iPM 8/10/12
User Guide

SAFETY

Safety Checks
- 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 lead is plugged in and that mains power is on

Disabling the touchscreen
- Press and hold the **Main Menu** quick key for approximately 3 seconds. A padlock symbol 🔒 displays on the main menu quick key if the touchscreen is disabled
- To re-enable the touchscreen, press and hold the **Main Menu** quick key again

Cleaning
- 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 monitor over time

Please Note: Some items that connect to the system are single patient use

BASIC OPERATION

Functions of the LED's, hard keys and rotary knob

1 2 3   4   5   6   7   8   9   10

1. **AC power LED** Illuminates when connected to mains power
2. **On / Off Key**
3. **Battery LED** Illuminates when battery is installed and connected to mains power. Flashes when disconnected from mains power
4. **Alarm Reset Key** Press to silence current alarm conditions
5. **Alarm Pause Key** Press to pause all alarms for a pre-set length of time or restore all alarms
6. **Freeze Key** Press to freeze or unfreeze currently displayed waveforms
7. **Recorder Key** Press to start or stop paper recording
8. **NIBP Key** Press to start or stop NIBP measurements
9. **Main Menu Key** Press to enter or exit the main menu
10. **Rotary Knob** Rotate the knob clockwise or anti- clockwise and press to select

These guidelines do **NOT** replace the instructions for use and all users should refer to the appropriate **Operator's Manual** for detailed instructions.
The Illustrations may not necessarily reflect the setup or data displayed on your device.

PATIENT ADMISSION & DISCHARGE

Admitting a patient
- **Patient Setup** quick key → **Admit patient**

OR
- **Main Menu** quick key → **Patient Setup** → **Admit Patient** → **OK**
- If the Discharge Patient button appears dimmed or is not available, directly select Admit Patient and then select:
  - **Yes** to apply the data saved in the patient monitor to the new patient

OR
  - **No** to clear the data saved in the patient monitor

- Enter patient details in the **Patient Demographics** window

Please Note: Ensure the correct Patient Category (ADU, PED or NEO) and Paced status is selected

- Select **Ok** when complete

Accessing & editing patient information
- Select the **Patent Information Area** on the top left hand corner of the touch screen
- Within the **Patient Demographic** window, enter patient details → **OK**

Discharging a patient
- **Patient Setup** quick key → **Discharge Patient** → **Standby** → **Ok**

OR
- **Main Menu** quick key → **Patient Setup** → **Discharge Patient** → **Standby** → **OK**
- Discharging a patient clears all history data in the monitor

SpO₂

Selection and application of the SpO2 Sensor
- Different sensors are available for finger and earlobe placement, and as reusable / single patient use
- Sensor selection should depend on the weight range of the patient (see sensor packaging)
- The finger sensor should be fitted with the finger diagram uppermost
- Incorrect sensor placement can result in less than optimum measurements

Perfusion Index (PI)
- This is the numerical value for the pulsatile portion of the measured signal caused by arterial pulsation
- PI is an indicator of pulsatile strength, and is also used to assess the quality of an SpO_2 measurement

  - Above 1 is optimal
  - Between 0.3 and 1 is acceptable (displays with a yellow background)
  - Below 0.3 indicates low perfusion (displays with a red background)
    Reposition the SpO_2 sensor or find a better sensor location. If low perfusion persists, choose another method of measuring oxygen saturation if possible

Low PI value

- This example displays a low PI of 0.2 indicating that the pulse is weak
- The PI value highlighted in RED offers a visual indicator of the PI status
- A '**?**' is displayed, as a further visual indication that the measurement may be unreliable

Selection and application of the NIBP Cuff

- Select an appropriately sized cuff by referring to the limb circumference marked on the cuff
- Apply the cuff to the patient's upper arm or leg, ensuring the ⓘ marking on the cuff matches the artery location
- The cuff should fit snuggly, but with enough room for two fingers to be placed between the cuff and the patient's limb (on adults) and loosely on neonates with little or no air present within the cuff
- Do not use NIBP cuff on limb with an Intravenous Infusion or arterial catheter in place
- The middle of the NIBP cuff should be in line with the right atrium of the heart
- An incorrect cuff size may give inaccurate readings

Starting & stopping NIBP measurements

- Start and stop NIBP measurement by selecting one of the options below:

Task	By Quick Key	From NIBP menu
Start a manual measurement	**NIBP Start/Stop** quick key	**Start NIBP** button
Start auto NIBP series	**NIBP Start/Stop** quick key	**Setup** tab → set **Interval** → **Start NIBP** button
	NIBP Measure quick key	
Start sequence NIBP measurement	**NIBP Measure** quick key → **Sequence**	**Sequence** tab → set NIBP sequence →**Start NIBP** button
Start STAT measurement	**NIBP STAT** quick key	**STAT** button
	NIBP Measure quick key → STAT	
Stop the current NIBP measurements	**NIBP Start/Stop** quick key	**Stop NIBP** button
End auto NIBP series	**Stop All** quick key	**Stop All** button
Stop STAT measurement and end series	**NIBP Start/Stop** quick key	**Stop NIBP** or **Stop All** button
	NIBP STAT quick key	

Changing invasive blood pressure labels

- Select the IBP numeric area or waveform area to enter the corresponding pressure menu → **Setup** → Set **IBP1** or **IBP2** Label

Please Note: The pressure label is a unique identifier for each type of pressure, therefore, you should select a proper pressure label for the source of the pressure you want to monitor

Zeroing pressures

Zero the transducer by one of the following methods:

- Press the **Zero** hard key on the module
- Select the numeric area (such as the Art numeric area), and then select **Zero** option
- Select the **IBP Zero** quick key

Please Note: After the zero calibration is completed, close the three-way valve to the air and open to the patient. Ensure that the valve cap is reconnected as the final operation

CO₂ measure & standby modes

- Press the **Measure** / **Standby** hard key on the CO₂ / Anaesthetic Gas module.
- Select the CO₂ numeric area or waveform area to enter the CO₂ / AG menu → **Setup** → Set **Operating Mode** to **Measure** / **Standby**

REVIEWING PATIENT DATA

Triggering & reviewing a manual event
- You can initiate a manual event by selecting the **Manual Event** quick key

OR

- **Main Menu** quick key → **Mark Event** → Select the waves to be saved → **Trigger Manual event**

- Manually triggered events can be viewed via the **Review** quick key → **Events**
- Select the event to be viewed → **Details**

- The monitor stores events in real time, including technical alarm events, physiological alarm events, manual events and operational events

- When an event occurs, up to 16 seconds of data prior to, and following the event, are stored

- You can select ◀ ▶ to navigate through the waveforms

Displaying tabular trends & changing the viewable data interval
- **Review** quick key → **Tabular Trends**
- Select **Interval** option at the bottom of the **Tabular Trends** review window

Setting alarm limits

- **Alarm Setup** quick key

OR

- **Main Menu** quick key → **Alarm Setup**

OR

- Individual alarm settings can also be accessed from each parameter menu

Alarm Reset

- The alarm sound is silenced
- A √ appears before the alarm message, indicating that the alarm is acknowledged
- The **Alarm Reset** symbol appears in the alarm symbol area and the parameter numeric and alarm limits flash

Alarm Pause

- **Alarm Pause** quick key will temporarily disable all alarm indicators for a pre-set length of time

- No alarm lamps flash, no alarms are sounded, no numeric and alarm limits flash, and no messages are displayed
- The remaining alarm pause time is displayed in the physiological alarm information area
- The alarm pause symbol is displayed in the system information area

GENERAL OPERATION

Loading configurations

Changes can be made to some settings during operation. However, these changes or the pre-selected configuration may not be appropriate for the newly admitted patient. Therefore, the monitor allows you to load a specific configuration

To load a configuration, follow this procedure:

- **Load Config** quick key → Select the desired configuration → **Load** → **Yes**

OR

- **Main Menu** quick key → **Load Configuration** → Select the desired configuration → **Load** → **Yes**

Night Mode

This is a clinical monitoring mode which allows you to avoid disturbing the patient by enabling the user to preset specific volume and screen brightness levels

- **Night Mode** quick key → Adjust settings as required → **Enter Night Mode**

OR

- **Main Menu** quick key → **Screen Setup** → **Night Mode** → Adjust settings as required → **Enter Night Mode**

To cancel night mode

- **Exit Night Mode** quick key → **Ok**
- **Main Menu** quick key → **Screen Setup** → **Night Mode** → **Ok**

Standby Mode

Temporarily stops patient monitoring without shutting down the monitor by entering standby mode

- **Standby** quick key → **Yes**

In standby mode, the monitor behaves as follows:

- All parameter measurements are suspended
- All alarm and prompt messages are suspended, except for the battery low alarm
- Screen brightness is reduced

To exit standby mode, choose one of the following:

- Press any key
- Press the touchscreen to exit the standby mode and resume monitoring the current patient