

## CHPRSTATDP

### Digital Programmable Thermostat Installation Instructions

The latest ESP product manuals can be found on-line:



#### 1 / Specifications:

- Power supply: 4xAAA 1.5V Alkaline batteries
- Battery lifespan: 1 year
- Contact rating: 3A, 230V AC
- Temperature display range: 0-50°C (increment 0.1)
- Temperature control range: 5- 35°C (increment 0.5)
- Temperature accuracy: +/-1°C
- Switching differential: +/-0.5°C or +/-1.0°C selectable
- Operating temperature: 0 - 50°C
- Flexible wire size: 0.5-1.5mm<sup>2</sup>
- Rigid wire size: 0.5-2.5mm<sup>2</sup>
- Clock accuracy: <1sec / day
- Protection rating: IP30
- Dimensions: 140\*88.6\*32.1mm
- Mounting: Surface mounting with wall plate

#### 2 / Front View, Back View : Fig. 1 and Fig. 2

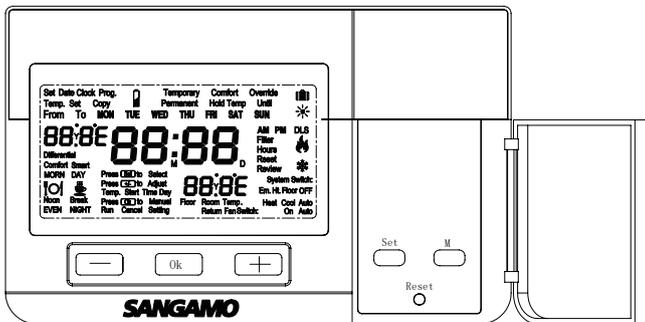
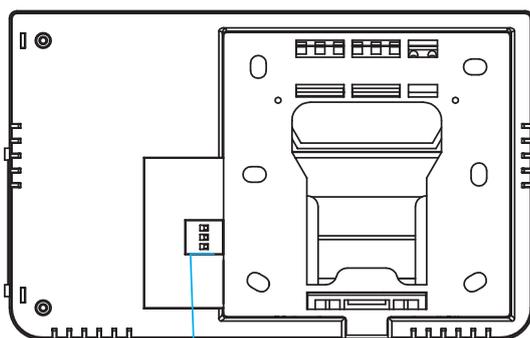


Fig. 1



- TPI ON
- Optimum Start
- Delayed Stop ON
- TPI OFF
- Delayed Start
- Delayed Stop OFF

Fig. 2

#### 3 / Wiring Diagram:

• Connect the 230V 50Hz mains supply and load cables to the terminal block which are marked as follows:

• Note:

1. Check boiler instructions before connecting.
2. The 4th terminal is not to be used

230VAC 50Hz /  
MAINS SUPPLY

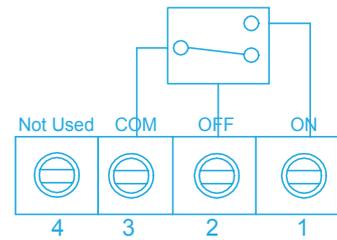


Fig. 3

#### 4 / Pre-Installation Set Up:

Before installation, the installer needs to set the DIP switches first. The DIP switches are located on the rear of the programmer (see Fig. 2).

• TPI ON/TPI OFF: The default setting is TPI off. When TPI is set to off, the thermostat will work based on hysteresis algorithm. With this algorithm, when the difference between the room and the setpoint temperatures is less than the sensitivity threshold (0.5°C and 1.0°C optional, please refer to the operation guide for setting the sensitivity threshold/switching differential), the thermostat considers it has reached the setpoint temperature.

When TPI is set to on, initially only hysteresis algorithm is available. After your thermostat has been in use for a short duration, the thermostat will have learned your home characteristics, such as your thermal inertia and your heating insulation. then the thermostat will switch to work as per TPI control automatically for a better temperature regulation. if the location of the thermostat is changed from one room to another room, the user needs to set the DIP switch to OFF position first and then reset to ON position again, so that the thermostat can relearn your room characteristics for best TPI performance.

• Optimum Start/Delayed Start: The default setting is optimum start. When this mode is selected, you set the time you want to be warm and Optimum Start will do the rest. On warmer days it will start later. Optimum Start ensures that you are warm when you want to be (and not before), reducing wasted energy and saving money.

When delayed start has been selected, You set the earliest start time, based on an estimate and Delayed Start will do the rest. Delayed Start will delay the boiler firing time on warmer days, when it is possible to save energy.

• Delayed Stop ON/ Delayed Stop OFF: The default setting is Delayed stop OFF. When Delayed Stop is OFF, the thermostat will turn off the heater as per hysteresis algorithm or TPI control normally. When Delayed Stop is ON, the thermostat will calculate how long the house will take to cool down, then turns off the boiler at the earliest possible moment, when it calculates that the temperature will not decay by more than 1/2°C

#### 5 / Installation Guide:

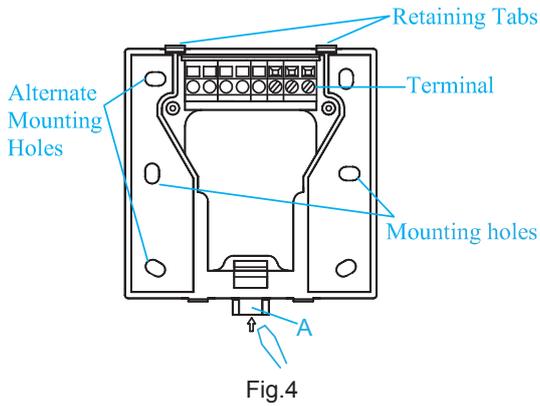
1. Remove the mounting plate from the unit by prying off the mounting plate in position A (as showing in Fig. 4) with a screwdriver, and pivoting the bottom of the unit outwards. The CHPRSTATDP body can then be lifted off.

2. Using mounting screws provided secure the mounting plate directly to the wall or the pattress box.

3. Set the required DIP Switch position ( refer to DIP Switch Setting above).

4. Carefully remove the plastic terminal cover. Terminate the cables into the terminal block ensuring correct polarity is observed (See Fig. 3 Wiring Diagram). Re-position the plastic terminal cover and screw into place.

5. Engage the top of the CHPRSTATDP onto the mounting plate retaining tabs, and push firmly to reinstall the unit onto the mounting plate.



Date Issued	Issue No	Description
J20	A30-CHPRSTATDP-01-2	Rev.1

**Health & Safety**

This unit must be installed by a suitably qualified person in accordance with the latest IEE Wiring Regulations. Isolate mains supply before commencing installation. Please read all installation instructions before proceeding. Example circuit diagrams for typical installations are shown. These diagrams are schematic and should be used as a guide only. Please ensure that all installations comply with the current IEE regulations. For reasons of space and clarity not every system has been included and the diagrams have been simplified, for instance some Earth connections have been omitted. Other control components shown in the diagrams i.e. Valves, Room Stats etc. are general representations only. However, the wiring detail can be applied to the corresponding models of most manufacturers. Your product is not user serviceable. Do not dismantle this product. Due to our policy of continuous product improvement and development, the specifications in this guide may be subject to change without prior notice.

**Elite Security Products**  
**Unit 7, Target Park, Shawbank Road,**  
**Lakeside, Redditch, B98 8YN**

**Tel: 01527 515150**  
**Fax: 01527 515143**  
**Email: info@espuk.com**  
**Web: www.espuk.com**

