

Hub Quick Start Guide

Version	Date	Comment
Current Version (v. 2)	Dec 23, 2025 13:20	afnan khan
v. 1	Dec 01, 2025 14:32	Dalton Aker Draft

Technical Specification

1. Power : Rate : 24VAC (common wire requirement) Frequency : 50/60Hz
2. Weight of Unit: 0.5 Kg
3. Environment Operating Temperature : 0 0C~400C Storage Temperature : -100C~450C
Humidity : 0 to 90% RH (non-condensing)

CAUTION!

1. Risk of explosion if the battery is replaced by an incorrect type
2. Use the battery only under the following environmental conditions. Failure to do so can result in reduced performance or a shorten service life. Recharging the battery outside of these temperatures can cause the battery to overheat, explode or catch fire. Operating environment: When charging the battery: 00C~450C When discharging the battery: -100C~600C When stored up to 30 days: -100C~450C When stored up to 90 days: -100C~350C
3. In cases where children use the battery, instruct them on the contents of the user's guide and keep an eye on them to ensure that the battery is being used correctly. If the battery leaks and electrolyte gets your skin or clothing, immediately rinse the affected area with clean running water. If left as is, skin inflammation can occur.
4. For directions on battery installation and removal, read the instruction manual that accompanies the equipment in which the battery will be used.
5. If the terminals of the battery are dirty, wipe them clean with dry cloth before use. Otherwise, solid electrical contact may not be charged with the equipment, and this can cause power outages or charging to fail.

Warning!

1. Do not use the battery if it gives off an odor, generates heat, becomes discolored or deformed, or appears abnormal in any way. If the battery is in use or being recharged, remove it from the device or charger immediately and discontinue use.
 2. Replace a BATTERY with incorrect type that can defeat a SAFEGUARD (for example, in the case of some lithium BATTERY types);
 3. Disposal of a BATTERY into fire or a hot oven, or mechanically crushing or cutting of a BATTERY, that can result in an explosion;
 4. Leaving a BATTERY in an extremely high temperature surrounding environment that can result in an explosion of the leakage of flammable liquid or gas;
 5. A Battery subjected to extremely low air pressure that may result in an explosion or the leakage of flammable liquid or gas;
 6. Keep the batteries out of the reach of children. If a child somehow swallows a battery, seek medical attention immediately.
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Danger!

Failure to observe the following precautions may result in battery leakage, overheating, explosion and/or fire.

1. Do not immerse the battery in water or allow it to get wet.
 2. Do not use or store the battery near sources of heat such as a fire or heater.
 3. Do not connect the battery directly to wall outlets or car cigarette-lighter sockets.
 4. Do not put the battery into a fire or apply direct heat to it.
 5. Do not short-circuit the battery by connecting wires or other metal objects to the positive (+) and negative (-) terminals.
 6. Do not carry or put the battery together with necklaces, hairpins or other metal objects.
 7. Do not strike, throw or subject the battery to severe physical shock.
 8. Do not pierce the battery casing with a nail or other sharp object, break it open with a hammer, or step on it.
 9. Do not directly solder the battery terminals.
 10. Do not attempt to disassemble or modify the battery in any way.
 11. Do not recharge the battery near a fire or in extremely hot conditions.
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Terminals

24VAC Power Connection

Terminal	Color	Description
Rh or Rc	RED	24VAC Power Wire
C	BLUE	Common Wire

Terminal Description

Terminal	Color	Function
G	Green	Fan
Rc	RED	Cooling Transformer
Rh	RED	Heating Transformer
O/B	ORANGE	Heat Pump O or Heat Pump B (reverse value)
Y/Y2	YELLOW	Y, Y2: Use for 1-2 stages of conventional A/C or 1-2 stages of heat pump compressor
W/W2	White Brown	W, W2: Use for 1-2 stages of conventional heat or 1-2 stages of auxiliary heat with heat pump
C	Blue	24VAC Common Wire

Note:

1. Thermostat hub is designed for 24VAC with a 1A max. current.
2. Do not connect to line (high) voltage or millivolt systems
3. Switch enable: Rh=Rc (One transformer)
4. Switch disable: Rc≠Rh (Two transformer)
5. Y/Y2 will switch together, W/W2 will switch together

Thermostat Wire Connection

Please Note: if there exists two independent transformers ($R_c \neq R_h$), switch can be disable, vice versa

1. Gas/Oil/Geothermal/Propane: Force Air, Radiators (Rh-W,Rh-W2 switch together)
2. Electric: Force Air (Rh-W,Rh-W2 switch together)
3. Electric: Radiator (Rh-W,Rh-W2 switch together)
4. Heat Pump O/B: Force Air
5. Heat Pump O/B: Radiator

Wire Connection Procedure

Please refer the following procedure to install your thermostat

1. Turn Off power

Turn off the power to your heating and air conditioning system at your fuse box or flip the switch next to your furnace. In order to confirm the power is off, try to turn on heating or cooling by setting temperature on your old thermostat.

2. Remove old thermostat

Remove face plate with screwdriver or by pushing the pressure latch.

3. Take a photo of your wiring

Take a photo of your existing wiring before remove your thermostat from the wall. It is very important step and can help and reduce a lot time if you need to troubleshooting later.

4. Label your wires

Use the wire labels before remove the wire cable from your old thermostat. Label one wire at a time and doing the terminal cross-reference table .

5. Attach back terminal plate to wall

Secure the back plate to your wall with the screws

6. Connect wire to the back terminal plate

7. Attach the main frame on it

8. Power on HVAC system

Fuel Source	Heating Type	Heating	Cooling	Common Wire	*Mode switch duration
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Gas,Oil, Geotherma I, Propane	Forced Air, Radiators, Infloor Radiant	Rh- W , Rh-W2	Rc- Y , Rc-G	C	180s
Electric	Forced Air	Rh- W , Rh- W2 , Rc-G	Rc- Y , Rc-G	C	180s
Electric	Radiators, In-floor Radiant	Rh- W , Rh-W2	Rc- Y , Rc-G	C	180s
*Heat- Pump O	Forced Air	Rc-Y , Rh- W , Rh- W2 , Rc-G	Rc- Y , RcO/B , Rc- G	C	180s
*Heat- Pump O	Radiators, In-floor Radiant	Rc-Y , Rh- W , Rh- W2 , Rc-G	Rc- Y , Rc- O/B	C	180s
*Heat- Pump B	Forced Air	Rc-Y , Rc- O/B , Rh- W , Rh- W2 , Rc-G	Rc- Y , Rc-G	C	180s

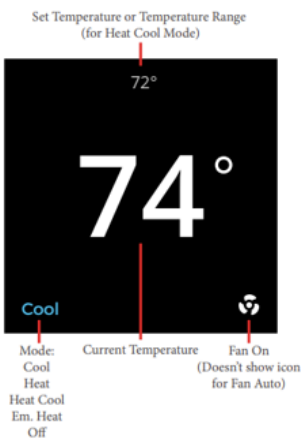
*Heat-Pump B	Radiators, In-floor Radiant	Rc-Y , Rc-O/B , Rh-W , Rh-W2 , Rc-G	Rc-Y	C	180s
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- *Heat Pump mode : W, W2 wiring belong to Aux. heating, it needs work with G wire
- *Mode switch duration : Mode switching from Y (cooling) to W (heating) needs waiting 180 sec. ,vice versa.

Operation

Home Screen

Home Screen



Main Menu

Main Menu

• Mode

Fan

← Exit

Mode Highlighted

Mode is highlighted when visiting this Menu. Pressing the Center button here will go to the Mode Menu.

Mode

• Fan

← Exit

Fan Highlighted

Pressing the Center button here will go to the Fan Menu.

Mode

Fan

• ← Exit

Exit Highlighted

Pressing the Center button here will go to the Home Screen.

Mode Menu

Mode Menu

- Cool
- Heat
- Heat • Cool
- Em. Heat
- Off
- ← Back

Cool Mode Highlighted

Cool Mode is highlighted when visiting this Menu. Pressing the Center button here will turn the A/C to Cool Mode and go back to the Home Screen.

- Cool
- Heat
- Heat • Cool
- Em. Heat
- Off
- ← Back

Heat Mode Highlighted

Pressing the Center button here will turn the A/C to Heat Mode and go back to the Home Screen.

- Cool
- Heat
- Heat • Cool
- Em. Heat
- Off
- ← Back

Heat Mode Highlighted

Pressing the Center button here will go to the Heat Cool Menu.

- Cool
- Heat
- Heat • Cool
- Em. Heat
- Off
- ← Back

Em. Heat Mode Highlighted

Pressing the Center button here will turn the A/C to Em. Heat Mode and go back to the Home Screen.

- Cool
- Heat
- Heat • Cool
- Em. Heat
- Off
- ← Back

Off Highlighted

Pressing the Center button here will turn the A/C Off and go back to the Home Screen.

- Cool
- Heat
- Heat • Cool
- Em. Heat
- Off
- ← Back

Back Highlighted

Pressing the Center button here will turn go back to the previous screen (Main Menu).

Fan Menu

Fan Menu

- Auto
- On
- ← Back

Fan Auto Mode Highlighted

Auto is highlighted when visiting this Menu. Pressing the Center button here will turn the Fan to Auto Mode and go back to the Home Screen.

- Auto
- On
- ← Back

Fan On Mode Highlighted

Pressing the Center button here will go to the Fan Time Select Screen below.

- Auto
- On
- ← Back

Back Highlighted

Pressing the Center button here will turn go back to the previous screen (Main Menu).

Heat Cool Menu

Heat Cool Menu

- Set Heat - 64°
- Set Cool - 78°
- Start Heat • Cool
- ← Back

Set Heat Highlighted

Set Heat is highlighted when visiting this Menu, this option also shows the current Heat Target stored in the system. Pressing the Center button here will go to the Set Heat Target Screen shown below.

- Set Heat - 64°
- Set Cool - 78°
- Start Heat • Cool
- ← Back

Set Cool Highlighted

This option also shows the current Heat Target stored in the system. Pressing the Center button here will go to the Set Cool Target Screen shown below.

- Set Heat - 64°
- Set Cool - 78°
- Start Heat • Cool
- ← Back

Start Heat Cool Highlighted

Pressing the Center button here will go to the turn the A/C to Heat Cool Mode and go back to the Home Screen.

- Set Heat - 64°
- Set Cool - 78°
- Start Heat • Cool
- ← Back

Back Highlighted

Pressing the Center button here will turn go back to the previous screen (Mode Menu).

Wi-Fi Configuration

To use your hub normally, it must be connected to the internet so it can stay online and communicate with the app.

Connecting the hub to Wi-Fi keeps it online for everyday use, updates, and reliable control.

- **Start the connection flow:** Follow the on-screen steps to put the hub into Wi-Fi setup mode.
- **Temporary setup connection :** Your phone will be briefly connect to the hub's setup network so the app can configure it.
- **Choose a Wi-Fi network:** Once your device, is connected to the hubs network, IAPTS_{{HUBID}}, it will scan for the available networks. Select from **Available Networks**.
- **Add a network (optional):** Tap **Add Network** if your Wi-Fi name isn't listed, then type it manually.
- **Enter password & connect:** Enter the Wi-Fi password and tap **Connect**.
- **Wait while it finishes:** A progress screen appears; it can take a few minutes for the hub to reconnect and come online.
- **If it fails:** You'll get an **Unsuccessful** message with options like **Retry** or go back and try again.
- **Finish:** When it succeeds, you're automatically returned to the home screen (device list for installers, or the main app for residents).

FCC Statement

15.19

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

15.21

Note: The grantee is not responsible for any changes or modifications not expressly approved by the party responsible for compliance. Such modifications could void the user's authority to operate the equipment.

15.105(b)

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

RF Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator and your body