

# mindray

#### 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 editor displays within the main menu quick key if the touchscreen is disabled
- When the touchscreen is locked, powering off the monitor and restarting it will automatically unlock the touchscreen
- 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**



## **BASIC OPERATION continued**

#### Enter standby mode

- When no parameters are being measured, you can press the power switch or to enter Standby mode
- A warning message will appear. Select Yes to enter the Standby mode
- When the monitor is powered by a battery, it will automatically enter the Standby mode when the following conditions are satisfied:
  - No key operation within 10 minutes
  - No unacknowledged alarms

#### Exit standby mode

- Press any hard key on the front panel
- Rotate the navigation dial / rotary knob
- Connect SpO<sub>2</sub> sensor, and let the monitor receive SpO<sub>2</sub> data for more than 5 seconds

Please Note: In standby mode, monitoring for the current patient ceases, but the monitor is still active. If the monitor enters and then exits standby mode during patient monitoring, the patient needs to be readmitted.

# PATIENT ADMISSION & DISCHARGE

#### Admitting a patient

- Select the Admit Patient (+) hard key to access the Patient Demographics menu
- Complete the patient details  $\rightarrow$  select **OK**

If the monitor is connected to ADT server, when you input patient MRN, the monitor performs as follows:

- If a matching patient MRN is found in the ADT server, the monitor will automatically populate the **Patient Demographics** fields according to the patient data stored in the ADT server
- If no matching patient MRN is found in the ADT server, the following message will display
  'Failed to obtain patient information'

Patient Category	Adu		
MRN	12		
Last Name	Brown		
First Name	Jack		
Bed No.	1		
Gender	Male		
DOB (yyyy-mm-dd)	1963 - 4	1	
Obta	ain Patient Inform	nation >>	

 The patient will be admitted to the monitor, patient name and MRN (if completed) will be displayed in the upper left hand corner of the monitoring screen.

Depending on settings, the department configuration will be automatically loaded.

- Ensure the correct Patient Category ADU, PED or NEO is selected
- Press Ok when complete

## SpO<sub>2</sub>

## 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)

## lex (PI) PI 0.2

This is the numerical value for the pulsatile portion of the measured signal caused by arterial pulsation
 Plus an indicator of pulsatile strength and is also used to assess the quality of an SpQ measurement

- PI is an indicator of pulsatile strength, and is also used to assess the quality of an SpO<sub>2</sub> measurement
  - Above 1 is optimal
  - Between 0.3 and 1 is acceptable
  - Below 0.3 indicates low perfusion Reposition the SpO<sub>2</sub> sensor or find a better sensor location. If low perfusion persists, choose another method of measuring oxygen saturation if possible

## NIBP

## 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 **①** 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 the **NIBP Start/Stop** (S) hard key
- Select **NIBP Setup** menu  $\rightarrow$  NIBP interval time  $\rightarrow$  **Start NIBP** key to start the measurement interval



# CO<sub>2</sub> measure & standby modes



 Select the CO₂ numeric area or waveform area to enter the CO₂ → Setup → Set Operating Mode to Measure / Standby

## **CLINICAL SCORING**

#### **Entering the NEWS 2 screen**

You can calculate a score in the scoring screen or in the score tile

• Select the **Scoring** quick key to enter the scoring screen

#### **Calculating a Score**

To calculate a score, follow this procedure:

- Select the default scoring or load a scoring for the applicable patient category
- Obtain the value of all parameters, and then total score will be automatically calculated
- If necessary, record the scoring data



- 1. Icon for manual input manually input the parameter
- 2. Score for single parameter
- 3. Icon for real-time monitoring The parameter value is from the monitor
- 4. Recommended clinical response
- 5. The latest scoring result

#### **Obtaining total Scoring**

The total score will automatically be calculated when each required parameter tile has a value

To calculate a score, follow this procedure:

- Start monitoring parameters. Their values are automatically obtained and displayed
- Manually input the values for the parameters that are not monitored
- For **NEWS2**, set the SpO2 Scale
  - **Scale 1:** for patients without hypercapnic respiratory failure
  - Scale 2: for patients with a prescribed oxygen saturation requirement of 88–92% (for example, in patients with hypercapnic respiratory failure).
- Select Save the results data

Please Note: The scores and clinical responses in the clinical scores are for reference and cannot be used alone for diagnostic interpretation

## **REVIEWING PATIENT DATA**

#### **Reviewing patient data**

Select Review quick key in order to review the trends

In **Monitor Mode**, you can view:

- Spot check trends
- Continuous trends
- Graphic trends
- Scoring review



In Spot Check mode you can review the Spot Check Trends and Score Review

Spot Check Trends x Parameter value trigger: MRN AI AI Filter High level alarm has a red background . MRN Time Medium or Low level alarm has a yellow background 38/2 20 3972 University 08:57:48 Data Status 1/536 ٠ Edit < 1/2 > ٠ Delete Print Send Data Status The required patient demographics that is not fully filled display as  $^{\textcircled{2}}$ • Patient data successfully sent to the EMR displays as 💟 • Patient data that failed to transmit to the EMR displays as  $^{\bigotimes}$ Patient data that is cached on the device but not transmitted displays as 🕜

## ALARMS



# **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. The monitor allows you to load a specific configuration

To load a configuration, follow this procedure:

• Select the Menu quick key  $\rightarrow$  Load Configuration  $\rightarrow$  Select the desired configuration  $\rightarrow$  Load  $\rightarrow$  OK