

N Series
BEDSIDE MONITOR GUIDELINE

This document is a guideline only to be used as an aid to comprehensive Inservice training.

NAME: _____

HOSPITAL: _____

DATE: _____

	Trainee's Initials
A. OVERVIEW	
1. Locate ON/OFF button	
2. Locate communication ports. How does the clinician know he/she is communicating to the Distributive Monitoring System	
3. Locate A/C connection	
4. Load recorder paper/printer paper	
5. Discuss <ul style="list-style-type: none"> a. Module insertion into monitor and Satellite Module Rack b. Dock tethering to the monitor c. Module options 	
6. Locate ECG, NIBP, SPO2, and Temp. connection ports	
7. Discuss Touch screen function. Discuss rotating screen function (N19/N22)	
8. Discuss quick key buttons <ul style="list-style-type: none"> a. How can a clinician see more than one row of quick keys? b. What quick keys remain on the display at all times? 	
9. How does a clinician exit a menu?	
10. Locate patient size, date and time	

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B. BASIC FUNCTIONS	
1. Attach ECG, NIBP, and SPO2 probe	
2. ECG <ul style="list-style-type: none"> a. Discuss electrode prep and placement b. Change Lead from II to I c. Enhance the pacemaker pulse/spike d. Discuss Minimum QRS Threshold e. Display a full or half screen of ECG f. Start and stop a recording of ECG* 	
3. ARRHYTHMIA* <ul style="list-style-type: none"> a. Discuss default arrhythmia setting b. Where are arrhythmia messages displayed? c. What leads are used for arrhythmia analysis and heart rate detection? d. Enable lethal arrhythmias only. Can lethal arrhythmias be turned off? e. Adjust the following settings: <ul style="list-style-type: none"> i. Asystole to 4 seconds ii. Vtach to 6 PVC/110bpm iii. Turn on Bigeminy alarm and assign a prompt priority iv. Select VFib to automatically record/print f. Discuss the relearn process 	
4. SPO2 <ul style="list-style-type: none"> a. Discuss placement of sensor b. Discuss the difference between the DeSat and Low SpO2 alarm c. Discuss the NIBP Simul feature d. Discuss HR vs Pulse Rate differentiation in HR tile e. Discuss enabling/disabling beep tone 	
5. NON-INVASIVE BLOOD PRESSURE (NIBP) <ul style="list-style-type: none"> a. Discuss proper cuff size b. Set BP interval for every 10 minutes c. Start/Stop NIBP cuff d. Suspend the NIBP interval e. Locate the last several NIBP measurements f. Activate the end measurement tone. Explain this feature g. Set the following NIBP sequence: <ul style="list-style-type: none"> i. 5 minutes for 15 minutes ii. 15 minutes for 1 hour iii. 30 minutes for 1hour h. View tabular trends from Parameter List 	
6. RESPIRATIONS <ul style="list-style-type: none"> a. Locate respiratory rate display b. Respirations are obtained from what sources? c. Turn ECG respiratory monitoring off* d. Discuss auto vs. manual detection mode. When might this function be used? 	

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7. TEMPERATURE a. Locate temperature b. Change Temperature label to Tcore	
8. ALARMS a. Change high HR limit to 130 bpm b. Change low SpO2 limit to 87% and change to a high priority alarm c. Turn on RR alarms and set the low RR limit to 5 d. How does a clinician know if an alarm is turned off? e. Discuss the difference between alarm pause/audio pause and alarm reset including icon difference. How long is the alarm silenced or paused? What alarms are excluded? f. Extend Alarm/Audio Pause* g. Discuss high, medium, low, and prompt priority alarm notifications h. Discuss technical alarms i. Discuss latched alarms including what alarms are latched and what is required to acknowledge a latched alarm?	
9. Change patient size from Adult to Pediatric. Once patient is discharged does it remain in Pediatric?	
10. Enter the following patient information: a. Jane Doe b. Height: 5'7" c. Weight: 140 lbs. d. ID: 68924 e. Bed 13A*	
12. The patient is being removed from the monitor for Surgery a. Suspend monitoring and enter Standby location b. Resume monitoring function	
13. What is the difference between discharge and standby?	
14. Discuss transferring a patient using the main module. a. What data is transferred to the monitor? b. What data is transferred to the Workstation c. How does a clinician know when the transport monitor has left the monitor (host)?	
15. Perform the following functions in Tabular trends: a. Adjust Tabular trends to display only when a NIBP measurement is obtained b. Adjust trends to display every 30 minutes c. Record/print trends for the last 1 hour d. How many trends are stored? How are they cleared?	

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<p>16. How can older waveform data be viewed?</p> <ul style="list-style-type: none"> a. Scroll back 1 minute in time and print the strip. b. Save Lead II, V Lead (5 lead wire set), c. Save a full disclosure strip with a note that Dr. was notified 	
<p>17. Select and print</p> <ul style="list-style-type: none"> a. A full disclosure event b. An alarm event 	
<p>18. Adjust and discuss the following views on the main display:</p> <ul style="list-style-type: none"> a. Big numerics b. Minitrends c. EWS 	
<p>18. Discharge the patient</p>	
<p>19. Does the room/bed number clear upon discharge?</p>	
C. ADVANCE FUNCTIONS	
<p>1. INVASIVE BLOOD PRESSURES (IBP1-8) *</p> <ul style="list-style-type: none"> a. Discuss invasive blood pressure monitoring setup b. Zero an invasive line c. Change the label from P1 to ART d. Discuss what happens when an invasive is labeled with a label already in use (i.e. changing ART to CVP for P1 when P2 is already labeled CVP) e. Change the scale to 0 –240 f. Change the numeric layout to show the Mean as the most prominent number g. Discuss overlapping Invasive Blood Pressures on main screen 	
<p>2. CO2*</p> <ul style="list-style-type: none"> a. Discuss CO2 setup: sample line and water trap if applicable b. Change the CO2 scale to 0 to 60 c. Change the sweep speed to 12.5 mm/s d. Discuss water trap maintenance/replacement 	
<p>3. ST*</p> <ul style="list-style-type: none"> a. Enable ST analysis. How does the clinician know it is enabled? b. How many ECG leads are being analyzed? c. Adjust ISO and ST points d. Adjust the ST alarm on Lead II to 2mm/.2mV and -2mm/.2mV 	
<p>4. QT/QTc*</p> <ul style="list-style-type: none"> a. Enable QT/QTc analysis b. Select all leads for analysis c. Change QTc formula d. Adjust High QTc alarm limit to 500ms 	

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<p>5. 12-Lead ECG Analysis*</p> <ul style="list-style-type: none"> a. Discuss ECG electrode prep and placement b. Enter additional information: <ul style="list-style-type: none"> i. Age: 75 ii. Drug: Diuretics c. Acquire a 12 Lead Report <ul style="list-style-type: none"> i. Enter the 12 Lead Order number d. View and Print a 12-Lead Report e. Review historical 12 Lead Reports 	
<p>6. ScVO2*</p> <ul style="list-style-type: none"> a. Discuss setup for ScVO2 monitoring b. Discuss ScVO2 calibration 	
<p>7. CO*</p> <ul style="list-style-type: none"> a. Set Comp constant to 0.608 b. Discuss how to perform a CO and accept an average c. Access the hemodynamic calculations screen 	
<p>8. CCO*</p> <ul style="list-style-type: none"> a. Discuss interface with CCO device b. Change primary parameter value to CCI c. Change secondary parameters to SVR, SVRI, EDV, SV 	
<p>9. EEG*</p> <ul style="list-style-type: none"> a. Discuss EEG set up and electrode placement b. Start a manual sensor check then set the auto sensor check to 30 minutes c. Print EEG waveform 	
<p>10. rSO2*</p> <ul style="list-style-type: none"> a. Discuss rSO2 set up and sensor placement b. Label rSO2-1 L and rSO2-2 R c. Discuss setting the Baseline d. Set the displayed parameters to show baseline variance 	
<p>11. NMT*</p> <ul style="list-style-type: none"> a. Discuss set up and electrode placement b. Discuss calibration c. Change the measurement mode to Train of Four (TOF) d. Set NMT measurement interval to 5 minutes 	
<p>12. ANESTHETIC AGENTS (AG)*</p> <ul style="list-style-type: none"> a. Discuss anesthetic agent monitoring setup b. What agents can the monitor identify? c. Adjust the agent scale to 0 -15% 	

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D. OTHER FUNCTIONS	
<ol style="list-style-type: none"> 1. Dose Calculation function <ol style="list-style-type: none"> a. Enter a weight of 160 pounds b. Select the drug "Dopamine" c. Enter a dosage of 5 mcgs/kg/min d. How many cc/hr is this? e. Print titration table 	
<ol style="list-style-type: none"> 2. Hemodynamic Calculation <ol style="list-style-type: none"> a. Discuss the auto-entering of parameter information b. Enter/Adjust the following information: <ol style="list-style-type: none"> i. Weight: 140 lbs ii. CVP: 6mmHg iii. Calculate and print Hemodynamic profile 	
<ol style="list-style-type: none"> 3. Remote View screen <ol style="list-style-type: none"> a. Select three additional monitors to view and place in a main screen tile b. Display Lead II and the SPO2 waveform from a remote monitor c. Discuss silencing an alarm on a remote patient* d. What do the following bed icons mean on the remote monitors? <ol style="list-style-type: none"> i. Red ii. Yellow 	
<ol style="list-style-type: none"> 4. Discuss interfacing the N-Series monitor with: <ol style="list-style-type: none"> a. Ventilator b. Infusion pump c. Discuss what digital/waveform information is displayed 	
<ol style="list-style-type: none"> 5. Discuss available Clinical Assistive Applications <ol style="list-style-type: none"> a. Calculate a Glasgow Coma Score (GCS) b. Calculate an Early Warning Score (EWS) and set auto scoring to NIBP c. HemoSight* <ol style="list-style-type: none"> i. Discuss interfacing device required ii. Discuss Physiology Graphics d. SepsisSight <ol style="list-style-type: none"> i. Calculate a qSOFA and SOFA score e. Print an ECG 24 Summary 	
<ol style="list-style-type: none"> 6. Secondary display* <ol style="list-style-type: none"> a. Discuss interaction with secondary display b. Discuss mouse functionality 	
E. MAINTENANCE	
<ol style="list-style-type: none"> 1. Adjust Date/Time <ol style="list-style-type: none"> a. Discuss daylight saving time consideration 2. Discuss approved cleaning agents 	