ViewPoint™

Operating Instructions

Datascope®

innovation is the best medicine

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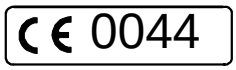
Symbols and Descriptions

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	Attention, Consult Accompanying Documents / Refer to Manual		Touchscreen
	Alternating Current (AC)		Alarm On
	Keyboard		Alarm Off
	Mouse		Alarm Mute Icon
	Input/Output		Earth Ground
	Speaker	Patient Network	ViewPoint Patient Network Ethernet
	Monitor	Central Network	ViewPoint Central Network Ethernet
	Non-Ionizing Electromagnetic Radiation		



A symbol designating compliance of the ViewPoint Central Station Monitoring system and ViewPoint Telepack 2.4 with the Medical Device Directive (MDD) 93/42/EEC, as a Class IIb device.

A symbol designating compliance of the ViewPoint Central Station tower and the ViewPoint Server with the Electromagnetic Compatibility Directive and/or compliance of the ViewPoint Central Monitoring system accessories to the Medical Device Directive (MDD) as Class I devices.

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Foreword

This Operating Instruction Manual is intended for the sole purpose of providing information required to operate the ViewPoint Central Monitoring system. For additional information and technical assistance, please contact your area or regional Datascope Patient Monitoring Representative.

Information relating to installation, servicing, and repair of the ViewPoint Central Monitoring System is provided in the documents listed below:

Installation Guide, ViewPoint Central Monitoring System, P/N 0070-00-0471

Service Manual, ViewPoint Central Monitoring System, P/N 0070-00-0457

Printer Configuration Manual, ViewPoint Central Monitoring System, P/N 0070-00-0561

General knowledge and understanding of the features and functions of a ViewPoint Central Station are prerequisites for the proper use of this equipment. Therefore, do not operate this equipment before reading these instructions, including all appropriate warnings and cautions, completely and thoroughly.

CAUTION: US Federal law restricts the sale of this device to, by, or on the order of a physician.

Warnings, Precautions and Notes

Please read and adhere to all warnings, precautions and notes listed here and in the appropriate areas throughout this manual.

A **WARNING** is provided to alert the user to potential serious outcomes (death, injury, or serious adverse events) to the patient or the user.

A **CAUTION** is provided to alert the user to use special care necessary for the safe and effective use of the device. They may include actions to be taken to avoid effects on patients or users that may not be potentially life threatening or result in serious injury, but about which the user should be aware.

A **NOTE** is provided when additional general information is applicable.

Warnings

WARNING: **Loading any unauthorized software on the ViewPoint Central Monitoring System will cause the application to no longer be suitable for medical patient monitoring use.**

WARNING: **Do not attempt to load any devices or device drivers onto the ViewPoint Central Station. If the user connects, or attempts to connect any unauthorized equipment, the ViewPoint Central Monitoring System may not operate as intended.**

WARNING: **Only qualified and trained personnel or Datascope Service personnel should attempt to service Datascope equipment. Service is defined as any activity requiring the cover to be removed for internal adjustments, parts replacements, repairs, or software upgrades of any kind to insure compatibility.**

WARNING: **To insure compatibility with the operating system and applications software, use only Datascope Corp. supplied and/or approved components to repair any part of the ViewPoint Central Monitoring System.**

WARNING: **Do not block the speakers or turn down the volume from the maximum position on the speakers provided with the ViewPoint Central Monitoring System. Set the volume levels so that alarms can be heard at all times, as described in this Operation Manual.**

WARNING: **Incorrect setting or silencing of patient alarms can jeopardize patient safety.**

WARNING: **Possible Explosion Hazard - Do not use in the presence of flammable gases. This instrument is not explosion proof in the presence of flammable anesthetics.**

WARNING: **Route cables neatly. Ensure cables are not in the way of hospital personnel.**

WARNING: **Do not incinerate batteries, possible explosion may occur.**

WARNING: **The ViewPoint Central Station and the ViewPoint Server must utilize the hospital emergency power system. Failure to do so will result in loss of monitoring during extended periods of power failure. The ViewPoint Central Monitoring Systems' back-up power time period is limited.**

WARNING: **Auto set alarm values works best when the patient is in stable condition.**

WARNING: **Cardiac arrhythmia and respiratory apnea conditions are not detected by the ViewPoint Central Station. They are alarm conditions that are detected by compatible physiological monitor(s) connected to the ViewPoint Central Station. The ViewPoint Central Monitoring System displays these conditions on the patient demographic line regardless of alarm tracking configuration.**

WARNING: **The unit of measure on the ViewPoint Central Station must match the unit of measure on the patient monitor. Failure to match units will result in unpredictable operation of the system.**

WARNING: **The 18.1" flat panel may tip over, if the display head is inclined to an angle greater than 45°, backward tilt. If the user elects to have the display head inclined to an angle greater than 45°, backward tilt, the flat panel must be attached to a secure mounting surface via three screw locations on the bottom of the base.**

WARNING: **Do not put MPSO (Multiple Portable Socket Outlets, i.e. multiple outlet extension cords) used with the ViewPoint Central Station system on the floor. Connect only ViewPoint Central Station accessories and components to the same MPSO as the ViewPoint Central Station. Do not overload MPSOs. Use only MPSOs that comply with the requirements of IEC 60601-1-1.**

WARNING: **The ViewPoint Telepack 2.4 is a telemetry system and hence prone to intermittent signal dropout. Therefore, use the telepack monitoring only on the patients whose conditions tolerate intermittent monitoring interruptions.**

WARNING: **The ViewPoint Telepack 2.4 device should not be used in the presence of flammable gases.**

WARNING: **Patients with fragile skin, dermal allergies, or a history of skin reactions to adhesive tapes may show a dermatitis reaction to the adhesive in addition to possible side effects from the electrical current.**

WARNING: **Use of ACCESSORIES, transducers and cables other than those specified in "Approved Accessories" on page 11-14 may result in increased EMISSIONS or decreased IMMUNITY of the ViewPoint Telepack 2.4 device.**

WARNING: **The ViewPoint Telepack 2.4 device should not be used adjacent to or stacked with other equipment and that if adjacent or stacked use is necessary, the ViewPoint Telepack 2.4 device should be observed to verify normal operation in the configuration in which it will be used.**

Cautions

CAUTION: US Federal law restricts the sale of this device to, by, or on the order of a physician.

CAUTION: For proper operation do not obstruct the fan air holes.

CAUTION: For proper operation use only hospital grade power cords.

CAUTION: For proper operation do not use ViewPoint Central Monitoring System with a frayed or damaged power cord.

CAUTION: For proper operation use only Datascope accessories with this product.

CAUTION: For proper operation do not use a damaged or broken system or accessory.

CAUTION: For proper operation never place fluids on top of this equipment. In case of accidental wetting, wipe clean immediately and have the system serviced to ensure no hazard exists.

CAUTION: Dispose of single use items in accordance with hospital policy.

CAUTION: Do not connect or attempt to connect any equipment to the ViewPoint Central Monitoring System local area networks unless Datascope Corp. has explicitly approved the hardware in writing. This includes all commercially available networking hardware (i.e., hubs, switches, routers, etc.) or peripherals (i.e., printers) even if they are the same brand as recommended by the configuration of the system and supplied by Datascope Corp.

CAUTION: Before connecting a patient to a monitor, make sure that no other patient is assigned to the monitor and that the previous patient has been discharged from the tile and monitor.

CAUTION: The Passport 2 should be disconnected from the patient when changing the CO_2 units of measurement.

CAUTION: Contact the Datascope Service Center or your designated Datascope Service Person if the ViewPoint Central Station continues to initialize without operator intervention.

CAUTION: For proper monitoring of patient information, do not block the operators' clear view of the ViewPoint Central Station data display(s).

CAUTION: If passwords are changed from the factory defaults, users MUST ensure that they document new passwords in the space provided in this manual. Failure to recall user defined passwords will render the system UNUSABLE.

CAUTION: The ViewPoint's Bedside Alarm Tracking feature can affect ST alarm processing between the ViewPoint and the bedside monitor.

If Bedside Alarm Tracking is on, the ViewPoint and the bedside monitor will always have the same learned ST alarms and the same ST Alarm Limits.

If Bedside Alarm Tracking is off, the ViewPoint and the bedside monitor may have different learned ST values and different ST Alarm Limits. Therefore the alarms may occur at different ST levels for the ViewPoint and the bedside monitor.

CAUTION: Before connecting a patient to a monitor, make sure that no other patient is assigned to the monitor and that the previous patient has been discharged from the tile and monitor.

CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the ViewPoint Telepack 2.4 equipment.

CAUTION: Conductive parts of electrodes and associated connectors for applied parts, and neutral electrode should not contact other conductive parts and earth.

CAUTION: The use of ViewPoint Telepack 2.4 may affect the functioning of other Medical Electrical Equipment operating in the same frequency band.

CAUTION: The ViewPoint Telepack 2.4 unit may not function properly, if the device was subjected to extreme mechanical forces.

CAUTION: The ViewPoint Telepack 2.4 unit may not function if the batteries installed in the device are corroded.

CAUTION: The ViewPoint Telepack 2.4 unit should not be used with damaged cables, connectors or accessories.

CAUTION: The ViewPoint Telepack 2.4 device should not be attached to the patient when the device is being programmed into the system.

CAUTION: Ensure that the ECG lead cable is plugged into the port firmly, the end cap of the battery is firmly secured and the serial port is also secured with the dummy plug to prevent fluids from entering into the ViewPoint Telepack 2.4 device.

CAUTION: The LED's in the ViewPoint Telepack 2.4 may not be clearly visible under brightly lit conditions. The lighting should be adjusted to ensure that all LED indicators are clearly visible.

CAUTION: The user should monitor the Viewpoint Central Station for messages from the ViewPoint Telepack 2.4 device that indicate a low battery condition.

CAUTION: The nurse should periodically press the test button on the ViewPoint Telepack 2.4 to verify the battery condition.

CAUTION: Indication of the heart-rate may be adversely affected by the operation of cardiac pacemaker pulses or by cardiac arrhythmias.

Notes

NOTE: The ViewPoint Server connected to the Viewpoint Central Station should also be rebooted whenever the ViewPoint Central Station is rebooted.

NOTE: The Passport 2 should be disconnected from the ViewPoint Central Station when enabling either wired or wireless in the Setup menu of the Passport 2.

NOTE: The ViewPoint Telepack 2.4 should not be used when the Electro Surgical Unit (ESU) is active.

NOTE: NIBP heart rate will be displayed on the Passport 2 but not on the ViewPoint Central Station. The Systolic and Diastolic readings will however be displayed on the ViewPoint Central Station.

NOTE: Volume settings use the system time format.

NOTE: A touch screen sidebar button can be used to toggle between System Alarm Responses, System Alarm Options, and System Alarm Limits.

NOTE: Restrict access among hospital staff to Password for *System Menu, marked in the Table 3-1 on page 3-7.

NOTE: When assigning new equipment, the Equipment Type must be entered before the Device ID is assigned.

NOTE: If the equipment type selected is "Passport 2®", an E is put in the device ID field, meaning the Device ID must start with an E.

NOTE: The Device ID is unique to each patient monitor.

NOTE: See the Patient Monitor's Operation Manual for information on how to retrieve the Device ID for each monitor and how to physically connect the Patient Monitor to the ViewPoint Patient Network.

NOTE: The default value for unit measurement is British.

NOTE: Initiating a Touch Screen re-calibration always affects both ViewPoint Central Station touch screen displays. The user is prompted to adjust settings for one touch screen display and then the other.

NOTE: The text in the Re-calibrate Touch Screen file folder cannot be translated and will always be displayed in English.

NOTE: You cannot admit a new patient into the discharged tile until the equipment is removed and re-entered or until a new patient is admitted to the patient monitor.

NOTE: The Last patient discharged appears at the bottom of the list.

NOTE: **The procedure described above in section "Transfer to another ViewPoint Central Station" on page 4-6 can be used to transfer the patient back to the original ViewPoint Central Station. However, the user must wait up to 5 minutes after the initial transfer before transferring the patient back.**

NOTE: **If a patient is put in Standby mode from the Passport 2®, a Patient Standby Location cannot be selected.**

NOTE: **When a device connected to the ViewPoint Central Monitoring System uses a 5 lead ECG cable, the ViewPoint Central Station can display any of 7 ECG vectors, independent of the vectors displayed on the connected device. When a device uses a 3 lead ECG cable, it can display only the 1 ECG lead currently displayed on the connected device.**

NOTE: **Please refer to the manufacturer's printer manual for specific instructions regarding the printer.**

NOTE: **A patient can only belong to one cluster at a given time.**

NOTE: **From the 16 patients that can be displayed on the ViewPoint Central Station, up to 8 can be wireless (connected to the Telepack device).**

NOTE: **Any change in the Patient Setup menu is immediately seen as a change in the patient tile.**

NOTE: **The LATCH ALARMS button only latches Viewpoint Central Station generated alarms (such as heart rate). Lethal and non-lethal arrhythmia alarms are not affected by this button.**

NOTE: **If the system clock displays an odd number of minutes, then the List Trends screen shows trend measurements in odd increments. If the system clock displays an even number of minutes, then the List Trends screen shows trend measurements in even increments. Exiting and returning to the List Trend screen may result in the display of different increments of measure, however the List Trend information is still accurate.**

NOTE: **The ViewPoint Central Station will display an 'ST Single alarm' every time that its alarm limit boundaries have been violated for a period of thirty consecutive seconds.**

NOTE: **The ViewPoint Central Station will generate a separate ST Single alarm for each lead of ST that independently violates the alarm.**

NOTE: **The ViewPoint Central Station will display an 'ST Dual alarm' every time that its alarm limit boundaries have been violated for a period of thirty consecutive seconds.**

NOTE: **The ViewPoint Central Station will generate a separate ST Dual alarm for each pair of ST leads that violate the alarm.**

NOTE: **[1] System and Technical events (except those marked*) have audible sound. See "Technical Events/System Events" on page 5-19.**

NOTE: **[2] After the message text the sensor name will appear for that message type.**

NOTE: **[3] The *"unable to measure"* message will persist until a valid measurement is obtained.**

NOTE: ***Message text that is marked with a single asterisk (*) does not have an audible sound.**

NOTE: ****Message text that is marked with a double asterisk (**) is not displayed when print sharing is used. For additional information see the ViewPoint Central Monitoring System, Printer Configuration Manual (0070-00-0561).**

NOTE: **The cables used should be properly maintained. Refer to the Service Manual.**

NOTE: **The Technical Events Sounds option must be turned on in the ViewPoint Central Station System Alarms/System Alarm Options Tab for the alarm to be audible from the ViewPoint Central Station when the ViewPoint Telepack 2.4 device is out of range. The message "Communication Lost" is also displayed on the patient tile in the ViewPoint Central Station. Refer to section "Technical Events Sounds" on page 3-4.**

NOTE: **The ViewPoint Telepack 2.4 should be cleaned and disinfected before and after each patient's use. Refer to "Cleaning and Disinfecting the Telepack" on page 11-12 for information.**

NOTE: **The ViewPoint Telepack 2.4 equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interference by one or more of the following measures:**
Reorient or relocate the receiving antenna.
Increase the separation distance between the equipment and the receiver.
Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
Consult the dealer or an experienced technician for help.

NOTE: **The ViewPoint Telepack 2.4 needs special precautions regarding Electro Magnetic Compatibility (EMC) and needs to be installed and put into service according to the EMC information provided in section "Electromagnetic Compatibility" on page 11-20.**

NOTE: **Portable and mobile RF communications equipment can affect the Telepack. See Table 11-1 on page 11-21, Table 11-2 on page 11-21, Table 11-3 on page 11-23 and Table 11-4 on page 11-24.**

NOTE: **Programming and assigning of the ViewPoint Telepack 2.4 is required to be done only once for each device. This process is to be performed by authorized service personnel only.**

NOTE: **The used alkaline batteries may be subject to local regulations regarding disposal. At the end of the battery life, do not dispose the batteries in fire but dispose of the batteries in accordance with any local regulations.**

NOTE: **At 80 MHz and 800 MHz, the higher frequency range applies.**

NOTE: **The EMC guidelines in Table 11-3 on page 11-23 may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.**

NOTE: **At 80 MHz and 800 MHz, the separation distance for the higher frequency range applies.**

NOTE: **The separation distances guidelines in Table 11-4 on page 11-24 may not apply in all situations. Electromagnetic propagation is affected by absorption and reflection from structures, objects and people.**

Indications for Use

The indications for use for the ViewPoint Central Monitoring System include:

A. Viewing real time patient clinical and demographic data

B. Graphical and numeric trending of clinical data

C. Storing and printing of clinical and demographic data

D. Setting independent alarm limits for data sent by the bedside monitor.

The clinical data displayed by the ViewPoint Central Monitoring System is obtained from one or more Datascope compatible physiological monitors and includes: ECG waveforms, Invasive and Non-Invasive Blood Pressure, Blood Oxygenation (SpO_2), Heart Rate, Respiration Rate, Temperature, CO_2 inspired and end tidal, Ventricular Arrhythmia analysis and ST Segment analysis.

The ViewPoint Central Station system is intended for use in a fixed location, in the health care facility setting, as a central viewing station. The ViewPoint Central Monitoring System is not intended to be directly connected to the patient at any time, or installed in a patient's vicinity.

Unpacking Information

ViewPoint Central Monitoring System is installed by a certified Datascope Service Technician. Please contact your authorized Datascope Service Representative for more information.

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1.0 Overview

1.1 General Description

Datascope Corp. ViewPoint Central Station can view, record and recall clinical data such as heart rate, ECG waveforms, oxygen saturation, invasive and non-invasive blood pressure, CO_2, respiration, temperature, ST segment analysis and alarms. It also monitors status for up to 16 patients. The data is derived from compatible physiological monitor(s) connected to the ViewPoint Central Monitoring System via the ViewPoint Patient Network.

The ViewPoint Central Station also communicates with a remote ViewPoint Telepack 2.4 device, which provides the heart rate information when the patient is in an ambulatory mode. Refer to "ViewPoint Telepack 2.4" on page 11-1 for detailed information.

For information regarding the backwards compatibility of the ViewPoint software, contact your Datascope Service Representative.

1.2 ViewPoint Licensing

The ViewPoint Central Station uses a licensing key to control the number of channels that are used with the system. The licensing key is coded with the system specifications that have been purchased and then attached to the parallel port on the back of the ViewPoint system.

The ViewPoint system will check for the presence of the system's licensing key within sixty seconds after the system startup and every ten seconds during the operation of the system. If at any time during these checks the system does not find the licensing key, the system will shut down and an event will be posted in the system error log.

1.3 ViewPoint Central Monitoring System

The ViewPoint Central monitoring system is controlled by a set of menu buttons. Buttons are activated in one of two ways:

1. Touching a button on the touchscreen monitor.
2. Using the mouse to position the cursor over a button and select it.

Monitoring at the Central Station is automatic and very few actions are required by the user. When any of the menu buttons are selected, the user receives both visual and audio feedback. The ViewPoint Central Station can be configured to display up to 16 patients on two displays (8 on each display).

The monitoring capacity of the ViewPoint Central Monitoring System is flexible and utilizes industry standard components to provide network communications to all related patient monitors and peripheral devices. The ViewPoint Central Monitoring System is intended to be installed and used in a fixed, non-portable, permanent location, in a hospital setting. This location acts as a central data viewing station. The ViewPoint Central Monitoring System is not intended to be installed in a patient room/patient vicinity. In addition, the ViewPoint Central Monitoring System is not directly connected to the patient at any time.

The standard configuration (See Figure 1-2.) of the ViewPoint Central Monitoring System consists of the following:

- ViewPoint Central Station
- (2) Displays
- Network Printer
- Mouse
- Uninterruptible Power Supply (UPS)
- Speakers
- Keyboard (for diagnostics purposes only)

The system also typically includes a bedside monitor. It will also include a ViewPoint Telepack 2.4 unit, if purchased by the customer.

Connectivity to a second ViewPoint Central Monitoring System creates a larger, networked area coverage. Patient data transfer is possible between two connected ViewPoint Central Monitoring Systems via ViewPoint Central Network. Through an Ethernet Switch, this network provides bi-directional communication. The network communicates over a 100 Base T LAN for central station to central station communication and network laser printing.

Through a Hub, the ViewPoint Patient Network provides bi-directional communication over a 100 Base T LAN using proprietary protocols to communicate real-time patient data. Real-time data can be retrieved from up to 16 attached external monitoring devices.

Figure 1-2 on page 1-5 shows an example of the ViewPoint Central Monitoring system.

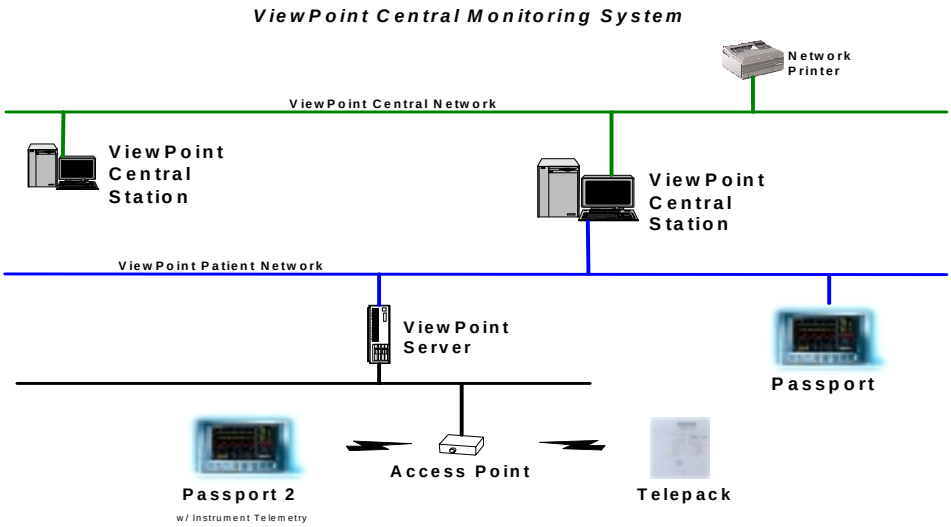

FIGURE 1-1 ViewPoint Central Monitoring System

ViewPoint Central Station default operational rules:

- One ECG waveform is visible at all times for each patient.
- All data generated from the same parameter is the same color for all patients.
- Patient waveform and related digital parameters tiles are horizontally linked.
- Active parameters/patient monitors will be displayed. Active means that the parameter is present and functioning and patient cable/catheter connected.
- Each patient's tile contains only two waveforms and up to 5 digital parameters. The waveforms and digital parameters are selected via the **PARAMETER DISPLAY** file tab of the **PATIENT SETUP** menu. The Bedside view interactive screen displays up to four waveforms and associated digital values as well as 4 additional digital values.

The ViewPoint Central Station has an immediate display function. When a patient is attached to a bedside unit, the digital data and waveform will immediately appear on the ViewPoint Central Station monitor. If a parameter has been selected for display at ViewPoint Central Station it will be displayed as the data becomes available. The user selected priorities (Parameter Display) will determine which data is displayed. Heart rate is always the first digital parameter displayed.

Parameters are identified using the colors that are selected by the user. For example, by default, all heart rates are displayed in green. However, in the Main screen, the Bedside, Graphic Trends (digital data only), Event Zoom In (View Waveforms), and the Full Disclosure Zoom In tabs, the color in which the heart rate parameter is displayed will be based on the source of the heart rate measurement. Possible sources of heart rate include ECG, NIBP, SPO_2, IBP1, and IBP2.

NOTE: **NIBP heart rate will be displayed on the Passport 2 but not on the ViewPoint Central Station. The Systolic and Diastolic readings will however be displayed on the ViewPoint Central Station.**

The user can choose whether the second waveform is displayed.

A parameter refers to one set of digital data related to a particular value being monitored. For example, heart rate, NIBP (NIBP includes the systolic, diastolic, mean, and elapsed time values) and inspired/expired CO_2 are three parameters. If the user chooses to have NIBP, IBP or CO_2 displayed, the system will combine tiles to allow all information pertaining to that parameter to be displayed.

The main system displays are controlled by buttons on the touchscreen or by use of the mouse. The optional use of a keyboard would be available for use during system installation and service. The mouse and touchscreen can be used interchangeably.

When the button labeled **OPEN MENU** is displayed, the ViewPoint Central Station monitor will display limited menu choices. The choices will be TOUCH SCREEN ON/OFF and OPEN MENU. Selecting the **OPEN MENU** button allows access to additional commonly used function buttons. Choosing one of these function buttons will open the interactive portion of the screen. Less frequently used choices and selections are located in sub-menus in this interactive area. Password protected functions are also located in sub-menus.

The two most frequently used functions, printing (REC) and selecting a patient to view (VIEW), are activated by selecting the appropriate button, which appears next to the patient's waveform tile.

System default set-up is a password protected feature.

The Touchscreen ON/OFF function is always active to facilitate cleaning of the touchscreen.

Another frequently used function, muting or silencing an alarm is available whenever an alarm has been violated. Selecting the **MUTE** button (which was the **VIEW** button until the alarm sounded) will silence or "mute" the alarm.

FEATURES	STANDARD FEATURE	STANDARD FEATURE – USER CAN TURN OFF/ON
Printing	Yes	User can select printing to a laser jet printer
Set/silence alarms at Central Station		Yes
Automatic print strips feature		Yes
72 hour Trending - graphic and tabular	Yes	
72 hour waveform - full disclosure	Yes	
Display of ST segment analysis	Yes	
Display of Arrhythmia detection	Yes	
Report	Yes	

A listing of standard user features and optional features for the Central Station system is as follows:

1.3.1 Main Displays

Figure 1-2 on page 1-5 shows an example of the ViewPoint Central Station's main display.

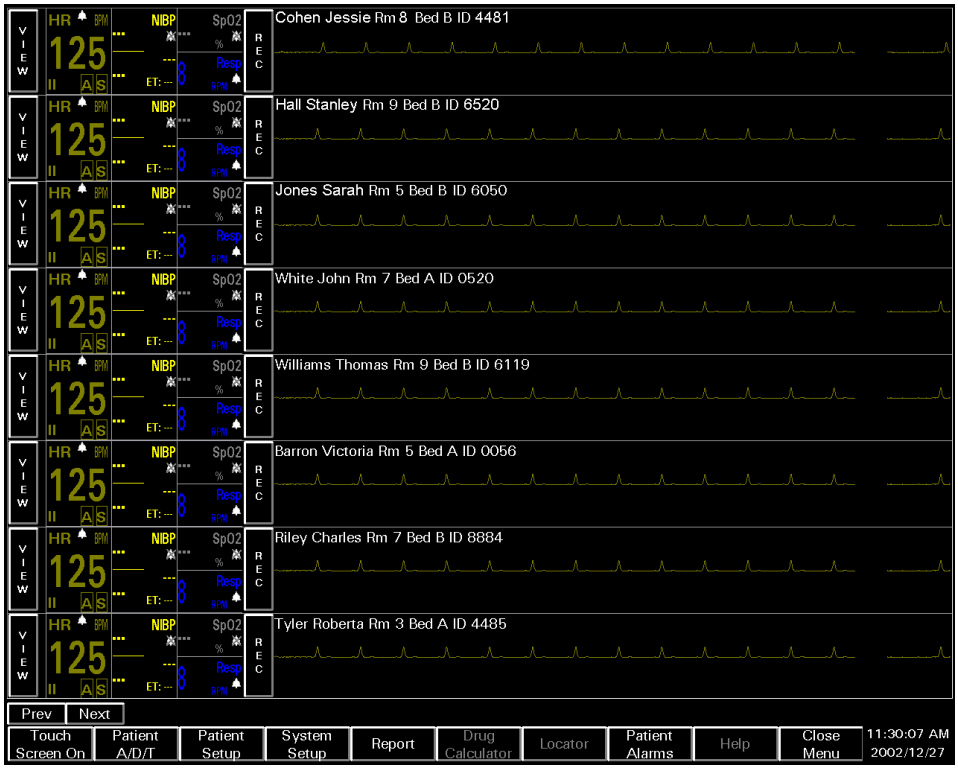

FIGURE 1-2 ViewPoint Central Station's Main Display

Three types of displays are available with the unit (20" and 21" CRTs, as well as an 18.1" flat panel display). The ViewPoint Central Station is capable of supporting two displays at one time. For calibration purposes if two displays are used they must be the same type of display (for example, two 18.1" flat display monitors). The maximum number of patients viewed on each display is determined during installation, when the display screen is set to 8 or 12 patients per display with a maximum of 16 patients shown on the displays.

There are two main operating modes for the displays, Normal and Interactive modes. The normal mode is displayed when the operator is centrally monitoring patients and is not performing any management functions. The interactive mode is displayed when the operator wishes to continue monitoring the patients as well as perform management functions such as admit, discharge, etc.

Tiles are used to display digital parameters (order is user configured) and waveforms for each patient. See "File Folder Tab: Parameter Display" on page 5-7.. A digital tile is used to display the patient's digital parameter data. A waveform tile is used to display one or two waveforms as preferred by the user for each patient.

In order for patient information to be displayed on the tiles the following two things need to take place:

1. Monitoring equipment is assigned to a specific tile.
2. A patient is admitted to the tile.

Admitting a patient can be automatic admit or a manual process. Both are explained later in this document. See "Admitting Patients" on page 4-2.. Patient data and waveforms are displayed in their respective tiles for each patient that is admitted to the tile. All tiles without a patient admitted to them appear as blank tiles.

Whenever the user moves a patient with a piece of equipment to a new tile (by transferring a patient attached to the piece of equipment to a new location, or through the system set-up options), the system reassigns that equipment to the new tile. If the user attempts to admit a patient to a tile that does not have monitoring equipment assigned to it, a message displays in a pop-up message window. The message reads ***"Can not admit patient to this tile. No device attached to this tile."*** Select **"OK"** to continue.

The configuration of the system will be performed as outlined in the Service Installation Guide P/N 0070-00-0470.

1.3.1.1 Normal Screen

The Normal Screen appears with either eight or twelve patient parameter and waveform tiles. The menu function buttons are located across the bottom of the screen.

When the operator has selected the **OPEN MENU** button, the **CLOSE MENU** button is displayed along with the function buttons shown in Figure 1-3 on page 1-6.

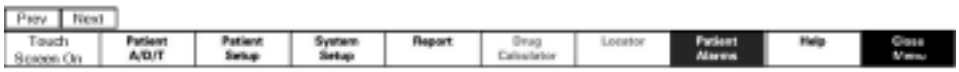

FIGURE 1-3 Function Buttons - Open Menu

When the operator has selected the **CLOSE MENU** button, the **OPEN MENU** button is displayed along with function buttons shown in Figure 1-4 on page 1-6.

FIGURE 1-4 Function Buttons - Close Menu

A Status bar is located above the menu buttons and provides for display of system messages, warning information, and any messages the ViewPoint Central Station sends to the user. Users may scroll through all available status messages by pressing the **NEXT** and **PREV** buttons located next to the Status window.

1.3.2 Patient Tile Functions

Digital values for up to five monitored parameters appear in the patient's digital parameter tile in **Normal View**. If one or more of those values is a blood pressure with a systolic and diastolic value, fewer parameters will be displayed. The first parameter contains icons, which indicate the status of features selected for this patient. The icons are displayed at the bottom of the digital parameter tile. The ECG lead number and icons are replaced with the Standby message, as appropriate. The icons are:

-  Arrhythmia option is selected for this patient.
-  ST segment analysis option is selected for this patient.
-  Small Bell Indicates that alarms are on for this parameter.
-  Small Bell with "X" over it indicates that at least one alarm is off for this parameter. The "X" over the bell is only removed when all alarms for an associated parameter are on.
- I, II, III, aVR, aVL, aVF, V1, etc. indicates the lead that is monitored for waveform and digital if the parameter is heart rate.
- **STANDBY** indicates that the patient is in standby mode. There is no monitoring of waveforms or parameters for this patient.

The digital parameter data and Alarm State are displayed for parameter tiles. The title of the parameter will appear at the top of the digital parameter tile.

When ST is selected to be displayed in the patient tile, an ST lead label is shown in the patient tile (ST1, ST2, or ST3). The ST lead label shows the lead from which the displayed data is acquired. The ST lead labels that are available include: I, II, III, aVR, aVL, aVF, and V1.

All ST lead labels in the Patient Tile will include a tag that indicates if the ST that is measured is seen by the bedside monitor as a delta value (-d) or an absolute value (-a).

- A **-d** tag is shown next to an ST lead label when the bedside monitor sees the measure as Delta ST.
- A **-a** tag is shown next to an ST lead label when the bedside monitor sees the measure as Absolute ST.

The ECG waveform will appear in the patient's waveform tile (lead to be determined by the user). The user can also select a second waveform to display in this area. The patient's room number, bed number, name, and ID (demographic data) appear at the top of the waveform tile. This message area is also used to display bedside relevant status such as alarms at the bedside monitor and arrhythmia alarm messages.

When two waveforms are displayed in the waveform section of the patient tile, the waveform tile will be split into two sub-tiles and one waveform will be shown in each sub-tile. Each waveform will have an independent baseline. If a section of the waveform goes out of the patient tile's range, that section of the waveform is not shown.

A patient is selected by touching a section of the patient's tile.

Selecting a Patient in the Normal Screen

When a patient tile is selected in the Normal Screen Display the following occurs:

- If a **VIEW** button is selected, the button will momentarily turn white and the selected patient is placed in the Bedside Interactive mode.
- If a patient tile is selected, nothing will happen.
- If a **REC** button is selected, the button will momentarily turn white and the patient's All Strips Report is printed.

Selecting a Patient in the Bedside Interactive Mode

When a patient tile is selected in the Bedside Interactive Mode the following occurs:

- The patient's name, room number, and bed number will be displayed at the top of the interactive screen just above the waveform area, and on any document printed for that patient.
- If a **VIEW** button is selected, the button will momentarily turn white and the newly selected patient information is displayed on the bottom half of the display.
- If a patient tile is selected, a white background appears on the screen around that patient's parameter tile and a bold white line will surround the patient's waveform tile, to indicate which patient has been selected.
- If a **REC** button is selected, the button will momentarily turn white and the selected patient's All Strips Report is printed.

1.3.3 Physiological Alarm Indication

When a Central Station alarm limit is violated, the **VIEW** button to the left of the patient tile will change to **MUTE** *(when the* **MUTE** *button is pressed, the alarm is acknowledged and the button changes back to* **VIEW***)*. The patient's digital tile representing the alarming parameter displays the alarming state by highlighting the background. The background will flash in the color that is representative of the alarm severity. The background is red or yellow depending on severity, red = highest and yellow = medium/low, and for lowest severity the background does not flash.

The parameter color will remain until the alarming violation has been resolved. An audio alarm tone will also be generated. Resolution of the alarm condition occurs when the alarming parameter(s) return to a value within the limits of the set alarm range, or the alarm limits are adjusted wider than the current value of the parameter. Alarm messages, such as arrhythmia alarms, sequence on the patient's demographic data line. See "Arrhythmia Alarms" on page 10-1..

If the alarming parameter is one that is not configured for display in the patient digital tile, it will replace the lowest priority parameter that is currently displayed. This will continue until either the alarm condition is resolved or an alarm occurs in another, higher priority parameter that is not currently displayed.

System alarms, such as printer out of paper, are indicated with messages in the status message line, accompanied by an audio alarm.

ViewPoint Central Station and bedside alarms for the same parameter may be set at different levels. If an alarm exists at bedside but is not in violation of the ViewPoint Central Station alarm, a message ***"Alarm at bedside (alarm type)"*** will be displayed in the waveform tile. Patient alarms are displayed in the color that represents its priority level. Level 1 alarms are displayed in red, level 2 and 3 alarms are displayed in yellow and technical events are displayed in white.

Alarms are displayed in order of priority and time; priority 1 alarms are displayed first, in order of occurrence. They are followed by priority 2 and 3 alarms. The first priority 2 or 3 alarm follows the last priority 1 alarm. These are followed by a repeat of all priority 1 alarms which are in turn followed by the second level priority 2 and 3 alarms. In all cases, the most recent alarm is displayed last.

The following table shows the order in which alarms are displayed:

ALARM	ALARM LEVEL	DISPLAY SEQUENCE
Asystole	1	Asystole
Check Sensor	3	High HR
High HR	1	Check Sensor
Low SpO_2	2	Asystole High HR Low SpO_2

1.3.4 Alarm Muting

The **VIEW** button changes to MUTE when an alarm occurs. Selecting the **MUTE** button silences the audio portion of the alarm. The alarm message in the waveform area will continue flashing the alarm condition. The **MUTE** button will return to VIEW and selecting this button a second time will open the Bedside Interactive display.

1.3.5 VIEW

Selecting the **VIEW** button on the patient's parameter tile will change the display to the Bedside Interactive display. See "File Folder Tab: Bedside" on page 5-11.. This display offers emulation of the bedside display in an expanded view.

When the Bedside Interactive display is selected with the main menu closed (main function buttons that are located across the bottom of the display were not displayed), the main menu automatically opens to display the main patient's function buttons. To distinguish the tile of the patient being viewed in the bottom half of the display, the patient's tile will be shown with black characters on a white background in the top half of the display. To change the patient being viewed in the Bedside Interactive Mode, touch the new patient's **VIEW** button, or touch the desired patient's digital tile or waveform tile (touching the **REC** button will not change the patient that is selected).

To close the View display, either select the **NORMAL SCREEN** button (that will always be in the far lower right hand screen for all screens) or select the **CLOSE MENU** button. If the **VIEW** button is pressed for a tile that does not currently contain a patient, the patient name field shows "No Patient in the tile".

1.3.6 REC

Figure 1-5 on page 1-10 shows an example of the **REC** button in a patient tile.

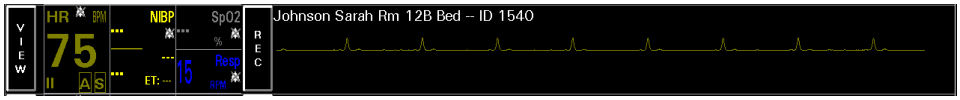

FIGURE 1-5 REC WaveForm

ECG waveform 1 in the print setup.

The **REC** button is adjacent to the patient's waveform tile (See Figure 1-5.). When the **REC** button is pressed ViewPoint will output a 10 second report of all available digital parameters and available waveforms. The report will contain the waveforms for the 10 seconds prior to pressing the **REC** button.

The print device is determined by the configuration of the Print Setup file folder tab in the **SYSTEM SETUP** menu button (See "Report Layout and Specifications" on page 10-2.). The print job stays in the queue until the print is complete or the job is deleted. A message toggles on the status line to indicate a printer problem. If a problem that is not related to the printer is detected, the ViewPoint will automatically retry the print job at least once. The ViewPoint Central Monitoring System takes a snapshot of the data at the time of the Print request, and queues this data to print whenever the printer becomes available.

See "Report Layout and Specifications" on page 10-2.

1.3.6.1 Print Error

See "ViewPoint Central Station Messages" on page 10-37.

2.0 *Main Menu Buttons*

2.1 Controls and Indicators

This section of the Operation Instructions identifies and describes the basic controls of ViewPoint Central Monitoring System.

The operation of the ViewPoint Central Station is controlled by function buttons.

- The first set, consisting of **TOUCHSCREEN ON/OFF** and **OPEN/CLOSE MENU** are buttons that are always active and displayed on the screen. Selecting **OPEN MENU** will expand the function buttons to include the **PATIENT A/D/T, PATIENT SETUP, SYSTEM SETUP, REPORT**, and **PATIENT ALARMS** buttons. These buttons will be hidden with the selection of **CLOSE MENU**.
- The second set of function buttons are actually part of the patient tile. The **VIEW** button, positioned next to the parameter portion of the patient tile, activates the **BEDSIDE VIEW** screen. This button toggles to **MUTE** when an alarm is active and returns to **VIEW** when **MUTE** is pressed. Depressing **VIEW** enables the **BEDSIDE VIEW** screen. This brings up a set of file folders labeled **Bedside**, **Trends**, **Event, Disclosure**, and **ST**. The **REC** button, positioned next to the waveform portion of the patient tile, will activate the print command.

2.2 Menu Button: Open/Close Menu

- Selecting the **OPEN MENU** button causes the main menu buttons to appear.
- Selecting the **CLOSE MENU** button hides the main menu buttons.

3.0 *Getting Started*

3.1 System Setup

System Set-up creates the system wide settings and defaults for the displays.

Once in the System menu, two sets of set-up options are available, one is open for all users to access, the other is password protected (Installation Set-up). The first set would have setup options that need to be accessed by all (no password protection for these functions). Such functions are printer options and setting up clusters. The second set of set-up options are the installation choices and are password protected.

Clusters are groupings of patients. Clusters can be a caregiver, care area, or any other context that is relative to the hospital. Reference labels can be assigned to a Cluster for reference use at the hospital. Cluster members can be reassigned to a different cluster at any time by using the Cluster/Group Setup file folder. However patients can only be assigned to 1 cluster at any given time.

The **NORMAL SCREEN** button appears in each sub-file of the System Setup.

3.1.1 File Folder Tab: Installation Set-up (password protected)

The **SET-UP** menu is for initial installation of the system. Choices made in this menu affect all of the displayed parameters and waveforms. They also affect passwords, equipment assignment and determine the system defaults such as volume and alarms.

Selecting the **Installation Set-Up** file folder tab, opens a Password dialog box. When the user selects the black area of the box a keyboard screen appears for the user to enter the password. If a password is entered 3 times unsuccessfully the display will return to the normal screen without any changes. If the correct password is entered an additional set of file folders will be displayed. The default password is “system” and is case sensitive.

Additional file folders include **Volume**, **System Alarms**, **Passwords**, **Equipment Setup**, **Date/Time/**, **More**, **Previous**, **Print Setup**, **Recalibrate Touch Screen**, **Unit Priorities**, **Unit Choices, Parameter Color** and **Telepack**.

- Selecting the **DONE** button, when available, saves changes before exiting.
- Selecting the **NORMAL SCREEN** button will return the user to the normal screen.

3.1.1.1 File Folder Tab: Volume

The Volume file folder tab is used to configure the Volume, System Alarms, Physiological Alarms, and touch click sounds of the ViewPoint system. The main features of the Volume file folder tab include the following:

- Touch click Volume

  1 Volume level
  Can be turned off

- System Alarms

  1 Volume level
  No OFF position

- Physiological Alarms

  3 Volume levels that can be set based on the time period specified
  No OFF position

To set a time range for Physiological Alarms:

1. Select the colored box next to the desired time period.

A Time range is indicated by the color bar next to the physiological alarm volume slider.

2. Click in the black area below the **FROM/TO** buttons.

The numeric keypad is displayed.

3. Enter new "From" and "To" times.

Delete existing Hr./Min. data by using the Clear or CE buttons.

The time format for Physiological alarms follows the system time format.

12-Hour Format

The default time period for the 12-hour format is 12:00 AM to 12:00 AM for the first time period, '--' for the second time period, and '--' for the third.

The AM/PM toggle button changes between AM and PM when pressed. This button is only available in the 12-hour time format.

24-Hour Format

The default time period for the 24-hour format is set to 0:00 to 0:00 for the first time period, '--' for the second time period, and '--' for the third.

4. Set the desired volume level.

The volume level is set to Max by default.

There are two ways of adjusting the volume level. To adjust the volume level, you can either touch the arrows on the screen or use the mouse to move the sliding bar to the desired level.

5. Press the **OK** button to save the selections.

NOTE: **Volume settings use the system time format.**

WARNING: **Do not block the speakers or turn down the volume from the maximum position on the speakers provided with the ViewPoint Central Monitoring System. Set the volume levels so that alarms can be heard at all times, as described in this Operation Manual.**

3.1.1.2 File Folder Tab: System Alarms

Figure 3-1 on page 3-3 shows an example of the System Alarms Options screen.

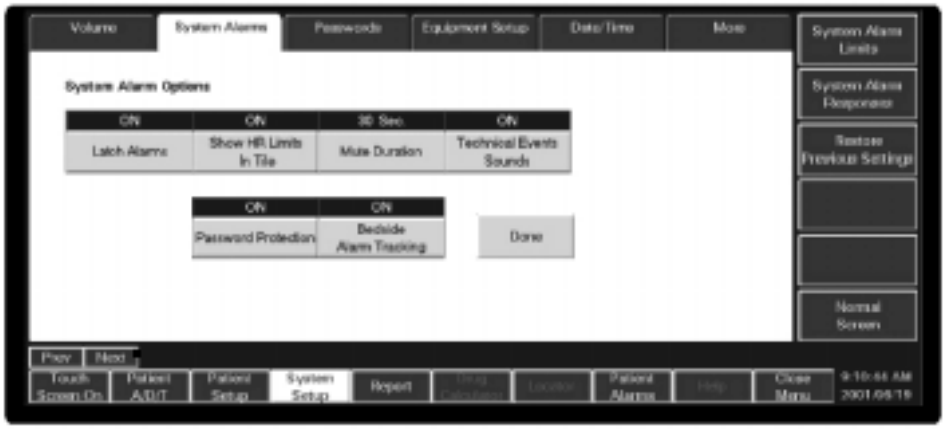

FIGURE 3-1 System Alarms Options screen

This tab consists of three main areas, namely: **System Alarm Options, System Alarm Limits** and **System Alarm Responses**. Every patient admitted to ViewPoint Central Station starts with the default settings for system alarms.

NOTE: **A touch screen sidebar button can be used to toggle between System Alarm Responses, System Alarm Options, and System Alarm Limits.**

3.1.1.2.1 System Alarm Options

3.1.1.2.1.1 Latch Alarms

This button allows the ViewPoint Central Station to continue displaying an alarm message even after the event has passed. If alarms are set to be latched, the user must manually turn the alarm off (mute the alarm) for it to be silenced. If alarms are not latching, the alarm will automatically stop if the alarm situation resolves itself. However, a minimum of one full alarm burst will be sounded. **Asystole**, **Vfib**, **Vtach and Apnea** are always latched alarms and cannot be set to non-latching. This is an **ON/OFF** button and is selected using the gray area of the button. The default setting is **ON**.

Alarms are displayed in order of priority and time; priority 1 alarms are displayed first, in order of occurrence. They are followed by priority 2 and 3 alarms. The first priority 2 or 3 alarm follows the last priority 1 alarm. These are followed by a repeat of all priority 1 alarms which are in turn followed by the second level priority 2 and 3 alarms. In all cases, the most recent alarm is displayed last.

NOTE: The LATCH ALARMS button only latches Viewpoint Central Station generated alarms (such as heart rate). Lethal and non-lethal arrhythmia alarms are not affected by this button.

3.1.1.2.1.2 Show HR Limits in Tile

This selection determines if the heart rate alarm limits are displayed in the parameter tile. This is a **ON/OFF** button and is selected using the gray area of the button. This function is only displayed in bedside view. The default setting is **ON**.

3.1.1.2.1.3 Mute Duration

This toggle style button sets the amount of time an alarm will be silenced after the **MUTE** button is pressed. The value selection is accessed by pressing the gray area of the button. Values available are: **10 Sec.**, **15 Sec**., **30 Sec.**, **45 Sec.**, **60 Sec.**, and **120 Sec**. The default setting is 30 seconds.

3.1.1.2.1.4 Technical Events Sounds

This button enables the system to provide audible alarms when the ViewPoint Telepack 2.4 device is out of range. The default setting is **ON.**

3.1.1.2.1.5 Password Protection

This button sets password protection for Patient Alarms only (**ON/OFF**). Users make their selection using the gray area of the button. The default setting is **ON.**

3.1.1.2.1.6 Bedside Alarm Tracking

Beside alarm tracking ensures that changes in bedside alarms are automatically changed for ViewPoint Central Monitoring System. This is an **ON/OFF** button and is selected using the gray area of the button. The bedside alarm values and the central alarm values can be set to track together if desired. In the tracking mode the system initially sets alarms based on bedside values, then any changes made at one unit will automatically change the alarm limit values at the other unit, on a bed by bed basis. The default setting is **ON**.

3.1.1.2.2 System Alarm Limits

Figure 3-2 on page 3-5 shows an example of the System Alarm Limits.

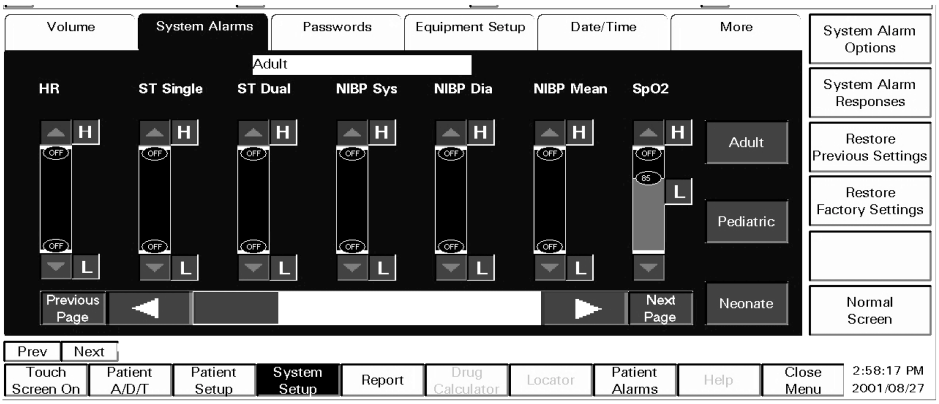

FIGURE 3-2 System Alarm Limits Screen

This screen allows the user to set the default alarm limits for the system. These alarm limits are used when a patient is admitted. These limits are overridden by any individual patient alarm limits that may be set. See "System Alarm Limits and Ranges for Parameters" on page 10-24.

In each one of these menus, there are three buttons: **RESTORE PREVIOUS SETTINGS, RESTORE FACTORY SETTINGS** and **NORMAL SCREEN**.

RESTORE PREVIOUS SETTINGS is a momentary contact button that changes the alarm limits in the system alarm limits tab to the previously saved alarm limits. When the Restore Previous Settings button is selected, the button is briefly highlighted while the old settings are restored. The current settings are automatically saved when you change the patient size or when you leave the current dialog box.

While in System Alarm Limits the following is true:

- When a new patient size is selected or when you leave the tab, the current settings are automatically saved.
- When the button for the current patient size is selected, no changes are made to the system settings.

Restoring the Previous Settings

To restore the system's previous settings:

- Press the **RESTORE PREVIOUS SETTINGS** button.

WARNING: Cardiac arrhythmia and respiratory apnea conditions are not detected by the ViewPoint Central Station. They are alarm conditions that are detected by compatible physiological monitor(s) connected to the ViewPoint Central Station. The ViewPoint Central Monitoring System displays these conditions on the patient demographic line regardless of alarm tracking configuration.

3.1.1.2.2.1 System Alarm Limits for Patient Sizes

Between the alarm limits and the four buttons (Restore System Defaults, etc.) there will be three buttons: **ADULT, PEDIATRIC** and **NEONATE.** These buttons are associated with the limits as described in the Appendix. See "System Alarm Limits and Ranges for Parameters" on page 10-24..

3.1.1.2.3 System Alarm Responses

Figure 3-3 on page 3-6 shows an example of the System Alarms Responses.

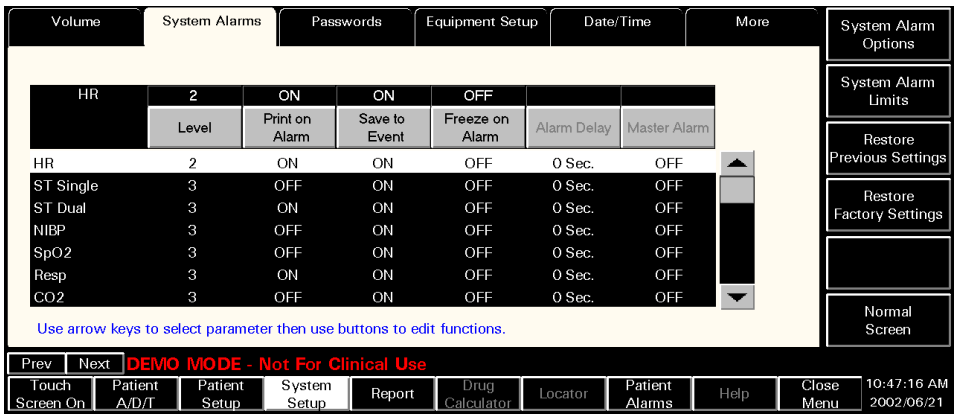

FIGURE 3-3 System Alarms Responses Screen

The system alarm responses screen allows the user to set the severity level of an alarm, and determine whether to **print on alarm,** or **freeze on alarm**. The user can choose all, none or a combination of responses.

3.1.1.2.3.1 Level

Lethal arrhythmias are defined as **Asystole, Vfib** and **Vtach**. These are severity level 1 latching alarms and are not configurable to a lower level. Severity level 1 alarms have a distinct tone. All parameters and arrhythmias are configurable to severity levels 2 or 3 with the exception of HR (Heart Rate), which can be set to level 1 or 2 only. Severity level 1 is the highest and level 3 is the lowest. Options are selected by pressing the gray **LEVEL** button.

3.1.1.2.3.2 Print on Alarm

The **PRINT ON ALARM** option is a toggle type button which when activated will print a All Strips Report upon alarm violation. This option sets the system default settings for each parameter that is measured. Available Choices: ON/OFF

Settings can also be configured on a patient by patient basis in the Patient Alarm Responses tab (See "File Folder Tab: Responses" on page 5-3.).

3.1.1.2.3.3 This section intentionally left blank.

3.1.1.2.3.4 Freeze on Alarm

The Freeze On Alarm option freezes all of the waveforms and digital data in the Bedside Interactive display and puts a check mark in the **FREEZE** button. The data will remain frozen until the **FREEZE** button is unchecked. The Freeze On Alarm option only works if the patient is in the Bedside Interactive display mode when the alarm occurs. (That is, if the system is viewing any other patient, or any other screen for any patient, when the alarm event occurs, the system will not freeze the display). If the Bedside Interactive display is exited and re-entered or View More is pressed the display will NOT be frozen.

Available Choices: ON/OFF

3.1.1.2.3.5 Alarm Delay

The delay time between onset of alarm and audio/visual notification of an alarm. Alarm delay is fixed at 0, and not changeable.

3.1.1.3 File Folder Tab: Passwords

In this menu, the user can change passwords for access by designated individuals. These passwords are for **Alarm** (for Patient Alarms) and **System**. The passwords are changed by selecting the appropriate button. A dialog box will be presented for input of the old password. Pressing the black area of this box will display a keyboard for entry of the old password. If the wrong password is entered a message ***"Incorrect password. Please try again"*** will be displayed. If the correct password is entered an area is provided to input the new password. After entering the new password an area for confirmation is presented. The operator once again enters the new ViewPoint Central Monitoring System password and the display returns to the main password display. Only alphanumeric characters may be used for passwords, if a non-alphanumeric character is chosen for use in a password, the message ***"Illegal password please choose new password"*** is displayed. Password entry is case sensitive.

Password changes should be recorded by the user in the table below:

TABLE 3-1 Password Table.

MENU	DEFAULT PASSWORD	USER PASSWORD
Alarm	alarm	
***System Menu (Shut Down)**	system	

NOTE: **Restrict access among hospital staff to Password for *System Menu, marked in the Table 3-1 on page 3-7.**

CAUTION: **If passwords are changed from the factory defaults, users MUST ensure that they document new passwords in the space provided in this manual. Failure to recall user defined passwords will render the system UNUSABLE.**

3.1.1.4 File Folder Tab: Equipment Setup

Figure 3-4 on page 3-8 shows an example of the Equipment Setup tab.

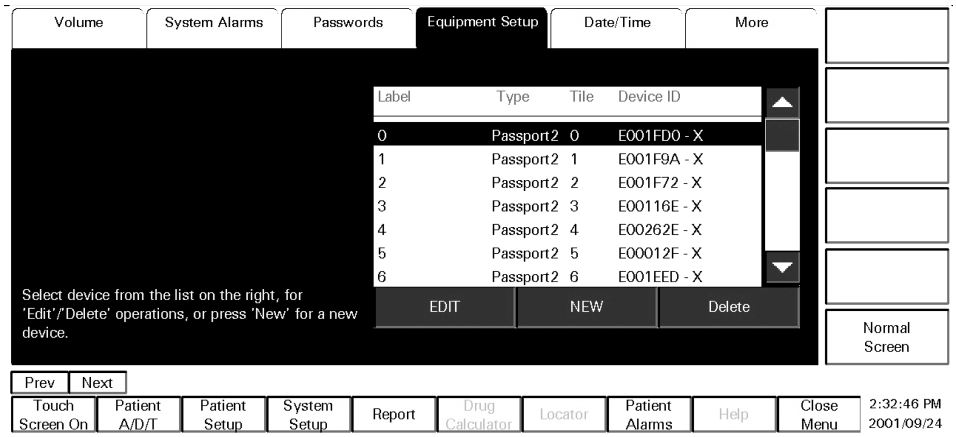

FIGURE 3-4 Equipment Setup Tab

This menu is used to assign patient monitoring equipment to the patient tile. A maximum of 64 pieces of equipment can be entered in the ViewPoint Central Station's Equipment Setup dialog. Monitoring equipment must be assigned to a tile for ViewPoint Central Monitoring System to display information from that monitoring device.

The number of channel licenses that are purchased for the ViewPoint system will determine the amount of equipment that can be assigned to patient tiles in the Equipment Setup dialog. If the amount of equipment that is assigned to the tiles of the ViewPoint Central Station exceeds the number of channel licenses that were purchased, the "***You have reached the maximum number of channel licenses available***" error message is displayed. The ViewPoint Central Station Equipment Setup dialog will allow a maximum of 16 *Passport 2®* monitors to be assigned a tile at any given time.

The screen presents the user with a list of available monitoring equipment and the current tile assignment of that equipment. Other information available for the equipment is the label, type of monitor, and equipment ID. If the equipment is assigned to a tile, the tile number is shown in the equipment list. If the equipment is unassigned, a dash (-) is used to indicate the tile number.

In this menu, the user may add, edit, or delete equipment from the list. Equipment to which a patient is assigned cannot be edited, deleted or assigned; however, labels can be edited.

The fields and sizes are as follows:

- Label - maximum of 14 characters
- Type – pull down list of possible equipment: *Passport 2®* ViewPoint
- Device ID Number - 8 characters
- Tile – pull down list

Tiles are numbered in columns from top to bottom and then left to right. The first option from the pull down list is None. Additional choices are: 0-7 (single display of 8 patients), 0-15 (dual display of 16 patients), 0-11 (single display of 12 patients) or 0-23 (dual display of 24 patients).

The following table lists nomenclature information for Device IDs used with equipment that can be attached to a ViewPoint Central Station:

3.1.1.5 Device ID Nomenclature

DEVICE	PREFIX	SUFFIX
Passport 2®	E	X
ViewPoint	C	X
VP Server	W	X
Telepack	T	X

If an attempt is made to enter a Device ID which is currently assigned (duplicate) to the Central Station an error message will be displayed indicating that this is an illegal procedure. The error message displayed will be ***"This Device ID already exists."***

If the Device ID is entered using the wrong device type the following message will appear: ***"Device ID must start with proper device prefix."***

If the user fails to input a device type, the following message will appear: ***"Invalid device type"***.

3.1.1.5.1 Editing existing equipment labels

Existing equipment labels can be edited.

Editing Existing Equipment Labels

1. Select the equipment label to be changed.

   Equipment labels are selected from the equipment list.

2. Select the **EDIT** button.
3. Enter the new equipment label.

   Labels are entered using the on-screen keyboard.

4. The new label is entered.

   The ViewPoint Central Station Equipment Setup dialog box does not allow the Device ID to be edited.

   The ViewPoint Central Station Equipment Setup dialog box does not allow the Tile # to be edited.

3.1.1.5.2 Assigning new equipment

To assign new equipment to the ViewPoint Central Station:

1. Click the **NEW** button.

   A dialog box is shown.

2. Enter the Tile number, Type of equipment, equipment Label, and equipment Device ID.

To access the on-screen keyboard, select the black area below the desired button.

The ViewPoint Central Station Equipment Setup dialog will automatically assign a '-' for the Tile number entry of a ViewPoint Central Station.

The ViewPoint Central Station Equipment Setup dialog will automatically generate a Device ID for a ViewPoint Central Station that is entered.

NOTE: When assigning new equipment, the Equipment Type must be entered before the Device ID is assigned.

NOTE: If the equipment type selected is "Passport 2®", an E is put in the device ID field, meaning the Device ID must start with an E.

NOTE: The Device ID is unique to each patient monitor.

NOTE: See the Patient Monitor's Operation Manual for information on how to retrieve the Device ID for each monitor and how to physically connect the Patient Monitor to the ViewPoint Patient Network.

3.1.1.5.3 Deleting Equipment

To delete equipment from the ViewPoint Central Station:

1. Select the equipment to be deleted from the available menu list.
2. Press the **DELETE** button.
3. Verify the deletion of the equipment.

- The system will post the message ***"Are you sure you want to delete this device?"*** along with **YES/NO** buttons.
- If the equipment is already assigned to a patient, the system will post the message ***"Cannot delete equipment connected to a patient, OK"***.

4. Press the **OK** button to return to the equipment list.

3.1.1.5.4 Done

When the user is finished typing, the **DONE** button is used to add the entry to the end of the equipment list. Selecting the **DONE** button will accept the new equipment and return the user to the equipment setup screen.

3.1.1.5.5 Date/Time

This display allows you to set and configure the time and date formats used throughout the system.

3.1.1.5.6 Set Date/Time

The user may change the day, month, year, hour and minute values by pressing the black area below the desired field. A keypad will be presented for data entry. Date and time settings are utilized for all date/time related functions.

3.1.1.5.7 Set Date/Time Format

Selecting either the DATE or TIME buttons can change the format of the system's time and date. The buttons can be toggled.

Date can be configured to the following formats:

- YYYY-MM-DD (Default)
- MM-DD-YYYY
- DD-MM-YYYY

Time can be set to display 12 (Default) or 24 hours and is shown in the following formats:

- HH:MM:SS (Default)
- HH:MM

Changing the ViewPoint Central Station's time/date format changes the time format throughout the system. The ViewPoint system will display **AM/PM** toggle buttons where applicable when the system is in 12-hour mode. The AM/PM text cannot be translated and will always be displayed in English. Therefore, when the ViewPoint Central Station is run in a language other than English only the 24-hour time format should be used.

3.1.1.5.8 Printing an Equipment Report

The equipment that is set up in the ViewPoint Central Station can be viewed in an Equipment Report. An Equipment Report can only be printed by pressing the **PRINT** button in the side bar of the Equipment Setup tab.

For additional information on printing an Equipment Report, See "Report Generation" on page 6-1. For additional information on the contents of an Equipment Report See "Report Layout and Specifications" on page 10-2.

3.1.1.6 File Folder Tab: Unit Priorities

Figure 3-5 on page 3-12 shows an example of the Unit Priorities tab.

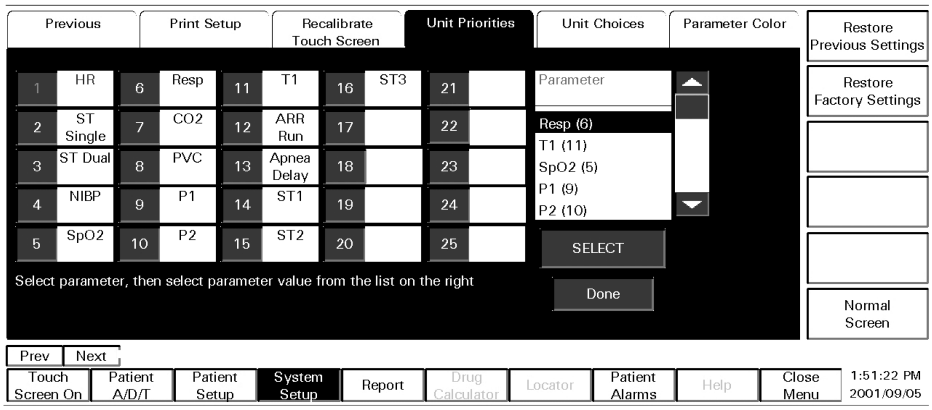

FIGURE 3-5 Unit Priorities Tab

This screen is used to set-up the display order (priorities) for parameters on ViewPoint Central Monitoring System. This does not imply any priority or severity regarding alarms that may be generated. These display priorities are used during the time that a patient is admitted to ViewPoint Central Monitoring System. Any priorities that are set here as system wide defaults are over-ridden for each patient in the **Parameter Display** folder of the **Patient Setup** menu. In all cases, the first parameter displayed will be heart rate. This is not adjustable on any of the screens.

For example, if the **NIBP** data were configured to be the second priority, **SpO_2** third and **Temperature** fourth, the **NIBP** would appear as the second parameter, **SpO_2** third, etc. If the **Unit Priorities** for the system are configured to place another parameter in the display after the **NIBP**, this will replace that parameter and the two will swap positions. All other parameters will remain in their assigned positions. ViewPoint Central Monitoring System factory default settings for Unit Priorities are shown in the Appendix. See "Unit Priorities System Defaults" on page 10-29.

The **RESTORE PREVIOUS SETTINGS** and **RESTORE FACTORY SETTINGS** buttons allow you to revert to the previous settings or factory default settings. Settings are saved each time you exit this dialog. ViewPoint Central Monitoring System factory defaults for display priority are shown in the Appendix. See "System Installation Table" on page 10-30.

ViewPoint Central Monitoring System factory defaults for alarm limits are also shown in the Appendix. See "System Alarm Limits and Ranges for Parameters" on page 10-24.

3.1.1.7 File Folder Tab: Unit Choices

Figure 3-6 on page 3-13 shows an example of the Unit Choices tab.

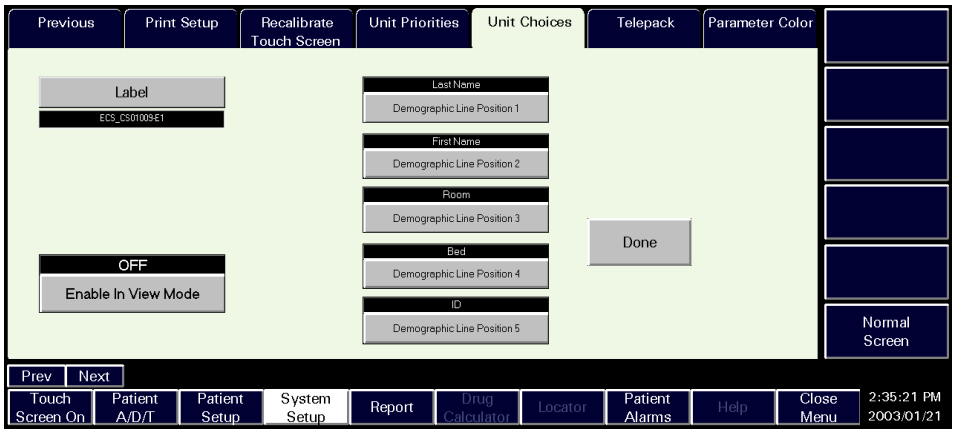

FIGURE 3-6 Unit Choices Tab

This menu allows system-wide selection for display and response choices.

Users may choose to label the ViewPoint to better identify its location within a facility. The **VIEWPOINT LABEL** button may be selected to input this label. Pressing the black area of the button will display a keyboard for data entry. Up to 17 characters may be entered in this field.

Users may also select the order in which patient demographic information is displayed or to exclude certain demographic information entirely. Buttons for each of the five demographic fields are available for selection. Each button toggles to allow users to select First Name, Last Name, Room Number (Room), Bed Number (Bed), Patient ID Number (ID) or Demo Off.

Users may place demographic data in any desired order, however, duplication of fields is not allowed. Changes are recorded upon pressing the **DONE** button.

If a user attempts to duplicate a demographic field in multiple line positions, a message will be displayed indicating the presence of redundant information. For example: if a user selects First Name for Demographic Line Positions 1 and 2, a message will be displayed upon pressing the **DONE** button. The message ***"Error: Redundant Demographic Entry"*** will be displayed.

Users may choose to utilize these demographic order options in the Bedside View, Full Disclosure View, Trend View or Event View by toggling the **ENABLE IN VIEW MODE** switch to the **ON** position (from the system default position of **OFF**.) Choosing **OFF** will include all available demographic information. The information will be displayed in default order. The default order is First Name, Last Name, Room, Bed and ID.

3.1.1.8 File Folder Tab: Telepack

Figure 3-7 on page 3-14 shows an example of the Telepack tab.

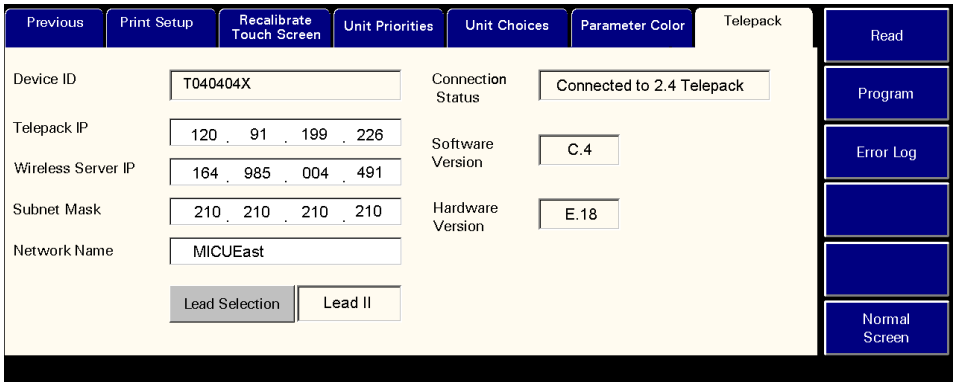

FIGURE 3-7 Telepack Tab

The Telepack tab allows you to program and retrieve information about the configuration of the Telepack 2.4. The contents of the Telepack tab can only be viewed on one display at a time, even if the ViewPoint Central Station is configured for dual display. The ***"This tab is in use by another display. Can not be updated from more than one display at the same time."*** error message is displayed if you try to open the Telepack tab on a second display.

The information that can be viewed in the Telepack tab includes:

- a Device ID field
- a Connection Status field
- a Telepack IP address field
- a Wireless Server IP address field
- a Subnet Mask IP address field
- a Network Name field
- a Software Version field
- a Hardware Version field
- a **LEAD SELECTION** toggle button
- a **READ** side bar button
- a **PROGRAM** side bar button
- an **ERROR LOG** side bar button
- a **NORMAL SCREEN** side bar button

The Telepack tab shall display information in the following ways:

- Fields that are automatically populated by the connected device when the **READ** side bar button is pressed. These fields cannot be edited.
- Fields that are populated by typing information into the field. When these fields are selected an on-screen keyboard is displayed. The **READ** sidebar button can also be used to populate these fields.
- A **LEAD SELECTION** toggle button that when pressed shall display the options that are available for lead selection.

For information specific to the Telepack device, see the section for the ViewPoint Telepack 2.4.

3.1.1.8.1 Device ID Field

The Telepack Device ID field is a static text field that allows for the display of the Telepack Device ID.

- The Telepack Device ID field cannot be edited.
- The Telepack Device ID field will have a prefix of T.
- The Telepack Device ID field will include six alphanumeric characters.
- The Telepack Device ID field will have a suffix of X.
- Pressing the READ button in the side bar of the Telepack tab will populate the Device ID field.
- The Telepack Device ID field will remain blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.
- The Telepack Device ID field will be empty when the user enters the Telepack tab.
- A populated Telepack Device ID field will be cleared when the user presses the **ERROR LOG** side bar button.

A populated Telepack Device ID field will be cleared when the user exits the Telepack Tab.

3.1.1.8.2 Connection Status Field

The Telepack Connection Status field is a static text field that allows for the display of Telepack Connection Status messages.

- Pressing the **READ** button in the side bar of the Telepack tab will populate the Connection Status field.
- The ***Error Could Not Receive Data*** status message will appear in the Connection Status field if a valid Telepack device is not connected to the ViewPoint system.
- The ***Not Connected*** status message will appear in the Connection Status field if something is connected to the ViewPoint Central Station but it is not a valid Telepack device.
- The ***Connected To 2.4 Telepack*** status message will appear in the Connection Status field if a valid Telepack device is connected to the ViewPoint Central Station.
- The Connection Status field will be blank when the user enters the Telepack tab.
- A populated Connection Status field will be cleared when the user presses the **ERROR LOG** side bar button.
- A populated Connection Status field will be cleared when the user exits the Telepack Tab.

3.1.1.8.3 Telepack IP Address Field

The Telepack IP address field has four text entry address fields that can be populated either manually or automatically.

- Clicking in the Telepack IP address field will display an on-screen keyboard to allow for manual entry of text.
- The text entry address fields in the Telepack IP address field will support the characters 0-255.
- Pressing the **READ** side bar button in the Telepack tab will automatically populate the Telepack IP Address field.
- The Telepack IP Address field will remain blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.
- The Telepack IP address field will be blank when the user enters the Telepack tab.
- A populated Telepack IP address field will be cleared when the user presses the **ERROR LOG** side bar button.
- A populated Telepack IP address field shall be cleared when the user exits the Telepack tab.

3.1.1.8.4 Wireless Server IP Address Field

The Wireless Server IP address field has four text entry address fields that can be populated either manually or automatically.

- Clicking in the Wireless Server IP Address field will display an on-screen keyboard to allow for manual entry of text.
- The text entry address fields in the Wireless Server IP Address field supports the characters 0-255.
- Pressing the **READ** side bar button in the Telepack tab will automatically populate the Wireless Server IP address field.
- The Telepack IP address field will remain blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.
- The Wireless Server IP address field is empty when the user enters the Telepack tab.
- A populated Wireless Server IP address field is cleared when the user presses the **ERROR LOG** side bar button.
- A populated Wireless Server IP address field is cleared when the user exits the Telepack tab.

3.1.1.8.5 Subnet Mask Address Field

The Subnet Mask address field has four text entry address fields that can be populated either manually or automatically.

- Clicking in the Subnet Mask address field will display an on-screen keyboard to allow for manual entry of text.
- The text entry address fields in the Subnet Mask address field supports the characters 0-255.
- Pressing the **READ** side bar button in the Telepack tab is automatically populate the Subnet Mask address field.

- The Subnet Mask address field is blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.
- The Subnet Mask address field is empty when the user enters the Telepack tab.
- A populated Subnet Mask address field is cleared when the user presses the **ERROR LOG** side bar button.
- A populated Subnet Mask address field is cleared when the user exits the Telepack tab.

3.1.1.8.6 Network Name Field

The Telepack Network Name field is a text entry field for the name of the Telepack's network. It can be populated either manually or automatically.

- Clicking in the Network Name field will display an on-screen keyboard to allow for manual entry of text.
- The Network Name field allows for a maximum of eight alphanumeric characters.
- Pressing the **READ** side bar button in the Telepack tab is automatically populate the Network Name address field.
- The Network Name field will remain blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.
- The Network Name field is blank when the Telepack tab is entered.
- A populated Network Name field is cleared when the **ERROR LOG** side bar button is pressed.

A populated Network Name field is cleared when the Telepack tab is exited.

3.1.1.8.7 Software Version Field

The Telepack Software Version field is a static text field that displays the Software Version of the connected Telepack.

- The Telepack Software Version field cannot be edited.
- Pressing the **READ** button in the side bar of the Telepack tab will populate the Software Version field.
- The Telepack Software Version field will remain blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.
- The Telepack Software Version field is blank when the user enters the Telepack tab.
- A populated Telepack Software Version field will be cleared when the **ERROR LOG** side bar button is pressed.
- A populated Telepack Software Version field will be cleared when the Telepack tab is exited.

3.1.1.8.8 Hardware Version Field

The Telepack Hardware Version field is a static text field that displays the Software Version of the connected Telepack.

- The Telepack Hardware Version field cannot be edited.
- Pressing the **READ** button in the side bar of the Telepack tab will populate the Hardware Version field.

- The Telepack Hardware Version field will remain blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.
- The Telepack Hardware Version field is blank when the Telepack tab is entered.
- A populated Telepack Hardware Version field will be cleared when the **ERROR LOG** side bar button is pressed.
- A populated Telepack Hardware Version field will be cleared when the Telepack tab is exited.

3.1.1.8.8.1 LEAD SELECTION Toggle Button

The **LEAD SELECTION** button is a toggle button that is used to select a default ECG lead for the Telepack.

- The options available in the **LEAD SELECTION** toggle button are be Lead I, Lead II, and Lead III.
- Pressing the **READ** button in the side bar of the Telepack tab will populate the field for the **LEAD SELECTION** button.
- The field for the **LEAD SELECTION** button will remain blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.

The field for the **LEAD SELECTION** button will be blank when the Telepack tab is entered.

- The field for a populated Telepack **LEAD SELECTION** button will be cleared when the ERROR LOG side bar button is pressed.
- The field for a populated Telepack **LEAD SELECTION** button is cleared when the Telepack tab is exited.

3.1.1.8.9 READ Side bar Button

The Telepack **READ** side bar button is used to read the configuration information for a Telepack device.

- When a valid Telepack device is connected to the ViewPoint system, pressing the **READ** side bar button will populate the Device ID, Telepack IP address, Wireless Server IP address, Subnet Mask address, Network Name, Software Version, Hardware Version, and Lead Selection fields.
- If a valid Telepack device is not connected to the ViewPoint system, the Device ID, Telepack IP, Wireless Server IP, Subnet Mask IP, Network Name, Software Version, Hardware Version, and Lead Selection fields will be blank and the ***"Error could not receive data"*** error message is displayed in the Connection Status field.

3.1.1.8.10 PROGRAM Side Bar Button

The Telepack **PROGRAM** sidebar button is used to program the configuration information for a Telepack device.

- The **PROGRAM** button can only be used when all of the information in the Telepack tab is completed.
- If the **PROGRAM** button is pressed before all of the information in the Telepack tab is completed, the ***"You must enter all fields to program the Telepack"*** error message is displayed. Press the OK button to close this dialog box and return to the Telepack tab.

- If the **PROGRAM** button is pressed and a valid Telepack is not connected to the ViewPoint system, the ***"Error could not receive data"*** error message is displayed in the Connection Status field of the Telepack tab.
- Once the **PROGRAM** button is pressed, the ***"Are you sure you wish to program the Telepack?"*** message will appear in a pop-up confirmation dialog box.
- The choices for the **PROGRAM** button's confirmation dialog box are be No and Yes.
- Selecting the **NO** button in the pop-up confirmation dialog box will cancel the programming of the Telepack.
- Selecting the **YES** button in the pop-up confirmation dialog box will program the Telepack with the Telepack IP address, Wireless Server IP address, Subnet Mask IP address, Network Name, and default Lead selection.

3.1.1.8.11 ERROR LOG Side Bar Button

The Telepack tab will have an **ERROR LOG** side bar button that is used to read the connected Telepack's error log.

- Selecting the **ERROR LOG** side bar button will display the connected Telepack's Error Log.

For additional information on the Telepack's error log, see the section "File Folder Tab: Telepack (Error Log Display)" on page 3-19

3.1.1.8.12 NORMAL SCREEN Side Bar Button

The **NORMAL SCREEN** button in the Telepack tab will close the Telepack tab and return the ViewPoint display to a full screen of patient tile data with the function buttons along the bottom of the screen.

3.1.1.9 File Folder Tab: Telepack (Error Log Display)

The Telepack tab's Error Log display displays the error messages for the connected ViewPoint Telepack.

Figure 3-8 on page 3-19 shows the Error Log for the Telepack tab.

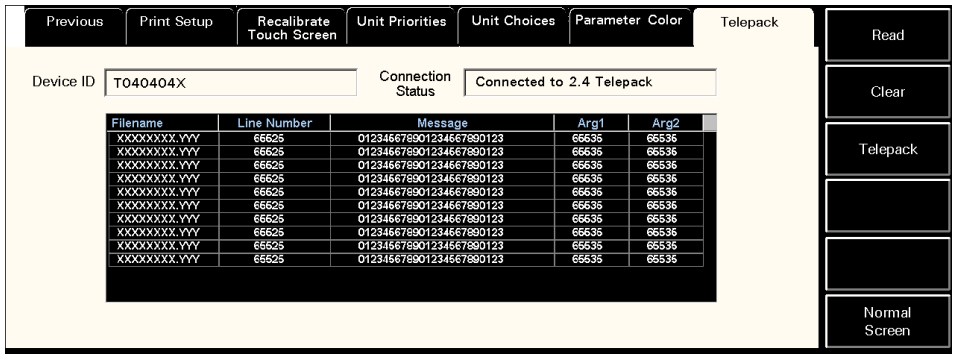

FIGURE 3-8 Error Log for the Telepack tab

The information is available in the Error Log for the Telepack tab:

- A Device ID text field
- A Connection Status text field
- A box for the Error Log list information
- A File Name column
- A Line Number column
- A Message column
- An Arg1 column
- An Arg2 column
- A **READ** side bar button
- A **CLEAR** side bar button
- A **TELEPACK** side bar button
- A **NORMAL SCREEN** side bar button

3.1.1.9.1 Device ID Field (Error Log Display)

The Device ID field in the Error Log display of the Telepack tab is a static text field that displays the Telepack Device ID.

- The Telepack Device ID field (Error Log display) cannot be edited.
- The Telepack Device ID field (Error Log display) has a prefix of T.
- The Telepack Device ID field (Error Log display) includes six alphanumeric characters.
- The Telepack Device ID field (Error Log display) has a suffix of X.
- Pressing the **READ** button in the side bar of the Telepack tab (Error Log display) will populate the Device ID field.
- The Telepack Device ID field (Error Log display) will remain blank, when the **READ** side bar button is pressed, if a valid Telepack device is not connected to the ViewPoint system.
- The Telepack Device ID field (Error Log display) will be blank when the user enters the Telepack tab.
- A populated Telepack Device ID field (Error Log display) will be cleared when the **ERROR LOG** side bar button is pressed.
- A populated Telepack Device ID field (Error Log display) will be cleared when the Telepack Tab is exited.

3.1.1.9.2 Connection Status Field

The Telepack Connection Status field is a static text field that allows for the display of Telepack Connection Status messages.

- Pressing the **READ** button in the side bar of the Telepack tab (Error Log display) will populate the Connection Status field.
- The ***Error Could Not Receive Data*** status message will appear in the Connection Status field (Error Log display) if a valid Telepack device is not connected to the ViewPoint system.

- The ***Not Connected*** status message will appear in the Connection Status field (Error Log display) if something is connected to the ViewPoint Central Station but it is not a valid Telepack device.
- The ***Connected To 2.4 Telepack*** status message will appear in the Connection Status field (Error Log display) if a valid Telepack device is connected to the ViewPoint Central Station.
- The Connection Status field (Error Log display) is blank when the the Telepack tab is entered.
- A populated Connection Status field (Error Log display) will be cleared whenever the **ERROR LOG** side bar button is pressed.
- A populated Connection Status field (Error Log display) will be cleared whenever the Telepack Tab is exited.

3.1.1.9.3 Error Log List Box

The Error Log tab contains a list box that displays the errors for the connected Telepack.

- The Error Log list box will be a blank by default.
- The Error Log list box shall contain a Filename column that shows the names of the files in the error list.
- The Error Log list box contains a Line Number column that shows line numbers for the items in the error list.
- The Error Log list box contains a Message column that shows the messages that are sent to the ViewPoint system by the Telepack device.
- The Error Log list box contains an Arg1 column that is populated by the text fields that are sent to the ViewPoint system by the Telepack device.
- The Error Log list box contains an Arg2 column that is populated by the text fields that are sent to the ViewPoint system by the Telepack device.

3.1.1.9.4 READ Side bar Button

The Telepack tab's Error Log display contains a static side bar button labeled **READ**.

- The Error Log's **READ** side bar button will send a request to the connected Telepack and read the Error Log.
- The Error Log's **READ** side bar button will update the Error List box field.
- The Error Log's **READ** side bar button will update the device ID field.
- The Error Log's **READ** side bar button will update the Connection Status field for the connected Telepack.

3.1.1.9.5 CLEAR Side bar Button

The Error Log shall contain a static side bar button labeled **CLEAR**.

- The Error Log tab's **CLEAR** side bar button will produce a pop-up confirmation dialog on the screen that states ***"Are you sure you want to clear the error log? Selecting Yes will Delete all Data"***
- The choices for the Error Log confirmation dialog are No and Yes.
- Selecting the **NO** button in the Error Log confirmation dialog will not clear the error log.
- Selecting the **YES** button in the Error Log confirmation dialog will clear the error log and all errors in the Telepack hardware.

3.1.1.9.6 TELEPACK Side bar Button

The Error Log shall contain a static side bar button labeled **TELEPACK**.

- The Error Log tab's **TELEPACK** side bar button will return the Telepack tab to the display of the Telepack configuration.

3.1.1.9.7 NORMAL SCREEN Side bar Button

The **NORMAL SCREEN** side bar button in the Telepack tab's Error Log display shall close the Error Log display and return the ViewPoint display to a full screen of patient tile data with the function buttons along the bottom of the screen.

3.1.1.10 File Folder Tab: Parameter Color

This menu allows the user to assign a color to a parameter or waveform from a displayed color palette. The color selected will be shared by both digital information and waveforms associated with the parameter. The color assignment is affected on a system wide basis; i.e. ECG waveform and numeric will be the same color for all patient tiles.

Buttons to Restore System Defaults allow the user to cancel color assignment changes.

3.1.2 File Folder Tab: Previous

This tab returns the user to the first set of file folder tabs.

3.1.3 File Folder Tab: More

This tab brings up the second set of file folder tabs.

3.1.4 File Folder Tab: Print Setup

Figure 3-9 on page 3-22 shows an example of the Print Setup tab.

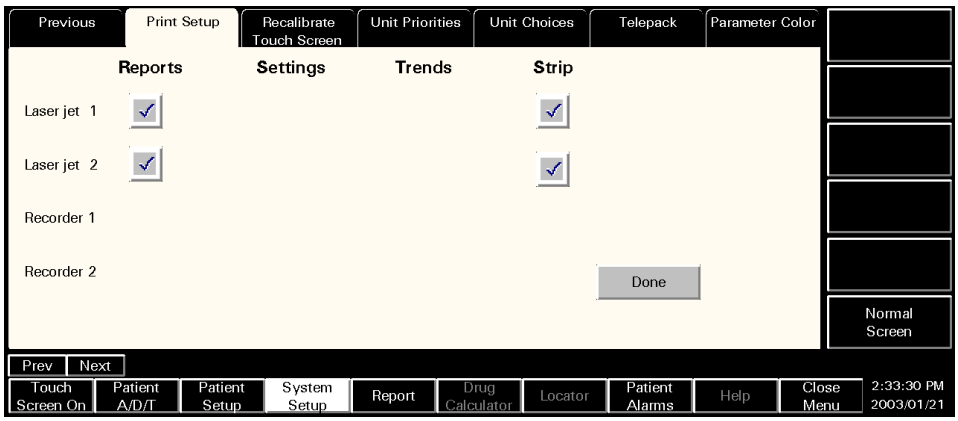

FIGURE 3-9 Example of the Print Setup tab

This menu allows the user to assign a specific output device for data. Buttons for **REPORTS** and **STRIP** permit the system to send this information to a laser printer.

The ViewPoint Central Station is capable of supporting two printers and load balancing print jobs for a single ViewPoint between the two printers.

3.1.4.1 Re-calibrate Touch Screen File Folder

This file folder will allow the user to recalibrate the touch screen as needed. If re-calibration is desired, the user will select the "**Recalibrate Touch Screen**" file folder. This will activate the re-calibration screen, the user will follow and press the red touch targets from a normal operating position. At the end of this process a Yes/No dialog box appears and asks if the arrow follows the users touch on all areas of the screen. If calibration is satisfactory the user selects the box to exit.

NOTE: Initiating a Touch Screen re-calibration always affects both ViewPoint Central Station touch screen displays. The user is prompted to adjust settings for one touch screen display and then the other.

NOTE: The text in the Re-calibrate Touch Screen file folder cannot be translated and will always be displayed in English.

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4.0 *Admitting, Discharging or Transferring Patients*

4.1 Menu Button: A/D/T (Admitting/Discharging/ Transferring)

When selected, this button allows the user to admit, transfer or discharge a patient to/from a specified tile and also allows for editing of patient demographic information. If the ADT menu button is selected while the ViewPoint display is in the Normal Screen mode, the display is switched into the Bedside Interactive mode. Until the user selects a patient tile, the message ***"No patient Selected"*** appears on the screen.

Reassignment of the patient to another tile can also be accomplished through the Transfer function. See "Transferring Patients" on page 4-6.

When the **A/D/T** button is selected, the display switches to interactive mode. In the interactive display, four file folder tabs appear (**Admit / Edit, Transfer, Discharge** and **Standby**). The **NORMAL SCREEN** button also appears. If a patient is selected, the default screen is the **Transfer file** folder.

CAUTION: Before connecting a patient to a monitor, make sure that no other patient is assigned to the monitor and that the previous patient has been discharged from the tile and monitor.

4.2 Admitting Patients

Figure 4-1 on page 4-2 shows an example of the Admit/Edit tab.

FIGURE 4-1 Example of the Admit/Edit tab

4.2.1 File Folder Tab: Admit/Edit

Once the **Admit/Edit** file is opened, the user may enter patient demographic information by selecting the black area of the desired field. Once selected, an alphanumeric keyboard will be displayed.

Figure 4-2 on page 4-2 shows an example of the keyboard in the Admit tab.

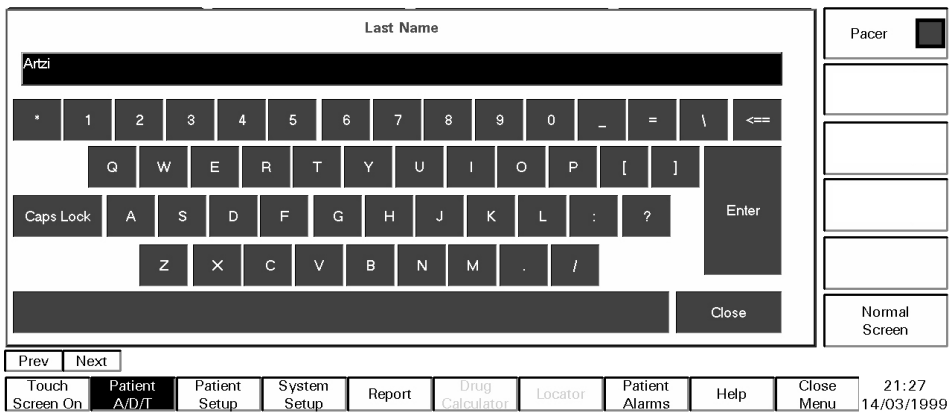

FIGURE 4-2 Example of the keyboard in the Admit tab

The on-screen keyboard is used to enter alphanumeric data into the system. There is a field in the keyboard where the selected value is displayed before it is accepted in the original dialog box.

To access the on-screen keyboard:

1. Touching the black area below the appropriate label (Example First Name Demographics Field).

   The on-screen keyboard is displayed

2. Enter the appropriate value using the keyboard.
3. Click Enter.

   The keyboard disappears and the value is transferred to the original dialog box.

The ViewPoint Central Station also has a number keypad. The numeric keypad is labeled with the appropriate parameter name and the available range of values is stated at the bottom of the keypad. This keypad is accessed the same way as the keyboard (Example Patient Height Demographic Field).

Before activating **Admit**, the user should first select the **Admit/Edit** function and then choose the target tile for admitting the patient. If the patient is already on the unit and connected to a monitoring device, their waveform and digital data will be displayed on the screen in a tile. The user will select that tile and then select the **A/D/T** button.

The following demographic information can be transferred to the ViewPoint Central Station from the bedside monitor: **Patient size, First name, Last name, ID, Bed number, Height,** and **Weight.** If the patient demographic information has been entered on the bedside monitor, all demographic information (including blank fields) is automatically sent to the ViewPoint Central Station after 5 seconds.

If any demographic information is entered or changed on the bedside monitor then all demographic information (including blank fields) is automatically sent to the ViewPoint Central Station after 5 seconds. Information previously stored in the ViewPoint Central Station is overwritten.

Selecting **RETRIEVE FROM BEDSIDE** will also retrieve all the above demographic information from the bedside monitor. Performing this function will also overwrite any demographic information, manually entered at the ViewPoint, for that particular patient.

The **Admit/Edit** display will also allow users to enter or change the following information: **Last Name, First Name, ID, Bed, Age, Height, Weight, Room,** and **Doctor.** Selecting the black box directly below the desired field will enable the on-screen keyboard. Users enter all desired demographic data by using the keyboard and selecting **ENTER** to return to the **Admit/Edit** display. This process is continued until all required demographic data has been entered. Selecting the **SEND TO BEDSIDE** button exports data to the bedside monitor. Selecting the **DONE** button completes the operation.

See "Patient Demographics and Admission" on page 10-43.

4.3 Discharging Patients

4.3.1 File Folder Tab: Discharge

Figure 4-3 on page 4-4 shows an example of the Discharge tab.

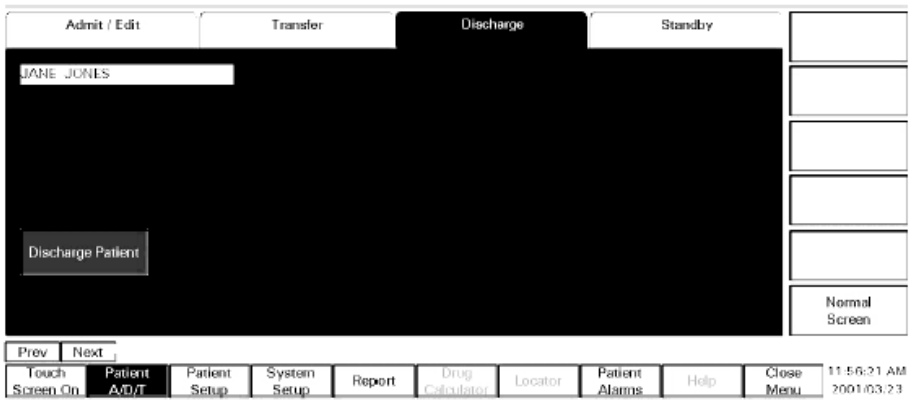

FIGURE 4-3 Example of the Discharge tab

The discharge function allows the user to discharge the patient and reset the system for the next patient. Discharge can be initiated either at bedside or at ViewPoint Central Station.

ViewPoint Central Station will save the last 5 discharged patients' files in a temporary holding file so, if the discharge function is executed in error the patient data at ViewPoint Central Station can be easily retrieved through the **ADMIT** menu and all patient data will be retrieved.

In order to retrieve a discharged patient the user will select the **RETRIEVE DISCHARGED PATIENT** button. Once pressed, a list of the five last discharged patients will appear. The user will select the desired patient from this list and the patient will be returned to the tile originally occupied by the patient being retrieved.

If an attempt is made to retrieve a discharged patient into a new tile because the legacy tile is occupied by a newly admitted patient, the following message will appear; ***"The discharged patient you are readmitting to tile Y, must be readmitted to tile X, the tile previously occupied by the patient".*** Tile Y is the new tile the user is attempting to readmit the patient to, and tile X is the legacy tile that is currently occupied by another patient.

The legacy tile must be made available by transferring the new patient to another tile. Once the discharged patient is readmitted, the previously stored information (Trends, Full Disclosure, Patient Demographic Information, Alarm settings, Alarm Responses, Wave Gain and Cluster Assignment) for that patient, will be returned and will be used for monitoring.

To discharge a patient the user must select the **A/D/T** button and then select the desired patient tile. Once the patient is selected and the **Discharge** file folder is open, the user can press the **DISCHARGE PATIENT** button to begin the discharge. A prompt will appear along with **YES/ NO** buttons, asking the user to verify the discharge operation. Selecting **NO** will exit the discharge mode without affecting the patient status. Selecting **YES** will discharge the patient at the ViewPoint Central Station. Attempts to discharge without selecting a patient will generate a ***"No Patient Selected"*** message.

If you try to retrieve a discharged patient into a tile for which the equipment assignment has changed, the ***"Retrieve discharge patient failed: the monitoring device that was attached to this patient has been deleted from the system"*** error message is displayed.

NOTE: You cannot admit a new patient into the discharged tile until the equipment is removed and re-entered or until a new patient is admitted to the patient monitor.

NOTE: The Last patient discharged appears at the bottom of the list.

If a patient is discharged from the ViewPoint Central Station but not from the patient monitor, the ViewPoint Central Station tile will not be available for a new patient until a discharge has been performed at the patient monitor. Discharging a patient from the ViewPoint Central Station does not discharge the patient from the patient monitor. The following table describes the discharge function and retrieval methods:

HOW DISCHARGED	HOW RETRIEVED	PATIENT SETTINGS
On Central Discharge Patient button	On Central Retrieve Discharged Pt.	Retrieves legacy settings
On Central Discharge Patient button	Went to Bedside Discharge from Monitor then pressed **STANDBY** to readmit to monitor	New Patient
On Monitor Discharge From Central	On Central Retrieve Discharged Pt.	Retrieves legacy settings
On Monitor Discharge From Central	Went to Bedside Discharge from Monitor then pressed **STANDBY** to readmit to monitor	New Patient
On Monitor Discharge from Monitor	Pressed **STANDBY** to readmit to monitor	New Patient

4.4 Transferring Patients

This sub-menu is the default opening position for the **A/D/T** file whenever a patient's tile is selected. To understand the transfer concept, you must realize that ViewPoint Central Station display tiles must be associated with monitoring equipment in order to display information.

4.4.1 Transfer to Another Tile

This function allows the user to "reorganize" the distribution of the patient display. In order for this function to occur, the tile must not be occupied by a patient or be assigned a monitoring device.

When the Transfer file is opened, the user can choose where they would like to transfer the patient's data, and to where they want the patient's waveforms and digital data displayed.

The following steps transfer a patient to another tile:

A. Destination tile must not be occupied by any other equipment (no equipment assigned)

B. Select Patient

C. Select Transfer to Another Tile

D. Select Destination Tile

If the selected destination tile already has a piece of monitoring equipment associated with it, the system will display "Transfer Failed. The destination tile is currently occupied. Please select a different tile," and "OK" to continue. If the selected destination tile does not have a piece of monitoring equipment associated with it, then the transfer will be executed, the patient information, digital and wave forms, will now be shown in the destination tile and the original source tile will be empty.

4.4.2 Transfer to another ViewPoint Central Station

A ViewPoint Central Station is capable of transferring patient data and device monitoring information over a ViewPoint Central Network to another ViewPoint Central Station.

The transfer process consists of copying the patient's entire database files from the source ViewPoint Central Station to the destination ViewPoint Central Station. A patient will no longer be monitored on the original ViewPoint Central Station during transfer to another ViewPoint Central Station. A Maximum of two ViewPoint Central Station systems may be networked together. A ViewPoint Central Station is capable of transferring out and transferring in only one patient at a time. An attempt to transfer out a second patient while one patient is in the process of transferring out will cause the second transfer request to be rejected. A message will be displayed at the source ViewPoint Central Station that a patient is currently being transferred. This message ***"Cannot transfer. Another transfer is active"*** is displayed in the source ViewPoint Central Station status message window and remains displayed until the current transfer is complete.

In order to Transfer one patient to another ViewPoint Central Station, the following needs to be in place:

1. Two ViewPoint Central Stations connected via switch on the C-LAN.
2. One Bedside Monitor connected to ViewPoint Central Station #1 via hub on the E-Lan.
3. ViewPoint Central Station labels for both ViewPoint Central Stations, which can be found by clicking on the date and time four times.
4. In the equipment lists, each system has a record of device type ViewPoint with a label of destination ViewPoint and Device ID. A transfer occurs in the following sequence:

The following steps should be executed to transfer a patient from one ViewPoint Central Station to another:

On the source ViewPoint Central Station:

1. On ViewPoint Central Station #1. Select Patient A/D/T.
2. Switch to the Transfer tab.
3. Select the patient tile for the connected Bedside Monitor.
4. Click on **"Retrieve LAN System"**.
5. Select ViewPoint Central Station #2's label. (A ViewPoint Central Station list appears on the right)
6. Select the destination ViewPoint Central Station from the list and press the **SELECT** button.

On the destination ViewPoint Central Station:

1. On ViewPoint Central Station #2 the message ***"A patient is transferred in from a remote ViewPoint."*** should appear in the status message bar.
2. Select System Setup.
3. Switch to the Installation Setup tab.
4. Enter the password and go to the Equipment Setup tab.
5. Locate the device ID for the transferred device. It must be in the list.
6. Click **EDIT**.
7. Click **TILE** and select an available tile from the displayed list of tiles.
8. Click **SELECT**.
9. Click **DONE**.
10. Disconnect the Bedside Monitor from ViewPoint Central Station #1's E-Lan and reconnect it to ViewPoint Central Station #2's E-Lan. This step can be done before or after steps 1-7.
11. The patient and all his data should now exist only on ViewPoint Central Station #2.

NOTE: **The procedure described above in section "Transfer to another ViewPoint Central Station" on page 4-6 can be used to transfer the patient back to the original ViewPoint Central Station. However, the user must wait up to 5 minutes after the initial transfer before transferring the patient back.**

To reject a transfer the following procedure should be followed:

1. Initiate the transfer as described above.
2. On ViewPoint Central Station #2, the message ***"A patient is transferred in from a remote ViewPoint."*** should appear in the status message bar.
3. Select Patient A/D/T.
4. Switch to the Admit tab.
5. Click **REJECT TRANSFER PT.**
6. Select the name from the list and press Select.
7. Select the **DONE** button.

If a patient transfer is rejected all data is deleted and connection to any ViewPoint Central Station is terminated. Once a transfer has been rejected, data is not recoverable.

If the source ViewPoint Central Station is in the process of transferring out a patient it will reject any additional transfer requests and post a message to the status message window until the transfer is completed.

Try to initiate another transfer with a second patient to a destination ViewPoint Central Station. It should be observed that the patient is still being monitored and that the ***"Cannot transfer. Another transfer is active."*** message is being displayed in the status message window.

4.4.2.1 A Failed Transfer

The failed transfer can be caused by the inability to rename the patient's database on either the source or destination ViewPoint Central Station or the inability to copy the files from the source ViewPoint Central Station to the destination ViewPoint Central Station. Numerous attempts are made for each of these tasks during transfer processing and when the acceptable thresholds for attempts have been reached, the transfer is considered to have failed.

When a failed transfer has occurred, the ***"Patient transfer failure. Recover patient through transfer dialog."*** message will appear in the status message window. A **RECOVER PATIENT** button will appear in the Transfer Menu when opened.

A failed transfer patient can be recovered on the source ViewPoint Central Station.

Open the Transfer Menu and press the **RECOVER PATIENT** button. A list of failed transfer patients appears on the right of the menu. Select the patient to recover from the list and press the **SELECT** button. The patient is recovered into the tile that it was originally configured for and that the ***"Patient transfer failure. Recover patient through transfer dialog."*** message has been removed from the status message window.

Additional patient transfers, back to ViewPoint Central Station #1 are accomplished by:

- Waiting three minutes after having made the most recent transfer
- Following patient transfer steps indicated in 1-7 above.