Instructions - Digital thermostat - Heat control – THD(W)

Product Information:

The Digital thermostat adopts the latest technology in electronic control of heating equipment. It is safe, has simple operations, accurate performance, small compact size, intelligent control and various functions for heat control.

Technical Specifications:
240 Volts AC.
Lead length: 2.0m.
Probe wire Length: 2.0m
Temperature range: -40~99oC
Accuracy: plus or minus 1oC
Input: one NTC sensor
Relay capacity: 10A
Sensor type: NTC
Protection Class: IP65

Features:

- The thermostat is used to control the amount of heat available from heating equipment.
- The thermostat consists of a NTC sensing probe wire and graduated digital keys.
- The probe wire should be secured to the heating equipment at all times.
- 10 AMP
- LCD screen – shows the temperature at a glance
- Press button control
- Durable, will last many years of continuous use
- Made in Australia from high quality parts and materials

Instructions for plant propagation use:

1. Place the thermostat near the propagator but away from the likelihood of water spray. The power lead supplied with the unit should be connected to a correctly earthed power point.
2. Carefully unwind the probe wire taking care not to overstretch, twist or bend it. The probe (on the end of the probe wire) *senses* the temperature. **For Heat pads:** tape the probe directly to the top of the pad and then place pots on top of the probe. **For Foil mats**, tape the probe directly to the foil mat under the covering plastic, place trays on top of the covering plastic over the probe.
3. Do not allow the sensor probe to hang freely in the air unattached to the pad or mat as this will cause overheating.
4. Plug into a power point, the thermostat is preset at the factory at 23oC. To alter the temperature see directions below. Allow the propagator to stabilise after initial switch on - this may take up to 8 hours.
5. A temperature of 16°-23^oC is usually sufficient depending on the type of planting. If you alter the temperature setting allow time for the unit to stabilise after each correction.
6. Avoid using high temperatures which will dry out the tray mix.
7. Avoid using polystyrene pots/trays on top of the Foil mat as overheating will occur due to polystyrene's insulative qualities.
8. We recommend the use of a residual current protection device/safety switch on the power supply for your safety.

Care:
Please return the thermostat to the manufacturer to be repaired or tested if there is a fault.
Take care when handling the probe wire as constant movement will shorten the lifespan of the wire (replacement probes available).
Do not immerse in water.
Do not tamper with or alter this thermostat or electrical lead in any way.
Do not use if damaged, return to place of purchase
12 month warranty.
Replacement parts and repairs must be carried out by a qualified electrician
The manufacturer provides the above directions only as a guide and cannot accept responsibility for loss of stock or failure caused by circumstances beyond their control.

Technical Settings - Digital Thermostat

This thermostat is pre set at the factory, therefore the function settings are already set and do not need to set them. However if you need to reset the functions follow the Function Menu Chart below using the column in **Red text** for Heating purposes.
Note the temperature setting is pre set at the factory at 23oC, no need to set. The temperature can be easily changed: Press SET for one second, the press UP or DOWN arrow to choose your desired temperature, then press SET for 3 seconds to save.

How to switch on and off:

In the off status, press POWER to switch on
In the on status, press POWER button for 5 seconds to switch off the thermostat

Indicator light description

WORK light indicator: means is in working status, on means work, flash means delay, Off means not working.
SET light indicator: means set status, on means work, off means not working

How to change the temperature setting:

Press SET for **one second** (you will see the current set temperature displayed)
Use UP or DOWN to adjust the temperature you require
After adjustment press SET for 3 seconds to save

How to reset the function settings to default settings use the Function Menu table below:

Press SET for **3 seconds** (set indicator is on), this allows you to enter the main menu.
Follow the steps in the Function Menu chart below, entering the values listed in the Heating Equipment setting (marked in red).
For HC: use UP or DOWN button to choose H,
After adjustment press SET to the next parameter and continue through the list codes using the same procedure.
Or to cycle through the settings: press SET to move to the next code setting.

Function menu table

Code	Function	Setting range	Default	Settings for: Heating equipment & Foil Mat (pre set at factory-no need to set)
HC	mode	**C**: cool, **H**: heat	C	**H**
d	differential	1~15	3	**1**
LS	Low temp	-40~setting temp	-40	**0**
HS	High temp	Setting temp~99	99	**+30**
CA	Calibration	-5~5	0	**0**
Pt	Delay time	0~15	3	**0**

Error Codes

Code	Reason	Troubleshooting
HH	Sensor probe short circuit or exceeds the highest measuring temperature	Replace probe sensor
LL	Sensor probe open circuit or exceeds the lowest measuring temperature	Replace probe sensor
-	Sensor probe is disconnected	Connect the sensor probe to the correct terminals
EE	Sensor probe is faulty	Replace probe sensor
Alarm sound	Sensor probe is faulty	Replace probe sensor
Incorrect temperature reading	Sensor probe is faulty	Replace probe sensor