Chapter 2

Basic Operation

This chapter describes the basic operation for monitoring.

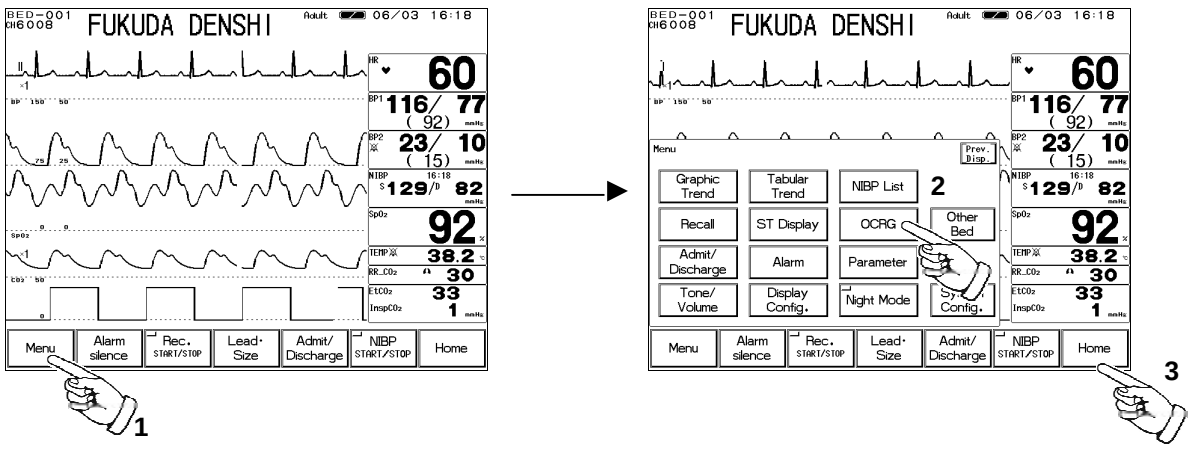
— Before Use — Basic Operation for Monitoring • 2
Touch Keys • • •

Touch Keys

All the operation is performed using the touch keys on the screen.

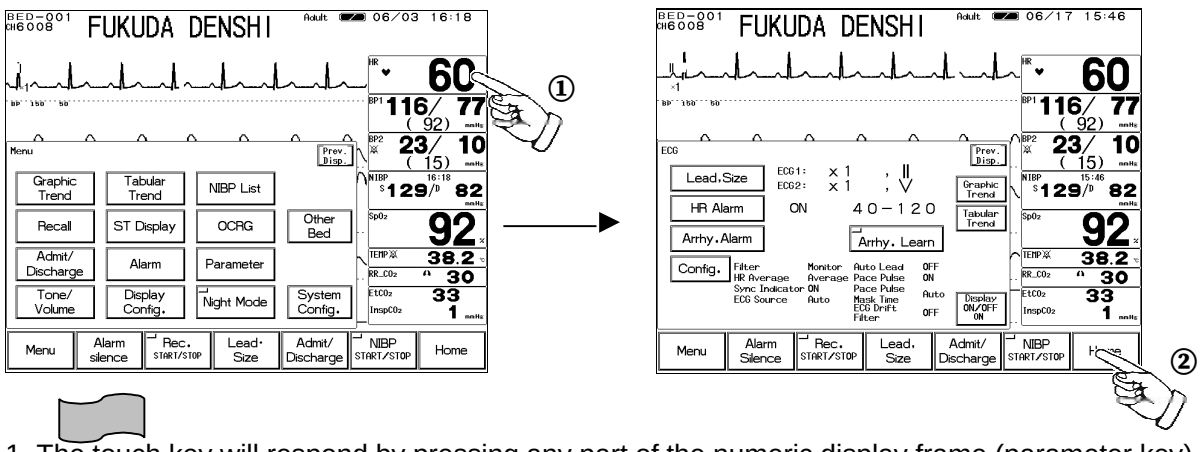
⚠CAUTION	Always operate the touch screen with fingers or touch screen pen. Do not touch with a pen-point or other hard-edged instruments. Malfunction of the touch screen or damage may result.

●General Key Control



1. Pressing the Menu key will switch the display with a pip sound.
2. The touch key will respond by pressing any part of the key.
3. Pressing the Home key at any time will return the display to the home display.

●Key Control for Each Parameter



1. The touch key will respond by pressing any part of the numeric display frame (parameter key).
2. Pressing the Home key at any time will return the display to the home display.

Reference

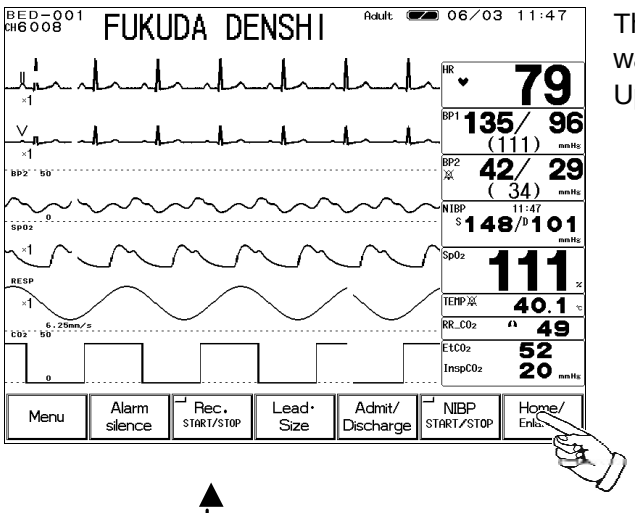
Up to 4 frequently used keys can be set as user key.
Refer to “4. Monitoring Setup To Set the User Keys” for details.

About the Home Display

✍The home display appears immediately after the power is turned ON.
✍The waveforms and numeric data are displayed on the home display.
✍There are 2 modes of home display, “Standard Display (Home)” and “Numeric Data Enlarged Display”, which can be switched by pressing the Home / Enlarge key.

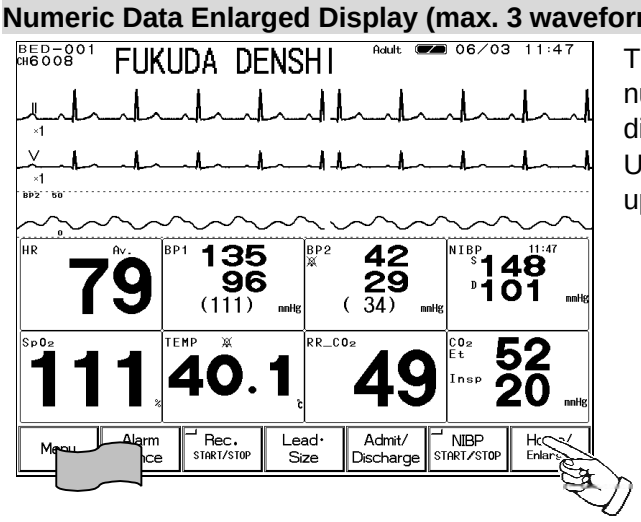
Reference
The home key function can be selected from Home / Enlarge or Home on the hospital setup menu. The default setting is Home.
Refer to “8. System Configuration Hospital Setup” for details.

Standard Display (max. 6 waveforms)



This display is focused on number of waveforms to be displayed.
Up to 6 waveforms can be displayed.

Numeric Data Enlarged Display (max. 3 waveforms)



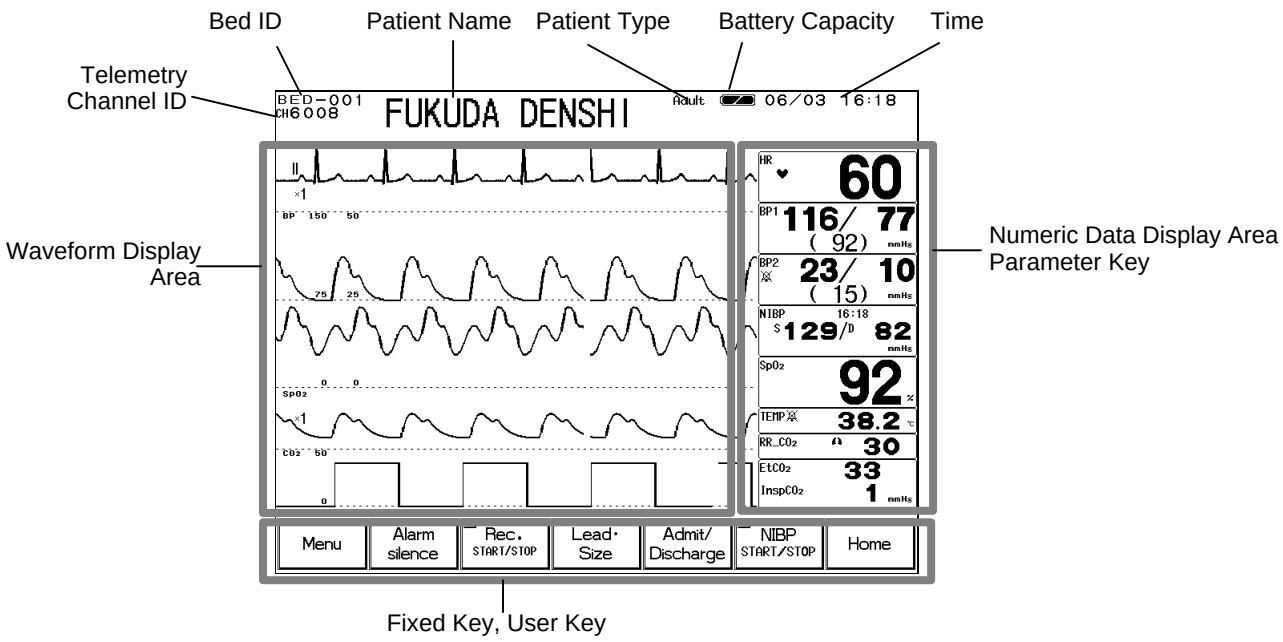
This display is focused on the visuality of numeric data. Each numeric data will be displayed large for easier view.
Up to 3 waveforms will be displayed on the upper half of the display.

Reference
The displaying waveforms and numeric data can be selected as desired, and the configured display can be programmed.
Refer to “4. Monitoring Setup To Configure the Display” for details.

The Description of the Display

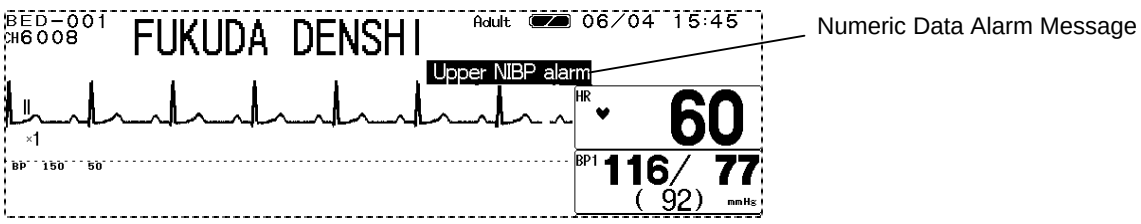
Other than waveforms and numeric data, patient name, alarm message, status message, etc. will be displayed on the screen.

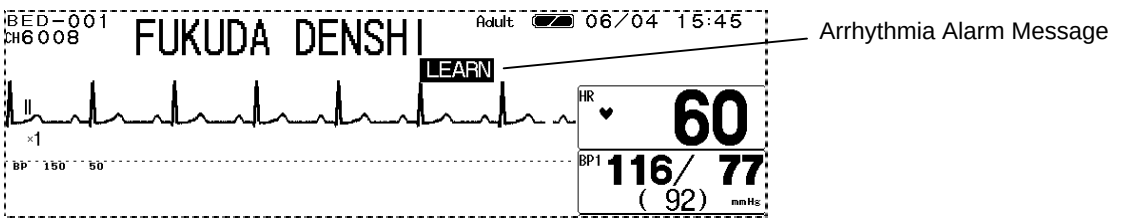
●Numeric Data, Waveform, Patient Name, etc.



●Alarm Message for Numeric Data / Arrhythmia

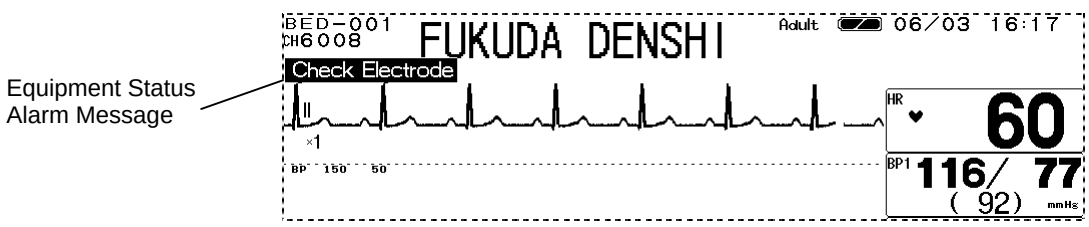
There are 2 types of alarm messages, numeric data alarm message and arrhythmia alarm message. If both alarms occur at the same time, the numeric alarm message and arrhythmia alarm message will be displayed alternately in 2-seconds intervals.





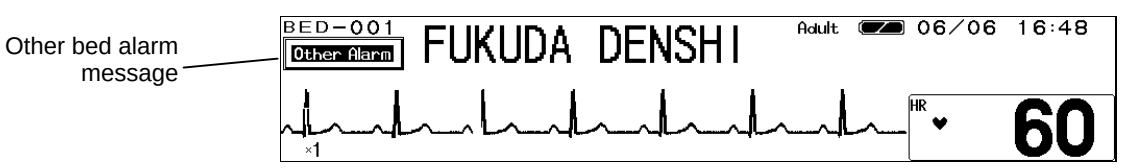
●Equipment Status Alarm Message

The equipment status alarm message will be displayed when proper monitoring can not be performed.

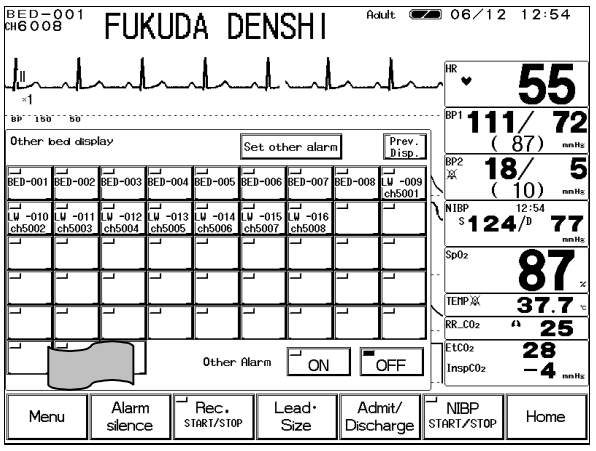


●Other Bed Alarm Message

When the monitor is connected to the network, and other bed alarm is turned ON, the alarm occurring at the other bedside monitors will be notified.



The other bed alarm message will function as a control key. By pressing the message display, the window to select the alarm generating bed will appear. Pressing the key will display the numeric data and waveforms for that bed.



By pressing the Room/Bed ID key for the alarm generating bed, the numeric data and waveforms will be displayed.

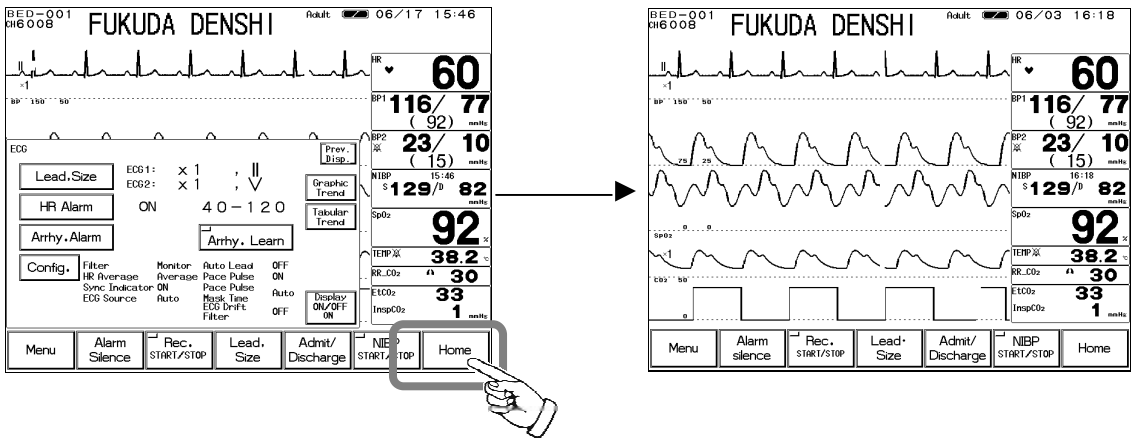
The Room/Bed ID key for the alarm generating bed will be indicated in red.

Reference Refer to “7. Function Other Bed Display”

To Return the Display

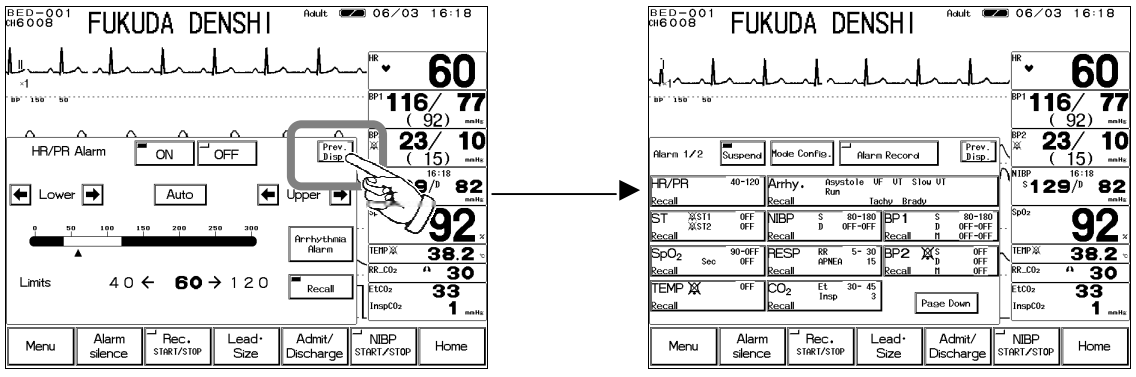
【To Return to the Home Display】

By pressing the Home key, the display will return to the home display.



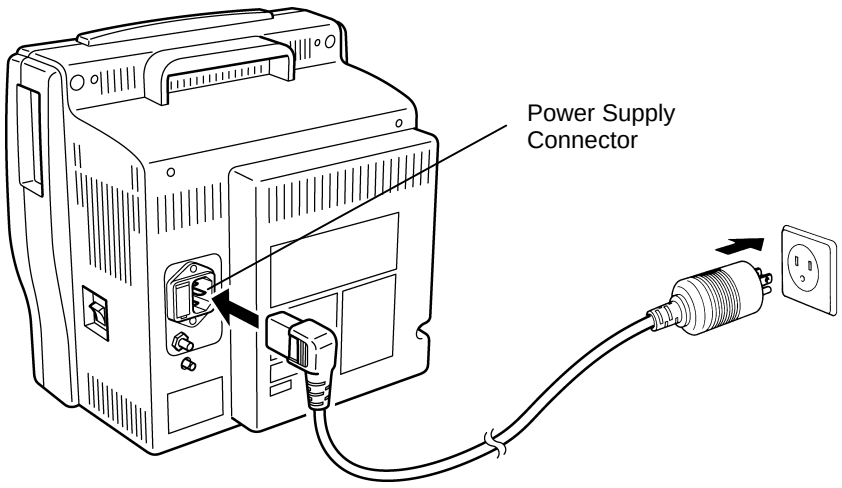
【To Return to the Previous Display】

By pressing the Prev. Disp. key which will be displayed on each setup window, the previous display will appear.

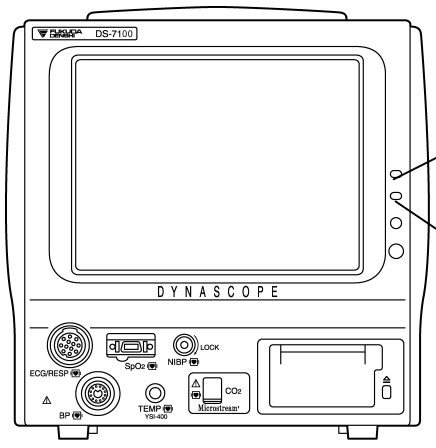


Connecting the Power Cable

Connect the accompanying AC power cable (CS-34) to the monitor and to the 3-way grounded outlet.



When the AC power is supplied to the monitor, the main power lamp will light in green.



Main Power Lamp
This lamp will light in green when the AC power is supplied.
The lamp will be extinguished during battery operation.

Charge Lamp
This lamp will light in orange during charging.
It will turn to green when the charging is complete.

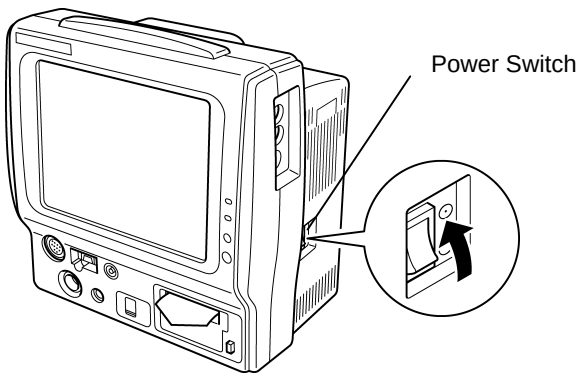
When the battery pack (optional) is installed, the charge lamp will light and charging will start.

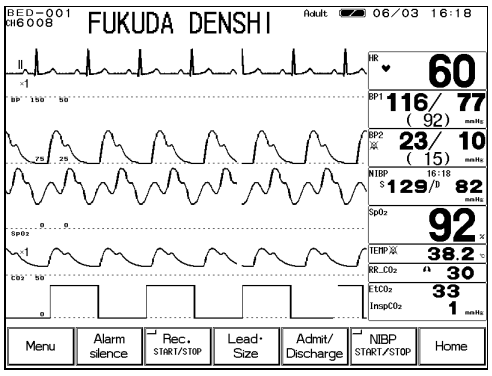
⚠WARNING	✍ Use only the accompanying 3-way AC power cable. Use of other cables may result in electric shock to the patient and the operator. ✍ The power cable must be connected to AC 115V hospital grade outlet. ✍ When using multiple ME equipment simultaneously, perform equipotential grounding to prevent potential difference between the equipment. Even a small potential difference may result in electric shock to the patient and the operator.

NOTE	Equipotential Grounding When connecting multiple devices, electrical potential difference may be generated between the devices. This may result in electric shock to the patient connected to these devices. Pay special attention for use in the operating room, ICU, CCU, Cardiac Catheter Laboratory, and Cardiovascular X-ray room. To avoid such electrical potential difference, use the accessory ground cable to connect each device's equipotential terminal to the same ground terminal. This is called equipotential grounding.

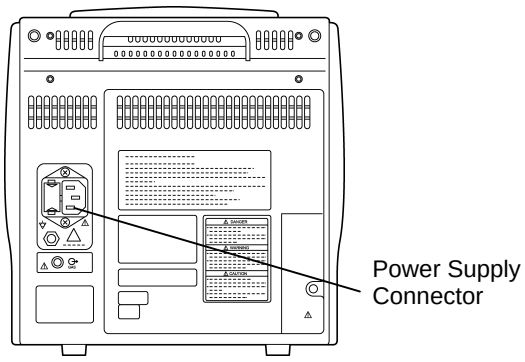
To Turn On the Power Switch

By turning the power switch ON, the display will appear and monitoring will start.

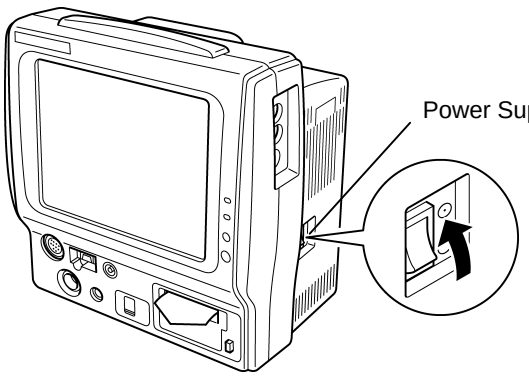




To Use with the Battery Pack

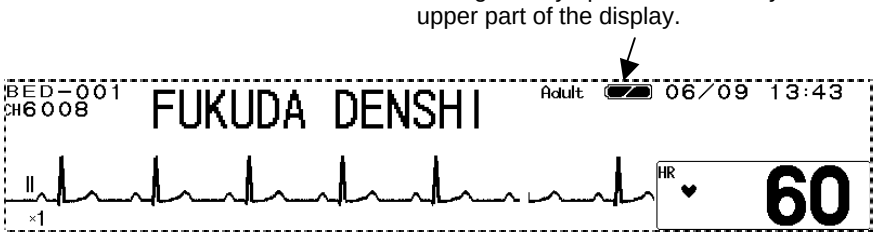


Unplug the power cable from the power supply connector located at the rear side of the monitor.
If the power cable is unplugged with the power turned ON, the monitor will also automatically change to battery operation mode.



Turn ON the power switch located at the right side of the monitor.

During battery operation, a battery mark will be displayed on the upper part of the display.



Battery Mark	*Charge Condition*	*Indication of Operation Time*	
		Standard Mode	*Power Saving Mode*
	Full	3 hours～2 hours 20 min.	3 hours 30 min.～2 hours 40 min.
	Medium	2 hours～10 min.	2 hours 40 min.～10 min.
	Empty	10 min,	10 min.

Reference Refer to “8. System Configuration Monitor Setup” for power saving mode.

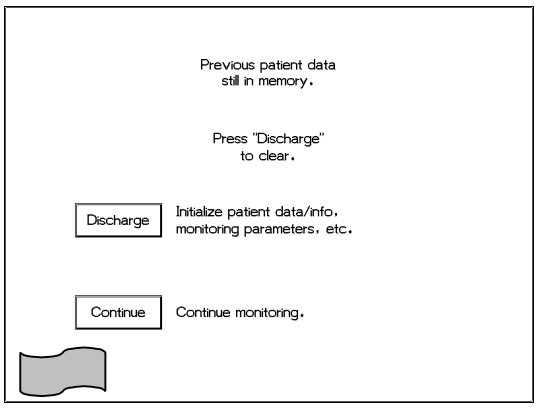
Indication of Charging Time (Empty to Full)	
When the power cable is connected and the power is turned OFF	2.5 hours
When the power cable is connected and the power is turned ON	13 hours

⚠CAUTION	The above operation time indicates the time for the new battery pack performing ECG measurement, NIBP periodic measurement (5-minute interval). Note that the battery pack degrades with a continuous use and shortens the usable time.

— To Start Monitoring —

Discharge Confirmation at Power ON

The monitor retains the trend and NIBP list data even when the power is turned OFF. If starting to monitor a new patient, discharge procedure on the patient admit / discharge menu should be performed.



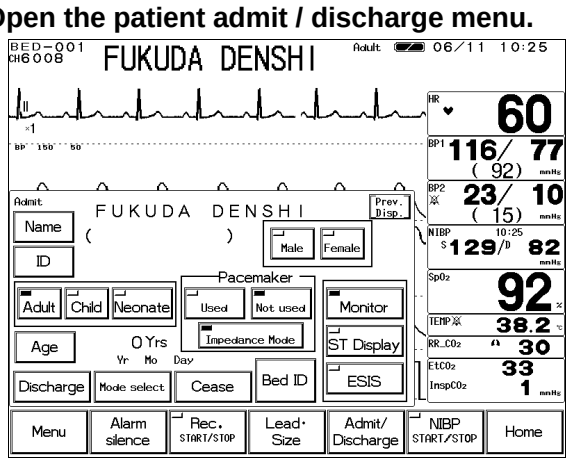
To start monitoring a new patient, press the [Discharge] key. The data before turning ON the power will be erased and starts monitoring.
Pressing the [Continue] key will retain the data before turning ON the power and starts monitoring.

Reference ON/OFF of this confirmation display can be selected.
Refer to “8. System Configuration Monitor Setup” for details.

To Admit a Patient

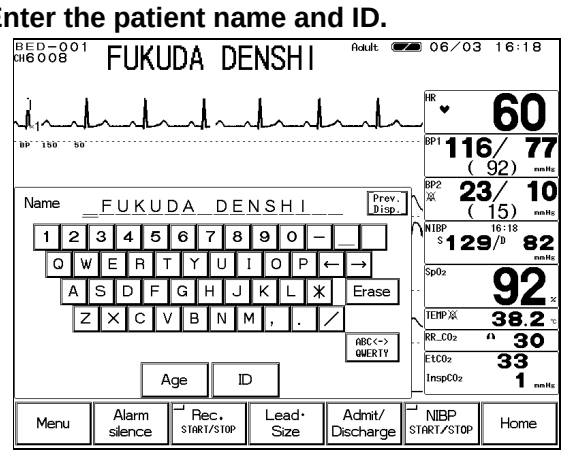
Enter the patient information on the patient admit / discharge menu.

1. Open the patient admit / discharge menu.



Press the [Menu] → [Admit / Discharge] key.
The patient admit / discharge menu will be displayed.

2. Enter the patient name and ID.



Press the [Name] key.
Enter the name using the numeric keypad.
The entered name will be displayed large on the upper part of the display.