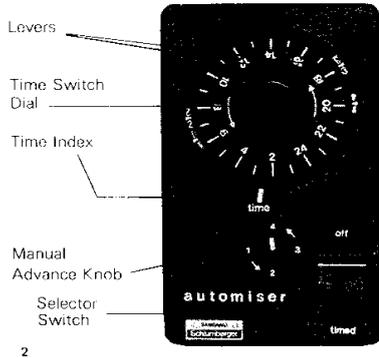


M7 AUTOMISER

INSTALLATION & USERS INSTRUCTIONS



TIME SWITCH:

The easy-to-read 24-hour dial is marked every hour and fitted with two 'ON' and two 'OFF' levers. The 'ON' levers, numbered 1 and 3 are red and the 'OFF' levers, numbered 2 and 4 are black. These numbers correspond to the numbers around the ADVANCE control knob.

To set the time levers, push each one in and slide it either clockwise or anti-clockwise to the appropriate time. After setting the levers, turn the time switch dial anti-clockwise for one complete turn and then continue turning until the time of day is in line with the time index.

SELECTOR SWITCH:

This switch gives you a choice of switching operations.
TIMED: All time levers are effective so there are 2 on/off operations per day (unless the ADVANCE knob is used).
OFF: Time levers non-effective (ie continuously OFF). A neon is incorporated to show ON/OFF operation of levers.

NOTE The dial continues to turn irrespective of the switch setting.

ADVANCE KNOB:

The ADVANCE knob indicates the number of the last time lever to pass the time index. If you wish to advance any operation you should:- Turn the ADVANCE knob until it indicates the number of the time lever whose operation you wish to anticipate.

Assuming the time levers are set thus: -

Lever 1 ('ON')	at	6 (6am)
Lever 2 ('OFF')	at	8 (8am)
Lever 3 ('ON')	at	17 (5pm)
Lever 4 ('OFF')	at	19 (7pm)

The following examples will demonstrate the facilities provided by the Advance Knob without any cause to move levers or Time Switch Dial.

EXAMPLE 1

If after 6am you wish the immersion heater to switch off before 8am turn the knob which will be indicating 1 to indicate 2. This will immediately anticipate the action of lever 2 ('OFF') and the circuit will be 'off' and remain 'off' until lever 3 ('ON') passes the time index at 5pm.

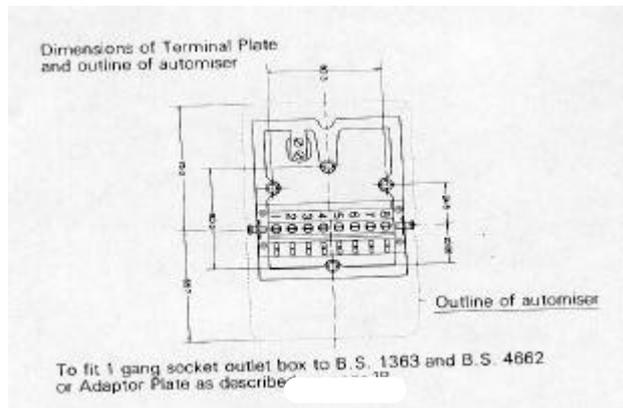
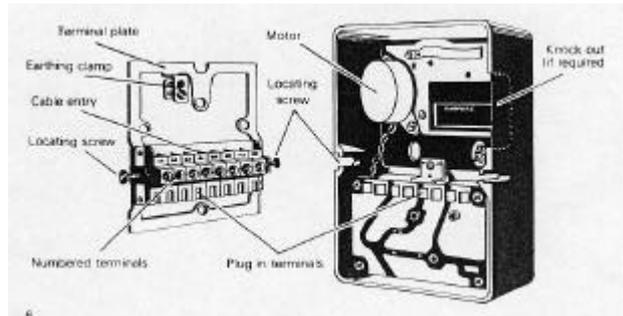
EXAMPLE 2

If after 8am you do not require hot water until the following morning (ie you wish to omit the evening operation) turn the knob which will be indicating 2 to indicate 4. This will immediately anticipate the action of lever 4 ('OFF') and the

circuit, already at 'off' will remain 'off' until lever 1 ('ON') passes the time index at 6am the following morning.

EXAMPLE 3

If more hot water is required after 7pm turn the knob which will be indicating 4 to indicate 1. The circuit will come 'on' and would remain 'on' until lever 2 ('OFF') passes the time index at 8am the following morning. To avoid unnecessary waste of electricity, it must be remembered to turn the knob to indicate 4 as soon as hot water is no longer required. This will switch the immersion heater off and allow the Automiser to continue with its set programme.



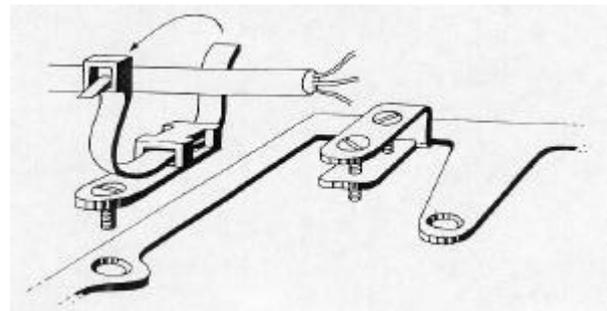
To fit 1 gang socket outlet box to BS 1363 and BS4662 or adaptor plate as described

INSTALLATION & WIRING INSTRUCTIONS

The following instructions are shown step by step to enable the Automiser to replace the existing manual switch.

If the immersion heater has a flexible cable fitted to the existing switch, this must be clamped with a re-useable tie as shown.

METHOD OF CLAMPING FLEXIBLE CABLE



It is essential that all electrical wiring conform to the requirements of: IEE Wiring Regulations, Local

Government Regulations, The Building Standards (Scotland) where applicable

WARNING

If your original manual switch was installed without an EARTH connection DO NOT proceed with the installation but consult a qualified electrician.

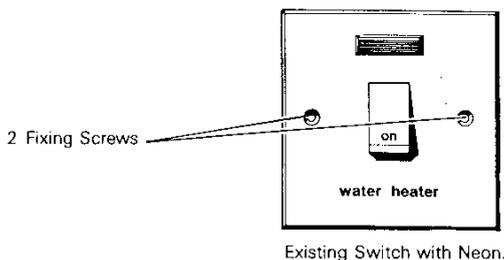
The first set of instructions shows how to replace a switch fitted to a single gang outlet box sunk into the wall.

STEP 1

Switch off electric supply at the main fuse box.

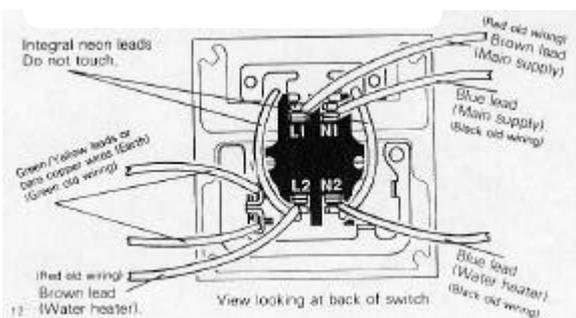
STEP 2

Unscrew 2 fixing screws and pull switch out from wall to expose connections.



STEP 3

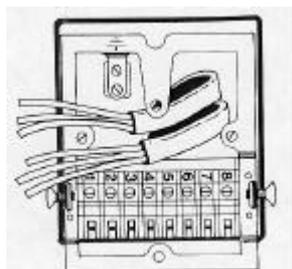
Remove leads from switch, marking each one in accordance with existing markings 0 L1, N1, L2, N2 and earth.



STEP 4

Remove Automiser terminal plate from packing case, pass cables through and fit to outlet box with 2 screws supplied in automiser packaging.

NOTE: Ensure that the Terminal Plate is fitted the correct way up, as shown.



STEP 5

Connect as follows:



L1 (Main supply) Colour brown, into terminal 1 (old wiring red)
 N1 (Main supply) Colour blue, into terminal 8 (old wiring black)
 L2 (Water Heater) Colour brown, into terminal 3 (old wiring red)
 N2 (Water Heater) Colour blue, into terminal 6

Both Earth leads colour Green/Yellow (old wiring Green) into earthing clamp on Terminal Plate.

NOTE: Ensure that leads are bared only sufficient to enable good connections.

STEP 6

Ensure terminal screws are tight and push cables back into outlet box to avoid interference with the Automiser, special attention to be paid to area behind motor.

Loosen locating screws on terminal plate.

Unpack and fit Automiser by pushing onto Terminal Plate and tighten locating screws.

STEP 7

Switch on electric supply at Fuse Box.

Switch selector switch on Automiser to "Timed".

Rotate Time Switch dial ensuring that the neon lights when levers 1 and 3 pass the time index and goes out when levers 2 and 4 operate.

Set levers to required times on dial and set dial to time of day (ie align time of day on dial to time index).

NOTE: Refer to picture and information given at the beginning of this information.

FAULTS

Neon 'ON' continuously regardless of Selector Switch position.

Dial stops when Selector Switch is 'OFF' and when levers 2 or 4 operate. Neon operates continuously while Selector Switch is set to 'Timed'.

Dial stops when Selector Switch is 'OFF'.

Automiser operates correctly but water is not being heated.

REASON

Main supply and immersion heater cables have been reversed.

Main supply LINE cable and immersion heater LINE cable have been reversed.

Main supply NEUTRAL cable and immersion heater NEUTRAL cable has been reversed.

Immersion heater cable has not been connected or immersion heater is faulty.

IF IN ANY DOUBT REGARDING THE INSTALLATION, CONTACT A QUALIFIED ELECTRICIAN.

To replace an existing switch which is surface mounted (ie the single gang outlet box is NOT sunk into the wall but fitted directly onto the wall).

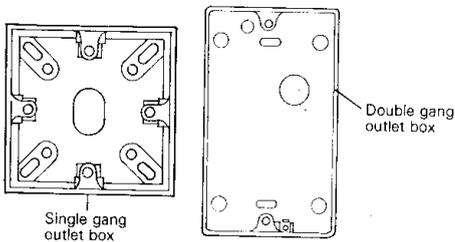
Purchase from your electrical dealer a pack manufactured by: EGATUBE Ltd, St Asaph, CLWYD, North Wales, LL17 0ER. Reference No. CS 2102, comprising a two-gang outlet box, and adaptor plate and two fixing screws.

This pack has been designed to accommodate the Automiser and will enable you to install it more easily.

Proceed as follows: follow steps 1, 2 and 3 as previously described.

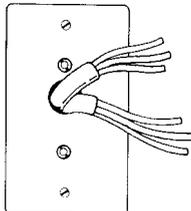
STEP 4A

Unscrew single gang outlet box from wall and fit double gang box from the Egatube pack in its place. This may require repositioning of wall plugs to enable a suitable entry for the cables.



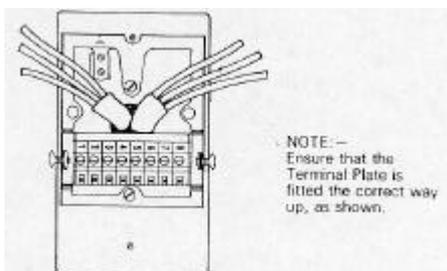
STEP 5A

Fit adaptor plate from Egatube pack to the two-gang outlet box with the two screws provided in pack, threading adaptor plate over cables.



STEP 6A

Remove Automiser terminal plate from packing case, pass cables through and fit to adaptor plate with the two screws supplied in automiser packaging.



STEP 7

Connect as follows:



L1(Main supply) Colour brown, into terminal 1 (old wiring red)
 N1(Main supply) Colour blue, into terminal 8 (old wiring black)
 L2(Water heater) Colour brown, into terminal 3 (old wiring red)
 N2(Water heater) Colour blue, into terminal 6

Both Earth leads colour Green/Yellow (old wiring Green) into earthing clamp on terminal plate.

NOTE: Ensure that leads are bared only sufficient to enable good connections.

Ensure terminal screws are tight and push cables back into outlet box to avoid interference with the Automiser, special attention to be paid to area behind motor.

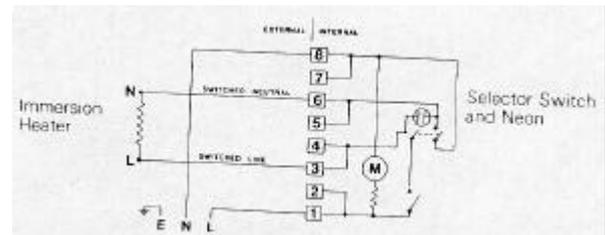
Loosen locating screw on terminal plate.

Unpack and fit Automiser by pushing onto terminal place and tighten locating screws.

STEP 8

Switch on electric supply at fuse box.
 Switch selector switch on Automiser to "Timed".
 Rotate Time Switch dial ensuring that the neon lights when levers 1 and 3 pass the time index and goes out when levers 2 and 4 operate. Set levers to required time on dial and set dial to time of day (ie align time of day on dial to time index).

WIRING DIAGRAM



This product is guaranteed by your supplier for 1 year from the date of installation. If it should become defective please contact your installer or supplier for a replacement unit.

Voltage rating:	220/250V 50Hz
Contact rating:	13A resistive load, tested at +10% max.
	Current to BSI 3955 part 3, 3.0A
inductive load.	
Exposure of live parts:	Enclosed
Moisture protection:	Ordinary
Dirt protection:	Normal situations
Shock protection:	Class 1
Ambient temp range:	0°C to 50°C

IMPORTANT

Although every care is taken to ensure the accuracy of he electrical circuit diagram shown. Sangamo Time Controls or associated companies cannot be held responsible or liable for the circuit connections other than those directly associated with the Automiser.

ELECTRICAL CONNECTIONS
IF IN ANY DOUBT CONCERNING THE INSTALLATION ,
CONSULT A QUALIFIED ELECTRICIAN.

WARNING
THE AUTOMISER MUST BE EARTHED. TERMINAL
ARE FOR FIXED/FLEXIBLE WIRING. PROVISION FOR
CLASS A DISCONNECTION OF THE
SUPPLY MUST BE MADE IN THE FIXED WIRING.

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