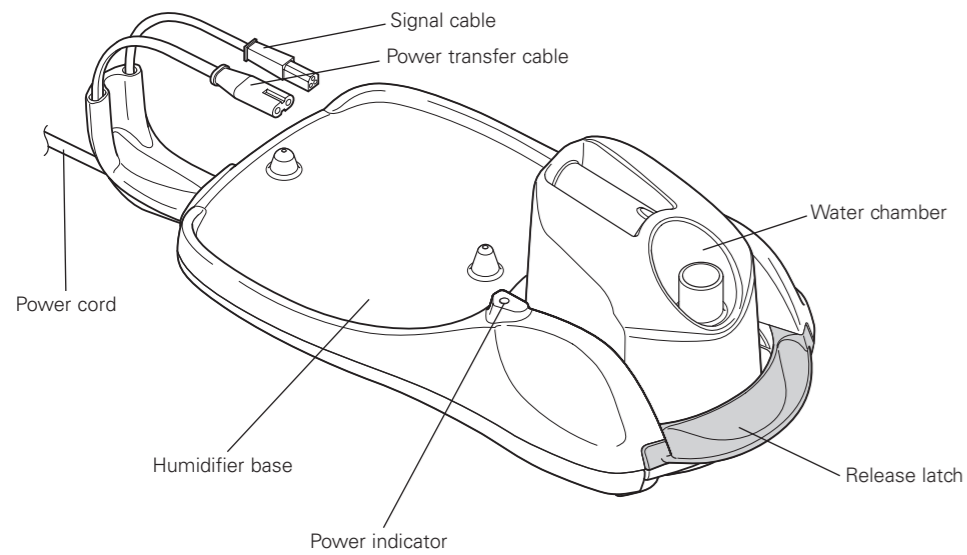


C-Series Heated Humidifier User Guide



Thank you for choosing the ResMed C-Series Heated Humidifier. The C-Series Heated Humidifier is designed to humidify (moisten) the air delivered to your airway during CPAP (continuous positive airway pressure) therapy. The C-Series Heated Humidifier attaches to your ResMed C-Series flow generator with a simple latch mechanism.

This user guide contains the information you need for the correct use of your C-Series Heated Humidifier.

CAUTION: Fill with distilled water only.

1. Intended Use

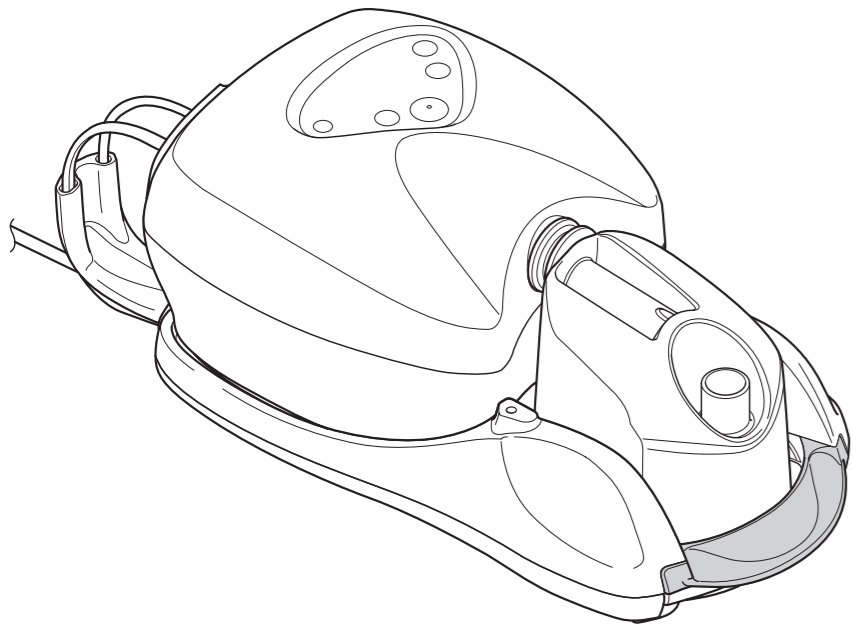
The C-Series Heated Humidifier is indicated for humidification of the air delivered from the ResMed C-Series CPAP System.

CAUTION

Federal law restricts this device to sale by or on the order of a physician.

2. Contraindication

The C-Series Heated Humidifier is contraindicated for use with patients whose upper (supraglottic) airway has been bypassed. Please also refer to your C-Series Flow Generator User Guide for contraindications associated with CPAP therapy.

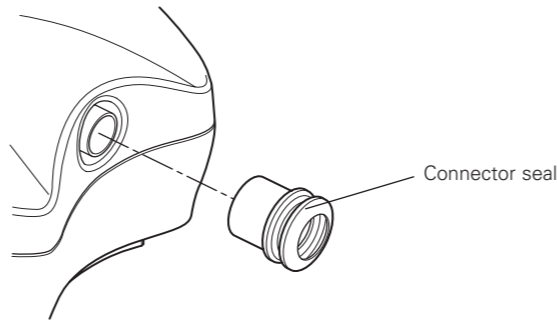


3. Connecting the C-Series Heated Humidifier

WARNING

- **Make sure the flow generator is switched off and unplugged at the power outlet before connecting or disconnecting the humidifier.**
- **Always remove the water chamber before connecting or disconnecting the humidifier and the flow generator.**

1. Disconnect the flow generator power cord from the socket at the rear of the flow generator.
2. Fit the connector seal to the air outlet on the flow generator. Ensure the connector seal is fully seated over the air outlet.



3. Place the humidifier base on a firm, level surface near your bed at a level lower than your sleeping position. Ensure the surface is not sensitive to heat and moisture, or use a protective mat.
4. Align and place the flow generator on the humidifier base.
5. Connect the (black) humidifier signal cable into the signal cable socket, and the (gray) power transfer cable into the power socket at the rear of the flow generator. Do not attempt to use the system unless both cables are connected to the flow generator.
6. Plug the humidifier power cord into a power outlet. When the combined C-Series system is powered, the green indicator lights on the flow generator and humidifier turn on.

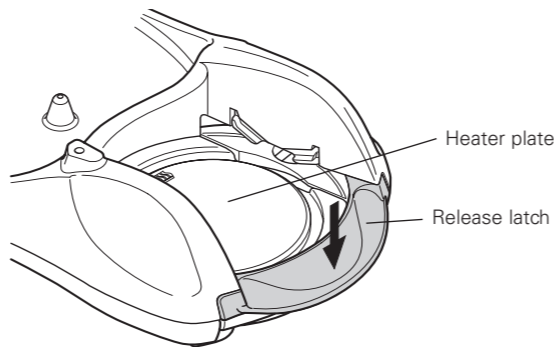
4. Attaching and Detaching the Water Chamber

WARNING

Take care when handling your humidifier. Allow ten minutes for the heater plate and any excess water to cool.

Attaching the Water Chamber

Press down the release latch on the humidifier and carefully slide the filled water chamber onto the heater plate. The release latch springs back to hold the water chamber in place.



Detaching the Water Chamber

1. Unplug the power cord from the power outlet and allow ten minutes for the heater plate and any excess water to cool.
2. Detach the air tubing from the water chamber.
3. Press down the release latch on the humidifier and carefully slide the water chamber from the humidifier base.
4. Discard any excess water.

5. Filling the Water Chamber

WARNING

- **Do not overfill the water chamber, as water may enter the flow generator and air tubing.**
- **Remove the water chamber from the humidifier before filling it with water.**

CAUTION

Do not use any additives (eg, scented oils and perfumes). They may reduce the humidification output of the humidifier and/or cause deterioration of the water chamber materials.

Carefully fill the water chamber to the maximum water level mark with distilled water only.



Fill with distilled water only. Using distilled water will prolong the life of your water chamber. Water from the faucet typically contains minerals that will damage the base of your water chamber.

6. Setting the Humidity Level

The aim of humidification is to deliver moist air to your mask, but to avoid having condensation form in the air tubing. The temperature and humidity of the surrounding air will affect the setting you need.

You can adjust the humidity setting at any time before or during therapy, to find the most comfortable and effective setting.

To set the humidity level press or on the flow generator; notice that the screen displays “H” and the selected humidity level (eg, H. 3).

The OFF setting switches heated humidification off and delivers minimum humidification. A setting of 6 delivers maximum humidification.

The humidification setting remains displayed on the screen for five seconds.

7. Starting Therapy

1. Connect one end of the air tubing firmly onto the air outlet of the water chamber and the other end to your mask.
2. Fit your mask as described in your mask user instructions.
3. If necessary, set the humidity level as described in the section “Setting the Humidity Level!”
4. Press on the flow generator to start therapy. Therapy starts straight away. The heating indicator on the flow generator lights when the humidifier is on.
5. Lie down and arrange the air tubing so that it is free to move if you turn in your sleep.

WARNING

Do not leave a long length of air tubing around the top of your bed. It could twist around your head or neck while you are sleeping.

8. Stopping Therapy

To stop your therapy at any time, remove your mask and press on the flow generator.

9. Cleaning and Maintenance

WARNING

- **Beware of electrocution. Do not immerse the flow generator, humidifier or power cord in water. Always unplug the device before cleaning and be sure that it is dry before plugging it back in.**

CAUTION

- **Do not use any of the following to clean any part of the humidifier. These solutions may cause damage and reduce the life of the product:**
 - **bleach, chlorine, alcohol- or ammonia-based solutions**
 - **moisturizing, antibacterial or glycerine-based soaps**
 - **water softening and unapproved descaling agents.**
- **Do not wash the water chamber in a dishwasher.**

Daily

Wash the water chamber and connector seal in warm water, using a mild detergent (see previous caution). Rinse them thoroughly with clean water and allow them to dry away from direct sunlight.

Weekly

Inspect the water chamber for wear and deterioration. Replace the water chamber if any component has cracked, become cloudy or pitted. Replace immediately if there is any leakage from the water chamber.

If you notice white powder or deposits in the water chamber:

1. Fill the water chamber to the maximum water level mark with a solution of one part vinegar to ten parts water.
2. Let the solution soak for ten minutes.
3. Discard the solution and rinse the water chamber thoroughly with clean water.

Periodically

Wipe the humidifier base with a clean cloth.

10. Troubleshooting

| Problem | Possible Cause | Solution |
|--|---|---|
| Device not working (no display on LCD screen and/or indicator light not lighting up) | Power cord is not plugged in properly. Faulty power outlet. | Check that the power cord is plugged firmly into the power outlet and the switch (if available) is on at the outlet. Try another power outlet. |
| Leaking water chamber | The water chamber may be damaged or cracked. | Contact your supplier for a replacement. |
| No/low air flow | The air tubing is not connected properly. The air tubing is blocked, pinched or punctured. The water chamber is overfilled. | Adjust the air tubing connection. Unblock or free the air tubing. Check the air tubing for punctures. Make sure that the water level is not above the maximum water level mark. |
| Water splashing on your face | Condensation is forming in the air tube. Flow generator operation. | Press to decrease the humidity setting. See the Troubleshooting section in the flow generator guide. |
| Air does not feel moist | Condensation is forming in the air tube and mask. The humidity setting is set too low. Humidifier heating element is not working. | Press to decrease the humidity setting. Press to increase the humidity setting. Contact your equipment supplier. |
| Air too moist | The humidity setting is set too high. High relative humidity in your room. | Press to decrease the humidity setting. Adjust your humidity setting. |
| White powder or deposits in the water chamber | The water leaves scaly mineral deposits. | Refer to the weekly cleaning instructions. Use distilled water. |

11. Symbols Which Appear on the C-Series Heated Humidifier

| | | | |
|--|---|--|--------------------------------|
| | Attention. Consult accompanying documents | | Do not touch |
| | Type CF equipment | | Maximum water level |
| | Class II equipment | | Drip proof |
| | Hot surface | | Canadian Standards Association |

12. General Warnings and Cautions

A **warning** alerts you to possible injury.

- The humidifier, including the associated tubing, is for single-patient use and must not be re-used on another person. This is to avoid the risk of cross-infection.
- Always place the humidifier device lower than the level of the patient. If it is placed at or above the level of the patient, heated water may flow down the air tubing and into the mask.
- There exists the possibility that if the device is placed above the level of the patient and is tipped over, or if the tubing is filled with condensate, the mask might fill with water. The device should be placed below the level of the patient so that in the event of the device being tipped over, the tubing and mask do not fill with water.
- The humidifier should only be used with delivery tubes or accessories recommended by ResMed. Connection of other delivery tubes or accessories could result in injury, or damage to the device.
- If liquids are inadvertently spilled into or on the humidifier, unplug the device from the power outlet. Disconnect the humidifier from the flow generator and allow it to drain and dry before using.
- Do not operate the humidifier if the device has a damaged power cord.
- Do not operate the humidifier if it is not working properly or if any part of it has been dropped or damaged.
- Keep the power cord away from heated surfaces.
- No perceptible heating effect may be felt at low heat settings, depending on the ambient temperature.
- Do not attempt to dismantle the humidifier. There are no user-serviceable parts inside. Repairs and internal servicing should only be performed by an authorized service agent.
- Do not drop or insert any object into any opening or tubes.

A **caution** explains special measures for safe and effective use of the device.

- Only use distilled water with the C-Series Heated Humidifier.
- Use the humidifier only for its intended use as described in this guide.
- Make sure that the water chamber is empty before transporting the humidifier.
- The water chamber should not be attached when transporting the humidifier in the carry bag. Place the water chamber in a separate compartment in the carry bag.
- The C-Series Heated Humidifier is designed only for use with the ResMed C-Series System. Do not use the humidifier with any other CPAP device.
- If you put the device on the floor, make sure the area is free from dust and clear of bedding, clothes or other objects that could block the air inlet.
- Be careful not to place the device where it can be bumped and knocked over.
- Blocking the air inlet or tubing while the device is operating could cause it to overheat.

13. Accessories

| Part Number | Item |
|-------------|------------------------|
| 34901 | C-Series Water Chamber |

14. Servicing

This product (C-Series Heated Humidifier) should be inspected by an authorized ResMed Service Center 5 years from the date of manufacture. Prior to this, the device is intended to provide safe and reliable operation provided that it is operated and maintained in accordance with the instructions provided by ResMed. Applicable ResMed warranty details are provided with the device at the time of original supply. Of course, as with all electrical devices, if any irregularity becomes apparent, you should exercise caution and have the device inspected by an authorized ResMed Service Center.

15. Technical Specifications

| | |
|---|---|
| Maximum heater plate temperature | 185°F (85°C) |
| Temperature cut-out | 199°F (93°C) |
| Maximum output humidity | 95% relative humidity (control dial set to maximum setting, flow rate 50 L/min, ambient temperature of 68°F (20°C), ambient relative humidity of 40%) |
| Maximum gas temperature | 106°F (41°C) at 95°F (35°C) ambient temperature. |
| Dimensions (H x W x D) | 3.4" x 7.5" x 16" (87 mm x 189 mm x 409 mm) |
| Water chamber capacity to maximum fill line | 375 mL |
| Weight (Humidifier and unfilled water chamber) | 2 lb (920 g) |
| Power supply. Input range for Tango™ flow generator with humidifier | 110 V, 60 Hz; <90 VA (80 W) (maximum power consumption) * |
| Instantaneous peak power consumption | <340 VA |
| Maximum heater element power | 120 VA (100 W) |
| Operating temperature | +41°F to +104°F (+5°C to +40°C) |
| Operating humidity | 10–95% non-condensing |
| Storage and transport temperature | -4°F to +140°F (-20°C to +60°C) |
| Storage and transport humidity | 10–95% non-condensing |
| Atmospheric pressure range | 1060 hPa (sea level) to 680 hPa (8500 ft) |
| IEC 60601-1 Classification | Class II (double insulation), Type CF |
| Electromagnetic Compatibility | Refer to your flow generator user guide for details |

* Actual average power consumption will vary, depending on factors such as temperature setting, set pressure, the use of accessories, height above sea level and ambient temperature.

The manufacturer reserves the right to change these specifications without notice.

16. Limited Warranty

ResMed warrants that your ResMed product shall be free from defects in material and workmanship for the period specified below from the date of purchase by the initial consumer. This warranty is not transferable.

| Product | Warranty Period |
|---|-----------------|
| ResMed humidifiers, ResControl™, ResLink™, ResTraxx™ | 1 Year |
| ResMed flow generators | 2 Years |
| Accessories, water chamber, mask systems (including mask frame, cushion, headgear and tubing). Excludes single-use devices. | 90 Days |

Note: Some models are not available in all regions.

If the product fails under conditions of normal use, ResMed will repair or replace, at its option, the defective product or any of its components. This Limited Warranty does not cover:

- a) any damage caused as a result of improper use, abuse, modification or alteration of the product;
 - b) repairs carried out by any service organization that has not been expressly authorized by ResMed to perform such repairs;
 - c) any damage or contamination due to cigarette, pipe, cigar or other smoke;
 - d) any damage caused by water being spilled on or into a flow generator.
- Warranty is void on product sold, or resold, outside the region of original purchase. Warranty claims on defective product must be made by the initial consumer at the point of purchase. This warranty is in lieu of all other express or implied warranties, including any implied warranty of merchantability or fitness for a particular purpose. Some regions or states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you. ResMed shall not be responsible for any incidental or consequential damages claimed to have occurred as a result of the sale, installation or use of any ResMed product. Some regions or states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from region to region. For further information on your warranty rights, contact your local ResMed dealer or ResMed office.

