

HAMILTON-H900 Quick Guide Overview

Temperature monitoring window button

- 1 Press to show temperature
 - At Y-piece
 - At chamber exit
 - Difference between the two above
- 2 Press for 5 s to enable Night display

Auto mode button

- Press for default settings*
 - Invasive mode: 37°C
 - Noninvasive mode: 31°C
 - HiFlow: 35°C
 - Temperature gradient: + 2°C (+ 3°C for infant breathing set)

Power/Standby key

- 1 ON: Long-press > 3 s
 - Device starts in Invasive mode
 - Briefly press to (de)activate Standby
- 2 OFF: Long-press > 3 s



Limb connection status indicators

- Green:** The limb is connected correctly.
- Orange:** The humidifier is testing the limb connection.
- Red:** Any of the following: There is a problem with the limb connection, the limb is *not* connected, or the limb is connected to the incorrect port on the ventilator.

Exp. temp increase button**

- ON by default
- Increases the temperature in the WHITE expiratory limb to reduce condensation
- Press to stop extra heating

INV/NIV/HiFlow mode button

- Press to switch between Invasive, Noninvasive, and HiFlow modes

Audio pause key

- Press (if appropriate for alarm)
 - Audible alarm paused for 2 min

* Factory default settings listed

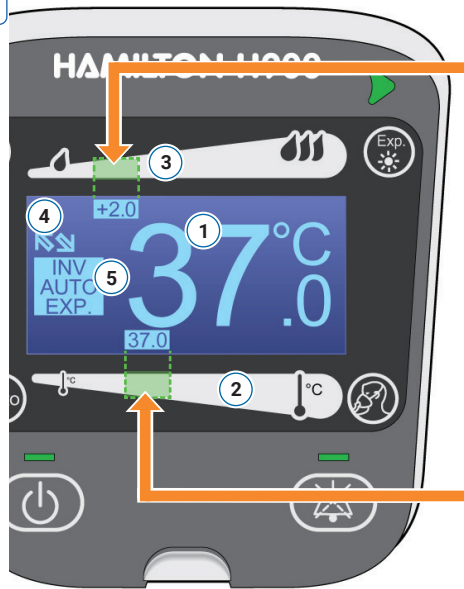
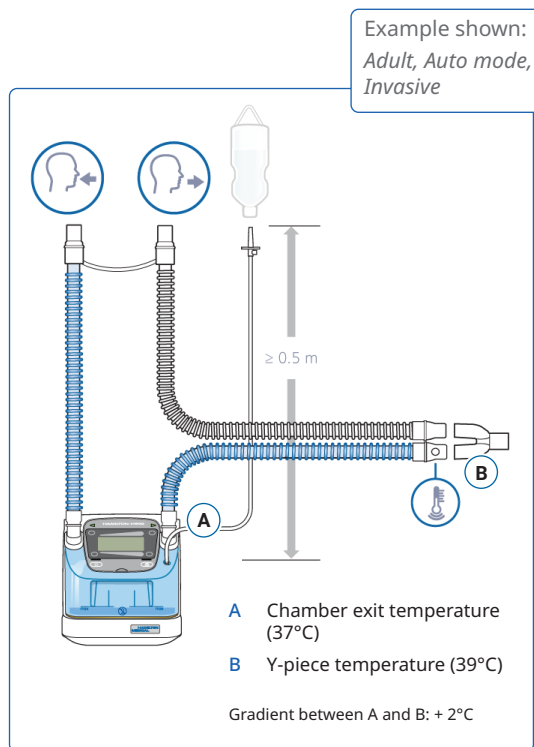
** Dual limb, single use breathing circuits only

Applies to software version 1.10x and later

See the HAMILTON-H900 Instructions for use for detailed information.

HAMILTON
MEDICAL

Display and circuit overview



Humidifier display

- 1 Current chamber exit temperature
- 2 Chamber exit temperature slider
- 3 Temperature gradient slider
- 4 Ventilator connection enabled
- 5 Mode symbols

Adjust temperature gradient

Temperature difference between humidification chamber and Y-piece

- ▶ Touch the temperature gradient slider at the current setting.*
Auto mode is deactivated.
- ▶ Drag right to decrease the temperature gradient.
- ▶ Drag left to increase the temperature gradient.
- ▶ Release to apply setting.

Adjust chamber exit temperature

Humidification chamber exit temperature

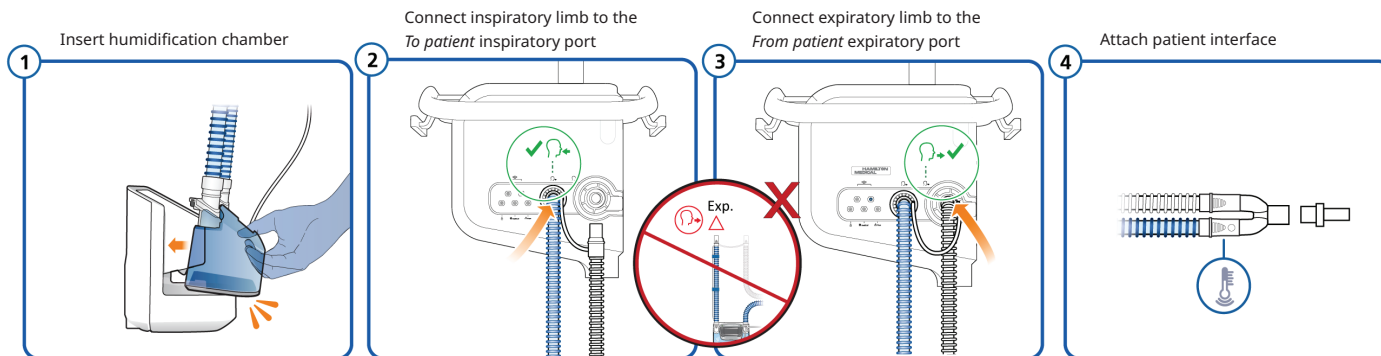
- ▶ Touch the chamber exit temperature slider at the current setting.*
Auto mode is deactivated.
- ▶ Drag left to decrease the chamber exit temperature.
- ▶ Drag right to increase the chamber exit temperature.
- ▶ Release to apply setting.

See the HAMILTON-H900 Instructions for use for detailed information.

* For illustration purposes, shown as the green zone above/below the associated setting.

System setup

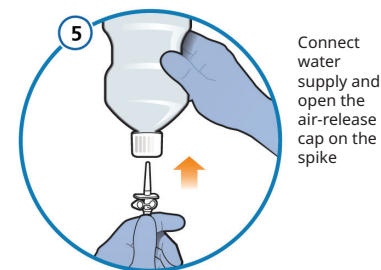
HAMILTON-C6 ventilator shown



Optimize settings

Depending on your settings and ambient conditions, condensation can occur. Follow these steps to reduce condensation.

- 1 Start with lower humidity settings.
 - ▶ Remove any water from the circuit.
 - ▶ Use the lowest Chamber exit temperature setting (slider all the way left).
 - ▶ Set Temperature gradient to 1°C.
 - ▶ Check that no condensation is present after 2 hours.
- 2 Find the optimum settings.
 - ▶ Humidity is optimal when fine, breath-dependent fogging forms in limbs, tubing, or flow sensor.
 - ▶ If humidity is not optimal, increase chamber temp. by 0.5 °C, recheck in 1 hour.
- 3 Save optimum settings.
 - ▶ Save these settings as new defaults. See the *Instructions for use* for details.



Connect water supply and open the air-release cap on the spike

NOTE

Position of humidifier

- ▶ Avoid direct sunlight or flow of air conditioning (AC) onto the humidifier and the breathing circuit to avoid unnecessary condensation.

Alarms and troubleshooting

See the HAMILTON-H900 Instructions for use for detailed information.

High-priority alarms

Indicated by audible, repeating alarm sound and flashing visual red alarm indicator



Temperature high

- ▶ Check whether breathing circuit is covered by patient's bed covers
- ▶ Check whether breathing circuit or humidification chamber is directly exposed to sunlight
- ▶ Replace breathing circuit set



Water level high

- ▶ Empty humidification chamber to reduce the water level
- ▶ Replace humidification chamber
- ▶ Operate humidifier at an angle $< 10^\circ$ relative to the floor



Humidifier tilt

- ▶ Check the mounting of the humidifier
- ▶ Check the ventilator trolley
- ▶ Operate humidifier at an angle $< 10^\circ$ relative to the floor

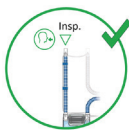
Medium-priority alarms

Indicated by audible, repeating alarm sound and flashing visual yellow alarm indicator



Check left or right limb

- ▶ Verify breathing limbs are properly inserted and seated
- ▶ Verify BLUE humidifier inspiratory limb is connected to ventilator To patient inspiratory port
- ▶ If limbs are incorrectly connected, disconnect patient and provide alternative ventilation! Then replace breathing circuit set including humidification chamber, and fill with fresh water. Reconnect patient.



Check water chamber

- ▶ Insert a new humidification chamber and connect breathing circuit



Temperature low

- ▶ Wait until system heats up completely (approx. 30 min)
- ▶ Verify that all settings are correct
- ▶ Avoid direct air flow from air conditioner and the like to the humidifier and breathing circuit



Water level low

- ▶ Check water bottle and refill tubing
- ▶ If water bottle is empty, connect a new one
- ▶ Refill or exchange empty humidification chamber
- ▶ Operate humidifier at an angle $< 10^\circ$ relative to the floor