# T1 PATIENT MONITOR

# Quick Reference Guide





Note: The T1 Quick Reference Guide is not intended as a replacement to the Operating Instructions. Prior to operating equipment, the user must be familiar with the Operating Instructions Manual contents. This document is a guideline only to be used as an aid to comprehensive Inservice Training.

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# PATIENT SETUP

#### Admit Patient and Enter Demographics (Manual Entry)

The Patient Setup menu allows the clinician to admit a patient and enter patient demographics. Admitting also restores default (preconfigured) settings and clears previous patient's information.

To enter demographics on the T1 monitor:

- a. Scroll and select **Patient Setup** >> from **Main Menu** (quick key)
- b. Select Admit Patient
- c. Select Ok to enter Patient Demographics
- d. Select white edit box to open field and enter patient information
- e. Enter patient's information using onscreen keyboard
- f. Select 🕂 to accept the information
- g. Select Ok to return to main display

**DPM Central Station Interface:** Entering demographic information on the DPM Central Station automatically enters it at the T1 bedside monitor. Entering demographic information on the T1 bedside monitor automatically enters it on the DPM Central Station. Admit button selection is required for patient information to be displayed or stored on the DPM Central Station.

Panorama Central Station Interface: Entering demographic information on the Panorama Central Station or WorkStation automatically enters it on the T1 bedside monitor. Entering demographic information on the T1 bedside monitor automatically enters it on the Panorama Central Station and WorkStation. Admit button selection is not required for patient information to be displayed or stored on the Panorama Central Station.

#### Enter Demographics (Hospital Information System Interface)\*

The Patient Setup menu allows the clinician to enter patient demographics from the Hospital Information System.

To enter demographics from the Hospital Information System on the T1 bedside monitor:

- a. Scroll and select **Patient Setup** >> from **Main Menu** (quick key)
- b. Select Patient Demographics

- c. Select Obtain Patient Info. >>
- d. Select **Department** and enter hospital department
- e. Select patient demographic field (Last Name and/or First Name and/or MRN)
- f. Enter patient's information using onscreen keyboard
- g. Select Query
- h. Select patient and select Import
- i. Select **Ok** to return to main display

\*Optional Installation Required

#### **Adjust Patient Size**

The Patient Setup menu allows the clinician to adjust patient size. To adjust patient size on the T1 monitor:

- a. Scroll and select **Patient Setup** >> from **Main Menu** (quick key)
- b. Select Patient Demographics
- c. Select Patient Cat.
- d. Select current size and adjust to Adu (adult), Ped (pediatric), or Neo (Neonate)
- e. Select **Ok** to return to main display

Note: Adjusting patient size restores the monitor to the default (preconfigured) settings but does not clear patient information or data.

**DPM Central Station:** Patient size can be changed on the DPM Central Station.

Panorama Central Station: Patient size cannot be changed on the Panorama Central Station.

#### **Discharge a Patient**

The Discharge function clears all patient information and restores default (preconfigured) settings.

To Discharge a patient on the T1 monitor:

- a. Scroll and select **Patient Setup** >> from **Main Menu** (quick key)

- b. Select Discharge Patient
- c. Select **Ok** to confirm

Note: After the patient is discharged, default (preconfigured) settings are

restored, and the monitor is placed into Standby.

**DPM Central Station Interface:** Discharging a patient on the T1 bedside monitor will automatically discharge the patient on DPM Central Station. Discharging the patient on the DPM Central Station will discharge the patient on the T1 bedside monitor.

**Panorama Central Station Interface:** Discharging a patient on the T1 bedside monitor will automatically discharge the patient on the Panorama Central Station, WorkStation, and ViewStation. Discharging the patient on the Panorama Central Station will automatically discharge the patient on the WorkStation, ViewStation, and T1 bedside monitor (optional, controlled by the Panorama).

# **STANDBY**

#### Enter Standby

The Standby function allows the clinician to suspend monitoring on a patient. While in standby, the patient is not monitored; however, all data and settings are preserved.

To place a patient into Standby on the T1 monitor:

- a. Select **Standby** from the **Main Menu** (quick key)
- b. Select Yes to confirm

# **Resume Monitoring**

To remove a patient from Standby and resume monitoring on the T1 monitor move the Lock/Unlock key to the right to resume monitoring.

**DPM Central Station Interface:** Selecting **Standby** on the T1 bedside monitor automatically places the DPM Central Station in standby.

Panorama Central Station Interface: Selecting Standby on the T1 bedside monitor automatically places the Panorama Central Station, WorkStation, and ViewStation in standby. Selecting Bedside and Panorama Standby on the Panorama Central Station or WorkStation automatically places the T1 bedside monitor and ViewStation in standby. On the T1 monitor, move the Lock/Unlock key to the right to remove patient from Standby and resume monitoring as a patient cannot be removed from Standby on the Panorama Central Station.

# PRINT

#### Realtime Waveforms (Laser printer connection required)

To print a real time report for a patient on the T1 monitor:

- a. Scroll and select **Print Setup** >> from **Main Menu** (quick key)
- b. Select Realtime Reports >>
- c. Select Normal Report tab
- d. Select Print
- e. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

#### **Adjust Printed Waveforms**

To adjust the waveforms printed for a patient on the T1 monitor:

- a. Scroll and select **Print Setup** >> from **Main Menu** (quick key)
- b. Select Realtime Reports >>
- c. Select Normal Report tab
- d. Select Select Wave >>
- e. A  $\sqrt{}$  in the waveform box indicates waveform is selected
- f. Select 🗙 to return to Normal Report and select Print
- g. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

**DPM Central Station Interface:** Selecting **Print** in the **Realtime Report** menu on the T1 bedside monitor will print a 10-second, Realtime Report on the DPM Central Station. The waveforms printed are determined by the T1 bedside monitor.

Panorama Central Station Interface: Selecting Print in the Realtime Report menu on the T1 bedside monitor will print a 10-second, All Strips Report on the Panorama Central Station. The waveforms printed are determined by the Print Setup tab on the Panorama Central Station. Waveform print selection on the Panorama Central Station, WorkStation, and ViewStation are independent.

# ECG

# Adjust ECG Lead

The T1 allows the clinician to adjust the leads being viewed on the main display. To adjust the ECG Lead on the T1 monitor:

a. Select ECG waveform or ECG numeric tile to enter the ECG Setup menu

Or

- a. Select **ECG Setup** >> from **Parameters** >> in **Main Menu** (quick key) to enter the **ECG Setup** menu
- b. Select Others >>
- c. Select Lead Set to select a lead set from the drop down list
- d. Select ECG to adjust lead (3 lead) or select ECG1 to adjust the first lead and ECG2 to adjust the second lead (5 lead)
- e. Scroll and select lead from the drop down menu
- f. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

**DPM Central Station Interface:** Adjusting ECG leads on the T1 bedside monitor and DPM Central Station are independent.

**Panorama Central Station Interface:** Adjusting ECG leads on the T1 bedside monitor, Panorama Central Station, WorkStation, and ViewStation are independent.

#### Enable Pacemaker Detection and Set Pacemaker Rate

The T1 allows the clinician to enable pacemaker detection. The symbol  $\mathbf{L}$  is displayed when the pacemaker detection is enabled.

To enable the pacemaker detection on the T1 monitor:

a. Select ECG waveform or ECG numeric tile to enter the ECG Setup menu

Or

- a. Select **ECG Setup** >> from **Parameters** >> in **Main Menu** (quick key) to enter the ECG Setup menu
- b. Scroll and select Others >>
- c. Select Paced to Yes
- d. Scroll and select Pacemaker Rate
- e. Adjust Pacemaker Rate using the up and down arrows
- f. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

**DPM Central Station Interface:** Pacemaker enhancement on the T1 bedside monitor and DPM Central Station are independent.

**Panorama Central Station Interface:** Pacemaker enhancement on the T1 bedside monitor, Panorama Central Station, WorkStation, and ViewStation are independent.

# Initiate ECG Relearn (Arrhythmia Option Required)

To initiate ECG relearning manually on the T1 monitor:

a. Select ECG waveform or ECG numeric tile to enter the ECG Setup menu

Or

- a. Select **ECG Setup** >> from **Parameters** >> in **Main Menu** (quick key) to enter the ECG Setup menu
- b. Scroll and select Relearn
- c. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

# Initiate ST Analysis (ST Option Required)

To initiate ST analysis on the T1 monitor:

a. Select ECG waveform or ECG numeric tile to enter the ECG Setup menu

Or

- a. Select **ECG Setup** >> from **Parameters** >> in **Main Menu** (quick key) to enter the ECG Setup menu
- b. Scroll and select ST Analysis >>
- c. Select ON for ST analysis
- d. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

#### NIBP

#### Factors that Affect Blood Pressure Measurement Accuracy:

The accuracy of non-invasive blood pressure (BP) measurement has been shown to be affected by numerous factors. Some of the more important aspects (based on published literature) to consider while measuring BP are:

- The cuff should fit snugly, but with enough room for two fingers to be placed between the cuff and the patient's arm (on adults), and loosely on neonates with little or no air present within the cuff.
- Use the Guidance Table provided to select the proper size cuff. Too small a cuff has been shown to result in the overestimation

of BP (systolic and diastolic) while too large a cuff results in the underestimation of BP. Errors in the 10 to 40 mmHg range can occur.

Ensure that the cuff is wrapped directly over the patient's skin. BP measurement could be 10 to 40 mmHg higher or lower than actual when the cuff is applied over clothing.

- The cuff should be applied so that the center of the bladder in the cuff is over the brachial artery. Use the reference marker for this.
- For best results, the cuff should be placed on the arm at heart level and the lower arm supported passively. Published data indicates that BP can increase about 2 mmHg for every inch that the cuff is below heart level and decrease by the same amount if above heart level.
- Avoid compression or restriction of the pressure hose. Do not place the NIBP cuff on a limb that is being utilized for any other medical procedure, for example, an I.V. catheter.
- Have the patient sit quietly for several minutes before BP measurement and remain still during measurement to avoid unnecessary motion artifact. If the patient has not rested before measurement, BP could be elevated by 10 to 20 mmHg.
- Do not talk to the patient during BP measurement as talking has been shown to result in a 10 to 15 mmHg overestimation of BP.
- The patient's back and feet should be properly supported with the legs kept uncrossed. Unsupported back and feet could increase BP by up to 15 mmHg, while crossed legs could result in a 4 to 12 mmHg increase.
- Other factors that have been shown to result in an overestimation of BP are labored breathing (5 to 8 mmHg), full bladder (10 to 15 mmHg), pain (10 to 30 mmHg).

Cuff Description	Limb Circumference
Child	10 - 19 cm
Small Adult	18 - 26 cm
Adult	25 - 35 cm
Large Adult	33 - 47 cm

#### **Guidance Table**

Cuff Description	Limb Circumference	
Thigh	46 - 66 cm	
Adult Long	25 - 35 cm	
Large Adult Long	33 - 47 cm	

#### **References:**

- American Association on Critical-Care Nurses (AACN): Practice Alert, Non-Invasive Blood Pressure Monitoring (April 2010)- http://www. aacn.org/wd/practice/docs/practicealerts/non-invasive-bp-monitoring. pdf?menu=aboutus
- 2. Pickering Thomas G, Hall John E, Appel Lawrence J, Falkner Bonita E, Graves John, Hill Martha N, Jones Daniel W, Kurtz Theodore, Sheps Sheldon G, Roccella Edward J. Recommendations for blood pressure measurement in humans and experimental animals: Part 1: Blood pressure measurement in humans: A statement for professionals from the Subcommittee of Professional and Public Education of the American Heart Association Council on High Blood Pressure Research. J Hypertens 2005; 45: 142-161.
- 3. O'Brien Eoin, Asmar Roland, Beilin Lawrie, Imai Yutaka, Mallion Jean-Michel, Mancia Giuseppe, Mengden Thomas, Myers Martin, Padfield Paul, Palatini Paolo, Parati Gianfranco, Pickering Thomas, Redon Josep, Staessen Jan, Stergiou George, Verdecchia Paolo. European Society of Hypertension recommendations for conventional, ambulatory and home blood pressure measurement. J Hypertens 2003; 21: 821-848.

#### Initiate a Non-Invasive Blood Pressure Measurement (NIBP)

To initiate a NIBP measurement for a patient on the T1 monitor:

- a. Select NIBP 💊 (quick key) on the main display
- Or
  - a. Select NIBP numeric tile to enter the NIBP Setup menu
  - b. Select Start NIBP
  - c. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

DPM Central Station Interface: Selecting Start NIBP Measurement on the

DPM Central Station will initiate a NIBP measurement on the T1 bedside monitor.

#### Set a Non-Invasive Blood Pressure Measurement Interval

The T1 allows the clinician to set an interval for a NIBP measurement to be obtained automatically. To set an automatic interval on the T1 monitor:

- a. Select NIBP numeric tile to enter the NIBP Setup
- b. Select Interval and adjust value using up and down arrows
- c. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

To stop *the current* NIBP measurement for a patient on the T1 monitor, select NIBP (quick key) on the main display.

**DPM Central Station Interface:** Selecting **Stop NIBP Measurement** on the DPM Central Station will stop a NIBP measurement on the T1 bedside monitor. To stop *all* NIBP measurements for a patient on the T1 monitor:

- a. Select NIBP numeric tile or select NIBP Setup >> from Parameters >> in Main Menu (quick key) to enter the NIBP Setup menu
- b. Select Stop All
- c. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

#### **INVASIVE BLOOD PRESSURES**

The T1 monitor allows a clinician to monitor up to 2 invasive blood pressures (IBP) simultaneously with the included Y-type IBP adapter cable. The T1 monitor allows the clinician to monitor one IBP with a direct IBP cable connection.

#### Adjust Invasive Blood Pressure Label

To adjust the label on an invasive blood pressure on the T1 monitor:

a. Select displayed invasive blood pressure waveform or IBP numeric tile to enter the invasive blood pressure Setup menu

Or

- a. Select the invasive blood pressure setup (i.e. ART Setup >>) from
  Parameters >> in Main Menu quick key) to enter the invasive blood pressure Setup menu
- b. Select IBP Label and adjust the label using the up and down arrow keys

c. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

# Zero Invasive Blood Pressure

To zero an invasive blood pressure transducer on the T1 monitor:

- a. Connect the invasive blood pressure cable to the invasive blood pressure transducer set
- b. Position transducer and open the invasive line in accordance with hospital policy
- c. Select displayed invasive blood pressure waveform or IBP numeric tile to enter the invasive blood pressure Setup menu
- d. Scroll and select Zero >> in the specific invasive blood pressure setup menu
- e. Select Zero
- f. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

# ALARMS

### **Adjust Alarm Limits**

The Alarm Setup tab allows the clinician to configure alarm limits and alarm responses on the T1 monitor.

To adjust a patient's alarm limit on the T1 monitor:

- a. Select parameter's waveform or numeric tile to open parameters Setup menu
- b. Select Alarm Setup >>
- c. Select High or Low limit value and adjust using the up and down arrows
- d. Select **Main Menu** (quick key) or 🗙 to return to the main display
- Or
  - a. Scroll and select Alarm Setup >> from Main Menu (quick key)
  - b. Select Parameters tab to change parameters or ST Alarm tab to change

ST

- c. Scroll and select the parameter
- d. Select High or Low limit value and adjust using the up and down arrows
- e. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

**DPM Central Station Interface:** Changing alarm limits on the DPM Central Station will automatically change alarm limits on the T1 bedside monitor. Changing alarm limits on the T1 bedside monitor can automatically change alarm limits on the DPM Central Station.

**Panorama Central Station Interface:** Changing alarm limits on the Panorama Central Station or WorkStation will automatically change alarm limits on the T1 bedside monitor. Changing alarm limits on the T1 bedside monitor will automatically change alarm limits on the Panorama Central Station and WorkStation.

#### Adjust Alarm Responses

To adjust a patient's alarm responses on the T1 monitor:

 a. Select parameter's waveform or numeric tile to open parameters Setup menu and select Alarm Setup >>

#### Or

- a. Scroll and select Alarm Setup >> from Main Menu 🔲 (quick key)
- b. Scroll and select the parameter
- c. Select
  - On/Off to enable or disable the alarm's limits and responses
  - Level to adjust the audio and visual alarm indicators. Level options include High (Red), Medium (Yellow), Low (Yellow)
  - **Defaults** to restore preset settings

d. Select Main Menu (quick key) or  $\times$  to return to the main display **DPM Central Station Interface:** Changing alarm responses on the DPM Central Station will not change alarm responses on the T1 bedside monitor. Changing alarm responses on the T1 bedside monitor will not change alarm responses on the DPM Central Station.

**Panorama Central Station Interface:** Changing alarm responses the Panorama Central Station or WorkStation will not change alarm responses on the T1 bedside monitor. Changing alarm responses on the T1 bedside monitor will not change alarm responses on the Panorama Central Station and WorkStation.

# Adjust Arrhythmia Alarms (Arrhythmia Option Required)

To adjust a patient's arrhythmia alarm on the T1 monitor:

- a. Scroll and select Alarm Setup >> from Main Menu 🔲 (quick key)
- b. Select Arrh. Analysis tab
- c. Scroll and select individual arrhythmia
- d. Select
  - Alarm to enable or disable arrhythmia alarm responses
  - Alm Lev to adjust the audio and visual alarm indicators. Level options include High (Red), Medium (Yellow), Low (Yellow), and Message
- e. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

To adjust a patient arrhythmia threshold setting on the T1 monitor:

- a. Scroll and select Alarm Setup >> from Main Menu 🔲 (quick key)
- b. Scroll and select Arrh. Threshold tab
- c. Scroll and select individual arrhythmia threshold
- d. Adjust value using the up and down arrows
- e. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

**DPM Central Station Interface:** Adjusting arrhythmia alarms on the DPM Central Station or WorkStation will not change arrhythmia alarms on the T1 bedside monitor. Adjusting arrhythmia alarms on the T1 bedside monitor will affect the arrhythmia alarms on the DPM Central Station.

Panorama Central Station Interface: Adjusting arrhythmia alarms on the Panorama Central Station or WorkStation will not change arrhythmia alarms on the T1 bedside monitor. Adjusting arrhythmia alarms on the T1 bedside monitor will affect the arrhythmia alarms on the Panorama Central Station and WorkStation.

# Disable Non-Lethal Arrhythmias (Arrhythmia Option Required)

To disable all arrhythmia alarms *except lethal* arrhythmias on the T1 monitor:

- a. Scroll and select Alarm Setup >> from Main Menu 🔲 (quick key)
- b. Scroll and select Arrh. Analysis tab
- c. Select Lethals Only
- d. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

#### **RESET ALARMS**

To acknowledge an alarm and reset the alarm system on the T1 monitor select Alarm Reset (quick key) on main display.

**DPM Central Station Interface:** Selecting **Alarm Reset** on the T1 bedside monitor can reset the alarm for that device on the DPM Central Station for the duration of the alarm. Selecting **Alarm Reset** on the DPM Central Station can reset the alarm on the T1 bedside monitor for the duration of the alarm (Configurable Option at the DPM Central Station).

**Panorama Central Station Interface:** Selecting **Alarm Reset** on the T1 bedside monitor *will not* reset alarms on the Panorama Central Station, WorkStation, or ViewStation. Acknowledging an alarm on the Panorama Central Station *will not* reset alarms on the T1 bedside monitor.

# **PAUSE ALL ALARMS**

To pause *all alarms* on the T1 monitor for a preconfigured amount of time, select **Alarm Pause** (quick key) on main display.

**DPM Central Station Interface:** Selecting **Alarm Pause** on the T1 bedside monitor will pause active alarms on the DPM Central Station for a *preconfigured amount of time*. Selecting **Alarm Pause** on the DPM Central Station can pause active alarms on the T1 bedside monitor (Configurable Option at the DPM Central Station).

Panorama Central Station Interface: Selecting Alarm Pause on the T1 bedside monitor *will not* pause active alarms on the Panorama Central Station, WorkStation, or ViewStation. Acknowledging an alarms on the Panorama Central Station *will not* pause alarms on the T1 bedside monitor.

# SCREEN DISPLAY

The T1 allows the clinician to adjust the main display based on viewing preference. To enter the screen selection menu and adjust the main screen's layout on the T1 monitor:

- a. Select Screens from Main Menu 🔲 (quick key)
- b. In the Choose Screen tab, select
  - Normal Screen: Real time waveforms and numeric parameters on the main display (Configurable)

- **Big Numerics:** Up to 4 waveforms and numeric parameters in an expandable view on the main display
- ECG 7-Lead Full Screen (5 lead wire set): 7 leads of ECG with numeric parameters on the main display
- ECG 12-Lead Full Screen (optional): 12 leads of ECG with numeric parameters on the main display
- c. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

**Note:** The first waveform is always an ECG lead and HR is always located in the first digital tile in the Normal Screen selection.

**DPM Central Station Interface:** Digital and waveform display selections on the DPM Central Station are independent of the T1 bedside monitor.

**Panorama Central Station Interface:** Digital and waveform display selections on the Panorama Central Station, WorkStation, and ViewStation are independent of the T1 bedside monitor.

# HISTORY

# Tabular Trends

To display Tabular trends for a patient on the T1 monitor:

- a. Scroll and select **Review** >> from **Main Menu** (quick key)
- b. Select Tabular Trends tab
- c. Scroll and select **Trend Group** to specify trend category or select **Custom** for user defined parameters to be displayed
- d. Scroll and select **Interval** to specify the time interval tabular trends are to be displayed
- e. Select 🗙 to return to Tabular Trends
- f. Select Main Menu 🔲 (quick key) to return to the main display

To print a patient's Tabular (List) trends on the T1 (Laser Printer Required):

- a. Scroll and select **Review** >> from **Main Menu** (quick key)
- b. Select Tabular Trends tab
- c. Scroll and select Print and confirm specified time period
- d. Select Print
- e. Select Main Menu 🔲 (quick key) to return to the main display

**Central Station Interface:** Trend storage, display interval, and printing length on the T1 bedside monitor and Central Station are independent.

# Arrhythmia and Alarm Events

The Events tab stores 100 physiological and arrhythmia events for a patient based on the Alarm Setup menu.

To view and print a patient's alarm event on the T1 monitor:

- a. Scroll and select **Review** >> from **Main Menu** (quick key)
- b. Select Events tab
- c. Scroll and select event
- d. Select Details to view the 16-second event
- e. Scroll and select Print (Laser Printer Required)
- f. Select Main Menu 🔲 (quick key) to return to the main display

Note: The waveform length printed are determined by the setting of **Recording** Length from Main Menu→Alarm Setup→Others on the T1 bedside monitor.

DPM Central Station Interface: Event storage and printing length on the

T1 bedside monitor and DPM Central Station are independent.

Panorama Central Station Interface: Event storage and printing length on the

T1 bedside monitor and Panorama Central Station are independent.

# Full Disclosure

The T1 monitor has the ability to store configured waveforms and associated numeric information collected for a configured period.

To adjust waveforms to be stored for a patient:

- a. Scroll and select **Review** >> from **Main Menu** (quick key)
- b. Select Full Disclosure tab
- c. Scroll and select Save Waves >>
- d. A  $\sqrt{}$  in the waveform box indicates waveform is selected
- e. Select Confirm to return to the Full Disclosure tab
- f. Select Main Menu 🔲 (quick key) or to return to the main display

**Note:** Full Disclosure allows the clinician to view selected, saved waveforms. It is for viewing purposes only and cannot be printed.

**DPM Central Station Interface:** Waveform Review (Disclosure) storage on the T1 bedside monitor and DPM Central Station are independent.

**Panorama Central Station Interface:** Full disclosure storage on the T1 bedside monitor and Panorama Central Station are independent.

# VOLUMES

The alarm volume, key volume, and QRS volume can be adjusted on the T1 monitor.

#### Alarm Volume

To adjust the alarm volume on the T1 monitor:

- a. Scroll and select Alarm Setup >> from Main Menu 🔲 (quick key)
- b. Scroll and select Others tab
- c. Select Alm Volume to adjust medium and low priority alarm volumes
- d. Select volume ranging from X\*-10 (0=Off 10=Max)
- e. Select High Alarm Volume to adjust high alarm volumes
- f. Select volume ranging from Alm Volume+0 to Alm Volume+2
- g. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

\*The minimum volume range(X) is configurable.

#### **Key Volume**

To adjust the key volume on the T1 monitor:

- a. Scroll and select Screen Setup >> from Main Menu 🔲 (quick key)
- b. Select Key Volume
- c. Select volume ranging from 0-10 (0=Off 10=Max)
- d. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

#### Beat Tone

To adjust the beat tone (QRS tone) volume on the T1 monitor:

- a. Select ECG waveform or ECG numeric tile to enter the ECG Setup menu
- b. Scroll and select Others >>
- c. Select QRS Volume
- d. Select volume ranging from 0-10 (0=Off 10=Max)

e. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

Or

- a. Select SpO<sub>2</sub> waveform or SpO<sub>2</sub> numeric tile to enter the SpO<sub>2</sub> Setup menu
- b. Select Beat Vol
- c. Select volume ranging from 0-10 (0=Off 10=Max)
- d. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

**Note:** The QRS tone is derived from either the HR or PR, depending on which is currently selected as the alarm source. When monitoring SpO<sub>2</sub>, there is a variable pitch tone which changes as the patient's saturation level changes. The pitch of the tone rises as the saturation level increases and falls as the saturation level decreases.

# ALTERNATE OPERATING MODES

The T1 has the alternate operating modes to reduce disturbing patient.

#### Night Mode

To reduce brightness, volumes, and NIBP measurement acquisition on the T1 bedside monitor:

- a. Scroll and select Screen Setup >> from Main Menu 🔲 (quick key)
- b. Select Night Mode >>
- c. Scroll and select Enter Night Mode

To remove a patient from Night Mode:

- a. Scroll and select **Screen Setup** >> from **Main Menu** (quick key)
- b. Select Night Mode >>
- c. Select Ok

**DPM Central Station Interface:** Night Mode can be enabled/disabled on the DPM Central Station.

**Panorama Central Station Interface:** Night Mode is not supported at the T1 bedside monitor when interfacing to the Panorama Central Station.

#### **Privacy Mode**

To suspend alarm notification and turn off the display on the T1 bedside monitor when admitted to the DPM Central Station:

- a. Scroll and select Screen Setup >> from Main Menu 🔲 (quick key)
- b.. Select Privacy Mode
- c. Select Yes

To remove a patient from Privacy Mode and resume monitoring on the T1 bedside monitor select any key on the T1 bedside monitor

**DPM Central Station Interface:** Privacy Mode monitor can be enabled/disabled on the DPM Central Station.

**Panorama Central Station Interface:** Privacy Mode is not supported at the T1 bedside monitor when interfacing to the Panorama Central Station.

# DATE AND TIME

To adjust the date and time on the T1 monitor:

- a. Select Main Menu 🔲 (quick key)
- b. Scroll and select Maintenance >>
- c. Scroll and select System Time >>
- d. Select Date to set the date and Time to adjust the time
- e. Select Date Format to adjust the month, day, and year format
- f. Select Time Format to adjust the time format (12h or 24h)
- g. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

**Central Station Interface:** Adjusting the date and time on the Central Station will adjust the date and time on the T1 bedside monitor. *The date and time cannot be adjusted at the T1 bedside monitor when interfacing with the Central Station because date and time are controlled by the central station.* 

# PARAMETER COLORS

The T1 monitor provides the ability to adjust the parameter's numeric and waveform (if applicable) color.

To adjust the parameter's color on the T1 monitor:

- a. Select Main Menu 🔲 (quick key)
- b. Scroll and select Screen Setup >>
- c. Select Measurement Color Setup >>
- d. Select parameter

- e. Select color
- f. Select Main Menu 🔲 (quick key) or 🗙 to return to the main display

DPM Central Station Interface: Parameter color on the T1 bedside monitor and DPM Central Station are independent.

Panorama Central Station Interface: Parameter color on the T1 bedside monitor, Panorama Central Station, ViewStation, and WorkStation are independent.

# LOAD DEFAULT (PRESET) SETTINGS

The T1 bedside monitors settings are automatically restored either when the patient size is adjusted or when Discharge is performed.

A clinician may restore default settings on a patient currently being monitored on the T1 bedside monitor by:

- a. Select Main Menu (quick key)
- b. Scroll and select Load Configuration >>
- c. Select user defined (preset) configuration from displayed list
- d. Select Load
- e. Select Yes to confirm and return to the main display

# LOCK/UNLOCK TOUCHSCREEN DISPLAY

The T1 monitor provides the ability to lock and unlock the touchscreen display. The T1 monitor touchscreen automatically locks if it is not touched for >60 seconds.

To manually lock the touchscreen display on the T1 monitor:

Slide the Lock/Unlock key to the right or press and hold Main Menu

(quick key) for 2-3 seconds until Lock **6** (quick key) appears.

To unlock the touchscreen display on the T1 monitor:

Slide the Lock/Unlock key to the right or press and hold Lock (quick key)

for 2-3 seconds until Main Menu 🔲 (quick key) appears.

 $\Box$ 

# **CLEANING/DISINFECTING**

#### Cleaning the Main Unit/Module/Handle/Docking Station

Clean your equipment on a regular basis. Before cleaning, consult your hospital's regulations for cleaning the equpment.

The following table lists approved cleaning and disinfecting agents.

Product Name	Product Type	Ingredients
Sodium hypochlorite	Liquid	Sodium hypochlorite bleach
bleach*		0.5%
Hydrogen peroxide*		Hydrogen peroxide 3%
Isopropanol		Isopropanol 70%
1-Propanol*	]	1-Propanol 50%
CIDEX OPA Solution		Ortho-Phthalaldehyde 0.55%
Metrex CaviCide1™		Diisobutylphenoxyethoxyethyl dimethyl benzyl ammonium chloride 0.28%, Isopropanol 17.2%
Virex <sup>®</sup> II 256+		Didecyl dimethyl ammonium chloride 8.704%, n-Alkydimethyl benzyl ammonium chloride 8.190%
Virex®TB		n-Alkyl dimethyl benzyl ammonium chlorides 0.105%, n-Alkyl dimethyl ethylbenzyl ammonium chlorides 0.105%
Rely+On <sup>™</sup> Virkon®Powder *(Used as 1% solution)	Powder	Used as 1% solution Biocidal active: Pentapotassium bis (peroxymonosulphate) bis (sulphate)(500g/kg), Contains dipotassium peroxodisulphate.

Product Name	Product Type	Ingredients
Alpet <sup>®</sup> D2 Surface	Wipes	Isopropyl Alcohol 58.6000%®
Sanitizing Wipes		Octyl Decyl Dimethyl
		Ammonium chloride 0.0075%,
		Dioctyl Dimethyl Ammonium
		Chloride 0.0030%
Clorox Dispatch <sup>®</sup> Hospital		Sodium Hypochlorite 0.65%
Cleaner Disinfectant		
Towels with Bleach		
Clorox Healthcare®Bleach		Sodium Hypochlorite 0.55%
Germicidal Wipes		
Clorox Healthcare®		Hydrogen Peroxide 1.4%
Hydrogen Peroxide		
Cleaner Disinfectant Wipes		
Diversey Oxivir®TB Wipes		Hydrogen Peroxide 0.5%
Metrex CaviWipes™		Diisobutylphenoxyethoxyethyl
		dimethyl benzyl ammonium
		chloride 0.28%,
		Isopropanol 17.2%
PDI Sani-Cloth <sup>®</sup> AF3		n-Alkyl dimethyl ethylbenzyl
Germicidal Disposable		ammonium chlorides 0.14%,
Wipe		n-Alkyl dimethyl benzyl
		ammonium chlorides 0.14%
PDI Sani-Cloth <sup>®</sup> Bleach		Sodium Hypochlorite
Germicidal Disposable		0.63%, other ingredients
Wipe		99.37%
PDI Sani-Cloth <sup>®</sup> HB		n-Alkyl dimethyl ethylbenzyl
Germicidal Disposable		ammonium chlorides 0.07%,
Wipe		n-Alkyl dimethyl benzyl
		ammonium chlorides 0.07%

Product Name	Product Type	Ingredients
PDI Super Sani-	Wipes	n-Alkyl dimethyl ethylbenzyl
Cloth <sup>®</sup> Germicidal		ammonium chlorides 0.25%,
Disposable Wipe		n-Alkyl dimethyl benzyl
		ammonium chlorides 0.25%,
		Isopropyl Alcohol 55.0%,
VIRAGUARD Hospital		Isopropanol 70%, Other
Surface Disinfectants		ingredients 30%

Note: For equipment with the symbol , all the listed cleaning and disinfecting agents are available for use. For equipment without the symbol , only the cleaning and disinfecting agents marked with "\*" are available

for use.

To clean the equipment:

- a. Shut down the monitor and disconnect it from AC power.
- b. Clean the display screen with wipes or a soft cloth moistened with one of the cleaning agents listed in the table above.
- c. Clean the exterior surface of the equipment, module, handle and docking staion with wipes or a soft cloth moistened with one of the cleaning agents listed in the table above. Avoid wetting the pins and metal parts.
- d. Wipe off all the residue with a dry cloth.
- e. Dry your equipment in a ventilated, cool place.

# Disinfecting the Main Unit/Module/Handle/Docking Station

Disinfect your equipment as required in your hospital's servicing schedule using one of the disinfecting agents listed in the table above. Cleaning equipment before disinfecting is recommended.

# **Cleaning and Disinfecting the Accessories**

For information about cleaning and disinfecting of accessories, please refer to the manufacturer's packaging or the T1 Patient Monitor Operator's Manual.

#### **STERILIZATION**

Sterilization is not recommended for this equipment, related products, accessories, or supplies unless otherwise indicated in the Instructions for Use that accompany the products, accessories or supplies.

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