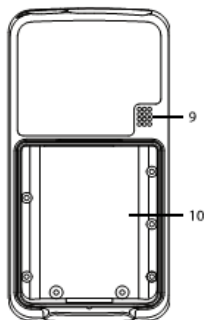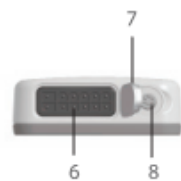# BeneVision TM80
User Guide

mindray

SAFETY

Safety checks
- Before putting the system into operation, the operator must verify that the TM80 Telemetry Monitor, connecting cables and accessories are in correct working order and operating condition
- Do not use patient or accessory cables and sensors if prior visual inspection reveals cable damage or the presence of liquid, lint or dust

Cleaning
- Before cleaning the TM80, install the lithium-ion battery or AA battery tray into the battery compartment and close the battery compartment door. Insert the SpO_2 cap into the SpO_2 connector when SpO_2 is not in 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 monitor over time
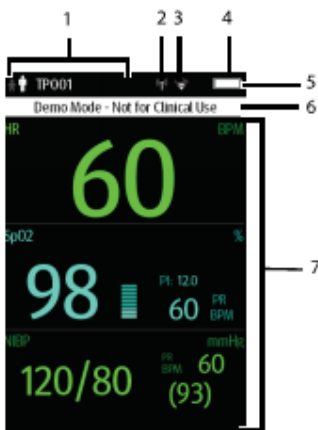
PHYSICAL VIEW

1. **Display Activation (Power On/Off) button**

2. **Nurse Call button** (if configured)
   Press this button to activate a nurse call request at the Central Station
   To acknowledge the nurse call alarm, press **Attendant Present** in the main menu of the TM80 Telemetry Monitor

3. **Main menu button**
   Press this button to open the main menu, return to the main screen, turn the display on, or display the **Screen Locked** menu

4. **Display**
   Touchscreen display for viewing patient information and adjusting patient settings

5. **Patient alarm light indicator**

6. **ECG lead connector**

7. **SpO_2 cap**

8. **SpO_2 connector**

9. **Speaker**

10. **Battery compartment**
    Contains the lithium-ion battery or AA battery tray

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.

POWERING ON

- When the rechargeable lithium-ion battery or AA battery tray is properly inserted into the compartment, the TM80 will automatically be powered on
- The alarm light will momentarily illuminate cyan to indicate that the equipment is starting
- The TM80 performs a self-test during start-up. An audible beep sounds, and the alarm light flashes red, yellow, and cyan, and then turns off. This indicates that the alarm system is functioning correctly
- When the TM80 has a rechargeable lithium-ion battery or AA battery tray installed, and is powered off, press ⬤ to turn the TM80 on

DISPLAY SCREEN & GENERAL NAVIGATION

1. **Patient information area**
   This area shows the patient information such as patient category, device name, and department. Tapping this area displays the **Patient Info** menu

2. **MPAN indicator**
   Indicates that the TM80 is not paired with the BP10

   Indicates that the TM80 is paired with the BP10 successfully or configuration transfer of the TM80 is in progress

3. **Wi-Fi symbol**
   Indicates that the TM80 has been connected to the Wi-Fi access point and the signal coverage is very good. A decrease in visible arcs indicates a reduction in signal strength

   Indicates that the TM80 is not connected to the Wi-Fi access point

4. **Alarm symbols**
   Indicates that the alarm system is reset

   Indicates that the technical alarm audio is turned off

5. **Battery symbol**
   This symbol indicates the battery charge status. The white part indicates the remaining battery charge

6. **Prompt message area**
   This area shows technical alarm messages and informational messages. When there are multiple messages, the messages scroll

7. **Patient data area**
   This user configurable area can display parameter/waveform data. The parameter/waveform is labelled in the upper left corner. Tap this area to display the Setup menu for the corresponding parameter/waveform

Swipe for more data

SCREEN DISPLAY STATUS

TM80 display on:
- Parameters and waveforms will be displayed on the screen
- If an alarm condition occurs, both audible and visual alarm indicators will be given locally, at the TM80 and at the Central Monitoring Station, if network connected
- If the TM80 is not connected to the Central Monitoring Station, the **No CMS** message will display in the prompt area of the TM80 display

TM80 display off:
- No audible or visual alarm indicators are given. Press ⊙ or ⊟ to turn on the display and enter the monitoring mode
- Regardless of the display status, all patient data is transmitted to the Central Monitoring Station
- If the TM80 is disconnected from the Central Monitoring Station, its display will be turned on automatically and the **No CMS** message will display in the prompt area of the TM80 display

QUICK KEY ACCESS

Swipe up from the bottom of the touch screen

Tap to enter Standby. Press ⊙ to exit Standby.

Tap to discharge a patient.

When the prompt message "Is This A New Patient?" appears, select **Yes** to admit a patient.

| Discharge Patient | Standby | Change Lead |
| Print | Mark Event | Alarm Reset |

Tap to print a strip.

Tap to silence an alarm for the duration of the alarm on the TM80 and the Central Station. Or

On the main menu of the TM80, tap **Alarm Reset** from the **Commands** section to silence an alarm.

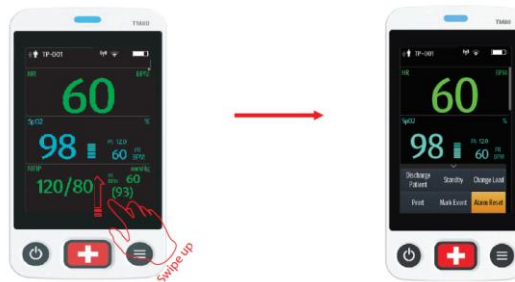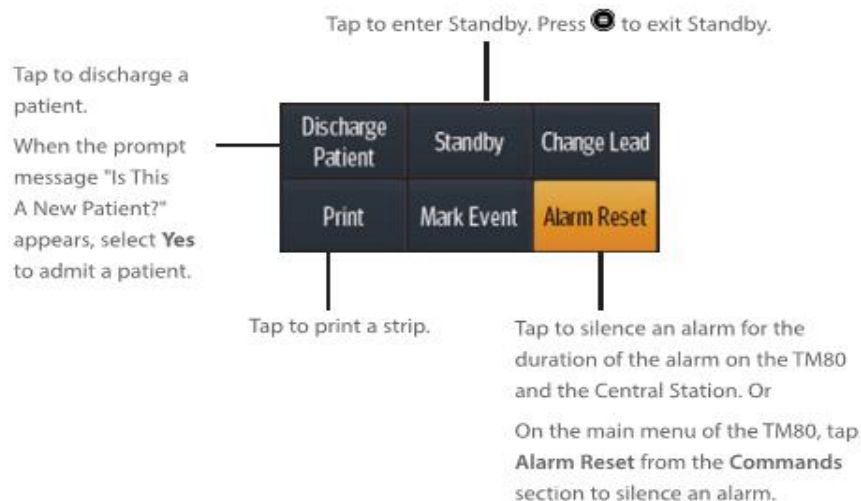**Please Note:** Quick keys are configurable. These images are just representative

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PATIENT ADMISSION & DISCHARGE

Admitting a patient
- After the TM80 is powered on, when the message **Is This A New Patient?** appears, select **Yes** to admit the patient
- Additional patient details can be entered at the Central Monitoring System

Please Note: Patient Category and Paced Status can be entered on the TM80 only

- Select the ⬛ Menu key
- Select **Patient Info**
- Adjust the **Patient Type** and /or **Paced** status
- Select ⬛ to exit

Discharging a Patient
- Discharge the patient by selecting **Discharge Patient** in the main menu and press **Yes** to confirm or restart the TM80

BATTERY LIFE

Display Off
- **5-lead ECG:** Three LR6 AA alkaline batteries ≥22 hours / Lithium-ion battery ≥40 hours
- **5-lead ECG & Mindray SpO$_2$:** Three LR6 AA alkaline batteries ≥18 hours / Lithium-ion battery ≥36 hours

Display On
- **5-lead ECG:** Lithium-ion battery ≥15 hours
- **5-lead ECG & Mindray SpO$_2$:** Lithium-ion battery ≥13 hours