



Programmable thermostatic head for radiators

User manual

By the way...

You can programme the RBM programmable thermostatic head by hand or you can use, for example, the comfortable USB programming device to copy your personally specified heating and economy times onto all your programmable thermostatic heads at your home which have a programming port in a matter of seconds.



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

Scope of delivery

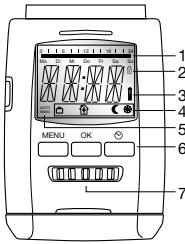
- 1 RBM Programmable thermostatic radiator head
- 1 User manual
- 1 Connector

Application as directed

By purchasing the RBM programmable thermostatic radiator head 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 USB programming port is intended ONLY for our programming device. 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



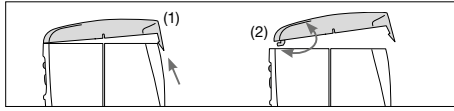
Set up menu

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
TIME	setting of date and time
WINU	window function
RES	reset of the device to factory preset
ADAP	starting of a new adaptation to adjust the valve
HOLI	travel function
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 the programmable thermostatic head is ready for installation INST 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. → **mounting.**

You can also set date and time via the menu item TIME later on. But in case of that, the programmable thermostatic head does not move to the installation position.

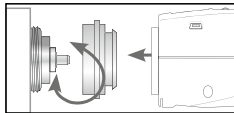
→ In case of replacing batteries, the stored time programme will remain active. You should check the specified time to ensure that.

Mounting

The thermostatic head can be quickly and easily mounted on all RBM valves. 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.

valve – coupling ring

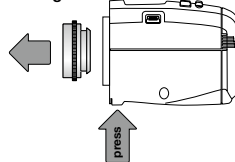


2. Screw the connector on the valve or the adapter.
3. Now, you put the programmable thermostatic head on the connector until it noticeably clicks into place.

ATTENTION: It must be possible to insert the programmable thermostatic head without applying force, ensure that the appliance is in the „INST“ or „ON“ position.

→ In case of a later installation, please switch in the menu to „INST“ before you install the device. Herewith the installation is facilitated. **Only mount it in this position.**

Dismounting



→ To remove the programmable thermostatic head 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 then press on the unlocking device to detach the quick-release catch. Then pull the thermostatic head from the valve.

Adaptation

Initial installation: Press the button until RDRP appears on the display so that the programmable thermostatic head 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 RUS-Position, please press in the menu the button RDRP until adaptation starts again.
- If the mistake is shown on the display place the programmable thermostatic head 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 the programmable thermostatic head adjusts to the manually specified temperature.

AUTO-Modus

In the AUTO-mode the programmable thermostatic head 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. The programmable thermostatic head 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 the programmable thermostatic head 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. DAY1 to DAY7 represent the weekdays from Monday to Sunday. Additionally, the corresponding days are shown as abbreviation below the menu bar on the display.

Block construction:

- D 1–5 = same programme from Monday to Friday
- D 1–6 = same programme from Monday to Saturday
- D 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 . DAY1 for Monday is shown on the display. Select day/block with the selector wheel. Confirm with . Set the beginning of the 1st heating time (symbol) with the selector wheel. Confirm with . Set the beginning of the 1st economy time (symbol) with the selector wheel. Confirm with . Now, if desired, a 2nd, 3rd or 4th 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 OFF: 8°C, freeze protection function is active

Area ON: 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 AUTOMode 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 manual, 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 OFFS 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!




Window function

If you open a window and consequently the temperature drops significantly, the programmable thermostat head will automatically close the heating valve in order to save energy. The display will show . Afterwards, the programmable thermostat head will resume normal operation. For the set up select WINU 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. Press . Select the menu item TRAVEL . Confirm with  (suitcase  appears on the display). Select with the selector wheel the end of the travel function (= date of the recommencement of the regular heating times). Confirm with . Set the time and confirm with the button . The signal OFF appears on the display. Now set the temperature and confirm with .  appears on the display. With  the function can be deactivated.



Child lock

You can lock the programmable thermostat head 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 programmable thermostat head

Press . Select the menu item PAUSE with the selector wheel. Confirm with . Select PAUSE and confirm with . Set the temperature on the display to OFF . 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. The programmable thermostat head 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 ON/OFF 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 . The programmable thermostat head 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, the thermostat head 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 the thermostatic head is submitted to a calcification protection programme once a week on Friday mornings.

Cleaning and used devices




Cleaning

To clean the programmable thermostatic head 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.

Help

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 the programmable thermostatic head, 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 be adapted 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.
$\text{E1} - \text{E3}$	By pressing any key the error message will be deleted in the display and the adapter is re-started.	
E1	No adaptation possible. The programmable thermostat head is not installed to the heater.	Is the installation OK? Install The programmable thermostat head 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?

Declaration of Conformity

The Declaration of Conformity is provided at: www.rbm.eu

RBM S.p.A.

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