

ducasa

smart commandTM

HEATING CONTROL PACK

GATEWAY

ENERGY MONITOR

Installation and operating manual

Version 1.0

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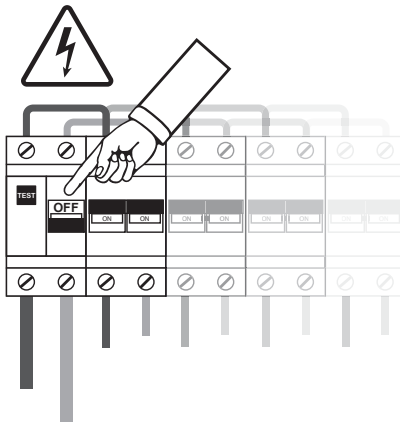
Introduction

Congratulations on purchasing your **smart[®]command[™]** Internet Controller for your Ducasa Avant DGi central heating system. By using this product you will be able to control and program the temperature of each radiator in your home and know your electricity consumption at anytime from anywhere in the world via the Internet. Also you will be able to access statistics and reports on your electricity consumption and room temperatures.

Preliminary considerations

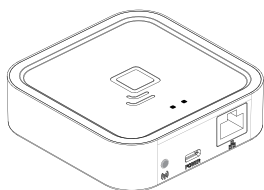
! The Energy Monitor **must** be installed by a qualified electrician who should disconnect the mains power in your home before commencing work.

! According to instructions, it must be possible to isolate the electric power supply circuit of the electric measurer **+e** using an omnipolar cut-off element, either with a switch or **circuit breaker**. The contact opening must be at least 3mm.

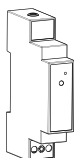


! The **warnings** safety symbol means ATTENTION! PAY ATTENTION!

Contents of the smart⁺command Pack.



Gateway, communicates with your Avant DGi radiators wirelessly and connects to the Internet via your router. This allows you to control your devices from anywhere in the world via the **smart⁺command** APP which is available for Android and Apple devices.



Energy Monitor Sensor +e : Measures the electricity consumed in your home and sends the information to the Gateway. You can then use the APP so you see how and when you are using electricity, helping you control your consumption and reduce your energy bills.

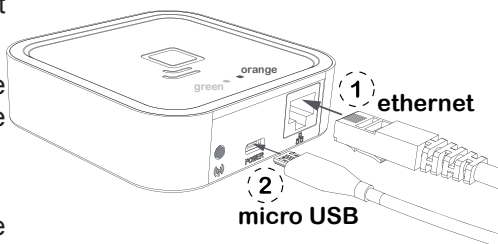
i **smart⁺command** System is distributed in different packs with some or all of the devices. Follow the instructions for installing the elements that you have acquired.

Installation instructions

Gateway

Connect the Gateway to the Internet router using the Ethernet cable ①

Connect the USB cable ② to the Gateway and the other end to the supplied power adaptor.



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

! It is preferable to register the Gateway before installing it. 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 **smart[®]command[™]** Gateway.

Status of Gateway lights

The Gateway status is indicated by the 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 Gateway has connected to router correctly, but there is no communication with the Internet.

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
 - > 3000 TCP

Energy Monitor

The installation of the Energy Monitor should be carried out by a qualified electrician.

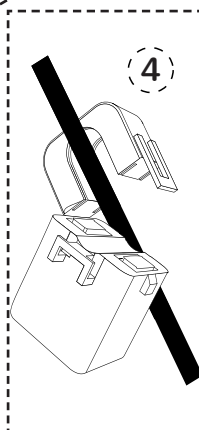
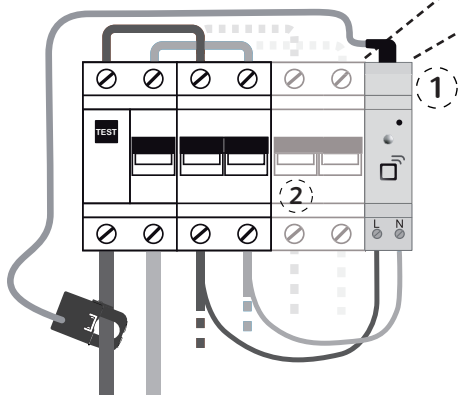
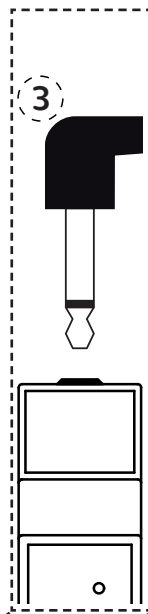


Switch off the mains power supply in the consumer unit. Disconnect the circuit breaker where you are going to make the connection. Connect the power supply cable to the Live and Neutral terminals (L and N) of the Energy Monitor. Place the Energy Monitor in the DIN rail in your consumer unit where there is available space. ①

Connect the other two ends of the Energy Monitor cable to the output of a circuit breaker, preferably a lighting type, minimum 5A/230V, ②. The circuit breaker must be easy to access and be marked so that it can be recognised as the Control Centre isolator.

Connect the jack plug of the Energy Monitor sensor to the socket on the top of the Energy Monitor. ③

Open the sensor as indicated in the image ④ and place it around the main power supply cable of the consumer unit. NOTE: The Energy Monitor will measure the electrical consumer of your complete home, not just the heating.



Registering the Gateway in the web portal

Once all the components are installed as described above, access the web portal at:

<http://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.

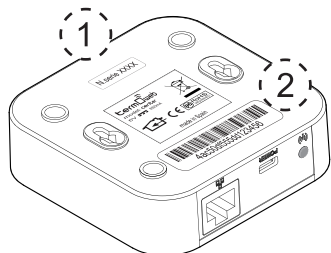
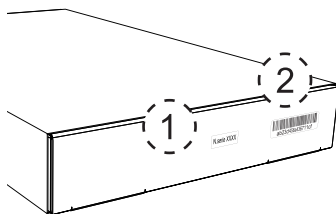
Password: enter a password for accessing the system, then confirm it in the following field.

Serial No.: (1) this appears at the bottom of the **smartcommand** Gateway and on the packaging - it is a 4 digit number.

Device No.: (2) this also appears at the bottom of the Gateway and on the packaging - it contains 18 alphanumeric characters.

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

Once the data registration is complete, press **REGISTER**. In a few minutes you will receive an e-mail confirming the account. If you do not receive an email check your SPAM folder. When you receive the email confirm registration by clicking enclosed link.



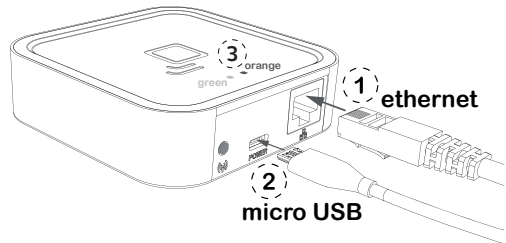
Pairing

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 switchboard in discovery status by pressing the pairing key.

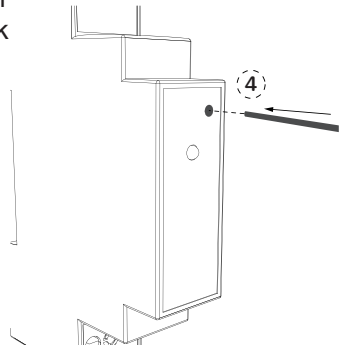
③. The orange LED starts to flash.

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



Energy Monitor


To pair the Energy Monitor, press the small push button ④ on the top of the Monitor with the paper clip supplied. Look at the measurer LED to check that it is paired.

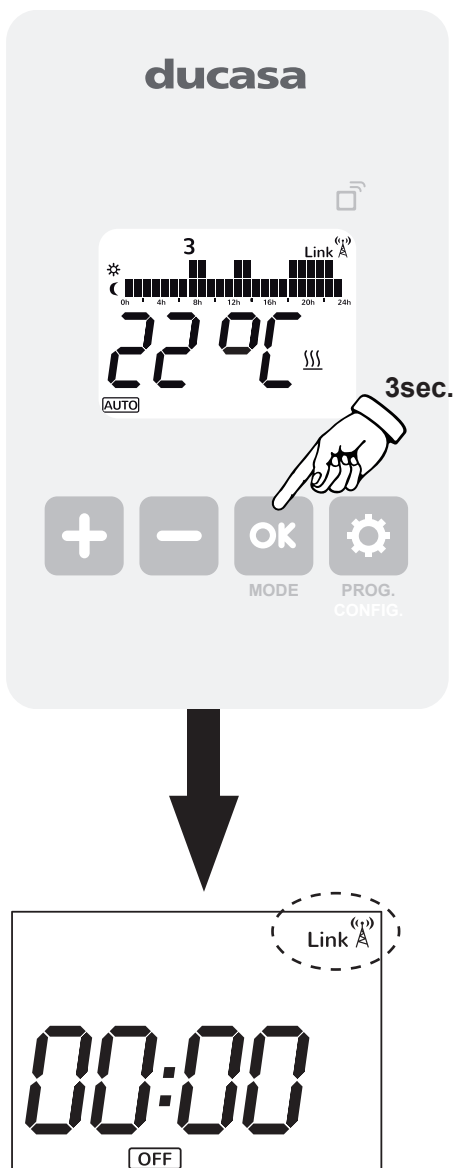


Status of the Energy Monitor LED

- **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. Once communication with the Gateway becomes available, the Energy Monitor will connect again automatically.

Avant DGi Radiator

To pair the radiator press the OK key for 3 seconds until the symbol  appears in the top right of the radiator screen.




Additional information

When you have paired your Ducasa Avant DGi radiators to the Smart Command Gateway download the **smart****command**™ app, which is available from:

<http://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 radiator, monitor the energy use for home and each radiator, 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****command**™ Gateway.

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: 868Mhz
- Operating temperature 0 °C to 60 °C
- Storage temperature -20 °C to 85 °C

Energy Monitor

- DIN rail placement. 1 rail module necessary
- Power supply 200-260 V ~ 50 Hz
- Consumption 0.90W
- Communication frequency: 868Mhz
- 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

Current Sensor

- External current transformer with measurement range between 0 and 100A AC. Connection with 3.5 mm jack
- Cable measurement capacity: $\varnothing 12\text{mm}$, maximum commercial section 95mm^2

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

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a slight shadow on the right side, suggesting it's resting on a surface. There is no handwriting or other markings on the paper.

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.



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

Telephone number for technical assistance: 01603 897 608