

ENGINEERING
TOMORROW



User Guide

Danfoss Link A central controller for your entire house



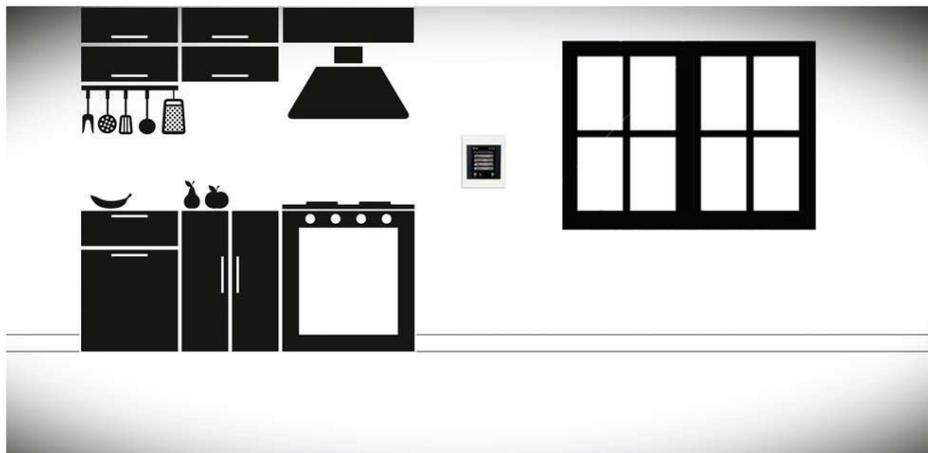
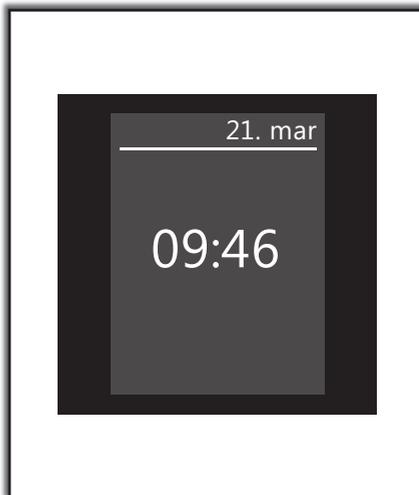
Congratulation on the purchase of your new Danfoss Link system

In this user guide, we will explain what the *Danfoss Link* system can do and provide you with good advice and instructions for finding the settings that fit your exact needs.

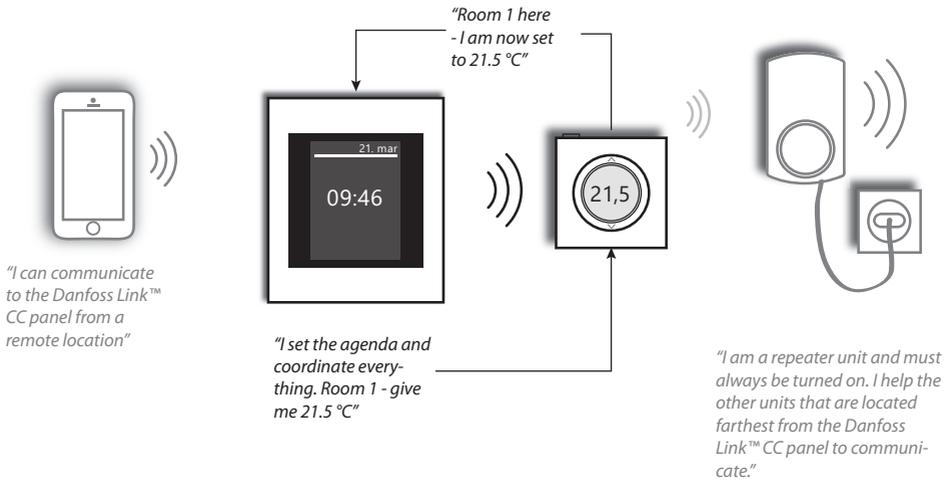
The *Danfoss Link* system is designed to make life easier for you. All sub-systems in your house communicate with one another via Danfoss Link™ CC and the system is able to perform several tasks without you as a user having to study loads of technical instructions.

We hope you will spend some time reading this user guide, to benefit most possible of your *Danfoss Link* system.

This user guide primarily addresses the house's control system. If you would like more specific information concerning a single unit, please refer to the literature provided with the product.



Building an intelligent wireless system



How the user interface works

The Danfoss Link system is operated via a user-friendly touchscreen.

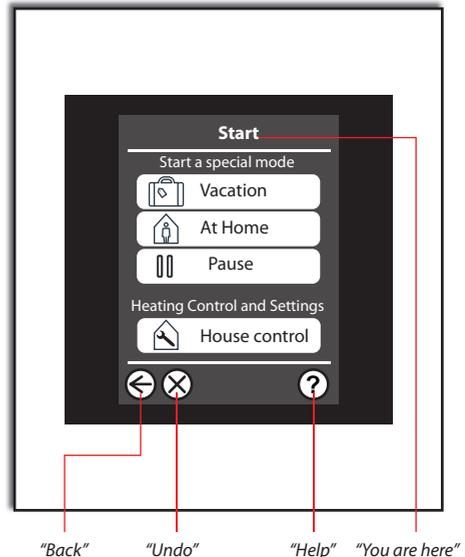
One common characteristic of the user interface is that you are always made aware where you are in the menu structure, at the top of the display.

The "Help" key is located in the bottom right-hand corner. You can use this to obtain additional information about the current given screen display.

The "Back" key is located in the bottom left-hand corner, and you can use this to go one step back in the menu.

By pressing the "X" key, you can undo an erroneous setting. That's all it takes, it's as easy as that.

We encourage you to explore the system's settings and screen displays in order to become familiar with the available options.



I want to adjust the temperature in one room

All rooms that are part of the network can be adjusted centrally using the Danfoss Link™ panel.

You can also set the temperature using the actual room device, i.e. the *living connect*® thermostat on the radiator, or the Danfoss Link™ RS if you have hydronic floor heating.

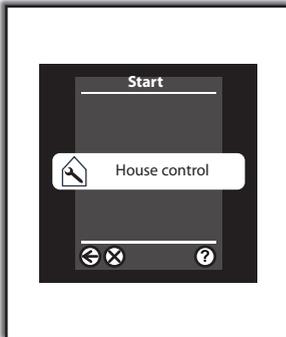
Please note: If you have a Danfoss Link™ RS in combination with a living connect® thermostat in the same room, the desired room temperature is set using only the room sensor.



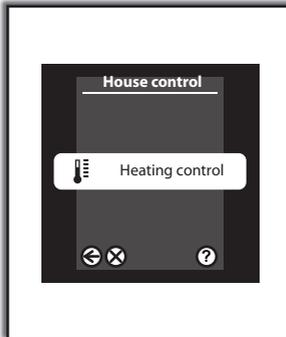
With the living connect® thermostat, you can set the desired room temperature locally using the thermostat. If you have two thermostats in the same room, they will synchronise automatically.



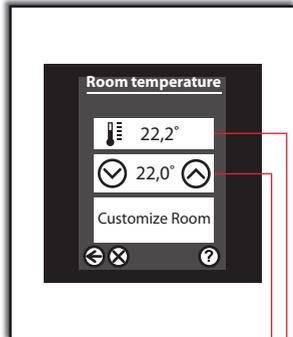
The Danfoss Link™ RS (standard with floor heating systems, extra accessory for radiators with living connect®). You can set the temperature locally using the room sensor.



Select **House control**



Select **Heating control** and then the room



Here you can set the **desired** temperature

Please note: Be aware that hydronic floor heating is a relatively slow-acting heat source. It may take as long as 8 hours for the desired room temperature to be reached.

*If you have a radiator, you should be aware that the temperature you set is reached **locally, in the area in which the radiator is installed** or **where the room sensor is mounted**. Thus, minor adjustments may be needed.*

If you have a Danfoss Link™ RS, you can see the measured room temperature here

I want to save energy

Danfoss Link makes saving energy easy without having to compromise in terms of comfort.

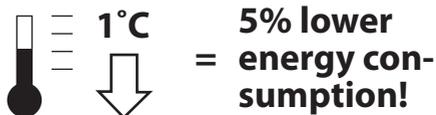
Why maintain a high room temperature when you're not at home?

Lowering the room temperature by one degree will reduce your heating costs by approx. 5%.

For this reason it makes perfect sense to use the **weekly schedule**, which automatically sets the desired **At Home temperatures** when you're at home, and the desired **Away/Asleep temperature** when you're away.

If you have radiator heating, you can experiment with significant temperature reductions (e.g. from 21 °C to 17 °C) in **Away/Asleep mode**.

If you have hydronic floor heating, you should not lower the temperature by more than 1-2 °C, as the cooling/heating time is very long.



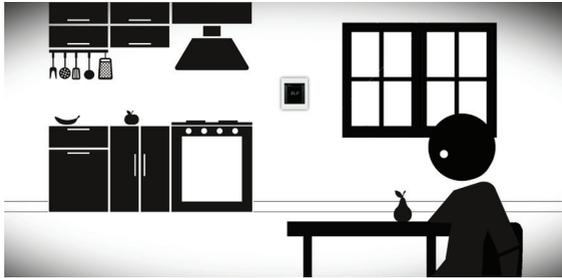
How the weekly schedule works

This function requires you to set two basic temperatures; one **At Home temperature**, i.e. the desired temperature for when you're at home, as well as one **Away/Asleep temperature** for when you're out of the house or sleeping at night.

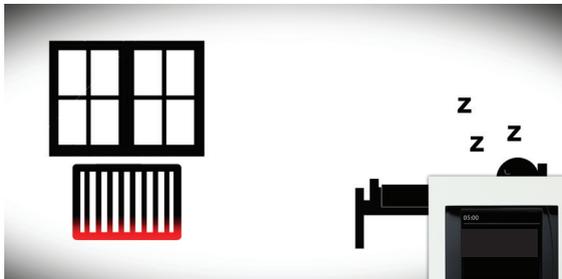
If you like, it is also possible to set various **At Home** and **Away/Asleep temperatures** for each room in your house.

The weekly schedules can be set for each room, and you can of course copy your settings from room to room, as well as setting alternating periods for weekdays and weekends.

The schedules are set directly via the "period arrows" on the screen, and you can remove or set new periods as needed.

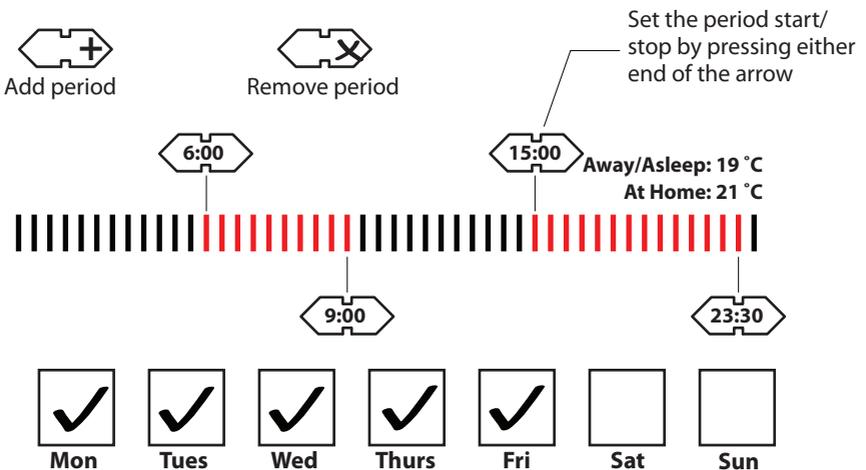


The **At Home** period is activated at the times of day when you are at home.



The **Away/Asleep** period can be activated e.g. overnight, when most people prefer slightly cooler temperatures.

Scheduling examples



Not so fast - what happens if I come home early one day?

Our everyday lives do not always run according to plan, and sometimes we're forced to stay home, say, with a sick child. In such situations, we don't want the system to lower the temperature during daytime hours.

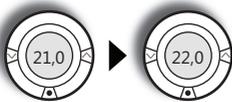
In this case, all you have to do is select **At Home** on the menu's start page, and select the specific rooms in the house, these will then be set to their **At Home** temperatures.

The **At Home** mode will remain active until you turn it off, so if you use the weekly schedule function to save energy, **remember to turn off At Home again.**

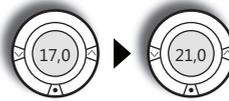


**What happens when I change a local setting in a room?
Does the Danfoss Link™ CC remember the new setting?**

If you are **not** using the **weekly schedule**, the settings you enter in the room will **always** be permanent.



If you are running the weekly schedules and come home during an **Away/Asleep** period, you will most likely find it necessary to turn up the temperature. This is possible of course, but the system will consider this to be an exception from the rule and not a general preference.



Away/Asleep period
You come home and turn up the heat



At Home period

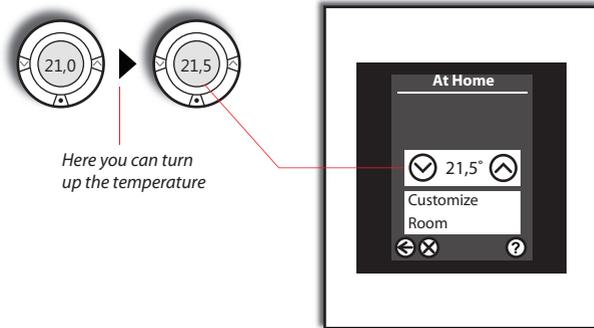


Away/Asleep period
Automatically returns to the original setting

If you use the **weekly schedule** and change the temperature during a **At Home** period, then this may be a general preference for a different temperature. This type of modification will be permanently saved and will thus become the new standard **At Home** temperature for the room in question.

*Please note: This describes the **factory settings**; your installer may have set the system up to also remember modifications made locally during an **Away/Asleep** period.*

At Home period



*The change is automatically saved in the Danfoss Link™ system and is now the new desired temperature for all **At Home** periods.*

Give the system a little time to adapt...

The first week after the system is started up in **weekly schedule**, it will take a bit of time for it to become familiar with its new surroundings. It is during this first week that the *Danfoss Link* system learns how quickly the different rooms can be heated.

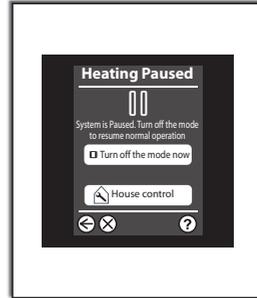
For example, if you set your weekly schedule to 21 °C at 3 pm, the system uses the information it has gathered to determine when to begin a reheating cycle as well as how to account for seasonal temperature differences.



Pause! I need a break in my schedule ...

If you need to take break from your normal routine, to air the house for example, then use the **Pause** function.

The temperature of the entire system is lowered to the safest minimum. You choose if this is for just one hour or indefinitely. To turn off the **Pause** function simply turn off the mode.



We're going on holiday; how should we set the system?

It's quite simple: all you have to do is press the **Vacation** key on the initial menu display.

The **Vacation** function puts the entire house in hibernation mode, in which all sub-systems drop to a controlled, low operating point, without the risk of moisture damage, frost damage or the like.

You can set the **Vacation** function to start - and stop at a desired date/time. The system will automatically return to your preferred settings in advance, so that you return to a comfortable warm house.



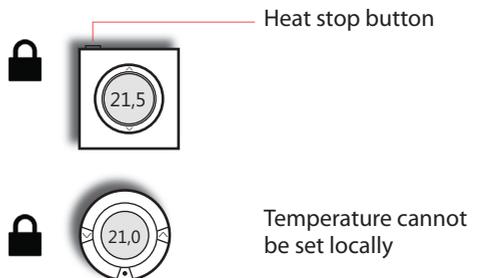
You can set the **Vacation** function to apply for the entire house or to selected rooms only.

If you return home earlier than expected, you can cancel the **Vacation** function on the main screen.

Does the Danfoss Link system have a tamper-proof lock?

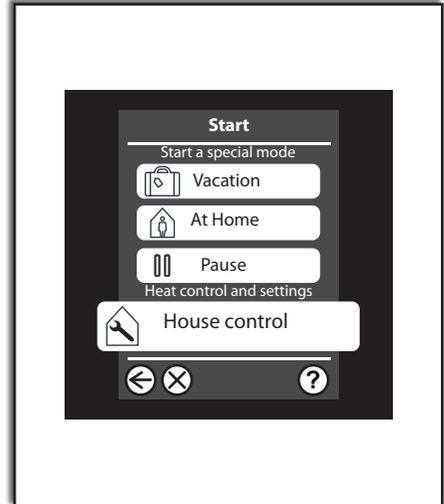
Yes. It is possible to use a tamper-proof lock for the individual room units.

All you have to do is select the **Customize Room** on the individual rooms. Next, select **Room Restrictions**, which will allow you to set a maximum and minimum temperature that can be set from the room in question; alternatively, you can block local room operation all together. If you have room sensors, you can also deactivate the heat stop function on the room sensor.



Changing the time, date, sound or display

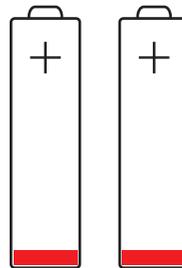
If you would like to change the date and time or modify the display appearance or sound of the user interface, you can do so in **Settings** located under the **House control** menu.



Uh oh - the batteries are dead. Now what happens?

When the battery-operated units are close to running out of power, an alarm will be issued on the central control panel well before the batteries are completely used up. The system will not "forget" anything even if a unit temporarily loses power.

In the event of a battery-operated unit running completely out of power, the unit will set the room to a certain temperature before the batteries die.

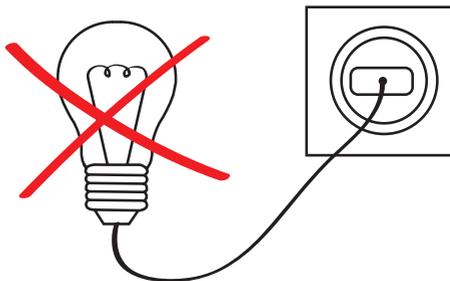


Please note: Danfoss recommends the use of non-rechargeable, alkaline batteries (2 x AA per room unit), for which you can expect an average battery lifetime of 2 years.

Power failure?

Short-term power failures will not affect your *Danfoss Link* system. A power failure lasting more than 8 hours may result in you having to reset the date and time, though all other programmes and units will remain intact.

However, you may find that the system runs somewhat “sluggishly” immediately following a power failure as the network is working hard to re-establish itself.



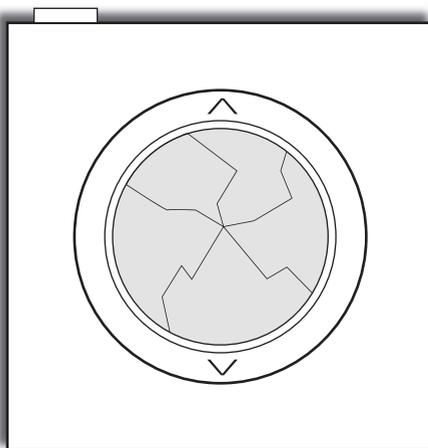
One of my room units has been damaged

How does the system react when one of your room devices is damaged?

When we do not know what the room temperature is, it is not possible to regulate the floor heating system. In response, we turn up the heat, but the system is unable to maintain a specific room temperature. If a *living connect*® radiator thermostat loses its connection to the *Danfoss Link*™ CC, it will continue running at the last known set point.

The *Danfoss Link*™ CC operating panel will issue an alarm if the room unit has not responded within 90 minutes. The operating panel will indicate which device has experienced an error or in which room the device is missing.

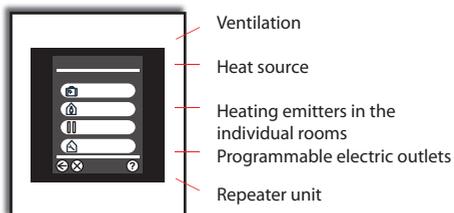
If the device is not physically damaged, you can start by trying to insert new batteries. If this does not solve the problem, please contact your installation technician, who can then remove the defective device from the network and connect a new one.



That's how the main system works - what about my sub-systems?

Danfoss Link can control several sub-systems, and not two solutions are exactly alike. In the pages that follow, we will describe the unique devices you have installed in *your* house (that is, the devices you selected when you generated this user guide).

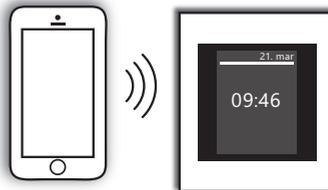
You may also benefit from reading the instructions and descriptions provided with the individual units, but in what follows we will provide an explanation of how the devices interact with the *Danfoss Link* system.



Connecting your Danfoss Link™ CC for smartphone/ tablet control

Your Danfoss Link™ CC can be paired to your smartphone or tablet for more convenience with the Danfoss Link™ App.

Danfoss Link™ App. allows you to communicate remotely with your Danfoss Link CC. For ease of use the app has the same icons as your Central Controller at home.



Step 1.

Download the Danfoss Link™ App. from Google play or App Store

Step 2.

Pair your Danfoss Link™ Central Controller, simply follow the instructions on the Danfoss Link™ App.

To enable smartphone control, your Danfoss Link™ needs to connect to your home WiFi. You can do this in **Settings** located under **House Control**. Select your WiFi network and enter your Wi-Fi password, wait for a check-mark on the globe icon, on the **House Control** screen, note, it may take a few minutes.



Please note: If you need help connecting your app. go to link.app.danfoss.com where you can find additional information.

What about Software Updates?

The Danfoss Link™ App. will keep itself updated (like other Apps) and the Danfoss Link™ CC with Wi-Fi will receive automatic software updates if Wi-Fi is enabled.

Danfoss Link CC - End User Agreement and Disclaimer

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2. Automatic Software Updates

Danfoss may from time to time develop patches, bug fixes, updates and other modifications to improve the performance of the Software ("Updates"). By connecting the *Danfoss Link™ CC* to the internet You accept that Updates may be automatically downloaded and installed on your *Danfoss Link™ CC* without further notice or consent being required. If you do not wish such Updates to be automatically downloaded and installed You must disable the *Danfoss Link™ CC* from the internet. You acknowledge that you may be required to install Updates to use the Product for remote access.

3. Consent to use of data

By enabling Your *Danfoss Link™ CC* to wirelessly connect to the internet you agree that Danfoss may collect, use, register and store information concerning your room names, heating requirements, user set-points, IP-addresses, software and hardware attributes, connection errors and user interaction. Such information is used by Danfoss to improve default settings and enhance the performance of the Software.

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