Oximetry setup

1. Connect the HemoSphere oximetry cable to the left side of the HemoSphere advanced monitor (A).

2. Press the power button to turn on the HemoSphere advanced monitor. All functions are accessed through the touch screen.

3. Select Continue Same Patient or New Patient and enter new patient data (patient ID, gender, age, height, and weight).

4. Open side 1 of the oximetry catheter tray, exposing only the optical connector (B). Be careful not to contaminate tray contents in side 2.

5. Insert the optical connector of the catheter “TOP” side up into the oximetry cable and snap the enclosure shut (C).

6. The HemoSphere oximetry cable must be calibrated before each monitoring session.
**In vitro Calibration (if catheter has not been inserted yet)**

1. Touch the clinical actions icon > **Oximetry Calibration** icon.
2. Select **Oximetry Type: ScvO₂** or **SvO₂**.
3. Touch **In vitro Calibration** button.
4. Enter either the patient’s hemoglobin (HGB) or hematocrit (Hct) value. A default value may be used until the patient’s HGB or Hct is available.
5. Touch **Calibrate** button.
6. When the calibration successfully completes, the following message appears: **In vitro Calibration OK, insert catheter**.
7. Insert the catheter as described in the catheter instructions for use.
8. Touch **Start** button.
9. If ScvO₂/SvO₂ are not current key parameters, touch the displayed parameter label located outside of any parameter globe to select ScvO₂/SvO₂ as a key parameter from the parameter popup.
10. Touch within the ScvO₂/SvO₂ parameter globe to adjust Alarms/Targets.

**In vivo Calibration (performed after catheter has been inserted)**

1. Touch the clinical actions icon > **Oximetry Calibration** icon.
2. Select **Oximetry Type: ScvO₂** or **SvO₂**.
3. Touch **In vivo Calibration** button. If setup is unsuccessful, see Chapter 10: Help and Troubleshooting in the HemoSphere Advanced Monitor Operator’s Manual.
4. When baseline calibration is successful, touch **Draw** button and then draw the blood sample.
5. Draw the blood sample slowly and send the blood sample to the lab for measured analysis by co-oximeter.
6. Enter HGB or Hct and ScvO₂/SvO₂ when lab values are received.
7. Touch **Calibrate** button.
8. If ScvO₂/SvO₂ are not current key parameters, touch the displayed parameter label located outside of any parameter globe to select ScvO₂/SvO₂ as a key parameter from the parameter popup.
9. Touch within the ScvO₂/SvO₂ parameter globe to adjust Alarms/Targets.
Recall Oximetry Cable Data can be used to recall data from the oximetry cable after a patient has been transported away from the HemoSphere advanced monitor. This allows the patient’s last calibration to be recalled along with the patient’s demographic data for immediate oximetry monitoring. Calibration data within the oximetry cable must be less than 24 hours old to use this function.

1. With the catheter connected to the HemoSphere oximetry cable, unplug the cable from the HemoSphere advanced monitor and transport it with the patient. The catheter should not be disconnected from the oximetry cable.

2. If the oximetry cable is being connected to another HemoSphere advanced monitor, make sure that previous patient data is cleared.

3. Once the patient has been transferred, reconnect the oximetry cable to the HemoSphere advanced monitor and turn it on.

4. Touch the clinical actions icon > Oximetry Calibration icon.

5. Touch Recall Oximetry Cable Data button.

6. If the oximetry cable data is less than 24 hours old, touch Yes button to start oximetry monitoring using the recalled calibration information. OR Touch No button and perform an in vivo calibration.

7. From the oximetry calibration menu, touch In vivo Calibration button to recalibrate the cable. To review patient data that was transported with the oximetry cable, touch the settings icon.

8. Touch Patient Data button.
NOTE: Keep the time and date of all HemoSphere advanced monitors current. If the date and/or time of the HemoSphere advanced monitor being transported “from” differs from the HemoSphere advanced monitor being transported “to” the following message may appear:

“Patient data in oximetry cable more than 24 hours old – Recalibrate.”

If the system needs to be recalibrated, a 10 minute warm up period for the oximetry cable may be required.