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Surveyor Review

USER MANUAL

Manufactured by Mortara Instrument, Inc., Milwaukee, Wisconsin U.S.A.

CE
0459



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- Assembly operations, extensions, readjustments, modifications, or repairs are carried out only by personnel authorized by Mortara Instrument, Inc.
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- c) Misapplication, misuse, abuse, and/or failure to follow the Product/s instruction sheets and/or information guides;
- d) Accident; a disaster affecting the Product/s;
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- f) Other events outside of Mortara’s reasonable control or not arising under normal operating conditions.

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1. SAFETY INFORMATION



Warning: Means there is the possibility of personal injury to you or others.



Caution: Means there is the possibility of damage to the device.

Note: Provides information to further assist in the use of the device.

Safety Regulations

Surveyor™ Review is a medical device **CE** labelled, according to European directive 93/42/EEC (MDD), as a class IIa. Various other accessories like the monitor and printer are **CE** marked by the respective manufacturers according to the applicable European directives. See declarations of conformity for details.

The Surveyor Review, together with all accessories that have a physical or logical connection with it, forms part of a Medical Electrical System that complies with IEC 60601-1:2005 Ed:3 including its equivalent EU, US and Canadian National Differences as well as IEC/EN 60601-1-2:2007 .

12-lead ECGs generated with the device comply with IEC 60601-2-25:2011-10 Edition 2.0,. Refer to the Mortara Instrument Physician's Guide to Resting Interpretation, reference number 9501-001-50, for information pertaining to 12-lead ECG measurement and interpretation.



Warnings

- Reference Surveyor Central system user manual for warnings relating to the Surveyor Central and Mortara antenna network.
- Reference the S12/S19 patient monitor user manuals for all warnings related to the S12/S19.
- Reference the S4 mobile monitor user manuals for all warnings related to the S4.
- Device is a computer-based software application intended for use on a computer separate from the Surveyor Central in a stand-alone mode. The device can alternatively be networked to the Surveyor Central system's patient database through the Surveyor Central system security router. The device cannot be connected to the Surveyor Central system without a properly configured Surveyor Central system security router. The Surveyor Central system stored patient monitoring data or archived patient monitoring data are reviewed at the device.
- The device captures and presents data reflecting a patient's physiological condition that when reviewed by a trained physician or clinician can be useful in determining a diagnosis; however, the data should not be used as a sole means for determining a patient's diagnosis. The device is optionally equipped with Mortara's VERITAS™ 12-lead resting ECG interpretation algorithm. When this option is enabled, the VERITAS ECG algorithm can provide an over-reading physician with a silent second opinion through diagnostic statements output on the ECG report. For additional information on the Mortara VERITAS 12-lead resting ECG interpretation algorithm, please refer to the Physician's Guide to ECG Interpretation.
- Pediatric interpretation is generated only for 12-lead ECG's printed or exported with Surveyor Review version 4.00 or later.
- Device is designed to operate under Microsoft® Windows® 7 Professional (64-bit), Windows 8.1 (64-bit), or Windows 10 Professional (64-bit).

- Before attempting to use the device for clinical applications, the user must read and understand the contents of the user manual and any accompanying documents.
- Equipment on which the device is installed or connected to must comply with appropriate safety and electromagnetic compatibility requirements for the environment in which they are used.



Cautions

- Reference Surveyor Central System user manual for cautions relating to the Surveyor Central and Mortara antenna network.
- Reference the S12/S19 patient monitor user manual for all cautions relating to the S12/S19.
- Reference the S4 mobile monitor user manual for all cautions relating to the S4.

Notes

- Surveyor Review is compatible with a Surveyor Central installation of the same software version. Surveyor Review is able to read archives saved with earlier versions of Surveyor Central, from version 3.00 onward.

Protection of Patient Privacy

The device described in this manual is meant to be used in compliance with European directive 95/46/EC on the protection of personal data and the national transpositions thereof.

Mortara Instrument, Inc. or its representatives cannot be considered the “data controller” in the sense of this directive, or as responsible for processing personal data. This functionary will need to be assigned within the structure of the customer organization. It is the duty of the customer to provide the correct storage and handling of data generated by the device, putting into service all measures foreseen in the mentioned directive or its national implementation.

In particular, it is the duty of said customer to regulate access to the parts of the device described in this manual that might disclose information concerning specific identified patients or operators, taking those measures that he/she considers most suitable to obtain what is mentioned in the directives, providing, for example, rooms with limited access and/or a system of identification for access to the information.

The following information is meant to help the user decide which measures to take, taking into account both patient safety and the protection of personal information.

Device gives the possibility to enter patient name as part of the demographic data. This name is displayed on the screen of the device and on printouts.

Device displays and prints patient data (including patient name, if entered) stored on detachable, integrated, or networked storage media for review in the context of immediate care.

It is the responsibility of the customer organization to regulate access to the system on which the device is installed and on which sensitive patient data is stored in compliance with the local regulations.

2. EQUIPMENT SYMBOLS AND MARKINGS



Attention, consult accompanying documents



Do not dispose as unsorted municipal waste. Per European Union Directive 2002/96, requires separate handling for waste disposal according to national requirements

Waste Disposal

The Surveyor Review software-protection dongle, after its useful life, is considered to be “Waste Electric and Electronic Equipment (WEEE), which may contain toxic substances. The accumulation of this waste in the environment poses serious risk for the environment and human health. Therefore, WEEE needs to be collected separately and disposed of or recycled in an environmentally friendly way. Your local administration provides the means to do so, and sanctions are foreseen for unauthorized disposal. Please consult your local regulation on how to dispose of the equipment after its useful life. The producer of this equipment participates actively with the collection and recycling of this equipment. You may return this equipment to your distributor for recycling or disposal.

For your guidance, below is a list of waste materials that are related to or contained in the device, according to the EC commission regulation 2557/2001, Annex Part 2, European Waste Code 9 April 2002 directive. Please consult eventual national implementations and later modifications:

Class UE	Description
16 02 14 20 01 36	Discarded electronic equipment not containing hazardous components (protection dongle)
200103	Plastic of small size (CD)
15 01 02 20 01 39	Plastic packaging

Contact your local waste disposal agency for guidance on the proper recycling or disposal of these components.

3. INTRODUCTION

Purpose

This Surveyor Review user manual explains how to:

- Install Surveyor Review and connect, if applicable, to a Surveyor Central monitoring system operating at the same software version
- Use and understand Surveyor Review and its available options
- Enter, modify, and delete information
- Perform common user tasks

NOTE: This manual may contain screen shots. Any screen shots are provided for reference only. Consult the actual screen in the host language for specific wording.

Audience

This manual is written for clinical professionals who are expected to have a working knowledge of medical procedures and terminology as required for interpretation and handling of data acquired by monitoring cardiac patients.

Indications and Environments for Use

Surveyor Review is indicated for use:

- In a clinical setting by qualified medical professionals that have been properly trained in ECG monitoring and use of the system.
- In conjunction with centralized ECG monitoring through a network of adult patients in Coronary Care Units, Step-Down Units, Emergency Departments, and other locations where patients are being monitored.
- In the evaluation of data stored for patients with symptoms suggesting arrhythmia.
- For ST segment analysis of stored ST data.
NOTE: The significance of the ST segment changes needs to be determined by a clinician.
- In the evaluation of data stored for patients with pacemakers.
- In the evaluation of a patient's response after resuming occupational or recreational activities (e.g., after M.I. or cardiac surgery).
- In the evaluation of ECG documenting therapeutic interventions in individual patients or groups of patients.
- In clinical and epidemiological research studies.

System Description

Surveyor Review allows clinicians to review online patient monitoring data from a Surveyor Central system database or archived data that has been written to external media or a networked location. The Resting ECG Interpretation option is required to enable global measurement and 12-lead ECG interpretation.

The Surveyor Review station screen layout is similar to the Surveyor Central system review screen in its dual-display modality and has the same review features and functionality including printout and 12-lead ECG export (when the Resting ECG Interpretation option is present).

When the Surveyor Review station is networked to the Surveyor Central system database, it is possible to initiate archive of patient monitoring data, delete records, and/or modify patient demographic information.

System configurations

The Surveyor Review is provided in one of two configurations:

- **Node** – The Surveyor Review is provided pre-installed on a computer workstation.
- **Kit** – The Surveyor Review is provided in the form of a CD that can be installed on a customer-supplied computer workstation meeting the following specifications:
 - Operating System: Windows 7 Professional, 64 bit, Windows 8.1, 64 bit or Windows 10 Professional, 64 bit
 - CPU : Performance equivalent to an Intel Core i3, or higher
 - RAM: 2 GB (minimum)
 - Video: 1280 × 1024 resolution (minimum)
 - Disk space: 1 GB on the C: drive (minimum)
 - USB ports: 1 free V2.0 (minimum)

Required Equipment

- Surveyor Review Kit
 - Surveyor Review installation CD
 - Surveyor Review dongle (enables associated features)
 - Surveyor Review user manual (includes installation and operational instructions)
- Computer(s) to run Surveyor Review application software

NOTE: It is not possible to use the Surveyor Central system network printer for Surveyor Review printout.
- Online access (for when a Surveyor Review station is networked to Surveyor Central)
 - Mortara Surveyor Security router installed and configured by an authorized Mortara representative

Application installation (Kit configuration only)

NOTE: Prior to installing Surveyor Review, any copy-protection dongle must be removed from the computer.

Insert the Surveyor Review program CD in your drive. If the Auto Play function is enabled, installation will start automatically. If not enabled, left click on the desktop **My Computer** icon, browse to the CD/DVD drive, and left click on Setup Executable. The Review program and dongle driver will install automatically at C:\SCSYSApps\Review\Bin. When complete, follow the on-screen instructions.

- Select the application language.
- Configure the initial data parameters.
 - Live database IP [enter IP address with which the Surveyor Central database server is visible or make no changes when you plan to review archived data only. The IP address is typically the public IP address of the Surveyor firewall. Ask the network administrator when in doubt.].

NOTE: The version of Surveyor Review being installed must match that of the Surveyor Central.

- Archive [enter path or click on the button (...) to browse to the location].

NOTE: Surveyor Central archive data at V3.00 or later.

- Click on the radio button that represents the database source.
- Select Run Review Configurator Now checkbox, then Finish.
 - Define the print settings in the Print Settings tab.
 - Click on the Miscellaneous tab to define the 12-lead ECG export path and to choose ID or Name to be displayed in the Patients Surveyor Review station listing.
 - Select Save and Exit when finished.

***NOTE:** Saved settings can be changed within the Surveyor Review program.*

- The install program will automatically create a shortcut on the computer desktop to the Surveyor Review program.
- Links to the Surveyor Review configurator, dongle update utility, and uninstaller shortcut will be created in the Windows Start menu within the Surveyor Central applications group.
- Insert the Surveyor Review dongle in an available USB port. Only one dongle can be used at a time; if running Mortara's HScript™ Holter analysis software at version 4.xx on the same computer, ask a Mortara representative to upgrade the HScript dongle to enable the Surveyor Review program features.

Surveyor Review specifications

Computer

Operating System:	Windows 7 Professional or Windows 10
CPU :	Performance equivalent to an Intel Core i3, or higher
RAM:	2 GB (minimum)
Video:	1280 x1024 resolution (minimum)
Disk space:	1 GB on the C: drive (minimum)
USB ports:	1 free V2.0 (minimum)

Environmental Conditions

Transporting and Operating:	Depends on the computer in which the device is installed
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Screen

Supported screen resolutions:	Horizontal from 1024 to 3500 pixel Vertical from 720 to 1500 pixel
Traces per patient:	Up to 12 simultaneously
Display velocity:	5, 10, 25, or 50 mm/s
ECG sensitivity:	5, 10, 20, or 40 mm/mV
Trends:	Up to 8 tabular or graphic
Trend duration:	3, 6, 12, and 24 hour
Full disclosure:	Up to 4 traces
Full disclosure duration:	Depending on screen resolution, number of traces, and display velocity; typically more than 1 hour
Review method:	By event or by graphical trend

Printer

Compatibility:	Windows compatible printer; fully tested with HP M601n laser printer and PCL5 drivers
Printout types:	Rhythm, 12-lead ECG, ST report, trends, Summary Report
12-lead ECG formats:	6×2, 3×4+1, 3×4+3 at 25 or 50 mm/s
Rhythm speeds:	5, 10, 25, 50 mm/s
Paper types:	A4 and letter
Resolution:	1200 × 1200 dpi
Print speed:	55 ppm max

4. USING SURVEYOR REVIEW

Selecting data for review

Open the Surveyor Review program to display a patient list as shown in the example below. (This program example is setup to review archived patient data on a networked drive.)

Sort the list by any of the column headers (i.e., Last Name, ID, Date of Birth, etc.). The selected sort field is indicated by a triangular symbol. To sort in reverse order, click on the same column header again. To sort by two headers, click on the first choice then press and hold the shift key and simultaneously click on the second sort column. Then click on **Reload**.

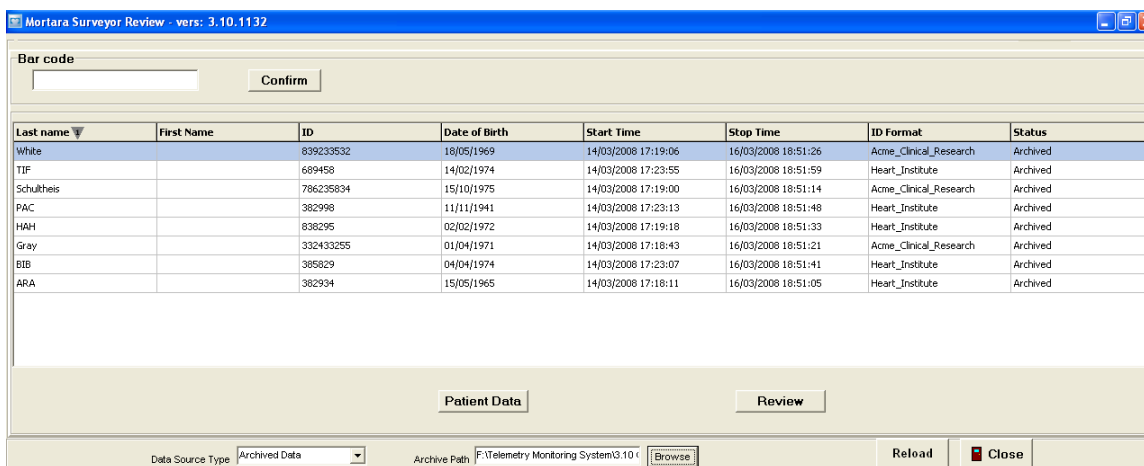


Figure 1 - Patient list.

To review a patient's demographic information, highlight the desired patient and left click on **Patient Data**. The Patient Data window will open. To exit this window and return to the patient list, click on **Close**.

To review a patient's ECG data, double click the desired patient or highlight the desired patient and left click on **Review**. To return to the patient list, click on **Patients**.

If using a bar code scanner, scan the patient's bar code to automatically highlight the patient. Click on the **Bar code** field, scan the code, and left click on **Confirm**.

Left click on **Reload** at the bottom of the display to update or refresh any changes that have occurred to the patient listing. Left click on **Close** or click on the red X in the upper right corner to exit the program.

The following selections allow you to change configuration settings:

- **Data Source Type** Choose between Archived Data and Online Database (when networked to a Surveyor Central system).
- **Archived Data** Displays the "archive path"; manually enter or use the Browse button to navigate to the archived data location.
- **Online Database** Displays "online server address"; enter the IP address of the Surveyor Central system database. The IP address is typically the public IP address of the Surveyor firewall.

When using Surveyor Review in the online database configuration, access is defined by the Surveyor Central system administrator in the password-protected configuration (Config) menu. The Surveyor Central system administrator will select each user's authorized ID formats and set applicable permissions.

The Patient Data button is replaced by the following permitted selections:

Selecting **New** will open a window.

Select ID format from the drop-down list and enter the patient demographics. Left click **OK** to save any changes and return to the patient list. Select **Cancel** to return without saving any changes.

Use **Modify** to open a patient's demographics window to add to or change any of the demographic information. Left click **OK** to save any changes and return to the patient list. Select **Cancel** to return without saving any changes.

Delete will remove new patient information that has been added, as well as patient data with a "Stopped" or "Archived" status from the database. Once deleted, the data cannot be retrieved. Delete is inactive if a patient with a current status of "Monitoring" is highlighted. Surveyor Review can be setup to require the configuration password in order to delete a patient. See a Mortara representative to activate this function.

Archive sends all closed monitoring sessions of a highlighted patient to the destination defined in the system. If a patient that is currently being monitored is highlighted, only the stopped monitoring sessions will be archived.

***NOTE:** Archived data cannot be restored to the Surveyor Central system. Archived data is typically used for acquisition at a Surveyor Central Review station, or an HSCRIBE system that has the Surveyor data analysis option.*

Review screen

Surveyor Review allows you to review all stored events and ECG data for any patient in the patient list.

In the example below, the selected patient's ECG data is shown in Waveform Traces view with a 12-lead ECG displayed at 25 mm/s speed. Parameters for the ECG are given in the bottom portion of the screen. Events are listed in the upper portion of the screen in reverse chronological order. Left click on any event to display the ECG.

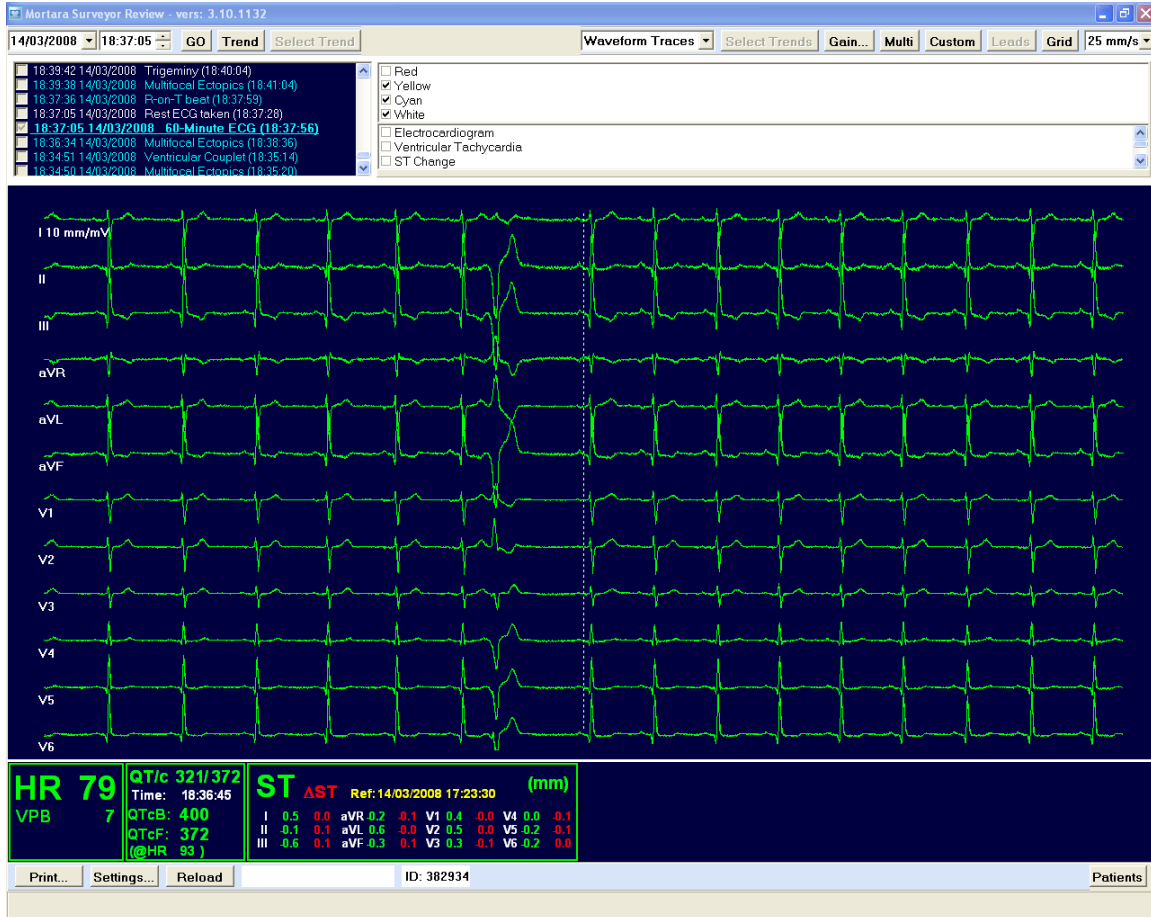


Figure 2 - Waveform traces view.

Event Review

Filter the events list by selecting or deselecting the check boxes to the right of the listing. Additionally, you can filter to view related groups of events. Any combination of event priority types and related groups can be selected.

Event Type Hierarchy

- Red = High
- Yellow = Medium
- Cyan = Low
- White = Informational

Event Groups

- Electrocardiogram
- Ventricular Tachycardia
- ST Change
- Protocol Events
- Extended Arrhythmias
- Resting ECG
- Technical Alarms
- All Alarms Off

NOTE: Some of the groups available for filter selections (e.g., ECG Derived Respiration (EDR), NIBP, SpO₂, Temperatures, Invasive Pressures and CO₂) are non-ECG parameter items and may not be available when reviewing telemetry only monitoring data.

NOTE: Selected event types and groups remain selected each time the review window is closed and reopened.

Trend Review

Left click on **Trend** to toggle between Event review and Trend review. In Trend review, the events listing changes to a trend allowing navigation to any monitoring session. HR trending and values are shown in green and VPB (ventricular ectopy) is shown in red. Left click on **Select Trend** to change the duration and parameters.

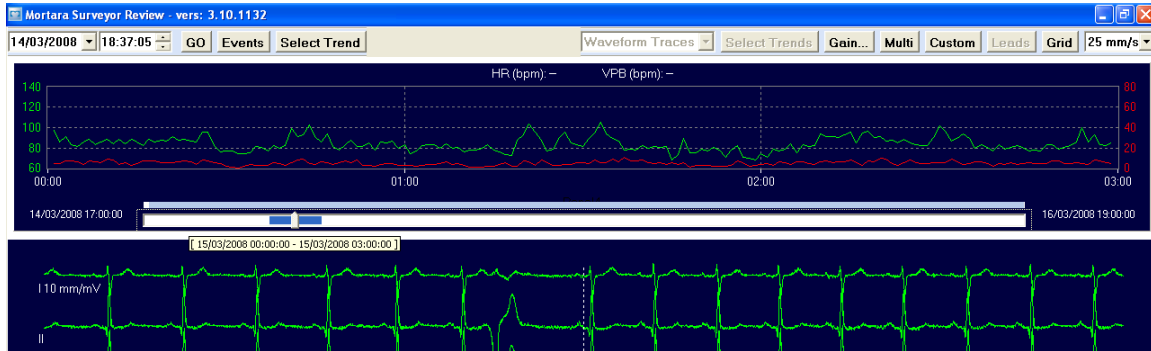


Figure 3 - Trend review screen.

The start and end times of all monitoring sessions are shown to the right and left of the slider bar allowing navigation to any session time point. Left click the slider bar cursor to display the date and time for its current position.

Left click anywhere in the trend and the ECG waveform at that time is immediately displayed. Blank areas in the trend and slider bar indicate periods when the monitoring was stopped and then restarted.

Navigation to Day and Time

Displayed ECG waveform dates and times are shown in the upper left corner of the display. Left click on the date and time values and change them to navigate to any point in the monitoring data. You can also left click on the date drop-down list to open a calendar and choose a date.

To navigate to any time or day during the monitoring session(s), enter the time and date and then click **GO**.

Select Trend for Waveform Traces Display

Click on **Select Trend** to change the displayed trend to durations of 3, 6, 12, or 24 hours and select various trend parameters.

NOTE: Some selections (e.g. Oxygen Saturation, NIBP, and End-Tidal CO₂) are non-ECG parameter items and may not be available when reviewing telemetry only monitoring data.

Navigation within the Review ECG

- Use **Home/End** keys to go the beginning or end of the monitoring period.
- Use **Page Down/Page Up** keys to go to the next/previous page of ECG.
- Use the mouse wheel to **zoom in/out** the number of seconds in the display.
- **Right/left arrow keys** move the displayed ECG a second at a time forward or backward.
- **Up/down arrow keys** move the displayed ECG set of traces to the previous/next line of traces.

- Left click any beat in the display to center within the 12-second dashed box with the center on the beat you selected.
- Move the mouse cursor within the context of the Review ECG window and time and date at the bottom of the display will change to reflect the location of the ECG. Field is blank when the cursor is outside the Review ECG field.

Gain

ECG gain can be adjusted in 5, 10, 20, or 40 mm/mV and will affect all ECG gain in review.

NOTE: Some selections (e.g., EDR gain, Plethysmogram gain, ART gain, PA gain, etc.) are non-ECG parameter items and may not be available when reviewing telemetry only monitoring data.

Multi (Traces), 12-Lead and Custom Display

The **Multi** button is an on/off toggle to display multiple traces for each ECG lead. When toggled on, the **Leads** and number of seconds drop-down lists allow customization of the ECG display. The number of seconds and the number of traces for each lead automatically adjust according to the number of leads selected. Close the **Leads** drop-down list by a left click.

NOTE: Some selections (e.g., EDR, Plethysmogram, Pressure ART, etc.) are non-ECG parameter items and may not be available when reviewing telemetry only monitoring data.

When the **Multi** button is toggled off, an alternate view of the ECG can be selected. This view gives you only one single trace for each lead. Select this view by toggling **Multi** off, or by left clicking on the **12-Lead/Custom** toggle. Select either all 12 leads for display by left clicking **12-Lead** or select a subset of leads by left clicking **Custom**.

Multi is automatically toggled off when you left click on the **12-Lead/Custom** toggle key. In single-trace view, display speed is expressed in mm/s and can be changed with the drop-down list. The number of leads in the custom display can be selected with **Leads**. The number of seconds displayed in this view adjusts according to the number of leads selected and can be changed by clicking on the **Seconds** value drop-down list.

Select **Grid** in the configuration menu to display a grid. Note that the grid is never shown at 5 mm/s display speed or greater than 600 seconds in the multi view.

Graphical Trends Review

With events displayed, switch between Waveform Traces, Graphical Trends, ST Trends, and Tabular Trends. In this view, Waveform Traces and Events Select Trend related buttons are not available.

This view allows you to choose durations of 3, 6, 12, or 24 hours and any combination of up to 8 trend parameters.

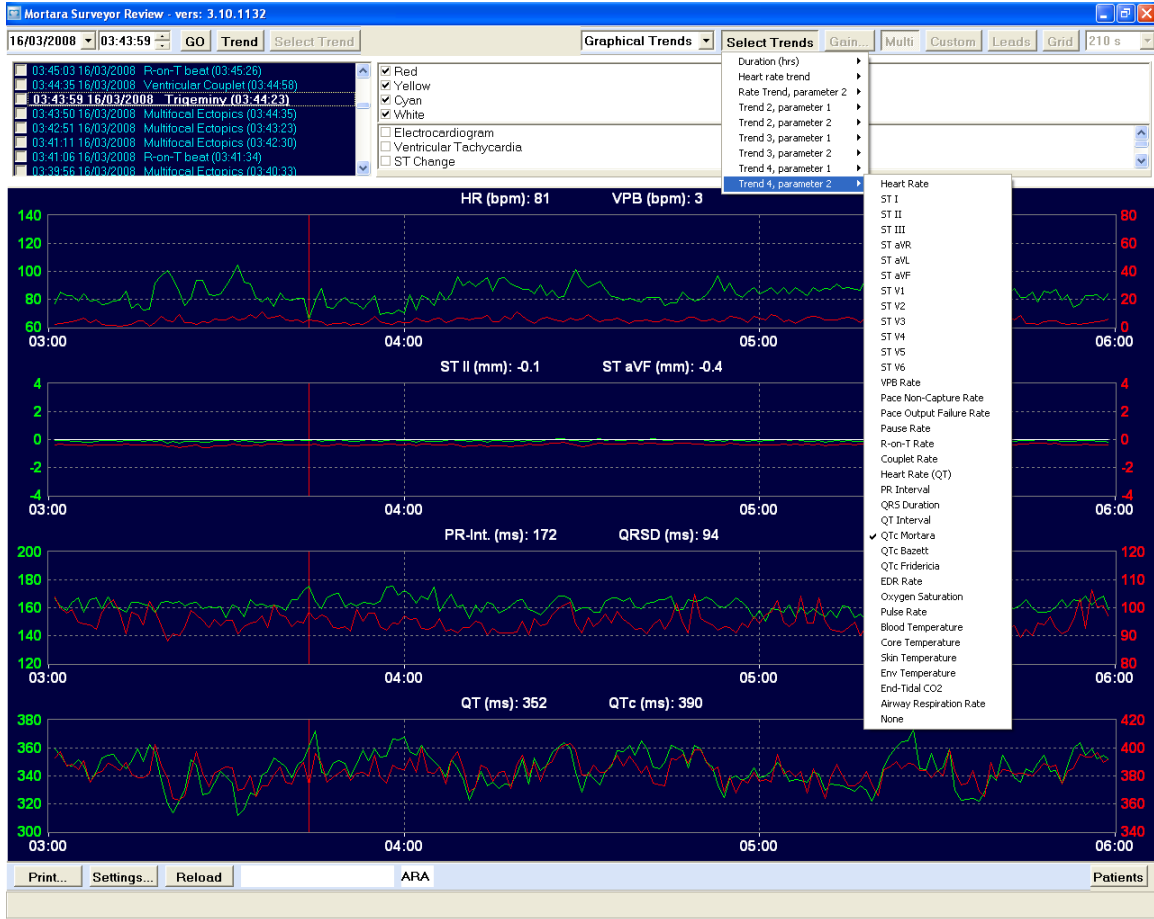


Figure 4 - Graphical trends review screen.

The first trend is HR and VPB per minute. Trends can also be turned off by use of the **None** selection.

NOTE: Some parameter selections shown (e.g., EDR Rate, Oxygen Saturation, Pulse Rate, NIBP, Pressure ART, etc.) are non-ECG parameter items and may not be available when reviewing telemetry only monitoring data.

ST Trends Review

With events displayed, switch between Waveform Traces, Graphical Trends, ST Trends, and Tabular Trends. In this view, Waveform Traces and Events Select Trend related buttons are not available.

This view allows you to choose durations of 3, 6, 12, or 24 hours using the Select Trends button.

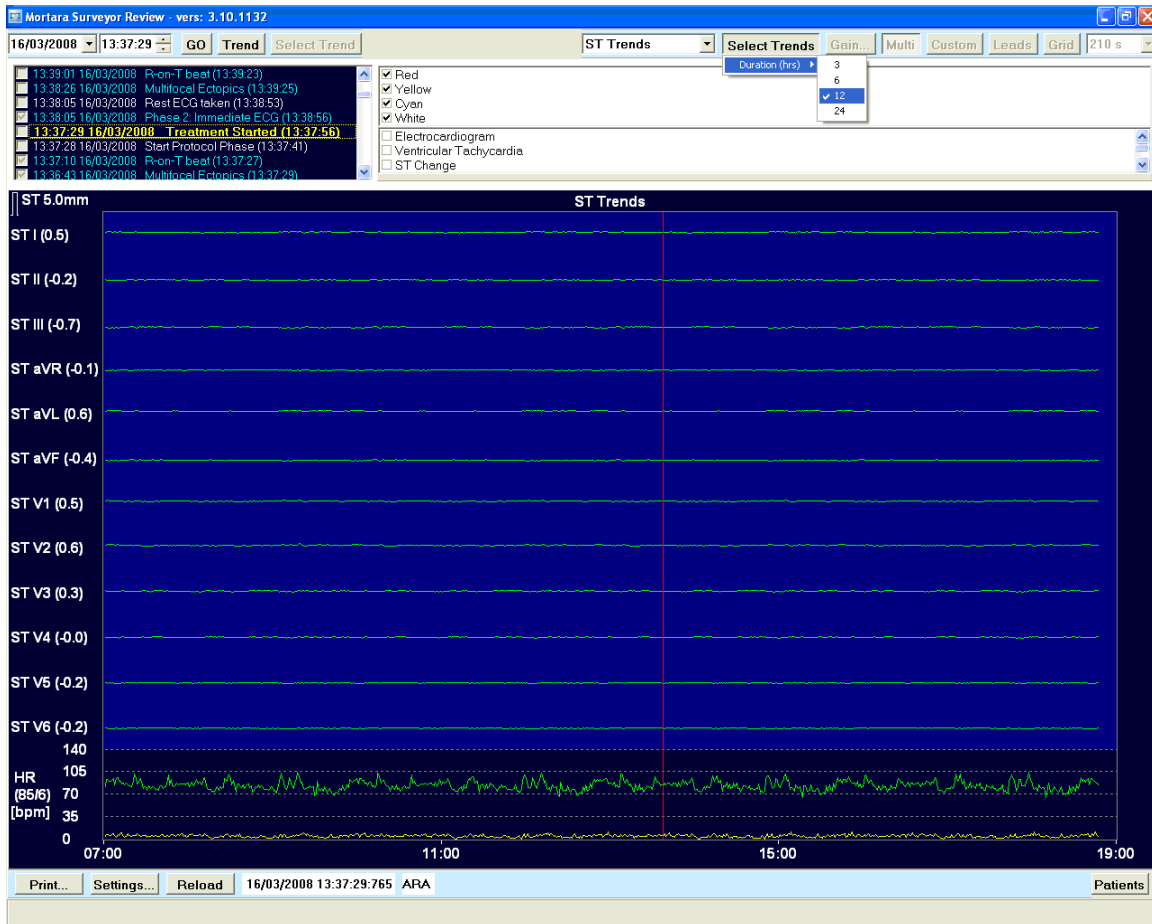


Figure 5 - ST Trends Review screen.

An ST trend for each of the ECG leads is displayed with a blue background. The HR trend is displayed in green and ectopy is displayed at the bottom in yellow.

Location of the red vertical cursor determines the ST values in parenthesis that are shown to the right of the ST lead labels.

The values in parenthesis below HR indicate *HR/ectopic beats per minute* in relation to the red cursor location.

The HR trend scale values are shown to the right of the HR values (e.g., 140, 105, 70, 35 and 0).

The date and time shown in the middle lower portion of the display will indicate mouse cursor position when it is moved over the graph.

Tabular Trends Review

With events displayed, switch between Waveform Traces, Graphical Trends, ST Trends, and Tabular Trends. In this view, Waveform Traces and Events Select Trend related buttons are not available.

This view allows you to choose durations of 3, 6, 12, or 24 hours and any combination of up to 8 trend parameters.

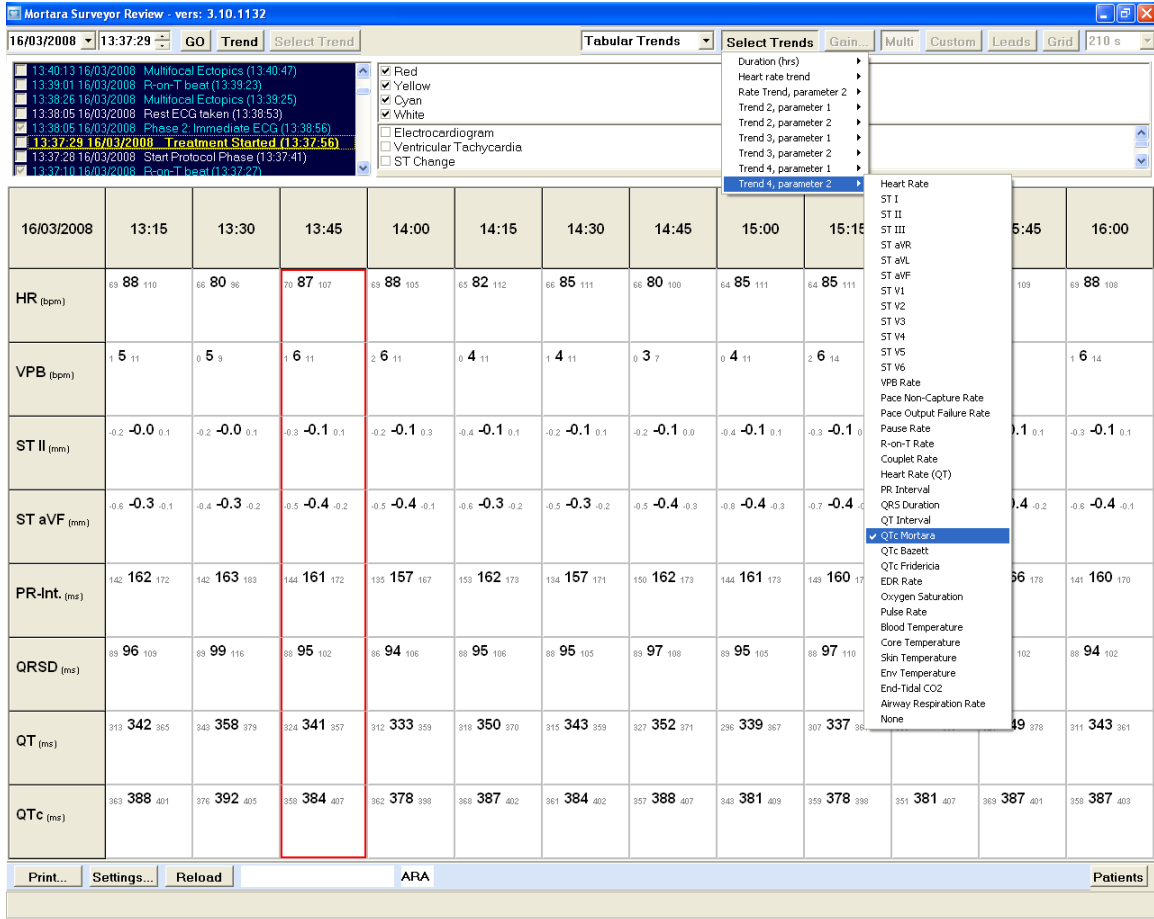


Figure 6 - Tabular Trends screen.

Trend column times will adjust as the durations are changed. This trend is 3 hours in duration and values are shown for each 15 minutes.

Minimum, average, and maximum values for each time period are shown for each parameter.

NOTE: Some parameter selections shown (e.g., EDR Rate, Oxygen Saturation, Pulse Rate, NIBP, Pressure ART, etc.) are non-ECG parameter items and may not be available when reviewing telemetry only monitoring data.

Print

Left click on **Print** in the lower area of the display to open the available selections. When a 12-lead ECG is selected, the ECG located within the dashed box will be printed. You can also print the ECG and trends as they are displayed on the screen. Patient demographics, displayed leads, and ST measurement values will appear on the waveform traces printouts. Note that the amount of data that is printed on the screen format differs slightly from the amount displayed, because dimensions of the screen differ from that of standard paper.

NOTE: The Surveyor Review Resting ECG Interpretation option is required to enable global measurement and 12-lead ECG interpretation.

Settings

Settings allows you to change the printout defaults. Settings can be changed for 12-lead ECG, ST report, and Summary Report printouts.

***NOTE:** Some parameters available for ST-Report trend selections (e.g., Oxygen Saturation, NIBP, Pressure ART, etc.) are non-ECG parameter items and may not be available when reviewing telemetry only monitoring data.*

Summary report

The Summary report provides a configurable report to tailor information to each specific patient's needs. The report includes the following information:

- Patient demographics
- Patient overview information, which includes average and summary information of parameters.
- List of alarms.
- Graphical parameter trends (optional).
- Tabular parameter trends (optional).
- Alarm snapshots (optional) – shows one tracing of an alarm condition; also shows a timeline of alarm occurrences.

To configure the contents of a Summary report:

1. Click the **Settings** button at the bottom of the review screen.
A list of report configuration settings pops up. The following items apply to the Summary report:

Item	Description	Options
Summary Report: Report Duration	Selects the coverage period for the report.	4 hours 8 hours 12 hours 24 hours
Summary Report: Tabular trends interval	Selects the reporting interval used for the tabular trends section of the report.	1 minute 5 minutes 15 minutes 30 minutes 60 minutes
Summary Report: Graphical Trends	Selects whether or not to include a graphical trends displays in the report.	Enabled/disabled
Summary Report: Tabular Trends	Selects whether or not to include a tabular trend display in the report.	Enabled/disabled
Summary Report: Alarm Snapshots	Selects whether or not to include alarm snapshots in the report.	Enabled/disabled

2. Click on the desired configuration item.

3. Click on the desired setting for the configuration item.
4. Repeat the above steps for each configuration change to be made.

To print a Summary Report:

1. Click the **Print** button at the bottom of the review screen. A list of available reports pop up.
2. Select the **Summary Report** item.

Reload (Patient Review)

Left click on **Reload** to update or refresh any events or trends that occurred since you entered the review display when you are connected to the Surveyor Central online database. Neither the events list nor trends will update or show new information until you select this button.

5. TROUBLESHOOTING

Trouble	Possible Cause and Solution
Surveyor Review station does not connect to the Surveyor Central system (error message!!)	<ul style="list-style-type: none"> • IP address for the Surveyor Central (= public address of firewall) is wrong or unreachable. Check the IP address ("Ping" should be used). • The firewall has not been installed correctly. Check that the used ports are open. • Surveyor Central is off or not connected to network. Consult your network administrator or Mortara service personnel.
Surveyor Review user is not allowed to review, delete, archive, or modify patient data on the Surveyor Central system (error message!!)	<ul style="list-style-type: none"> • Check to see if the user has permissions (set by the Surveyor Central system administrator). • Define the user in the authorized list of Review users in the Surveyor Central configuration settings.
Nothing happens when the Surveyor Review user clicks on an entry in the patient list.	<ul style="list-style-type: none"> • The clock setting on the Surveyor Review station computer is one hour or more behind the Surveyor Central system. • Correct the clock time on the Surveyor Review computer.
Archived data that resides in a network folder cannot be accessed from the Surveyor Review station.	<ul style="list-style-type: none"> • The Surveyor Review computer is not in a Windows domain. • Use a computer that is in a Windows domain or copy the archived data onto a local drive.
12-lead resting ECG interpretation is present on ECGs printed from Surveyor Central archive but not present when printing a 12-lead ECG from an online Surveyor Central system.	<ul style="list-style-type: none"> • The Surveyor Central system does not have the 12-lead resting ECG interpretation option installed. The Surveyor Review interpretation option is valid for archived data only. • For online Surveyor Central database access, the option settings of the Surveyor Central take precedence. • An upgrade to the 12-lead VERITAS interpretation option on the Surveyor Central system is required.
Surveyor Review software locks up during installation.	<ul style="list-style-type: none"> • Check to see if a dongle is present. All dongles must be removed prior to software installation. • End the program "Haspdinst.exe" through the Windows task manager program. • Uninstall Surveyor Review through the Start -> Programs -> Surveyor Central Applications -> Uninstall menus. • Repeat the installation steps.