



# NIRS MONITORING



## SETTING UP AND TOP TIPS

### APPLYING THE PROBE

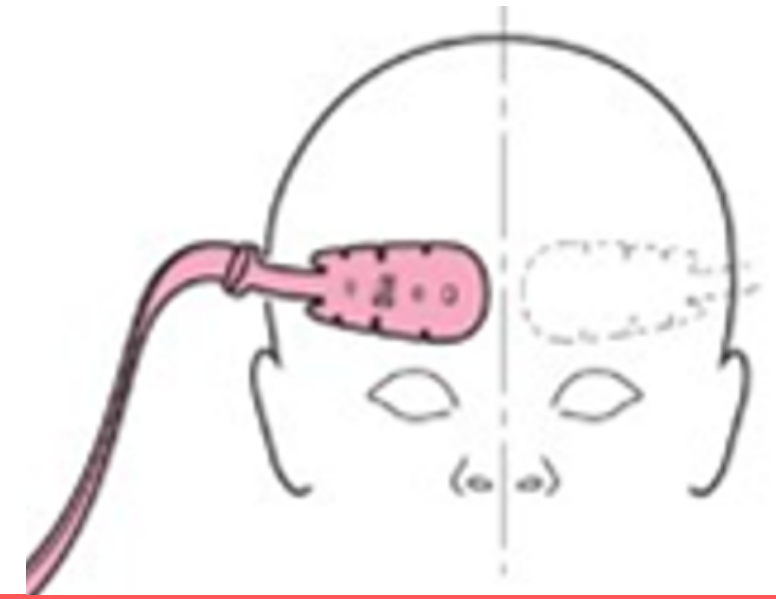
Apply 3M Cavillon non-sting barrier to skin.

Apply probe as show, aiming to place probe slightly to left or right of midline.

Ensure no tension on cable or baby's skin.

Plug in connector of sensor to O3 module:

- Port 1 for LEFT
- Port 2 for RIGHT



### SKIN CARE

- ✨ Use Cavilon before and Apeel to remove.
- ✨ Change probe position 12 hourly and use new probe 24 hourly.

### SETTING THE BASELINE AND ZEROING THE $\Delta$ Hb INDICES

This should be done after the probe has been applied.

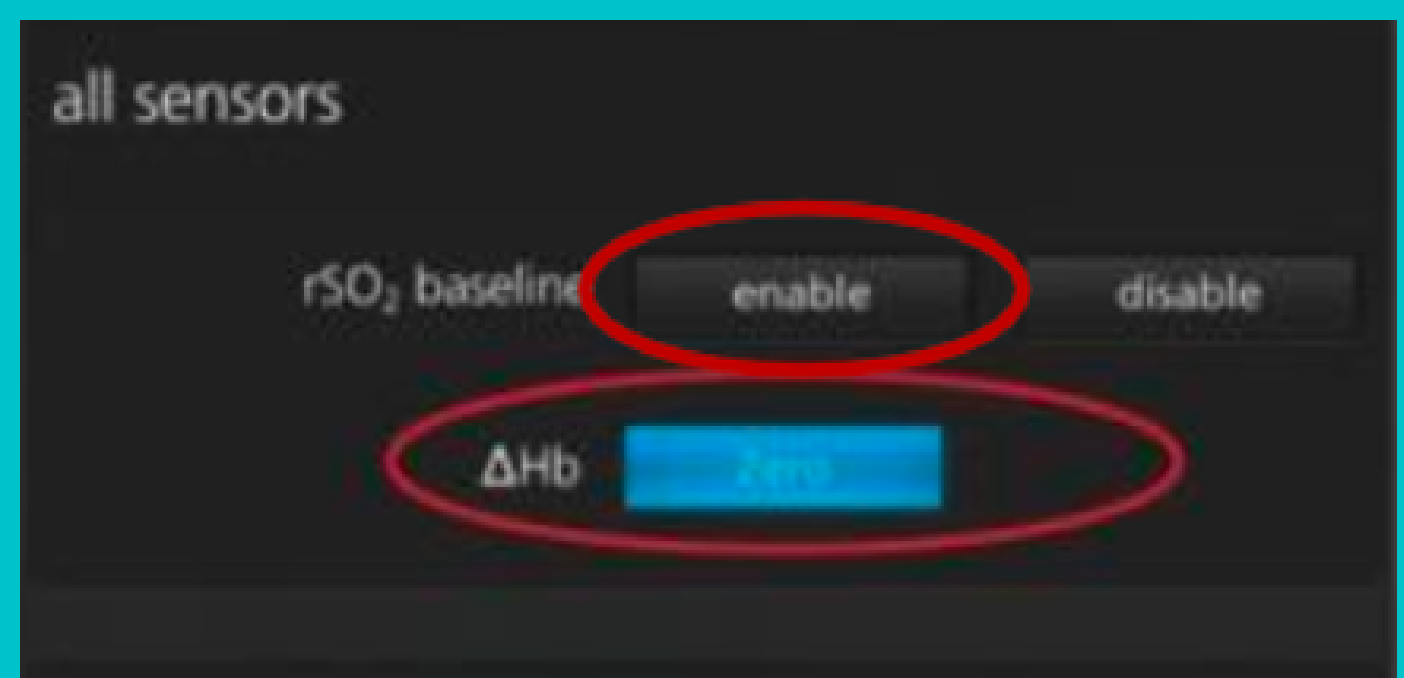
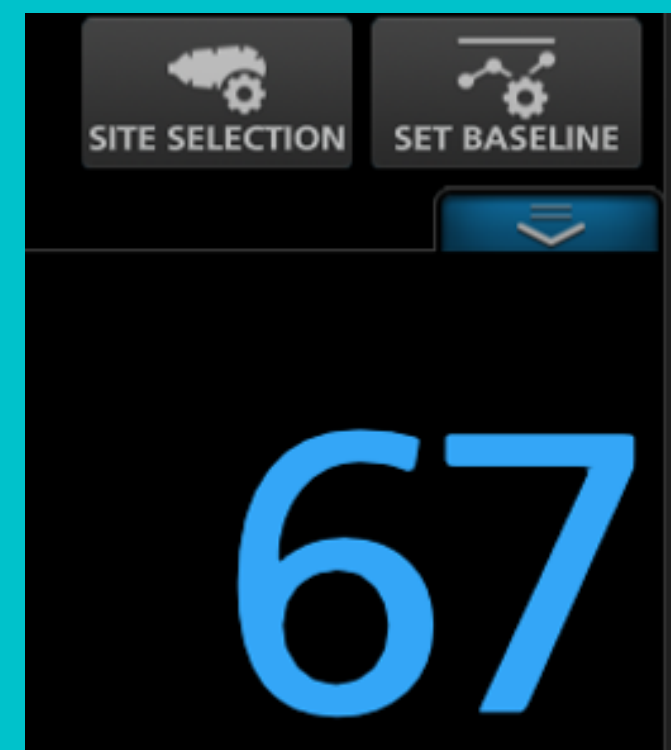
Step 1: Tap the drop down menu at the top right corner of the screen, and press "Set Baseline".

Step 2: Click on "enable" rSO<sub>2</sub> baseline and "Zero"  $\Delta$ Hb.

Step 3: Press "OK" at the bottom of the screen.

Step 4: Press the home button to return to the home screen

A green line will now appear, indicating patient baseline and  $\Delta$ Hb indices will be shown on the screen.



### TROUBLESHOOTING

✨ **Phototherapy can affect readings.**

- Try to ensure good contact between the probe and the skin.
- Covering the probe with a biliband or hat may help.





# NIRS MONITORING MEASUREMENTS



## CEREBRAL OXYGENATION

Cerebral Oxygenation (rSO2) reflects the balance between O2 delivery to the brain and O2 consumption by brain.

### REFERENCE RANGE

64-85%

### RECORDING

1 hourly

rSO2 in Badger "Basic Obs" form



### REFER TO ALGORITHM IN GUIDELINE IF...

Less than 64% or greater than 85% OR persistent rise or fall of >20% from baseline.

## △ HB INDICES

The Delta Hb indices show how much the total haemoglobin (cHbi), deoxygenated haemoglobin (HHbi) and oxygenated haemoglobin (O2Hbi) have changed since the haemoglobin indices were reset.

### REFERENCE RANGE

Not applicable.

### RECORDING

Documentation by nursing staff not needed. This will be downloaded at the end of the study.



This will only record if baseline set and △ Hbi is zeroed.

