Quick Guide
HWAM® SmartControl™
Wi-Fi Frequency: 2.4-2.4835GHz.

EN

Smart Control™

11.04.2019 / 53-0774
www.hwam.com

HWAM intelligent heat

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*The app for the HWAM® SmartControl™ is named IHS SmartControl™.
(IHS = Intelligent Heat System)

QuickGuide HWAM® SmartControl™ (Wi-Fi 2,4 GHz)

Dear Customer,
Congratulations on your new HWAM® SmartStove™.
It is essential for us that your new investment brings joy and benefit to you and your loved ones. Therefore, we wish to draw your attention to the fact that the functioning of this HWAM® SmartStove™ differs considerably from that of a traditional wood-burning stove.

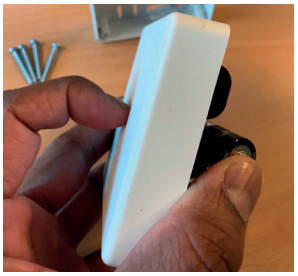
The HWAM® SmartControl™.
Your wood-burning stove is equipped with the electronic HWAM® SmartControl™ whose primary focus is to ensure a clean environment and minimise particle emission. With the HWAM® SmartControl™, your stove provides completely clean burning without emission of tiny particles and other environmentally harmful substances. This is ensured by advanced software controlling the temperature and air supply.
The firewood converts into gas when heated, and gas needs an air supply to burn. It requires high temperatures to burn all gasses. The HWAM® SmartControl™ ensures the correct air supply and temperature needed to achieve the full benefit of the firewood and clean burning.
Wood-burning stoves with HWAM® SmartControl™ ensure a constant room temperature, even if you fill it up with plenty of firewood. With the HWAM® SmartControl™, the room temperature does not get too hot; it will only last longer before you will have to re-stoke. The automatic night-time lowering ensures that the heat lasts as long as possible without adverse environmental impacts.
With the HWAM® SmartControl™, you can rest assured that your stove burns perfectly. This is very hard to achieve by manual control, as you can not control the temperature and air supply. In addition, you can not see from the flames whether the burning is clean.

Download the IHS SmartControl™ App

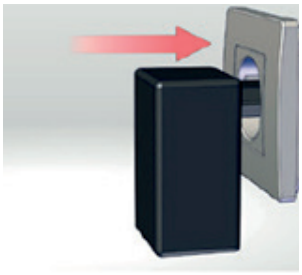
You can download the IHS SmartControl™ app from App Store to your iPhone or iPad and from Google Play Store to your Android phone or tablet.

Connecting the Room Temperature Sensor to Your Stove

1. Make sure there is no power connected to HWAM® SmartStove™. Remove the lid of the room temperature sensor and insert 3 AA batteries.



2. Push and hold the button on the front of the room temperature sensor for 4 to 5 seconds until the sensor starts flashing sequences of green and red light.

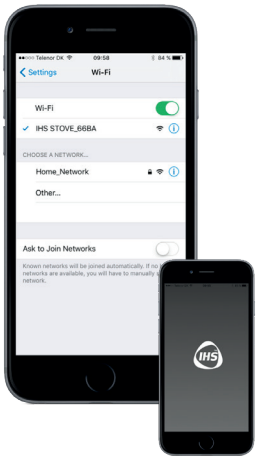


3 Plug in the stove's power supply within two minutes. The room temperature sensor will keep flashing green and red lights. Then the green light will flash 5 times, and when the light goes out, the sensor has been correctly paired with the wood-burning stove. The distance between the room temperature sensor and the stove may be up to 4 to 5 meters.

If the pairing fails, please un-plug the power supply and repeat the steps 1-3*.

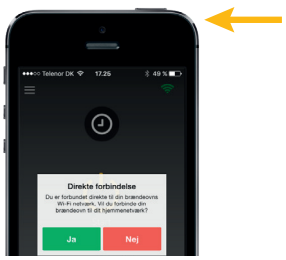
***LED is flashing sequences of green and red light:** The room temperature sensor is in pairing mode.
***LED is flashing a green light or is turned off:** The room temperature sensor has been successfully connected.
***LED is flashing an orange light:** The room temperature sensor is searching for the stove. Do nothing - it will re-establish the connection itself.
***LED is flashing a red light:** The room temperature sensor is not connected to the stove. See error report in the app.
***LED is flashing a green light and giving off sound signals:** It is time to add more firewood.

Wi-Fi Direct / Local Network Wi-Fi 2.4 GHz



Enter the Wi-Fi settings on your mobile phone or tablet and establish the connection to your stove using Wi-Fi Direct (e.g., IHS STOVE_XXXX).

Open the IHS SmartControl™ App.



When the Wi-Fi symbol in the top right corner flashes green, click on the symbol.
Follow the app's instructions and connect your stove to your local network.

Remember to have your network key at hand!

Temperature Level

Initially, set the desired temperature level on Level 2 or 3 (+ / - yellow level bar in the bottom of the app).

Lighting Your Stove Properly!

Your new HWAM® SmartStove™ closes all valves when not in use to prevent hot air from being sucked into the chimney and out into the open (loss of energy). A conventional wood-burning stove has constantly open valves, and you would be surprised to know the amount of hot air slipping out of the house.
For the HWAM® SmartStove™, this valve function comprises the challenge that, at each new lighting, you will always start out with a cold chimney - pay attention to this. It requires extra rapid heating of the stove and chimney when lighting the stove.

A proper lighting is best done with 1-2 kg. of firewood chopped into 2-4 rather small pieces.

Then add 8-10 pieces of fine kindling wood, and on top of it all, place a couple of fire-lighters. Light up the firelighters and close the door.

Learn more about how to light your stove from the movie: www.hwam.dk/råd+og+vejledning/korrekt+optænding

The HWAM® SmartControl™ starts when the combustion chamber door is opened. The HWAM® SmartControl™ has a cold start-up program requiring that the operating temperature is reached within 15 min. If the heat-up is too slow, the app will ask for more firewood. This may seem illogical when there is both firewood and flames in the stove, but as long as the proper operating temperature has not been reached, the stove does not burn environmentally clean, and, therefore, the temperature has to be reached fast. The reasons for a slow rise in temperature may be: insufficient draught in an ancient brick chimney, damp firewood, too large firewood pieces, or insufficient firewood/kindling wood.

The Chimney

Information on the chimney's effect

New stoves are highly efficient and do not emit the same amount of heat into the chimney. Therefore, it is crucial to understand the importance of efficient lighting to ensure good and clean combustion. Imagine the chimney as the "stove's engine." It functions by the natural draught of the chimney resulting from hot air rising up through the chimney, thus creating a vaccum in the stove. Air is then sucked into the stove which feeds the combustion with oxygen. Hot air will always rise; the hotter the air, the faster the rise. A good chimney draught provides a greater air intake and, thus, improved and cleaner combustion.

When the stove is not lit, e.g., at night, the chimney may get filled with cold air. As cold air will always sink, an accumulation of cold air in the chimney may occur which can be difficult to get rid of when lighting the stove.

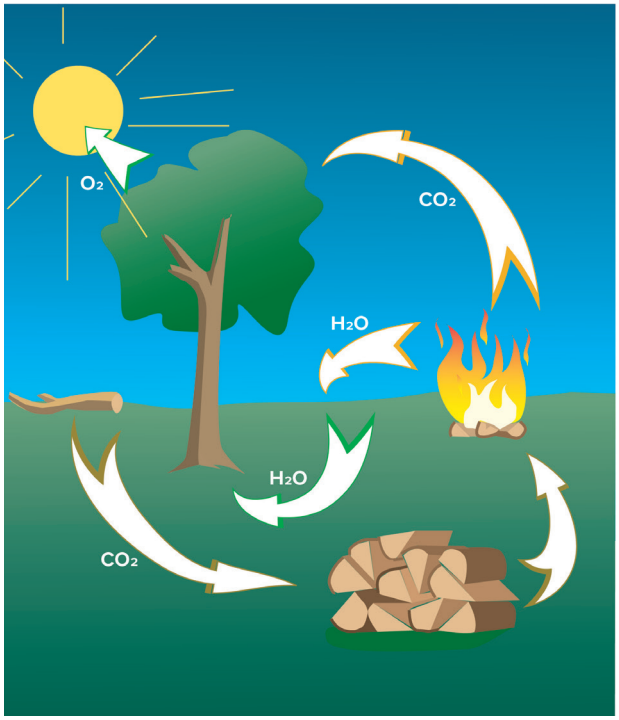
To dissolve the cold air plug, try to leave the stove door open for 3 to 5 minutes before lighting the stove. This will make the cold air sink into the stove and out into the room. Alternatively, try putting 2 to 3 crumpled newspapers on top of the arranged kindling firewood; they will quickly heat up the cold air and provide draught in the chimney.

A chimney is not just a chimney!

An ancient brick and uninsulated chimney is not suitable for modern wood-burning stoves. As a minimum, the chimney should be insulated with, for instance, Isokern elements or equipped with a steel liner. Regardless of the chimney you have, the joints must be tight to avoid false air intake which may reduce the air intake for the combustion.

An insulated high-quality steel chimney often produces the best result together with a high-quality wood-burning stove. These two elements must always be considered as a whole.

Environment



Your HWAM® SmartStove™ is future-proof. It ensures a clean environment; for you and your neighbour. The HWAM® SmartControl™ has been developed by HWAM technicians in collaboration with DTU (Technical University of Denmark), who have established its well-functioning in the laboratory as well as in the consumers' homes. Firing and heating with wood is CO_2 neutral renewable energy. Typically, the applied firewood comes from the thinning of forests, hedges, and gardens in the local area; in other words, necessary maintenance of planted areas. Consequently, processing and transport cause minor environmental impact. Considering the fossil fuel alternative, each user of a wood-burning stove saves the society about 2-2.5 tons of CO_2 on an annual average, according to the University of Copenhagen.

Trees consume CO_2 to grow. Burning wood emits CO_2. Wood that perishes or decomposes in nature emits the same amount of CO_2 as wood that burns.

Economy

Firewood for a wood-burning stove is the cheapest heating energy source available. Moreover, a HWAM® SmartStove™ equipped with the HWAM® SmartControl™ ensures a 50% reduction on the consumption of firewood.

Comfort

The cosy atmosphere created by a wood-burning stove is the best part of it all - the gently swaying flames and the extra heat; just when you need it. It evokes a nice sense of comfort. With a wood-burning stove, you are in charge; no central control or dependency of an external heat supplier outside your influence. At the same time, you can enjoy looking at your stove as a designer furniture that makes a difference - you can both see and feel it!

HWAM® SmartStove™

- a whole new class of wood-burning stoves