



# User manual Comet Plus

programmable  
energy-saving  
radiator thermostat



## By the way...

You already know about PROGmatic programming sticks? You can programme Comet Plus by hand or you can use, for example, the comfortable PROGmatic-Bluetooth programming stick to copy your personally specified heating and economy times onto all your Eurotronic energy-saving radiator thermostats at your home which have a programming port in a matter of seconds.

**Detailed information and the \*PROGmatic Programming sticks can be found on: [www.eurotronic.org](http://www.eurotronic.org)**



Please read the user manual before you place the thermostat. Keep the documents for later questions and provide them if you pass the thermostat on to other persons.

## Scope of delivery

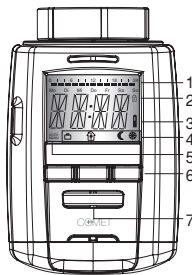
- 1 Comet Plus energy saving radiator thermostat
- 1 User manual
- 1 Connector
- 3 Adapters (Danfoss RA, Danfoss RAV, Danfoss RAVL)

## Application as directed

By purchasing the Comet Plus energysaving radiator thermostat you own a programmable radiator thermostat which can be used for temperature regulations in enclosed rooms and therefore, it can contribute to the reduction of heating energy. – Please use the thermostat only for this purpose. The Eurotronic programming port is intended ONLY for our Eurotronic programming stick. Never connect other devices with the programming port!

## Display and control elements

- 1 Heating times
- 2 Child lock active
- 3 Battery low
- 4.a Travel function active
- 4.b Comfort temperature active
- 4.c Economy temperature active
- 4.d Window/freeze protection function active
- 5 AUTO or MANU mode active
- 6.a Button – leads to the main menu (starting from regular display); within the menu one keypress leads to the previous level
- 6.b Button – confirmation of setting
- 6.c Button – timer function
- 7 Selector wheel



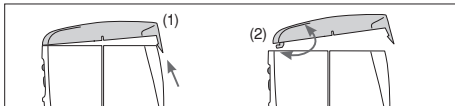
## Set up menu

By pressing you will arrive at the set up menu. Please choose one of the items with the selector wheel. With you can select one menu item and with the selection wheel they can be adjusted. The button confirms the setting. The button leads to the previous level.

MODE	to select the mode AUTO = automatic mode MANU = manual mode
PROG	setting of time programme
TEMP	setting of comfort and economy temperature
ZEIT	setting of date and time
FENS	window function
RES	reset of the device to factory preset
ADAP	starting of a new adaptation to adjust the valve travel function
URLR	
INST	installation function (Please only attach the controller to the coupling ring in this position)
OFFS	adaptation of temperature to the room situation
STBY	standby function
VERS	version
DST	Daylight saving time

## Inserting / replacing batteries

Remove the battery lid by pressing the battery lid upwards (1) at the highlighted point and then taking it out (2).



Then insert the batteries as represented in the appliance. **Do not use accumulators! Ensure that the polarity is correct!** Attention: Never recharge batteries, danger of explosion! Do not short circuit batteries! Do not disassemble batteries! Take low batteries out of the device immediately. Keep batteries away from extreme warming – danger of leakage! Do not apply used and new batteries together.

If needed, clean the battery and the contacts before using them. Keep the batteries away from children. When getting in touch with battery acid instantly irrigate the affected parts with clear water and call a doctor.

## Setting date and time

After inserting the batteries for the first time the date will flash on the display. Now, date and time can be set.

- Set date with the selector wheel. Confirm with
- Set month with the selector wheel. Confirm with
- Set day with the selector wheel. Confirm with
- Set hour with the selector wheel. Confirm with
- Set minute with the selector wheel. Confirm with
- That's it.

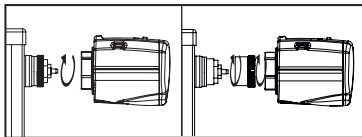
On the display **PREP** will be shown. Now, the motor will completely move to the installation position in order to make the installation easier. As soon as Comet Plus is ready for installation on „ADAP“, will be shown on the display. (INST- any time selected in the menu). Now please do not press any other buttons! Plug device for coupling ring. **see mounting.**

You can also set date and time via the menu item **ZEIT** later on. But in case of that, Comet Plus does not move to the installation position.

- In case of replacing batteries, the stored time programme will remain active. You should check the specified time to ensure that.

## Mounting

Comet Plus can be quickly and easily mounted on all common valves (see adapter table). It can be installed without grime and water spots because the heating circuit is not interrupted.



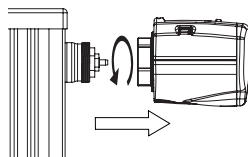
1. Turn the manual thermostat head up completely, loosen the fastening and pull the thermostat off of the valve.
2. Use an appropriate adapter, if required, and push it onto the valve.
3. Screw the connector on the valve or the adapter.
4. Now, you put Comet Plus on the connector until it noticeably clicks into place.

**Additional information about the different adapters are at: [www.eurotronic.org](http://www.eurotronic.org)**

**ATTENTION:** It must be possible to insert Comet Plus without applying force, ensure that the appliance is in the „ADAP“ or „EIN“ position.

- In case of a later installation, please switch in the menu to „INST“ and wait until the display shows „ADAP“ before you install the device. Herewith the installation is facilitated. **Only mount it in this position.**

## Dismounting



- To remove Comet Plus remove this at the EIN (with the wheel turn on the highest temperature of over 28 C° to EIN position), wait for a short period and unscrew the cap nut and remove the Comet Plus from the valve.

## Adaptation

Initial installation: Press the button and wait until ADAP appears on the display so that Comet Plus will be able to start its adaptation. The device will adapt itself to the stroke of your valve body. To do this the valve will now be opened and closed several times to store the end points. In some cases this process can take a few minutes. After successful adaptation it returns to normal mode.

- Should adaptation become necessary again, e.g. if your radiator does not cool down in the AUS-Position, please press in the menu the button ADAP until adaptation starts again.
- If the mistake E2 is shown on the display place Comet Plus onto the radiator valve and then take the batteries out for a short time in order to execute a reset.

## Basic operating modes

### MANU-Modus

In the MANU-mode Comet Plus adjusts to the manually specified temperature.

### AUTO-Modus

In the AUTO-mode Comet Plus changes between to temperatures according to the time programme that has been set:

**comfort temperature** (factory preset 21°C)

**economy temperature** (factory preset 16°C)

The heating and economy times can be specified via the adjustable time programme. It is possible to set 8 switch points (4 heating and 4 economy times) per day at the most. SPARmatic comet has the following factory preset:

### Heating time:

Heating with comfort temperature  
(factory preset: 1st heating time at 07:00)

### Economy time:

lowering to economy temperature  
(factory preset: 1st economy time at 22:00)

### Setting heating and economy times

With Comet Plus it is possible to set 4 heating and 4 economy times per day – one for each day or one for a block of several days. TAG1 to TAG7 represent the weekdays from Monday to Sunday. Additionally, the corresponding days are shown as abbreviation below the menu bar on the display.

### Block construction:

T 1–5 = same programme from Monday to Friday

T 1–6 = same programme from Monday to Saturday

T 1–7 = same programme from Monday to Sunday

- For non-programmed days the factory preset remains active.

### Setting of an individual programme:

Press . Select the menu item **PROG** with the selector wheel. Press . TAG1 for Monday is shown on the display. Select day/block with the selector wheel. Confirm with .

Set the beginning of the 1<sup>st</sup> heating time (symbol ) with the selector wheel. Confirm with . Set the beginning of the 1<sup>st</sup> economy time (symbol ) with the selector wheel. Confirm with . Now, if desired, a 2<sup>nd</sup>, 3<sup>rd</sup> or 4<sup>th</sup> heating/economy time can be entered.

- If you do not want to set a further heating/economy time confirm „- - -“ with .

The next day for programming is shown on the display.

- If you do not want to enter a further day, leave the menu with . If the temperature is shown on the display the programming is finished. Within the blocks you can also overwrite single days with differing times.

### Setting comfort and economy temperature

Press . Select the menu item **TEMP** with the selector wheel. Confirm with . Set comfort temperature with the selector wheel. Confirm with . Set the economy temperature with the selector wheel. Confirm with .

**Area AUS:** 8°C, freeze protection function is active  
**Area EIN:** valve is completely open

- **By the way:** Maximum energy saving can be obtained with an economy temperature which is about 5 °C below the comfort temperature.




### Manual operation

With the selector wheel an adaptation of the room temperature is possible at any time. In the AUTO mode it remains active until the next switch point is reached. Now, the usual programme becomes active again.




## Further functions

### Timer function





The timer function is selected with the timer-button 

With this function a user-defined temperature for a programmable period can be entered. This can be very useful in case of a party, for example. Press  First, the time for which the time programme has been deactivated is shown. Confirm with  Now, the desired temperature can be set. Confirm with . In the selected period it is not possible to change the temperature manually, the wheel is locked. Press Menu and unlock it.

### Offset






If the perceived temperature significantly differs from the set thermostat temperature a temperature set up can be executed. Press  Select the menu item OFF5 with the selector wheel. Confirm with . The degree setting  $\square, \square^{\circ}\text{C}$  will flash on the display. Now, set up the desired adaptation for the temperature (from -5 up to +5°C) with the selector wheel. Confirm your entry with . The temperature display does not change!



### Windowfunction

If you open a window and consequently the temperature drops significantly, Comet Plus will automatically close the heating valve in order to save energy. The display will show . Afterwards, Comet Plus will resume normal operation. For the set up select FENS in the menu. Confirm with  First, the sensibility is selected with the selector wheel (HIGH = high sensibility, MID = medium sensibility (factory preset), LOW = low sensibility). Confirm with . Now, you enter the time (10 min (factory preset) - 60 min) for which the valve should remain closed. Confirm with .




### Travel function

For the time you are absent you can select an individual temperature. After this period the originally defined programme becomes active again.




1. Press .
2. Use tuning wheel to select the menu item URLR. Confirm with .
3. Select with the selector wheel the date and the start time of vacation. Confirm with .
4. Select end of vacation. Date and the start time. Confirm with .
5. Set temperature and confirm with the button .

Symbol  appears on the display, when selected holiday time begins. The symbol disappears automatically when the time ends. The symbol disappears also by pressing .



### Child lock

You can lock Comet Plus to protect the device from unauthorized activation. Press the buttons  +  at the same time for about 2 seconds until the signal  appears on the display in order to lock the device. By using this button combination again the symbol disappears and you release the lock.



### Heating pause – Closing the Comet Plus

Press . Select the menu item MODE with the selector wheel. Confirm with . Select PAUSE and confirm with . Set the temperature on the display to PLUS. The valve is now closed and will work without a time programme. The calcification protection function remains active once a week. After the heating pause you switch in the menu to the AUTO mode and the personally set programme will be executed again.




### Daylight saving time

Press . Select DST with the selector wheel. Confirm with the  button and select ON/OFF with the selector wheel. SPARmatic comet switches automatically from summer to winter time.

### LCD standby indicator

Press  the menu item STBY with the selector wheel. Confirm with the  button and select EIN/AUS with the selector wheel. After about 30 seconds, the LCD indicator switches into standby mode. By pressing any button, the display will be activated again. (by removing the battery, standby mode will be reseted). Increases the battery life time.

### Going back to factory preset/All reset

Press . Select the menu item RES with the selector wheel. Confirm with . OK flashes, confirm with . Comet Plus is reset again. Now, proceed as described for the initial operation.

### Freeze protection and calcification protection function are active automatically:

#### Freeze protection function

If the temperature drops below 6°C, Comet Plus opens the valve until the temperature again rises above 8°C. This prevents the radiators from freezing.

### Calcification protection function

To prevent radiator valves from calcifying Comet Plus is submitted to a calcification protection programme once a week on Friday mornings.

## Cleaning and used devices




### Cleaning

To clean the Comet Plus use only a dry or lightly wet cloth. Avoid chemical solvent – it can probably damage the device.

### Used devices

Do not throw old devices and packaging into the household waste. They can be recycled. You receive further information at your local government.

### Adapter

Heimeier, Junkers Landys+Gyr, MNG, Honeywell, Braukmann threadmeasure dimension of M 30x1,5	no adapter required
Danfoss RAV (accompanying pin must be plugged on the valve tapped)	 + accompanying pin, only for RAV!
Danfoss RA	
Danfoss RAVL	



Please remove all the connection pieces of the plastic adapters before you use one of the attached adapters!




Please completely remove the connection rods highlighted in grey prior to assembly the adapter. You can find additional brass adapter models that are subject to a charge:


[www.eurotronic.org](http://www.eurotronic.org)


### Hilfe

Problem	Cause	Solution
	Batteries do not have enough power.	Replace batteries.
Heating element does not warm up.	Is the boiler water temperature O.K.?  Valve does not open, is it calcified after the summer pause / heating pause?	Adjust the temperature of the boiler water. Remove the Comet Plus, move the valve stem back and forth per hand or with a tool.
Heating element does not cool down.	Valve does not close completely. It may be that the closing point of your valve seat has shifted.	Adapt again (see "Adapting") Move the valve stem several times by hand, it may be that adaptation is impossible because your valve is calcified or the seat no longer performs its function.
Pressure piece falls out (This can also cause an E1-error)	Due to an end-lessthread the pressure piece, which is situated at the bottom, can fall out if the device has not been affixed on the valve.	Put in the pressure piece. The device can beadapped by pressing the  - point or by removing and inserting the batteries. The end-lessthread is rotating now and fixes the pressure piece again. Just install it to the radiator and adapt it once again.
E1 - E3	<b>By pressing any key the error message will be deleted in the display and the adapter is re-started.</b>	
E1	No adaptation possible. Comet Plus is not installed to the heater.	Is the installation OK?  Install Comet Plus to the heater.
E2	Valve stroke is too short.	Open and close the valve several times manually or replace the batteries.
E3	Motor movement is not possible.	Does the valve stem move freely?


## ENVIROMENT PROTECTION

 From the date of transposition of the European Directives 2012/19/EU into national law, the following shall apply:

Electrical and electronic devices as well as batteries  must not be disposed with household waste. The customer is legally obliged to return electrical and electronic equipment and batteries at the end of their service life to the public collection points set up for this purpose or the point of sale. Details are regulated by the respective national law.

 Dispose of packaging sorted by type. Add paperboard and cardboard to the waste paper, foils to the recyclables collection. The symbols on the product, the instruction manual or the packaging refer to these regulations. By recycling, material utilisation or other forms of utilisation of old devices/batteries, you make an important contribution to the protection of our environment.

### Declaration of Conformity

The Declaration of Conformity is provided at:  
 <https://eurotronic.org/produkte/elektronische-heizkoerperthermostate/comet-plus/>

### Guarantee

The three-year warranty begins on the day of purchase. Please keep the receipt as evidence of purchase in the future. During the guarantee period, defective radiator thermostats may be sent to the service address below. Please ensure sufficient postage is paid. A new or repaired device will then be sent to you free of charge. Following expiry of the guarantee, you may still send the defective device to the address below for repairs. Please ensure sufficient postage is paid. Repairs carried out after the guarantee period are subject to a charge. Your legal rights are not affected by this guarantee. There is no new warranty period starting when repairing or replacing the device. Please note that we only grant warranty on the function of the device. We will not grant warranty for the interaction between the thermostat and the bottom part of the valve. The technical data is only valid for the use of the following valves: Heimeier, Junkers Landys + Gyr, MNG, Honeywell, Braukmann (measure of thread M30 x 1,5), Oventrop (M30 x 1,5) Danfoss RA, RAV and RAVL. Please see the combinations of the devices on our website ([www.eurotronic.org/](http://www.eurotronic.org/) Adapter list) EUROtronic does not issue a guarantee when using the thermostat with valves which are not mentioned above.

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