GENIUS THE INGENIOUS ENERGY-SAVING CONTROLLER

INSTALLATION & OPERATION GUIDE





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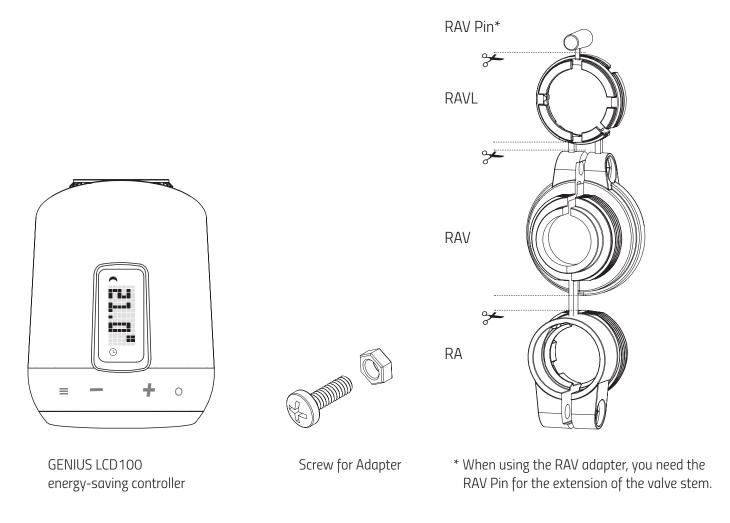
The following operating instructions will guide you during commissioning and use of your GENIUS LCD 100 and answer all essential questions. Please read these operating instructions carefully before using your GENIUS LCD 100.

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1. SCOPE OF DELIVERY GENIUS LCD 100

1x GENIUS LCD100 1x Quick Start Guide 3x Adapters (Danfoss RA / RAV / RAVL) 1x Srew for Adapter 2x Batteries AA LR6

NOTE: The following figures are for illustrative purpose only and can differ from the real product.





2x batteries AA LR6

NOTE: Please check the delivery scope for completeness.



WARNING! This signal word indicates a hazard with a medium degree of risk which, if not avoided, may result in death or serious injury.

NOTE! This signal word warns of possible material damage.

SAFETY INSTRUCTIONS

- GENIUS LED100 is designed for use in buildings.
- Operate GENIUS LED100 only as described in the user manual
- GENIUS LED100 should only be put to use in a dry and dust-free place, away from direct sunlight.
- Do not keep using the device when ther is obvious damage.
- GENIUS LED100 may not be rerebuilt, modified or opened

WARNING! RISK OF EXPLOSION!

Improper handling of batteries can lead to explosion.

- Do not heat batteries and do not throw batteries into an open fires.
- Do not place batteries in direct sunlight.
- Protect batteries from excessive heat.
- Do not short-circuit the batteries.
- Never attempt to charge non-rechargeable batteries.
- Never disassemble batteries.
- Do not use new and used batteries together.
- Observe the correct polarity (+/-) when inserting the batteries.
- Before inserting the batteries, clean the batteries and the contacts in the thermostat.

WARNING! RISK OF ACID BURNS!

Leaking battery acid can lead to burns.

- Avoid contact of battery acid with skin, eyes and mucous membranes.

- In case of contact with battery acid, rinse the affected areas immediately with plenty of clear water and consult a doctor.

WARNING! RISK OF INJURY!

When children play with the thermostat or packaging, they might swallow small parts and suffocate.

- Do not let children play with the thermostat or packaging.
- Keep batteries away from children. Seek medical attention immediately if batteries are swallowed.

WARNING! SENSITIVITY TO LIGHT!

Some people may have epileptic seizures if they are exposed to certain light effects, even if no previous incidents are known.

3. INTRODUCTION GENIUS LCD100

Thank you for purchasing a product from Eurotronic Technology GmbH. This device is designed to adjust the temperature in your rooms comfortably and completely according to your needs while helping you to reduce your heating costs effectively.

All development and production are 100%, Made in Germany", guaranteeing the highest quality and technology standards. These operating instructions will help you to put your device into operation quickly and easily.

GENIUS LCD 100

GENIUS LCD100 automatically regulates your room temperature according to your specifications and can be configured directly on the controller or conveniently via your smartphone using Fast-Link.



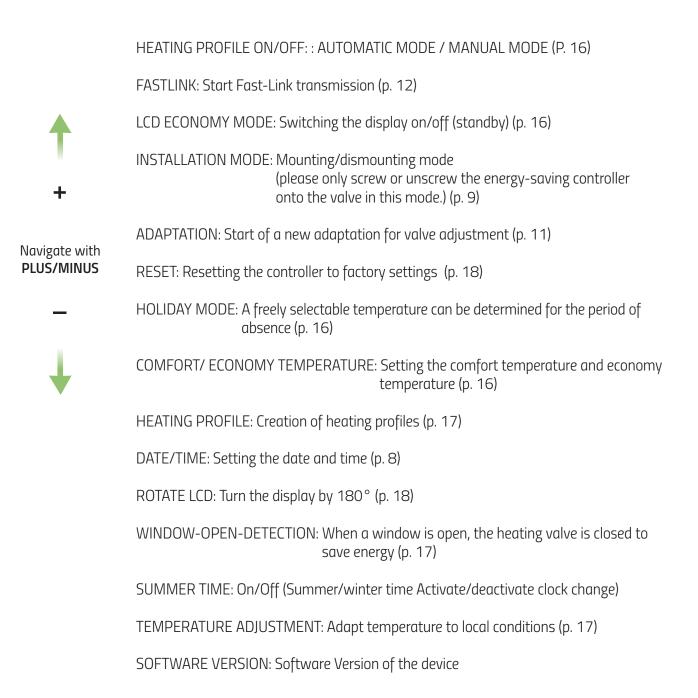
4. SETUP MENU GENIUS LCD 100

Press **MENU** to enter the selection menu. Use the **PLUS/MINUS** buttons to navigate through the menu. Press **OK/SET** to select a menu item and **PLUS/MINUS** to change the values. Press **OK/SET** to confirm your entry and MENU to return to the previous menu level.

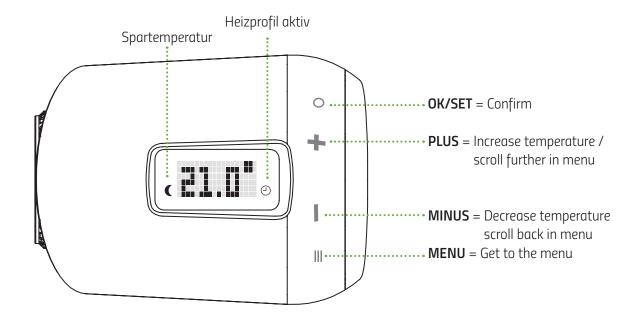
In normal mode, you can set the temperature with **PLUS/MINUS**.

Press the **MENU** button to access the menu

Confirm with **OK/SET** button



5. CONTROLS AND DISPLAY ELEMENTS

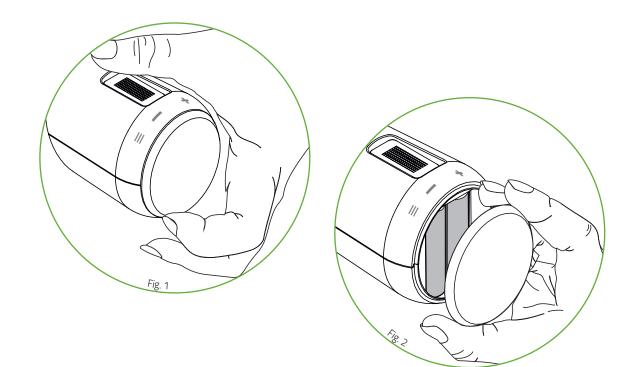


(<u>_</u>]====	Key lock active
{]]]]	Battery level display
	Fast-Link transmission running (animation is displayed)
	Fast-Link was successful
, # .	Fast-Link was not successful
	Window-open-detection active
- 	Anti-freeze protection function active
	Adaptation (the animation is displayed until the adaptation is complete)
	Holiday function

6. INSTALLATION AND START-UP

6.1 INSERTING/CHANGING BATTERIES

- 1. Remove the battery cover by pulling it upwards at the notch (Fig. 1).
- 2. Now insert the batteries. Pay attention to the correct polarity! Do not use rechargeable batteries.
- 3. Place the battery cover back on the GENIUS LCD100 (Fig. 2) by pressing until it clicks.



6.2 SET THE DATE AND TIME

During initial commissioning, the year number starts flashing after the batteries have been inserted. The year, date and time can now be set one after the other.

Set the year with **PLUS/MINUS**. Set the month with **PLUS/MINUS** Set the day with **PLUS/MINUS** Set the hour with **PLUS/MINUS** Set the minute with **PLUS/MINUS** Confirm with **OK/SET**. Confirm with **OK/SET**. Confirm with **OK/SET**. Confirm with **OK/SET**. Confirm with **OK/SET**.

An animation appears in the display immediately afterwards. The motor now opens completely to facilitate assembly. As soon as GENIUS LCD 100 is ready for installation, ADAPTATION appears on the display. Now please do not press any more buttons! Now mount the energy-saving controller onto the valve.

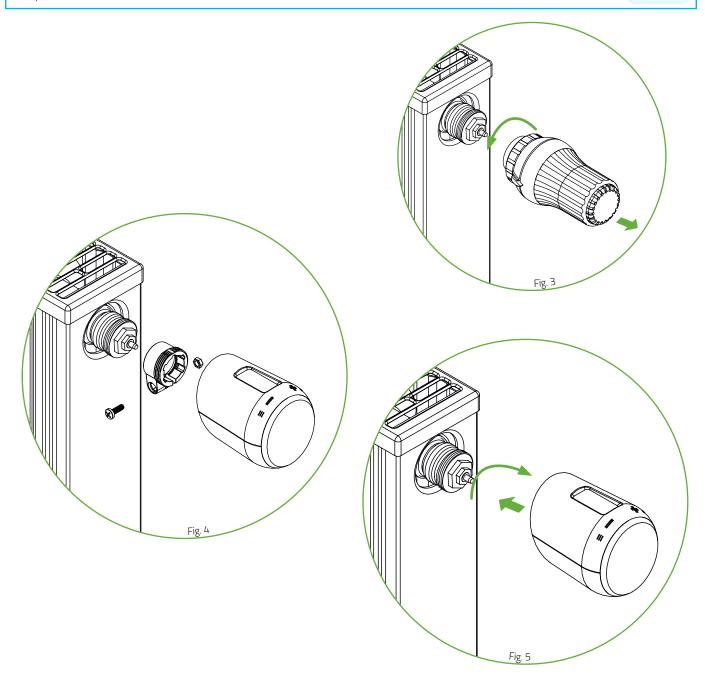
6.3 INSTALLATION AT THE RADIATOR

GENIUS LCD100 can easily be mounted on all known valve bodies (see adapter list at: https://eurotronic.org/service/faq).

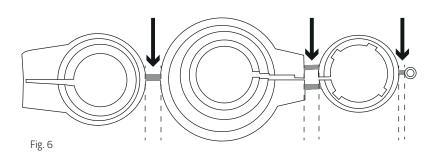
- 1. Unscrew the old thermostatic head completely, loosen the fastening and pull it off the valve (Fig. 3)
- 2. If necessary, select a suitable adapter and mount it on the valve (Fig. 4)
- 3. Screw the thermostat onto the valve or adapter by turning the union nut clockwise (Fig.5).

CAUTION:

Make sure that the device is in the installation mode even if it is installed/removed later. Only assemble/disassemble in this position.



6.4 ADAPTERS



NOTE:

Remove the connectors of the plastic adapters completely (Fig. 6) before using one of the included adapters! For Danfoss RA/RAV, use the enclosed screw and nut.

For the following valves no adapter is required:

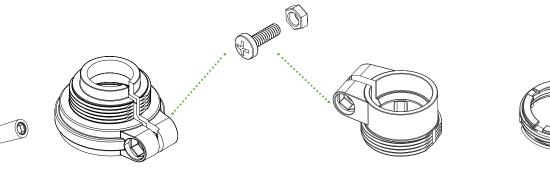
Heimeier; Junkers Landys+Gyr; MNG; Honeywell; Braukmann, as these have a thread of M30 x 1,5 mm. The adapters for Danfoss RAV (pin must be plugged on the valve tappet) Danfoss RA and Danfoss RAVL are included.

For the following valves you need an adapter:

Herz M28x 1,5 mm; Comap M28x 1,5 mm; Vaillant 30,5 mm; Oventrop M30x 1,0 mm; Meges M38x 1,5 mm; Ondal M38x 1,5 mm; Giacomini 22,6 mm; Rossweiner M33x 2,0 mm; Markaryd M28x 1,0 mm; Ista M32x 1,0 mm; Vama M28x 1,0 mm; Pettinaroli M28x 1,5 mm; T+A M28x 1,5 mm; Gampper 1/2/6; Danfoss RA/RAV/RAVL.

For additional adapters, please visit: http://shop.eurotronic.org

If you are not sure which valve you have, please visit: www.eurotronic.org/produkte/faq/ and check the adapter list.





RAV

RA



6.5 ADAPTATION GENIUS LCD 100

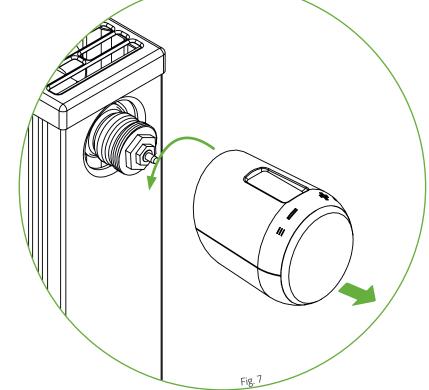
After the installation has been completed, GENIUS LCD 100 is able to start adapting by holding down OK/SET for approx. 3 seconds. The device now adapts to the stroke of your valve body. To do this, the valve is now opened and closed several times to learn the respective end points. The display shows . This process may take some time.

After successful adaptation, the GENIUS LCD 100 switches to normal operation, the display shows the setpoint temperature.

- | If a new adaptation is necessary, e.g. if your radiator does not become cold in the OFF position, please select ADAP-TATION in the menu. Confirm with OK/SET and start the adaptation again.
- | If the error E1 appears in the display, place GENIUS LCD 100 on the radiator valve and then remove the batteries briefly to perform a reset.

6.6 DISASSEMBLY

To remove GENIUS LCD 100, select MENU INSTALLATION MODE and confirm with OK/SET. Wait briefly until the motor movement shown by an animation is completed and ADAPTATION appears in the display. Now turn the union nut counterclockwise and remove the GENIUS LCD 100 from the valve (Fig. 7).



7. FAST-LINK-TECHNOLOGY

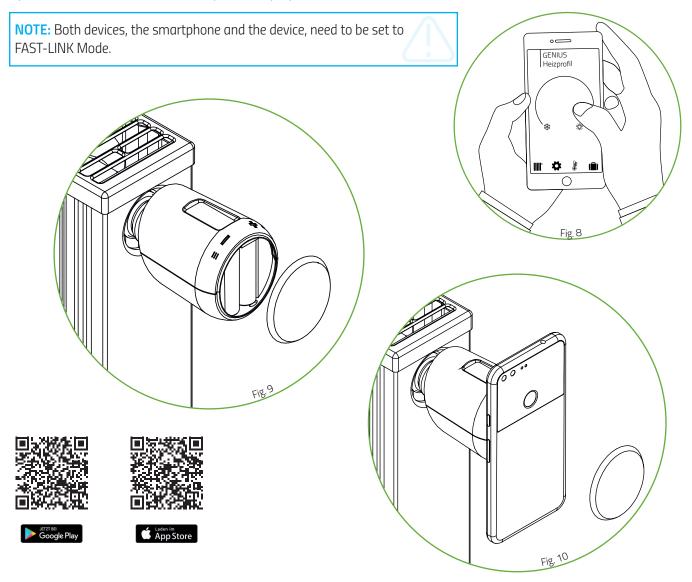
With Fast-Link technology and our app, you can quickly and easily make settings on your controller and create heating profiles using your smartphone. Using Fast-Link technology, the settings are then transmitted to the controller simply by holding the smartphone on to it.

To use Fast-Link you need the Eurotronic GENIUS App. Download the free ,Eurotronic GENIUS" application from the Apple App Store (iOS) or Google Play Store (Android) to your smartphone or tablet.

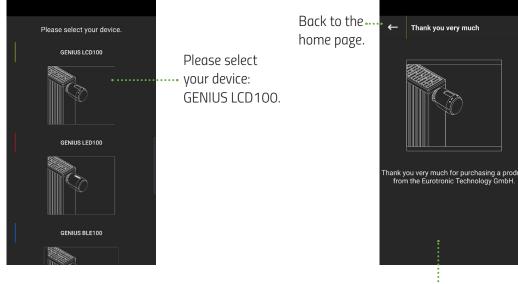
NOTE: To ensure trouble-free transmission, set the brightness of your display to the highest level. No energy-saving mode or similar must be activated.

- 1. Remove the battery cover (Fig.9).
- 2. Select FASTLINK from the menu and confirm with **OK/SET.** (The animation shows that the controller is ready for transmission via Fast-Link.)
- 3. Start Fast-Link from your smartphone and hold it up to the device as shown in Figure 10.

4. Now you can transmit your settings and heating profiles via Fast-Link. After successful transmission the display shows 🗒



8. GENIUS APP



By ,wiping further" you can display the assembly instructions in four steps.

NOTE:

Please remember to transmit the data via Fast-Link as soon as you have made a change in the app.

8.1 SETTINGS (APP)

	 •					
	~	Living room Heating profile	setting	s		
	Wir	ndow-open-det	ectior	ı		
		Sensitivity		low	>	
	Dur	ation in minutes		10	>	
Instruction						
Assembly	Key	lock		•		
FastLink	Sun	nmer/ winter time			•	
GENIUS LCD100	\geq					
GENIUS LED100	Rot	ate LCD by 180°		•	D	
GENIUS BLE100						
Help						
Support						
			(Settin	

Select the sensitivity of the temperature setting (high, . medium, low).

Set the desired period of time for which the valve is to remain closed.

By activating the child lock, manual operation on the controller is blocked. In the display of GENIUS LCD100 the following symbol is shown

- If you activate the ,Summer/winter time" toggle switch, the time changeover is carried out automatically.
- Activate this button to rotate the display by 180°.

In the menu bar you can switch between the menu items: settings, temperature, heating profile and holiday.

8.2 TEMPERATURE (APP)

The temperature shown above is the one currently being set.

÷	Heating profile		
**	18.0 16.0		
	ating operature	18.0 °C	
	ergy Saving nperature	16.0 °C	
Temperatu	ure E	(Â)	#

... With the setting wheel you can set your comfort temperature and economy temperature, which will then be used for your heating profiles.

... Determine the temperature with which the heating is to be carried out during the heating times. To do this, select the ,Comfort temperature" button and set the temperature using the setting wheel.

••• Determine how far the temperature should be lowered during the saving times. To do this, select the ,Economy temperature" button and set the temperature using the setting wheel.

In the menu item ,Temperature" you may set your comfort and economy temperatures.

NOTE: Please remember to transmit the data via Fast-Link as soon as you have made a change in the app.

8.3 HEATING PROFILE (APP)



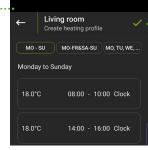
Back to the• overview.

Here you can create a heating profile for the **whole week**.

Here you can create different heating profiles for the **weekdays** and **weekends**.

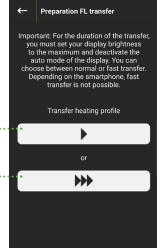
Here you can create an individual heating profile for **each day.**

 After you have made your settings, you can transmit your heating profile via Fast-Link.



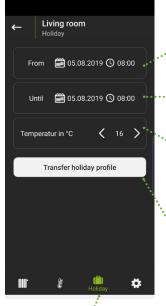
You can transmit simply.

 After defining the heating times, confirm with the check mark.



In the menu item ,Heating profile" you can create individual heating profiles.

8.4 HOLIDAY FUNCTION (APP)



- Select the time of your departure.
- . Select the time of your return.
- Determine the room temperature for the duration of your absence.
- After you have created your holiday profile, transmit it via Fast-Link.

The menu item ,Holiday" allows you to create a holiday profile for the time of your absence.



Select your month and day and confirm with OK.

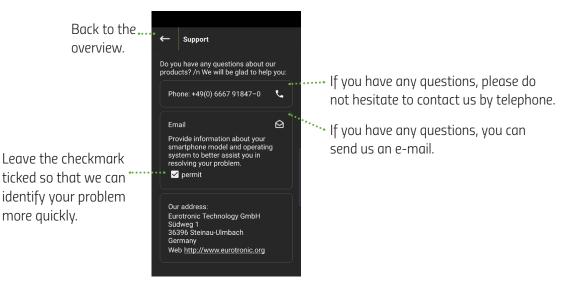


Select your month and day and confirm with OK.

NOTE:

Please keep in mind, to transmit the data you have changed in the App via Fast-Link.

8.5 SUPPORT (APP)



9. MAIN FUNCTIONS GENIUS LCD 100

HEATING PROFILE OFF:

In manual mode, GENIUS LCD 100 regulates the temperature to the manually set value. In this mode, the timer function is disabled.

HEATING PROFILE ON:

In automatic mode, GENIUS LCD 100 switches between two temperatures according to the set time programme: Comfort temperature (factory setting 21°C) and economy temperature \mathbf{C} (factory setting 16°C). The following symbol appears on the display \mathbf{O} , indicating that the heating profile is currently active. As soon as the setpoint temperature is changed manually, the symbol flashes \mathbf{O} .

LCD ECONOMY MODE:

To extend battery life, the LCD saver mode can be activated. This causes the LCD display to automatically go into standby mode after a short time. To activate this function, press **MENU**. Press **PLUS/MINUS** to select the menu item LCD ECONOMY MODE. Confirm with OK/SET. Use **PLUS/MINUS** to set to on or off. By pressing any button, the display is reactivated.

HOLIDAY MODE:

For the time of your absence, you can determine a freely selectable temperature. After the set time has elapsed, the programme you have set will automatically run again.

To set the holiday mode, press **MENU**. Press **PLUS/MINUS** to select the menu item HOLIDAY MODE. Confirm with **OK/SET**. Select the end of the absence with **PLUS/MINUS** (date of start of regular heating operation). Enter the time and confirm with **OK/SET**. When the holiday mode is active, the following symbol appears on the display \clubsuit . To exit the HOLIDAY MODE prematurely, press **MENU**.

COMFORT/ ECONOMY TEMPERATURE:

Press MENU to set the comfort and economy temperatures. Press PLUS/MINUS to select the menu item COMFORT/ ECONOMY TEMPERATURE. Confirm with **OK/SET.** Set the comfort temperature with **PLUS/MINUS.** Confirm with **OK/SET.** Set the economy temperature **(** with **PLUS/MINUS.** Confirm with **OK/SET.**

Range OFF: 8°C, anti-freeze protection function active

Range ON: Valve fully open, control function switched off.

| Advice: You achieve maximum energy savings at an economy temperature that is approx. 5°C below the comfort temperature.

9. MAIN FUNCTIONS GENIUS LCD 100

HEATING PROFILE:

The heating and saving times can be defined by the freely adjustable time programme. GENIUS LCD 100 has the following factory default setting:

Heating time: Heating to comfort temperature (factory setting): 1st heating time at 07:00 am) Saving time: Reduction to economy temperature (factory setting: 1st saving time at 10:00 pm)

Create heating plans - define heating and saving times

With GENIUS LCD 100 you can set 4 heating and 4 saving times per day - for each day individually or for several days in a block.

Individual days:

DAY1 for Monday, DAY2 for Tuesday, etc. appears in the display.
Select the day/block with **PLUS/MINUS.**Set the start of the 1st heating time with **PLUS/MINUS.**Set the start of the 1st saving time with **PLUS/MINUS.**Confirm with **OK/SET.**Confirm with **OK/SET.**

Now you may enter a 2nd, 3rd and 4th heating/saving time.

- If you do not want to set another heating/saving time, confirm the ,----" display with **OK/SET.** The next day to be programmed appears in the display.
- If you do not want to set another day, exit the menu with **MENU**.
- It is also possible to overwrite individual days with deviating times within blocks.

Block formation:

- T1 5 = same programme Monday to Friday
- T1 6 = same programme Monday to Saturday
- T1 7 = same programme Monday to Sunday
 - If days are not programmed, the factory settings remain active. To set and save an individual programme, press MENU. Use PLUS/MINUS to select the HEATING PROFILE menu item.

WINDOW-OPEN-DETECTION:

The GENIUS LCD 100 automatically closes the heating valve to save energy if you open a window and the temperature thereby drops significantly. If the window-open-detection is active, energy if appears in the display. After the time you have specified (e.g. 10 minutes), GENIUS LCD 100 resumes normal operation.

To configure the settings for the window-open-detection, select the menu item WINDOW-OPEN-DETECTION in the MENU. Confirm with OK/SET. First, select the sensitivity with PLUS/MINUS (HIGH = high sensitivity (default), MID = medium sensitivity, LOW = low sensitivity). Confirm with OK/SET. Then select the duration (e.g. 10 min (factory setting) - 60 min) for which the valve is to remain closed. Confirm with OK/SET. After the time has elapsed, the controller returns to normal mode.

TEMPERATURE ADJUSTMENT:

If the perceived temperature deviates from the set temperature, you can carry out a temperature adjustment. To do this, press **MENU** and select the menu item TEMPERATURE ADJUSTMENT with **PLUS/MINUS.** Confirm with **OK/SET.** The degree setting 0.0° flashes in the display. Now set the desired adjustment (from -5 to 5°C) of the temperature using **PLUS/MINUS.** Confirm your entry with **OK/SET**. The temperature indication in the display does not change!

10. FURTHER FUNCTIONS

Align the display: Depending on the position of your radiator valve, it may be necessary to rotate the display of your controller by 180°. To do this, press MENU and select ROTATE LCD to rotate the display accordingly. **OK?** appears in the display, which can now be rotated and adjusted with **PLUS/MINUS**. When the desired orientation is reached, confirm with **OK/SET**.

Key lock: To prevent unauthorised operation of your controller, you can lock the GENIUS LCD 100. Press and hold the OK/SET and MENU buttons simultaneously for approx. 3 seconds until the **Cm** symbol appears on the display. If you press this combination again, the symbol disappears and you unlock it again.

Anti-freeze and anti-scale function: The anti-freeze and anti-scale functions are automatically active.

Anti-freeze function: If the temperature drops below 8°C, GENIUS LED 100 opens the valve until the temperature rises above 8°C again. This prevents the radiators from freezing.

Anti-scale function: To prevent the radiator valves from scaling, GENIUS LED 100 regularly carries out a scaling protection run.

Manual operation: Use PLUS/MINUS to manually change the room temperature at any time. In AUTO mode, this manually set temperature remains until the next setting point. Then the GENIUS LCD 100 switches back to the heating programme set.

Resetting: To reset the radiator controller to the factory settings, press **MENU**. Press **PLUS/MINUS** to select the menu item RESET. Confirm with **OK/SET**. A flashing **,OK?**" appears in the display. Confirm with **OK/SET**. The GENIUS LCD 100 is now back in the factory setting. Now proceed as for the initial commissioning.

11. CLEANING AND STORAGE

RISK OF DAMAGE! Improper handling of the thermostat can lead to damage.

- Do not immerse the thermostat in water or other liquids.
- Do not use aggressive cleaning agents, brushes with metal or nylon bristles or sharp or metallic cleaning objects such as knives, hard spatulas and the like. These can damage the surface.
- Clean the thermostat with a soft, dry cloth. Do not exert pressure on the display.

Switch off the device and remove the batteries if you will not be using the device for a long time. Store the device in a dry, dust-free place.

12. ERROR MESSAGES AND HELP

Problem	Ursache	Lösung	
	Batteries almost exhausted.	Replace the batteries.	
Radiator does not warm up.	Boiler water temperature OK? Valve does not open after the summer heating break - is it scaled?	Correct boiler water temperature, re- move GENIUS LCD100. Move the valve tappet back and forth several times by hand/tool.	
Radiator does not get cold.	Valve does not close completely. The closing point of your valve seal may have shifted.	Perform new adaptation (see ,Adapta- tion") Move the valve tappet several times by hand - adaptation may not be possible because the valve may have scaled or the seal no longer fulfils its function.	
Thrust piece falls out. (This can also cause a E1 error)	An endless thread can cause the thrust piece located on the under- side to fall out if the controller has not been applied to the valve.	Insert thrust piece. Press the OK -button or perform adaptation of the device by removing and reinserting the batte- ries. The endless thread now turns and tightens the thrust piece again. Attach to radiator and perform adaptation again.	
E1-E3	By pressing any button, the error message in the display is deleted and the adaptation restarts.		
E1	No adaptation possible. GENIUS LCD 100 is not mounted on the radiator.	Device correctly mounted on radiator? Mount the GENIUS LCD 100 .	
E2	Valve stroke too short or battery power too low.	Open and close the valve tappet several times by hand or insert new batteries.	
E3	No valve movement possible.	Make sure that the valve tappet can move freely.	
,	Fast-Link transmission not success- ful.	Increase the brightness of your smart- phone display to the highest level. Hold your smartphone to the controller as soon as you have selected Fast-Link transmission on your smartphone and your controller is ready for transmission.	

13. TECHNICAL SPECIFICATIONS

Name of device	GENIUS LCD 100
EAN	4260012711349
Article Number	700069
Supply Voltage	2 x 1,5V LR6/Mignon/AA
Connection	M30 x 1,5mm
Method of operation	Туре 1
Dimensions (W x H x D)	56 x 68 x 89 mm
Weight	149,7 g (incl. batteries)
Degree of protection	IP20
Degree of pollution	2

Technical modifications are subject to change. All descriptions for compatibility are without engagement.

14. SUPPORT AND CONTACT

For technical support for the Eurotronic products, please contact Eurotronic via e-mail or telephone: Customer Service: **Eurotronic Technology GmbH**

> Südweg 1 36396 Steinau-Ulmbach Germany

 Telefon:
 +49 (0) 6667 91847-0

 Email:
 info@eurotronic.org

15. ENVIRONMENTAL INFORMATION GENIUS LCD 100

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 of with household waste.



😂 The consumer 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 to the point of sale. Details are regulated by the respective national law.

Batteries and rechargeable batteries must not be disposed of with household waste!

As a consumer, you are legally obliged to dispose of all batteries and rechargeable batteries, no matter whether they contain harmful substances* or not, at a collection point in your municipality/city district or in the respective stores, so that they can be disposed of in an environmentally friendly manner.

*labelled with: Cd = cadmium, Hg = mercury, Pb = lead

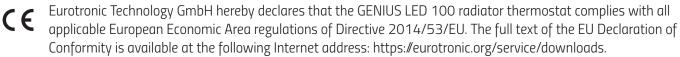
Dispose of Packaging:



Dispose of the packaging sorted by type. Add paperboard and cardboard to the waste paper, foils to the recyclables collection. Dispose of the 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 Apple Logo, iPad und iPhone are brands of Apple Inc., which are registered in the USA and other countries. App Store is a service brand of of Apple Inc. Google Play, Android and other brands are brands of Google Inc.

16. WARRANTY

The two-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. There is no new warranty period stargting 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 M30x1,5), Oventrop (M30x1,5) Danfoss RA, RAV und RAVL.

Please see the combinations of the devices on our website (www.eurotronic.org/service/faq/)

Following expiry of the warranty, 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 are subject to a charce. Your legel rights are not affected by this guarantee.





Eurotronic Technology GmbH Südweg 1 | 36396 Steinau-Ulmbach | Germany www.eurotronic.org

02/2021