

1) SAFETY

What safety checks should be completed before the monitoring system is used?

General overview of system integrity, system is visually clean, all required accessories are available and suitable for patient group.
Check integrity of accessories, ensure mains AC clamp is securely in place at the back of the monitor and that mains power is on.

State how you would clean the monitor and cables between patient use?

Adhere to the Operators Manual for advice on cleaning agents.
Follow hospital policy but with an awareness that agents utilised by the hospital may cause damage to the monitors over time.

2) PATIENT ADMISSION AND DISCHARGE

How do you admit a patient and enter their details?

Select **[Patient Setup]** quick key, enter patient details in the **[Patient Demographics]** menu.
Ensure you select the correct **[Patient Category]** toggling from [ADU] and [PED]. Select **[Ok]** when complete.

How do you access and edit patient details?

Either tap on the blank patient area on the top left hand corner of the touch screen, the **[Patient Demographic]** window appears.
Enter patient details and select **[OK]**
OR
Select **[Patient Setup]** quick key, enter patient details in the **[Patient Demographics]** menu and select **[OK]**.

How do you discharge a patient and why is it good practise to do so?

Select the **[Patient Setup]** quick key, Select **[Discharge Patient]**. In the pop up menu, select **[Standby]** then Ok.
Discharging your patient ensures the monitor is able to reset the configuration settings and all previous patient data is removed from your current display screen. Appropriately admitting and discharging patient's means that there exists a start and end point to data collection for each patient. This ensures one is able to confidently access the correct patient's data based on the ID information provided and if necessary interrogate the data stored in the hard drive by the central station.

3) SpO2 MONITORING

Why is the Perfusion Index important?

It is an indicator Peripheral perfusion by determining pulse strength at the sensor site and therefore the reliability of the SpO2 reading.
The range is from 0.02%, indicating a very weak pulse to 20% for a very strong pulse. The PI will vary considerably depending on the patient's physiological status and selected sensor site.

What action would you take if the displayed Perfusion Index is **0.2**?

A low PI of 0.2% indicating that the pulse is weak. The SpO2 numeric displayed may not be a reliable reading.
Clinical staff is advised to re assess their patient, re site the pulse SpO2 sensor, and complete actions dictated by departmental policy and procedure for further investigation as required.

4) ECG MONITORING

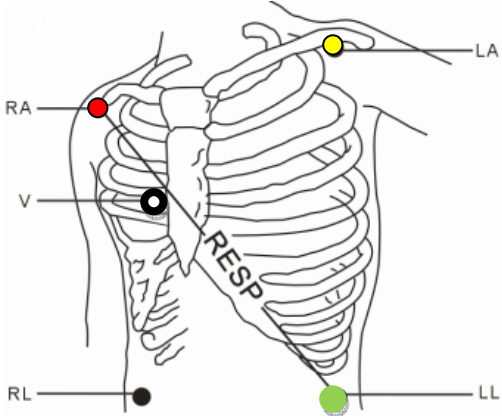
How would you prepare your patient's skin for ECG electrode placement?

To minimise skin to electrode impedance and with the verbal consent of the patient, remove hair from intended application site by trimming or shaving the area (as stated in Trust Policy). Taking care not to irritate the skin, gently exfoliate site with a gentle abrasive (dry gauze swab or proprietary abrasive tape) in order to remove dead skin cells. Clean site with a mild soap solution and ensure the skin is completely dry before applying electrodes. Care should be taken especially when a patient has sensitive or broken skin.
Adhere to hospital clinical guidelines.

What checks should take place prior to using the ECG electrodes?

Check integrity of packaging and ensure this is within the 'use by' date. If packaging has been previously opened, ensure the gel has not dried on the ECG electrode, if so, discard and open a new pack.

Identify landmarks for 5 lead ECG Electrode placement.



RED = Right Arm
Place directly below the clavicle and near the right shoulder

WHITE = Precordial
Place at the 4th intercostal space at right sternal border

BLACK = Right Leg
Place on a non muscular* surface on the lower edge of the right ribcage

YELLOW = Left Arm
Place directly below the clavicle and near the left shoulder

GREEN = Left Leg
Place on a non muscular* surface on the lower edge of the right ribcage

Describe how you apply ECG electrodes and how often they should be replaced.

When using 'snap wires', attach the wires to the electrode before placing on the patient and apply the electrode by pressing around the adhesion frame. Avoid pressing the centre of the electrode as this may result in unnecessary discomfort to the patient and cause a spread of the contact gel across the adhesive (preventing the electrode sticking properly) or air pockets beneath the electrode (contributing to ECG noise)

Avoid Muscle, bony prominences or fatty areas where possible in order to minimise motion artefact.

If movement artefact is detected, contact gel appears to have dried and /or skin contact is poor. Always refer to manufacturer's instructions and guidelines in conjunction with your Trust and / or Local policy.

Store electrodes in their packaging and ensure the packaging is sealed in between use. This is to prevent electrodes drying out.

5) NON INVASIVE BLOOD PRESSURE

How would you select an NIBP interval of 10 minutes?

Select **[NIBP Measure]** quick key. From the window, select desired interval. The monitor will start the NIBP recording and cycle.

6) REVIEWING PATIENT DATA

Why would you use the manual event quick key?

To force the monitor to take a 'snapshot' of data. This will occur automatically during any alarm violation.

How do you view the graphical data associated with the manual event?

Select the **[Review]** quick key, select the **[Events]** tab located at the top of the displayed window. Select the event to be viewed and press **[Details]**. A 16 second snapshot is available. Use the arrows within this window to navigate through the data.

How do you display the tabular trends and change the data interval to 1 minute?

Select **[Review]** quick key. Select **[Tabular Trends]** located at the top of the displayed window. The Tabular Trends window appears. At the bottom of this window select the box located above **[Interval]** and changed the displayed interval to '1 minute'

7) ALARMS

How do you set your alarm limits?

Select the **[Alarm Setup]** quick key. The Alarm Setup window appears. Select the numeric to be changed and toggle using the arrows of the navigation dial. Press **[X]** to confirm.

What would you do to lower the Spo2 alarm limit below 80%?

Firstly lower the **[Desat]** level to allow you to step down the **[Low SpO2]** limit.

What does the “Silence” key do?

Silences an individual alarm condition or group of concurrent alarm conditions for the period of time that the alarm condition remains violated. One remains aware of the continuing alarm condition because the Parameter numeric and alarm limits continue to flash and the alarm message remains on display (although a ‘√’ appears on the left hand side of the alarm message and the alarm silence icon appears centre and top of the screen).

What does the “Alarm Pause” key do?

Suspends **ALL** alarm conditions for a period of 2 minutes. All visual and audible notifications of the alarm condition occurring cease, although the alarm pause icon appears centre and top of the screen.
Re select this key to return all alarm alerts.

8) GENERAL OPERATION

How do you load configurations on the iPM?

Select **[Load Config]** quick key. A configuration window appears. Ignore **[Default]** configurations.
Select the appropriate config for your dept and select **[Load]**.

How do you set Privacy mode and where do the alarm conditions sound?

Select the **[Privacy]** quick key OR **[Main Menu] – [Screen Setup] – [Privacy Mode]**.
The screen turns blank and the following message is displayed:

‘ Under Monitoring. Press any key to exit the privacy mode’

Monitoring and data storing continue but the patient data is only visible at the central station.

Alarms can still be triggered, but all audible alarms are suppressed and the alarm lamp is deactivated at the bedside monitor.

All system sounds are suppressed, including heart beat tone, pulse tone, prompt tones etc.

The touch screen is automatically locked.

Press any key to exit the privacy mode. The monitor exits privacy mode automatically if the patient monitor disconnects from the central station.

Describe how to set up the Night Mode.

Select the **[Night Mode]** Quick Key OR **[Main Menu] – [Screen Setup] – [Night Mode]**.

In the pop-up menu, set the desired brightness, alarm volume, QRS volume, key volume, whether to stop NIBP measurement or not.

When **[Stop NIBP]** is selected, all the NIBP measurements terminate after entering the night mode.

Select the **[Enter Night Mode]** button.

To cancel the night mode : Select the **[Night Mode]** Quick key OR **[Main Menu] – [Screen Setup] – [Night Mode]**. Select **[OK]** in the pop-up menu.

How do you operate the 12 lead function?

In the ECG setup window, select ECG lead set to 12 lead. Select the **[Screens]** Quick Key – **[ECG 12 Lead Full Screen]**.

12 ECG waves and 1 rhythm wave will be displayed on the screen. To commence interpretation of the 12 lead, wait at least 11 seconds after entering the 12 Lead ECG screen. Select **[Freeze]** and the **[analyse]**. The Analysed data window appears. Select **[Print Report]** to print out the interpretation of the resting 12 lead ECG.

Why would you put the monitor in ‘Standby’?

When a patient has been removed from the monitor for a short period of time and will return to monitoring. The standby mode will prevent nuisance alarms sounding at this point.

9) NOTES