

GE Healthcare

Web Viewer

User's Reference Manual



Web Viewer

User's Reference Manual



Conformity according to the Council Directive 93/42/EEC concerning Medical Devices

CAUTION: U.S. Federal law restricts this device to sale by or on the order of a licensed medical practitioner.

All specifications are subject to change without notice.

Document no. M1056740
1st edition

14 February, 2006

GE Healthcare Finland Oy
Helsinki, Finland
P.O. Box 900
FI-00031 GE
Tel: +358 10 39411
Fax: +358 9 1463310
www.gehealthcare.com

Datex-Ohmeda Inc.
P.O. Box 7550
Madison, WI 53707-7550, USA
Tel: +1-608-221 1551
Fax: +1-608-222 9147

© 2006 General Electric Company. All rights reserved.

Intended purpose (Indications for use)

The Web Viewer displays information received from other networked devices. It is comprised of a Mobile Care Server and Web Viewer clients.

The Mobile Care Server maintains and coordinates the network connections between the devices in the Datex-Ohmeda and Unity Networks and Web Viewer clients. The Web Viewer client runs on a generic computer that is connected to the hospital local area network (LAN).

The Web Viewer can be used for viewing or otherwise processing of information from several bedside monitors or other networked devices. The Web Viewer can be used for patients in hospital and it is meant for consultation and remote monitoring use.

The Web Viewer is not a primary alarm source. The device is for use by qualified medical personnel only.

CE marking

- The Mobile Care Server software, L-WEB05, is CE marked in accordance with the Medical Device Directive 93/42/EEC.
- The display units, computer and keyboard of the Mobile Care Server are CE marked in accordance with the EU Directives for Electromagnetic Compatibility 89/336/EEC and Low Voltage Equipment 73/23/EEC.

Trademarks

Datex®, Ohmeda®, and other trademarks S/5, D-lite, D-lite+, Pedi-lite, Pedi-lite+, D-fend, D-fend+, Mini D-fend, OxyTip+, MemCard, ComBar, ComWheel, EarSat, FingerSat, FlexSat, PatientO2, Patient Spirometry, Entropy and Tonometrics are trademarks of GE Healthcare Finland Oy. All other product and company names are property of their respective owners.

This product includes software developed by the Apache Software Foundation <<http://www.apache.org/>>.

Responsibility of the manufacturer

GE Healthcare Finland Oy (GE) is responsible for the safety, reliability and the performance of the software and equipment only if:

- assembly, extensions, readjustments, modifications, servicing and repairs are carried out by personnel authorized by GE.
- the electrical installation of the relevant room complies with appropriate requirements.
- the system is used in accordance with this User's Reference Manual.

Table of contents

About this manual	1
Conventions used in this manual	1
Illustrations and names	1
Related documents	2
1 General	3
Introduction	3
User authentication	3
Changing your password	3
Differences in the Web Viewer and bedside monitor views	4
Keyboard shortcuts	4
Shortcuts to different views	4
2 How to start and exit the Web Viewer	5
Using the Web Viewer for the first time	5
Creating a shortcut for the Web Viewer	6
Configuration pages	6
General settings	7
My Patients	7
Changing your password	8
Selecting units	8
Web Viewer specific Configuration Pages	8
Automatic log-off	8
Exiting the Configuration Pages	8
Web Viewer application	9
Using tabs, menus and command buttons	9
Exiting the program	10
3 Selecting patients	11
Using the Monitor List	11
Using the Patient menu	12
My Patients list	12
4 Viewing patient data	15
Using pages	15
Symbols in the network/patient information area	15
Multi View	16
Waveform view	18
12 lead ECG	20
Freezing waveforms	21
Printing waveforms	21
Editing waveform pages	21
Graphical trend view	22

Editing graphical trend pages	23
Numerical trend view	24
Printing numerical trends	25
Editing numerical trend pages	25
Demographics view	26
Editing units	27
5 Printing	29
6 Changing the settings	31
Editing waveform pages	32
Editing graphical trend pages	34
Editing graphical trend scales	36
Editing numerical trend pages	38
Editing sweep speeds	40
Editing units	42
Editing Multi View	44
7 Alarms	47
8 Safety precautions	49
9 Solving problems	51
Symptoms of trouble	51
Messages	52
10 General specifications	55
Technical specifications	55
Minimum technical requirements for Web Viewer Client	55
Minimum display requirements	55
Network infrastructure requirements	55
Software requirements	55
Index	Index-1

About this manual

The purpose of this manual is to describe the intended use of the Web Viewer, and to help you in using it in your daily routines.

Conventions used in this manual

To help you find and interpret information easily, the manual uses consistent text formats:

- Command buttons are written in the following way: **OK**.
- Keyboard key names are written in the following way: Enter, Esc.
- Software terms that identify window parts (pages, text boxes, list boxes, check boxes, menu commands) are written in bold italic typeface: ***Save password***.
- File names, file paths and text to be entered are written in the following way: comm.exe.
- Messages displayed on the display are written inside single quotes: 'You have been logged off because of x minutes of inactivity.'
- When referring to different sections in this manual or to other manuals, manual names and section names are enclosed in double quotes: See "Waveform view." Please, refer to the "Datex-Ohmeda S/5 Anesthesia Monitor User's Guide: Messages."
- Cautions are written in the following way:

CAUTION:

This is a caution.

- Warnings are written in the following way:

WARNING:

This is a warning.

Illustrations and names

All illustrations in this manual are only examples, and may not necessarily reflect your Web Viewer settings or data displayed. All names used in examples and illustrations are fictitious.

In this manual, the term care unit is used to refer to iCentrals and Centrals in the Datex-Ohmeda Network and Care Units in the Unity Network to simplify the description of various menu selections.

Related documents

For more information...	See...
Using the iCentral	iCentral User's Reference Manual
The Datex-Ohmeda Network configuration and setup	Datex-Ohmeda Network Installation Guide
Monitored parameters and alarms on the display	User manuals for bedside monitors in the Network
Web Viewer configuration	Mobile Viewers Technical Reference Manual
Using your computer	Computer's user documentation

1 General

Introduction

The Web Viewer belongs to the Mobile Viewers product range. Mobile Viewers are meant for remote monitoring of hospitalized patients.

With the Web Viewer you can view vital patient data and trends remotely on a standard computer. Patient data is measured by bedside monitors in the Datex-Ohmeda or Unity Network connected to the Mobile Care Server.

The Web Viewer can be viewed on a standard computer with the Internet Explorer, Firefox or Safari web browsers and the Java™ Web Start software. The Web Viewer connects to hospital's local area network (LAN) via the Internet, dial-up, direct wireless or wired connection.

WARNING:

Some equipment malfunctions may not generate a monitor alarm. Always keep the patient under close surveillance.

User authentication

Only authorized users can enter the Web Viewer. Every user is prompted for their username and password. Contact your system administrator to obtain the password.

Changing your password

For changing the password received from the system administrator, see ["Changing your password"](#) on page 8.

Differences in the Web Viewer and bedside monitor views

The Web Viewer shows the same waveforms and numeric fields as the bedside monitor with some exceptions:

- Waveform colors are configured through the “Administration Pages” and cannot be changed by the user
- Minitrends are not displayed
- Spirometry loops are not displayed
- Split screens are not displayed
- BIS data is not displayed
- NMT waveform is not displayed
- Waveforms are shown as cascaded if the same parameter is selected for two or more consecutive fields
- Some parameters of the Unity bedside monitors are not displayed

Also note that alarm indications may be slightly different from those of the monitor.

Keyboard shortcuts

The following keyboard shortcuts can be used for the Web Viewer:

Arrow keys	(Functionality depends on the view)
Page Up	Previous page (waveforms and graphical trends)
Page Down	Next page (waveforms and graphical trends)
Ctrl + P	Print Page (MacOS: Command + P)
Ctrl + M	Show Monitor List (MacOS: Command + M)
Pause	Freeze/Unfreeze the waveforms
F1	Opens the Help

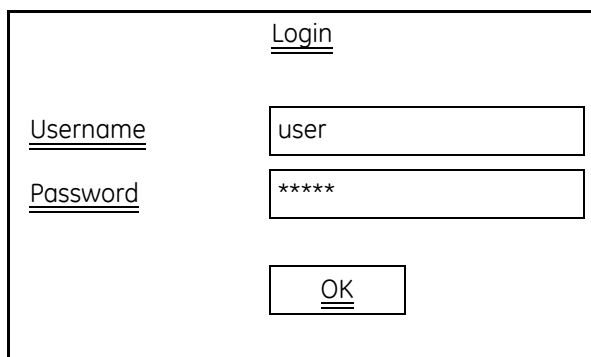
Shortcuts to different views

You can enter different menus (**Patient**, **View**, **Setup**, **Help**) by pressing simultaneously the Alt keyboard key and the key corresponding to the underlined letter in the menu title. After having entered the menu, you can open different views and perform tasks by pressing the keyboard keys corresponding to the underlined letters.

2 How to start and exit the Web Viewer

To start the application:

1. Enter the specified URL address (homepage) of the Mobile Viewers into the address line of the browser. You can get the URL address from your system administrator.
2. Click **Enter Web Viewer**. The Login screen appears.
3. Give your **Username** and **Password**. For changing your password, see page 8.
4. Click **OK**. Continue as explained in “[Selecting patients](#)” on page 11.



The screenshot shows a login window with the following elements:

- Title: Login
- Username field: Username with the text 'user' entered.
- Password field: Password with the text '*****' entered.
- Button: OK

The message '...Connecting to server' appears on the screen. Other messages indicate the progressing of the connection, see “[Messages](#)” on page 52. When the connection is ready, an empty Web Viewer view is opened. The size of the window is the same as the one viewed in the previous session.

Using the Web Viewer for the first time

When entering the Mobile Viewers homepage, you may get the following message: 'NOTE! You must install Java™ Web Start to be able to use Web Viewer.' If this happens, make sure that you have the Java Web Start installed, or install it now:

1. Click **Install Java Web Start** on the start-up page.
2. Follow the instructions on the screen.

When the Java Web Start is installed:

1. Click **Enter Web Viewer**.
2. The Web Viewer starts. Continue as explained above and in “[Selecting patients](#)” on page 11.

When the Web Viewer is used for the first time, a security warning is displayed prompting you to check that this application is signed by GE Healthcare. Check and click **Start** to continue.

Creating a shortcut for the Web Viewer

For your convenience you may create a shortcut on your desktop for starting the Web Viewer. The program prompts this when it is started. You can also create the shortcut in Java Web Start Application Manager.

Configuration pages

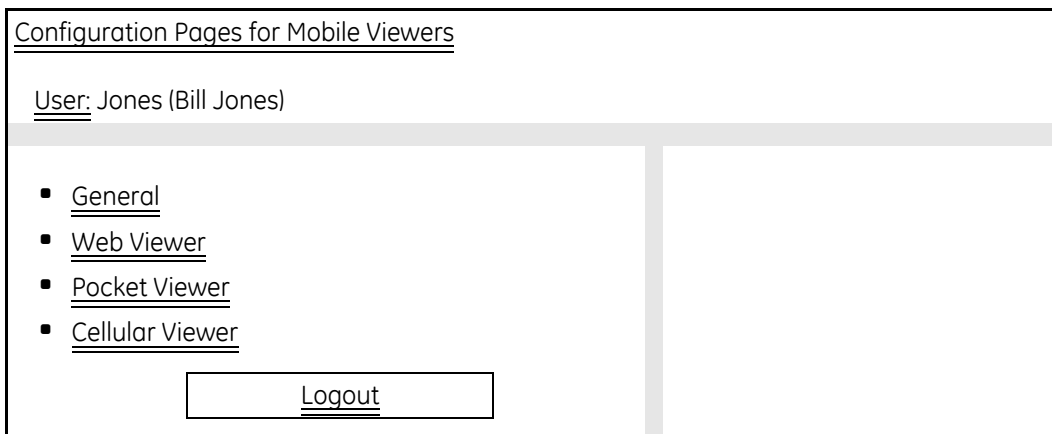
When you enter the homepage of the Mobile Viewers, you can also select the option **Enter Configuration Pages**. Through the Configuration Pages' **General** menu you can change your password and select units for height, weight and energy expenditure at one go for all Mobile Viewers that you may be using.

In the application specific menus you can edit waveform, graphical trend and numerical trend pages as well as sweep speeds and graphical trend scales. All these editing options are also available in the application's own menus and explained later in this manual.

To enter the **Configuration Pages for Mobile Viewers**:

1. Enter the specified URL address (homepage) of the Mobile Viewers into the address line of the browser.
2. Click **Enter Configuration Pages**. The Login screen appears.
3. Give your **Username** and **Password** in the corresponding text boxes.
4. Click **OK**.

The main configuration view appears.



General settings

Note that these settings affect all Mobile Viewers that you may be using.

My Patients

Managing My Patients list

More detailed instructions regarding the use of My Patients list are given later in this manual, see page 12. However, you can easily manage the list also through the **Configuration Pages**.

<ul style="list-style-type: none"> • <u>General</u> • <u>My Patients</u> • <u>My Patients List</u> • <u>Manage My Patients</u> • <u>Change Password</u> • <u>Units</u> • <u>Web Viewer</u> • <u>Pocket Viewer</u> • <u>Cellular Viewer</u> 	<u>Manage My Patients</u>				
		<u>My</u>	<u>Central / Unit</u>	<u>Monitor Name</u>	<u>Patient Name</u>
	Care Unit 1	<input checked="" type="checkbox"/>	Care Unit 2	Monitor 1	
	Care Unit 2	<input checked="" type="checkbox"/>	Care Unit 2	Monitor 2	
	Care Unit 3	<input type="checkbox"/>	Care Unit 2	Monitor 3	
Care Unit 4	<input checked="" type="checkbox"/>	Care Unit 2	Monitor 4		
		<input type="button" value="Select All"/> <input type="button" value="Unselect All"/>			
		<input type="button" value="OK"/> <input type="button" value="Cancel"/>			

1. Click **General - My Patients**.

To add patients to the list:

2. Click **Manage My Patients**.
3. Click the care unit name.
4. Check the **My** box for all those monitors you want to include in your list. Optionally, you can click **Select All** to include all monitors connected to this care unit.
5. Click **OK**.

To remove patients from the list:

1. Click **Manage My Patients**.
2. Click the care unit name.
3. Uncheck the **My** box for all those monitors you want to remove from your list. Optionally, you can click **Unselect All** to remove all monitors connected to this care unit.
4. Click **OK**.

NOTE: If the desired care unit or bedside monitor does not appear in the list, see "[Solving problems](#)" on page 51.

Changing your password

You can change your password through the [Configuration Pages for Mobile Viewers](#). This affects all Mobile Viewers that you may be using. The minimum number of characters is six, and the maximum number is 30. Passwords are case-sensitive.

1. Click [General - Change Password](#).
2. Give your new password in the [New password](#) text box.
3. Give your new password again in the [Repeat new password](#) text box.
4. Click [OK](#).

The screenshot shows a web application interface for changing a user's password. On the left, a sidebar menu lists various configuration categories: General, My Patients, Change Password (which is selected), Units, Web Viewer, Pocket Viewer, and Cellular Viewer. Below this menu is a 'Logout' button. The main content area is titled 'Change Password for User'. It features two text input fields: 'New password' and 'Repeat new password', both of which contain six asterisks to indicate masked text. Below these fields are two buttons: 'OK' and 'Cancel'.

Selecting units

You can change the units for height, weight and energy expenditure through the [Configuration Pages for Mobile Viewers](#), or through the [Setup](#) menu of the Web Viewer software; for instructions, see “[Changing the settings](#)” on page 31. All other units are defined by the bedside monitor.

Web Viewer specific Configuration Pages

Through the [Configuration Pages for Mobile Viewers](#), you can also enter the Web Viewer specific pages. The options are the same as the ones in the Web Viewer [Setup](#) menu. To edit waveform and trend pages either through the [Configuration Pages for Mobile Viewers](#) or the Web Viewer application’s [Setup](#) menu, refer to instructions given in “[Changing the settings](#).”

Automatic log-off

The automatic log-off feature logs you out of the system after the time defined by the system administrator. The message ‘[You have been logged off because of x minutes of inactivity.](#)’ appears.

Exiting the Configuration Pages

You can exit the [Configuration Pages for Mobile Viewers](#) by clicking [Logout](#).

Web Viewer application

Using tabs, menus and command buttons

You can select different views from the menu or by clicking the tabs.

<u>Patient</u>	<u>View</u>	<u>Setup</u>	<u>Help</u>
<u>My Patients</u>	Care Unit 3: Bed 1	Patient A	
Care Unit 2	<u>Waveform View</u>	<u>Graphical Trends</u>	<u>Numerical Trends</u>
Care Unit 3	(Patient data area)		
<u>All Patients</u>			
Bed 2 Patient B			
Bed 3 Patient C			
Care Unit 1			

- In the **Patient** menu you can choose the care unit and bedside monitor for viewing. Use this menu to exit the application (**Exit**). You can also use the **Show Monitor List** to choose the care unit and monitor.
- In the **View** menu you can choose what type of patient data (waveforms, graphical trends, numerical trends, or patient demographics) you want to see on the screen, refer to page 15. Alternatively, you can choose the views using the tabs. If the monitor list is not visible, you can select it visible through **View - Show Monitor List**. You can also stop the waveforms in the **Waveform View** for closer viewing (**Freeze**) and choose to print a waveform or numerical trend page (**Print Page...**).
- In the **Setup** menu you can change the contents of different views if necessary, see page 31.
- In the **Help** menu you can find this Web Viewer manual as a screen optimized pdf file, as well as the Web Viewer version details.

Exiting the program

To exit the application:

1. Click Patient - Exit.
 2. Click Yes when the question 'Do you really want to exit?' appears.
- or
- Click the closing button of the application in the title bar of the Web Viewer window.

3 Selecting patients

Using the Monitor List



The software starts with an empty view.

To select the patient:

1. If there is no monitor list visible, select **View - Show Monitor List**. You can also use the keyboard shortcut Ctrl+M (MacOS: Command+M).

View	Setup	Help
<input checked="" type="radio"/> Waveforms		
<input type="radio"/> Graphical Trends		
<input type="radio"/> Numerical Trends		
<input type="radio"/> Demographics		
<input checked="" type="checkbox"/> Show Monitor List		Ctrl-M
Freeze		Pause
Print Page...		Ctrl-P

2. Click one of the care unit name boxes. This opens a list of all the monitors connected to that care unit.

Patient	View	Setup	Help
My Patients 			
Care Unit 1			
All Patients			
Monitor 1 Patient A			
Monitor 2 Patient B			
Monitor 3 Patient C			
Care Unit 2 Patient A			
Care Unit 3 Patient CD 			
Care Unit 4 Patient EF			

- Click the desired monitor in the list. The available monitor names are displayed in black and other monitor names (monitors not connected or in standby) in gray. If there are more monitors than can be displayed at once, a scroll bar appears. A red or yellow alarm symbol after the care unit, bedside monitor or patient name indicates that there is an active alarm. By selecting **All Patients** you can see all the patients connected to that care unit in the Multi View option. For more information about the Multi View, see “Multi View” on page 16.

When the monitor has been selected, the previously used view appears on the screen.

Using the Patient menu

To select the patient:

- Click **Patient**.
- Click the care unit name.
- Check the radio button beside the monitor name.

Patient	View	Setup	Help
My Patients			
Care Unit 1		<input type="radio"/> All Patients	
Care Unit 5		<input type="radio"/> Monitor 1	
Care Unit 6		<input type="radio"/> Monitor 2	
Care Unit 7		<input type="radio"/> Monitor 3	
Exit			

The previously used view appears on the screen.

You can also exit the application through this menu: **Patient - Exit**.

My Patients list

If you often need to check data from specific bedside monitors connected to various care units, the easiest way to do this is to create a **My Patients** list. This list is visible on top of the list of care units, and you get a quicker access to the monitors you have included in it. The **My Patients** list is organized alphabetically.

Adding bedside monitors to My Patients

1. Select a patient as explained previously.
2. Click **Patient - My Patients - Add to My Patients**.

Patient	View	Setup	Help
My Patients		Add to My Patients	
Care Unit 1		<input type="radio"/> All Patients	
Care Unit 5		<input type="radio"/> Monitor 1	
Care Unit 6		<input type="radio"/> Monitor 2	
Care Unit 7		<input type="radio"/> Monitor 3	
Exit			

NOTE: **Add to My Patients** is visible when the selected bedside monitor is not included in the **My Patients** list. When the monitor is added to the list, the text changes to **Remove from My Patients**, see below.

Removing monitors from My Patients

1. Select a patient as explained previously.
2. Click **Patient - My Patients - Remove from My Patients**.

Patient	View	Setup	Help
My Patients		Remove from My Patients	
Care Unit 1		<input type="radio"/> All Patients	
Care Unit 5		<input type="radio"/> Monitor 1	
Care Unit 6		<input type="radio"/> Monitor 2	
Care Unit 7		<input type="radio"/> Monitor 3	
Exit			

NOTE: **Remove from My Patients** is visible when the selected bedside monitor is in the **My Patients** list. When the monitor is not included in the list, this selection is **Add to My Patients**, see above.

For your notes:

4 Viewing patient data

You can choose to view different types of patient data: waveforms, graphical trends, numerical trends, or demographics.




Using pages

When viewing waveforms, graphical trends or numerical trends, you can choose different combinations of parameters to the screen. These predefined sets of parameters are called pages. The waveform view, graphical trends view and numerical trends view have several available pages each. Only configured pages appear in the **Page** list box, empty pages are not shown.

Pages can be configured through the **Setup** menu, see page 31. The first two waveform pages, **Bedside** and **ECG**, cannot be changed. The **Bedside** page is always a copy of what is shown on the bedside monitor screen, and the **ECG** page always displays a 12 lead ECG.

Symbols in the network/patient information area

These symbols are used to indicate the following conditions:

- | | |
|---|---|
| no symbol | The data is from a Datex-Ohmeda monitor connected to the monitor network (LAN). |
|  | The data is from a Datex-Ohmeda monitor connected to the Wireless Monitor Network (WLAN). |
|  | The data is from a Dash, Solar or Eagle monitor connected to the Unity Network. |
|  | The data is from ApexPro Telemetry. |

Multi View

If you have the Multi View license, you can view all the patients connected to a selected care unit simultaneously in a multiple patient view called **Multi View**. The **Multi View** displays one to four waveforms, digits and alarms for each patient in separate patient sectors.

A **Multi View** page consists of 2 to 8 patient sectors in two columns. The number of sectors varies according to what has been chosen through **Setup - Multi View**, see page 44. The focus on a Multi View is always on one patient sector. To change the focus, click another patient sector. By double-clicking a sector, you will get a patient view of that patient.

If all patients of the selected care unit cannot be displayed in one **Multi View**, there are additional pages (10 pages at the most). Different **Multi View** pages are selected by clicking the corresponding tabs.

To select the **Multi View** display, select **All Patients** in the **Patient List**.

NOTE: When the **Multi View** is displayed, there are no other selectable options in the **View** menu. To change the view, go to a patient sector and activate the context-sensitive menu by using the right click. For more information on the context-sensitive menu, see page 18.

The following table displays the layout of an 8-patient **Multi View**.

Patient	View	Setup	Help
Care Unit 1			
Beds 1...8	Beds 9...16		
Care Unit 1: Bed 1 Patient A		Care Unit 1: Bed 2 Patient B	
sector 1, patient data area		sector 2, patient data area	
Care Unit 1: Bed 3 Patient C		Care Unit 1: Bed 4 Patient D	
sector 3, patient data area		sector 4, patient data area	
Care Unit 1: Bed 5 Patient E		Care Unit 1: Bed 6 Patient F	
sector 5, patient data area		sector 6, patient data area	
Care Unit 1: Bed 7 Patient G		Care Unit 1: Bed 8 Patient H	
sector 7, patient data area		sector 8, patient data area	

The following is an example of a patient sector:

Care Unit 1: Bed 5 Patient E



Context-sensitive menu

A context-sensitive pop-up menu is available in the **Multi View**: It is activated by right-clicking on a selected patient sector. Through this menu you can select another view for that patient, and add the patient to your **My Patients** list or remove them from it.


Waveform View
Graphical Trends
Numerical Trends
Demographics
Add to My Patients

Waveform view

To view patient waveforms:

First select the patient, see page [11](#).

1. Click **View - Waveforms**:

View	Setup	Help
 Waveforms		
<input type="radio"/>	Graphical Trends	
<input type="radio"/>	Numerical Trends	
<input type="radio"/>	Demographics	
<input checked="" type="checkbox"/>	Show Monitor List	Ctrl-M
	Freeze	Pause
	Print Page...	Ctrl-P

2. or click the **Waveform View** tab:

Patient	View	Setup	Help
Care Unit 1: Monitor 2 Patient A			
Waveform View	Graphical Trends	Numerical Trends	Demographics
Page	1: Bedside	▼	

3. To select which waveform page you want to see on the screen, click the page in the list box:
 - **Bedside:** this page displays a copy of the waveforms and digit fields of the bedside monitor screen and it cannot be modified
 - **ECG:** this page always displays a 12-lead ECG and cannot be modified
 - **Page 3 - 6:** user configurable pages



You can also use the keyboard shortcuts: press Page Up to select the previous page, Page Down to select the next page.

Up to six waveforms and four horizontal digit fields can be displayed simultaneously. If there are less than six waveforms specified, the waveform fields are adjusted to fill the whole screen. Note also that if you choose the same parameter for two or more consecutive waveform fields, they will be shown as cascaded.

12-lead ECG

The second waveform page, **ECG**, is also preconfigured and cannot be changed. It shows a 12-lead ECG with the following ECG data:

Patient		View		Setup		Help	
Care Unit 1: Monitor 2 Patient A							
Waveform View		Graphical Trends		Numerical Trends		Demographics	
Page	2: ECG	▼					
Waveform: ECG lead I				Waveform: V1			
Waveform: ECG lead II				Waveform: V2			
Waveform: ECG lead III				Waveform: V3			
Waveform: ECG lead aVR				Waveform: V4			
Waveform: ECG lead aVL				Waveform: V5			
Waveform: ECG lead aVF				Waveform: V6			
Digit field: HR				Digit field: ST			

NOTE: The number of ECG leads shown depends on the monitor type and software version.

Freezing waveforms

To stop the waveforms, click the command button **Freeze** or click **View - Freeze**. To unfreeze, click the button **Unfreeze** or click **View - Unfreeze**. You can also use the keyboard shortcut **Pause**. The waveforms are also automatically unfrozen after 60 seconds or when the patient or view is changed.

Printing waveforms

You can print the currently viewed **Waveform View** by using either the **Print Page...** command button or the menu selection **View - Print Page....** You can also use the keyboard shortcut **Ctrl + P** (MacOS: **Command + P**). For more information about printing, see page [29](#).

Editing waveform pages

To edit waveform pages, see page [31](#).

Graphical trend view

To view graphical trends:

Select the patient, see page 11.

1. Click **View - Graphical Trends**:

View	Setup	Help
<input type="radio"/> Waveforms		
<input checked="" type="radio"/> Graphical Trends		
<input type="radio"/> Numerical Trends		
<input type="radio"/> Demographics		
<input checked="" type="checkbox"/> Show Monitor List		Ctrl-M
Freeze		Pause
Print Page...		Ctrl-P

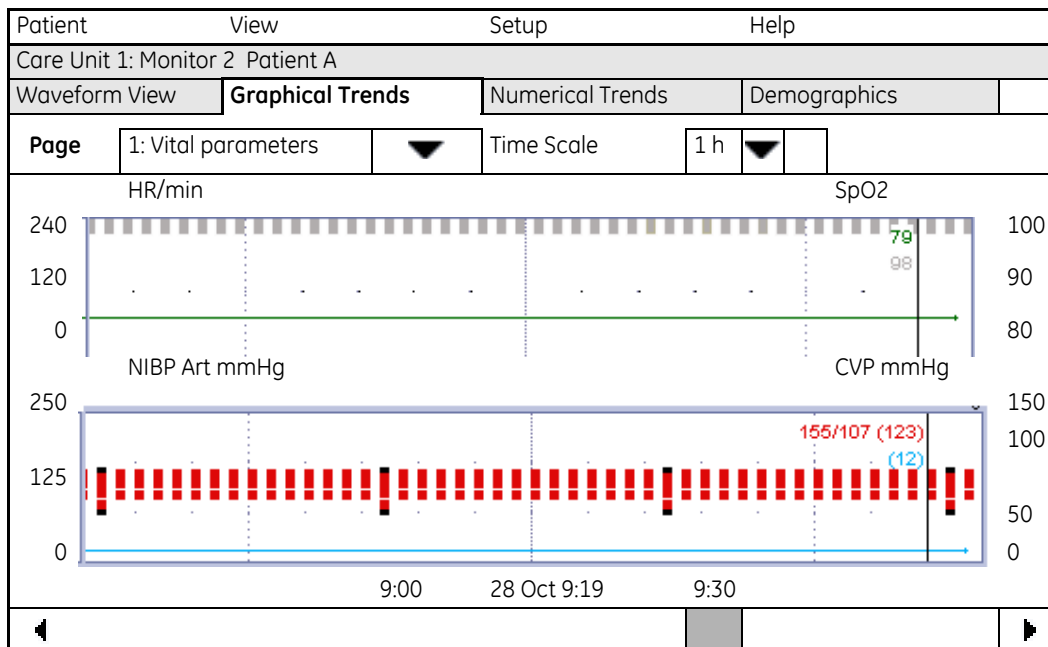
2. or click the **Graphical Trends** tab:

Patient	View	Setup	Help
Care Unit 1: Monitor 2 Patient A			
Waveform View	Graphical Trends	Numerical Trends	Demographics
Page	1: Vital parameters	▼	Time Scale
			1 h ▼

When the message 'Receiving trend data. Please wait.' appears below the trend boxes, the network is updating the trend display with more data.

3. Select the page in the **Page** list: click **Page 1 - Page 8**. You can also use the keyboard shortcuts: press Page Up to select the previous page, Page Down to select the next page.
4. Click the trend length (**Time Scale**) in the list. You can also use the keyboard shortcuts: press arrow up to select a shorter time scale, press arrow down to select a longer scale. NOTE: The actual trend length depends on the monitor you are using: some monitors provide trends up to 24 hours, and others up to 72 hours. Check the trend length in your monitor's user documentation.

- To scroll a trend page, use the horizontal scroll bar arrows at the bottom of the page or drag the scroll box.



- To have a cursor in the trends, click any point in a trend. You can see numeric values beside the cursor and the time of the measurement above the scroll bar. NOTE: The cursor remains in that point of time even when you change the page or select numerical trends for viewing.
- To move the cursor, drag it or click another point in the trends. You can also use the keyboard shortcuts: press arrow right to move the cursor to the right, press arrow left to move it to the left. When using the arrow keys, you can see the trends minute by minute even if the time scale is such that the resolution is less than one minute.

Editing graphical trend pages

To edit graphical trends and their scales, see page [31](#).

Numerical trend view

To view numerical trends:

First select the patient, see page 11.

1. Click **View - Numerical Trends**:

View	Setup	Help
<input type="radio"/> Waveforms		
<input type="radio"/> Graphical Trends		
<input checked="" type="radio"/> Numerical Trends		
<input type="radio"/> Demographics		
<input checked="" type="checkbox"/> Show Monitor List		Ctrl-M
Freeze		Pause
Print Page...		Ctrl-P

2. or click the **Numerical Trends** tab:

Patient	View	Setup	Help
Care Unit 1: Monitor 2 Patient A			
Waveform View	Graphical Trends	Numerical Trends	Demographics
Page	1: Vital parameters	▼	Resolution
			1 h ▼

3. Select the page in the **Page** list: click **Page 1 - Page 8**.
4. Click the trend resolution in the list.
5. To scroll the trends, use the vertical scroll bar arrows or drag the scroll box.

Patient		View		Setup		Help	
Care Unit 1: Monitor 2 Patient A							
Waveform View		Graphical Trends		Numerical Trends		Demographics	
Page	1: Vital parameters		▼	Resolution	5 min	▼	Print Page...
27 Oct 2005	HR /min			NIBP sys/dia mmHg		Art mmHg	
13:05	79					155/107	
13:07	79			154/84		155/107	
13:10	79					155/107	
13:12	79					155/107	
13:15	79					155/107	
13:20	79					155/107	
13:22	79			154/84		155/107	
13:25	79					155/107	
13:27	79					155/107	
13:30	79					155/107	
13:35	79			154/84		155/107	
13:37	79					155/107	

6. You can highlight a numerical trend line by clicking it. You can also use the keyboard shortcuts: press arrow up to move the cursor upwards in the trends, press arrow down to move it downwards. The trend cursor remains in the same place even when the trend view is changed between different pages or between graphical and numerical trends.

Printing numerical trends

You can print the currently viewed **Numerical Trends** page by using either the **Print Page...** command button or the menu selection **View - Print Page...** You can also use the keyboard shortcut Ctrl + P (MacOS: Command + P). For more information about printing, see page 29. Numerical trends can also be copied to other programs by marking a selection with the cursor and using normal operating system copy - paste commands.

Editing numerical trend pages

To edit numerical trends, see page 38.

Demographics view

To view patient demographics from the bedside monitor:

Select the patient, see page 11.

1. Click **View - Demographics**:

View	Setup	Help
<input type="radio"/> Waveforms		
<input type="radio"/> Graphical Trends		
<input type="radio"/> Numerical Trends		
<input checked="" type="radio"/> Demographics		
<input checked="" type="checkbox"/> Show Monitor List		Ctrl-M
Freeze		Pause
Print Page...		Ctrl-P

2. or click the **Demographics** tab:

Patient	View	Setup	Help
Care Unit 1: Monitor 2 Patient A			
Waveform View	Graphical Trends	Numerical Trends	Demographics

You can see the following information from the bedside monitor:

Patient	View	Setup	Help
Care Unit 1: Monitor 2 Patient A			
Waveform View	Graphical Trends	Numerical Trends	Demographics
Demographics			
Patient ID	005		
Last Name	Jones		
First Name	Mary		
Middle Name	M		
Date of Birth	01 Jan 1970		
Age	23 years		
Gender	Female		
Height	155 cm		
Weight	56 kg		
BSA	2,00 m2		

NOTE: Patient name and ID may not be shown. This is configured through the "Administration Pages", see the "Mobile Viewers Technical Reference Manual".

Editing units

To edit units for patient height and weight, see page [42](#).

For your notes:

5 Printing

You can print pages from the **Waveform View** and **Numerical Trends**. Only the presently viewed page is printed.

In the **Numerical Trends** view, the printing starts from the first row on the screen.

1. Select the patient and select **Waveform View** or **Numerical Trends**.
2. Click the **Print Page...** command button or click **View - Print Page...**
You can also use the keyboard shortcut key Ctrl + P (MacOS: Command + P).
3. The printer dialog box appears. You can now define the printer used.
Note that the printer must first be installed. With appropriate operation system drivers installed, you can also print an electronic pdf file.

Print	
Printer	
Name:	<div style="border: 1px solid black; padding: 2px;"> HP LaserJet 4050N PS ▼ </div> <div style="border: 1px solid black; padding: 2px; margin-left: 10px;">Properties</div>
Status:	Ready
Type:	HP Laser Jet 4050 Series PS
Where:	NP177A211
Comment:	Central lab

Each printout has a header with title, date, time, hospital and care unit names and patient identification, which are entered via the care unit or bedside monitor. Printing the patient ID and name can be disabled through the "Administration Pages."

For your notes:

6 Changing the settings

If necessary, you can edit waveform and trend views through the **Setup** menu. You can also use the **Configuration Pages for Mobile Viewers** for performing these tasks. Each user can configure these views differently, and they can then be viewed with that particular username and password.

You can give names to different pages, select their parameters, trend scales, sweep speeds and units for height, weight and energy expenditure. The pages can always be returned to their default values set by the system administrator.

The instructions given in this manual also apply to the **Configuration Pages** with the following differences:

- To start, you must enter the Web Viewer specific **Configuration Pages** on the homepage of the Mobile Viewers:
 - Click **Enter Configuration Pages**.
 - Login.
 - Click **Web Viewer**.
- On the **Configuration Pages**:
 - **Sweep Speeds** can be edited in the **Waveform View** menu.
 - **Trend Scales** can be edited in the **Graphical Trends** menu.
 - **Units** can be edited in the **General** menu (NOTE: This is not a Web Viewer specific menu).
 - The **OK** button corresponds to the **Apply** button, and the **Logout** button corresponds to the **Exit Setup** button.
 - When clicking **Set to Default**, no confirmation is required.


Editing waveform pages

You can change the waveform page names and select parameters for all waveform and/or digit fields.

1. Click **Setup - Waveform Pages**:

View	Setup	Help
Waveform Pages		
Graphical Trend Pages		
Graphical Trend Scales		
Numerical Trend Pages		
Sweep Speeds		
Units		
Multi View		

2. or click the **Waveform Pages** tab if you are already in another **Setup** page:

Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Waveform Pages		Graphical Trend Pages		
1: Vital parameters				

3. Select the page in the first list. The first two pages, **Bedside** and **ECG**, cannot be changed.
4. To change or enter the page name, click the **Name** text box and type the name.
5. Select parameters for **Waveform field 1 - 6** in the lists. NOTE: If there are less than six waveforms specified, the waveform fields are adjusted to fill the whole screen. If you choose the same parameter for two or more consecutive fields, they will be shown as cascaded.
6. Select parameters for **Digit field 1 - 4** in the lists.

Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Waveform Pages		Graphical Trend Pages		
2: Hemodynamics ▼				
Page setup				
Name	Hemodynamics		(Hemodynamics)	
Waveform field 1	ECG1 ▼	(ECG1)		
Waveform field 2	P1 ▼	(P1)		
Waveform field 3	P2 ▼	(P2)		
Waveform field 4	P4 ▼	(P4)		
Waveform field 5	Pleth ▼	(Pleth)		
Waveform field 6	CO2 ▼	(CO2)		
Digit field 1	Digit field 2	Digit field 3	Digit field 4	
Temp ▼	C.O.+PCWP ▼	OFF ▼	OFF ▼	
(Temp)	(C.O.+PCWP)	(OFF)	(OFF)	
			Set to Default	
Exit Setup		Apply	Cancel	

- Click **Apply** to save the settings or **Cancel** to return the previous values.
- Click **Exit Setup** to close the setup window.

Default values are shown beside the list boxes in parentheses. To return to the default settings set by the system administrator, click **Set to Default - Yes**.


Editing graphical trend pages

You can change the graphical trend page names and select five parameters for each page. Default values are shown beside the list boxes in parentheses.

1. Click **Setup - Graphical Trend Pages**:

View	Setup	Help
Waveform Pages		
Graphical Trend Pages		
Graphical Trend Scales		
Numerical Trend Pages		
Sweep Speeds		
Units		
Multi View		

2. or click the **Graphical Trend Pages** tab if you are already in another **Setup** page:

Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Waveform Pages		Graphical Trend Pages		
1: Vital parameters				

3. Select the page in the first list.
4. To change or enter the page name, click the **Name** text box and type the name.
5. Select parameters for **Field 1 - Field 5** in the lists. If you choose the same parameter for two consequent fields, the trend will be double the normal height.

Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Waveform Pages		Graphical Trend Pages		
1: Vital parameters				
Page setup				
Name	Vital parameters			
Field 1	HR+SpO2			
Field 2	P1+P2			
Field 3	OFF			
Field 4	OFF			
Field 5	OFF			
				Set to Default
Exit Setup	Apply	Cancel		

6. Click **Apply** to save the settings or **Cancel** to return the previous values.
7. Click **Exit Setup** to close the setup window.

To return to the default settings set by the system administrator, click **Set to Default - Yes**.


Editing graphical trend scales

You can also change the scales for graphical trend parameters to best suit your monitoring needs. Default values are shown beside the list boxes in parentheses.

1. Click **Setup - Graphical Trend Scales**:

View	Setup	Help
Waveform Pages		
Graphical Trend Pages		
Graphical Trend Scales		
Numerical Trend Pages		
Sweep Speeds		
Units		
Multi View		

2. or click the **Graphical Trend Scales** tab if you are already in another **Setup** page:

Waveform Pages		Graphical Trend Pages			
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View	
HR	0-240 /min		(0-240/min)		

3. Select parameter scales in the parameter specific lists.

Waveform Pages		Graphical Trend Pages			
Graphical Trend Scales		Numerical Trend Pages	Sweep Speeds	Units	Multi View
HR	<input type="text" value="0-240 /min"/> ▼	(0-240/min)	T1	<input type="text" value="20-40 CEL"/> ▼	(20-40 CEL)
PVC	<input type="text" value="0-8 /min"/> ▼	(0-8 /min)	T2	<input type="text" value="20-40 CEL"/> ▼	(20-40 CEL)
ST	<input type="text" value="-5...+5 mm"/> ▼	(-5...+5 mm)	T3	<input type="text" value="20-40 CEL"/> ▼	(20-40 CEL)
			T4	<input type="text" value="20-40 CEL"/> ▼	(20-40 CEL)
CPP	<input type="text" value="0-200 mmHg"/> ▼	0-200 mmHg)	Tblood	<input type="text" value="20-40 CEL"/> ▼	(20-40 CEL)
PCWP	<input type="text" value="0-30 mmHg"/> ▼	(0-30 mmHg)			
C.O.	<input type="text" value="0-9 l/min"/> ▼	(0-9 l/min)	EEG Amplitude	<input type="text" value="0-100µV"/> ▼	(0-100µV)
			SEF	<input type="text" value="0-30 Hz"/> ▼	(0-30 Hz)
SpO2	<input type="text" value="80-100%"/> ▼	(80-100%)	MF	<input type="text" value="0-30 Hz"/> ▼	(0-30 Hz)
VO2	<input type="text" value="0-10 kPa"/> ▼	(0-10 kPa)			
EE	<input type="text" value="0-400 ml/min"/> ▼	(0-400 ml/min)			
PgCO2	<input type="text" value="0-3000 kcal/d"/> ▼	(0-3000 kcal/d)			

Exit Setup
Apply
Cancel
Set to Default

4. Click **Apply** to save the settings or **Cancel** to return the previous values.
5. Click **Exit Setup** to close the setup window.

To return to the default settings set by the system administrator, click **Set to Default - Yes**.


Editing numerical trend pages

You can change the numerical trend page names and select up to eight parameters for each page. Default values are shown beside the list boxes in parentheses.

1. Click **Setup - Numerical Trend Pages**:

View	Setup	Help
Waveform Pages		
Graphical Trend Pages		
Graphical Trend Scales		
Numerical Trend Pages		
Sweep Speeds		
Units		
Multi View		

2. or click the **Numerical Trend Pages** tab if you are already in another **Setup** page:

Waveform Pages		Graphical Trend Pages		
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
1: Vital parameters		(Vital parameters)		

3. Select the page in the first list.
4. To change or enter the page name, click the **Name** text box and type the name.
5. Select parameters for **Column 1 - Column 8**.

Waveform Pages		Graphical Trend Pages		
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
1: Vital parameters ▼				
Page setup				
Name	<input type="text" value="Vital parameters"/>	<i>(Vital parameters)</i>		
Column 1	<input type="text" value="HR"/> ▼	(HR)		
Column 2	<input type="text" value="NIBP"/> ▼	(SpO2)		
Column 3	<input type="text" value="Art"/> ▼	(NIBP)		
Column 4	<input type="text" value="OFF"/> ▼	(Art)		
Column 5	<input type="text" value="OFF"/> ▼	(CVP)		
Column 6	<input type="text" value="OFF"/> ▼	(EtCO2)		
Column 7	<input type="text" value="OFF"/> ▼	(FiO2)		
Column 8	<input type="text" value="OFF"/> ▼	(RR)		
				<input type="button" value="Set to Default"/>
<input type="button" value="Exit Setup"/>		<input type="button" value="Apply"/>		<input type="button" value="Cancel"/>

6. Click **Apply** to save the settings or **Cancel** to return the previous values.
7. Click **Exit Setup** to close the setup window.

To return to the default settings set by the system administrator, click **Set to Default - Yes**.


Editing sweep speeds

You can change the sweep speeds of different waveform parameters. Default values are shown beside the list boxes in parentheses.

1. Click **Setup - Sweep Speeds**:

View	Setup	Help
Waveform Pages		
Graphical Trend Pages		
Graphical Trend Scales		
Numerical Trend Pages		
Sweep Speeds		
Units		
Multi View		

2. or click the **Sweep Speeds** tab if you are already in another **Setup** page:

Waveform Pages		Graphical Trend Pages		
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Hemodynamics	25 mm/s 	(25 mm/s)		

3. Select sweep speeds in the parameter specific lists.

Waveform Pages		Graphical Trend Pages		
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Hemodynamics	25 mm/s	▼	(25 mm/s)	
CO2	Fast (6.25 mm/s)	▼	Fast (6.25 mm/s)	
O2	Fast (6.25 mm/s)	▼	Fast (6.25 mm/s)	
AA	Fast (6.25 mm/s)	▼	Fast (6.25 mm/s)	
Paw	Fast (6.25 mm/s)	▼	Fast (6.25 mm/s)	
Flow	Fast (6.25 mm/s)	▼	Fast (6.25 mm/s)	
Resp	Fast (6.25 mm/s)	▼	Fast (6.25 mm/s)	
EEG	25 mm/s	▼	(25 mm/s)	

Exit Setup	Apply	Cancel	Set to Default
------------	-------	--------	----------------

- Click **Apply** to save the settings or **Cancel** to return the previous values.
- Click **Exit Setup** to close the setup window.

To return to the default settings set by the system administrator, click **Set to Default - Yes**.


Editing units

You can choose the units for patient height and weight and energy expenditure. Default values are shown beside the list boxes in parenthesis. NOTE: These settings affect all Mobile Viewers that you may be using.

1. Click **Setup - Units**:

View	Setup	Help
Waveform Pages		
Graphical Trend Pages		
Graphical Trend Scales		
Numerical Trend Pages		
Sweep Speeds		
Units		
Multi View		

2. or click the **Units** tab if you are already in another **Setup** page:

Waveform Pages		Graphical Trend Pages		
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Height	cm		(cm)	

3. Select the unit in the **Height** list.
4. Select the unit in the **Weight** list.
5. Select the unit in the **EE** list.

Waveform Pages		Graphical Trend Pages		
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Height	cm			
Weight	kg			
EE	kcal/d			
Exit Setup		Apply	Cancel	Set to Default

6. Click **Apply** to save the settings or **Cancel** to return the previous values.
7. Click **Exit Setup** to close the setup window.

To return to the default settings set by the system administrator, click **Set to Default - Yes**.

Editing Multi View

You can choose the layout of the Multi View pages and the parameters for the waveform and digit fields. Default values are shown beside the list boxes in parenthesis.

1. Click **Setup - Multi View**:

View	Setup	Help
Waveform Pages		
Graphical Trend Pages		
Graphical Trend Scales		
Numerical Trend Pages		
Sweep Speeds		
Units		
Multi View		

2. or click the **Multi View** tab if you are already in another **Setup** page:

Waveform Pages		Graphical Trend Pages		
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View
Layout	8 patients, 2 waveforms	(8 patients, 2 waveforms)		

3. Select the layout in the **Layout** list.
4. Select the parameters for the waveforms in the **Waveform field 1 - Waveform field 4** lists. NOTE: The number of selectable waveforms depends on the layout option you have chosen.
5. Select the parameters for the digit fields in the **Digit field 1 - Digit field 4** lists. NOTE: The number of selectable digit fields depends on the layout option you have chosen.

Waveform Pages		Graphical Trend Pages			
Graphical Trend Scales	Numerical Trend Pages	Sweep Speeds	Units	Multi View	
Layout	<input style="width: 100%;" type="text" value="8 patients, 2 waveforms"/> ▼		(8 patients, 2 waveforms)		
Waveform field 1	<input style="width: 50%;" type="text" value="ECG1"/> ▼	(ECG1)	Digit field 1	<input style="width: 50%;" type="text" value="SpO2"/> ▼	(SpO2)
Waveform field 2	<input style="width: 50%;" type="text" value="ECG2"/> ▼	(ECG2)	Digit field 2	<input style="width: 50%;" type="text" value="NIBP"/> ▼	(NIBP)
Waveform field 3	<input style="width: 50%;" type="text" value="P1"/> ▼	(P1)	Digit field 3	<input style="width: 50%;" type="text" value="CO2"/> ▼	(CO2)
Waveform field 4	<input style="width: 50%;" type="text" value="P2"/> ▼	(P2)	Digit field 4	<input style="width: 50%;" type="text" value="O2"/> ▼	(O2)
<input type="button" value="Exit Setup"/>		<input type="button" value="Apply"/>		<input type="button" value="Cancel"/>	
<input type="button" value="Set to Default"/>					

6. Click **Apply** to save the settings or **Cancel** to return the previous values.
7. Click **Exit Setup** to close the setup window.



To return to the default settings set by the system administrator, click **Set to Default - Yes**.

For your notes:

7 Alarms



The Web Viewer displays active alarms from the monitors in the network. However, the alarm indications may be different from those of the monitor.

7-1 Alarm priorities and color codes

Priority	Color	Symbol	Description
High	Red		Life-threatening situation
Medium	Yellow		Serious problem but not life-threatening
Low	White	no symbol	Informational and equipment related note

NOTE: There are no alarm sounds in the Web Viewer.

If there is an active alarm in any of the monitors connected to the network, a red or yellow alarm symbol appears beside the care unit name and also beside the monitor name. Low priority alarms are not shown in the monitor list.

Patient View Setup Help	
Care Unit 1	
Care Unit 2	
All Patients	
Monitor 1 Patient A	
Monitor 2 Patient B	
Monitor 3 Patient C	
Care Unit 3	
Care Unit 4	
Care Unit 5	

NOTE: See the bedside monitor manuals for all alarm messages.

NOTE: The Unity monitors' alarm message 'Leads off' is only displayed in the Web Viewer if the V lead used for ST analysis fails.

WARNING:

The Web Viewer is not intended to be used as a primary alarm source. Always verify the patient status on site.

For your notes:

8 Safety precautions

- Some equipment malfunctions may not generate a monitor alarm. Always keep the patient under close surveillance.
- The computer shall be supplied from an additional transformer providing at least basic isolation (isolating or separating transformer) when placed in a medically used room. Without an appropriate transformer the leakage current in the system may exceed the value allowed for the medical electrical equipment.

For your notes:

9 Solving problems

Symptoms of trouble

For further information, refer to the user documentation delivered with your computer.

Problem	Cause	Solution
The desired care unit or monitor is not in the list.	The Central or monitor <ul style="list-style-type: none"> – is not turned on – is not connected to the TCP/IP network Web Viewer is viewing – is not named appropriately – user rights do not allow viewing this care unit/monitor 	Make sure that the Central or monitor is on. Contact the system administrator and make sure that network connections are properly done and the monitors are appropriately named. Contact the system administrator for obtaining rights to view this care unit/monitor.
The monitor cannot be selected for viewing (name is displayed in gray).	The monitor is not on or the connection to the network has failed.	Make sure that the monitor is turned on and the monitor-network connection is properly done.
All Patients selection is not available.	Multi View license is not installed.	Contact the system administrator.
No printout.	Printer error or printer not available.	Check the printer and operating system's printer settings.
The Web Viewer does not respond to user input, or waveforms or digits are frozen on the display.	Underlying operating system may have halted.	Turn the computer off and back on to ensure a stable application environment.

If the problem persists, contact the system administrator or GE Healthcare technical support.

Messages

Alarm messages from bedside monitors, such as 'SpO2 low' or 'Apnea', are explained in the monitors' user documentation. The following messages describe the Web Viewer function. NOTE: The Unity monitors' alarm message 'Leads off' is only displayed in the Web Viewer if the V lead used for ST analysis fails.

Message	Cause	Solution
All licenses are already in use. Try again later.	All simultaneous Web Viewer licenses are already in use.	Try again when someone else has stopped using the license.
Cannot connect to server	The connection has failed. No network connection. No Web Viewer service.	Retry log in. Check cables or open the dial-up connection. Contact the system administrator.
...Connecting to server	The Web Viewer is trying to connect to the server.	Wait.
Connection to the monitor lost	The network may be down or the monitor is not connected to this network.	Check that the network and monitor are working. Select another monitor or wait for the message to disappear.
Connection to server lost, trying to reconnect...	The Web Viewer has lost connection to the network and is trying to reconnect.	Wait for about 20 seconds.
The connection to server was lost	The Web Viewer could not reconnect to the network.	Check the network connection. Login again.
Licensing error. Please contact your system administrator.	There has been an error in the licensing process.	Contact the system administrator.
...Loading configuration	The application is starting.	Wait.
Login incorrect	You have given a wrong username or password. You do not have a valid user account.	Give your username and password again. Contact the system administrator.
Monitor in standby: xxx	The chosen monitor is in standby.	Wait or select another monitor.
No licenses for Web Viewer. Please contact your system administrator.	There are no suitable licenses.	Contact the system administrator.

Message	Cause	Solution
No patients selected	You have not selected a monitor.	Select a monitor.
Preparing to print...	The Web Viewer is starting to print the view.	Wait.
Receiving trend data. Please wait.	The Web Viewer is updating the display.	Wait.
...Starting up monitoring services	The application is starting.	Wait.
...Starting up the application	The application is starting.	Wait.
Starting up, please wait...	The application is starting.	Wait.
There was an error while saving the setup to the server. The settings were not saved.	Due to network problems the settings were not saved.	Check network connection. Try again.
Trend data not available	There is no trend data for the selected patient. You are viewing an S/5 Light Monitor.	Select another view or another patient. No trends are available for the S/5 Light Monitor.
User account locked. Please contact your system administrator.	You have failed the login too many consecutive times.	Contact the system administrator.
Waveforms frozen	You have started printing or clicked the Freeze button or View - Freeze .	Click Unfreeze or select View - Unfreeze , or wait until the waveforms are automatically unfrozen.
You have been logged off because of x minutes of inactivity.	The automatic log-off feature has logged you out of the system after the time defined by the system administrator.	Log in again.

If the problem persists, contact the system administrator or GE Healthcare technical support.

For your notes:

10 General specifications

Technical specifications

For the computer and display technical specifications, refer to the user documentation delivered with the respective equipment.

Minimum technical requirements for Web Viewer Client

Windows 95/98/ME/NT 4.0/2000/XP

- 400 MHz processor
- 128 MB RAM

MacOS X 10.1

- PowerPC G3 500 MHz
- 128 MB RAM

Minimum display requirements

Display resolution 800 x 600 (SVGA), 256 colors (1024 x 768, 64k recommended)

Network infrastructure requirements

Intranet Client: Network board or wireless LAN with TCP/IP networking installed

Dial-Up Client: 56k modem (with TCP/IP networking installed)

Software requirements

Web browser (Internet Explorer, Firefox or Safari recommended)

Java Web Start (included)

For your notes:

Index

Numerics

12-lead ECG
viewing 20

A

Alarm
 priorities 47
 symbols 47
Authentication
 user 3
Automatic log-off 8

B

Browsers 3

C

Command buttons 9
Communication 3
Configuration Pages 6
 changing password 8
 exiting 8
 My Patients 7
 units 8
 Web Viewer specific 8
Configuring
 graphical trend pages 34
 graphical trend scales 37
 Multi View 44
 numerical trends 39
 sweep speeds 41
 units 43, 45
 waveform pages 32
Context-sensitive menu
 Multi View 18
Conventions
 manual 1
Creating
 shortcut 6

D

Demographics
 viewing 26
Differences
 Web Viewer and bedside monitors 4

E

Exiting
 application 10
 Configuration Pages 8

F

First use 5
Freezing
 waveforms 21

G

Graphical trend pages
 setup 34
Graphical trends
 configuring pages 34
 configuring scales 37
 scale setup 37

H

Help
 menu 9

I

Illustrations 1

K

Keyboard
 shortcuts 4

L

List
 My Patients 12
Log-off
 automatic 8

M

Menu

- context-sensitive in Multi View 18
- Help 9
- Patient 9, 12
- Setup 9
- View 9

Messages 52

Monitor List

- selecting patients 12

Multi View

- configuring 44
- context-sensitive menu 18
- layout 17
- patient sector 17
- setup 44
- viewing 16

My Patients 7, 12

N

Names 1

Network

- structure 55

Numerical trends

- configuring 39
 - printing 25, 30
 - setup 39
 - viewing 24
-

P

Pages

- using 15

Password

- Configuration Pages 8

Patient

- adding patients 13
- menu 9, 12
- Monitor List 12
- My Patients list 12
- removing patients 13
- selecting 12
- viewing demographics 26

Printing

- defining printer 29

- numerical trends 25, 30

- printer dialog box 29

- waveforms 21, 30

Priorities

- alarm 47

Problems 51

R

Requirements

- display 55
- network infrastructure 55
- software 55
- technical for Web Viewer 55

Responsibility of the manufacturer 2

S

Safety 49

Selecting

- patients 12

Setup

- graphical trend pages 34
- graphical trend scales 37
- menu 9
- Multi View 44
- numerical trends 39
- sweep speeds 41
- units 43, 45
- waveform pages 32, 33

Shortcuts

- creating for desktop 6
- keyboard 4

Specifications

- client requirements 55
- display requirements 55
- software requirements 55

Starting 5

Sweep speeds

- configuring 41
- setup 41

Symbols

- alarms 47
 - network and patient information 15
-

T

Tabs 9

Trends

- configuring graphical 34
 - configuring numerical 39
 - configuring scales 37
 - printing numerical 25, 30
-

U

Unfreezing

- waveforms 21

Units

- Configuration Pages 8
- configuring 43, 45
- setup 43, 45

User

- authentication 3
-

V

View

- menu 9

Viewing

- 12-lead ECG 20
 - demographics 26
 - Multi View 16
 - numerical trends 24
-

W

Waveforms

- configuring pages 32
- freezing and unfreezing 21
- printing 21, 30
- setup 32
- viewing 18