1. Getting Started

Amuheat's AT8V3 touch screen thermostats are specifically designed for underfloor heating systems. The thermostat offers automated temperature control of the air temperature, floor temperature or control of air temperature whilst maintaining the floor temperature within desired limits using an external temperature sensor.

When your thermostat is first connected to mains power, wait for about 30 seconds until the touch pad has self-adjusted. Press the POWER button to turn on/off the thermostat. When your thermostat is turned off, the LCD will display OFF.

LCD Display & Button Legend

🔒	The screen & buttons are locked
	Heating is turned on
❄	Frost protection activated
PROGRAM 1,2,3,4	Program number
	Manual mode
AUTO	Automatic mode, executes the programmed schedules
OVERRIDE	Temporary temperature override
Er	The floor sensor is not being read by the thermostat
▲	Increase
▼	Decrease

2. Setting Clock & Day

This thermostat is fitted with a real time clock. It is essential that the clock time and day are set accurately if you require your programmed events to start on time. To set follow the steps below:

1. Press TIME and the time will start flashing. Use the up and down buttons to set the time. By holding the arrow button down the time will change faster.

2. Press NEXT to move to the Day setting and use the up and down buttons to set to day.

3. Press OK to store and exit.

3. Customise Controller Settings

To enter into the setting menu follow the steps below:

1. Turn the thermostat off by pressing POWER .

2. Press MENU and you will then see menu 01.

3. Use the up and down arrows to adjust the selected menu setting (refer to table below).

4. Press NEXT to move to the next Menu and repeat step 3 through all menu option sets (refer to table below).

5. Once you have all the options set press OK to accept and store.

Menu	Feature
01	**Operation Mode Selector** 00 = Auto (default) 01 = Permanent manual mode
02	**Sensor Selector** F mode = control of floor temperature via installed floor probe sensor (default) A mode = control of air temperature via internal sensor AF mode = control of air and floor temperature via internal &floor sensor probe *Tip: Choose mode A for direct heating or where no floor sensor is installed, mode F for background heating or floor warming only, mode F for timber & vinyl floors heating*
03	**Maximum Floor Temperature Selector (F & AF mode only)** This is to protect the floor surface (default 28 °C).
04	**Floor Temperature Calibration** This is to re-calibrate the floor temperature if required between -25°C to +25°C (default 0 °C).
05	**Air Temperature Calibration** This is to re-calibrate the air temperature if required between -5°C to +5°C (default 0 °C).
06	**Temperature Screen Readout (AF mode only)** This gives you the option to display the Air Temperature (A), Floor Temperature (F), or to show both Air & Floor Temperatures (AF) in intervals (default AF).
07	**Frost Protection** When turned on and the temperature falls below 5°C, the heating will automatically turn on to maintain minimum 5°C. On = activated Off = deactivated (default)
08	**Program Mode Selector** This allows you to program either 5 days at once, then the 2 days of the weekend separately, or a full 7 days at the same time, or 7 days separately. 01 = 7 day programmable (default) 02 = 5+2 day programmable
09	**Clock Format** You can select the clock to show in either 12 or 24 (default) hour time

Menu	Feature
10	**Switching Differential** The number of degrees difference before switching. The default is 1°C which means the thermostat will switch the heating on 1°C below the set temperature and will turn it off 1°C above the set temperature. With a 2°C differential the heating will switch on 2°C below the set temperature and will switch off 2°C above the set temperature.
11	**Screensaver** This allows you to have the screen turn off after 30 seconds of touch inactivity. On = activated (default) Off = deactivated
12	**Software Version** This is for review only.
13	**Factory Reset** This allows you to reset your thermostat to factory default. Press and hold the down button until you see RES on screen.

4. Operation

The thermostat has 4 time programme periods of operation. When the appears on your screen, the heating is activated.

AUTO Auto Mode

This thermostat has the ability to programme each individual day of the week separately, or programme 7 days of the week at once. You can also programme weekdays (5 days) to one schedule and then weekends (2 days) to a different schedule. Refer to MENU 08 to set this up.

Default Schedule (7 days)

Prog.	Start Time	Set Point	Explanation
1	WAKE 04:00	24 °C	Set the heating period start time and set temperature you want during the morning period.
2	LEAVE 08:00	18 °C	Set the daytime heating period start time and set temperature you want during the daytime period.
3	RETURN 16:00	24 °C	Set the early evening heating period start time and set temperature you want during the early evening period.
4	SLEEP 21:00	18 °C	Set the overnight heating period start time and set temperature you want during the overnight period.

To modify the default schedule:

1. Press SCHDL and the day display will start flashing. (If your thermostat is set to 5+2 day programmable mode, the programming will skip to step3).

2. Use the up or down buttons to adjust the day of the week you want to start programming or to the day you wish to edit an existing event / program. (Press 1-7 to select all 7 days of the week, and to cancel press 1-7 again).

3. Press NEXT and Program 1 will display on the screen, with the time flashing.

4. Use the up or down buttons to adjust the time you wish the Program 1 event to commence for the selected day/days.

5. Press NEXT and the temperature will start flashing.

Mode A Control Tip: The recommended air temperature setting is 19-21°C.

Mode F Control Tip: The recommended floor temperature setting for tile floors is 24-28°C, carpet 25°C, slab, vinyl & timber 27°C.

Tip: During the Off or Away periods (generally programme period 2 & 4) the floor heating can be set to maintain a set back temperature (economy temperature). Set back temperatures should be 6°C below comfort heating setting. Where no set back is required or to switch heating off during a programme event, adjust the heating setting down to the minimum 5°C.

6. Use the up or down buttons to set the desired temperature to be maintained during Program 1.

7. Press NEXT and the LCD screen will now show Program 2 with the time display flashing, this signifies that the second daily event is now ready to be programmed.

Repeat steps 4,5,6,7 to set the remaining programs/events, then press OK to store and exit.

Tip: During setting programs, press DEL will clear a program entry and thermostat will maintain the temperature set point of the last executed program until the beginning of the next program.

AUTO Auto/Manual Mode

You can set the Auto or Manual operation mode in MENU10 in the controller settings. In Manual mode , the thermostat maintains a constant set temperature manually set by the user. In Auto mode, the thermostat follows the preprogrammed schedule.

OVERRIDE Temporary Temperature Override

Press the up or down button and the temperature display will start to flash. Use the up or down button to set the temporary temperature override. Press OK to accept, and you will see OVERRIDE above the temperature display. The thermostat will maintain the new set temperature until the next programmed event. To cancel the override setting, press RUN SCHDL .

Lock the Keypad

To lock the keypad, press and hold the POWER button for 5 seconds, you will see a lock symbol appear on the screen . To unlock, repeat the steps above and the lock symbol will disappear.

Amuheat's AT8V3 thermostat is an electronic touch screen on/off thermostat for temperature control by means of an NTC sensor located either externally or internally within the thermostat.

The thermostat is for flush mounting on a standard vertical wall plate/bracket.

WARNING – Important Safety Instructions.

Disconnect the power supply before carrying out any installation or maintenance work on this control unit and associated components. This control unit and associated components should only be installed by a competent person (i.e. a qualified electrician). Electrical installation must be in accordance with appropriate statutory regulations.

Installation of the External Floor Sensor

It is recommended that the sensor cable be placed in a non-conductive conduit embedded in the floor. The end of the pipe must be sealed and the pipe placed as high as possible to the surface of the floor finish.

Alternatively, the sensor can be embedded directly in the floor. Note this will make replacing the sensor impossible should it fail.

The sensor cable must be led through a separate conduit from power cables. The tip of the floor sensor must be centred between the heating cables.

The sensor cable may be extended up to 100m by means of a separate two-core cable. The two-core cable must be placed in a separate pipe or segregated from power cables.

Mounting the Thermostat with Built-in Sensor

The room sensor is used for comfort temperature regulation in rooms. The thermostat should be mounted on the wall approx. 1.6 m above the floor in such a way as to allow free air circulation around it. Draughts and direct sunlight or other heat sources must be avoided.

Mounting of thermostat

Carefully separate the front half of the thermostat from the back plate by placing a small flat head terminal driver into the slots on the bottom face of the thermostat.

Carefully unplug the ribbon connector which is plugged into the front half of the thermostat.

Place the thermostat front half somewhere safe. Terminate the thermostat as shown.

Screw the thermostat back plate on to the wall plate.

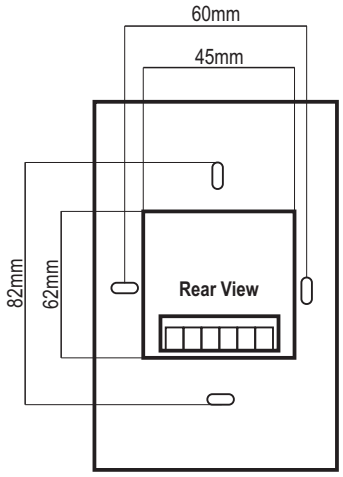
Re-connect the thermostat ribbon cable and clip the two halves together.

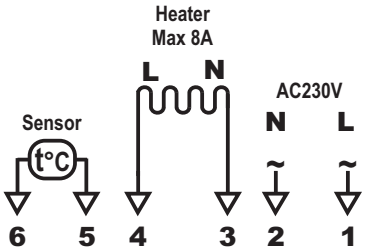
First time settings
The first time the thermostat is connected the Time, Date and Controller settings must be configured. See operational guide.

Programming
See user manual.

Technical Data

Supply voltage	230V AC
Output relay	16A resistive load
Clock function	4-event program
Air sensor temp. range	+5°C to +45°C
Air sensor calibration range	-5°C to +5°C
Floor sensor temp. range	+5°C to +45°C
Floor sensor calibration range	-25°C to 25°C
Floor sensor type	NTC (10K Ohms)
On/Off differential range	1°C to 10°C
Battery backup	1 x CR1220 3V
Screen backlight life	5,000 hours
Protective housing	IP20
Housing material	PC+ABS
Size	121mm×80mm×18mm
Warranty	3 Years





This product should be installed by a qualified electrician.

For more information or support call Amuheat on (02) 9114 6934 or visit www.amuheat.com.au