

Basic Operation, Daily Maintenance and Disinfection Guidelines

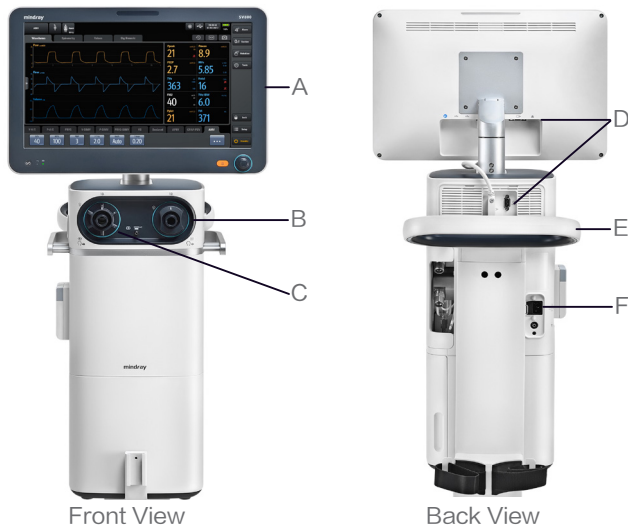
The guidelines apply to SV600/SV650/SV800/SV850 ventilator.

This product is intended to be used in intensive care situations within a professional healthcare facility, or during transport within a professional healthcare facility. This product is intended to provide ventilation assistance and breathing support for adult, pediatric and neonate patients. This product shall be operated by authorized medical personnel well trained in the use of this product. This product is not suitable for use in an MRI environment.

There are no absolute contraindications for this product. For some special diseases, however, some necessary treatments shall be taken for ventilator mechanical ventilation, or special ventilation modes shall be adopted to prevent possible patient injury.

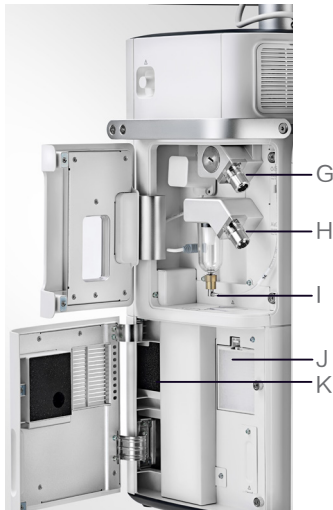
This guideline briefs the ventilator, its basic operation, daily maintenance, cleaning and disinfection. For more information, please refer to the Operator's Manual.

Introduction to Ventilator:



- A. Display
- B. Inspiration valve
- C. Expiration valve
- D. Connectors (USB connector, VGA connector, Internet connector and RS-232 connector etc.)
- E. Trolley handrail
- F. AC power input connector

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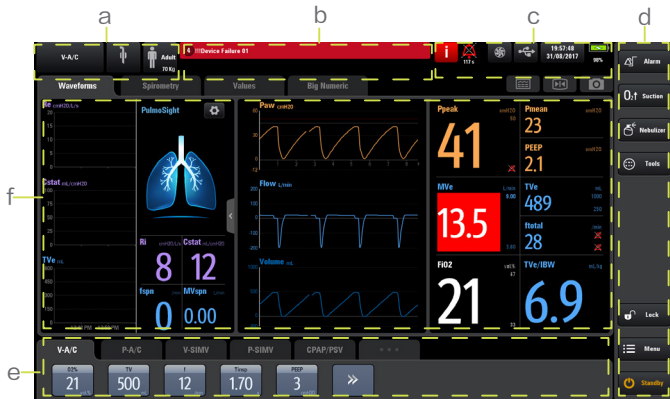
Right View

- G. O₂ supply inlet
- I. Water traps and drainage valve pole
- K. Fan dust filter



Left View

- H. Air supply inlet
- J. Air intake dust filter
- L. Ventilator outlet
- N. Module slot



Main Screen

- a. Mode and Patient size area
- b. Information display area
- c. Icon area
- d. Functional key area
- e. Vent mode and Parameter Setting area
- f. Waveforms/Parameter/Spirometry/Dynamic Lung/Trend Display Area

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Basic Operation:

1. Connect the ventilator and humidifier to the AC power supply. Connect the gas supply.
2. Start the humidifier and set the relevant parameters by following the humidifier instructions for use (check if the water level of the humidifier complies with the requirement before starting the humidifier).
3. When the ventilator is turned on, it runs self-test automatically.
4. Connect the breathing tubes, and select to run (recommended) or skip the system check.
5. Once system check is finished, the ventilator starts to work in the set mode. For new patients, you need to set the IBW, Patient Type (adult, pediatric or neonate), Gender, and Vent Type (invasive or non-invasive).
6. Connect the test lung, and check the status of the test lung. If the test lung is in good condition, you can disconnect the test lung and connect the ventilator to the patient (recommended).
7. Connect the patient and breathing tubes, and start ventilation. Keep the patient under close monitoring for a period and pay attention to the vital signs of the patient and ventilation status of the ventilator.
8. Keep observing the parameters and alarms during ventilation. Reconfigure the ventilation mode or parameters if necessary.
9. After use, turn off the ventilator and humidifier in sequence.

Routine Maintenance:

- Before each use or after continuous use of two weeks, perform system check. Check the breathing system resistance and leakage.
- Perform the following maintenance several times a day or as necessary: check the breathing tubes and water traps for water build-up. Empty water build-up if there is. Inspect the parts for damage. Replace as necessary.
- Perform the following maintenance each patient or as necessary: Perform pressure and flow zeroing, system check and flow sensor calibration. Replace with disinfected parts or new disposable parts.
- Perform the following maintenance daily or as necessary (recommended): Clean the external surfaces and calibrate the O₂ sensor. Replace the O₂ sensor if it is damaged. When the patient's exhaled gas may contaminate the inspiratory safety valve assembly, it is necessary to replace with disinfected inspiratory safety valve and membrane. Replace the expiration valve if it is damaged. Calibrate the CO₂ module when the CO₂ measured value has a great deviation. Calibrate the touch screen if its function is degraded. Check water traps at air supply inlet. Empty water build-up if there is. Please contact your service personnel if any cracks and leakage are found on the water traps.
- Perform the following maintenance monthly or as necessary: Check the air intake dust filter, fan dust filter and main unit air outlet dust filter for dust build-up. Clean or replace as necessary.
- When cleaning or installation, check the parts for damage and replace as necessary.
- Check lithium battery charging and discharging every 6 months and replace every three years. Please contact your service personnel for replacement.

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- Annually or as necessary, check the inspiration safety valve membrane. Contact your service personnel for replacement if necessary.
- Each year, per 5000 hours or as necessary, replace air intake HEPA filter. Check the expiration valve membrane and contact us for replacement if necessary. If the O₂ Cell damages, please replace one. Please contact us for preventive maintenance.
- Replace clock module battery every six years or as necessary. Contact us for replacement if necessary.
- Please contact us if the preventive and maintenance buttons  are shown on the system check interface or circuit test interface.

Cleaning and Disinfection:

- Perform the following cleaning and disinfection for each patient: Wipe ventilator external surface (including housing, power cord, supply gas hose), trolley, support arm, and touch screen for cleaning. Wipe or place them under ultraviolet radiation for disinfection.
- Perform the following cleaning and disinfection for each patient or every week: Immerse expiration valve assembly (except membrane), expiration valve membrane and patient tube (including water trap, Y piece, adapter) in detergent for cleaning. Immerse or autoclave them for disinfection. For cleaning and disinfection of mainstream CO₂ sensor, SpO₂ sensor, SpO₂ sensor cable, nebulizer and humidifier, refer to the instructions provided by the vendors.
- Perform the following cleaning and disinfection as necessary: Immerse inspiration safety valve assembly in detergent for cleaning. Immerse or autoclave it for disinfection.
- Perform the following cleaning and disinfection every 4 weeks or as necessary: Immerse the fan dust filter, main unit air outlet dust filter, and air intake dust filter in detergent for cleaning and disinfection.

The table below lists the cleaning and disinfecting agents and autoclaving process that may be used on the ventilator.

Name	Type
Ethanol (75%)	Moderately efficient disinfectant
Isopropanol (70%)	Moderately efficient disinfectant
Glutaraldehyde (2%)	High-efficient disinfectant
Ortho-phthalaldehyde (e.g. Cidex®OPA)	High-efficient disinfectant
Soap water (pH value of 7.0~10.5)	Rinsing agent
Clean water	Rinsing agent
Steam autoclave (134°C recommended)	Highly efficient disinfection

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