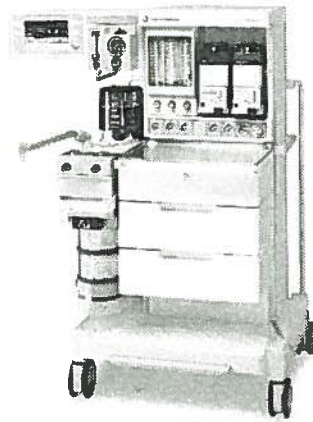


Aestiva

Quick Reference Guide

Software Revision 3.X



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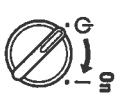
Step-by-Step Guide

For step-by-step instructions, refer to the Operation and Maintenance Manual. Do not use this system unless you have read each component's Operation and Maintenance Manual.

- ⚠ WARNING** Before you use the system
- Complete all of the preoperative tests.
 - Test all other system components.

1. Make sure the breathing circuit is correctly assembled.

2. Set the system switch to on (I) to permit gas flow and to turn on the monitoring.



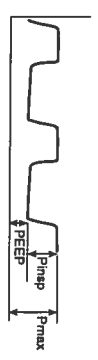
3. Do the preoperative checkout. Refer to the preoperative checklist.

4. Set the ventilation mode and controls.



- Volume control mode supplies a set tidal volume.

- Pressure control mode supplies a set pressure during inspiration.




5. Set the alarm limits.

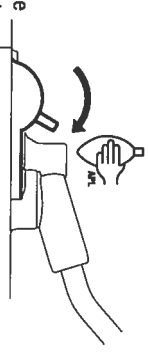
6. To start mechanical ventilation, set the Bag/Vent switch to Vent - .



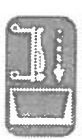
- Use the volume alarm key to prevent false alarms during manual ventilation.



7. To stop mechanical ventilation, set the Bag/Vent switch to Bag -  or select the auxiliary gas outlet.



- Use the end case key at the end of a case to prevent volume and apnea alarms and to set the pressure limit and PEEP to default values (40 cm H₂O; 0 cm H₂O). Mechanical ventilation must be off. Push end case. Push the knob to save.





Checklist

IMPORTANT!

- Refer to the preoperative checklist:
- Every day before the first patient.
 - Every time a different clinician uses the system.

Before Every Patient

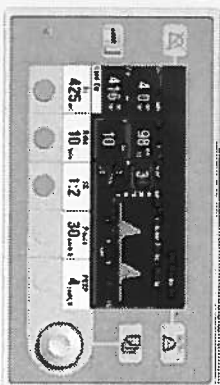
- Look for damage, necessary drugs and equipment, correct breathing circuit setup, and hazardous conditions.
- Check vaporizer installation:
 - Make sure the top of each vaporizer is horizontal (not on crooked).
 - Make sure each vaporizer is locked and cannot be removed.
 - Make sure the alarms and indicators operate correctly (Tec 6 vaporizer).
 - Make sure you cannot turn on more than one vaporizer at the same time.
- Do the breathing system tests:
 - Make sure the one way valves and auxiliary equipment (humidifier, etc.) operate correctly.
 - With a circle breathing-circuit module, push the drain button for ≥ 10 sec to remove condensate.
 - Ventilator circuit leak test.
 - Bag/Manual circuit leak test.
 - Bag/Manual circuit APL valve test.
 - Circuit leak test.
- Set the appropriate controls and alarm limits for the case.

Control Basics

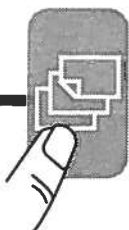
Menu

1. Push the menu key to see the main menu.
2. Turn the knob to select an option (highlight).
3. Push the knob to show the next screen.

- During a calibration or other procedure, the screen shows the instructions.

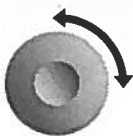


1



Main Menu
Ventilation Mode
Alarm Settings
Setup/Calibration Screen and Audio
Exit to Waveform Display

2



Main Menu
Ventilation Mode
Alarm Settings
Setup/Calibration Screen and Audio
Exit to Waveform Display

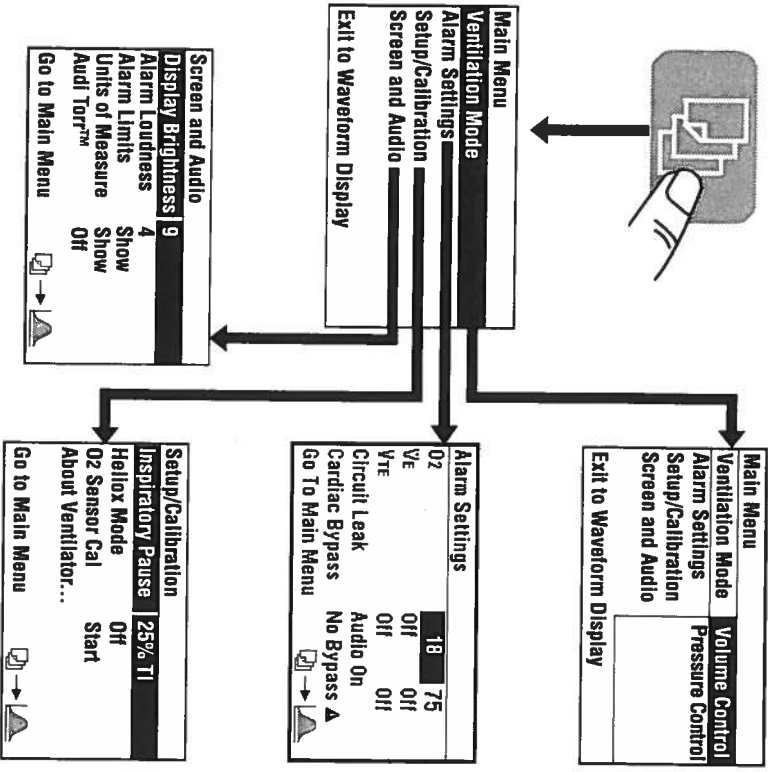
3



Setup/Calibration
Inspiratory Pause
25% TI
Heliox Mode
Off
O2 Sensor Cal
Start
About Ventilator...
Go to Main Menu



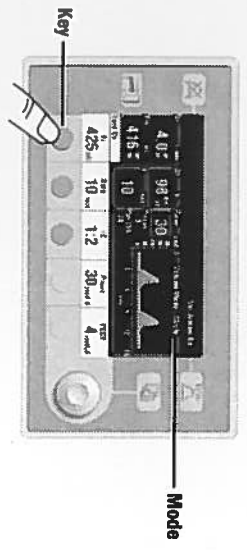
Menu Map



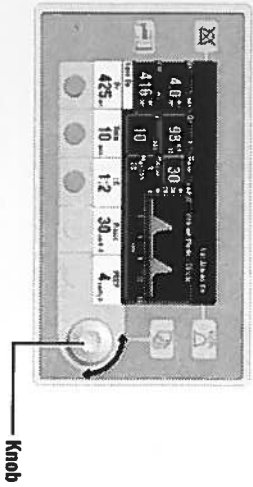
Selection Keys

The bottom of the screen shows control settings. To change a setting:

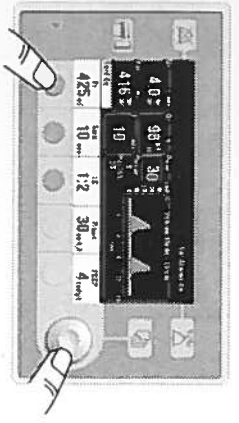
1. Push the selection key below the setting.

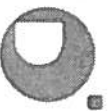


2. Turn the knob to change the setting.



3. Push the knob or the key to save the change.





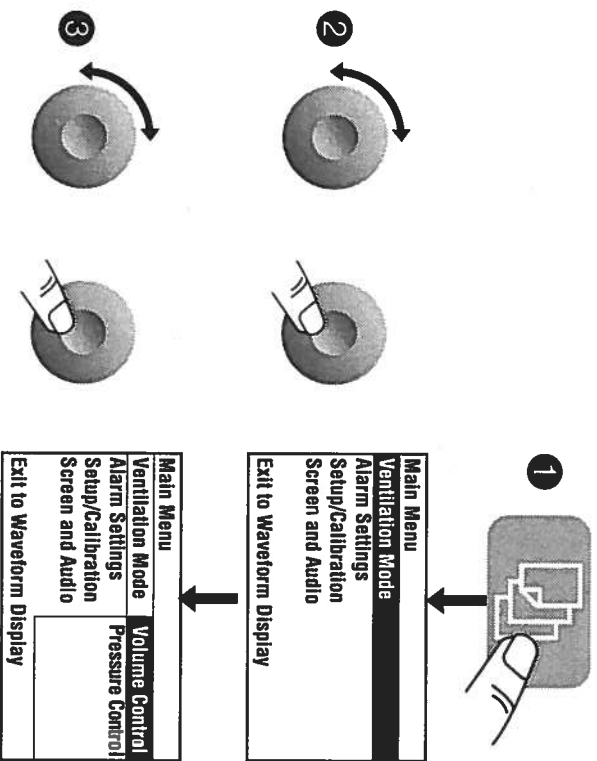
Ventilation Mode

Set the mode: text above the waveform shows the ventilation mode.

Volume control: supplies a set tidal volume.

Pressure control: supplies a set pressure during ventilation.

1. Push the menu key.
2. Turn, then push the knob to select Ventilation Mode.
3. Turn, then push the knob to change the mode. You must push the knob to save the change.



Start/Stop Mechanical Ventilation

To Start

⚠ WARNING Make sure the patient circuit is correctly assembled and the control settings are correct before you start or stop ventilation.

Mechanical ventilation is off when you first turn on the system.

1. Make sure the control settings are correct.
-

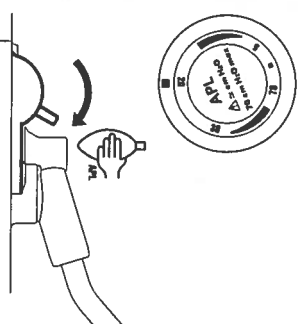
2. Turn off the auxiliary common gas outlet (some models).
-

3. Set the Bag/Vent switch back to Vent.
- If mechanical ventilation is not available, a message tells you what to do.
-

To Stop

⚠ WARNING Make sure the patient circuit is correctly assembled and the control settings are correct before you start or stop ventilation.

1. Make sure control settings are correct.
2. Set the Bag/Vent switch to Bag.



Alarm Settings

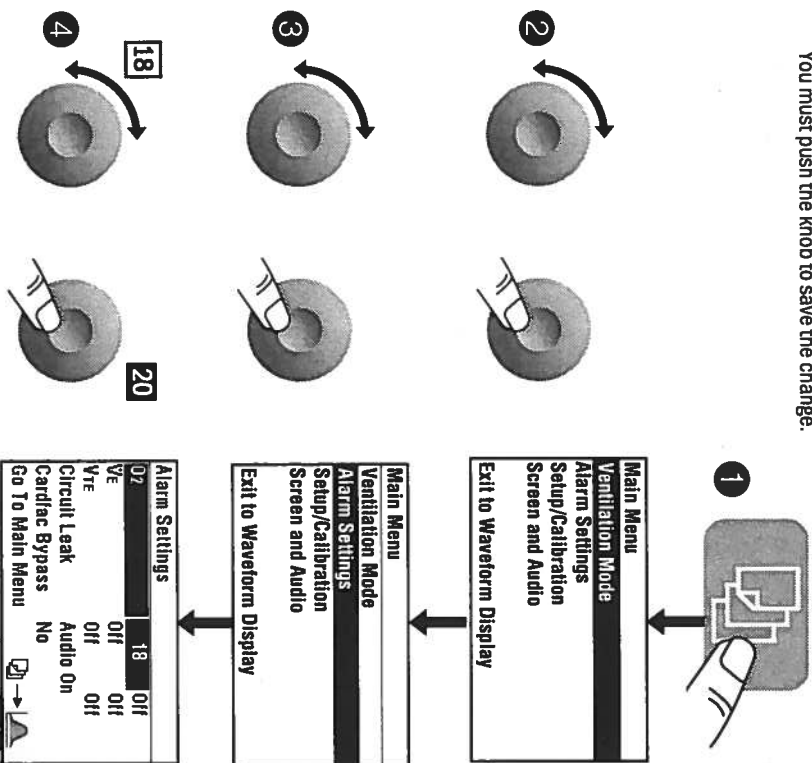
O₂ and volume alarms: high and low volume and high O₂ alarms can be turned off. The low O₂ alarm cannot be set to less than 18%.

Circuit leak audio: to prevent alarms from a known leak (e.g. an uncuffed tube), set the audio to off.

Cardiac Bypass: set Cardiac Bypass to "In progress" to prevent volume and Apnea alarms when the patient is on cardio-pulmonary bypass. When Cardiac Bypass is in progress, the display shows **Cardiac Bypass** and **Apnea Alarm Off**.

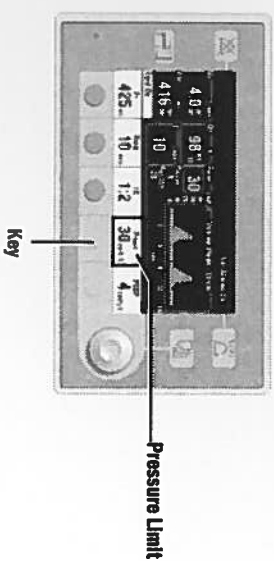
Note: mechanical ventilation must be off.

1. Push the menu key.
2. Turn, then push the knob to select **Alarm Settings**.
3. Turn, then push the knob to select an alarm limit.
4. Turn, then push the knob to change the limit. You must push the knob to save the change.



Alarm Settings

5. The pressure limit alarm uses a selection key.

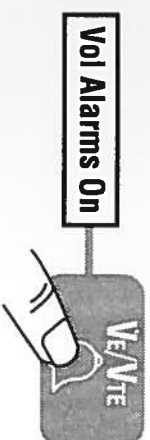


Turn the Volume Alarms On or Off

⚠ WARNING Do not turn off volume alarms with a spontaneously breathing patient. The system will not alarm for low volume.

The volume alarm key (VE/Vte) turns volume alarms on and off. When the alarms are off, the alarm limits are hidden.

Use this control to prevent false alarms if you switch to manual ventilation at lower tidal volumes.



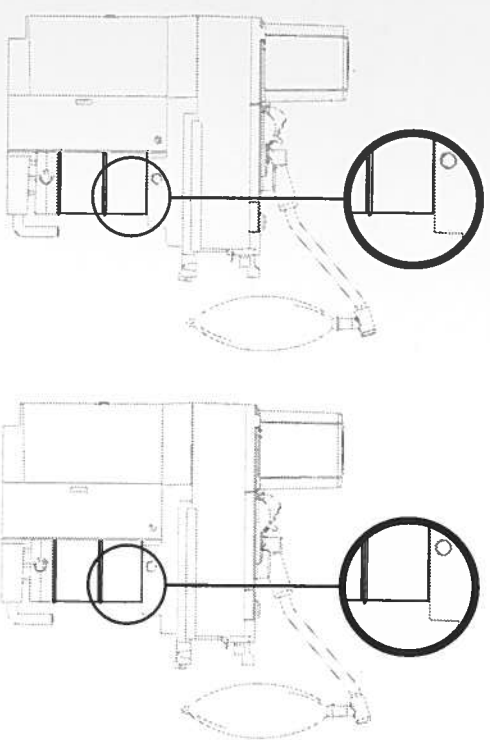
⚠ WARNING

Do not use malfunctioning equipment. Contact Datex-Ohmeda for service. Refer to the Operation Manual - Cleaning, Setup, Maintenance, and Troubleshooting for more information.

Message	Cause	Action/Concern
12 Hour Test	System in use for more than 12 hours without a power-up self test.	The system continues to operate. To do the test, move the system switch from standby to on.
Check Flow Sensors	No flow or negative flow during inspiration. Negative flow during expiration.	Are flow sensors correctly installed? Are the connectors reversed? Inspect check valves.
Low Paw	Paw does not rise at least 4 cm from the lowest pressure measured during the last 20 seconds.	Are circuit connections OK? Look at the Paw gauge on the absorber. Look for circuit disconnection.
Minimum System Failure	A severe malfunction prevents mechanical ventilation and monitoring. Other alarms may also occur.	Ventilate manually. Use a stand-alone monitor. Cycle system power (on-standby-on). If the alarm clears, restart mechanical ventilation.
Patient Circuit Leak	Exhaled volume < 50% of inspired volume for at least 30 sec.	Check breathing circuit and flow sensor connections. With an uncuffed tube or known leak, set circuit leak audio to off (alarm limits).
Unable to Drive Bellows	The drive pressure to the bellows housing > Paw.	Fill the bellows if empty. Check the patient connection.
Volume Apnea	No measured breath in last 30 seconds.	Check patient. Bag as needed. Look for disconnects. If the patient is on cardio-pulmonary bypass, select Cardiac bypass on the alarm menu.
Vt compensation off	The system supplies the set breath but cannot adjust ventilation for compliance and resistance losses, etc.	Adjust Vt manually and continue without compensation or change to the pressure control mode.
Vt not achieved	The tidal volume measured by the inspiratory flow sensor < set value.	Adjust controls to supply adequate tidal volume.

Leaks

1. Are absorber canisters correctly installed?



2. Is auxiliary outlet off?



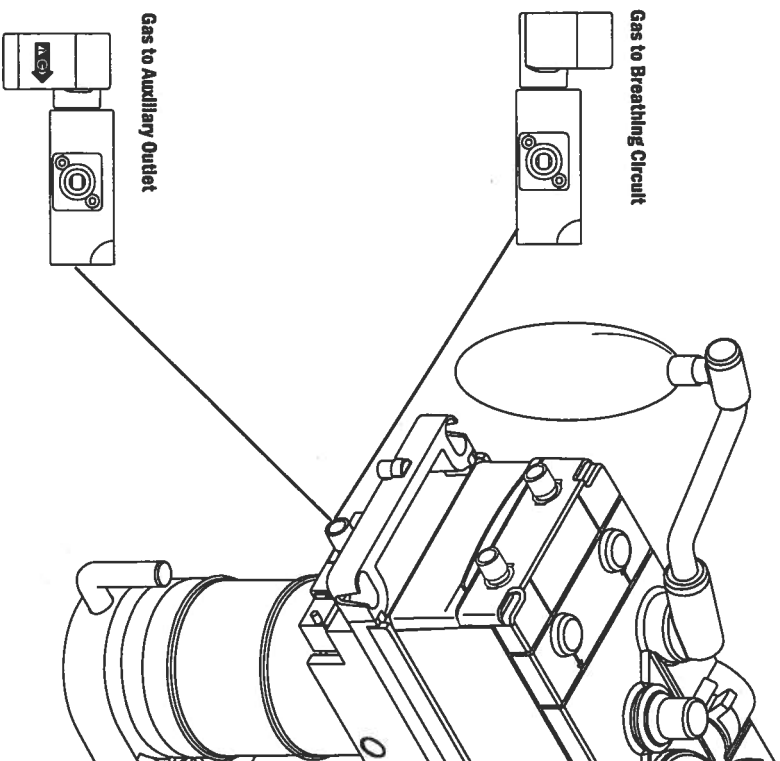
3. Calibrate/replace flow sensors.

4. Do circuit leak tests
 - Bag circuit
 - Ventilator circuit.



Auxiliary Outlet Switch (Option)

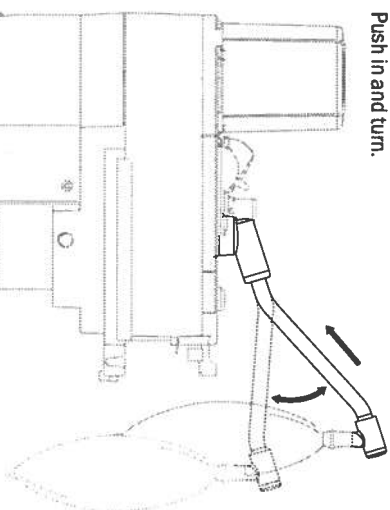
This switch sends gas to the selected outlet when the system has an auxiliary common gas outlet. Ventilation and volume monitoring turns off when the auxiliary outlet is selected.



Bag Arm Adjustment

Only the long arm can be adjusted (option).

1. Push in and turn.



2. Release the arm. It stays in position.

