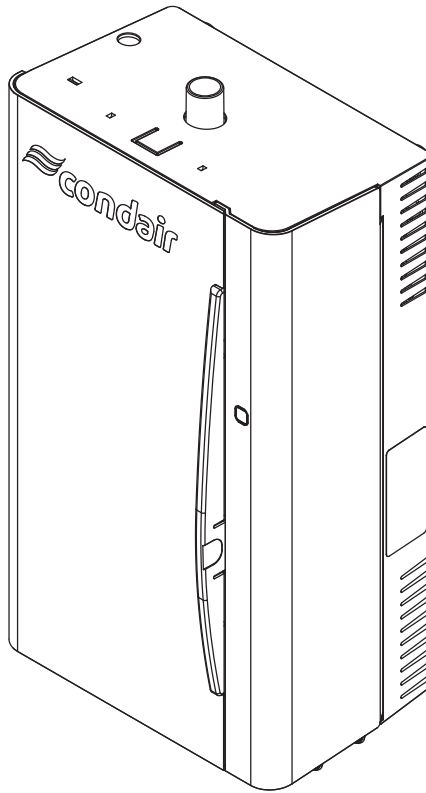




HOMEOWNER'S MANUAL

Condair RH Connect
Whole-home Steam Humidifier (RH-NAP, 22)

Humidification, Dehumidification
and Evaporative Cooling

 **condair**

Cautions and Warnings



CAUTION: Servicing

- The unit is mains powered. Disconnect main power before any servicing.
- Electrical compartment contains high voltage components. Access should be limited to authorized personnel only.
- The unit is hot. Wait for the unit to drain and cool before servicing. During and following operation of the humidifier, the steam and components in contact with the steam such as the steam lines, steam distributors, and condensate lines can become hot and can burn if touched.
- Condair does not accept any liability for installations of humidity equipment installed by unqualified personnel, or the use of parts, components, or equipment that are not authorized or approved by Condair.



CAUTION: Electrical

- All electrical work should be done according to all applicable local and national codes.
- Electrical connection to be performed by a licensed electrician.



CAUTION: Plumbing

- (Recommended) Plumbing to be performed by a licensed plumber.
- Drain water from the humidifier can be very hot. Drain to an appropriate floor drain.
- All plumbing work should be done according to local plumbing code.



CAUTION: Installation

- **Do NOT** mount in area where freezing can occur.
- **Do NOT** mount on vibrating surface.
- **Do NOT** mount on the floor.
- **Do NOT** block the steam outlet.
- (Recommended) Install an air proving switch.
- Do install steam lines to prevent any restrictions that may cause back-pressure in the humidifier.
- Ensure furnace fan is operating while the humidifier is generating steam.
- Keep out of reach of children.

Thank you for choosing Condair

The Condair RH Connect is a residential steam humidifier designed by Condair. It is designed to provide steady, clean humidification for the home, and is designed to connect to a supply air duct. The humidifier may be mounted directly onto the duct, or remotely with connected steam hoses and distributor.

This homeowner's manual provides a basic overview of the humidifier and its operation. Use of this manual assumes that the Condair RH Connect is already installed. If the Condair RH Connect has not been installed, refer to the quick start guide.

For more information, including troubleshooting, refer to the installation, and operation and maintenance manuals available at www.condair.com/residential.

Accessing the Condair RH Connect manuals

To access all Condair RH Connect manuals, including the French manuals, please scan the QR Code below.



Connecting to the Condair Connect App

Once the humidifier is mounted, and steam, water, drain, and wiring connections have been established, you can turn on the unit and control it with the Condair Connect App on your mobile device.

Downloading the Condair Connect App

Use your phone's camera or QR scanner to go to Google Play (Android) or the App Store (iOS).

Google Play (Android)



App Store (iOS)



Connecting to the Condair Connect App

1. Download and install the Condair Connect App from the App Store or Google Play Store. Ensure your mobile device is connected to your home Wifi network.
2. Turn on your humidifier (press and hold the power button for 2 seconds).
3. Open the Condair Connect App. You enter a screen allowing you to choose a humidifier to connect. On the Condair Connect App, press **Add Device**. Your mobile device will begin to scan the area for the Condair RH Connect.
4. On the humidifier, press and hold the power button for 5 seconds. The wireless light () will flash green. The humidifier will be discoverable to the Condair Connect App.
5. Follow the instructions in the Condair Connect App to finalize the connection.
6. The wireless light remains solid blue once completed. A red light indicates a disconnect.

User Interface

The humidifier has a single button that turns the unit on/off, drains the cylinder, resets faults and warnings, and connects to your wireless network. The humidifier also has four LEDs that indicate the status of the humidifier

	Description
Blue	Humidifier is on (operational).
Fading	(Blue) The unit is on standby. The humidifier will product steam when the humidity is lower than the setpoint (defined in the Condair Connect App).
	(Red) The unit is on standby. The humidifier is disabled through the Condair Connect App. The humidifier will not humidify unless it is re-enabled through the Condair Connect App.
Blinking	Security loop is open (W2).
Red	Humidifier is not on. It is still connected to the power supply.

	Description
Blue	Wifi/Cloud/Hostpot connection established.
Green	Hotspot (AP) mode activated. The humidifier is connected to your phone.
Fading	(Blue) The software in the humidifier is updating.
	(Green) The humidifier is in Hotspot (AP) mode. The humidifier is attempting to connect to your phone.
Red	No Wifi connection (W6).

	Description
Blue	Cylinder OK.
Blinking	Cylinder is draining.
Fading	Cylinder is filling. Appears on first fill cycle on a new cylinder.
Yellow	Cylinder end of life approaching expiry (W5). Replace soon.
Red	Cylinder end of life reached (E5).
	Invalid cylinder installed (E6).

	Description
Yellow	Warning: The humidifier will still operate, but requires maintenance.
Red	Error: The humidifier stops operation to protect system components.

Starting Up

IMPORTANT! Damaged or improperly installed units must NOT be operated. Damaged or improperly installed units may present a danger to persons and property.

To turn on the humidifier:

1. See the below instructions if you are starting the humidifier for the first time.
Press and hold the power button for 2 seconds. The unit will turn on. The unit will begin humidification once it receives a demand for humidity.

Hour No-Demand Auto-Drain

If the humidifier does not receive a request for humidification for 72 hours, a full cylinder drain will occur automatically. The humidifier will remain in this state, with an empty cylinder, until there is a demand for humidification. At that point, the cylinder will begin filling with water automatically and proceed with the normal humidification process.

This feature eliminates the need for user interaction at the end of the humidification season. The system does not need to be drained, or shut-down at the end of the season, since it will automatically fill and drain the cylinder as required.

Shutting Down

IMPORTANT! Shutting down the unit does not remove power from the unit. To remove power to the unit, use the external disconnect switch.

To turn off the humidifier:

1. Press and hold the power button for 2 seconds.
 - The humidifier stops humidifying.
 - The cylinder drains (approximately 11 minutes).

Should the unit be disconnected for an extended period of time, allow the humidifier to drain and shut down prior to disconnecting the power with the external disconnect. After removing power from the humidifier, close the water supply valve.

Note: The unit will drain only when turned off directly from the power button on the unit. Disabling humidification from the Condair Connect App will not drain the cylinder until 72 hours pass with no demand.

Draining the Humidifier

To drain the humidifier:

1. Drain the cylinder by proceeding with the shut down sequence (refer to ["Shutting Down"](#) above).
Press and hold the power button for 2 seconds.

Changing the Setpoint

Changing the setpoint of your Condaire RH Connect humidifier requires the Condaire Connect App.

The ideal indoor humidity range is between 40% and 60%. To reach a particular humidity level, a setpoint (or desired humidity) is determined for the humidifier. If the humidity of your home is lower than the setpoint the humidifier will produce steam. It will continue to produce steam until the humidity in your home reaches the setpoint.

To change the setpoint:

1. Open then Condaire Connect App.
2. On the home screen, select your humidifier.
3. Move the humidity slider to your desired <%>.
4. Press the <Home> button to save your changes.

Resetting Faults and Warnings

Error and warning codes may be reset (active faults cleared), however, if the issue has not been resolved, the warning or error code will return.

To reset the error/warning:

1. Double click the power button.

Operation Summary Table

To turn On/Off the humidifier:	Press and hold the power button for 2 seconds.
To reset the error/warning:	Double click the power button.
To connect the unit to your device:	Press and hold the power button until the WiFi LED flashes green (around 5 seconds)

Note: If your humidifier software version is earlier than 4.1.1, you can clear/reset the error/warning by pressing and holding the power button for 3 seconds.

Replacing the Cylinder

IMPORTANT! Ensure that the new cylinder is free of damage or defects.

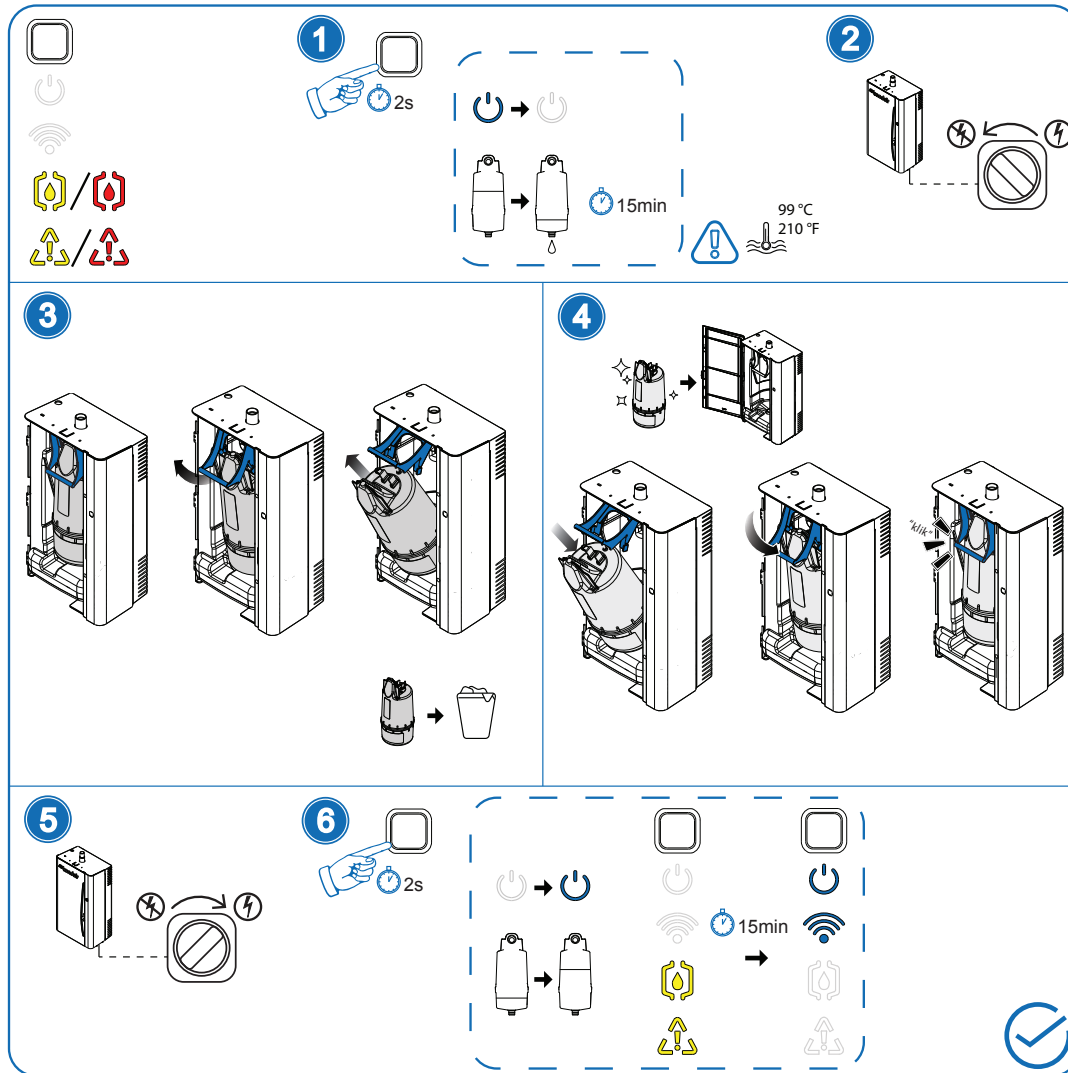


Figure 1 - Removing the Cylinder (front panel removed for clarity)

Replacing the Cylinder: Warning/Fault

When the cylinder needs to be replaced, you will receive a notification on the Condair Connect App and on the humidifier (⚠️ and 🔥). If the cylinder is not replaced within roughly 3 weeks, the warning notification upgrades to a fault notification and the humidifier stops steam production.

Replacing the Cylinder:

1. Turn off the humidifier. The unit will fully drain in approximately 10 minutes and then enter Off mode. The power LED will turn red. (Suggested) Wait an additional 5 minutes for the unit to cool.
2. Use the electrical disconnect to remove power from the humidifier.
3. Open the door to the humidifier. Pull the lever upwards. The lever will push the cylinder out. Pull the cylinder out of the humidifier.
4. Replace the cylinder with a new one. Put the new cylinder into the humidifier and secure it with the lever.
5. Restore power to the humidifier with the electrical disconnect.
6. Turn on the humidifier. Allow the cylinder to fill. The unit will go through a new cycle and will automatically detect a new cylinder.

General Troubleshooting

Condensation on the inside of windows.

Humidity is set too high

Seals around window are broken

- Reduce the humidity setting on the humidifier.
- Seal any gaps between the window pane and the window.

Humidifier appears to have no power and nothing happens when the On/Off/Drain button is pressed.

Electrical disconnect is engaged

Incorrect wiring

- Disengage the electrical disconnect to allow power to the humidifier.
- Ensure all high-voltage (mains) wires are connected. Check with a multimeter to register the connection between end points.
- Check if the switch mode power supply is functional.
- Check if the 'heart beat' LED on the PCB is lit.

Humidifier will not humidify or is not reaching the relative humidity setpoint.

Humidity sensor is not working

Humidistat terminals are not closed

Safety loop open

No demand signal

- Check the voltage on the humidity sensor. If the Condair sensor (supplied) is being used, **10 V indicates no demand, and 0 V indicates full demand.** If another control device is used, refer to the manual of that device.
- Check the humidity setpoint on the humidifier. Ensure that the setpoint is higher than the sensed humidity.
- Check the voltage.
- Check if there is 24 VAC at terminal "SC" (Safety Chain).
- Check wiring and operation of On/Off devices connected to "SC" terminals.
- Check the voltage between terminals GND and HUM. For demand configuration 20% of full-scale signal must be present for the humidifier to start.

Low conductivity water

- The cylinder includes a salt tablet that allows quick boil when run for the first time on low conductivity water. The salt tablet will be consumed and washed away after the first 20 minutes of operation.
- A minimum inlet water conductivity of 125 $\mu\text{S}/\text{cm}$ is required for continuous operation.
- Ensure the supplied water **is NOT reverse osmosis or deionized water**. Clean tap water (or potable) is acceptable.

No airflow in the ducts

- Check that the humidifier fan enable, terminals RF and GF, are properly wired to the furnace.

Liquid water is found in the duct.

Installation clearances not observed

- Outlets of the distributor tube may be too close to the duct walls. Ensure that clearances are observed. Relocating the distributor may be required.

Air supply temperature too low or humidity too high

- Indicates the design conditions have changed. Contact your Condair representative.

Steam line not installed correctly

- Ensure that the distributor is oriented correctly, and the steam lines (if used) are sloped correctly:
 - minimum 15° for steam moving upwards.
 - minimum 2° (below horizontal) for steam moving downwards.
- Ensure the steam line is insulated.
- Ensure that the steam holes on the distributor are facing up.
- Ensure that the steam distributor is installed in the supply duct.

Error and Warning Codes

Warning and error messages triggered by the control software in the humidifier are shown below.
To troubleshoot, refer to the operation manual available at www.condair.com/residential.

Error/Warning LED Interpretation

				Description
Blinking				Security loop is open (W2).
Fading				(Red/Blue) Standby mode. Activate the humidifier through your Connect-App and ensure the setpoint is between 40-60%.
Red				Unit is off (but still powered). Turn on the humidifier with the power button.
	Red		Yellow	No WiFi connection (W6).
		Yellow		Cylinder end of life approaching expiry (W5).
		Red	Red	Cylinder end of life reached (E5).
		Red	Red	Invalid cylinder installed (E6).
			Yellow	Control sensor broken (W3).
			Yellow	Limiter sensor broken (W4).
			Yellow	WiFi signal timeout reached (W6).
			Red	Over current detected (E1).
			Red	Inlet/Drain problem (E2).
			Red	No current detected (E3).
			Red	PCB error (E4).

Disclaimer

This Homeowners Manual provides basic product overview of the Condaire RH Connect Humidifier and is for general information purposes only. The general installation guidelines contained herein do not purport to cover all details of the Condaire RH Connect humidifier nor do they provide for every contingency met in connection with installation. Please consult the complete Installation Manual and Operation Manual for a more comprehensive installation guide and for general operation, maintenance, and troubleshooting information, including Condaire's suggested storage, packaging, and transportation guidelines. The Installation Manual and Operation Manual contain specific system, accessories, and components. Copies of the complete Installation Manual and Operation Manual can be found at: www.condair.com/residential. Please read all Cautions and Warnings before installing and using the Condaire RH Connect humidifier.

All electrical connections must be installed in accordance with local and national electrical code requirements by a licensed electrician.

All water supply and drain line connections must be installed in accordance with local plumbing codes by a licensed plumber.

Condaire does not accept any liability for installations of humidity equipment installed by unqualified personnel or the use of parts/components/equipment that are not authorized or approved by Condaire.

Compliance

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.

Notes

Warranty

Condair Inc. or Condair Ltd. (depending on the entity that supplied the product, and hereinafter collectively referred to as CONDAIR) warrant for a period of two years after installation or 30 months from the manufacturer's ship date, whichever date is earlier, that CONDAIR's manufactured and assembled products, not otherwise expressly warranted, are free from defects in materials and workmanship. Notwithstanding the foregoing, the products listed below have an alternate warranty period:

- GSTC Series heat exchanger(s) are warranted to be free from defects in materials and workmanship for a period of 3 years from installation or 40 months from the manufacturer's ship date, whichever is earlier.
- SAM-e Short Absorption Manifolds, except for the coupling seals, are warranted to be free from defects in materials and workmanship for a total period of 10 years from the manufacturer's ship date.
- Condair RH Connect and Condair RH Classic humidifiers are warranted to be free from defects in materials and workmanship for a period of 5 years from the manufacturer's ship date.
- Spare Parts used for repairs are warranted for the balance of the term of the warranty on the original humidifier or 90 days, whichever is longer.
- No warranty is made against corrosion, deterioration, or suitability of substituted materials used as a result of compliance with government regulations.

CONDAIR's obligations and liabilities under this warranty are limited to furnishing replacement parts to the customer, F.O.B. CONDAIR's factory. The replacement parts are warranted for the balance of the term of the warranty on the original humidifier or 90 days, whichever is longer. Procedure:

1. Customer Requests Warranty as per instructions on the CONDAIR Warranty Form.
2. CONDAIR reviews the warranty claim and will respond in one of two ways:
 - a. Warranty Accepted – Replacement Part or credit granted.
 - b. Warranty Declined – Response with justification will be provided to the customer.
3. In some cases, CONDAIR may request the part to be returned, freight prepaid by the customer, as part of the warranty acceptance or warranty determination process. Some reasons include:
 - a. Part must be analyzed to determine the root cause of failure.
 - b. Part must be returned to the supplier for claim/investigation.

When parts are requested to be returned, replacement parts will be sent by CONDAIR to the customer against an invoice from CONDAIR paid by the customer. The cost of the replacement parts will be reimbursed to the customer with a credit note after the parts are received and analyzed by CONDAIR, if the warranty is accepted.

The warranties set forth herein are in lieu of all other warranties expressed or implied by law. No liability whatsoever shall be attached to CONDAIR until said products have been paid for in full and then said liability shall be limited to the original purchase price for the product. Any further warranty, with the exception of a purchased extended warranty described below, must be in writing, and signed by an officer of CONDAIR.

CONDAIR makes no warranty and assumes no liability unless the equipment is installed in strict accordance with the installation manual in effect at the date of purchase, and by properly qualified and licensed professionals capable of installing such equipment.

CONDAIR makes no warranty and assumes no liability whatsoever for consequential damage or damage resulting directly from misapplication, incorrect sizing, or lack of proper maintenance of the equipment.

CONDAIR makes no warranty and assumes no liability whatsoever for damage to the products, humidifier, supply lines, drain lines, steam distribution systems, or the building as a whole caused by freezing.

CONDAIR reserves the right to change the design, specifications, and performance criteria of its products without notice or obligation.

Extended Warranty

Extended warranties are available to purchase under the conditions listed above. Extended warranties must be purchased at the time of the original equipment order.



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U.S.A.

1021 6th Street
Racine, WI 53403

CANADA

2740 Fenton Road
Ottawa, Ontario K1T 3T7

TEL: 1.866.667.8321
EMAIL: na.info@condair.com
WEBSITE: www.condair.com/residential

