



OPERATOR'S GUIDE SUPPLEMENT

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Overview

This supplement discusses these topics.

- Using Silent/Dark Mode
- Silent/Dark Mode Operating Procedure
- Recharging Guidelines
- Recharging the Ventilator in its Storage Case

The remain sections discuss these topics in detail.

Using Silent/Dark Mode

Silent/Dark Mode is a feature available with only the military version of the ZOLL Ventilator.

Under normal conditions, the ventilator's audible and visual alarms alert the operator to potential problems with the patient or ventilator.

There are, however, situations where the audible and visual alarms could present a hazard to both the patient and operator by alerting others to their presence. In Silent/Dark mode, the ventilator:

- Suppresses the audible alarm.
- Suppresses the back light for the LCD display and the **Accept** and **Mute/Cancel** buttons.
- All visible LEDs are suppressed. Alarms are indicated by an infrared (IR) LED.

When operating in this mode, the LCD remains viewable by transfecting visible light or with night vision goggles (NVG) equipment under dark conditions.

The NVG equipment used in this mode of operation must be capable of detecting infrared light in order to enable the operator to detect alarm conditions.

Warning! **Never use Silent/Dark mode without the appropriate NVG equipment and always ensure that the NVG equipment is capable of detecting the infrared light prior to commencing operation.**

Warning! **In the event the device loses power or the device is powered off, Silent/Dark Mode must be re-enabled using the Menu and Manual Breath buttons.**

Failure to re-enable Silent/Dark Mode might expose an NVG user to visible light emitted from the device and audible alarm tones.

Silent/Dark Mode Operating Procedure

1. Press both the **Menu** and **Manual Breath/P Plat** buttons while turning the unit on. This configures the device to start with no visible light and no audible alarms. The device will display *SILENT/DARK MODE ENABLED. PRESS ACCEPT KEY TO ENTER SILENT/DARK MODE NOW.*

Starting the device in this way enables **Silent/Dark** mode for the duration of the power cycle (turning off the device cancels **Silent/Dark** mode; it must be enabled again the next time the device is turned on).

- a. Pressing the **Accept** button while the message is displayed continues operation in Silent/Dark mode. If the **Accept** button is not pressed within the 5 second timeout period, the backlight and audible and visible alarms will be immediately presented on the device.
 - b. Pressing the **Mute/Cancel** button enables the audible and visual alarms and the LCD back light. In addition, Silent/Dark mode is added to the Menu, so that the operator can enter Silent/Dark mode at a later time for the duration of the current power cycle.
2. When operating in Silent/Dark mode, the operator should be extremely diligent in monitoring the patient and device.

Note: When operating in Silent/Dark mode, the brightness setting is not accessible from the main menu.

3. To disable Silent/Dark mode and resume normal operation press the **Menu** button, select **Silent/Dark** mode then select *OFF*, and then press the **Accept** button.
 - a. Silent/Dark mode can be reentered, provided the device has not been turned off.
4. When a High Priority alarm is detected, the infrared LED blinks at 2 Hz.
 - a. Pressing the **Mute/Cancel** button does not affect the infrared LED blink rate.
 - b. The operator should begin manual ventilation immediately.
5. When the device detects a Low or Medium priority alarm, the infrared LED blinks at 1 Hz.
 - a. The infrared LED continues to blink while Medium Priority alarms are active. Pressing the **Mute/Cancel** button results in the infrared LED being lit continuously for 30 seconds.
 - b. The infrared LED blinks when the device detects a Low Priority alarm. Pressing the **Mute/Cancel** button stops the blinking, leaving only the persistent message.

Recharging the Ventilator in its Storage Case

Follow these steps to recharge the ventilator battery when the ventilator is in its storage case.

1. Every 6 months, lift the dust cap of the storage case external AC power connector. See figure that follows.
2. Attach an AC power cord to the AC power connector and allow the ventilator to charge for two hours.
3. At the end of the two hours, remove the AC power cord from the AC power connector, and then secure the dust cap on the AC power connector.



Observe the following guidelines when recharging the ventilator battery.

- Do not store the ventilator at 100% battery charge in a high temperature environment ~ 40 °C (104 °F) and above for long periods. Doing so might affect usable battery life.
- When charging in the storage case, be advised that the battery may stop charging if ambient temperature is above 40 °C (104 °F) even though the unit is still connected to external power. Under these conditions, battery temperature can get as high as 10 °C (50 °F) above ambient. Charging will automatically start when the ambient temperature drops.
- Charge ventilator for only 2 hours when case is closed

Preventive Maintenance Cycle

The ventilator is configured with a Preventive Maintenance (PM) cycle of every two years when a device has less than 50 hours of use. This PM cycle is identified in the Unit Info menu as “Stockpile 2”.

To access the Unit Info menu, refer to Chapter 4 of the Operator’s Guide, in section titled, “Unit Info”.

