aeonmed
Reliable Quality Thoughtful Service

VG70 Product Training

International Service Department

Beijing Aeonmed Co., Ltd.

Contents

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Reliable Quality Thoughtful Service

Product Description

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Reliable Quality Thoughtful Service

1、The first turbine ventilator in China.

2、With Invasive and Non-Invasive ventilation function.

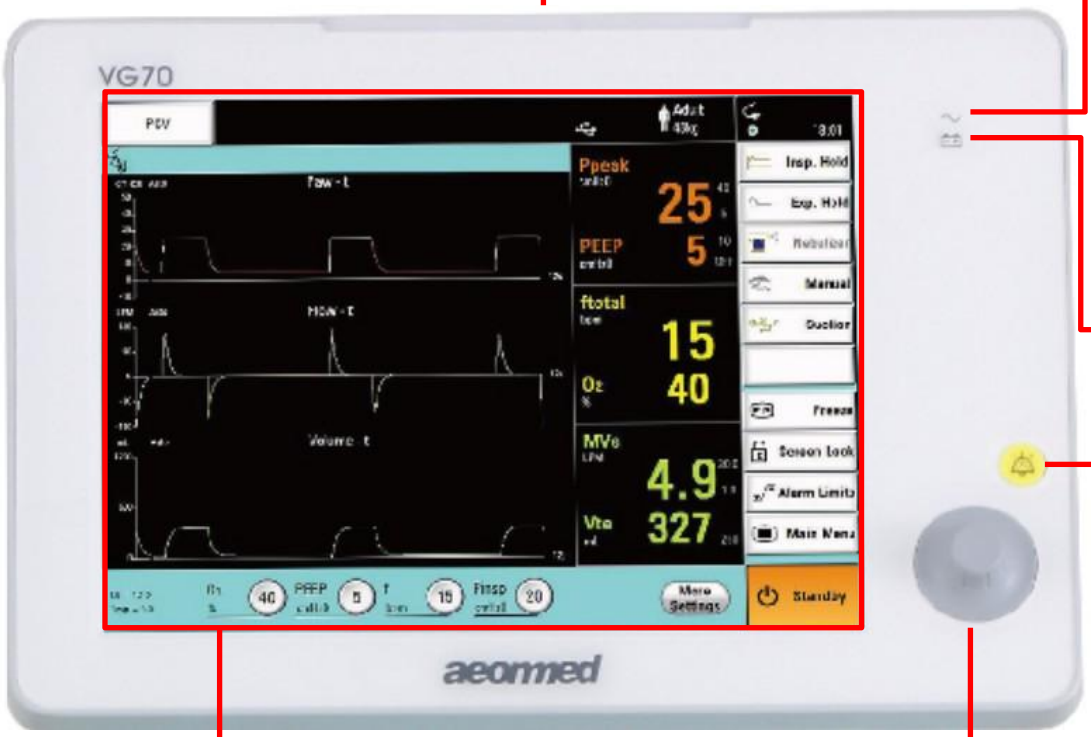
3、Can be used on Infant ,Children and Adults

4、Approved by CFDA & CE

5、Wide application in General ICU，RICU，EICU, and for intra-hospital transport

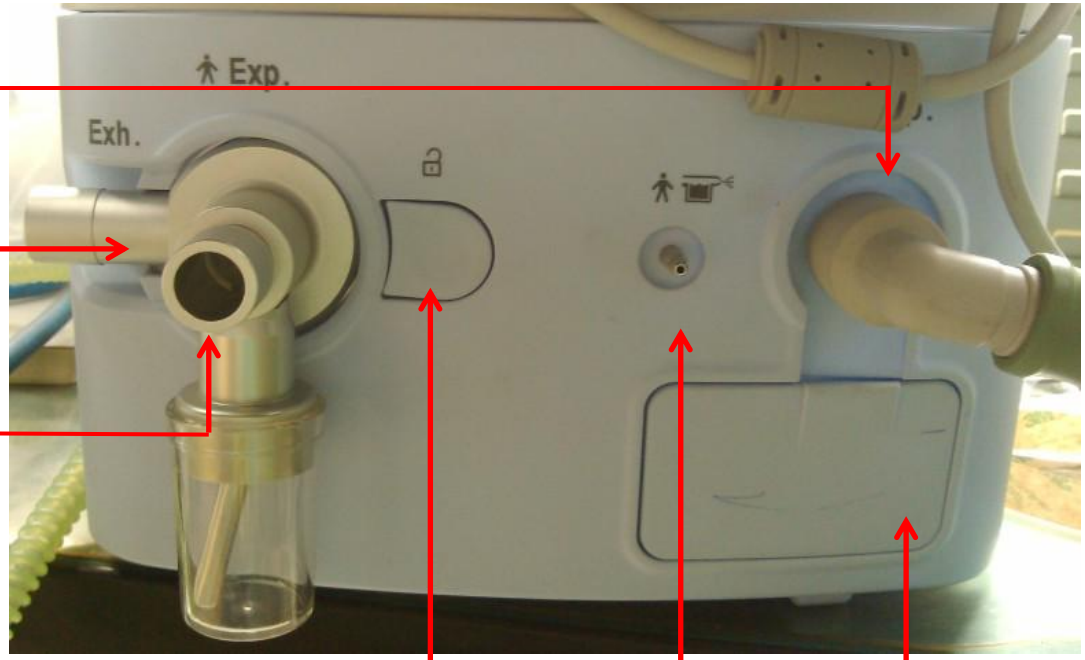
Product Configuration & Main Functions

1、Screen



Product Configuration & Main Functions

2、Main Unit



Product Configuration & Main Functions

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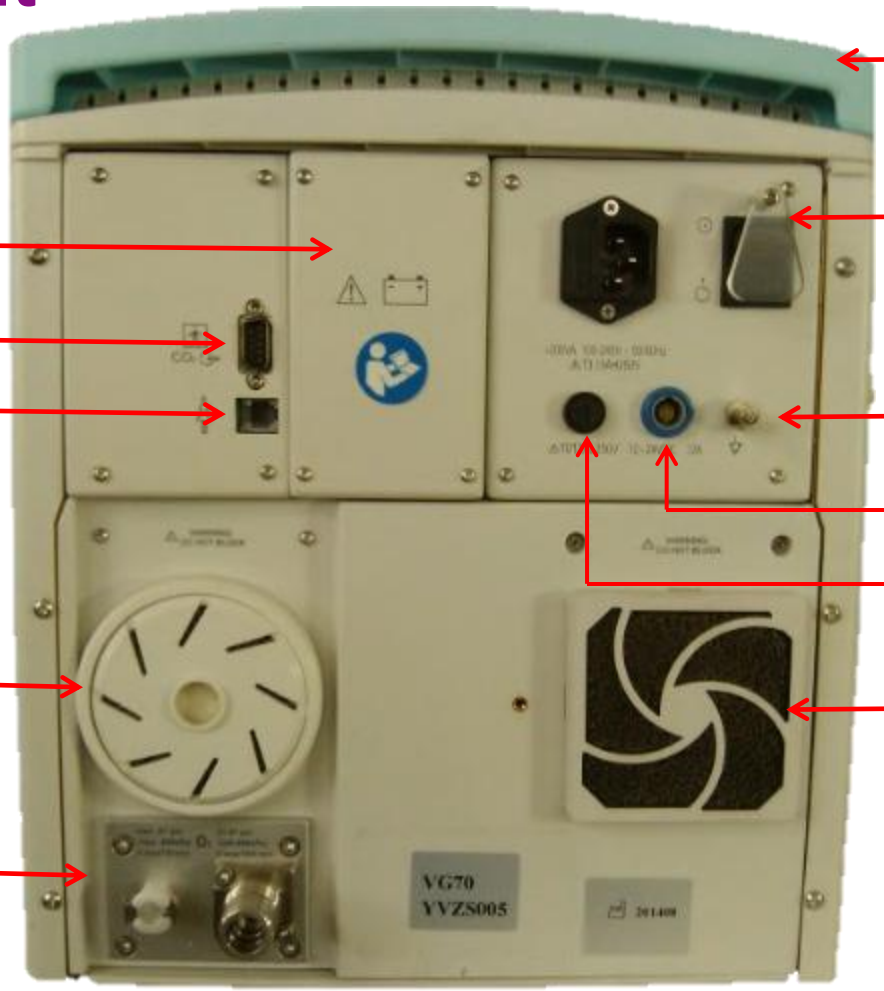


Handle

Power Switch

Internal Battery

CO2 Sensor Connection Port

Nurse Call

Equal potential Terminal

DC Input

DC Fuse

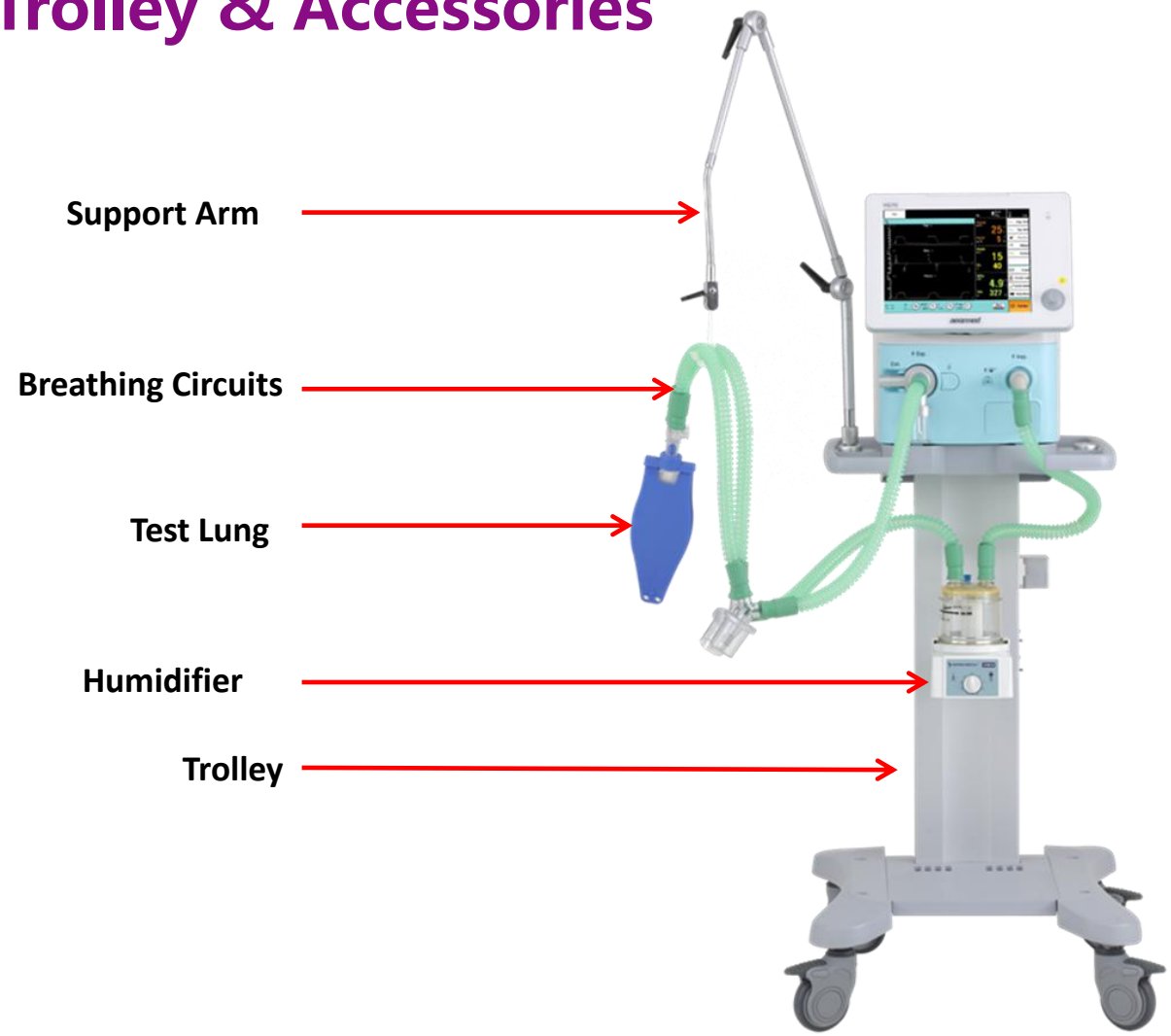
Air Filter

Fan

Oxygen Input Port

Product Configuration & Main Functions

3、Trolley & Accessories



4、Main Function –Ventilation Modes (1)

Invasive Ventilation Modes:

VCV, PCV, SIMV (V, P, PRVC), PRVC, SPONT/CPAP, BIVENT

Non - Invasive Ventilation Modes:

NIV/CPAP, NIV-T, NIV-S/T

4、 Main Function –Ventilation Modes (2)

Ventilation Strategy：

IV  **NIV**

Weaning Parameter： RSBI（Rapid-Shallow Breathing Index）

WOB（Work of breathing during lung）

4、 Main Function –Alarm（1）

5.1 Sound/Light/Color , 3 kind of Indicators

5.2 High level /Mid-Level And low level

5.3 After disappearing the Alarm can be reviewed

Question：

What will happen if many alarms Occur ?

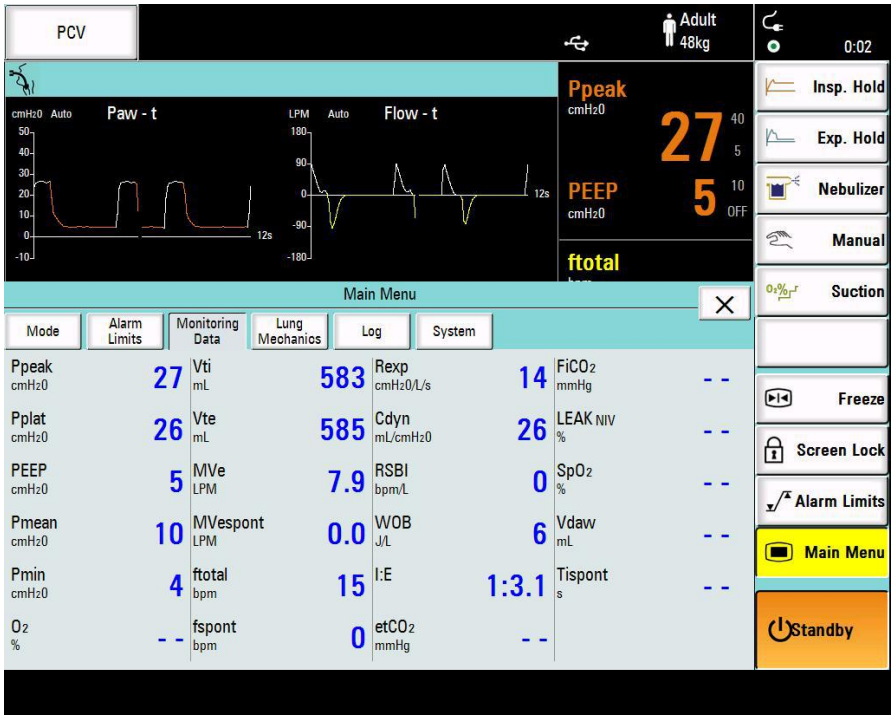
As priority level

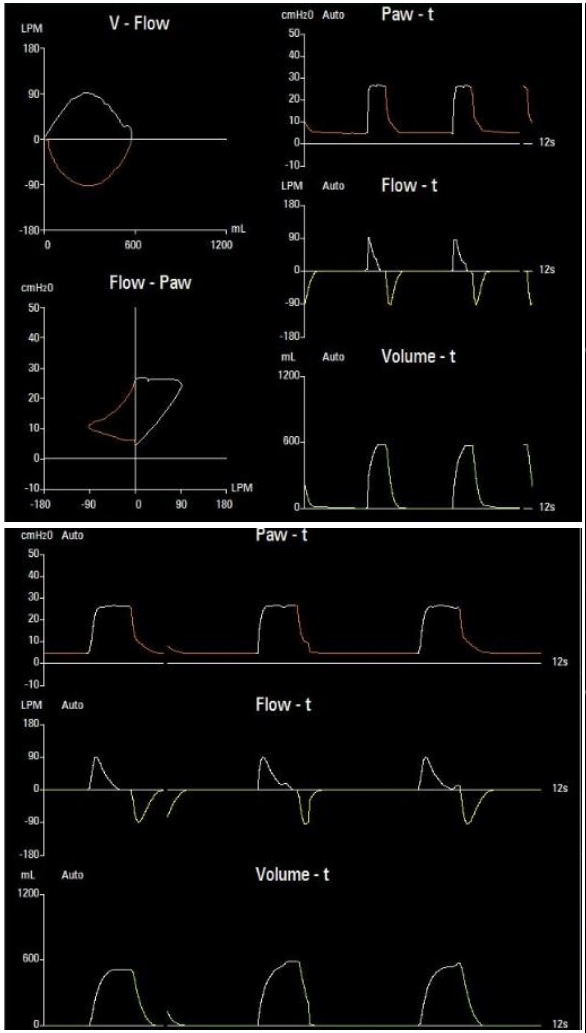
4、Main Function –Alarm (2)

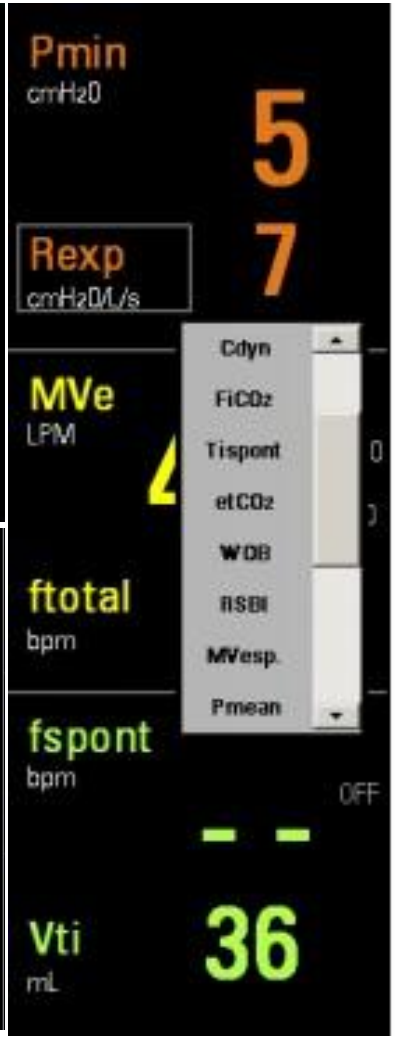
Product configuration and main function

4、Main Function –Monitoring

Many ways to monitor

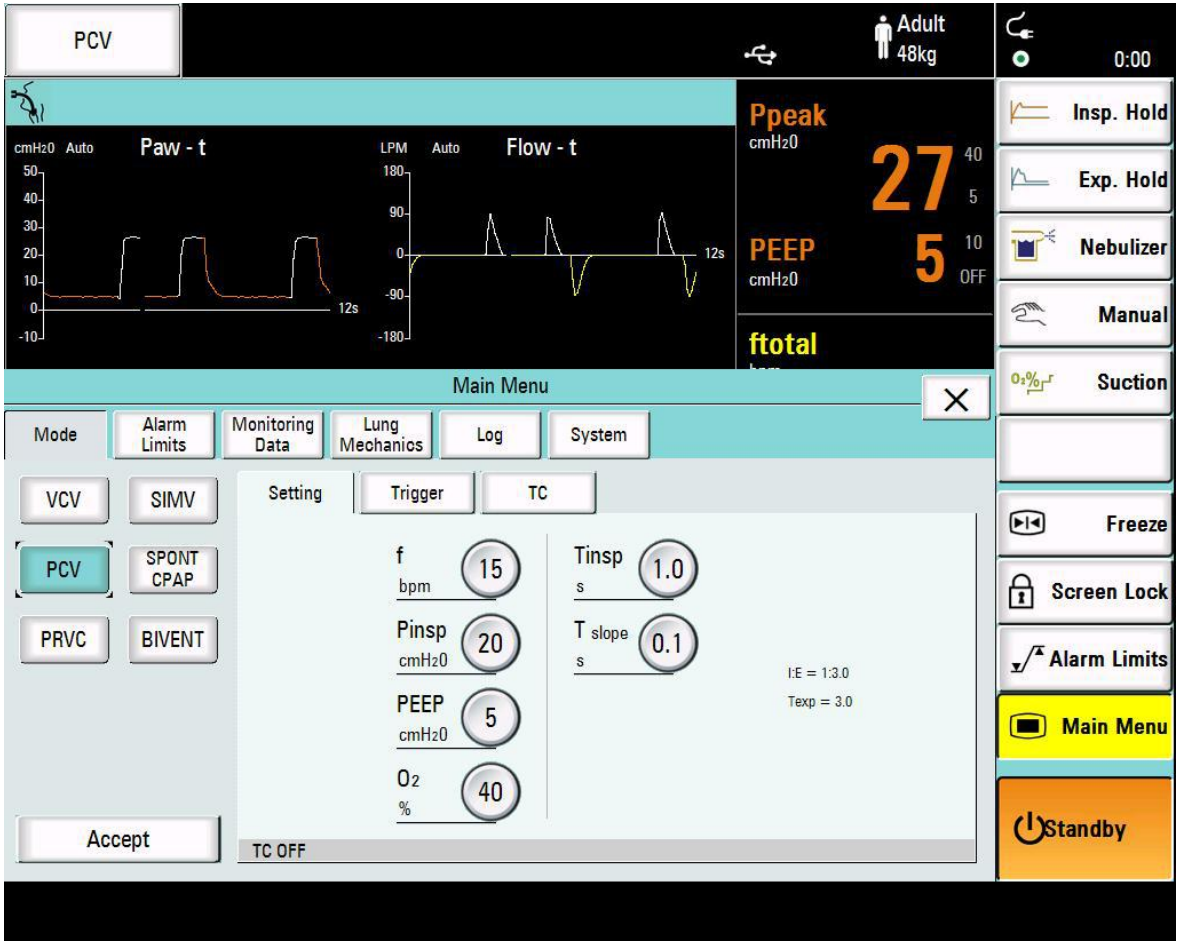






4、Main Function –Parameter Setting（1）

How to set ?



4、Main Function –Auxiliary Function（1）

Inspiratory Hold

Inspiratory hold is available within the period of mandatory ventilation and in all modes except full spontaneous breath modes as SPONT/PSV, NIV/CPAP.

Press the Inspiratory Hold key during the Inspiratory phase. The operation becomes active when a message stating “Inspiratory Hold” appears with a countdown timer. Keep pressing the Inspiratory Hold key. The expiratory phase will not start until the key is released or after 30 seconds, whichever comes first. If the button is not released after 30 seconds, the system will go to Expiratory state automatically and display a message “Inspiratory hold interrupted!”, as shown in Figure 6-69.

4、Main Function –Auxiliary Function（2）

Expiratory Hold

Expiratory hold is available in all modes. In Expiratory phase, press the Expiratory hold button and the expiratory operation will become active when a message "Expiratory Hold" appears with a countdown timer. The ventilator will stay in the expiratory phase and not transition to the inspiratory phase until either 1) the key is released or 2) 30 seconds have elapsed.

When selected during the expiratory phase, the ventilator will stay in the expiratory phase and not transfer to the inspiratory phase until either 1) the key is released and the current expiratory phase is completed or 2) 30 seconds have elapsed.

Pressing the Expiratory Hold key for more than 30 seconds will cause a message to be displayed. See example in Figure 6-70. Only one expiratory hold will be produced per key press. When Inspiratory hold key is released or if the key is not released after 30 seconds, the key background will revert to normal.

Expiratory Hold Interrupted !

4、Main Function –Auxiliary Function（3）

Nebulizer

The nebulizer function is available in all ventilation modes. Press the Nebulizer key turning the key background color to yellow. Meanwhile, a low level alarm “Nebulizer On” is displayed and the message “Nebulizer On, MM min SS s” with countdown timer is displayed in the message area, as shown in Figure 6-71.

4、Main Function –Auxiliary Function（4）

Manual Trigger

Manual Trigger is available in all ventilation modes. Press the manual trigger key to initiate a manual breath control as follows, as shown in Figure 6-72.

For VCV, PRVC, SIMV (VCV): set Vt and Tinsp, to control ventilation.

For BIVENT: set P_{high} and P_{low}, to control ventilation switchover.

For PCV, SIMV (PCV): Set P_{insp}, to control ventilation.

For modes or breath phase with PSV, set P_{supp}, to control ventilation.

Manual trigger is also available during backup ventilation period. When initiated during backup mode, the ventilator will remain in backup mode.

4、Main Function –Auxiliary Function（5）

Suction

Suction support is available in ventilation modes. Pressing Suction button will turn the button color to yellow signifying the start of Suction support as shown in Figure 6-73.

If the system detects that the circuit is disconnected, ventilation will be interrupted. During sputum aspiration, all physiological alarms will be off and audio alarms will be suspended.

The Ventilator will provide a low flow rate when the circuit is disconnected in order to detect reconnection of circuit. When pressing the suction support key, a message will be displayed in the message prompt area, as shown in Figure 6-74.

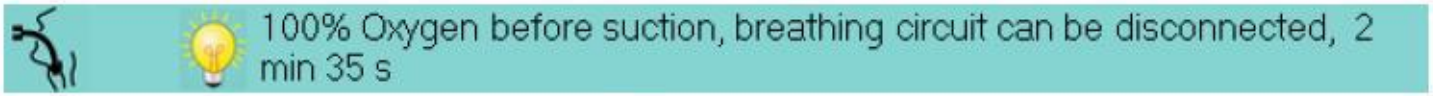


Figure 6-74

4、Main Function –Auxiliary Function（6）

Freeze

Press "Freeze" key and the current real-time waveforms and loops freeze simultaneously in the main screen when waveform drawing is completed. See example in Figure 6-76. Turing the encoder knob moves the cursor over each point of the waveform and the corresponding measured value is displayed. Pressing Freeze again will restart the waveform and any information displayed during waveform freeze will disappear, and the Freeze key color returns to normal. Waveform Freeze will automatically end 3 minutes after touching the freeze key.

4、Main Function –Other Functions

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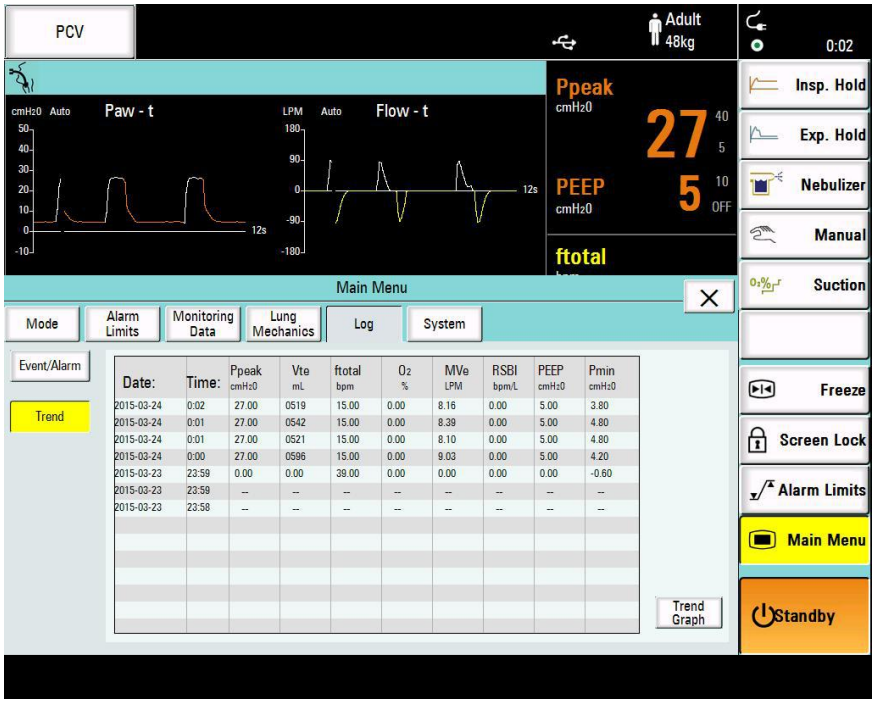
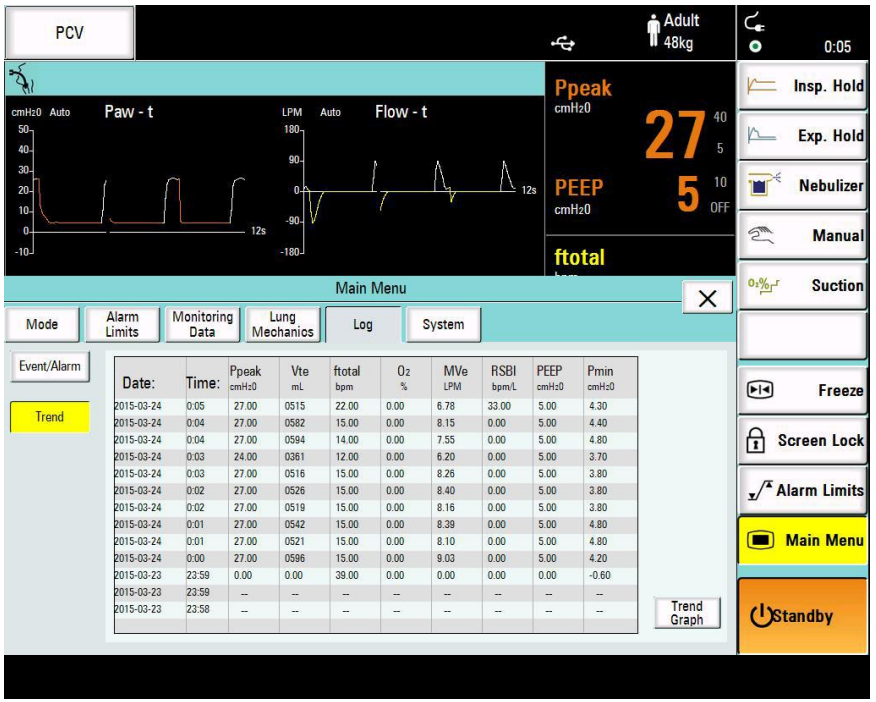
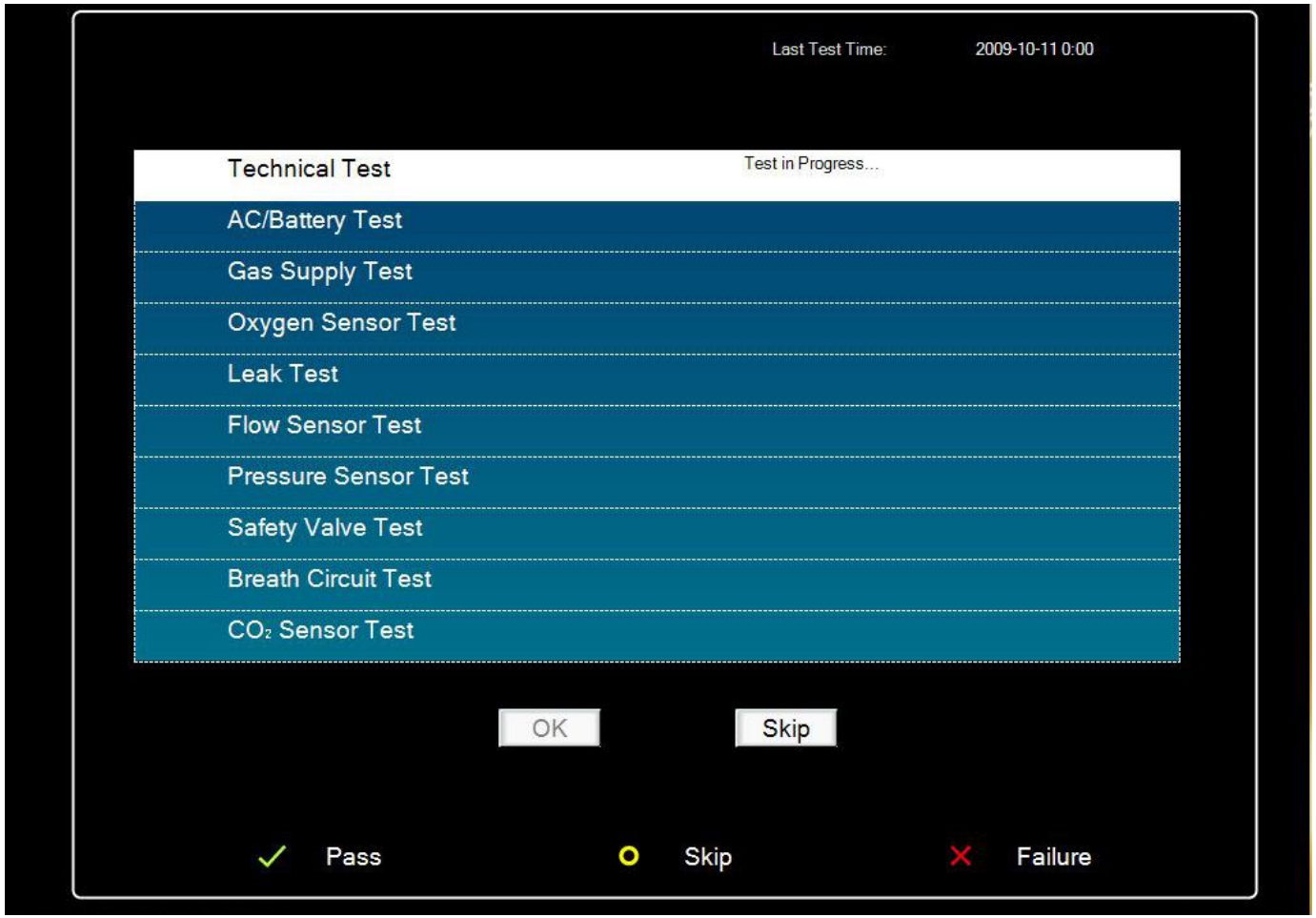




4、Main Function –Other Functions



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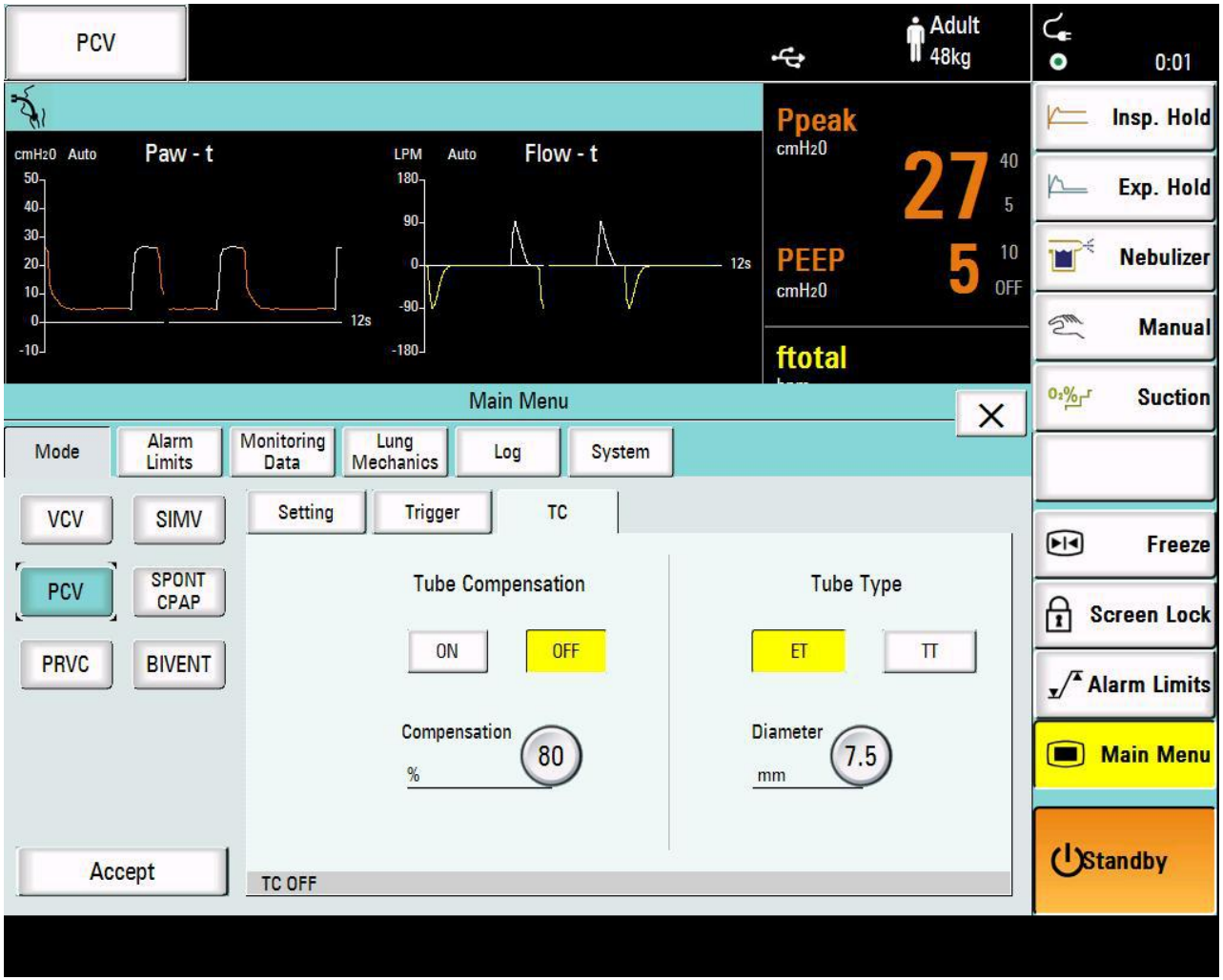
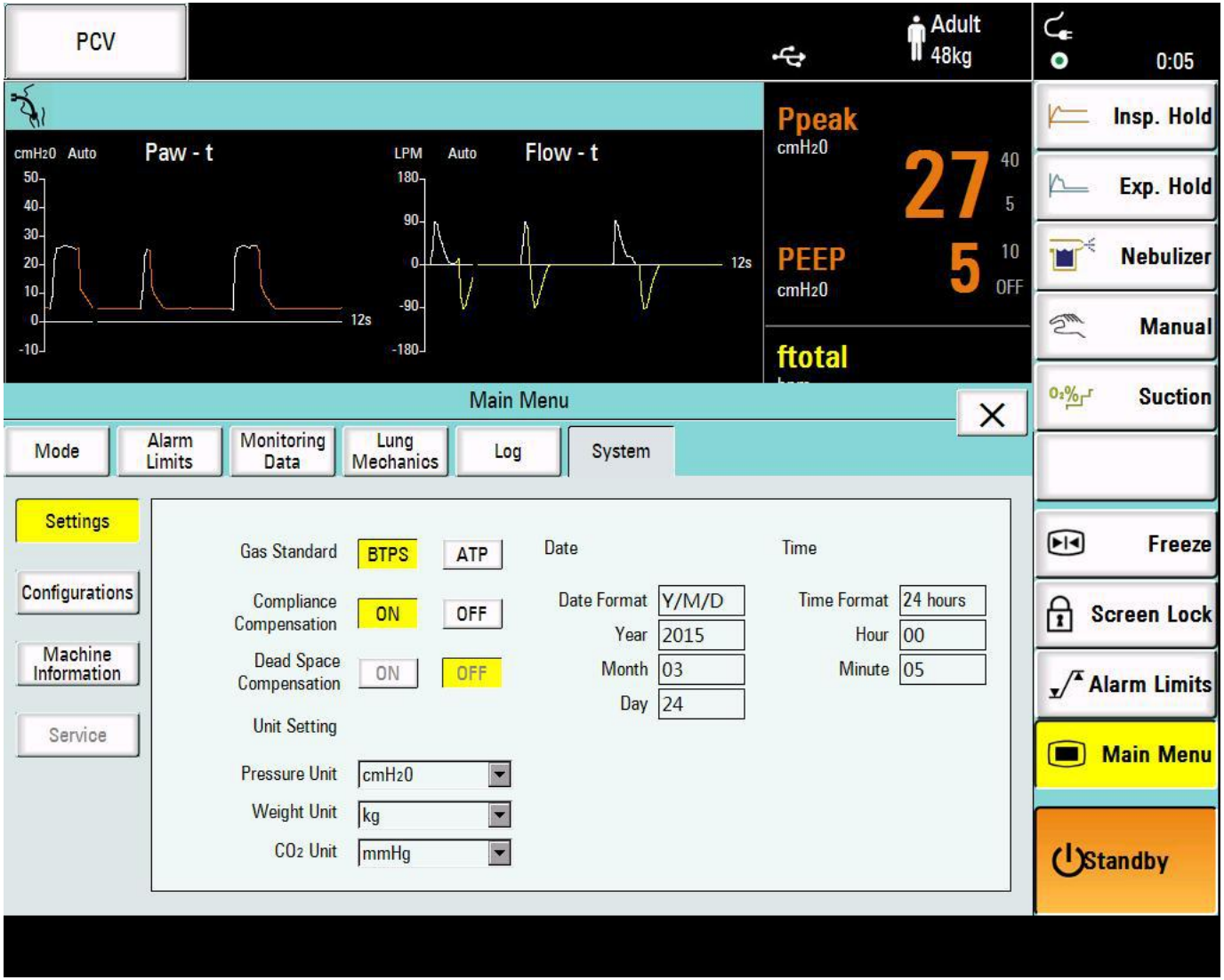
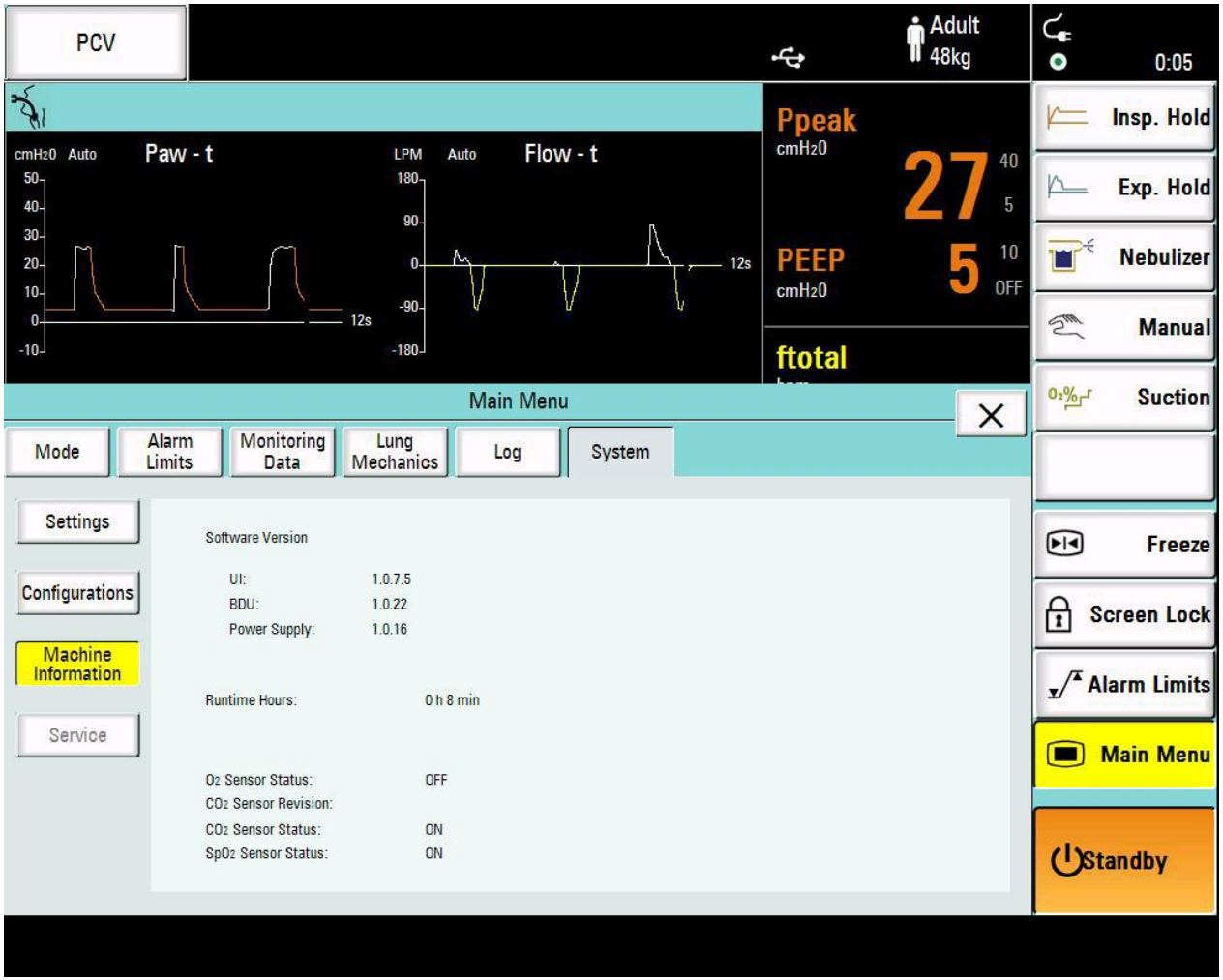


4、Main Function –Other Functions



4、Main Function –Other Functions



4、Main Function –Other Functions

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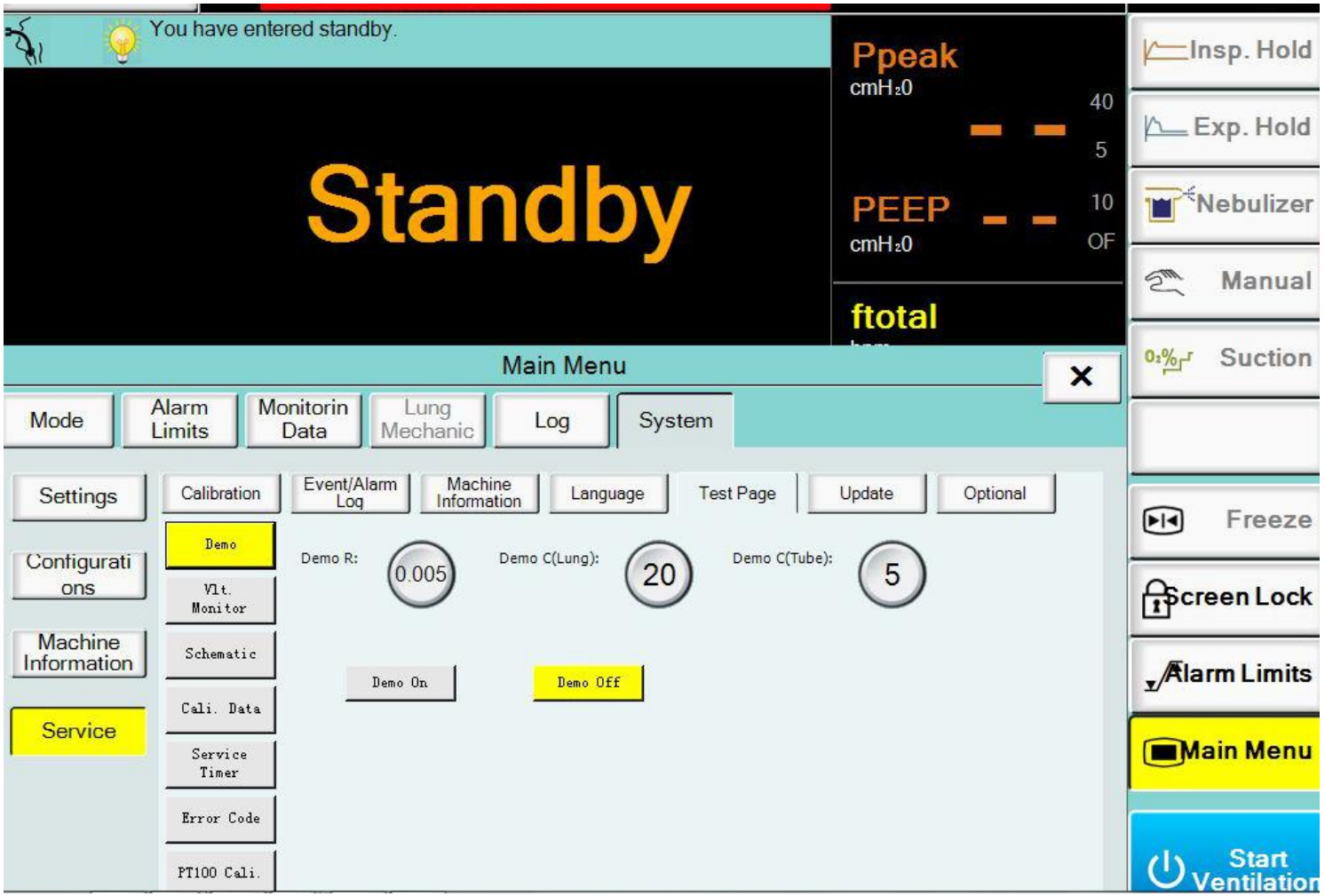
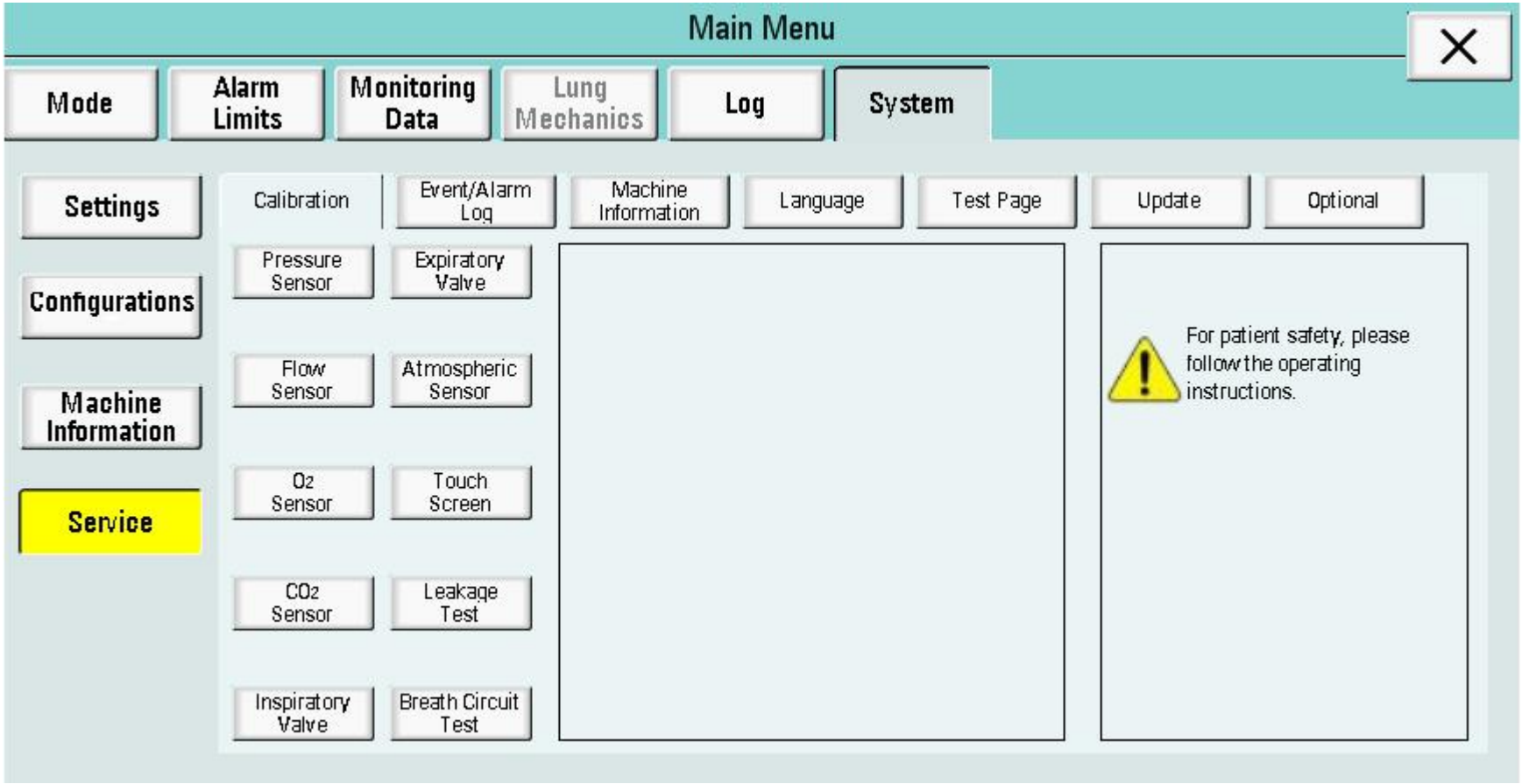


4、Main Function –Other Functions



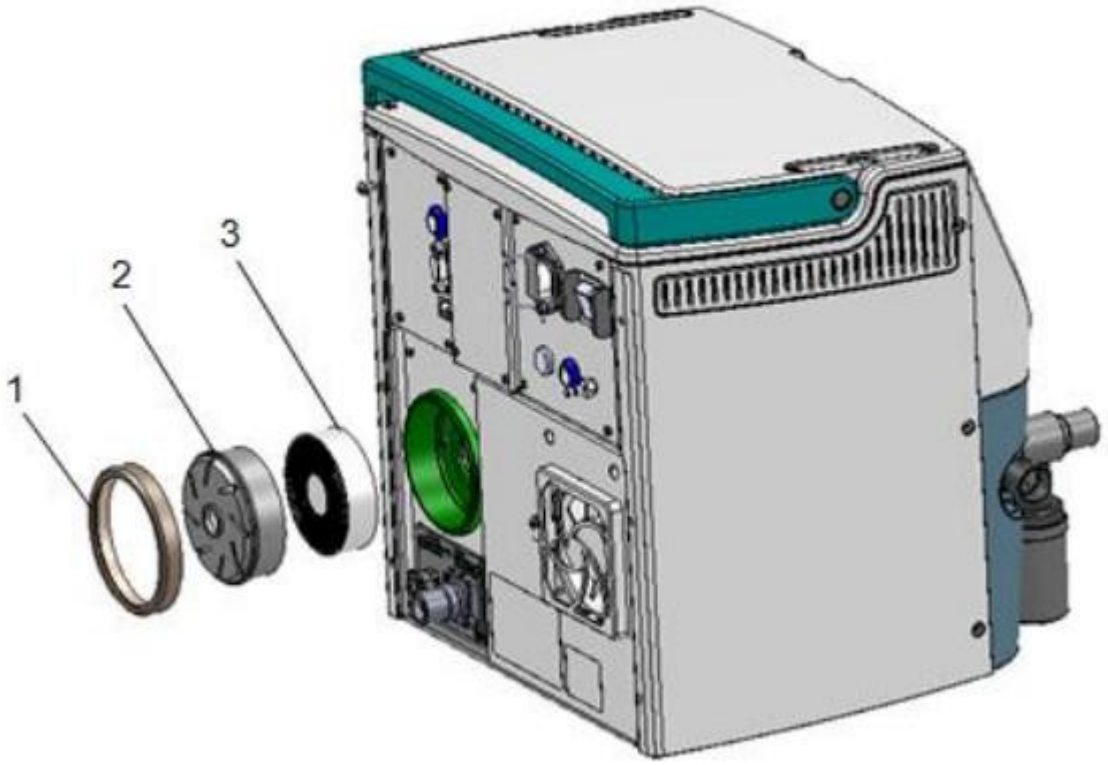
Operational Guidance

Daily disinfection of the surface of the ventilator.

Item	Frequency	Procedure	Note
External surface of ventilator (including LCD)	After every patient	Wipe clean with a damp cloth and water-soluble mild soap or with one of the chemicals listed below or its equivalent. Apply soap or chemical to damp cloth and directly to the equipment. If necessary use damp cloth and water to rinse off chemical residue. • Mild dishwashing detergent • Isopropyl alcohol (70% solution) • Window cleaning solution (with isopropyl alcohol and ammonia) • Ammonia (15% solution)	Be careful not to let disinfectant into the machine or power supply plug.

Operational Guidance

Every 1-3 months，hospital maintenance staff should check the air filter and change it according to the situation of the surface of it.



Operational Guidance

Lifetime of oxygen Sensor is 1 year . If calibration failure , please change a new one.

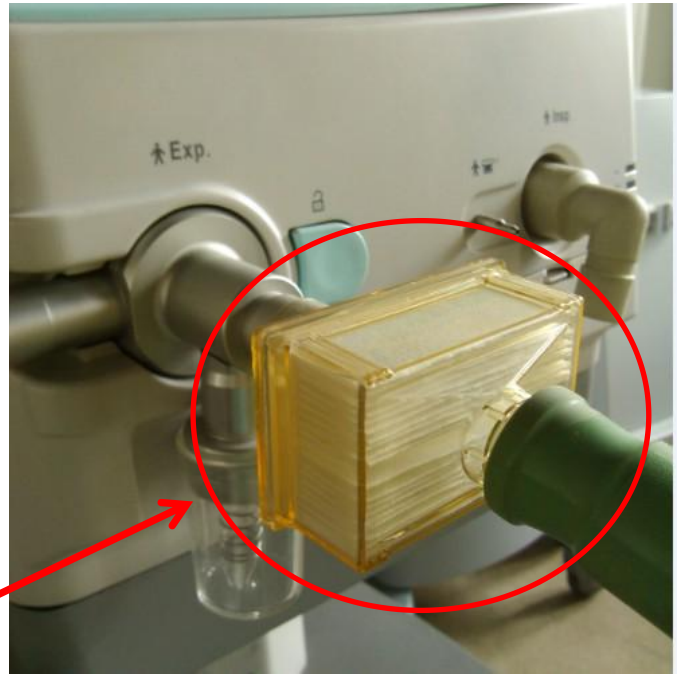
Paramagnetic Oxygen Sensor is not consumptive Material

Disinfection of Expiration valve.

Expiratory module	After each patient/weekly	Remove Expiratory module from ventilator and remove diaphragm and water trap. Clean the shell, diaphragm and water trap separately. Using an approved Gluteraldehyde disinfection solution, follow the manufacturer's instruction for high level disinfection and rinsing of the diaphragm, water trap and shell. ⚠ **NOTE:** The shell, diaphragm and water trap can also be high level disinfected through steam autoclaving up to a maximum temperature of 134°C (273°F). Using an autoclave, follow the manufacturer's instruction for high level disinfection of the shell, diaphragm and water trap while adhering to facility procedures.	Reinstall the module after cleaning and drying. Pay attention to assure connections are gas tight.

Operational Guidance

When the ventilator is used to cure infectious diseases.
Use a bacteria filter before Expiration valve.



bacteria filter

Advantages of VG70

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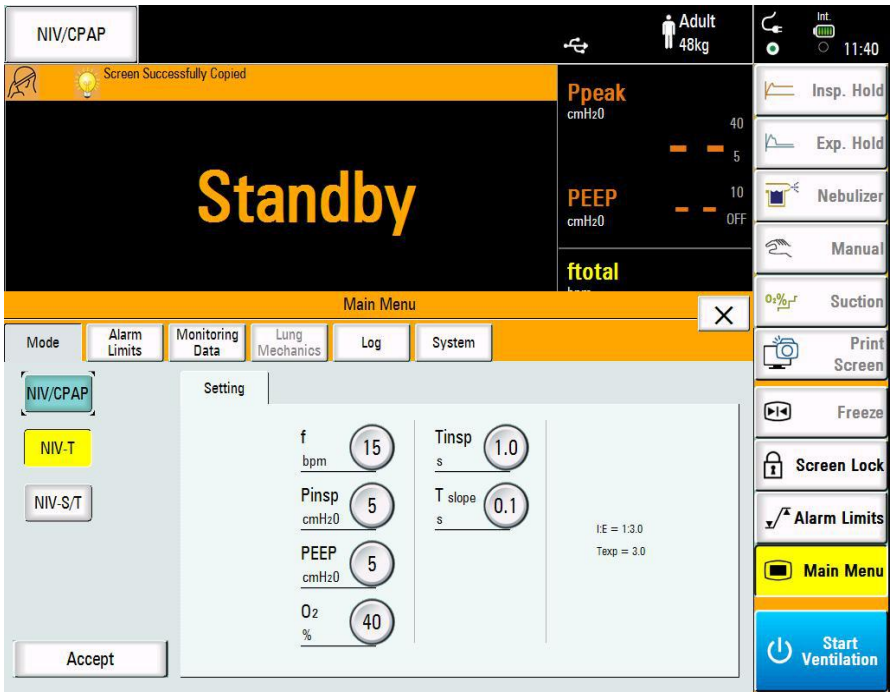
Comprehensive



Ventilation Modes

VCV, PCV, SIMV (V, P, PRVC), PRVC, SPONT/CPAP, BIVENT

NIV/CPAP, NIV-T, NIV-S/T

Auxiliary Functions

Lung mechanics, Smart suction, Synchronized nebulizer.....

Advantages of VG70

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Comprehensive

Used in
General ICU, RICU,
EICU,
intra-hospital transport

Suitable for

Adult, Pediatric, Infant

Advantages of VG70

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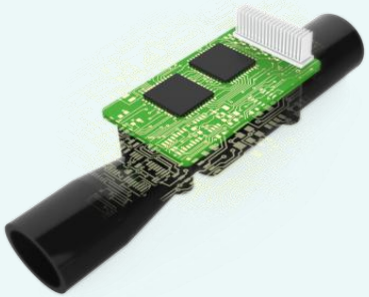
Reliable

Key parts



25000 h long-life turbine

Ultra-quiet

safe in oxygen enrichment

Advantages of VG70

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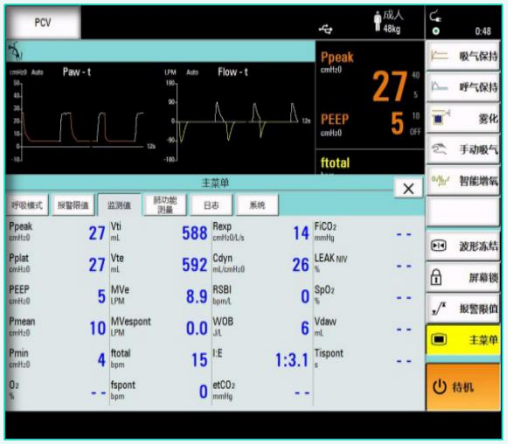
User-friendly

12” TFT touch screen



Pre-set parameters

Complete monitoring parameters

Advantages of VG70

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Intelligent

Automatic Leakage Compensation

Synchronized triggering

E-Comf™ expiration control

Responding time within 10ms

Maximum leakage compensation 60L/M

Advantages of VG70

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Cost-effective

Paramagneti CO_2 sensor

long-life expiratory flow sensor

upgradable software with USB port

Parameters

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Parameters Settings

Tidal Volume： 20-2000ml

Respiratory Rate： 1-80 bpm

Inspiration Time：0.2-9s

Inspiration Pause Time： 0~4s

Tslope： 0~2s

FiO2： 21%~100%

PEEP： 0-35cmH2O

CPAP（NIV）： 2-20cmH2O

Psupp： 0-70cmH2O

Pinsp： 5-70cmH2O

Phigh（in BIVENT mode）： 5-60cmH2O

Plow（in BIVENT mode）： 0-35cmH2O

Esens： 5%～80%

Trend function for multiple parameters

Parameter Controlld

Pressure： P_{min}, P_{plat}, P_{mean}, P_{peak}, PEEP

Volume： VT_I, VT_E, MV, Mv_{spont}, Leak%

Curves： P-t, F-t, V-t , etCO2-t

Loops: P-V, P-F, F-V

Q&A