



Pantone
156 U



Text - PMS 294U



Yellow Warning triangle
PMS 129C

+

QUICK REFERENCE GUIDE

WARNINGS:



- Proper operation of the BD Alaris™ System requires that you are familiar with related features, setup, programming, IV sets, and accessories. Read all instructions, including those for all attached module(s) before using the BD Alaris™ System.
- This guide is not intended to be comprehensive instructions for the setup and operation of the BD Alaris™ System. For complete instructions along with Warnings and Cautions, refer to *BD Alaris™ System User Manual* (v12).

Programming

Setting Alarm Limits

1. Press **Channel Select** key.
2. Press **Limits**.
3. Select limit to be changed.
4. Enter a numeric value using keypad or up/down arrow keys.
5. Press **ENTER**.

Trend Data

1. Select **TREND**.
2. Press **PAGE UP** and **PAGE DOWN** to navigate through trend data pages. To move cursor bar press up or down arrow keys.
3. Press **ZOOM** to change time period.
4. To exit press **EtCO₂ Main**.

PCA/EtCO₂ Trend Data (Available only with an Alaris™ PCA Module)

1. Press **OPTIONS**.
2. Select **PCA/EtCO₂ Trend data**. Navigate as described in previous section titled Trend Data.

Change Waveform Height

1. Press **OPTIONS**.
2. Select **WAVEFORM HEIGHT**.
3. Select 60mmHg or 99mmHg.

Change Waveform Time Scale

1. Press **OPTIONS**.
2. Select **WAVEFORM TIME SCALE**.
3. Select 5 or 10 seconds (for lower respiratory rates select 10 seconds).

Pre-Silencing Alarm

1. Press **SILENCE** to pre-silence monitoring alarms for two minutes.
Note: Infusion alarms will not be silenced.

Alaris™ EtCO₂ Module v12



BD

CareFusion 303, Inc.
10020 Pacific Mesa Blvd. San Diego, CA, 92121 United States
800.854.7128
BD, the BD Logo, Alaris and Guardrails are trademarks of Becton, Dickinson and Company or its affiliates. All other trademarks are the property of their respective owners. © 2021 BD. All rights reserved.



Alarms

Alarm Message	Priority	Meaning	Response
AUTOZERO (IN PROGRESS)	Informational	The EtCO ₂ Module performs a baseline by sampling CO ₂ present in ambient air.	Wait for the device to complete its autozeroing function. After the autozero cycle is complete, the module begins measurement again. No user intervention is required.
CHANNEL DISCONNECTED	High	Module(s) have either been disconnected while in operation, or have a non-recoverable error.	To silence the alarm and clear the message from screen, press the CONFIRM soft key. Reattach the module, if desired, ensuring it is securely "clicked" into place at Channel Release Latch. If the alarm is still present, replace the module.
CHANNEL ERROR	High	A malfunction is detected on the module.	Clear the channel error pop-up by pressing the CONFIRM soft key. Power down the system, or continue use of functional units, or replace the affected channel with an operable module.
CLEARING DISPOSABLE	Informational	The monitoring device is attempting to clear disposable of occlusion.	Wait for purging to complete.
DISCONNECT OCCLUDED DISPOSABLE	Medium	The disposable is occluded.	Check the disposable. Obtain a new disposable and attach it to the patient.

+

Alarms

Alarm Message	Priority	Meaning	Response
DISPLAY FAILURE - REPLACE MODULE	High	There is a malfunction with the display on the EtCO ₂ modules. The device continues to monitor.	Replace the module.
DISPOSABLE DISCONNECTED	Informational	No disposable is connected to the module while attempting to search for a patient.	Ensure disposable is attached to module.
DISPOSABLE DISCONNECTED	Medium	No disposable is connected to the module during monitoring or after approximately 30 seconds of searching for a patient.	Ensure disposable is attached to module.
HIGH ETCO ₂	High	The EtCO ₂ value is above the specified limit.	Assess the patient's condition. Confirm that the correct alarm limit values are selected.
HIGH FICO ₂	High	FiCO ₂ value is above the specified limit.	Assess the patient's condition. Confirm the correct alarm limit values are selected.
HIGH RR	High	The respiratory rate is above the specified limit.	Assess the patient's condition. Confirm the correct alarm limit values are selected.
LOW ETCO ₂	High	The EtCO ₂ value is below the specified limit.	Assess the patient's condition. Confirm the correct alarm limit values are selected.

Alarms

Alarm Message	Priority	Meaning	Response
LOW RR	High	The respiratory rate is below the specified limit.	Assess the patient's condition. Confirm the correct alarm limit values are selected.
NO BREATH DETECTED	High	No breath has been detected for a specified period of time.	Assess the patient's condition. Confirm that the correct alarm limit values are selected. Check the Microstream™ disposable to confirm that the correct disposable is chosen. Confirm the correct disposable placement.
PATIENT NOT DETECTED	Medium	The patient is not detected.	Assess the patient condition. Check the disposable.
SEARCHING	Informational	The monitoring device is attempting to start monitoring and is searching for patient vitals. Searching automatically follows initialization.	N/A
SENSOR WARMING	Informational	The monitoring device is preparing sensor mechanisms to search for and monitor the patient vitals.	N/A

+

EtCO₂ Waveform Examples

Normal Waveform Example — Normal Ventilation; 35-45 mmHg

A - B: Baseline period of no CO₂, end of inhalation

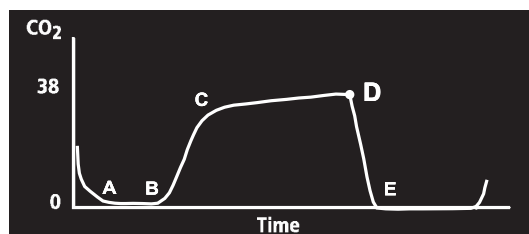
B - C: Rapid rise in CO₂

C - D: Alveolar plateau

D: End of expiration, end-tidal

CO₂ (EtCO₂)

D - E: Inhalation

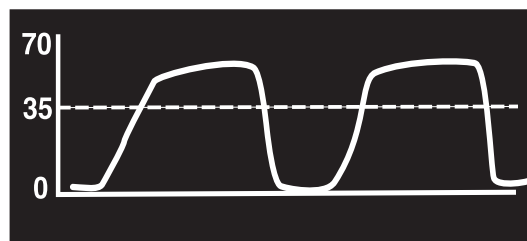


Abnormal Waveform Examples — Not necessarily associated with alarms

Hypoventilation

Possible Causes:

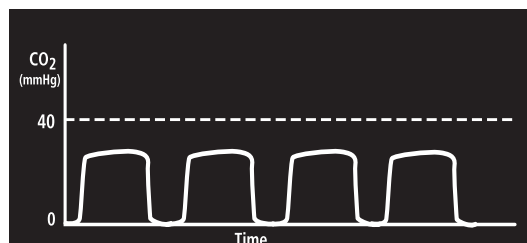
- Overmedication



Hyperventilation

Possible Causes:

- Respiratory distress



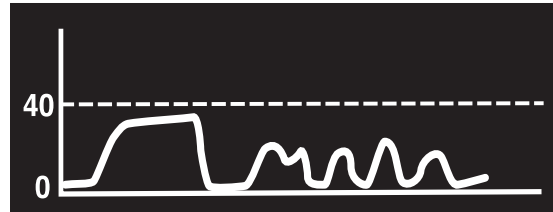
EtCO₂ Waveform Examples (Continued)

Abnormal Waveform Examples — Not necessarily associated with alarms

Partial Airway Obstruction

Possible Causes:

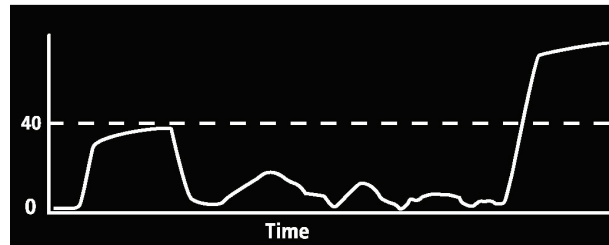
- Relaxation of upper airway
- Head position



Hypoventilation with Shallow Breathing

Possible Causes:

- Medication effect
- Low tidal volume



No Breath Detected

Possible Causes:

- Apnea
- Very shallow breathing
- Overmedication
- Displaced cannula

