



Economy model

Installation instructions

Electrical

- The SELV 12 V DC Power Supply is double insulated and complies with AS1044 (Approval No. A/13542EA). It must be located outside the bathroom, usually in the roof cavity above the shower.
- The shower timer box should be installed against a flat wall to comply with IPX5 standard.
- The power pack comes with 1.2m of lead with a 2.1mm DC plug on the end..
- If the power cable is to come through the wall, be aware of water pipes when drilling around the shower area. Damage can be expensive.
- The lead should enter the shower area within the confines of the shower timer box. It may be possible to enter next to the shower outlet pipe.
- To come down the wall externally from the ceiling, the plaster/rendered wall can be channelled out or surface ducting can be used.
- The cylindrical plug on the power supply lead fits into a socket on the Printed Circuit Board (PCB). This circuit is polarity conscious. That is; it will not operate if the positive and negative are reversed. Squeeze plug and socket between two fingers and thumb to ensure that the plug is fully home. About 3mm of the plug will remain outside the socket (See Fig 1). The display will light up and should alternate between "05" and "01". These are the factory settings – 5 minute Shower time and 1 minute waiting time between showers. It may be opportune to programme the timer now. (See programming instructions).
- Plug the PCB output leads on to the solenoid valve spade connectors as per Figs 1 & 2.
- Fit the box over the valve and be careful to allow room for the wiring. Keep it between the two mounting pegs.



Figure 1

Plumbing

HOT WATER SUPPLY MUST BE MAINS (OR EQUAL) PRESSURE.

SHOWER OUTLET PIPE SHOULD BE PERPENDICULAR TO THE FLAT WALL SURFACE.

PIPES MUST BE FLUSHED OUT TO REMOVE IMPURITIES.

Failure to flush out will most likely cause the Solenoid Valve to malfunction.

The solenoid valve will cut off the water at the completion of the cycle. We recommend that the taps be turned off after each shower but some users will not turn the taps off. This will result in the riser pipe between the taps and shower outlet being under pressure for the first time and for long periods.

The integrity of this plumbing has perhaps never been tested. Please be sure there are no leaking joints hidden in the wall, which will cause dampness in adjoining rooms, etc.

To instal solenoid valve

- Remove shower arm. This valve fits $\frac{1}{2}$ " BSP male outlet pipe.
- Cut outlet pipe squarely and precisely 10mm from the wall surface (tiles?).
TIP: To ensure a square cut, use a nut or a sleeve as a guide for the saw. A 10mm thick board with a 20mm hole will do the job. Plaster board is suitable if you carefully **cut anti-clockwise**.
- Carefully de-burr, flush and clean out the thread including old sealing tape, mortar, grout, etc. Thread must be clean as far back as the wall surface.
- Screw the valve on, counting 4 complete 360 degree turns. Turn valve further clockwise from that position until the coil is in the vertically down (6 O'clock) position (see Fig 1).
Turning more than 5 turns will damage the valve.
- Slip the box over the valve output nipple and check that all sides press firmly against the wall, particularly at the valve end. If not, check the body of the solenoid valve is flush with the wall surface. If not, you must remove the valve and trim a little more off the outlet pipe in order to achieve that.

TIP: Be sure that the wires are located between the two mounting "pegs" rather than caught under one of them.
- Remove the valve counting the number of turns
- Apply white teflon thread sealing tape clockwise to the thread of the outlet pipe. Six turns is not too much.
- Refit the valve counting the same number of turns until the coil is at 6 O'clock. You should be able to turn the valve by hand most of the way. If it is too firm, you risk breaking the valve.
- Turn on a tap and inspect around the valve for any sign of a leak. Leave the tap turned on to ensure that it does not weep.
- Please read the warnings (printed separately).



Figure 2

To fit the box

- Turn taps off. Carefully plug power lead into the socket on the printed circuit board. Squeeze plug and socket between two fingers and thumb to ensure that the plug is fully home. .
- The display will light up.
- Plug spade connectors onto solenoid valve. The 90 degree connectors must be fitted so as to direct the wires toward the wall. (See Fig 2). Beware; some water may come out if timer is running.
- Slip the box over the output nipple of the solenoid valve. Ensure that the wiring is not obstructed within the box. It must be between the mounting pegs. The solenoid valve will locate the box vertically.
- Apply the thread sealing tape and the convex flange. Screw on the shower. Do not flatten the flange. **Do not over tighten. That extra half a turn will break the valve!**

TIP: A trial fitting prior to applying the thread tape will indicate the number of turns required to just slightly depress the flange plate with the shower arm in the correct position. .

- Hold the box firmly while screwing on the shower arm. Use more tape if necessary, rather than over tighten to hold the shower firmly.
- The shower / flange will hold the box against the wall.
- Start the timer, turn on water tap and check for leaks at the valve output.

Do not seal the breather holes at the top and bottom of the box.

Where added security is needed the box can be screwed to the wall through the two access holes in the front:

Tap out the blanking plugs on the front of the box by pushing through the screw holes from the rear. Mark the wall for the mounting screws.

Remove the box, drill the wall and use 6 gauge x 25mm stainless screws. If there is any doubt about the presence of water pipes, use double sided adhesive tape or silicon to secure the box to the wall rather than screws.

NOTE

If the “swinging arm” model of shower is used we recommend that the box be screwed to the wall for extra support. Nevertheless, damage to the solenoid valve is possible if the arm is raised or lowered without loosening the friction nut. Such damage will not be covered by our warranty.

PROGRAMMING

- To enter programming mode, disconnect power for 30 seconds minimum. After the initial **installation it may be necessary to remove power at the fuse box.**
- Within 2 minutes of re-connecting power to the timer, press the Start button and hold for 10 seconds. The buzzer will sound 2 beeps and the display will show "P1".
- Repeatedly press the button to cycle through the program options. When the desired shower setting is displayed, press and hold the button for approximately 4 seconds (holding for 10 secs will take you out of programming mode). To confirm your selection, the buzzer will beep when you release the button.

If you want to change the waiting (Lockout) time between showers, repeatedly press the button again to advance to the desired waiting time. Press and hold for 3 seconds. (Buzzer will not beep until you release the button).

- The display will flash on all settings except the currently selected options.
- Holding the button for 10 seconds will return the timer to Normal mode. Failure to press the button during any period of 30 seconds will also return the timer to Normal mode.
- See table below for cycling sequence.

The following table shows the shower and waiting time options relating to the display shown during programming mode:

DISPLAY	SHOWER	WAITING
P1	1 Minutes	
P2	2 Minutes	
P3	3 Minutes	
P4	4 Minutes	
P5	5 Minutes	
P6	6 Minutes	
P7	7 Minutes	
P8	8 Minutes	
P9	9 Minutes	
10	10 Minutes	
11	11 Minutes	
12	12 Minutes	
00	Disabled	(no shower)
L0	(no waiting)	Disabled
15		15 Seconds
30		30 Seconds
L1		1 Minute
L2		2 Minutes
L5		5 Minutes