



## Product Overview

The AX97 "wireless" room thermostat is designed to offer the user multiple functions that can be enabled to suit the requirements of the installation. It offers the ideal solution for bringing energy wasting installations, with no control, up to date without damaging existing room decorations.

The room thermostat (transmitter) incorporates a Passive Infra Red (PIR) detector, which can be disabled by linking a bridge terminal inside the thermostat. With the PIR activated it is possible to introduce an adjustable setback facility which can be set from 5°C to 20°C, for instances when the room is unoccupied. This setback adjustment is made on the receiver unit. In this mode of operation, the temperature of the room is kept at the setback level until occupancy is detected; the unit then switches to the dial or tamperproof temperature setting. This setting is maintained until the PIR senses that there has been no movement for a ten minute period. It then switches the unit to the setback setting, which is maintained until movement is detected and the cycle is then repeated.

## Features

- "Wireless" Thermostat
- Built in Motion Detector
- Suitable For Loads Up To 3kW
- 65 million address codes
- Energy saving function
- Accurate Temperature Control

## Product Specifications

<b>Setback Range:</b>		5°C to 20°C
<b>Occupied Temperature Setting:</b>		15°C to 25°C
<b>Timer:</b>		10 minutes roll on
<b>Maximum Load:</b>		3kW
<b>Batteries:</b>		3 x standard "AAA" LR03
<b>Dimensions:</b>	Receiver	145 x 85 x 32mm
	Transmitter	120 x 70 x 25mm
<b>Frequency:</b>		433MHz
<b>Receiver Range:</b>		30 Metres
<b>Max Range PIR:</b>		6 Metres
<b>Country of Origin:</b>		United Kingdom

## Order Codes

<b>AX-WIRT-9700</b>	-	Wireless Room Thermostat and Receiver
<b>AX-WIRT-000T</b>	-	Wireless Room Thermostat only
<b>AX-WIRT-000R</b>	-	Wireless Receiver only

### NOTE:

A link on the room thermostat disables the temperature setting dial and converts the thermostat into a tamperproof unit. When this function is used the required room temperature is set at the receiver unit.

Power to the room thermostat is supplied by three standard "AAA" 1.5V batteries, an audible alarm is activated when the batteries require changing.

As the maximum load is 3kW, the AX-WIRT- Series is ideal for controlling electric convectors, however in conjunction with AXIO thermoelectric heads the unit can be used in "wet" underfloor & radiator installations.

### INSTALLATION INSTRUCTIONS IMPORTANT, PLEASE READ CAREFULLY

The Axio AX -WIRT- Intelligent room thermostat, consists of a battery operated "wireless" thermostat (transmitter) and a mains receiver unit.

A qualified electrician should install this unit according to the instructions. Current safety regulations must be observed. Under no circumstances should electrical connections be made whilst power is supplied to the unit. Only install the receiver in dry, enclosed rooms.

#### Receiver Electrical Connections

The Receiver is for use with 220/240Vac 50Hz supply.

The unit must not be connected whilst power is applied.

The maximum load of 3kW must not be exceeded.

Remove the front cover and mount the back plate containing the PCB to the wall, so that the cable inlet is at the bottom. With the power isolated, connect LIVE to the "L" terminal, connect the LIVE connection from the terminal valve or heater to terminal marked "OUT". Neutral connections are made to the terminals marked "N".

On no account run cabling across the PCB as this can affect reception and cause possible malfunction of the unit. If installing in a open area ensure that the cable into the receiver is suitably covered by mini trunking. If using in conjunction with fan convectors or electric heaters, ensure that the receiver is not positioned too close as to be affected by the heat emission. Although the Receiver unit does not require an "Earth" connection, the terminal marked "E" is available, should an earth cable require terminating.

If utilising the PIR function, set the unoccupied or "Set Back" temperature (fig 1) to the required value.

Position the link on "TEMP SET" (fig 2) over the centre & top pin for dial adjustment or over centre and bottom pin for Tamper Proof adjustment. If tamperproof adjustment is set, the room temperature can now be set at "TAMPER - PROOF TEMP - SET" (fig 3)

Place the link fitted onto "MODE" (fig 4) so that the bottom and centre link are covered.

**DO NOT REFIT THE LID AT THIS POINT AND DO NOT PUT POWER TO THE RECEIVER UNIT.**

#### Room Thermostat

To set the room thermostat to the required mode of operation, carefully remove the temperature adjusting dial and unscrew the cover retaining screw. If you require the thermostat to operate as an "on/off" unit, without occupancy detection (setback) facility, remove the link positioned on one pin of "T1" (fig 5) and refit to cover both pins, otherwise leave as fitted.

The exact location of the thermostat will need to be determined with consideration for the best effect as regards ambient room temperature & interference, maximum PIR range and body temperature.

Do not mount the thermostat over a heat source, in direct sunlight, behind curtains, close to appliances that give off heat or in a position where the signal may be affected by metallic objects. Do not remove the battery isolation tab until you are ready to put the thermostat into operation.

#### Operation

The AX-WIRT Intelligent Room Thermostat can now be put into operation.

Switch power to the Receiver unit, remove the battery protection tab from the Room Thermostat, hold down the code setting button (fig 6) for 2 seconds and release. The code accepted red LED (fig7) on the receiver will come on, confirming that the room thermostat is transmitting information to the receiver. This confirmation LED will remain on so long as power is connected to the receiver unit and the room thermostat has active batteries installed. In the event of a power failure or changing batteries there is no need to re-code the receiver unit.

Switch off power, remove the link on "MODE" Fig 4" and refit so that the top and middle link are covered. Switch on power, ensure 'code' accepted LED lights within one minute, fit cover and screw onto base.

An audible alarm in the form of a short intermittent beep indicates that the batteries require replacing, a double intermittent beep indicates that the batteries are nearly depleted. Always replace the three batteries.

**PIR Mode** - the PIR will detect body movement and if in set back mode will automatically place the unit in occupied mode until no occupancy is detected for a period exceeding 10 minutes, when the unit will revert to the setback setting until occupancy is detected again.

**On/Off Mode** - the room thermostat will operate and maintain the temperature set on the dial or in the case of tamperproof, the temperature selected on the receiver.

