

IMPORTANT - PLEASE READ THESE INSTRUCTIONS BEFORE USE

Welcome to your Microclimate Evo Connected experience. Evo Connected is the cloud based solution to monitoring and controlling multiple environments all from one simple to use application.





#### Channel 1

Dimming/Pulse selectable

Channel 2 On/Off





#### Channel

Dimming/Pulse selectable

#### Channel 2

Dimming/Pulse selectable

Channel 3
On/Off





#### Channel '

Dimming/Pulse selectable

# Channel 2

On/Off

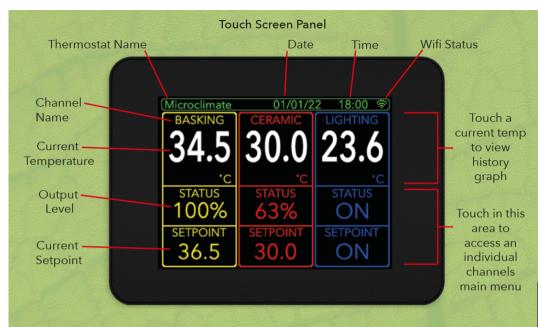
#### Channel 3

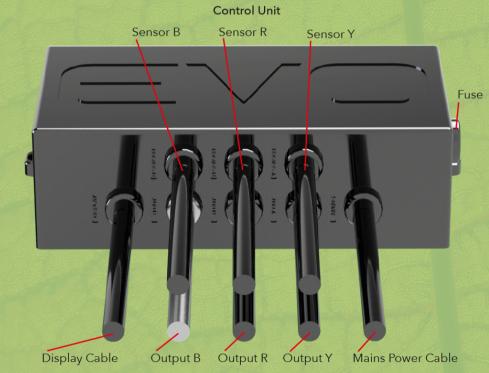
On/Off Humidity

There are three different models of EVO Connected thermostat. Some displays may vary from those shown in this instruction manual depending on which model of thermostat you have. The operating principles remain the same.

The total load of devices plugged into the thermostat must not exceed 1200w combined. Each individual channel must not exceed 600w.

All Microclimate products are designed and manufactured in house in the United Kingdom.





The cable outputs and the displayed menu items will vary depending on the model of Evo Connected you have selected. The Evo Connected 2 will not have a RED channel or the cables associated with the Red channel. The Evo Connected Pro will have a humidity sensor on the B channel sensor output instead of a temperature sensor. Please ensure the thermostat and display are both mounted safely.

#### Temperature History Graph

The on screen temperature history graph gives you a quick way to recall the temperatures that each channel has been recording either over the last hour or 24hr period. A more detailed view is available within the app or

(Microclimate 01/01/22 18:00 ♥)
35
30
25
20
-18 -12 -6 0

web dashboard. To access the on screen graph press on the current temperature for the channel you wish to view data for. Each channel has its own graph. Even if a channel isn't being used to control temperature

the sensor will still be logging data. This is great for monitoring alternate areas within the enclosure such as the cool end. The graph is continuously updated whilst the Evo Connected is switched on and is updated from the right hand side of the

display. To change the time period between 1 hour and 24hrs go to general settings and chart. To exit the graph touch anywhere on the display.

# STATUS ON SETPOINT ON

#### Main Menu

To access the main menu for an individual channel press on the status and setpoint area of the home screen for the channel that you require. The channels menu gives you access to the lock button, alarm deactivation, channel settings and also the general settings are accessible from this menu.





To Lock the touch screen to prevent accidental changes simply press the lock icon. This will prevent any inputs to the touch display that would change a setting. To unlock the display hold the locked icon for 3 seconds.



#### Alarms

If an alarm has been triggered you will need to access the main menu to reset the alarm. Press on the alarm icon to acknowledge the alarm. On the home screen if the channels high temp alarm is active the current temperature will be RED and if the channels low temp alarm is active the channels current temperature will be BLUE. This allows quick identification of the channel that has alerted and the type of alarm that is active.

Low Temperature Alarm Active

High Temperature

Alarm Active



23.6

Normal Operation

#### **General Settings**

The general settings menu can be accessed from within any of the channel menus.

Thermostat Name your thermostat for identification. This will appear at the top of the display. This is set independently to thermostat app name.



Time Set the time on your thermostat in 24 hour format.

Date Sets the current date for use with seasons mode

Seasons The Start date for each of the 4 seasons

Sound Keyclick Toggles keyclick sound when display is pressed

Alarm Toggles audible alarm sound on or off.

Display Units Changes the units used between degrees celcius and Fahrenheit.

nvert Rotates the Display 180 degrees

Sleep Sets the display time out, after the set time the display will go blank

and awaken when touched or an alarm is triggered.

Chart Sets the period of time the temperature history graph on the

thermostat display shows. This can be set to 1 hour or 24 hours.

Reset The reset button will restore factory default settings and will also erase

current wireless network settings.

#### **Channel Settings**

Each channel has a settings menu. From this menu it is possible to configure how the channel will control depending on the device you have plugged in to the channel. To access the configuration press the setup button. The channel name is also set from this screen. The channel name will appear on the thermostats touch screen, the mobile app and also the web dashboard. The area below these buttons is where the available setpoints can be set. This display will change depending on which timing mode is selected.



**Output Type** 

There are 3 different output types available. Depending on the channel that you have selected will vary which settings are available.

Dimming

Dimming control can be used on any type of heat source. There is no minimum load with the Evo Connected range of thermostat. Power is smoothly dimmed between 0 and 100% to provide extremely accurate control. This is the preferred method for all heat sources.

Pulse

Pulse control can only be used with non light emitting heat sources. This is because it pulses power to the heater. There is no difference in control accuracy to dimming.

On/Off

On/Off can be used to either switch devices on and off or it can be used as a thermostat. With an on/off thermostat there is a temperature differential of 0.5 degrees.

Timing

Constant A single setpoint will be controlled constantly.

Day & Night

Individual setpoints for daytime and night time are set. The time for day start and night start must be set.

Multi

8 different setpoints can be set over a 24 hour period. This allows you to replicate a natural cycle.

Seasons

Different day and night setpoints can be set for 4 seasons of the year. The season start dates will need to be set from within the general settings menu.

Periodic

Only available on an On/Off channel. Periodic mode will allow the output to activate for a set duration within set hours. This is ideal for use with misting systems or fans.

Start Finish

Set the start time for periodic operation.
Set the time that periodic operation will cease.
The time between activations.

Interval Duration

The length of time the output is active.

**Control Type** 

Heating The thermostat

The thermostat will work as a heating thermostat controlling the temperature at the tip of the probe

Cooling

The thermostat will now cool the temperature to the setpoint if a suitable 240v fan is connected to the output

Fixed

The channel will now operate as a fixed output suitable on an on/off channel for turning devices on and off such as lighting or misters. On a dimming or pulse channel a a percentage level can be set and the channel will output at the pre-set percentage. No temperature control is active in fixed mode.

#### Alarms

Each channel has 2 alarms that can be configured from within the channel setup menu.

High Temperature Low Temperature Set the temperature that will alert you to a high temperature An under temperature alarm is useful as it can alert you to a heater that is not reaching a set temperature.

#### Ramp Time

Ramp time allows temperature changes to become more natural as if the heat is coming from the sun. Ramp time is the length of time that a temperature change takes. For example if a Day & Night setting is being used with a night temp of 15 degrees and a daytime temp of 32 degrees if the ramp time is 0 then when daytime begins the thermostat will try to achieve 32 degrees as quickly as possible. If a ramp time of 60 mins is set then the thermostat will gradually increase the temperature over a period of an hour to get to 32 degrees allowing for much more natural temperature changes. This great feature can be used on Day & Night, Multi and Seasons mode.

#### Fuse replacement

The Evo Connected base unit is fitted with a 5 Amp FF ultra fast fuse. The fuse is designed to protect the thermostat against faults that are caused by external devices that are connected to the dimming/pulse channel/s of your thermostat. Common



causes for the fuse to blow would be bad connections such as bulb holders or sub standard bulbs. The On/Off channel/s will still continue to function as normal even if this fuse is blown. If there is no output from a dimming/pulse channel but the Thermostat is showing that power is being sent to the channel then check to see if the fuse is blown. To change the fuse simply unplug the thermostat from the mains supply, unscrew the fuse holder from the side of the base unit with a suitable

screwdriver and replace with a 5 amp FF (ultra fast) fuse from a Microclimate ultra fast fuse service pack. A normal or fast fuse will not act quickly enough to protect the thermostat in the event that an external item that is connected to the thermostat malfunctions.

DO NOT REPLACE THE FUSE WITH A HIGHER RATING.

# Warranty

Your Evo Connected is covered by our 5 year parts & labour warranty. If you believe your thermostat is not working correctly please call us on 01902 895351 as we may be able to help over the phone. If your thermostat needs to be repaired in the first 12 months there is no charge. If the thermostat is between 12 months and 5 years old there is a charge of £10 to cover return delivery and paperwork.

Microclimate International
Unit 3 Heathmill Enterprise Centre
Heathmill Road
Wombourne
West Midlands
WV5 8AP

01902 895351 www.microclimate.co.uk



Microclimate EVO app

Download the Microclimate Evo app from either the Apple App Store or the Google play store. Once installed you will be given the option of log in or sign up for an account.







The Evo app will be the central interface for you to monitor and control your whole collection. You will be able to add an unlimited amount of EVO Connected products and access them from anywhere in the world as long as the Evo Conneced products are linked to a wifi network with internet access where

they are installed. If this is the first time you have used the EVO app then you will need to register for an EVO account. Follow the on-screen instructions to fill in the required information. You will then be asked to verify your email address and to set your password. Once this process is complete please use the log in option. Before you have connected any devices you will be met with a screen displaying no devices and an add a new device button.



#### Adding your first device

The add a new device screen will only display if there are no devices currently linked to your account. Before you proceed ensure that your thermostat is powered on and that the



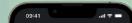
Wifi Icon in the top right corner of the touch screen is flashing. This flashing wifi icon indicates that the thermostat is not connected to a network and it is outputting its own network that can be detected by the app, which allows it to be linked to your account. If the wifi symbol on the thermostat is not flashing then please carry out a reset from the general settings menu on the touch screen. Select ready on the app screen and your phone will search for EVO Connected thermostats close by that are ready for provisioning. When your phone detects an Evo Connected product a Wifi network will be shown starting with EVO. Connect to this network and follow the on screen instructions.



## Adding additional devices

If you are adding a new Evo Connected device to your collection and need to add it to an existing account. Simply touch the 3 lines in the top right hand corner of the devices

home display. Then select Add new device at the top of the screen. This will



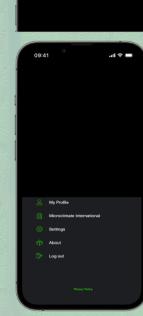


then ask you to power on your new thermostat and ensure the wifi symbol is blinking. Click ready and the new device will be added to your account. Any new devices will appear in the device home screen.

# **App Settings**

To access the App settings touch the person icon in the top left of the devices home screen. Here you can access my profile which will allow you to change your display name and email address that are associated with your EVO account. The organisation settings are then available. These allow multiple users to have access to your thermostats with varying levels of access. You can set a group name, group description and the time zone for the app. It is also possible to manage user access roles. The settings menu will allow you to toggle to mute all app notifications, notify when device goes offline, keep display always on, offline notifications and also enable and disable authorisation confirmation. There is also an about section which will indicate which version of the app you are running.

The final option is the ability to log out of the current account.





## Adding other users to your accoun

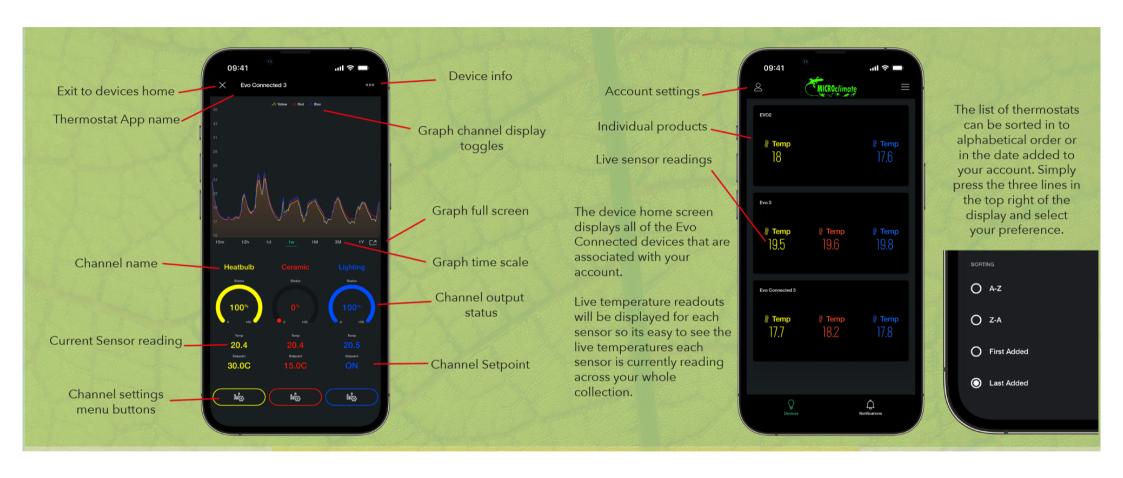
If you would like multiple users to have access to the Eve Connected thermostats on your account then you can send them an invite from within the app. You can also select the leve of account access that they have from a basic user through to the full access admin account. There is also a staff setting, this is useful for stores or for zoos where many users may require access but with different levels of account control. From the appreciations screen select your organisation from the list. There choose members. You will then see an invite new member icon You will need to complete the new users email address, the users name and then select the level of access that you would like them to have. The new user will then receive an emai inviting them to join and for them to set a password to be used to login and have access to the thermostats on your account

#### Thermostat Device name

To keep your collection of thermostats organised a device name is associated with each thermostat. Please note this is separate to the thermostat display name which appears on

the touch screen, although they can be set as the same name if required. When you add a new thermostat to your account you will have the opportunity to give the thermostat a device name. However if you would like to change this at a later date then select the thermostat from the list on the devices home screen. Then press the three dots in the top right hand corner of the app screen. From here you can change the device name.





# Channel settings menu



Each channel has its own channel settings menu. From here you can access the master settings, the channel setup configuration menu and the setpoints menu. The setpoints menu changes depending on the configuration of the channel setup menu.

The channel setup menu allows you to configure exactly how the

individual channel will operate. The options available will depend on the channel you have selected.

Ramp Time allows you to set a time period that temperature changes should take. this allows a more natural temperature change between day & night settings.

Channel Setup Menu



Under and Over temperature alarms set the values that you will be alerted to an alarm state.

Fixed, Heating or Cooling sets if the thermostat will operate as a heating or cooling thermostat or as a fixed control. Fixed will either operate the channel at a set percentage or is used by the on/off channels for switching devices such as lighting.

Pulse, Dimming or On/Off is the control type that is to be used by the channel. For temperature control dimming is the most universal type of control and can be used on all heat sources, pulse should only be used on non light emitting heat sources.

**Master Settings** 



Master settings allows you to set the thermostat name that will appear at the top of the touch screen. This is independent to the thermostat app name. Also you can set the current date & time. The season start dates are also set in the master settings menu.



Constant
A single setpoint that is active
4 hours a day throughout the
year



Two setpoints that mimic the day/night cycle. Set the day start and night start times, then enter the setpoint below each time.

# **Timing Modes**



Multi
Multi allows for 8 setpoints over
a 24hr period. This allows you
to recreate the temperature
changes of a day with greater
detail. Enter the Times on the
left followed by the setpoints on
the right



Seasons
Seasons mode allows you to program your environment for the whole year to aid producing a more natural environment.
The season start dates are set in the Master settings. Each season then has a day time and night time with independent setpoints.
That will automatically change at the set dates.



Periodic
Periodic mode will allow
you to activate the output
at set intervals for a
duration. A start time and
finish time will ensure that
the activations only take
place between set hours.
Perfect for use with misting
systems.

#### Alarms

There are 3 alarms per channel to alert you to under temp, over temp and sensor failure. The under and over temperature alarms are set on each channel in the channel setup menu. The temperature display will change colour depending on the type of active alarm. Red indicates over temperature whilst Blue indicates under temperature. In the app above the channel settings button a text description of the alert will appear. You will also receive a push notification informing you of the alarm if your push notifications are enabled on your device. If an alarm is active power will be cut to the individual channel until the alarm is reset.

#### Web dashboard - CSV data reports

To log into the web dashboard please visit

#### https://microclimate.blynk.cc/

You will need to use the same login details that you created when you setup your Evo account.

From the web dashboard you can monitor your whole collection also you can generate reports in CSV file format. To generate a report click on the 3 circles next to the specific thermostat name and select download report. This will then allow you to configure the type of report you wish to download.

You need to select in the list of data streams the sensors you would like to be included in the report. By clicking on the advanced settings menu you can select the data aggregation from 1 Minute to 1 Day. You can download up to 1 years worth of data per channel.

# https://microclimate.blynk.cc

