

COMMISSIONING

—
**CONNECTING
APPLIANCE TO THE
CLOUD**

End user

—
HYDRO

Indoor unit

System ADAPT AND VERSI



DESCRIPTION OF DOCUMENT AND APPROACH

This document is a part of the KRONOTERM instruction system, which follows the project's lifecycle from design phase to service support.

Connecting the appliance to the Cloud – 17-20-31-10000-02 / 2.2022

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1 IMPORTANT INFORMATION

These instructions were written to inform you of all important steps to take between commissioning and further use. They describe how to set and use the appliance.

- After installation these instructions must be given to the end user.
- If the appliance is to be used by some third party, these instructions must also be given to said third party.

1.1 SYMBOLS



These symbols indicate risks for the user or the appliance itself.

DANGER: A risk that could lead to grave bodily harm.

WARNING: A risk that could lead to minor bodily harm.

CAUTION: A risk that could damage or destroy the appliance.



These symbols indicate important information.

NOTE: Declaration on important information about the appliance and the manufacturer's requirements.

1.2 GENERAL WARNINGS

Incorrectly set parameters on the controller can lead to a malfunction or cause the appliance to stop working. Symbols in these instructions emphasize important information on mitigating risks. Follow all general safety instructions and warnings on appliance operation.



NOTE

Read these instructions thoroughly before using.

Any processing or replacement of the appliance's original integral parts will void the manufacturer's warranty for the appliance's safety and proper operation. The manufacturer is not responsible for the consequences of negligent or improper appliance use. The manufacturer is not responsible for any claim for compensation in the event of appliance damage or other damage resulting from not adhering to the instructions herein.

The warranty is voided if the appliance is installed differently from the manner prescribed herein.

Provide for the appliance's regular maintenance by a qualified service technician.

Require that the installation technician explain how the appliance works and how to use it.

Keep these instructions in a dry place in the appliance's vicinity.

2 CHECK WHETHER THE APPLIANCE IS CONNECTED

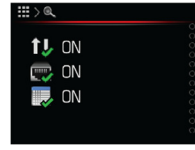
The router must have its DHCP (https://sl.wikipedia.org/wiki/Angle%C5%A1%C4%8DinaDynamic_Host_Configuration_Protocol) activated in order to automatically assign an address to the web module.



Press **OK** to get to the main menu.



Press **▲** or **▼** to find the **system check** menu. Press **OK** to enter the menu.



Press **▲** or **▼** to find the **communication system status**.



WEB status
Ethernet status
MB connection status

WEB status = ON: Successful cloud connection
Ethernet status = ON: Successful router connection
MB connection status = ON: The web and KSM modules are connected.

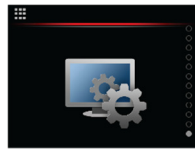
i NOTE

If within 3 minutes of having turned on the indoor unit any of the status indicators = OFF, see chapter 5.

3 GETTING A UID CODE



Press **OK** to get to the main menu.



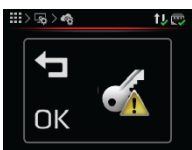
Press **▲** or **▼** to find the **regulator settings** menu. Press **OK** to enter the menu.



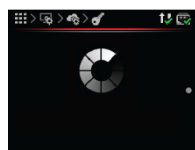
Press **▲** or **▼** to find the **cloud settings** menu.



Press **OK** to start the UID code acquisition process.



Press **OK** to confirm starting the UID code acquisition process.



UID code acquisition process



A new, unique **UID code** to use in further registration procedures.

4 NEW USER ACCOUNT REGISTRATION

Before the first connection to the web interface can be established, a new user account must be created and connected to your appliance. You can register through any personal computer, tablet computer, or smart phone with a browser.

The web application can be accessed through:

► **the KRONOTERM web page:**

<http://www.kronoterm.com>

by clicking on the “Cloud” icon

► **or directly at the web address:**

<https://cloud.kronoterm.com>

A 14-digit ID code is needed for registration. It can be acquired by following the procedure described in section 3. First enter the acquired code in the UID box on the web page. Next, enter your desired username and password. The validity of each entry is confirmed by a green check mark. A new user account is created by clicking on the “Registration” button.

4.1 LOGIN TO WEB INTERFACE

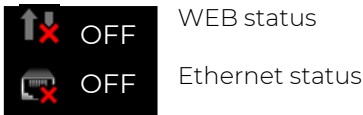
Use the username and a password provided during the new account registration procedure (Section 1) and log into the web interface by clicking the “**Sign-in**” button.

NOTE

If you forget your **user name** and/or **password**, you must acquire a new unique **UID code** and repeat the procedure for new user account registration.

5 TROUBLESHOOTING CLOUD CONNECTIONS

Checking the statuses show that one or more is OFF. Wait 3 minutes for the appliance to sync with the cloud. If nothing changes, follow the instructions below.



WEB status = OFF: Unsuccessful cloud connection
Ethernet status = OFF: Unsuccessful router connection

5.1 Router error

ETHERNET STATUS = OFF

If the orange LED on the router's ethernet socket is **not ON** while the green LED is flashing, this could in all likelihood indicate a weak network connection. To clear the error, follow the instructions below.



Image 1: Ethernet connector on the router.

5.1.1 Resolving errors

1. Check whether the network cable is properly inserted into the router's ethernet socket.
2. 2 LEDs are located on the ethernet socket. Is the green LED on or flashing?

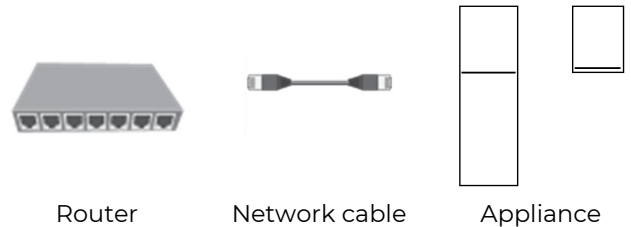
NOTE	
Ethernet socket: LED indicator status	
Green LED is:	
ON:	Connection established.
FLASHING:	Data connection is active.
OFF:	No connection.
Orange LED is:	
ON	100 Mbps data transfer rate
OFF	10 Mbps data transfer rate or no connection established

GREEN LED IS ON OR FLASHING

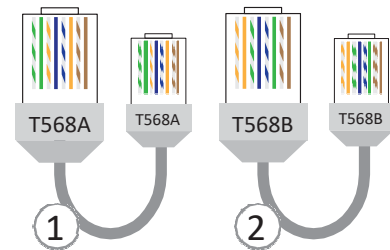
1. Check your network connection (PC, mobile devices, etc.).
2. Check instructions: is the appliance connected to the local network (section 6).

THE GREEN LED IS NOT SHINING (WEB STATUS = OFF)

1. Check if the network cable is properly inserted into the ethernet socket on the on the router.



2. Check whether the network cable is working. For proper operation, you will need cable type UTP5(e) or UTP6(e).
3. Check whether the network cable (UTP) is compliant with standard T568A or T568B (the wiring on both connectors must be the same).

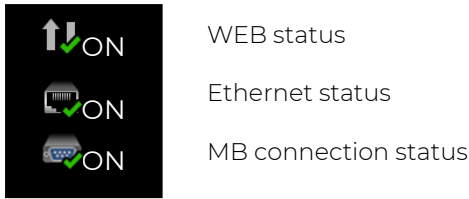


4. Check whether your network hardware is working (router, network switch, modem, etc.). Consult your network equipment manual. In the event of problems, contact your network operator.
5. If this procedure fails to resolve your issues, contact our technical support.

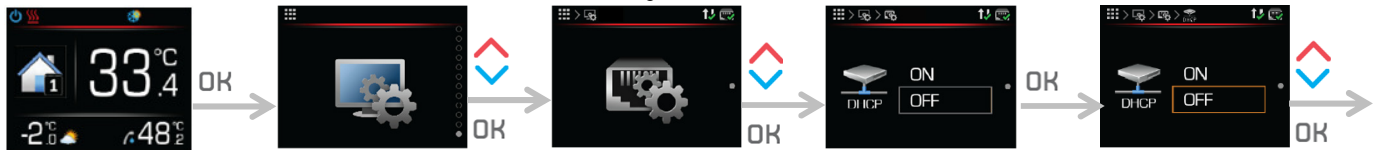
NOTE	
Before calling our technical support, look up your WEB Module Device ID , located on the label on your appliance case.	

5.2 Advanced network settings

The router must have its DHCP (https://sl.wikipedia.org/wiki/Angle%C5%A1%C4%8Dina_Dynamic_Host_Configuration_Protocol) activated in order to automatically assign an address to the web module.



1. Your appliance failed to acquire an IP address. The DHCP server is not working.
2. Make sure the DHCP server in your router is working. Use the router's instruction manual for help.
3. If the router's DHCP server is not working, or if you would like to set a static IP address, you will need to set the network parameters on the appliance's controller by hand.
4. Set DHCP, IP, MASK, GATEWAY, DNS1, and DNS2 by hand:



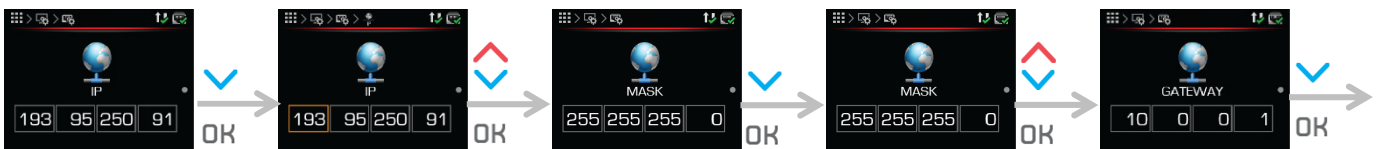
Press **OK** to get to the main menu.

Press **^** or **v** to find the **regulator settings** menu. Press **OK** to enter the menu.

Press **^** or **v** to find the **network setting** menu. Press **OK** to enter the menu.

Enable parameter setting by pressing **OK**.

Press **^** or **v** to automatically assign a DHCP address. Confirm by pressing **OK**.



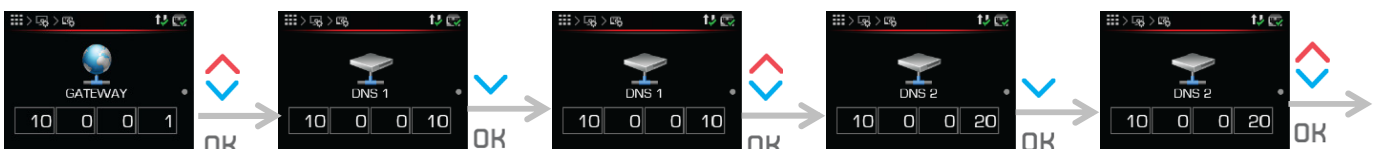
Press **v** to find the IP address menu. Enable parameter setting by pressing **OK**.

Press **^** or **v** to set individual IP address parameters. Confirm by pressing **OK**.

Press **v** to find the **MASK settings** menu. Enable parameter setting by pressing **OK**.

Press **^** or **v** to set individual MASK address parameters. Confirm by pressing **OK**.

Press **v** to find the **GATEWAY settings** menu. Enable parameter setting by pressing **OK**.



Press **^** or **v** to set individual GATEWAY address parameters. Confirm by pressing **OK**.

Press **v** to find the **DNS 1 settings** menu. Enable parameter setting by pressing **OK**.

Press **^** or **v** to set individual DNS 1 address parameters. Confirm by pressing **OK**.

Press **v** to find the **DNS 2 settings** menu. Enable parameter setting by pressing **OK**.

Press **^** or **v** to set individual DNS 2 address parameters. Confirm by pressing **OK**.

i NOTE

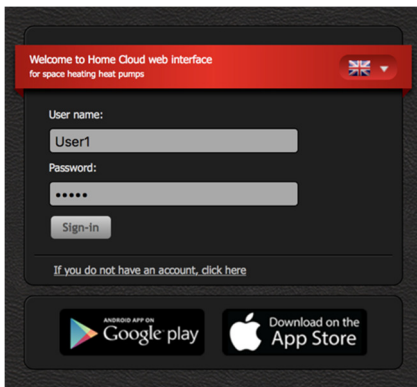
After confirming new network parameters, your appliance needs 3 minutes to establish a connection with the network (syncing).

5.3 Internet connection diagnostics

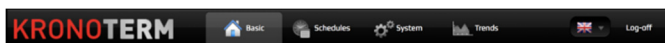
In the event of frequent power failures related to the cloud when using web applications and networking, we recommend running diagnostics on your internet connection.

This helps you determine whether your internet connection meets the level of quality requirements for the normal operation of the Home Cloud Web service. You can monitor the connection status in the Home Cloud web application.

1. You can access the Home Cloud web interface
 - on the following link: <https://cloud.kronoterm.com> or
 - through the application for smart phones "Home Cloud for phone", "Home Cloud for iPhone" or for table PC "Home Cloud", "Home Cloud for iPad", which can be found in the App Store or in Google Play.
2. Input the information you chose during the registration process into the fields "Username" and "Password". By pressing "Login", you enter into the web interface.





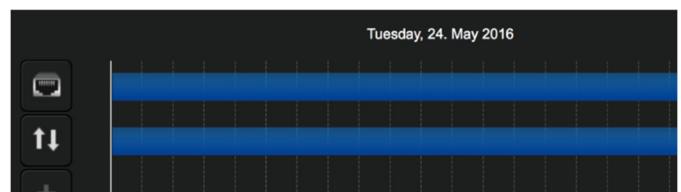
1. Select the tab "Trends" in the navigation bar.



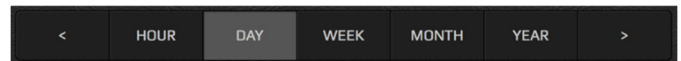
The "Time graphs" window opens. Graphs give you a review of historical trends and a comparison of all your system parameters.



1. By pressing + on the left side of the graph, a new selection window appears. Among the criteria shown, select the following  Ethernet connection.
2. Press + on the left side of the graph to select the criterion:  Web (internet) connection.
3. The blue line on the graph represents the connection status in the selected timeframe (hour, day, week, month, year). An interrupted line represents a loss of connection.



4. Using the keys under the graph, you can view the graph by different time criteria (hour, day, week, month, year).



5.3.1 Permitted number of connection losses

i NOTE

In such cases verify that your network hardware is working properly and contact your network operator.

Ethernet connection

A good connection is characterized by no more than 3 connection losses per week, with durations of no longer than a few seconds.

Web connection (Cloud connection)

A good connection is characterized by no more than 5 connection losses per week, with durations of no longer than 5 minutes.

5.3.2 Connection error (MB STATUS = OFF)



MB connection status

MB connection status = OFF: The Web and KSM modules are not connected properly.

i NOTE

If you see an **MB connection OFF** status, you will need a certified technician to come check the connection between the Web and KSM modules.

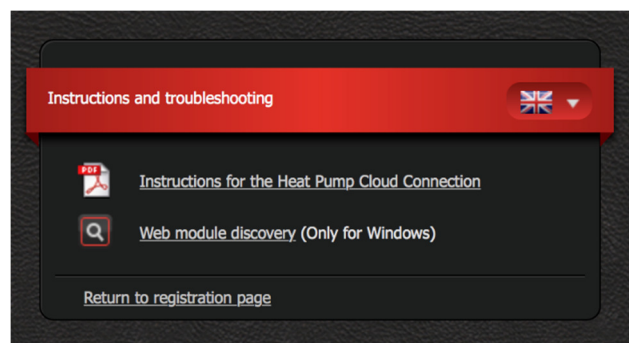
6 APPLIANCE IS CONNECTED TO THE LOCAL NETWORK

Using the program **KRONOTERM Web Module Discovery** you can easily check whether your appliance is connected to your local network.

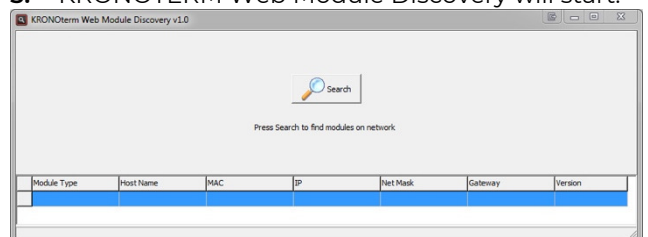
i NOTE


To start the program you need a PC with the Microsoft Windows operating system. The PC must be connected to the same local network as your appliance.


If a warning message from your firewall pops up on your screen, confirm a security exception.



1. The program KRONOTERM Web Module Discovery can be found at the URL: <https://cloud.kronoterm.com/?troubleshooting>.
2. Download the .exe file for the program **KRONOTERM Web Module Discovery** and run it.
3. KRONOTERM Web Module Discovery will start.



4. Press  to search for heat pumps in your local network.
5. If a heat pump is found, the following message is displayed:

Number of found modules: 1 

This means your heat pump is connected to your local network. Your appliance's network parameters likely set incorrectly.

Consult instructions: **Advanced network settings** (section 5.2).

7 FAQ

1. Is the ethernet cable between the router and the appliance made according to the standard described in Section 5.1.1?

NOTE

The maximal permissible length of the ethernet cable according to the standard is 50 m.

2. Did you test the ethernet cable with the tester? Only then can you be 100% sure that the cable is properly made.

NOTE

The main problem with homemade ethernet cables is the router itself, which is built robustly enough to work even if the cables have poor contacts with the connector. If such a cable is connected to the computer, the internet will work at a low speed and the whole connection risks instability. You can only perform a proper test with the tester.

3. Do you have another, commercially available interface for the connection between the router and the appliance such as a network adapter, router, Wi-Fi interface, etc.? **Check whether it is working properly.**
4. Do you have a switch or other commercial device between the router and the appliance that does not work properly? **Check whether it is working properly.**
5. Do you use the internet, torrents, IP-TV, Netflix, or other online services when a bad connection is detected?

NOTE

The answers to these questions give the basic requirements that must be fulfilled for the Web module to work properly; manufacturers of devices with Web modules have no control over such extenuating circumstances! For more information, contact your internet service provider.

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