

Accutorr<sup>®</sup> 7

## Quick Reference Guide
















**Caution:** The Accutorr 7 Quick Reference Guide is not intended as a replacement to the Operating Instructions. Prior to operating the 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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.....	<b>1</b>
Hard Keys.....	1
Menu Quick Keys.....	1
<b>A</b> .....	<b>2</b>
Admit Patient And Enter Demographics (Barcode Scanner).....	2
Admit Patient And Enter Demographics (Manual Entry).....	2
Admit Patient And Enter Demographics (Local Patient List and ADT Database) .....	2
Adjust Patient Size.....	4
Discharge A Patient.....	4
<b>A</b> .....	<b>5</b>
Enter Standby.....	5
Resume Monitoring.....	5
<b>A</b> .....	<b>5</b>
Realtime Waveforms.....	5
Adjust Recorder's Waveforms.....	5
<b>A</b> .....	<b>6</b>
Factors that Affect Blood Pressure Measurement Accuracy.....	6
Initiate A Non-Invasive Blood Pressure Measurement (NIBP).....	8
Stop Non-Invasive Blood Pressure Measurement (NIBP).....	8
Set A Non-Invasive Blood Pressure Measurement Interval.....	9
Configure A Custom Program.....	9
<b>A</b> .....	<b>10</b>
Adjust Alarm Limits.....	10
Adjust Alarm Responses.....	10
Alarm Status Symbols.....	11











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	.....	12
	.....	12
	.....	12
	.....	13
	.....	13
	.....	14
	.....	14
Alarm Volume.....		14
Key Volume.....		14
	.....	15
	.....	15
	.....	15
	.....	16
	.....	16
Cleaning.....		16
Disinfecting.....		17
	.....	17

**E**

	<ul style="list-style-type: none"> <li>• Press this key to turn the monitor on.</li> <li>• Press this key to enter/exit Standby mode.</li> <li>• Press and hold this key for more than 2 seconds to turn the monitor off.</li> </ul>
	<ul style="list-style-type: none"> <li>• Press this key to turn off the present alarm sounds.</li> <li>• Press and hold this key for more than 2 seconds to pause or restore alarms.</li> </ul>
	<ul style="list-style-type: none"> <li>• Press to start or stop NIBP measurements.</li> </ul>
	<ul style="list-style-type: none"> <li>• Press this key to admit a new patient.</li> <li>• Press this key again to return to the main screen.</li> </ul>
	<ul style="list-style-type: none"> <li>• Rotate the knob to scroll through parameters or menus.</li> <li>• Press the knob to access a menu or select an item.</li> </ul>

	<ul style="list-style-type: none"> <li>• Accesses the  screen , or quickly returns to the main display.</li> </ul>
	<ul style="list-style-type: none"> <li>• Accesses the  screen to evaluate a patient's condition.</li> </ul>
	<ul style="list-style-type: none"> <li>• Accesses the  or  pages to admit a patient and enter demographics.</li> </ul>
	<ul style="list-style-type: none"> <li>• Views and prints historical trends data.</li> </ul>
	<ul style="list-style-type: none"> <li>• Accesses the  screen to manually save patient data.</li> </ul>





The Patient Setup menu allows the clinician to enter patient demographics from the local patient list or the ADT database (hospital's patient database).

To enter demographics from the local patient list on the Accutorr 7 monitor:

- a. Select the **Patient Setup** quick key to access the **Patient Setup** tab.
- b. Select the page key (for example **1/1**), and then use the up or down arrow beside this key to turn the page.
- c. Select **Patient Setup**, use the up or down arrow beside this key to highlight the desired patient.
- d. Select **Patient Setup** to access the **Patient Setup** menu.
- e. If necessary, you can modify patient's information using the onscreen keyboard.
- f. Select **Back** to return to main display.

To enter demographics from the ADT database on the Accutorr 7 monitor:

- a. Select the **ADT Search** quick key, and select the **ADT Search** tab.
- b. Search a patient.
  - Input **Department** name, and then the system will search the patient within the department.
  - Input **MRN**, and then the system will search the patient according to the medical record number.
  - Input **First Name** and/or **Last Name**, and then the system will search the patient upon the name.

Or

- b. Select the page key (for example **1/1**), and then use the up or down arrow beside this key to turn the page.
- c. Select **ADT Search**, use the up or down arrow beside this key to highlight the desired patient.
- d. Select **ADT Search** to access the **ADT Search** menu.
- e. If necessary, you can modify patient's information using the onscreen keyboard.

f. Select to return to main display.

\* is in the menu of (): Entering demographic information on the BeneVision CentralStation and BeneVision WorkStation automatically enters it on the monitor. Entering demographic information on the monitor automatically enters it on the BeneVision CentralStation and BeneVision WorkStation.

### Patient Setup

The Patient Setup menu allows the clinician to adjust patient size. To adjust patient size on the Accutorr 7 monitor:

a. Press the hardkey to access the menu.

Or

a. Admitting a patient from the or page will automatically access the menu.

b. Select .

c. Select current size and adjust to (adult), (pediatric), or (Neonate).

d. Select to return to main display.

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







### Discharge

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

To discharge a patient on the Accutorr 7 monitor:

- Admit a new patient
- Place the monitor into Standby
- Turn the monitor off
- Select the quick key



must be selected in the menu in order for the monitor to work this way.

\*  is  in the  menu of .  (  ): Discharging a patient on the Accutorr 7 monitor will automatically discharge the patient on the BeneVision CentralStation and BeneVision WorkStation. Discharging the patient on the BeneVision CentralStation and BeneVision WorkStation will discharge the patient on the Accutorr 7 monitor.







**A DB \***

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 Accutorr 7 monitor:

- a. Press the  hardkey.
- b. Select  to confirm.

To exit Standby and resume monitoring, select any key on the Accutorr 7 monitor.





\*  is  in the  menu of .  (  ): Selecting any key on the BeneVision CentralStation and BeneVision WorkStation will remove patient from Standby on the Accutorr 7 monitor.

**ES D**

To record a waveform on a patient on the Accutorr 7 monitor's integrated recorder press the  hardkey on the monitor's recorder.

**A**

To adjust recorded waveforms on a patient on the Accutorr 7 monitor's integrated recorder:

- a. Select the  quick key to access the  menu.
- b. Select  >>, and then select  >>.
- c. Select the waveforms for recording.

d. Select the  quick key or  to return to the main display.

**B \***

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).

Child	10 - 19 cm
Small Adult	18 - 26 cm
Adult	25 - 35 cm
Large Adult	33 - 47 cm
Thigh	46 - 66 cm
Adult Long	25 - 35 cm
Large Adult Long	33 - 47 cm

1. American Association on Critical-Care Nurses (AACN): (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. *J Hypertens* 2005; 45: 142-161.
3. O'Brien Eoin, Asmar Roland, Beilin Lawrie, Imai Yutaka, Mallion Jean-Michel, Mancina Giuseppe, Mengden Thomas, Myers Martin, Padfield Paul, Palatini Paolo, Parati Gianfranco, Pickering Thomas, Redon Josep, Staessen Jan, Stergiou George, Verdecchia Paolo. *J Hypertens* 2003; 21: 821-848.

To initiate a NIBP measurement on a patient on the Accutorr 7 monitor:

- a. Press the 



The Accutorr 7 monitor allows the clinician to set a pre-configured interval for a NIBP measurement to be obtained automatically.

To set an automatic interval on the Accutorr 7 monitor:

- a. Select NIBP parameter area to access the **Interval** menu.
- b. Set **Interval**.
  - **Interval** can be set to 1, 2, 2.5, 3, 5, 10, 15, 20, 30, 1, 1.5, 2 : The monitor automatically measures NIBP based on the specified time interval.
  - **Interval** can be set to 1/2 : The monitor automatically measures NIBP based on a program customized by the user.
- c. Select the **Enter** quick key or **Exit** to return to the main display.

**Interval** is located in the **Interval** menu of **Interval** ( **Interval** ): Selecting **Interval** on the BeneVision CentralStation and BeneVision WorkStation allows the clinician to set an automatic interval on the Accutorr 7 monitor.

The Accutorr 7 monitor allows the clinician to perform NIBP measurement based on a customized program.

To configure a custom program on the Accutorr 7 monitor:

- a. Select NIBP parameter area to access the **Interval** menu.
- b. Select **Interval** >>.
- c. Set **Interval** to **1** or **2**.
- d. Set **Interval** and **Interval** for each measurement cycle.
- e. Select **Enter** to confirm.
- f. Set **Interval** to **1** or **2**.










## Alarm

### Alarm Setup


The Alarm Setup tab allows the clinician to configure alarm limits and alarm responses on the Accutorr 7 monitor.





To adjust a patient's alarm limit on the Accutorr 7 monitor:

- a. Select parameter's waveform or numeric tile to open the parameter's Setup menu.
- b. Select **Alarm Setup**.
- c. Select High or Low limit value and adjust using the up and down arrows.
- d. Select Off in the limit value area to switch off the parameter's alarm limit(s).
- e. Select the **Esc** quick key or **X**


-   – to switch on or off the alarm’s limits or responses
  -   – to adjust the audio and visual alarm indicators. Level options include High (Red), Medium (Yellow), and Low (Yellow)
  -     – to restore preset settings
- d. Select the  quick key or





### RESET ALARM

To reset **an alarm for the duration of the alarm** on the Accutorr 7 monitor, press the  hardkey on the front panel of monitor.

\*  is in the menu of : Pressing the  hardkey on the Accutorr 7 monitor can reset the alarm for that device on the BeneVision CentralStation and BeneVision WorkStation for the duration of the alarm. Selecting  on BeneVision CentralStation and BeneVision WorkStation can reset the alarm on the Accutorr 7 monitor for the duration of the alarm.

### PAUSE ALL ALARMS




To pause **all alarms** on the Accutorr 7 monitor for a preconfigured amount of time, press and hold the  hardkey on the front panel for more than 2 seconds.

\*  is in the menu of : Pressing and holding the  hardkey on the Accutorr 7 monitor will pause active alarms on BeneVision CentralStation and BeneVision WorkStation for a *preconfigured amount of time*. Selecting  on BeneVision CentralStation and BeneVision WorkStation can pause active alarms on the Accutorr 7 monitor.

### SEND PATIENT DATA TO EMR

The Accutorr 7 monitor can send patient data, including parameter values, related alarms and alarm settings, patient information and historical data to the EMR system.

To send patient data on the Accutorr 7 monitor to the EMR system:

- a. Select the  quick key.
- b. Select the  tab.
- c. Select the desired patient records.
- d. Select .

Or

If  is configured, simply select the  quick key.



## LE

The MEWS (Modified Early Warning Score) calculates a total score and provides a clinical response based on the entered parameters.

To calculate a clinical scoring on a patient on the Accutorr 7 monitor:

- a. Obtain all parameter values.
- b. Enter all required manual inputs.
- c. Clinical score will be automatically be calculated and displayed.

## ▶ LE

The alarm volume and key volume can be adjusted on the Accutorr 7 monitor.



To adjust the alarm volume on the Accutorr 7 monitor:

- a. Select the **ALARM** quick key to access the **ALARM** menu.
- b. Select **ALARM VOLUME** and select **ALARM VOLUME**.
- c. Select volume ranging from X\*-10 (0=Off 10=Max).
- d. Select the **ALARM** quick key or **X** to return to the main display.

\* X = 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10



To adjust the key volume on the Accutorr 7 monitor:

- a. Select the **KEY** quick key to access the **KEY** menu.
- b. Select **KEY VOLUME** and select **KEY VOLUME**.
- c. Select volume ranging from 0-10 (0=Off 10=Max)
- d. Select the **KEY** quick key or **X** to return to the main display.

## DATE TIME

To adjust the date and time on the Accutorr 7 monitor:

- Select the **DATE** quick key to access the **DATE** menu.
- Select **DATE** and select **DATE**.
- Set the date and time.
- Select **DATE** to adjust the month, day, and year format.
- Select **DATE** to adjust the time format (12h or 24h).
- Select the **DATE** quick key or **X** to return to the main display.

## PARAMETER COLOR

The Accutorr 7 monitor provides the ability to adjust the parameter's numeric and waveform (if applicable) color.

To adjust the parameter's color on the Accutorr 7 monitor:

- Select the **PARAMETER** quick key to access the **PARAMETER** menu.
- Select **PARAMETER** and select **PARAMETER**.
- Select parameter.
- Select color.
- Select the **PARAMETER** quick key or **X** to return to the main display.

**PARAMETER** ( **PARAMETER** ): Parameter color on the Accutorr 7 monitor and BeneVision CMS are independent.

## ADDF (DEF), DEF

The Accutorr 7 monitors settings are automatically restored either when the patient size is adjusted, or when Admit or Discharge is performed.

A clinician may restore defaults on a patient currently being monitored on the Accutorr 7 monitor by:

- Select the **ADDF** quick key to access the **ADDF** menu.
- Select **ADDF**.
- Select user defined (preset) configuration from displayed list.
- Select **ADDF**.
- Select **ADDF** to confirm and return to the main display.

▶ C / ▶ C ▶ C\_ C EE D\_ , A

Disinfect your equipment as required in your hospital's servicing schedule. Cleaning equipment before disinfecting is recommended.

The following table lists approved disinfectants.

Disinfectant	Form	Concentration
Sodium hypochlorite bleach	Liquid	Sodium hypochlorite 10%
Isopropanol	Liquid	Isopropanol 70%
Perform®	Powder	Used as 1% solution* 100g contains 45g Pentapotassium bis (peroxymonosulphate) bis (sulphate). 5 % to 15% anionic surfactants; <5% non-ionic surfactants; <5% soap and phosphonates, perfumes

1. Refer to the Operating Instructions for important notes about disinfecting.
2. The "\*" symbol indicates a disinfectant should be prepared according to the concentration directed by the accompanying instructions for use.

### .. E A

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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