# QUICK REFERENCE GUIDE

**Operator Precautions:**
To ensure proper operation of the Alaris® System (formerly known as "Medley® System"), user must be familiar with related features, disposables, administration sets, set-up and programming.

This guide is not intended to be comprehensive instructions for the setup and operation of the Alaris System. For complete instructions along with Warnings and Cautions, refer to Alaris System Directions for Use (v8).

## PROGRAMMING

### Setting Alarm Limits

1. Press **CHANNEL SELECT**.
2. Press **LIMITS**.
3. Select limit to be changed.
4. Enter a numeric value using keypad or up/down arrow keys.
5. Press **CONFIRM**.

### 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 **$EtCO_2$ Main**.

### $PCA/EtCO_2$ Trend Data

(Available only with an Alaris® PCA Module)

1. Press **OPTIONS**.
2. Select **$PCA/EtCO_2$ Trend Data**. Navigate as described above in 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® $EtCO_2$ Module v8

CareFusion

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## Alarms

| High Priority Alarm | Meaning | Response |
|---|---|---|
| No Breath Detected | No breath has been detected for a specified period of time. | Assess patient condition. Check Microstream® Disposable. Confirm correct disposable is chosen. Confirm correct disposable placement. |
| High $EtCO_2$ | $EtCO_2$ value is above the specified limit. | Assess patient condition. Confirm correct alarm limit values are selected. |
| Low $EtCO_2$ | $EtCO_2$ value is below the specified limit. | Assess patient condition. Confirm correct alarm limit values are selected. |
| High RR | Respiratory Rate is above the specified limit. | Assess patient condition. Confirm correct alarm limit values are selected. |
| Low RR | Respiratory Rate is below the specified limit. | Assess patient condition. Confirm correct alarm limit values are selected. |
| High $FiCO_2$ | $FiCO_2$ value is above the specified limit. | Assess patient condition. Confirm correct alarm limit values are selected. |
| Disconnect Occluded Disposable | Purging operation failed. | Check Microstream® Disposable. Obtain a new Microstream® Disposable. Attach Microstream® Disposable to patient and module. |

## Messages

| Message | Meaning | Response |
|---|---|---|
| Autozero (in progress) | $EtCO_2$ Module performs a baseline by sampling $CO_2$ present in ambient air. | Wait for the module to complete its auto-zeroing function. After the auto-zero cycle is complete, the module will begin measurement again. No user intervention is required. |
| Clearing Disposable | Microstream® Disposable has become blocked. | Check Microstream® Disposable. Wait for purging to complete. |

# $EtCO_2$ Waveform Examples

## Normal Waveform Example = Normal Ventilation; 35-45 mmHg

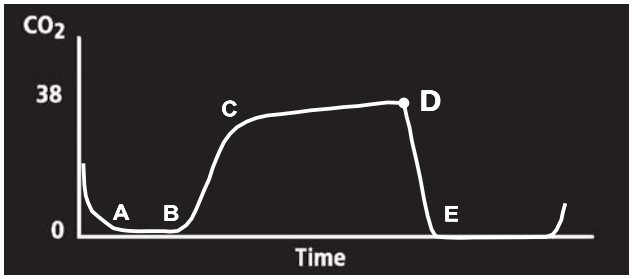
**A- B: Baseline period of no $CO_2$, end of inhalation**

**B- C: Rapid rise in $CO_2$**

**C- D: Alveolar plateau**

**D: End of expiration, end tidal $CO_2$ ($EtCO_2$)**

**D- E: Inhalation**

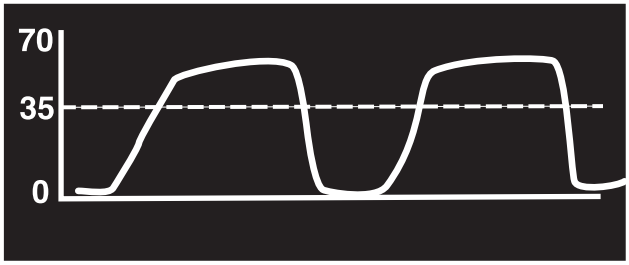



## Abnormal Waveform Examples - Not necessarily associated with alarms

### Hypoventilation

**Possible Causes:**

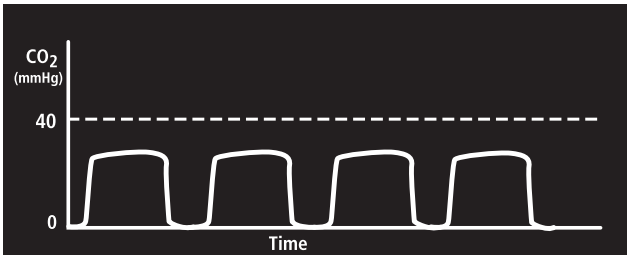
- **Overmedication**




### Hyperventilation

**Possible Causes:**

- **Respiratory distress**



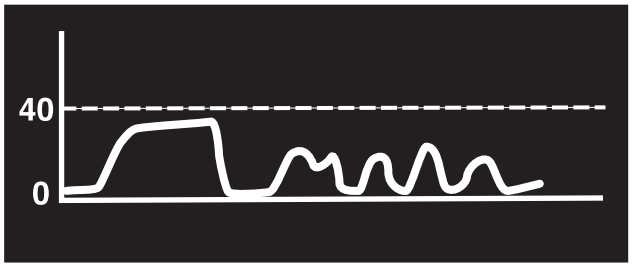
# $EtCO_2$ Waveform Examples (Continued)

## Abnormal Waveform Examples - Not necessarily associated with alarms

### Partial Airway Obstruction

**Possible Causes:**

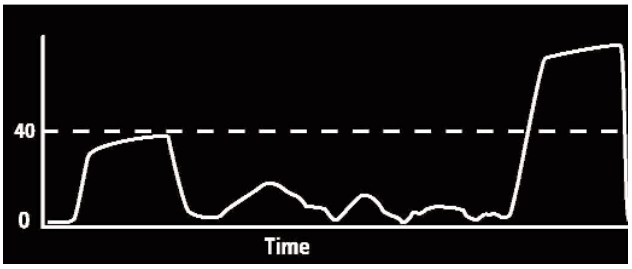
- Relaxation of upper airway
- Head position




### Hypoventilation with Shallow Breathing

**Possible Causes:**

- Medication effect
- Low tidal volume




### No Breath Detected

**Possible Causes:**

- Apnea
- Very shallow breathing
- Overmedication
- Displaced cannula