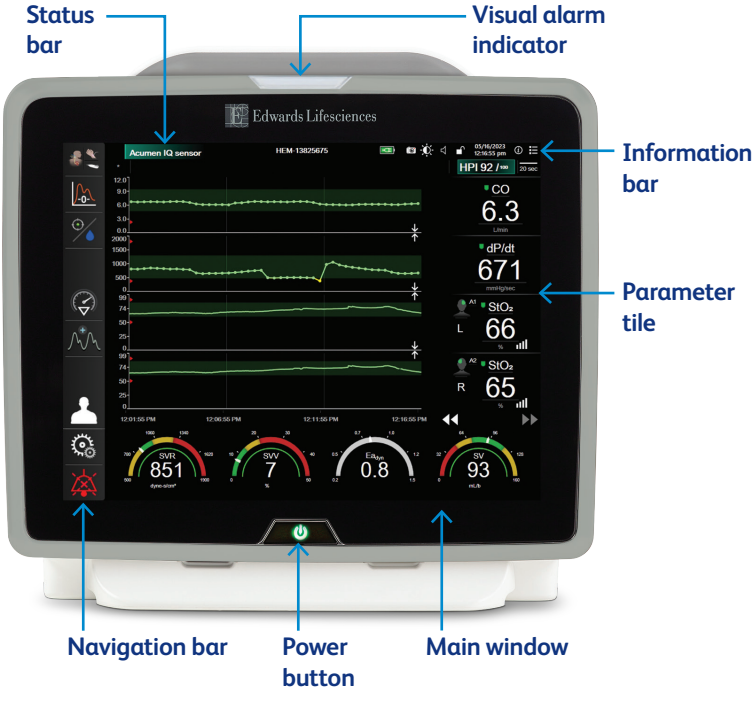
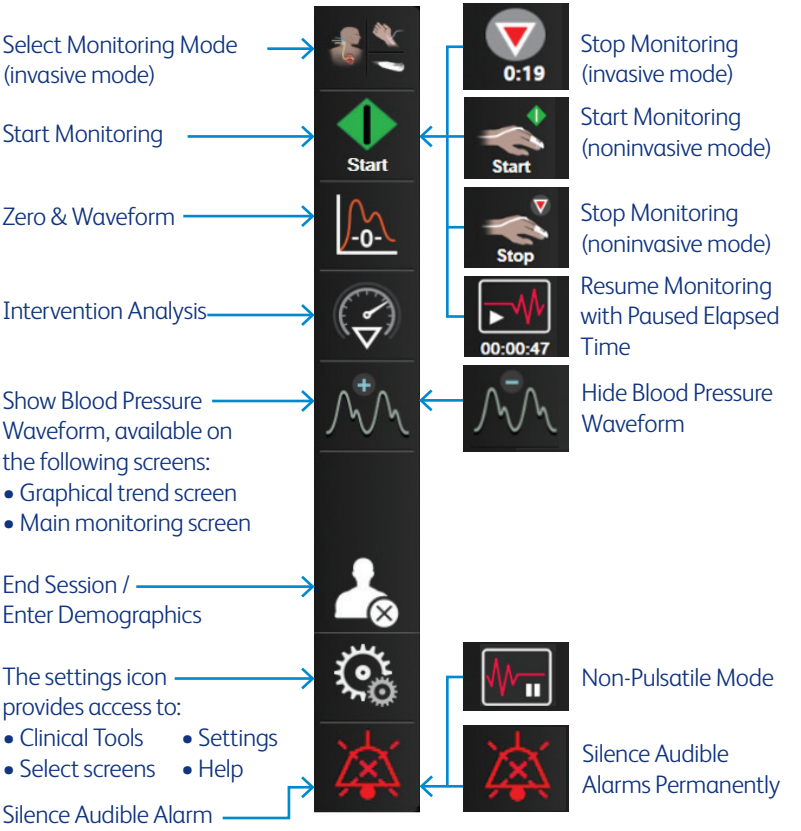
HemoSphere Advanced Monitoring Platform

Setup Guide



HemoSphere advanced monitor screen features



Information bar (located at the top of the screen)

Clinical actions

Changing parameters

1 Touch the displayed parameter label located inside the parameter tile to change it to a different parameter.

2 The tile configuration menu will show the selected parameter highlighted and other parameters currently being displayed outlined. Available parameters appear on the screen without highlight.

3 Select desired parameter to display.



Changing targets and alarms

1 Touch the parameter value on a parameter tile.

2 Adjust target values using arrows or select value and type in parameter target.

3 Select **Target** to disable or enable colors in target ranges.

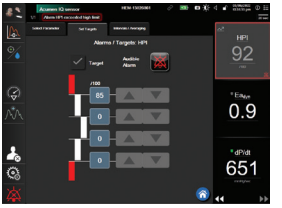


Silence LED and audible alert for individual high and medium priority physiological parameter alarms

1 Select parameter to be silenced.

2 Click the bell icon next to 'Audible Alarms.'

Parameter tiles with the alarm silence icon in the bottom right corner indicate LED and audible alerts are silenced until session is ended.



Silence LED and audible alert for all parameters

1 Select 'Silence Audible Alarm.'

Parameter tiles with the alarm silence icon in the bottom right corner indicate LED and audible alerts are silenced until alarm silence timer ends.



Acknowledging faults

1 Select 'Silence Audible Alarms icon'.

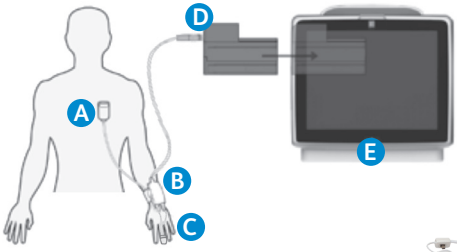
Audible alarm will disable when fault is acknowledged. LED may remain active for high severity faults. Fault text will remain on screen. Faults are silenced for the duration of the procedure or until system is retriggered.



ClearSight System with Acumen IQ Cuff

Setup Guide

Figure 1



- Step 1: Insert the HemoSphere ClearSight module **D** into the large technology slot of monitor **E**. The module will click when properly engaged. Press the power button to turn on the HemoSphere advanced monitor.
- Step 2: Select the "new patient" button and enter patient data, and then select the "non-invasive" button on the "monitoring mode selection" window *Note: Touch Skip to start monitoring without inputting the patient's demographics. If skipping demographics, only the following parameters can be monitored: SYSart, SYSpap, DIAart, DIApap, MAP, MPAP, CVP, StO_2, ctHb, PR*
- Step 3: Connect the pressure controller **B** to the HemoSphere monitor ClearSight finger cuff module module **D** followed by wrapping the pressure controller band around the patient's wrist (either wrist can be used, however the non-dominant arm is preferred), attaching the pressure controller to the band (Figure 2)



A Heart reference sensor

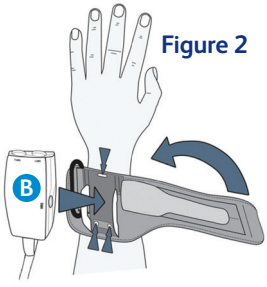
B Pressure controller kit

C Acumen IQ cuff

D HemoSphere monitor ClearSight finger cuff module

E HemoSphere advanced monitor

Figure 2



ClearSight module

BD

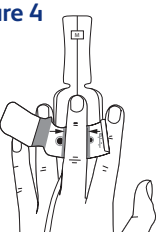
- Step 4: Remove the ClearSight Jr cuff from the packaging

Figure 3



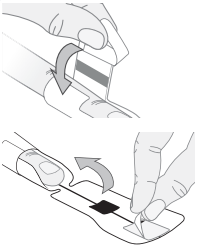
- Step 5: Open the cuff and place the finger between the green lines, with the cuff centered between the second and third knuckles (Figure 4)

Figure 4



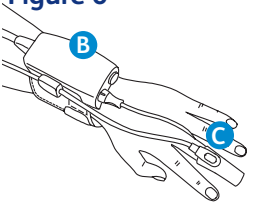
- Step 6: Gently lead the cuff cable between the two fingers (Figure 4)

Figure 5



- Step 7: Wrap the cuff around the finger; do not rotate the cuff after application (Figure 5)

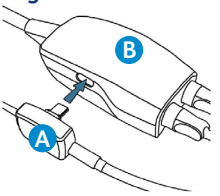
Figure 6



- Step 8: Connect the cuff C to pressure controller B (Figure 6)

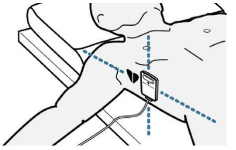
- Step 9: Connect heart reference sensor (HRS) A to pressure controller B (Figure 7)

Figure 7



- Step 10: Apply the heart end of the HRS to the patient at the phlebostatic axis level by using a HRS clip (Figure 8) and attach the other end of the HRS to the finger cuff (Figure 9)

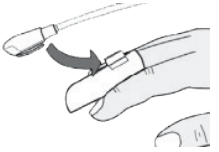
Figure 8



- Step 11: Touch the start monitoring icon 

on the navigation bar to begin monitoring

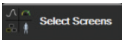
Figure 9



- Step 12: Touch the start monitoring icon on the navigation bar or on set up help screen to begin monitoring

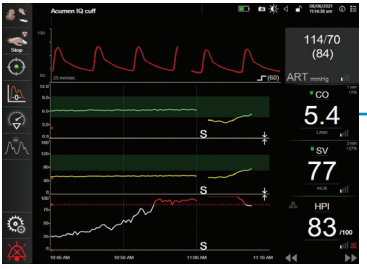
- Step 13: Touch the home icon 
to return to the main monitoring screen

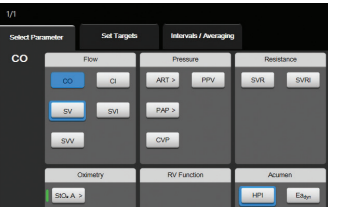
HemoSphere advanced monitoring platform: System navigation

- Step 1: Touch the settings icon and choose “Select Screens” tab 

to select the desired monitoring screen view

- Step 2: Parameter tiles are located on the right side of the monitoring screen. To change the parameter, touch the displayed parameter label. The tile configuration menu will show the selected parameter highlighted in color. Available parameters appear on the screen without highlights; touch any parameter to select the replacement parameter





- Step 3: To adjust alarms/targets, touch the settings icon → advanced setup (advanced setup password: 55555555) → parameter settings → alarms and targets

- Step 4: If desired, HemoSphere advanced monitor outputs can be connected to a bedside monitor and a second pressure cable can be added *(see General Troubleshooting setup guide)*

ForeSight Tissue Oximetry System

Setup Guide

HemoSphere advanced monitor setup

Figure 1



1. Slide the HemoSphere monitor tissue oximetry module into the monitor.
2. Connect the ForeSight tissue oximetry module cable into the HemoSphere tissue oximetry module (Figure 1). *Note: ForeSight system module LED illuminates green when connected to port A, and blue when connected to port B.*
3. Select **Continue Same Patient** or **New Patient**, enter patient data. Select corresponding patient mode. *Note: Tissue oximetry works with invasive, minimally-invasive, and noninvasive modes.*
4. Touch the displayed parameter label located inside of any parameter tile to select StO_2 <Ch> as a key parameter.

Figure 2



ForeSight sensor setup

Note: Refer to HemoSphere monitor Operator's Manual, Table 13-2, for sensor selection guidelines based on patient monitoring mode, patient weight, and body location.

Figure 3



1. Open ForeSight sensor packaging and inspect for damage (Figure 2).
2. Clean patient's skin and ensure area is dry prior to sensor application.
3. Remove protective liner and apply sensors.
4. Connect sensors to ForeSight cable. Ensure each sensor is connected with a tactile click (Figure 3).

BD

ForeSight system

Sensor location setup

1. If StO_2 is not a current key parameter, touch the displayed parameter label located inside of any parameter tile to select StO_2 <Ch> as a key parameter from the Select Parameter tab of the tile configuration menu, where <Ch> is the sensor channel. The channel options are A1 and A2 for ForeSight system module A and B1 and B2 for ForeSight module B.
2. The channel will appear in the upper left corner of the parameter tile. Touch the patient figure (Figure 4a) to access Sensor Location tab.
3. Select the patient monitoring mode: adult  or pediatric 
4. Select the anatomical location of the sensor (Figure 4b)
5. Touch the home icon to return to the monitoring window.

Figure 4a **Figure 4b**

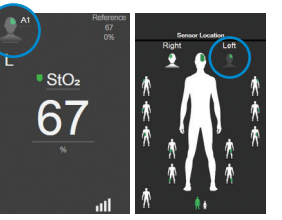
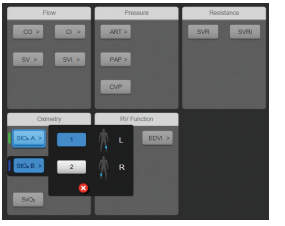


Figure 5





Parameter tile area **(Figure 6)**

1 **StO_2** reading displays current StO_2% level (a).

2 **Sensor Location** displays location and side of body sensor is placed (b).

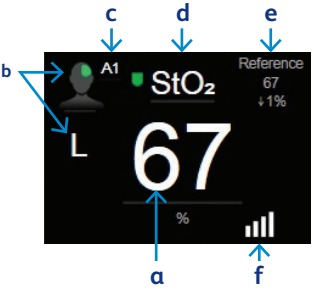
3 **Channel Location** displays which channel each sensor is connected (c).

4 **Parameter** displays which parameter is being monitored (d).

5 **Reference Value** displays the reference value from timepoint which menu selection is made (e).

6 **Signal Quality Indicator** displays the quality of the signal (f).

Figure 6



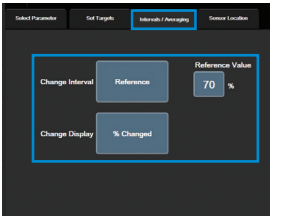
Display reference value

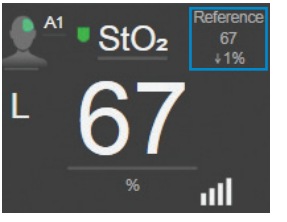
1 Select parameter tile, then select **Intervals/Averaging** tab (Figure 7).

2 Select **Change Interval** tab and select **Reference.**

3 Select **% Changed** or **Value Difference** in **Change Display** button.

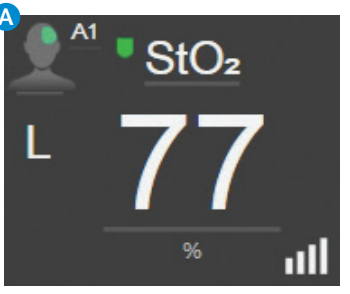
Figure 7





To display ΔctHb value or trend display

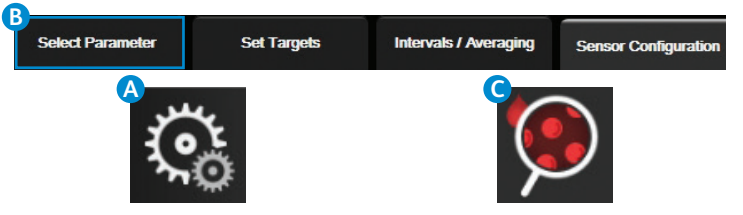
1 Touch anywhere in the StO_2 parameter tile A → sensor configuration tab B.
2 Toggle the ΔctHb trend or ΔctHb value or button from Off to On C.

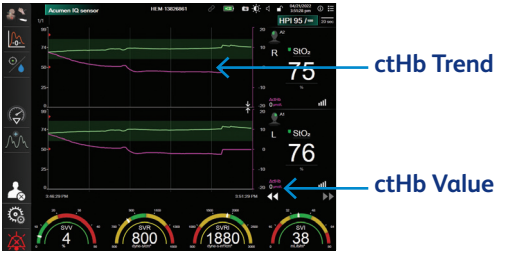




To reset ΔctHb baseline value

1 Touch the settings icon A → Clinical Tools tab B → ctHb Tools icon C.





2 Touch the reset ΔctHb button.

Skin check assessment

1. Select parameter tile, then select **Sensor Location** tab.
2. Select **Skin Check Reminder** button to choose a time interval between skin check notifications.
3. When performing skin check assessment lift the sensor to assess the skin integrity under the sensor.



CE 0123

Medical device for professional use. See instructions for use.
CE marked medical device.

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