LoRaWAN®

Vicki LoRaWAN®

User manual

Need some help?

For more product information and issues related to it, visit:
mclimate.eu/lorawan-resources

or write us to:
lorawan-support@mclimate.eu

📞 **00359 800 3 1010**
Monday-Friday
09:00 - 18:00

📍 **Sofia, Bulgaria**
Sofia Tech Park, labs building, floor 1

Bulgarian

За да разберете как се инсталира MClimate Vicki LoRaWAN®, сканирайте QR кода или посетете линка до него.

Italian

Per installare MClimate Vicki LoRaWAN® scannerizzare il codice QR oppure aprire il link al suo lato.

Swedish

För att ta reda på hur du installerar MClimate Vicki LoRaWAN®, skanna QR-koden eller besök länken bredvid den.

Czech

Chcete-li zjistit, jak nainstalovat MClimate Vicki LoRaWAN®, prohlédněte si kód QR nebo navštivte odkaz vedle něj.

French

Pour savoir comment installer MClimate Vicki LoRaWAN®, scannez le code QR ou visitez le lien à côté de celui-ci.

Finnish

Tutustu MClimate Vicki LoRaWAN®-laitteen asentamiseen, skannaa QR-koodi tai vierailla sen vieressä olevassa linkissä.

Dutch

Om te weten te komen hoe u MClimate Vicki LoRaWAN® installeert, scan de QR-code of bezoek de link ernaast.

Polish

Aby dowiedzieć się, jak zainstalować MClimate Vicki LoRaWAN®, zeskanuj kod QR lub odwiedź link obok niego.

German

Um herauszufinden, wie man MClimate Vicki LoRaWAN® installiert, scannen Sie den QR-Code oder besuchen Sie den Link daneben.

Spanish

Para saber cómo instalar MClimate Vicki LoRaWAN®, escanee el código QR o visite el enlace al lado.
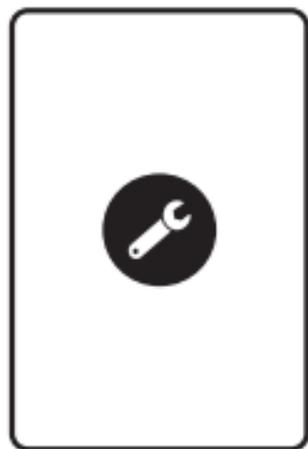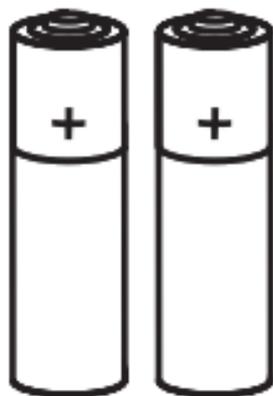
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Technical specifications

Description: MClimate Vicki LoRaWAN - Smart Radiator Thermostat Developed & Manufactured by MClimate™
Model: MC-LW-V02-BI
Dimensions: 54x78x50mm
Weight: 107gr.
Wireless technology: LoRaWAN® 1.0.3
LoRaWAN Security: LoRaWAN® End-to-End encryption (AES-CTR)
LoRaWAN Device type: Class A End-device
Supported LoRaWAN Features: OTAA, ADR, Adaptive Channels setup
Supported LoRaWAN Regions: EU868
Link budget: 130dB
RF Transmit power: 14dB
Power supply: 3V (2 x AA batteries)
Sensors: temperature and humidity
Work temperature: 0°C to +60°C
Material: ABS + PC reinforced with Glass Fibers, Nickel-plated brass (metal nut)

Environmental conditions, in which the device is intended to operate:
- Indoor only;
- Altitude up to 2000m;
- Ambient temperature: -20°C to +60°C;
- Maximum relative humidity of 80% for temperature up to 31°C, decreasing linearly to 25% relative humidity at temperature of 50°C;
- Environment with contamination degree 2 (PD2).

Storage and transportation conditions:
- Ambient temperature: -40°C to +60°C;
- Relative humidity 5% to 90% without condensation

Compliance with the WEEE Directive

The appliance marked with this symbol should not be disposed of with other household waste. It must be handed over to the relevant collection point for the recycling of electrical and electronic equipment.

⚠ Safety Instructions

Please read the safety instructions before installing the device! Failure to follow the recommended instructions in this manual may be dangerous or in violation of the law. The manufacturer MClimate Jsc., is not responsible for any loss or damage caused by failure to follow the instructions in the operating manual.

Legal Notices

All information, including but not limited to, features, functionality, and / or other product specifications are subject to change without notice. MClimate retains all rights to review or update its products, software or documentation without being required to notify any natural or legal person.

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EU Declaration of Conformity

This device complies with the essential requirements and other applicable provisions of the following EU directives:

2014/35/EU Low Voltage Directive:
EN 60950-1:2006 / A11:2009 / A1:2010 / A12:2011 / A2:2013

2014/30/EU EMC Directive:
EN 301 489-1 V2.1.1
EN 301 489-3 V2.1.1

Radio Equipment Directive (RED):
EN 300 220-1 V3.1.1
EN 300 220-2 V3.1.1
EN 62479:2010

CE ☒

You can find a copy of the Declaration of Conformity at: **www.mclimate.eu/conformity**

Compatibility

Vicki works with the majority of radiator valves.

Default radiator valve fitting: M30x1.5
Available adaptors: RA, RAV, RAVL, ORAS Termostat, ORAS Stabila, Oventrop, Giacomini, Caleffi, M28x1.5 to M30x1.5

In order to operate Vicki, you will need:
- LoRaWAN® network
- Batteries

Battery type: 2xAA (1.5VDC each)
Device operating voltage: 2.7 - 3.6VDC

Commissioning

1 Open your LoRaWAN® Network provider access panel and add the device using the supplied Serial Number, DevEUI, AppEUI (JoinEUI) and AppKey.

Device ID:	9X7█████
DevEUI:	70B3D25D████████
AppEUI:	70B3D25████████
AppKey:	A0658DFAE7213████████

Register

⚠ The data is example. Do not use.

2 Continue the Installation with the instructions of your LoRaWAN® Network provider.
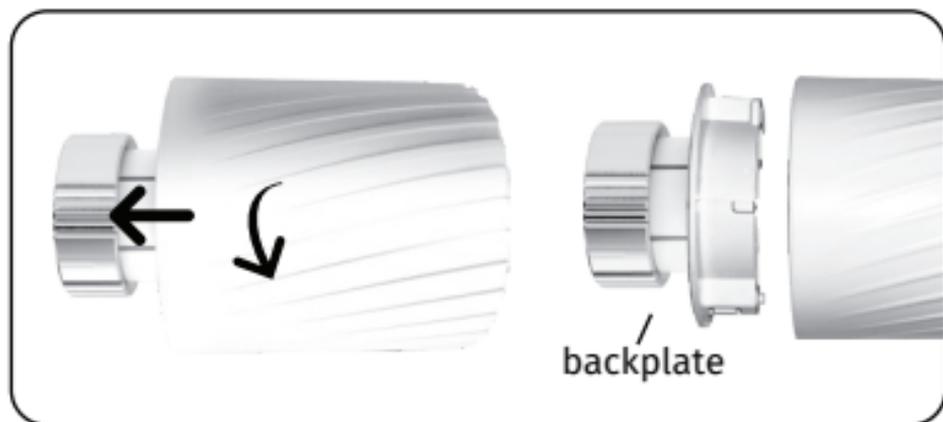
MClimate_LoRaWAN_51177

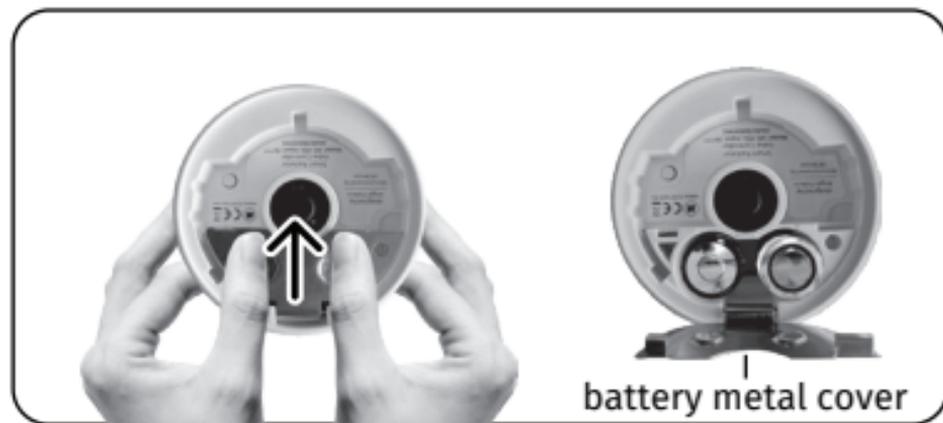| Serial Number	DevEui	AppEui	AppKey
G████████	70█████	70B3████████	5fc31████████

📋 You can get DevEUI, AppEUI (JoinEUI) & AppKey information from the LoRaWAN® credentials .csv file we sent you with the fulfillment confirmation.

Batteries

Follow the steps below to insert the batteries.

backplate

1 Unplug the backplate of Vicki.

battery metal cover

2 Open the metal battery cover gently by using two fingers.

3 Insert **2xAA 1.5VDC** batteries and fix the battery cover tightly in place.

Batteries

display

4 After successfully inserting the batteries and closing the metal battery plate, the device will display "Hi".

⚠ If you don't see Hi, please check the polarity and voltage of your batteries.

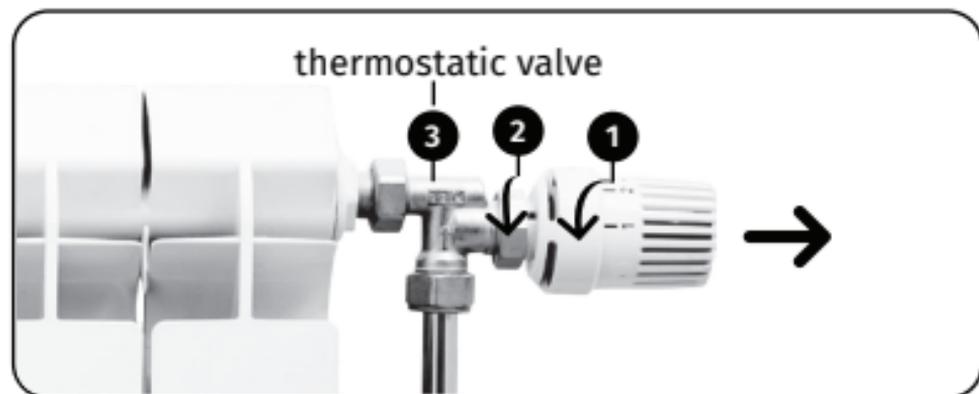🔋 Recommended batteries:
Energizer Lithium Ultimate L91
Device does not operate with rechargeable batteries!

🔋 Do not mix new batteries in use with semi-used batteries or different types of batteries as it will affect the performance and conditions of Vicki.

Installation
Remove the old radiator thermostat.

thermostatic valve

1 Set the old thermostatic valve to the highest
setting (e.g. 5).

2 Unscrew the securing ring ② and remove the thermostat.

> ⚠ **Warning**: If you already have a thermostatic valve,
> during installation no water will leak. If you don't have
> a thermostatic valve, please call a specialist and ask
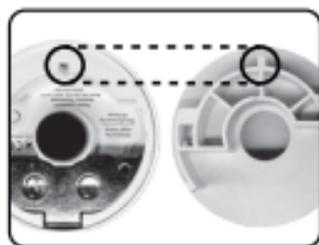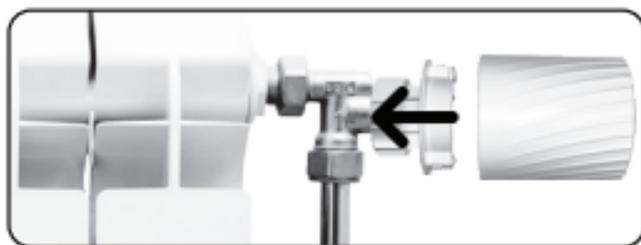> them to replace your valves.

Mount Vicki on the thermostatic valve

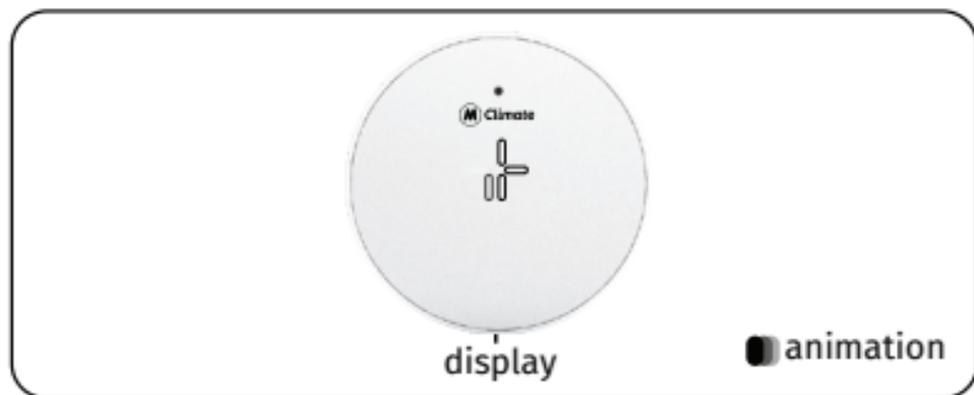⚠️ **Warning:** Mount Vicki on the backplate ONLY AFTER the backplate is mounted and secured on the radiator valve.

1 Place the backplate of Vicki on the thermostatic valve, use appropriate adaptors when required.
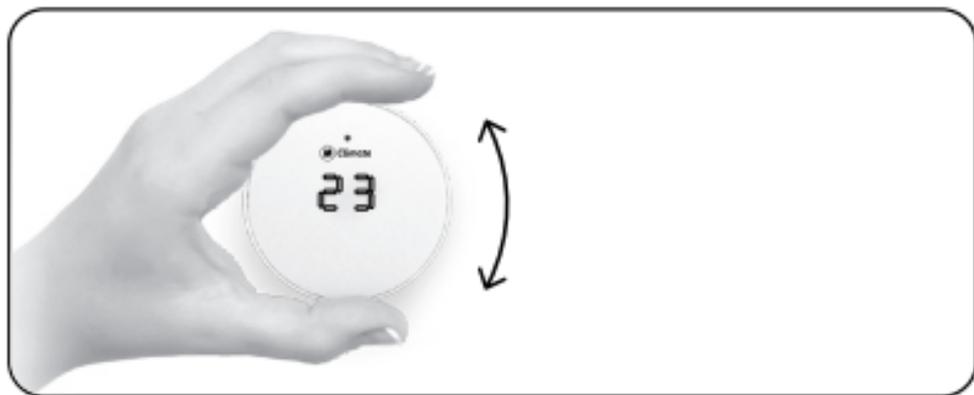
2 Screw tightly the securing ring. Do not overscrew.

3 Align the head and backplate notches and insert Vicki on the backplate.

4 Apply moderate pressure with your palm on Vicki's display and rotate the device clockwise to secure it on the backplate.

display   ● animation

5 After succesfully mounting of Vicki the front display must show the calibration animation. After that, Vicki starts calibrating, which takes 1-2 minutes MAX.

6 If the calibration was successful, when you rotate Vicki, you should see degrees changing. If you do not see anything light up on the display, calibration was not successful and you might need to use a pin extender.

Device operation
Manual target temperature control

You can set desired temperature directly from Vicki by rotating the device until you see the target temperature on the display.

A properly installed and connected Vicki displays the target temperature when rotated. If two dashes appear on the top and bottom before the temperature, the device did not join the network successfully. Examine your Gateway and/or LNS for issues.

Low battery indication

If Vicki's batteries are running low, it indicates that by showing a "Lo" message on the display.

Child lock

If Child lock is activated, Vicki's display will show "Ch" and the manual temperature control will be disabled.

Calibration

animation

Once you attach Vicki to the radiator, a calibration process will be initiated. The aim of the calibration process is to let Vicki know the kind of valve she is attached to. During calibration, the display will show a loading animation.

> ⚠️ **Please, do not dismount the device during calibration!**

(M) Climate

We
make any
building
smart.