## INSTALLATION INSTRUCTIONS

## Centroller 3000+

## GENERAL

This kit comprises: -
1 Centroller Type 67-040-15 complete with detachable wall plate, type 67-07068
1 Room Senstat Type 67-040-20
1 Tank Senstat Type 67-040-30
1 Length of expending band plus two hooks Type 67-090-09/10 1 Fuse 25 mm (BS1362) rated at 5 amps. The Centroller 3000 must only be used with theses senstats.

The main supply to the equipment should be connected either by a plug and socket or double pole switched outlet. The circuit should be fused with appropriately rated fuses, never greater than 5 amps. A 5 amps plug fuse is supplied.

All wiring must conform to the current edition of the IEE Wiring Regulations. In addition it should be noted that any wiring in close proximity to the boiler or hot water cylinder should be rated at $85^{\circ} \mathrm{C}$.

## THIS EQUIPMENT MUST BE EARTHED.

Suitable for general wiring is PVC insulated and sheathed flat twin with CPC $1 \mathrm{~mm}^{2}$ to BS 6004. (BICC type 6242Y or equivalent)

Suitable cable for high temperature wiring is rubber insulated HOFR sheathed
flexible cord 300/500v $0.5 \mathrm{~mm}^{2}$ to BS 6004 (BICC type 3182TQ or equivalent)

Both thermostats must be wired using PVC insulated and sheathed cable (BICC type 6192Y or equivalent is suitable)

All connections to centroller must be made via the detachable wall plate supplied with the equipment. Each terminal is suitable for up to $41 \mathrm{~mm}^{2}$ conductors - fixed wiring only. If high temperature flexible cord is used, it must be terminated in a suitable junction box with cord grips before completing the run with fixed wiring.

## TECHNICAL SPECIFICATION

Working Voltage 220-240v 50HZ. Rating of Switched Circuits 5 amp resistive 2
amp inductive.
Temperature $0^{\circ} \mathrm{C}$ to $40^{\circ} \mathrm{C}$.
INSTALLATION:

## NOTE:

Before commencing any wiring ensure that the main electricity supply is switched off.

## Centroller:

1. Select the exact position that the unit or to be mounted.
2. Electronic controllers are best placed in a clean dry position were they are not affected by condensation or undue heat from the boiler or other domestic appliances.
3. The Centroller can be mounted directly onto a wall or onto a two-gang switch box with 121 mm fixing centres, (size UA2 - BS 4662).
4. Unscrew and unclip the wall plate from the Centroller and fix the wall plate in the required position using standard M3.5 fixing screws for switch box mounting or woodscrews and wall plugs for direct wall mounting.


BASIC SYSTEM PUMPED HEATING
ON LOW WATER CONTENTBOILERS


TYPICAL CIRCUITS


HONEYWELLY PLAN FLOW SHARE
 BOILERS WITH PUMP CONTROLLED BY BOILER INTERNAL WIRING
FOR FULL DETAILS SEE BOILER MANUFACTURERS INSTRUCTIONS
5. Run the cables through the appropriate channels for direct well mounting or feed the wires through the cut outs if fitting to a switch box. Wire in accordance with the appropriate wiring diagram noting that the installation is suitable for fixed wiring only. Senstat cables must not be run in close proximity to mains supply cables otherwise disturbing pick-up might result.
6. Carefully mount the Centroller onto the wall plate and tighten the fixing screws.

## Room Senstat:

7. The Senstat is suitable for direct wall mounting and also for fitting on to a circular small conduit box (size 60.3 mm dia,, 50.8 mm fixing centres). It should be fitted onto an inside wall at approximately 1.5 meters from the floor ensuring that the ventilation slots are unrestricted and on the top and bottom surfaces.
8. There is generally a considerable variation of temperature within a particular area and a location should be chosen which as near as possible represents the conditions required. This should not be a draughty position, nor where independent heating may have an effect.
9. Wire the Senstat in accordance with the wiring diagrams using the specified cables. Note that these are electronic units and must never be connected to main supply.
10. After replacing the cover it must be locked by firmly pushing the securing buttons into the two holes in the cover.

## Tank Senstat:

11. The tank Senstat should be mounted approximately $1 / 3$ rd of the way up the domestic hot water tank. A higher location will decrease the mount of water available at the demanded temperature, a lower location will allow the temperature of the water at the top of the tank to rise considerably above that demanded.
12. The back metal bracket should be in good thermal contact with the copper tank. If the tank is of the pre-insulated type, great care should be taken to ensure that all the insulation is removed from the mounting area.
13. The Senstat is held in good thermal contact with the tank by the expanding wire band. Measure the circumference of the tank and cut the band to $90 \%$ of this length. Fit the two wire hooks and after passing the band around the tank, hook the two ends together to form a tight band the tank.
14. Wire the Tank Sentat in accordance with the wiring diagrams using the cable specified and after replacing the cover lock it by firmly pushing the securing buttons into the two holes in the cover. Note that these are electronic units and must never be connected to the main supply.
15. Slip the Senstat under the wire band to clamp the bracket firmly to the tank.
16. The Tank Senstat may be covered with an insulating jacket if required. The accuracy will not be affected.

## TEST PROCEDURE:

## General:

After installation and a complete inspection of wiring, the following checks should be carried out. This will confirm that the system is operational and that all the controls are functioning correctly.

## Switching On:

Switch on the main electricity supply and referring to the User Instructions, check that pre-set programme is displayed when the appropriate buttons are pressed. With the HEATING and HOT WATER selectors in the OFF position, check that the boiler and pump are off and any valves are in the rest position.

## Check Time Setting - see User Instructions

Follow the instructions for setting 'actual time and confirm that the clock is functioning correctly.

## Check Central Heating - see User Instructions

Move the HEATING and HOT WATER selectors to 'off'.
Ensure that the programmed temperature for the indicated time is higher than the present room temperature and move the 'HEATING' selected to 'on continuous'. Check that the central heating is switched on.

Re-programme the room temperature to a value lower than the present temperature and move the 'HOT WATER' selector from 'off' to 'on continuous' and back to 'off'. This will force the Centroller to read the room temperature immediately instead of at one-minute intervals. Check that the central heating is shut off.

## Check Hot Water-see User Instruction:

Move the HEATING and HOT WATER selectors to 'off'. Ensure that the programmed hot water temperature is higher than the present tank temperature and move the HOT WATER selector to 'on continuous'. Check that the system operates to heat the hot water.
After a period long enough for the hot water temperature to have risen above $52^{\circ} \mathrm{C}$, reprogram the hot water temperature to a value lower than the present water temperature.
Move the 'HEATING' selector from 'off' to 'on continuous' and back to 'off' to force the Centroller to read the tank temperature immediately. Check that the hot water heating is shut-off.

## Check Hot Water Boost-see User Instruction

Move the HEATING WATER selectors to 'off'.
Set the programmed hot water
temperature to a value above the present tank temperature and move the 'HEATING' selector from 'off' to 'on continuous, and back to 'off'. This will force the Centroller to read the temperature immediately and will set the tank temperature into the memory. Press the green 'Hot Water Boost' button and check that the button cap is illuminated and that the system operates to heat the hot water.
Press the 'Hot Water Boost' button a second time. The boost programme will be cancelled, the cap light will go out and the water heating will be shut-off.

## Check Programming:

Refer to the user instructions for Programming and Operating details and set in the required programme.

## Warranty

Centroller Limited accepts no liability for any claims arising from any failure to observe these Installations Instructions and will seek to be indemnified in respect of any such claims.

