

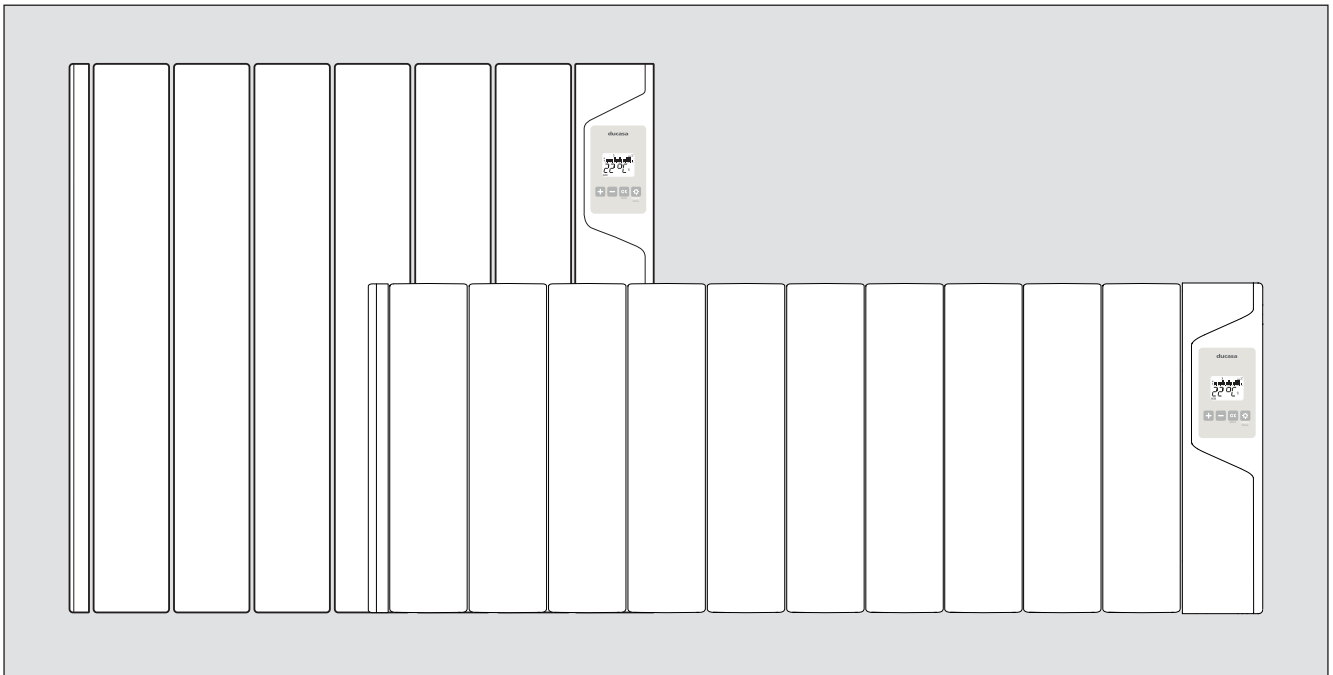
ducasa

AVANT-DGi+ AVANT-DGi+ L

Thermal Electric Radiator

Operating and Installation Instructions

(Read these instructions carefully and retain for future reference)



Models:

- AVANT-DGi+ 350
- AVANT-DGi+ 500
- AVANT-DGi+ 750
- AVANT-DGi+ 1000
- AVANT-DGi+ 1250
- AVANT-DGi+ 1500
- AVANT-DGi+ 1800
- AVANT-DGi+ 950 L
- AVANT-DGi+ 1425 L



Amazon Alexa and Google Home compatible



NOTE

A qualified electrician must carry out the electrical installation of this radiator. The electrical installation must comply with current UK regulations. Any claim on the warranty could be invalid if these requirements have not been met.

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IMPORTANT SECURITY INFORMATION

- This appliance can be used by children aged 8 years and above and persons with reduced physical, sensory or mental abilities or lack of experience and knowledge, if they have been given supervision or appropriate training regarding the use of the device in a safe way and they understand the dangers involved.
- Children should not play with the appliance. Cleaning and maintenance should not be performed by unsupervised children.
- Children under 3 years should be kept out of reach of the appliance unless they are constantly supervised.
- Children between age 3 and younger than 8 years old should only turn on / off the device whenever it has been placed or installed at its normal operating position provided they are supervised or have received instructions concerning use of the appliance safely and understand the risks that the device has. Children from 3 years and under 8 years old should not plug in, regulate, clean the appliance or perform maintenance.
- Warning: Some parts of this product can become hot and cause burns. Pay particular attention when children and vulnerable people are present.
- Heaters must be installed correctly following the specific requirements of the Installation Instructions section below.



Warning: in order to avoid over heating the unit, do not cover the heaters. This symbol “DO NOT COVER”, is placed on the heater as a reminder to the user.

ATTENTION:

- The heaters must not be covered by clothing, containers or any other objects that may block the air ventilation.

VERY IMPORTANT:

The “OFF” indicator shown on the heater’s control panel does not mean disconnection of the heater from the power supply and should be understood as a standby condition. To ensure the heater is completely off and without access to the power supply, it is recommended to disconnect it from the power supply by removing the fuse from the spur outlet. Alternatively, change the mechanical switch on the side of the heater to “OFF”.

- The unit must be placed away from flammable objects and children must not be left unattended when the heater is heating.
- The heater should not be located underneath any electrical connection.
- The electric supply line should be protected with a high sensitivity differential device (RCBO).
- Do not use the heater to dry clothes.
- Heaters must not be installed in places where there are risks of splashes such as next to bathtubs, sinks, etc.
- If the power cord is damaged, it must be changed by the manufacturer, its after-sales service or persons qualified to do so, to avoid possible danger
- Anyone who is in the bathtub or shower should not have access to the switches or other power operation devices. Always keep at least 0.6m (UK) or 3.0m (Ireland) between the radiator and the bath or shower.
(UK: Outside zone 2, Ireland: Outside zone 3)
- The radiator must be installed so that around the radiator there is sufficient space for proper circulation of hot air, with a minimum distance of 150 mm to curtains, furniture, etc

- All repairs where required must be completed by the manufacturing company or by special authorised staff.
- If the heater is sold without cable and plug or any other disconnecting method, the installer must incorporate a disconnecting device taking into account the specific regulations that apply.
- This heater has been designed and created as a fixed heating device unless it's being used with the optional feet and castor/pad set and must be used for this purpose only.
- If being wall mounted, the heater must be mounted using the brackets supplied with the heater.
- Do not place the heater directly on the floor.
- Make sure that the wall where the heater is going to be mounted is suitable to bear the heater's weight.
- Use the correct fixing for the type of wall the heater is to be mounted onto.
- Make sure that the electrical power supply corresponds to the information indicated on the heaters rating label.
- The heater must be levelled correctly both vertically and horizontally.
- When the heater is operational, the power cord must be totally unrolled and must not touch the surface of the unit.
- Do not operate the heater with wet hands.
- Before undertaking any type of maintenance, ensure that the heater is disconnected from the power supply by removing the fuse from the spur outlet.

TECHNICAL DATA

Model	Number Of Fins	Power Rating (W)	Size (mm)	Net Weight (Kg.)	Fuse Rating	Class
Avant-DGi+ 350	3	350	340 x 580 x 100	6.9	5 Amp.	I
Avant-DGi+ 500	4	500	420 x 580 x 100	8	5 Amp.	I
Avant-DGi+ 750	6	750	580 x 580 x 100	12	5 Amp.	I
Avant-DGi+ 1000	8	1000	740 x 580 x 100	16	10 Amp.	I
Avant-DGi+ 1250	10	1250	900 x 580 x 100	20	10 Amp.	I
Avant-DGi+ 1500	12	1500	1060 x 580 x 100	24	10 Amp.	I
Avant-DGi+ 1800	12	1800	1060 x 580 x 100	24	10 Amp.	I
Avant-DGi+ 950 L	10	950	900 x 340 x 100	20	10 Amp.	II
Avant-DGi+ 1425 L	15	1425	1300 x 340 x 100	26	10 Amp.	II

GENERAL INFORMATION

The Avant DGi+ has a special cast aluminium body specifically designed to assure the maximum rate of heat radiation; the air circulation channels provide a very efficient convection effect.

A unique manufacturing process provides bubble free filling so that the fluid delivers warmth from the heating element in a totally uniform way, ensuring that the entire surface of radiator provides comfortable heat.

A monotube heating element ensures maximum heat output.

Designed and fabricated in accordance with EN 60335-1, EN 60335-2 and EN 55014 (regulations for domestic appliances)

Standard colour White (RAL 9016)

Wall mounted (by quick fixing system)

Bi-metallic thermal cut-out

Overheat protection

Key-pad locking (anti-tamper)

NTC electronic sensor

Fitted with mains power cable approximately 1450mm long (without a plug)

INSTALLATION INSTRUCTIONS

Electrical Connection

A qualified electrician must carry out the electrical installation of this radiator. The electrical installation must comply with the current UK regulations. Any claim on the warranty could be invalid if these requirements have not been met.

The radiator requires a 230V 50/60Hz power supply.

Connecting wires:

Brown: Live

Blue: Neutral

Yellow-Green: Earth

NOTE: The Avant-DGi+ 950 L and Avant-DGi+ 1425 L are double insulated and do not require an earth cable

The connecting wires must be of the appropriate section, in regards to the length of cable, type of cable and power rating of the radiator.

The radiator must be connected into a **fused** connecting box or a **plug** fitted with an appropriate sized fuse for the radiator – see Technical Data on Page 3.

We recommend that the connecting box is positioned 10cm to the right of the radiator and at a height recommended by current UK regulations.

According to regulations, the radiator must be connected to the power supply by means of an all-pole circuit breaker with a contact gap of at least 3mm or by a thermal-magnetic circuit breaker.

Location

The ideal place to site the Ducasa radiator is as close as possible to coolest wall in the room but it is not recommended to site the radiator on un-insulated exterior walls, in this case, the part of the wall behind the radiator should be insulated.

In bathrooms, the radiators must not be sited inside the protected areas. The control unit switches must not be reachable, directly or indirectly, by a person in the bath / shower or using the wash basin.

The radiator, under no circumstances, should be installed below an electric power point.

Choose the location of the radiator in respect of the minimum distances that are indicated in Figure A.

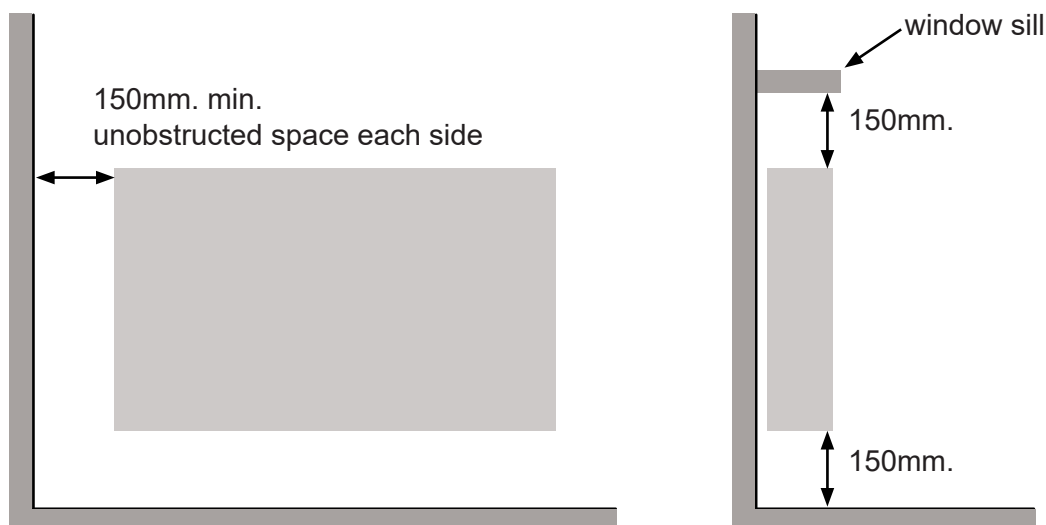


Fig. A

Note: If the window sill protrudes less than 20mm the gap above the heater can be disregarded.

Mounting The Radiator

Place the radiator on the floor, as shown in Figure 1a. For radiators with 4, 6 and 8 elements position the brackets supplied with the radiator between the first and second element (figure 1b). For radiators with more than 9 elements, the bracket should be placed between the second and third element (figure 1b).

Fig. 1a

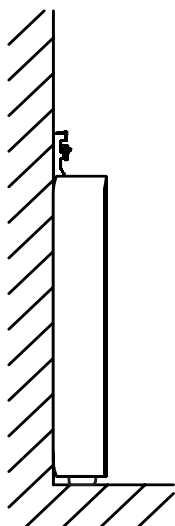
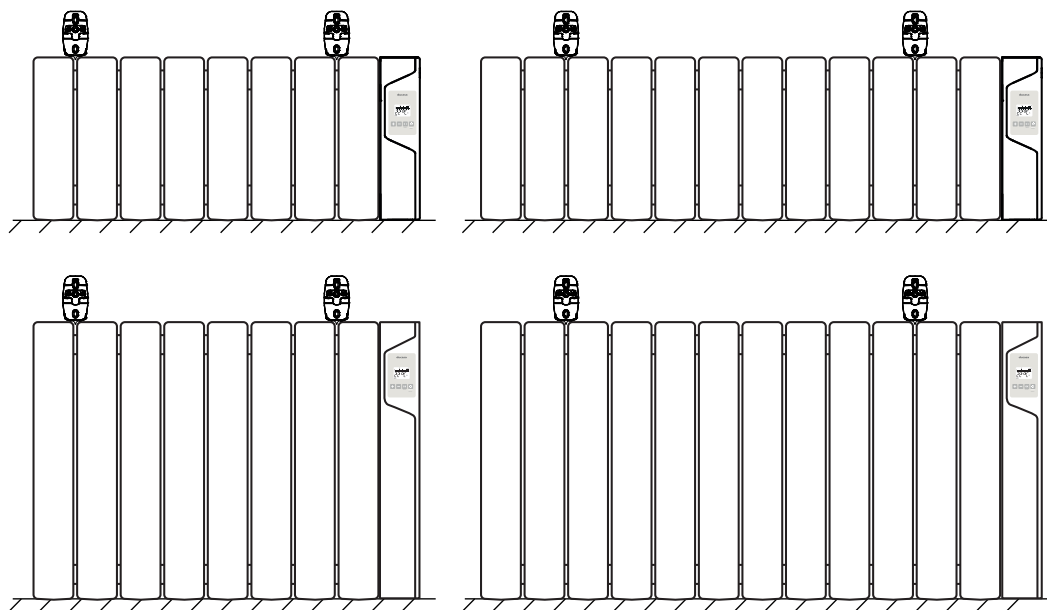


Fig. 1b



Place the supports between the elements as shown in Figure 2a, mark points on the walls through the fixing holes as shown in Figure 2b. This determines the spacing of the supports. Fix the supports to the wall with plugs and screws. Be sure that the supports are mounted in the correct position.

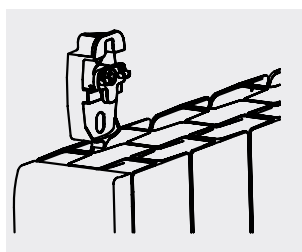


Fig. 2a

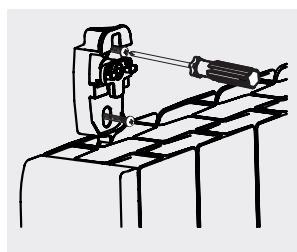


Fig. 2b

Lift the radiator and hang it on the supports, as Figures 3a and 3b.

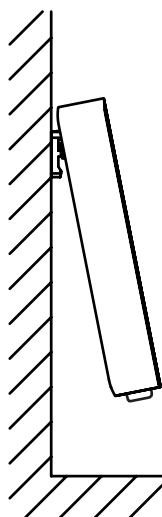


Fig. 3a

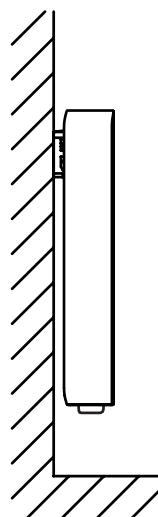
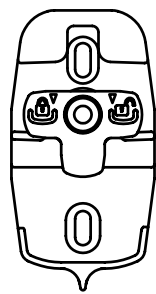
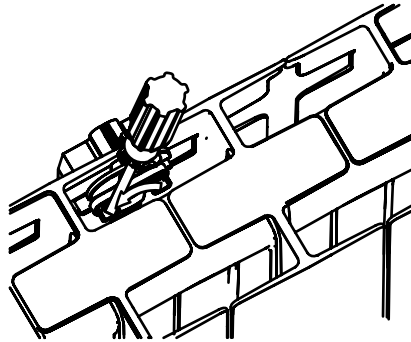


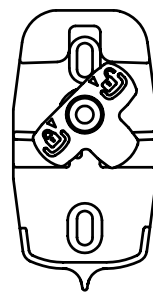
Fig. 3b

As soon as the radiator is hanging on the supports press on the locking plate until a click is heard. See Figure 4. The radiator is now installed.

Fig. 4



UNLOCKED



LOCKED

CONTROL OPTIONS

The Avant DGi+ is designed to be used in conjunction with the **smart[®]command[™] Tevolve** system and App, providing total control of your heating system from anywhere in the world via the internet. The **smart[®]command[™] Tevolve** App is available for both Android and iOS devices and offers the ultimate in control and energy monitoring.

**Search for “Tevolve” on the either the Google Play Store or the Apple App Store.
Scan this QR code to access to the download.**



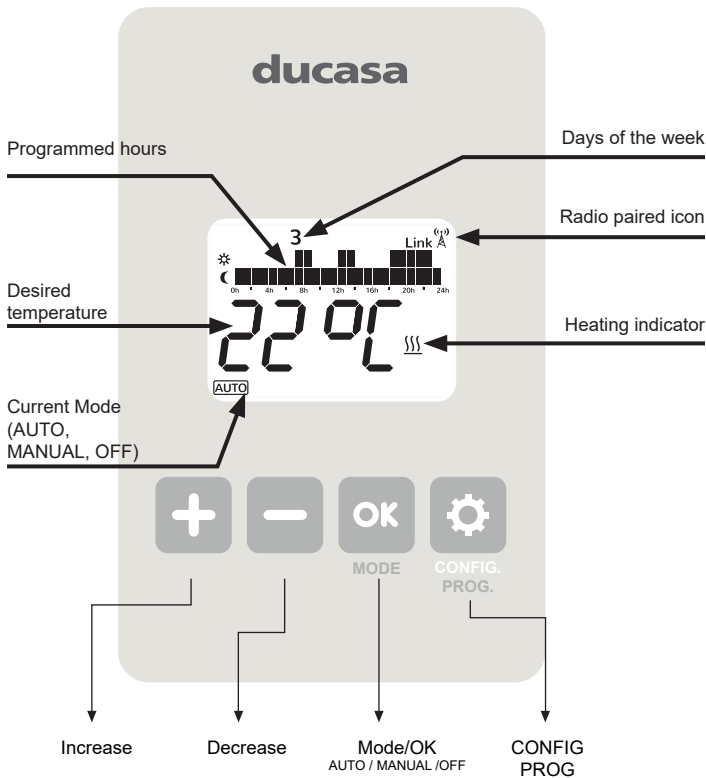
It is also possible to programme each radiator individually without the App by using the built in controls and screen. This may be convenient for single heaters however we recommend the **smart[®]command[™] Tevolve** Gateway to control multiple heaters.

The Avant DGi+ is also compatible with Amazon Alexa and Google Home via the **smart[®]command[™] Tevolve** System and App.

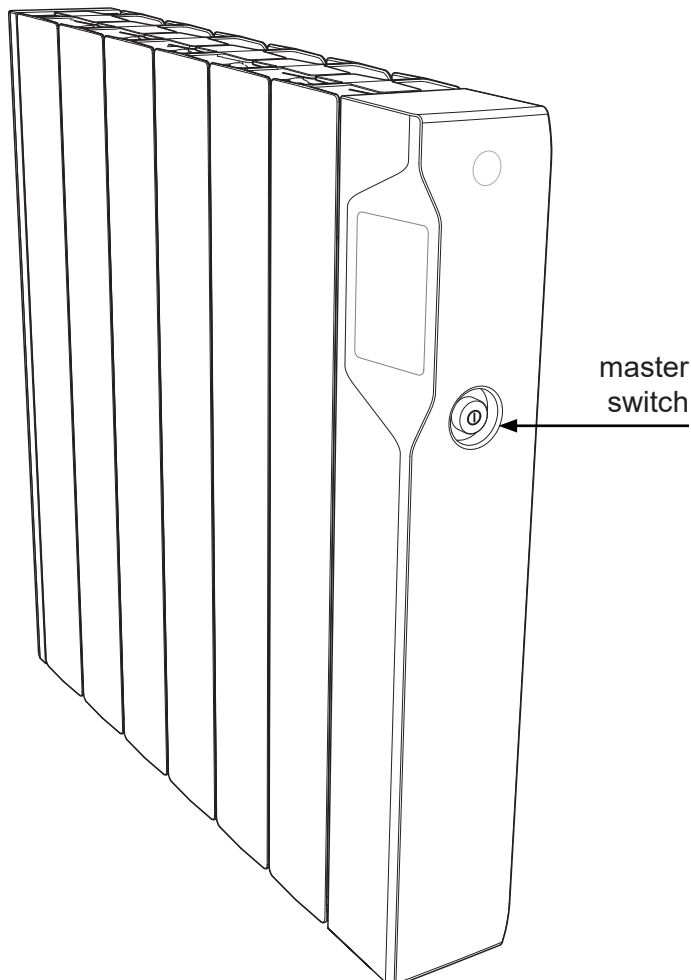
For instructions on how to link them, visit <https://ducasa.co.uk/smartcommand/voicecontrol>

OPERATING INSTRUCTIONS

The control is based on four buttons and an LCD display.



Ducasa DGi+ Radiator Controls



SWITCHING ON (MASTER SWITCH)

Once the radiator has been mounted on the wall and correctly connected to the main electricity power supply, press the main On-Off switch on the right hand side of the radiator.

After around 3 seconds the screen will show various information and the radiator is ready to work.

SWITCHING OFF (MASTER SWITCH)

To switch off the radiator press the main On-Off switch on the right hand side of the radiator. The LCD screen will be blank and the radiator will lose connection with the **smartcommand** Tevolve Gateway.

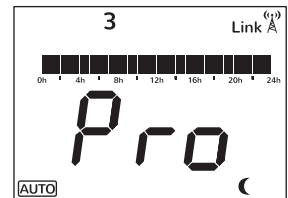
STAND-BY FUNCTION

Press the Mode/OK button until the **OFF** symbol is present as shown in the following screen.



When the radiator is in Stand-by Mode it will retain programmes and continue to communicate with the **smartcommand** Tevolve Gateway.

To switch the radiator On again, press the MODE button to choose programme mode **AUTO** or manual mode **Pro** – you will see the following screens:



USING WITH SMARTCOMAND TEVOLVE APP

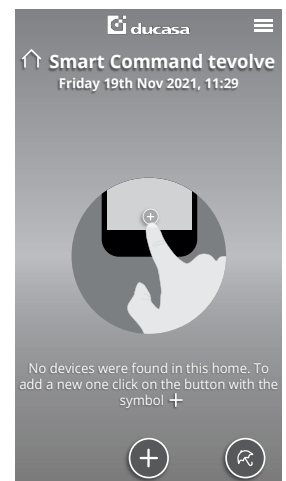
Connecting to the smart command tevolve app


To use your Avant DGi+ via the **smartcommand** Tevolve App you must first connect and register your **smartcommand** Tevolve Gateway. To do this follow the instructions in the gateway manual.

Ensure you have downloaded and logged into the **smartcommand** Tevolve App using your user name and password, then press the + icon on the home screen, and follow the on-screen instructions.


Please Note: Paired devices will show in the order they were added onto the App and will be called Radiator1, Radiator2 etc.


We highly recommend renaming each radiator as they are paired to avoid confusion. To do this select the paired

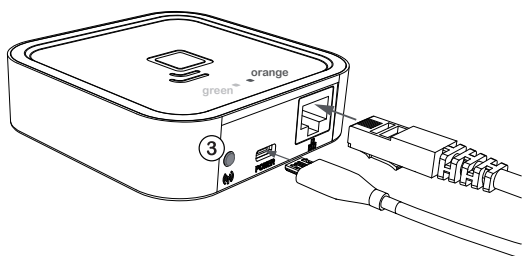


radiator and press the settings icon  where you can rename it.

Your Avant DGi+ is now ready to be controlled from the **smartcommand** *Tevalve*. App.

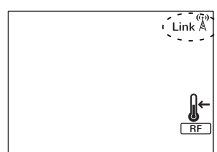
If the Avant DGi+ has been linked to the **smartcommand** *Tevalve*. Gateway and for some reason communication is lost, the Link icon disappears and the antenna  starts flashing on the Avant DGi+ screen. It will continue to operate in the mode it was in prior to losing communication.

If you don't have the access to the **smartcommand** *Tevalve*. App or are unable to pair using the method above, press the Link button on the Gateway  for 3 seconds.




Once the orange LED starts to flash, press the CONFIG button on the Avant DGi+ and press the +/- button until the RF icon flashes. Then press OK

'Link' together with an antenna icon will appear in the top right of the screen.



Your Avant DGi+ is now

connected to the **smartcommand** *Tevalve*. Gateway.

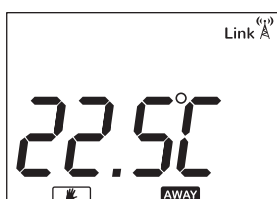
Please Note: Once the **smartcommand** *Tevalve*. Gateway's link button is pressed you have one minute to add a heater. When the heater has been added, you have one minute to add a further heater without pressing button .

Geolocation

This mode allows your **smartcommand** *Tevalve*. system to reduce the set temperature by a number of degrees that is configured for each device from the App when you are away from home. The default is 2 degrees.

Geolocation is activated from the **smartcommand** *Tevalve*. App within the Homes setting. If activated, all connected **smartcommand** *Tevalve*. devices in the house will use this feature and AWAY will be shown on the Avant DGi+ display.


If any button is pressed on any connected **smartcommand** *Tevalve*. device, all **smartcommand** *Tevalve*. devices in the house will exit Geolocation mode for 2 hours, unless it's turned back on again.



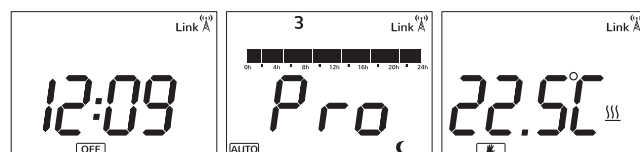
USING WITHOUT SMARTCOMMAND TEVALVE APP

Mode operation

To assist with programming the LCD screen is backlit and will stay illuminated for approximately 10 seconds after the last button is pressed.

When the radiator is operational and the room temperature is lower than the set temperature the heating symbol  will be shown indicating that the radiator is producing heat. When the room temperature equals or is above the set temperature the heating symbol will not be present indicating the radiator is not producing heat.

The following screens show **OFF**, **AUTO** and **MANUAL** modes. To chose diferent modes press **MODE/OK** button.

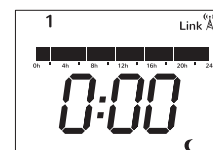





When the radiator is in **AUTO** mode the temperature can be changed by pressing the +/- buttons. This change will remain active until the next programmed change or until midnight when the temperature will revert to the preset value.

When in **MANUAL** mode, use the +/- buttons to adjust the temperature

Setting Programme and Clock

To start programming press and hold **CONFIG/PROG** button for 3 seconds and the following screen will appear:

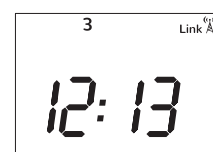


Programming starts on Monday at 00:00 and is set by choosing the required Mode for each hour of the week. Use the **OK** button to choose between Comfort , Economy  or Frost  Protection modes. On the screen programme hours will show two blocks for Comfort, one block for Economy and no blocks for frost protection). After choosing the mode press the +/- buttons to select the next hour to be programmed. When a full day has been programmed the screen moves to the next day.

Once each day of the week has been programmed the clock must be set.

Press the **CONFIG** button to exit from programming screen and enter the time setting screen.

To select the day of the week (1=Mon, 7=Sun) press +/- buttons and confirm with the **OK** button. Next select the hour, confirm with **OK** and then select the minutes and confirm pressing **OK** once more.



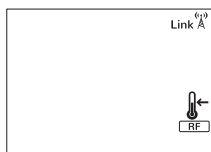
If a radiator is paired with a **smartcommand** *Tevalve*. Gateway, time setting is not required as it


recognises the system's time automatically.

Adjust Programmed Temperatures

Adjusting temperature in the following way will only effect the temperatures used for programmed modes.

To change these set up temperatures press the **CONFIG** button and the following screen appears:



When the temperature setup icon  starts flashing, press OK to scroll through each mode.



Press the +/- button to change the temperature of each mode then press **OK** to confirm and go to the next MODE to exit temperature setup, press **CONFIG**.

KEYPAD LOCKING (ANTI-TAMPER)

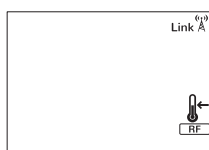
The Avant DGi+ can be locked to prevent any unauthorised person (children, people in public places, nurseries, offices, hotels etc.) altering the settings of the radiator. To lock the keypad press and hold the +/- buttons at the same time for 3 seconds until "bloc" appears on the screen. Any button presses will be ignored and "bloc" will be displayed on the screen.

To unlock keyboard, once again press and hold the +/- buttons for 3 seconds until the word 'bloc' disappears.

When the Avant DGi+ is locked the radiator will still receive communications from the **smartcommand Tevolve** Gateway.

ADVANCED SETTINGS

To enter the advanced settings mode, press **CONFIG** while the radiator is in one of the main modes (OFF, AUTO, MANUAL). The following screen will appear:



Now press the **CONFIG** button for 5 seconds and C1 appears on the screen.

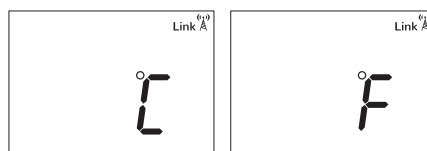
To scroll through the advanced settings (C1 to C6) use the +/- buttons and choose the required

setting by pressing OK. The advanced settings are:

- C1-> Choose °F or °C
- C2->Choose type of thermostat accuracy
- C3-> Temperature Compensation
- C4-> Firmware version
- C5-> Open Window detection
- C6-> Eco-Start

Degrees Fahrenheit or Celsius (C1)

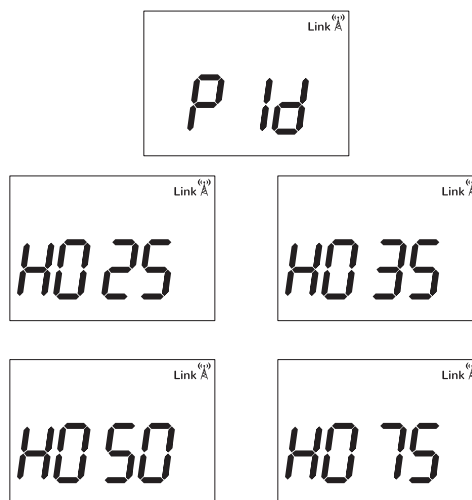
Select °C or °F with the +/- buttons and confirm with OK button



Type of Thermostat Accuracy (C2)

This setting shows the type of thermostat accuracy currently being used. There are 5 types of accuracy PID, hysteresis of 0.25°C, hysteresis of 0.35°C, hysteresis of 0.50°C and hysteresis of 0.75°C.

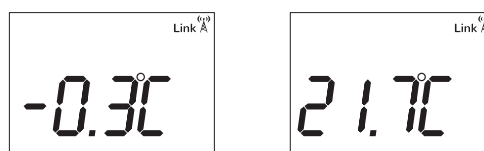
To change the type of accuracy press +/- button and confirm your selection by pressing the **OK** button. The screens shown are:



Temperature Compensation (C3)

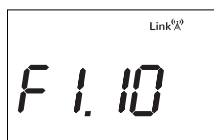
This setting is used to balance two radiators in the same room or to sync the Avant DGi+ with a thermostat. It will alternate between the temperature compensation (offset) and the measured temperature with offset applied. Alter the offset with the +/- buttons and confirm with OK.

Temperature compensation can be adjusted up to +/- 3°C



Firmware Version (C4)

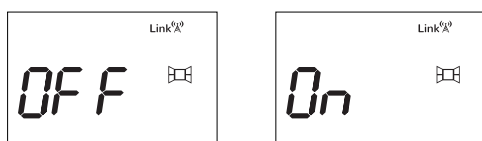
It shows internal software installed in the electronics.



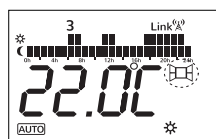
Open Window detection (C5)

In order to save energy, if a window opens and causes a sudden drop in temperature the heater will stop heating. If the heater is heating, it will be disconnected for 30 minutes and shows the Open Window icon on the display.

By default this function is deactivated. To change the status of the function, press the +/- button and then press ok to confirm.



This function detects a temperature drop of 0.6°C every minute over a period 4 minutes.



The heater will restore normal function in any of these situations:

- After 30 minutes
- If the temperature increases by 0.2°C for 1 minute from the point of activation.
- Pressing any button on the Heater

Eco-Start (C6)

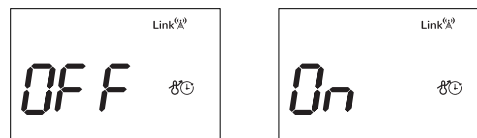
With this feature activated the radiator will learn what time it should switch on to achieve the required room temperature at your programmed time.


The heater will monitor the room temperature over a rolling 10 day period to establish how quickly the room reaches temperature and uses this information to switch the heater on at the correct time.

By reaching the required temperature at the set time and not before, energy use and running costs are reduced.

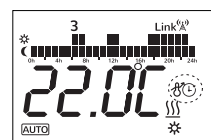
By default this function is deactivated.

To change the status of the function, press the +/- button and then press ok to confirm.



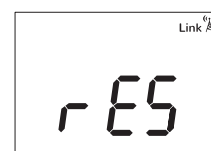
If this function is active then  will be shown on the LCD screen.

This function is only active while in AUTO mode. If the heater is reset, all previous Eco-Start data will be deleted.



Radiator Reset

Resetting the radiator will return all settings to the factory defaults and will also delete any 'pairing' with a **smartcommand** Tevolve Gateway. To activate the RESET feature press the **OK** button and the **CONFIG** button for 10 seconds. The following screen will appear:



To confirm the reset, press **OK** again, to cancel the **RESET** press any other button.

Factory Defaults

- Working mode: OFF
- Comfort Temp : 19°C
- Economy Temp : 17°C
- Frost Protection Temp : 5°C
- Manual Mode Temp: 19°C
- Temperature Compensation: 0°C
- No RF paired network
- Temperature units °C
- Control type: PID
- Default Programme: All Economy
- Open Window detection OFF.
- Eco-Start OFF.

Ducasa Avant DGi+

QUICK GUIDE TO MANUAL PROGRAMMING

The Avant DGi+ & Vitro-i+ radiator is programmed by using heating 'modes'.
The modes are set for each hour of the week, starting from midnight on Sunday
The days are numbered 1 to 7, with 1 being Monday and 7 being Sunday

The 'modes' are:
☀ Comfort ☾ Economy ❄ Frost Protection

There are 3 steps to programming your heater;
1. Programming the Modes 2. Setting the Clock 3. Setting the Temperatures

Programming the Modes

Press ⚙ Prog / Config for 3 Seconds
Press OK to choose the mode and '+' to confirm for each hour of each day
If you make a mistake press '-' to go back
When you are happy the modes are correct press ⚙ to move onto setting the clock

Setting the Clock

Use +/- to select the current day, 1 =Mon 7=Sun
then press OK
Use +/- to set the hour
then press OK
Use +/- to set the minute
When you are happy the clock is correct press ⚙ to move onto setting the temperatures

Setting the Mode Temperatures

Use +/- to select ⏪ then press OK
Use +/- to set the ☀ comfort temperature then press OK
Use +/- to set the ☾ Economy temperature then press OK
Use +/- to set the ❄ Frost Protection temperature then press ⚙
Press OK until AUTO is shown on screen
Programming is complete

Notes & Tips:

When the radiator is running in Auto the set temperature can be changed by pressing +/-
At the next programmed mode change, the radiator will return to the pre-set temperature

It can be useful to write down the times and modes you want before starting to programme the radiator

The screen backlight switches off after 10 seconds and the radiator exits programme mode.
If this happens you will need to press ⚙ Prog / Config for 3 seconds and re-enter your modes.

ECODESIGN TABLE

Models	Avant DGi+ 350	Avant DGi+ 500	Avant DGi+ 750	Avant DGi+ 1000	Avant DGi+ 1250	Avant DGi+ 1500	Avant DGi+ 1800	Avant DGi+ 950 L	Avant DGi+ 1425 L
Heat output									
Nominal heat output (P_{nom})	0.35 kW	0.5 kW	0.75 kW	1.0 kW	1.25 kW	1.5 kW	1.8 kW	0.95 kW	1.425 kW
Maximum continuous heat output ($P_{max,c}$)	0.35 kW	0.5 kW	0.75 kW	1.0 kW	1.25 kW	1.5 kW	1.8 kW	0.95 kW	1.425 kW
Auxiliary electricity consumption									
At nominal heat output (eI_{max})	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW
At minimum heat output (eI_{min})	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW
In standby mode (eI_{SB})	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW	0.0008 kW
Type of heat output/room temperature control:	Electronic room temperature control plus week timer								
Other control options:	Room temperature control, with open window detection. With adaptive start control. With distance control option.								
Heattend Products Ltd, https://www.heattend.co.uk/ Email: enquiries@heattend.co.uk									

MAINTENANCE AND CARE

Ducasa radiators require very little maintenance.

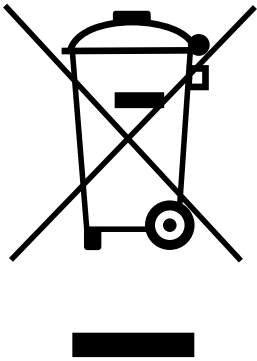
The surfaces of the radiator must not be cleaned with an abrasive product or those containing granular substances.

We recommend regular cleaning with PH neutral products.

In order to clean the radiator, it is recommended that the electric power is switched off.

To prevent a risk of overheating and to ensure optimum performance from the radiator, the vents within the fins and control unit must be always kept clear.

CORRECT DISPOSAL OF THIS PRODUCT



(Waste Electrical & Electronic Equipment)
(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed of with other household wastes at the end of its working life.

To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.



UK Distributor of Ducasa Products:

Heattend Products Ltd

Web: www.heattend.co.uk

Email: enquiries@heattend.co.uk