

smart commandTM *Tevolve*

Heat where you want it, when you want it

APP CONTROLLED HEATING

INTERNET GATEWAY

ENERGY MONITOR

Compatible with:

Amazon Alexa

Google Home




Installation and operating manual

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Introduction


Congratulations on purchasing your **smart[®]command** *Tevolve* Internet Controller for your Ducasa heaters and central heating system. By using this product you will be able to control and program your heating system and know your energy consumption at anytime from anywhere in the world via the Internet. Also you will be able to access statistics and reports on your energy consumption and room temperatures.

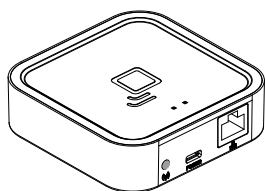
Preliminary considerations

 Disconnect the mains power in your home before installing the electrical Power Meter.

 It must be possible to isolate the electric power supply circuit of the electric Power Monitor by a 2 pole switch where the distance between contacts must be a minimum of 3mm.

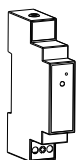
 These instructions have been written as a guide for most of the existing home installations. If you have a non-standard electrical installation, or if you are not sure about installing some of these elements, please consult an electrician.

 This **warning** safety symbol means
PAY ATTENTION!



smart[®]command[™] Tevolve. Elements

Tevolve Gateway: The centre of your Tevolve System, links your devices wirelessly and connects to the Internet via your router. This allows you to control your devices from anywhere in the world via the web portal or our mobile apps.



Power Monitor: Measures the electricity consumption in your home. It helps you see how and when you are using electricity, so that you can control your consumption level. Sold separately. Requires the *Tevolve* Gateway to function.

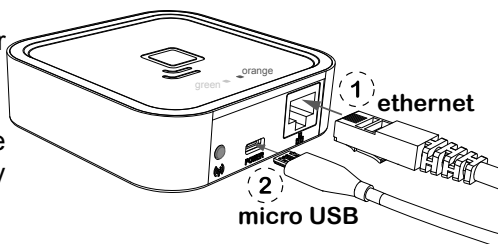
i smart[®]command[™] *Tevolve.* System is distributed in different packs with some or all of the devices. Follow the instructions for installing the elements that you have acquired.

Installation instructions

Gateway

Connect the gateway to the router using the Ethernet cable ①

Connect the USB cable ② to the Gateway and the power supply supplied.



Wait two minutes and use the Gateway LED lights to check that it is communicating correctly with the router.

! It is preferable to register the Gateway before installing it.

<https://tevolve.termoweb.net>

If it is registered after installation, it may take a few minutes to be accessible from the web page, if you do not want to wait, disconnect and connect the power supply to the Gateway.

Status of Gateway lights

The Gateway status is indicated via its LED lights:

Green off, orange flashing one second: discovery status (device pairing).

Orange on, green flashing 0.2 seconds: the router has not assigned an IP address to the Gateway.

Orange on constantly, green flashing briefly every 5 seconds: the router has assigned an IP address to the Gateway correctly, but there is no communication with the server.

Orange on, alternating with green flashing briefly every 5 seconds: the Gateway has connected to router correctly and has internet connection.

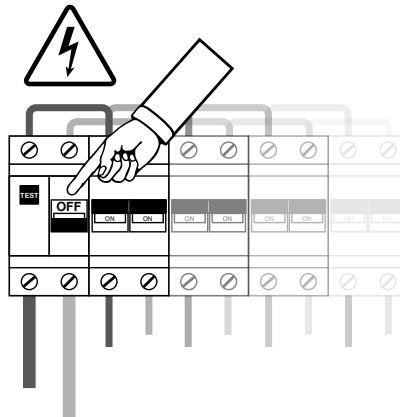
Requirements for correct operation

- To operate correctly the Gateway needs an Internet connection via a broadband router. The equipment can operate with broadband networks, cables and others, and in most cases, no set up in the router is necessary.
- If there are any connection problems or if operating in a corporate network, check with an IT technician that the following requirements are met. As a general rule it is not necessary to modify these parameters in a domestic router:
 - » The DHCP server in the router must be activated.
 - » There must be a direct Internet connection, without passing through a proxy.
 - » The output ports must be open:
 - > 123 UDP
 - > 5000 TCP

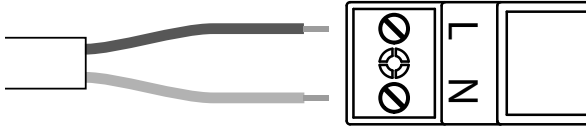
Power Monitor

Installation (Must be performed by an electrician)

Switch off the power supply to your control panel. If you have various circuits, disconnect the circuit breaker where you are going to make the connection.



Connect the power supply cable to the terminals **L** and **N** of the Power Monitor. Remember to disconnect the power supply from the circuit breaker where the Power Monitor will be connected.

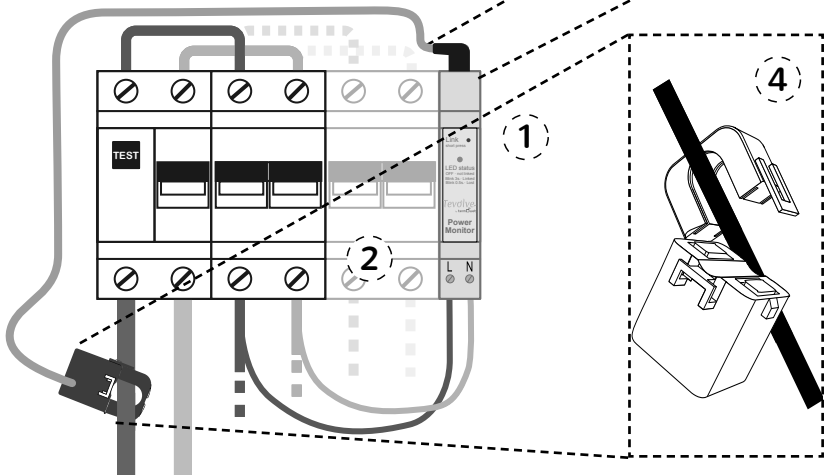
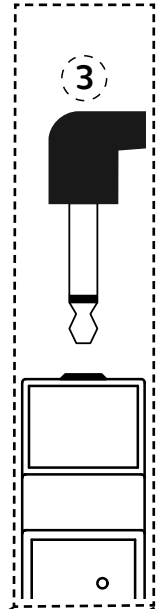


Place the Power Monitor in the DIN rail on your control panel where there is available space. ①

Connect the other two ends of the cable to the output of a circuit breaker switch, preferably a lighting type, minimum 5A/230V, ② The said circuit breaker must be arranged so that it is easy to access and it must be marked so that it can be recognised as the equipment disconnection device.

Connect the jack connector of the Power Monitor measurement clamp to the connector on the top of the Power Monitor. ③

Open the clamp as indicated below and place it around the main power supply cable from the main safety switch on the control panel. ④



Registering the Gateway in the web portal

Once all the system components you have are installed, access the web portal at the following url:

<https://ducasa.co.uk/smartcommand/register> and select **create a new account**.

Fill in the fields indicated in the form:

User: enter your e-mail address.

Password: enter a password for accessing the system and confirm it in the following field.

Serial No.: this appears at the bottom of the Gateway and on the packaging, and contains 4 digits.

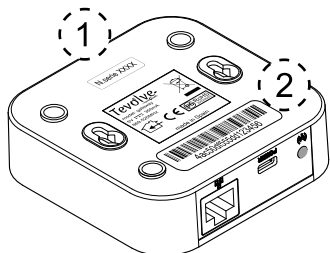
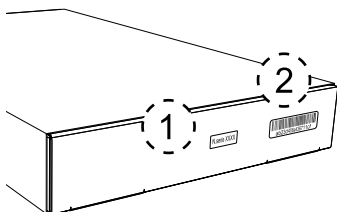
Once the data registration is complete, press **REGISTER**. In a few minutes you will receive an e-mail confirming the account. If this does not occur, check your SPAM folder and confirm the link supplied.

Access to the web/app with your validated username / password.

Follow instructions on the web/app to register gateway(home). Be sure your phone/tablet/computer is connected to same gateway network.

Device No.: this also appears on the packaging and at the bottom of the Gateway and contains 18 alphanumeric characters.

Location: this will help us determine the equipment time, time zone and location for weather forecasts.



Downloading of the App

Once you have registered your **smart^{TE}command^{TE}** *Tevo*lve Internet Gateway, download the **smart^{TE}command^{TE}** *Tevo*lve APP, which is available from:

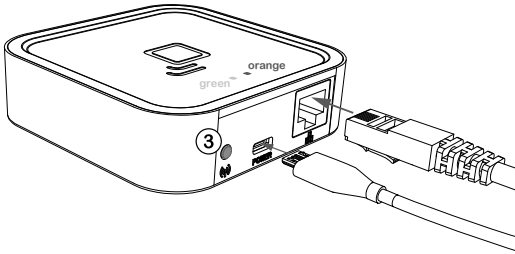
<https://ducasa.co.uk/smartcommand/app>

With the App you can rename the radiators i.e. Living Room, Kitchen etc, set the comfort and economy temperatures, programme individual times of operation for each heater, monitor the energy use for home and each heater, monitor room temperatures and much more.

The App is intuitive and with a few minutes exploring you will soon become aware of the features and benefits of the **smart^{TE}command^{TE}** *Tevo*lve Gateway.

Pairing

Gateway

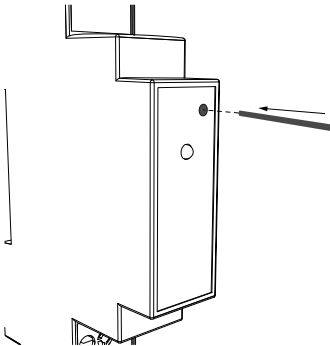


Once the Gateway is connected to the Internet and registered in the web portal, the devices must be paired to it. To do this, put the Gateway in discovery status press the **Link** button for 3 seconds.

③.

The orange LED starts to flash.

Once the pairing button has been pressed, you have one minute to add a device: for each new device, the time available increases.




Power Meter

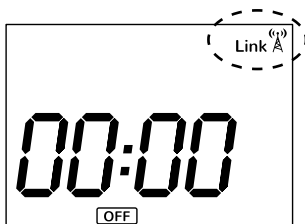
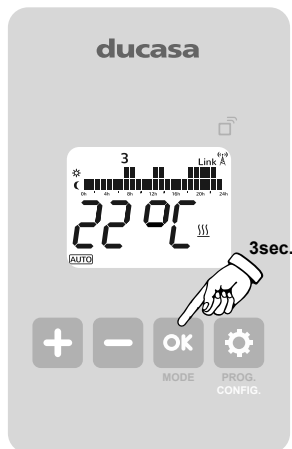
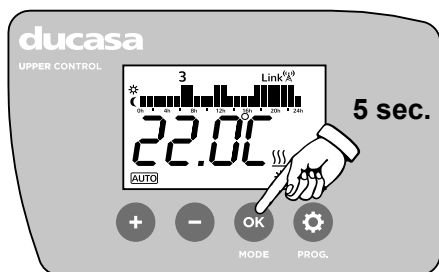
To pair the Power Meter, press with a clip (supplied) on the small push button on the top of the Power Meter. Look at the Power Meter LED to check that it is paired.

Status of the Power Meter LED

- **Not paired:** LED off
- **Paired correctly:** the LED flashes once every two and a half seconds.
- **Paired but lost:** the LED flashes once every half a second. This happens when the Gateway is disconnected, for example. Once communication with the Gateway is possible again, the Power Meter will connect again automatically.

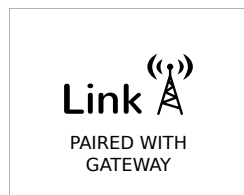
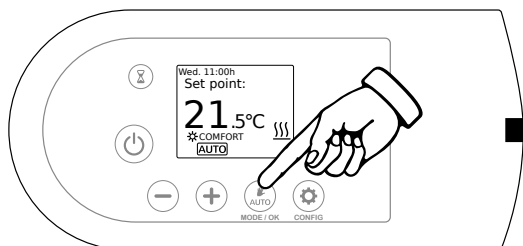
Avant DGi+ Radiator / Vitro-i+

To pair the radiator press the OK key for 5 seconds until the symbol  appears in the top right of the radiator screen.



Colorado DGi+

To pair the towel rail press the OK key for 5 seconds until the symbol  appears in the top right of the screen.



Amazon alexa and Google Home

The **smart****command**™ *Tevo* is also compatible with Amazon Alexa and Google Home.

For instructions on how to link them, visit:

<https://ducasa.co.uk/smartcommand/voicecontrol>

Technical characteristics

Gateway

- Desktop or wall placement
- Power supply: 5V 500mA micro USB external current adapter.
- Dimensions: 80x80x22mm
- RJ45 connector for Ethernet connections
- Communication frequency: 869Mhz
- Operating temperature 0 °C to 60 °C
- Storage temperature -20 °C to 85 °C

Power Meter

- DIN rail placement. 1 rail module necessary
- Power supply 200-260 V ~ 50 Hz
- Consumption 0.90W
- Communication frequency: 869Mhz
- Measurement: CAT II
- Voltage and Current, up to 80A-AC
- Instantaneous active power
- Accumulated Active Energy
- Error: <3%
- Operating temperature: 0 °C to 60 °C
- Storage temperature -20 °C to 85 °C
- Impact strength: IK06

Measurement Clamp

- External current transformer with measurement range between 0 and 80A AC. Connection with 3.5 mm jack
- Cable measurement capacity: ø9mm, maximum commercial section 70mm²

If the equipment is used in a way not specified in this manual, the protection ensured by the equipment may be compromised.

Notes about installation

[illegible]

**Processing electrical and electronic equipment at the end of their service life
(applicable in the EU and in countries with selective waste collection systems).**

This symbol on your equipment or its packaging indicates that this product cannot be treated as normal domestic waste, and instead it must be delivered to the corresponding group that collects electric and electronic equipment. By making sure that this product is disposed of correctly, you are helping to prevent the negative consequences for the environment and human health that could be derived from handling this product incorrectly. Recycling materials helps to preserve natural resources. To receive detailed information about recycling this product, please, contact your Town Hall, nearest collection point or the distributor where you acquired the product.



Advanced Heating Technology

<https://www.ducasa.co.uk>

Telephone number for technical assistance: 01603 897 608