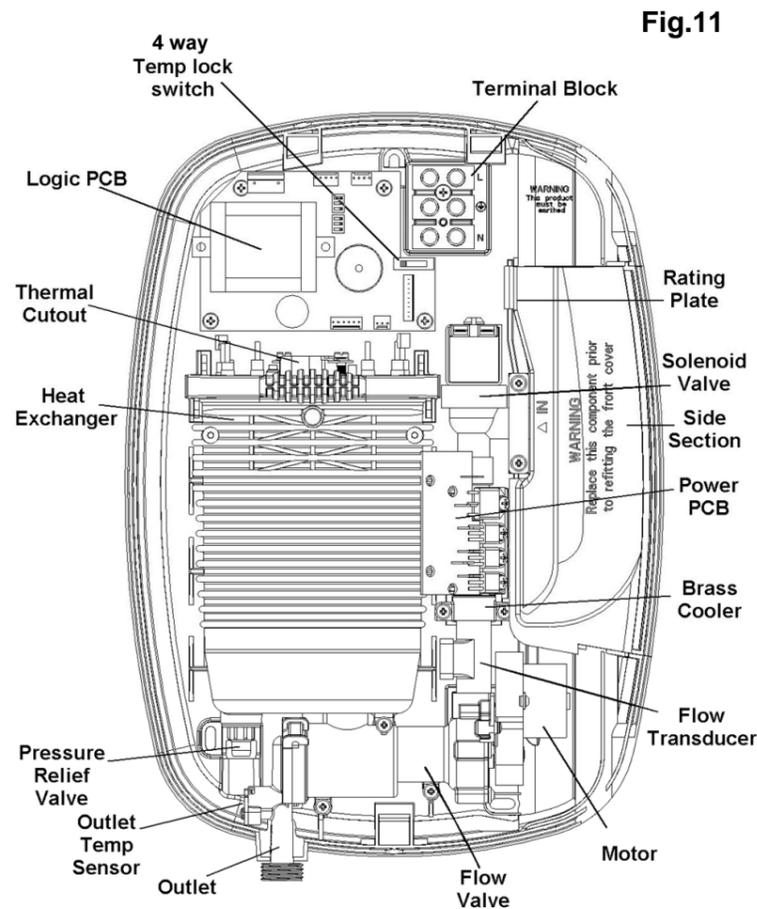
**You Must Regularly Inspect The Shower Hose For Wear And Damage. Replace If Necessary, Or Every Two Years, With Our Approved Part.**

***This appliance is not intended for use by persons (including children and the infirm) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given 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.***

## How Your Shower Works

1. Water is heated instantaneously as it flows over the heaters in the plastic heat exchanger assembly.
2. The shower automatically adjusts the power to the heating elements and flow of water to achieve the selected water temperature. The electronics senses the incoming water temperature and the flow of water through the heat exchanger. It then works out how many heaters to switch on so that the shower temperature matches the temperature selected by the buttons.
3. The amount of hot water available at the selected temperature is limited by the total power of the heater. The ideal flow rate is calculated and adjusted automatically.
4. The water is turned on and off by the solenoid valve built into the shower.
5. A stabiliser is built into the flow valve to automatically compensate for small fluctuations in water pressure that frequently occur in households. There are three further controls to cater for exceptional reductions in water pressure to prevent the shower from getting too hot.
  - a) If the flow of water is less than 1.0 l/min the power to the elements is switched off, but the solenoid valve remains open allowing water to flow through the shower.
  - b) If the outlet temperature sensor senses an excessive temperature the flow of water and the heating elements will automatically switch off. The electronics will signal over temperature condition (see "over temperature shutdown" section).
  - c) A two stage mechanical thermal cut-out is mounted on the top of the heat exchanger independent of the electronics. Stage one switches the power off to the elements if it senses an excessive temperature. The switch operates with an audible click and will reset if cold water is run through the shower. Stage two only operates if an extreme temperature is sensed. The cut out will permanently switch off and it will then have to be replaced.
6. A pressure relief device is fitted to safeguard against abnormal pressure conditions, and provides a level of appliance protection should an excessive build of pressure occur within the shower. If this operates a replacement part will be required.



## Troubleshooting

If the performance of the shower deteriorates in service, follow the checks in the "self help" table below before calling out the contractor.

Any one of the simple adjustments could restore the performance.

If these fail to restore the performance you should seek professional help.

The person who installed the shower is probably the best one to repair it and is certainly the person to contact if you have a problem in the guarantee period.

### Self Help Check List

a) Water too HOT	Press the cooler button when in NORMAL operation. Clean spray plate holes.
b) Water too COLD	Press the warmer button when in NORMAL operation
c) Spray pattern poor	Clean spray plate. Select outer / inner only
d) Display behaves erratically	Switch off electricity at ceiling / isolating switch, wait a few seconds, switch on again. (Note the shower should be switched off each time after use at the ceiling switch.)
e) Water does not flow when start/stop button is pressed	Note: If there is no water flowing then the shower will automatically switch off after about 5 seconds.
lights on	Check the water supply is turned on.
"o" and then "t" flashing in display	Unit in over temperature mode see section on "purging"
no lights	Check ceiling switch is on. Check power is on.
f) Warmer/cooler buttons only adjust between 1 and 5	Unit in "temp lock" mode. See relevant section on how to override.
g) Unit makes a whirring noise, especially at the start of the shower session.	This is normal. There is a motor inside the shower used to adjust the flow and this always operates at the start of each shower.

### Professional Service Check List

This additional checklist is provided for the benefit of the qualified service representative.

### Warning! Switch Off The Electricity At The Isolator Before Removing The Front Cover To Make Checks.

a) Poor temperature control	Check inlet / outlet thermistors to see if they are in circuit. Check for blockage in filter of solenoid valve Check board configuration for correct power rating
b) Water too COLD	Check circuit through thermal cut-out Check circuit through all 4 elements. Test should be done using a low voltage resistance meter whilst the power is switched off at the isolating switch Check circuit through triacs. Check working voltage.
c) Poor or no control over water flow	Replace inlet valve assembly
d) No water when start button is pressed.	Check water supply. Check circuit through solenoid coil. If ok replace logic PCB
e) Unit has been switched off using stop button but can be heard heating the water	Replace triac PCB
f) Pressure relief valve operated	Check for cause of high pressure and remove it. Replace pressure relief valve. (Not covered under guarantee)
g) Temperature buttons have a limited adjustment range	Unit is in templock mode. Remove cover and change position of templock switch to OFF (see fig.16 for location) or explain feature to user <b>Note :</b> For Care Wash installations the Temperature Lock Switch <b>MUST</b> be set to 1 or 2.
h) Shower runs for about 5 seconds and then switches off by itself	Flow transducer fault. Check that internal blade "spins" when the water flows: If not, replace transducer.