PULSE OXIMETER

Working

1. Assemble all necessary equipment.
2. If saturation monitor probe is reusable, cleanse probe with alcohol, let it dry.
3. Connect the power cable to the electric socket and turn monitor on.
4. Apply probe to a site that is well perfused.
5. Ensure both sides of probe are directly opposite each other.
6. Secure probe in place. Avoid edematous, bruised sites and excessive pressure.
7. Set high and low alarm limits for saturation (2% above and below desired limits) and heart rate 100 to 160/min.
8. Set pulse and alarm volumes.
9. Check the waveform or the perfusion index, if available, for the accuracy of the signal.
10. Check for correlation of depicted heart rate on monitor and the actual heart rate by auscultation.
11. Document heart rate, respiratory rate, colour, oxygen saturation and FiO₂ hourly.
12. Observe and change site at least once per shift.

Precautions
- Do not allow excess ambient light to shine on the probe, if so cover the probe with an opaque material
- Do not tie the BP cuff proximal to the limb where the probe is fixed
- Do not place equipments generating electromagnetic signals in the vicinity
- Do not run the oximeter on battery alone if back up power is available

Disinfection
- Clean probe with spirit swab before every application
- Use soap and water to clean monitor
- Do not autoclave, pressure sterilize
- Do not use petroleum based, acetone or other harsh solutions
*Familiarize with the operator's manual

## Trouble shooting

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<th>Alarm</th>
<th>Possible cause</th>
<th>Corrective action</th>
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<tr>
<td>Ambient light</td>
<td>Excessive light on sensor</td>
<td>Relocate, cover with opaque paper /cloth</td>
</tr>
<tr>
<td>Check sensor</td>
<td>Motion, low perfusion, wrong position</td>
<td>Reposition, relocate</td>
</tr>
<tr>
<td>Interference detected</td>
<td>Erratic signal with electromagnetic waves in vicinity like tv, mobile ph.</td>
<td>Remove interference</td>
</tr>
<tr>
<td>Low battery</td>
<td>Low internal battery</td>
<td>Connect to AC power</td>
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<tr>
<td>Sensor failure</td>
<td>Broken cable, faulty photodiode, sensor damage</td>
<td>Replace sensor</td>
</tr>
<tr>
<td>System failure</td>
<td>Internal component failed</td>
<td>Unit needs service /change</td>
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