User manual
Kabola thermostat for convection and hot air heating
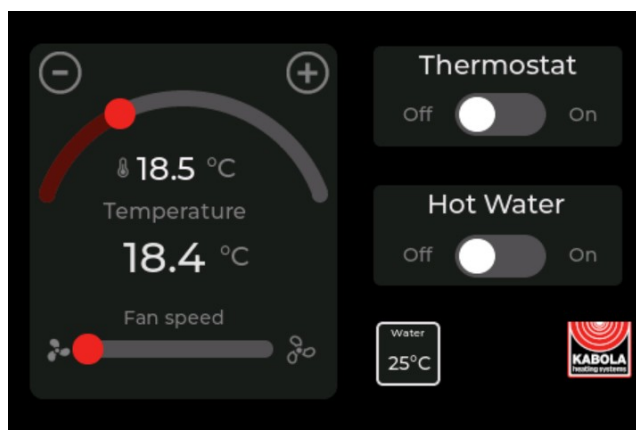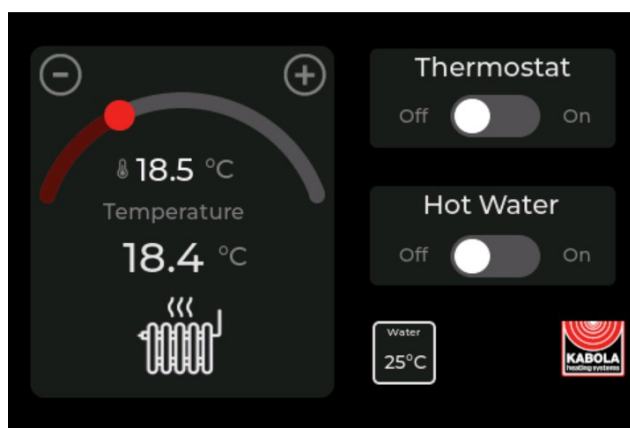
Version: 1.4

This manual describes firmware version up to 16.

KAB20_HUI07_Kabola-factuurpapier

KABOLA.NL   ALTIJD EEN WARM WELKOM

Kabola Heating Systems B.V.

Placotiweg 1ᴱ • 4131 NL Vianen (Utr.) Holland   IBAN: NL08 ABNA 0410 6900 74 • BIC: ABNANL2A
T +31 (0)347 320 030 • info@kabola.nl   IBAN: NL78 INGB 0000 3212 38 • BIC: INGBNL2A

Table of Contents

Preface

Thank you for purchasing the Kabola room thermostat. This manual will describe the installation and configuration process of the thermostat and its components.

Delivery of the thermostat will be part of a basic set. The set is dependant on the fact if you plan to use air heating and/or convection heating.

Additional components are available to extend functionality. This manual describes those components and their use.

KABOLA.NL   **ALTIJD EEN WARM WELKOM**

Kabola Heating Systems B.V.

Placotiweg 1ᴱ • 4131 NL Vianen (Utr.) Holland   IBAN: NL08 ABNA 0410 6900 74 • BIC: ABNANL2A
T +31 (0)347 320 030 • info@kabola.nl   IBAN: NL78 INGB 0000 3212 38 • BIC: INGBNL2A

90-001 Basic set for air heating

The basic set for air heating can be used for systems consisting of up to 4 fancoils and optionally one or more convection heating panels.

The set for air heating consists of the following components:

- 90-003: Kabola thermostat display (configured for air heating)

- 90-005: wiring loom for air heating

- 90-004: motor controller for 4 fans

Additionally a water temperature sensor is required to let the system work as intended. Kabola offers the sensors with various cable lengths:

- 90-008: sensor with 1.6 meter cable

- 90-012: sensor with 5 meter cable

- 90-013: sensor with 10 meter cable

External ambient temperature sensor

The display uses an internal temperature sensor to sense the ambient temperature. If needed an external ambient temperaturesensor (90-007) can be connected to the screw terminals at the backside of the display.

If the external sensor is connected and works correctly then the external sensor has preference over the internal sensor.

KABOLA.NL   ALTIJD EEN WARM WELKOM

Configuring the display for air heating

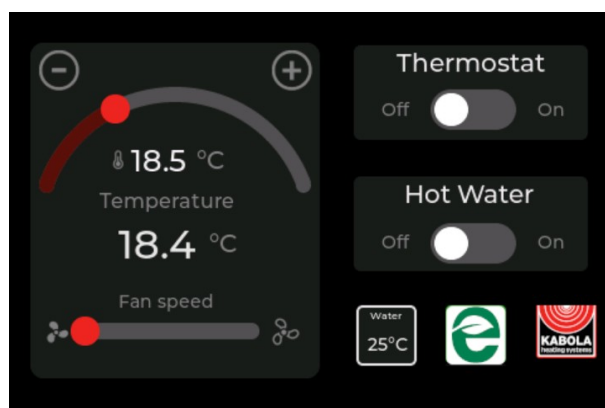The display is configured correctly when the main display shows the fan speed slider:

Figure 1: Kabola display configured for air heating. Note the fan speed slider at the left bottom of the display.

If the display show the radiator icon instead of the fans peed slider then the display needs to be switched to air heating mode.

In this case press the Kabola Heating logo on the main screen. A settings page will display.
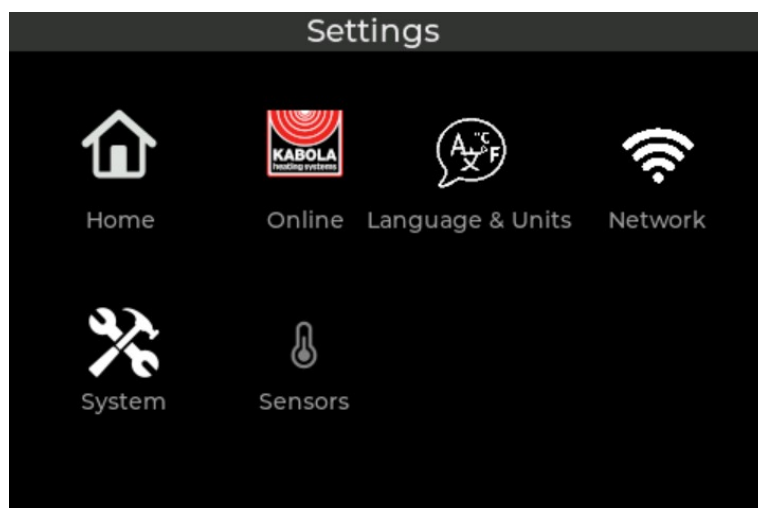

Figure 2: General settings page. System functions can be configured from this page. Click on the home button to return to the main screen.

KABOLA.NL   ALTIJD EEN WARM WELKOM

Kabola Heating Systems B.V.

Placotiweg 1ᴱ • 4131 NL Vianen (Utr.) Holland   IBAN: NL08 ABNA 0410 6900 74 • BIC: ABNANL2A
T +31 (0)347 320 030 • info@kabola.nl   IBAN: NL78 INGB 0000 3212 38 • BIC: INGBNL2A

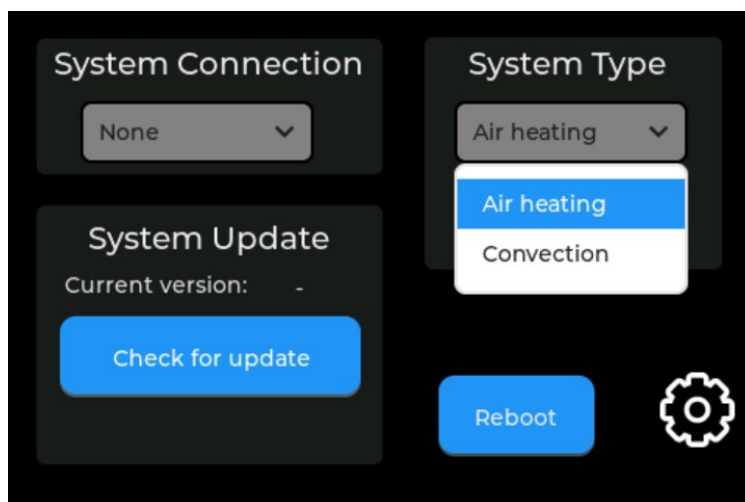Click on the System icon to open the system settings page.

Figure 3: System page showing the system type selection option.

Click on the system type dropdown and select Air heating. The display is now configured for air heating. This option will be saved automatically.

Click the gear wheel to go back to the settings page. From there you can click on the home icon to return to the main screen.

KABOLA.NL   ALTIJD EEN WARM WELKOM

90-002 Basic set for convection heating

The basic set for convection heating can be used for systems consisting of one or more convection heating panels.

The set for convection heating consists of the following components:

- 90-003: Kabola thermostat display (configured for air heating)

- 90-006: wiring loom for convection heating

- 90-014: Optionally a water temperature sensor can be connected to provide additional system information.

External ambient temperature sensor

The display uses an internal temperature sensor to sense the ambient temperature. If needed an external ambient temperaturesensor (90-007) can be connected to the screw terminals at the backside of the display.

If the external sensor is connected and works correctly then the external sensor has preference over the internal sensor.

KAB20_HUI07_Kabola-factuurpapier

KABOLA.NL   ALTIJD EEN WARM WELKOM
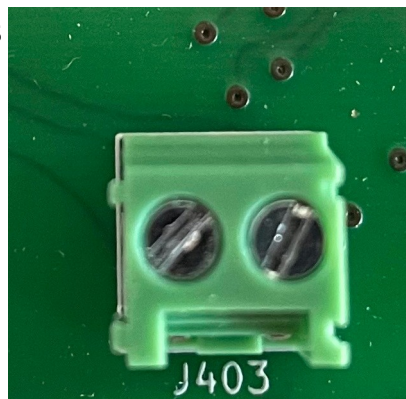
Configuring the display for convection heating

The display is configured correctly when the main display shows the convection icon:
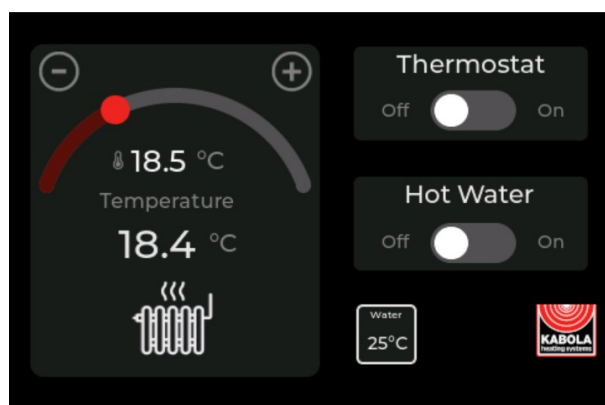

Figure 4: Kabola display configured for convection heating.

If the display show the fan speed slider instead of the convection icon then the display needs to be switched to convection heating mode.

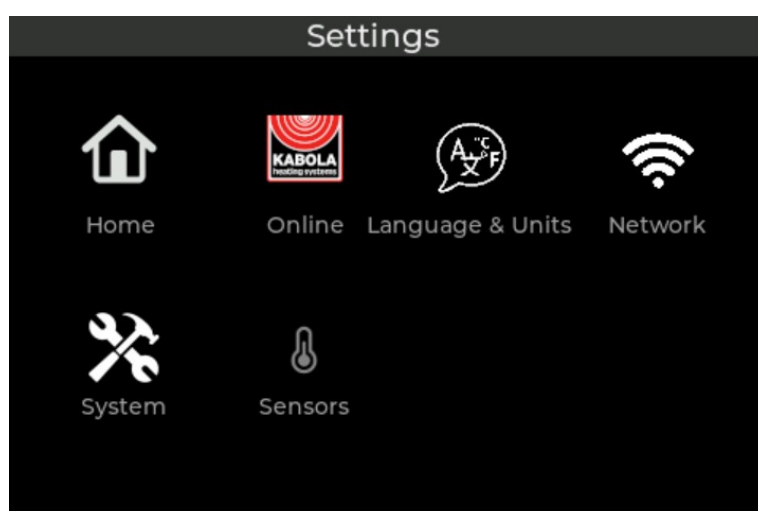In this case press the Kabola Heating logo on the main screen. A settings page will display.

Figure 5: General settings page. System functions can be configured from this page. Click on the home button to return to the main screen.

KAB20_HUI07_Kabola-facturpapier

Kabola Heating Systems B.V.

Placotiweg 1ᴱ • 4131 NL Vianen (Utr.) Holland   IBAN: NL08 ABNA 0410 6900 74 • BIC: ABNANL2A
T +31 (0)347 320 030 • info@kabola.nl   IBAN: NL78 INGB 0000 3212 38 • BIC: INGBNL2A

Click on the System icon to open the system settings page.
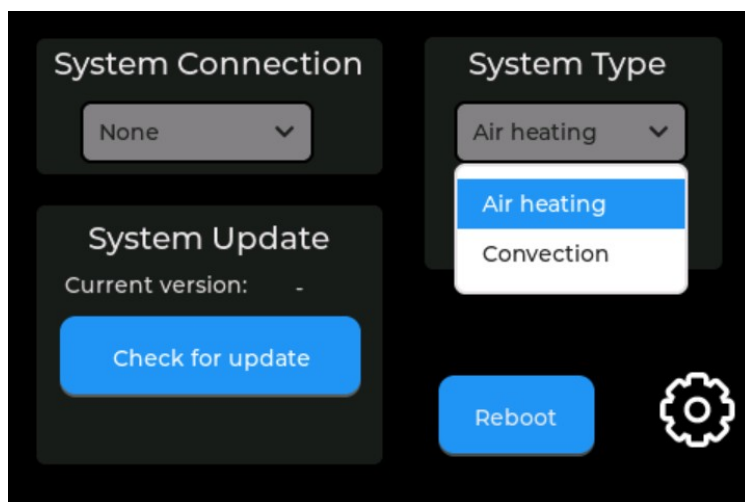

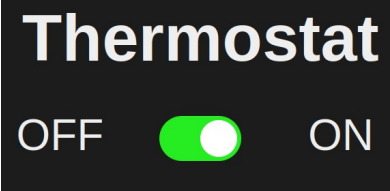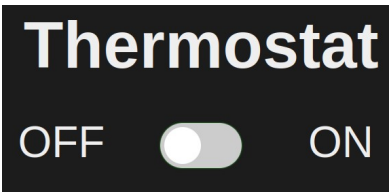*Figure 6: System page showing the system type selection option.*

Click on the system type dropdown and select Convection heating. The display is now configured for convection heating. This option will be saved automatically.

Click the gear wheel to go back to the settings page. From there you can click on the home icon to return to the main screen.

Adjust temperature on the display and in the app

The desired temperature can be set on the main screen using the '+' and the '-' icons. Valid temperatures can be set between 10 and 35 degrees Celcius or its Fahrenheit equivalent.

The thermostat switch determines the function of the thermostat as shown in the table below.

Switch is **on**; temperature will be adjusted to the user set temperature.	**Thermostat** OFF 🟢 ON
Switch is **off**; temperature will be adjusted to **6** degrees Celcius (**43** degrees Fahrenheit). Frostguard mode.	**Thermostat** OFF ⚪ ON

Connect the display to a wifi network

Connecting the display to a wifi network can is required if you want to control your thermostat remotely using your phone or computer.

From the main screen click the Kabola logo. This will bring you to the main settings page. From there click on the network icon. This will open the network settings page.
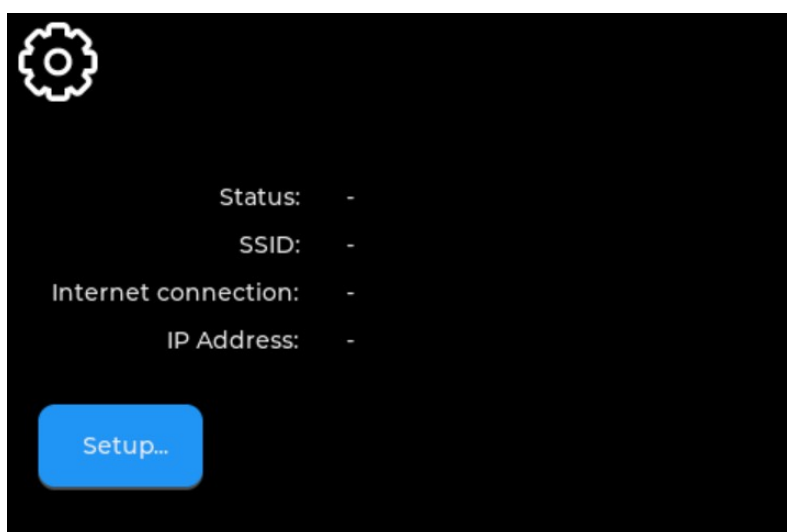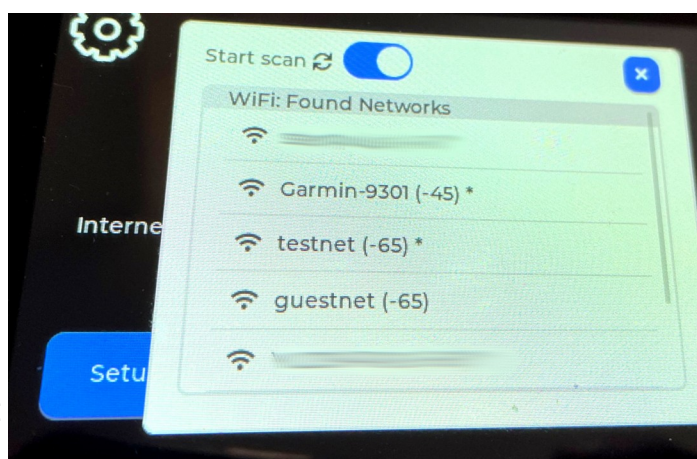

Figure 7: Network settings: unconnected.

Click the setup button to open the network scanning page.

Click the start scan button to start searching for wifi networks. When your desired network is displayed in the list click on its name and enter the password in the popup dialog.

Click the connect button. If the keyboard obscures the connect button click somewhere on the dialog to make the keyboard hidden.

If the password is correct the dialog closes and the network page is updated with the new network settings.

Kabola Heating Systems B.V.

Placotiweg 1ᴱ • 4131 NL Vianen (Utr.) Holland   IBAN: NL08 ABNA 0410 6900 74 • BIC: ABNANL2A
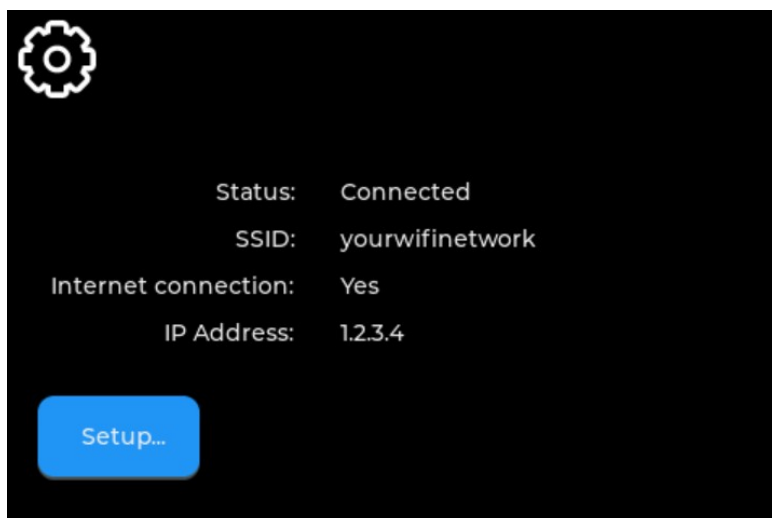T +31 (0)347 320 030 • info@kabola.nl   IBAN: NL78 INGB 0000 3212 38 • BIC: INGBNL2A

Figure 8: Network settings: connected.

Internet connection is tested periodically and may not be updated immediately after connection.

Connecting to Kabola Online

Existing device

If you already have configured your device online you can log in directly at: **https://mijn.kabola.nl** or scan the QR code below.
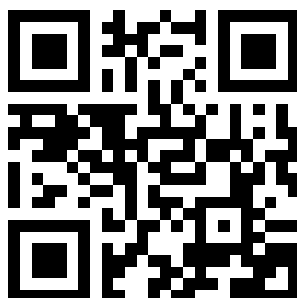
KABOLA.NL   ALTIJD EEN WARM WELKOM

Configuring a new device

Before you can configure Kabola Online your display needs to be connected to the internet. Refer to the steps in the previous chapter to connect the display to the internet.

From the main screen click on the Kabola logo to enter the settings page. On the settings page click again on the Kabola logo. This page will let you decide whether to activate the online functionality.
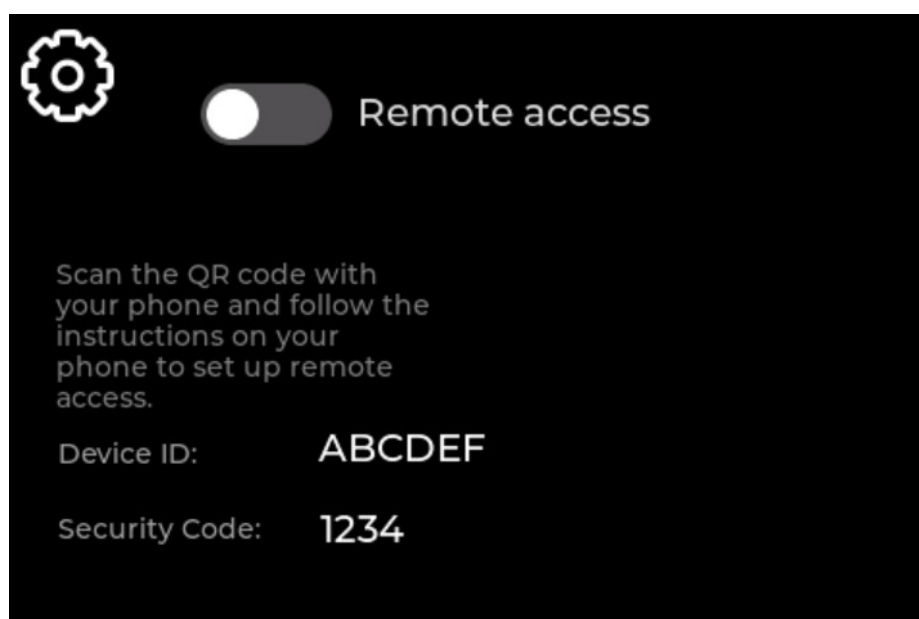

Figure 9: Kabola online connection page.

Click the remote access switch to enable remote access. When active a QR code will be displayed. Scan the code with your phone to open the configuration page.

The configuration page will ask you for the security code as displayed on your and will require you to register a Kabola Online account with a valid email address. This address will be used as your account name.

KAB20_HUI07_Kabola-facturpapier

KABOLA.NL   ALTIJD EEN WARM WELKOM

System language, temperature units and timezone

Follow the steps below to change system language, temperature units or timezone.

- From the main screen click on the *Kabola* logo

- You are now on the Settings page

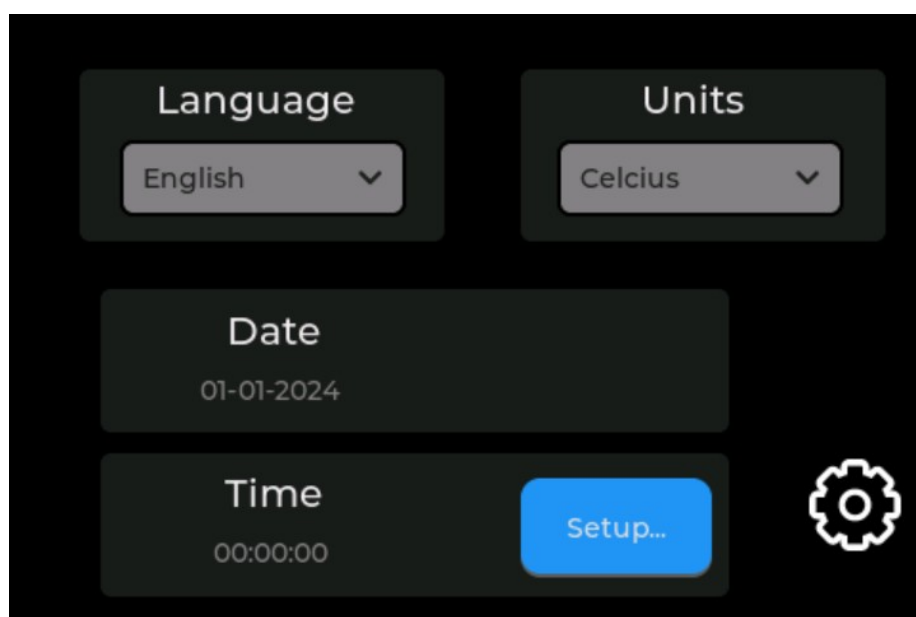- Click on the *Language & Units* icon to open the Language & Units settings page

Figure 10: Set up language, temperature units or time zone

Currently English and Dutch are the supported system languages.

Temperature units can be set in the Units tab. Click on the dropdown box to set the units t Celcius or Fahrenheit.

The system will automatically update the system time when connected to internet. To change the timezone click the *Setup…* button. The time properties button opens which allows you to select the current timezone you are in currently. Click *"Save"* to set the current timezone and go back to the Language & Units settings page.

To exit the Language & Units page click on the gear icon.

KABOLA.NL   ALTIJD EEN WARM WELKOM

System Update

If your thermostat is connected to internet you can update the firmware online.

It is important to run the latest version to be able to receive the newest features and the latest bugfixes.

From the main screen click the *Kabola* logo to enter the *Settings* page. Click the System Settings icon to enter the System Settings page.

On the System Settings Page click the *"Check for update"* button. Checking for update can take a few seconds. If a new version is available click the *"Apply update"* button. Installing the update takes up to 5 minutes depending on the network connection.
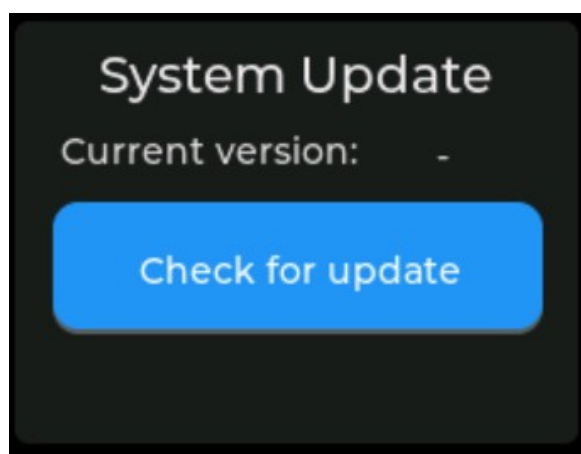
KABOLA.NL   ALTIJD EEN WARM WELKOM

KAB20_HUI07_Kabola-factuurpapier

Technical specifications

90-003 Thermostat display

Input voltage	12 - 30VDC
Power	< 1W
Radio/Wifi	2.4GHz; <100mW

90-004 Motor controller

Input voltage	12 - 30VDC
Standby power	< 1W
Maximum output current	10A

Declaration of Conformity

Product type: Kabola smart thermostat and hot air system

Product model: 90-003, 90-004

Manufacturer: Nieuwenhuis Special Projects

Zwijnenbergstraat 14

Hattem, The Netherlands

Directives: Radio Equipment Directive (RED) 2014/53/EC

Restriction of Hazardous Substances (RoHS) 2011/65/EC

Standards: EN 300328 (V2.2.2)

EN 301489-1 (V1.9.2)

EN IEC 63000:2018

The product described above is in conformity with the relevant European Union harmonisation Legislation

Signed:

Full name: Hans Nieuwenhuis

Title: Director

Date of issue: 01-02-2024

Place of issue: Hattem, The Netherlands

KAB20_HUI07_Kabola-facturpapier

KABOLA.NL   ALTIJD EEN WARM WELKOM