PHILIPS

Clinical Configuration Guide

IntelliVue Information Center iX

Release B.0/B.01

453564540521

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Understanding Configuration

This guide is intended to assist in the clinical configuration of the Philips IntelliVue Information Center iX (PIIC iX) Release B.01. Users must be familiar with the PIIC iX and its Instructions for Use as well as understand the clinical implications of the permanent changes being made. Always ensure that the clinical users are aware of the configuration settings.

WARNING: Before starting monitoring, check that the configuration meets the unit's requirements, especially patient category, alarm limits and paced setting. The Patient Category and Paced Mode setting in the default unit Profile will overwrite the default profile for these settings at the bedside monitor.

WARNING: Changing the configuration may alter the way the Information Center performs when monitoring patients. Do not change anything unless you are aware of the possible consequences, especially if you are monitoring a patient while in clinical settings.

What are Clinical Settings?

The Philips IntelliVue Information Center iX ships with preset configurations for common monitoring conditions. You must access clinical settings to store new configurations.

NOTE: Please consider assuring consistent settings between the bedside monitors and the Information Center.

Clinical Settings may be configured at either the system or unit level. At the system level, settings can be copied to other units or other Information Centers.

NOTE: Printing of the settings is only available at the PIIC iX Clinical Setting, not from System Configuration.

Types of Clinical Settings:

Unit Settings –affect every Information Center associated with the patient care unit. If the setting is intended for the entire unit, you will not see the name of each Information Center.

Local Settings – only affect one Information Center within a patient care unit. During configuration, you see the name of the Information Center(s) associated with your unit (Figure 1-1). Local settings need to be applied to each Information Center separately, and may be either configured differently, or copied to other Information Centers in System Configuration. This includes both Overview and Surveillance iX.

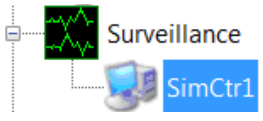


Figure 1-1

System Configuration

System Configuration is a configuration editor that permits setting up the system topology, including units and equipment, configuration of both clinical and support features and diagnostic tools for the Information Center system. For additional information about the Support Configurations, please see ***Philips IntelliVue Information Center iX Service and Installation Guide Release B 4535 644 63001.***

System Configuration runs automatically during product installation, and can be run later either from a desktop shortcut or from the Main Setup application menu while the product is running with proper user authentication.

Accessing System Clinical Settings

By factory default, system configuration is password protected. There are additional privileges to access certain areas of System Configuration that must be set up per person. Please check with your system administrator for your password information.

Clinical Settings are accessed within the Clinical folder in System Configuration. System Configuration can be accessed either at the Primary Server, or from any Information Center iX. From the Information Center iX, select Main Setup and choose System Configuration from the menu item.

System Configuration may also be done off-line by Philips personnel via the External Demo drive or Cloud iX.

If you want to open System Configuration from the desktop

1. Select the PIIC iX System Configuration shortcut.(Figure 1-2)

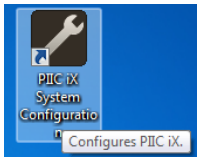


Figure 1-2

2. Enter the User Name and Password in the appropriate text boxes of the System Configuration Login dialog box.

3. Click OK

This list of icons appears. (Figure 1-3)

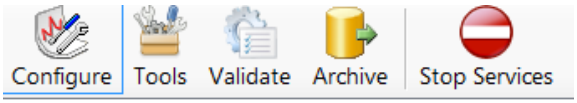


Figure 1-3

Select the Configure Icon.

Configure

The configure icon opens the System Configuration screen left pane (Figure 1-4) which includes folders that permit configuration of Topology, Clinical Settings, Interfaces, Network and Security Access.

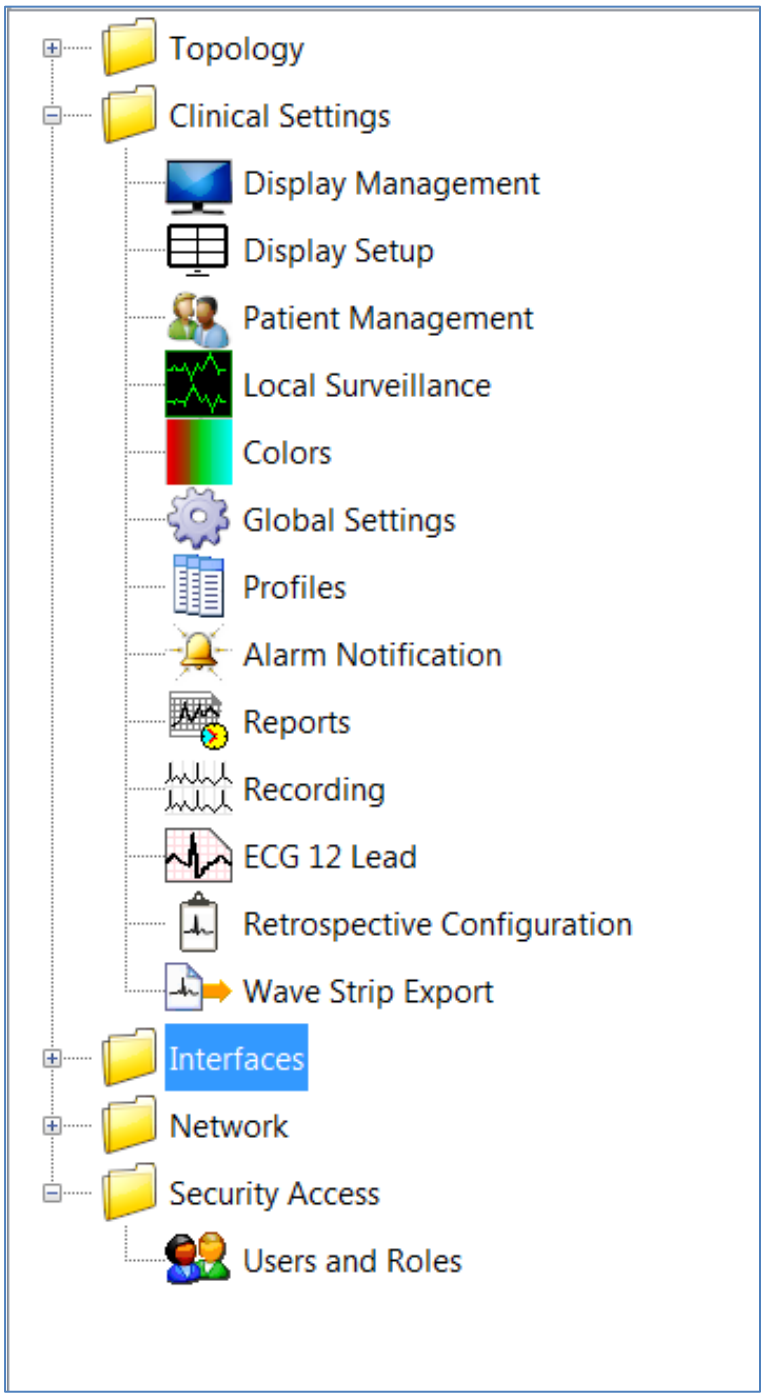


Figure 1-4

Overview of System Clinical Settings

The Clinical Settings folder contains a list of categories of settings. Select the desired category and the contents of each are displayed on the right to configure. Many of the categories in Clinical Settings open with multiple tabs across the top of the application, as seen in the Patient Management category in Figure 1- 5.

In the center you will see a list of units for unit settings, and a list of Information Centers for local settings. Whenever you make a change, you can use the icons in the middle section to Save and if desired, Copy to other units or Information Centers, or return to Factory Defaults.

Each of the groups of settings will be discussed in the following chapters, except Display Management. This is a technical setting, and detailed instructions can be found in the Service Guide. It is not in unit Clinical Settings. These settings determine the number of displays, as well as how the applications will open on the display(s). A second display can be configured as desired.

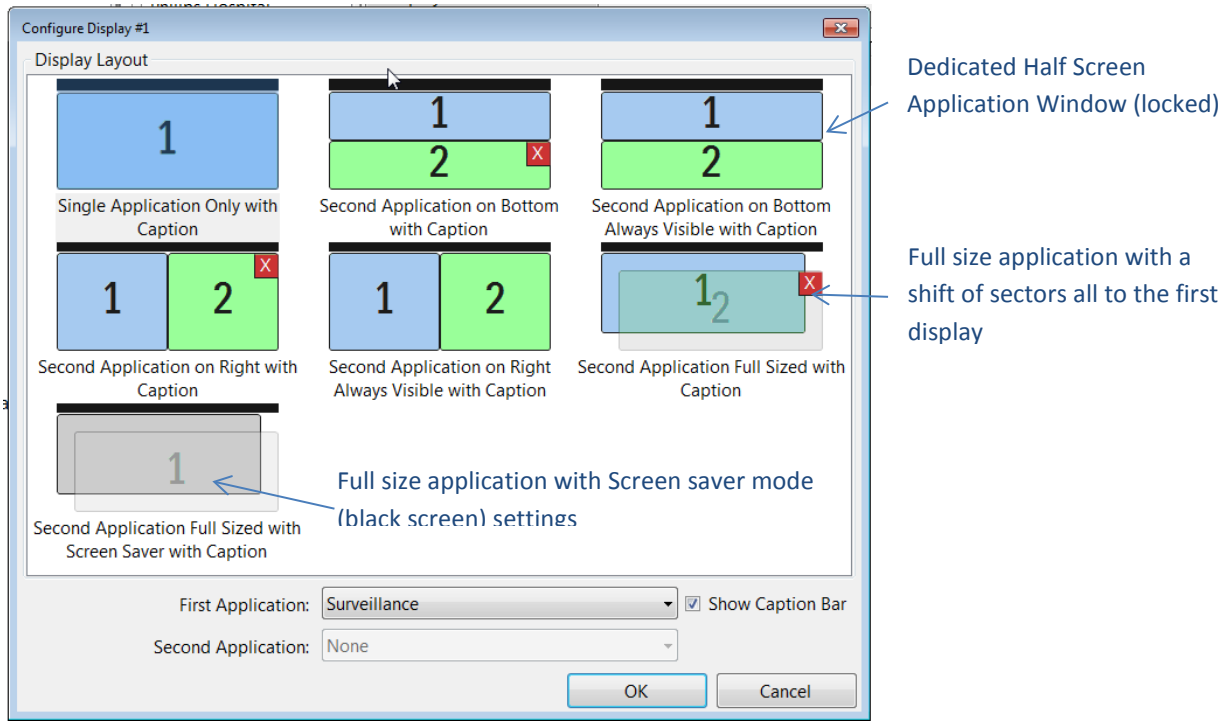


Figure 1-5

Within some of the clinical categories, technical settings may be present. When this is the case, users will be referred to the Service Guide.

Copy Settings

In System Configuration, you can copy unit settings to any other configured unit or single settings to any other information center either within a unit or in any other unit.

Select Copy and a popup will show the other units or PIICS within the unit, depending on the type of setting. Multiple units (or hosts for local settings) can be chosen at one time. Then Click the OK.

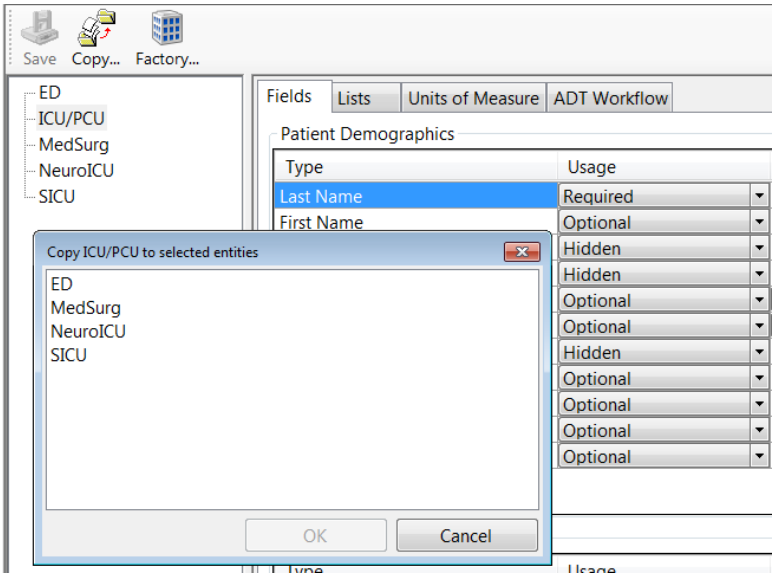


Figure 1-6

NOTE: ***All settings in the group from all the tabs will be copied. It is not possible to only copy one tab of a setting. It is advisable to change settings to be copied first, then customize per unit.***

NOTE: ***Please consider consistency in settings between patient care unit particularly for required field for admission.***

Unit Clinical Settings

Clinical Settings is a configuration editor that permits setting up unit default settings.

Accessing Unit Clinical Settings

Unit Clinical Settings may be accessed in one of three ways from the Information Center.

1. By selecting the name of the unit on the top caption bar of the Information Center (found just before the day/date) as shown in Figure 1- 7.
2. Select the menu item found in Manage Unit application button
3. Select the menu item in the Main Setup application.

Figure 1-7

Overview of Unit Clinical Settings

Unit settings open with a left pane of clinical categories that permit configuration these settings. Click on any category in the list to open those settings on the right. The top category is Patient Management and is the default application. Many of the categories in Clinical Settings open with multiple tabs across the top of the application, as seen in the Patient Management category in Figure 1-8.

Within some of the categories, technical settings may be present. When this is the case, please refer to the Service Guide. ***(PIIC iX Service and Installation Portfolio B.01 453564540441)***

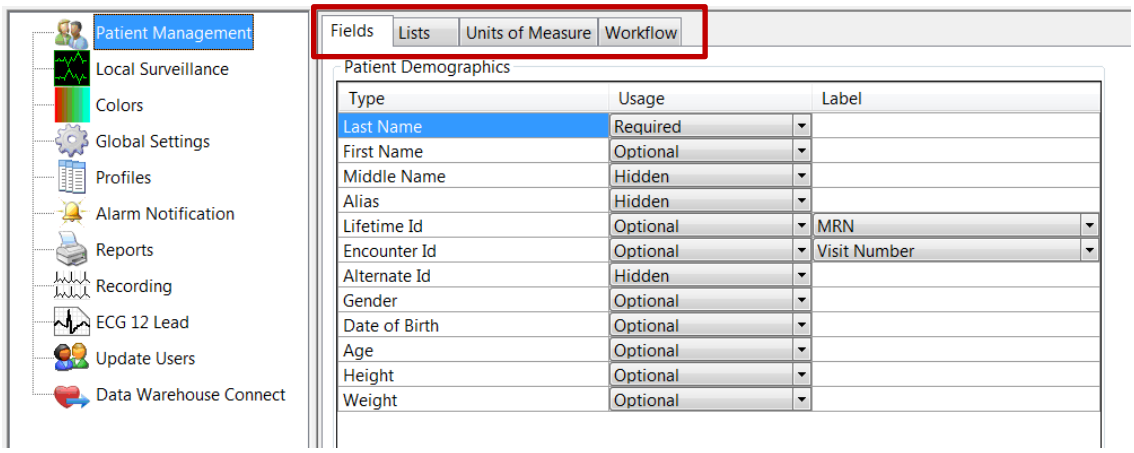


Figure 1-8

Apply Settings

Clinical Setting changes take effect immediately, except for any specific setting changes made per patient. Changes made per patient prior to the Clinical Setting change will be maintained for that patient. For example, you change the HR High Limit to 125 from 120. A nurse has changed her patient's high limit to 130. That patient's limit of 130 will be maintained even after the Clinical Setting change, until the patient is discharged.

Disconnected Mode

If your device is showing a Status Message of Disconnected, you will not be able to change Clinical Settings. Contact your system administrator or service engineer immediately whenever you see the Status: Disconnected message.

Log Out

Always remember to log out of any password protected function. On a single display, selecting Main Screen will automatically perform a log out. On a dual display, it will be necessary to select the Log Out icon at the top right of the application as shown in Figure 1-9.

Figure 1-9

NOTE: You may see a slight delay of opening certain applications due to the time it takes to load the Wave/ Numeric Priority Catalog. These applications include Local Surveillance (Sector Layout and Patient Window), Retrospective Editor and Colors.

Migration of Settings

When upgrading to a new release, customized clinical settings will be maintained. New clinical settings will always maintain the factory default until customized.

Patient Management

The fields that display, as well as which are required for admission, are configured in the Patient Management application.

There are four groups of settings accessed from tabs across the top of the application as shown in Figure 2-2.

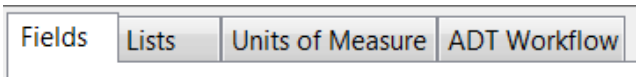


Figure 2-2

Fields

Customize the displayed demographic and patient care fields, and set fields that are required for admission to the monitoring system.

Patient Demographics

These settings determine which fields will display in the left column of the Manage Patient application. Factory defaults are displayed in Figure 2-3. To change a field, select the drop down box next to the field.

Choices include:

- Required – must be entered by users to admit patient to the Information Center. Only certain fields can be set to Required – see Information below
- Optional – may be entered if desired
- Hidden - will not show up in the Manage Patient application

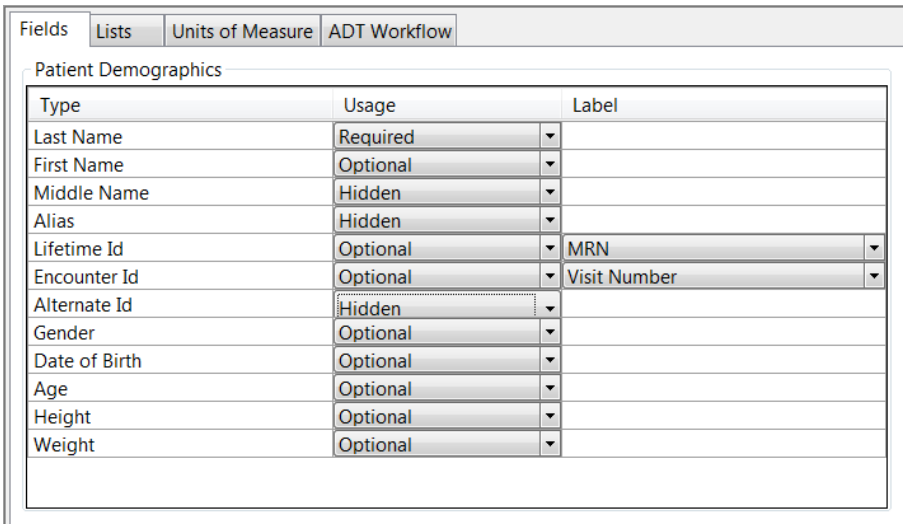


Figure 2-3

Information

Required Fields - Demographic fields that may be set as required include:

- Last Name (default)
- Lifetime ID
- Encounter ID
- Alternate ID
- Gender (requires at least K.2 IPM software to show at monitor)
- Date of Birth (requires at least K.2 IPM software to show at monitor)

At least one field is required to admit a patient to the Information Center. All required fields will have to be entered in order to save data with discharge. Required fields will overwrite bedside required fields upon association with the Information Center.

CAUTION: It is recommended that required fields for admission are consistent throughout the hospital. If a transfer occurs and the fields are not the same, a conflict will show. This also applies to fields sent from the Hospital Admitting system. Also, it is not recommended to only have Gender as the only required field – name or ID should also be required.

Alias: When Alias is configured to show, the Alias field appears in the Patient Management application. When an alias is entered for a patient, the alias is displayed instead of the actual patient name throughout the system. The actual patient name is always sourced for the HL7 stream, reporting and recording – the alias is not included. One model for using Alias is to only show the patient initials at the Information Center. Another would be for certain patients that would prefer additional privacy. This field is not one that can be searched in the Find Patient window.

Lifetime ID can be configured to display as one of the following:

- MRN (default)
- SSN
- Military ID
- Medicaid ID
- Drivers License

Encounter ID can be configured to display as one of the following:

- Account Number
- Visit Number (default)

CAUTION: It is important that all Hospital units select consistent Labels for Lifetime Id and Encounter Id and that those Labels are not changed after initial configuration. For example, if one unit set Lifetime Id as MRN and another sets Lifetime Id as SSN, patient selection and output accuracy is compromised.

Alternate ID: This is an optional third ID that can be used if desired. It is hidden by factory default.

Age: This is a read-only field that is set after the Date of Birth is entered.

Patient Care Information

These settings determine which fields will display in the center column of the Manage Patient application.

Factory defaults for Patient Care Information are displayed in Figure 2-4.

Choices are

- Optional
- Hidden

Patient Care Information

Type	Usage
Profile	Optional
Change Bed Label	Hidden
Resuscitation	Hidden
Nurse	Optional
Group	Optional
Screen Notes	Optional
Screen Notes (2)	Hidden

Figure 2-4

Information

Profiles: A profile is a group of measurement and alarm settings. This allows users to change an entire set of measurements and alarms for a patient rather than one at a time. A profile from the Information Center is intended for patients being monitored with telemetry devices. Profiles are not changed in Manage Patient, only displayed if set to Optional. See the Profiles section of this guide for further information.

Change Bed Label: Changing a bed label causes a transfer of the patient to the new bed label. It does not change the position of the sector. For example, the patient is currently in Bed 1 at the top left of the sector. He is to be transferred to Bed 8. If this is done via the Change Bed Label, the top left sector now becomes Bed 8. If set to optional, but sector labels are locked, this feature will not be available.

Resuscitation: If set to optional, users will be able to select a resuscitation status. It defaults to none, and choices include Full, Modified and DNR. An icon will show if a user chooses either DNR or Modified (for special code restrictions)

CAUTION: The resuscitation status is only kept with In-Unit transfers. It is not kept with Discharge or Out-of-Unit Transfers, and status will have to be re-entered.

Nurse: If set to optional, and no permissions are needed to apply Caregiver Assignments, users may change the Nurse Assignment either in the Manage Patient application or at the bedside monitor. The Nurse must first be assigned in the Caregiver application in order to be seen.

Patient Group: If set to optional, users may select a group, such as Afib (Atrial Fibrillation), in the Manage Patient application to help identify configured types of patients from the sectors. A colored border will show around the patient name. Groups are configured in the **Lists** section below.

Screen notes: Screen notes will only display in the patient sector if there is enough room to show a second caption bar (see Surveillance configuration). They will always display in the Patient Window, and in the Screen notes menu on the bedside. These can be configured to hide, show only 1 field, or show both fields in the Manage Patient application. The maximum number of characters used for each field is 30.

Primary ID

Choose which ID will be the primary ID. The factory default is shown in Figure 2-5.

Choices include:

- Lifetime ID
- Encounter ID
- Alternate ID

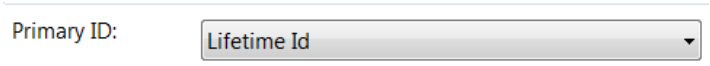


Figure 2-5

Patient ID Format

Choose the format in which to display Patient identification. The factory default is shown in Figure 2-6.

Choices include:

- Last Name only
- ID only
- Last Name and First Name
- Last Name and ID

Figure 2-6

Lists

There are two lists that can be configured: Patient Groups and Temporary Transport Locations.

Patient Group

Patient Group is used to identify types of patients that share a common characteristic. One example would be the Atrial Fib patients on the unit.

The maximum number of entries is 12. Entries can be no longer than 14 characters.

The factory defaults are shown in Figure 2-7.

Select any of the existing groups to Edit or Delete.

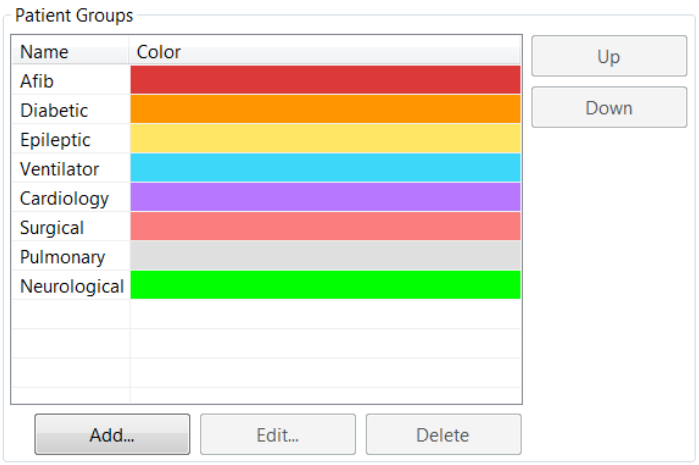


Figure 2-7

Add/Edit a new Group

1. Click the **Add** button to add or select the desired **Name** from the list and click **Edit**.

The **Add/Edit Patient Group** dialog opens. See Figure 2-8.

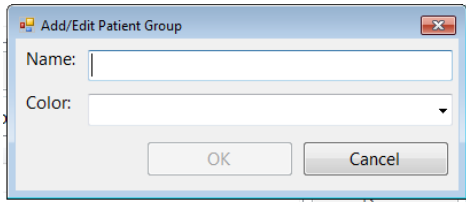


Figure 2-8

2. Enter desired information in the **Name** text box.
3. Click the **Color** down-arrow and make your selection from the list. There are up to 20 colors to choose from, and colors cannot be used for more than one entry.
4. Then click **OK**.

Temporary Transport Locations

Transport Locations, when used, will be shown in the Sector, and on the Standby screen of the bedside monitor.

The maximum number of entries is 12. Entry can be no longer than 12 characters.

Factory defaults are shown in Figure 2-9. Two additional factory defaults (not shown) are Dialysis and Cath Lab.

Select an existing location to Edit or Delete.

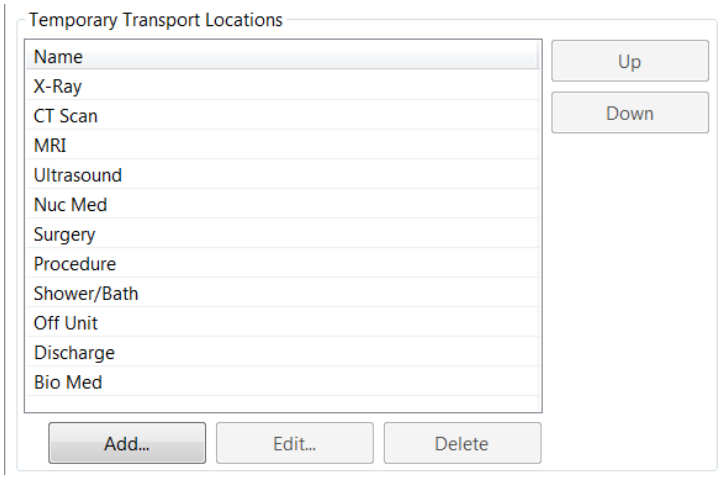


Figure 2-9

Information

Add a new Temporary Location

1. Click the **Add** button to add or select the desired **Name** from the list and click **Edit**.

The **Add/Edit Location** dialog opens. See Figure 2-10.

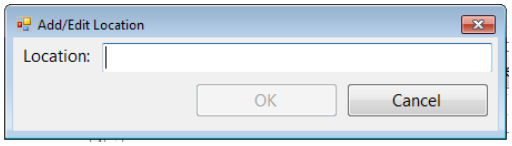


Figure 2-10

2. Enter desired information in the **Location** text box. Then click **OK**.

Change the order of Patient Groups or Temporary Transport locations

1. Select the **Name** of the desired **Patient Groups** or **Temporary Transfer Locations** that you want to move up or down in the list.
2. Click the **Up** or **Down** button to the right of the list to move the selection as shown in Figure 2-11.

Figure 2-11

Units of Measure

Factory defaults are shown in Figure 2-12.

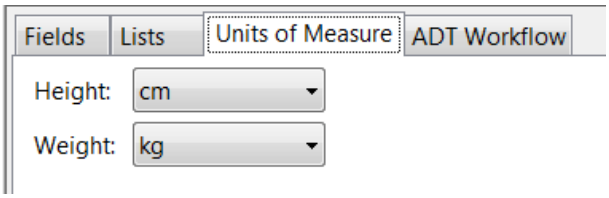


Figure 2-12

Information

Height: Choose inches or centimeters.

Weight: Choose pounds, kilograms. If neonatal is the patient category at the bedside, weight will display in grams.

NOTE: ***The defaults at the PIIC iX for Height and Weight will override settings at the bedside monitor. If settings are changed after an entry has been made, the old entry will be converted to the new unit of measure, to the nearest whole number.***

ADT Workflow

Workflow settings allow certain events to happen without user intervention, such as automatically print a report with transfer. Factory defaults are shown in Figure 2-13.

There are five types of patient transitions that require configuration. These are:

- Admit Patient
- Discharge/Transfer
- Discharge
- Transfer In Unit
- Transfer Out of Unit

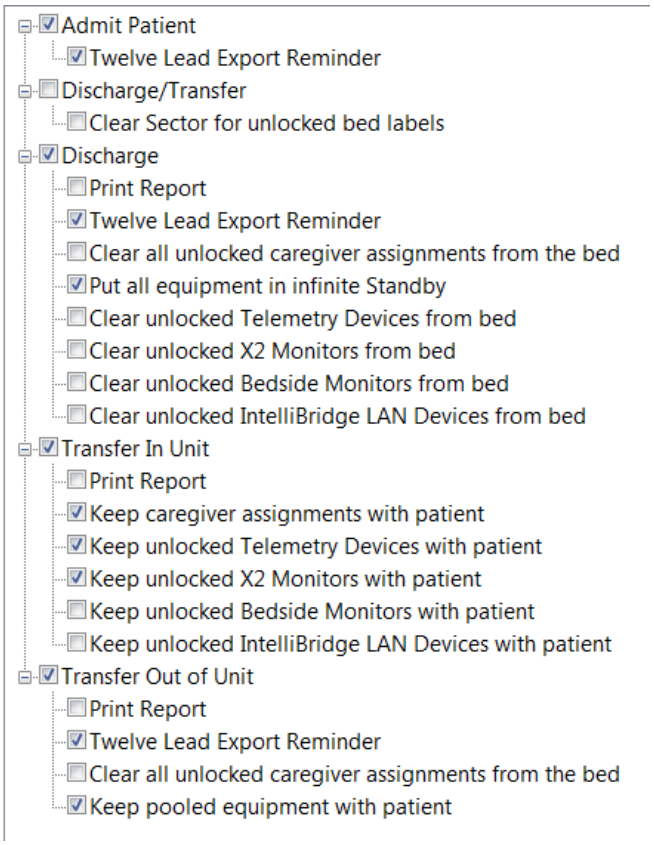


Figure 2-13

Information

Admit Patient

Twelve Lead Export Reminders: Check the box if you wish to see a dialog box when admitting a patient, when a 12-Lead ECG was captured prior to admission to the system.

Discharge/Transfer

Clear Sector for Unlocked Bed: A bed label may be locked or unlocked to a sector. This is configured in Display Setup. If the bed label is not locked, it can be cleared from a sector. The user will have the choice to clear the sector with the confirmation message of Transfer or Discharge. (See Figure 2-14) This settings is to have the Clear Sector checkbox checked or unchecked by default. Check the box if the use model is to always clear the

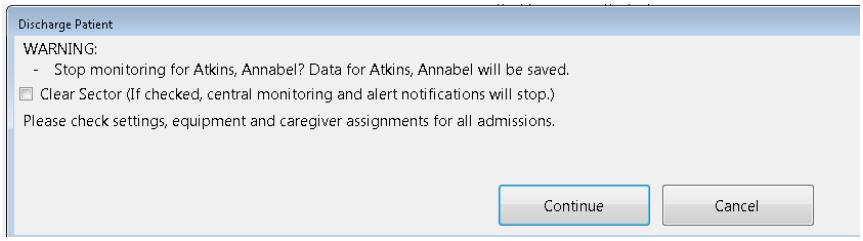


Figure 2-14

sector with discharge or transfer.

Discharge

Print Report: If checked, the Patient Summary Report will automatically print upon discharge.

Twelve Lead Export Reminder: Check the box if you wish to see a popup dialog box that a 12-Lead ECG has been captured from the bedside but has not yet been exported to a Cardiology Management System.

Clear all unlocked caregiver assignments from bed: If checked, all caregiver assignments will be cleared from the bed. New admissions will need to assign Caregiver assignments in either the Manage Patient or Caregiver Assignment application.

Clear unlocked <equipment> from bed: If checked, all equipment not locked to a bed label in System Configuration Topology will automatically be removed from the sector/bed assignment. You can choose which unlocked devices will be cleared, including Telemetry Devices, X2 Monitors, Bedside Monitors, and IntelliBridge LAN devices.

Put all equipment in Infinite Standby: If checked, telemetry devices that stay with the sector will automatically go to Infinite Standby upon discharge. Bedside monitors and X2 devices will also go into standby but do not have a timed configuration.

Transfer In Unit

Print Report: If checked, the Patient Summary Report will automatically print upon transfer in unit.

Keep Caregiver Assignment with patient: automatically updates all caregiver assignments to remain with the patient if they transfer to a new bed within the same unit.

Keep unlocked <equipment> with patient: If checked, equipment not locked to a bed label will automatically remain assigned to patient if they transfer to a new bed within the same unit. You can choose which unlocked

devices will be kept with the patient when transferring within the unit, including Telemetry Devices, X2 Monitors, Bedside Monitors, and IntelliBridge LAN devices.

Transfer Out of Unit

Print Report: If checked, the Patient Summary Report will automatically print upon transfer out of unit.

Twelve Lead Export Reminders: Check the box if you wish to see a dialog box when transferring a patient if 12-Lead ECG captures have not yet been exported.

Keep pooled equipment with patient: If checked, this setting allows a patient to keep a pooled device when transferring to another unit that shares the pooled devices. For example, if a patient was to keep their X2 monitor upon transfers to different levels of care. You can choose which unlocked, pooled devices will be kept with the patient when transferring out of the unit, including Telemetry Devices, X2 Monitors, Bedside Monitors, and IntelliBridge LAN devices.

WARNING: Workflow settings do not apply while a device is in a mapped port. Special care may be needed for equipment management upon discharge of the patient.

NOTE: ***A patient may have up to one (1) bedside monitor one (1) transport monitor, one (1) X2 monitor, one (1) X2 transport monitor, one (1) telemetry (either M4841 or MX40), two (2) IntelliBridge Hubs and four (4) IntelliBridge LAN devices. If equipment is to be kept with the patient, but the new bed has equipment already assigned, only the equipment assigned to the patient will be kept if the limit is reached.***

NOTE: ***CL Pods assigned to a device will always follow the device.***

NOTE: ***Transport Monitors will always keep the patient identity with discharge and transfer.***

Appendix: Equipment Use Models

The following pages describe distinct clinical use models and their configurations.

Glossary of Terms

The following terms are used to explain the use models:

Term	Definition
Companion	An X2 or other wired/wireless measurement device, such as an SRR connected tele device or CL Pod that is connected to a larger IntelliVue Patient Monitor. When connected, the X2 functions as an MMS.
Host Monitor	Any IntelliVue Patient Monitor MP20-MP90 that has an X2 docked (Companion Mode).
IIT	IntelliVue Instrument Telemetry wireless network, also known as Smart Hopping
MMS	Multi Measurement Server
FMS	Flexible Module Rack (FM-8, FM-4)
SRL or MSL	Acronyms used interchangeably representing the cable that connects the X2 or MP5 to a larger IntelliVue monitor or connecting the MP2 or X2 to the docking station.
OBO	Own Bed Overview – shows devices assigned to the same patient in an overview screen on the bedside using the Other Device Overview screen. Other Bed Overview – provides either a popup or window to display patient data from another bedside monitor in the unit.
Assignment	Adding equipment to the sector. Only free equipment is available for a new patient.
Free Equipment	Remove equipment from a sector. When equipment is freed, generally the following actions are executed: The patient identification and other demographics of the old patient are cleared The monitor creates a new Internal Patient ID Patient Category and Paced mode are set as the default profile (if system connected, will use the default PIIC iX Profile) All settings return to the default profile Patient Data history is cleared (if system connected, data will be stored up to 7 days) Depending on the workflow settings, the device may be kept or freed with the sector at discharge, or transferred with the patient. The bedside monitors have a setting to Free certain types of equipment automatically
Locked Equipment	Equipment cannot be removed from a sector bed label. If you bring a locked device, such as an X2 for transfer, the transfer can occur, but a Check Equipment Inop will be generated, and a status message on the bedside will indicate the bed to which the device belongs.
Unlocked Equipment	Equipment can be removed from a sector bed label.
Pooled Equipment	Pooled equipment should always be Unlocked. It is shared in a defined pool of units and can be moved with patients within this pool.

Symbols

The following symbols are used to explain the use models:

Device	Symbol	Device	Symbol
PIIC iX		MP80/90	
TRX Telemetry Devices		MP60/70	
Mx40		MP40/50	
MX800		MP20/30	
MX600/700		MP5 Monitor	
MX500/550		X2 Monitor	
MX450		MP2 Monitor	
MX400		MMS	

Major Equipment Use Models

The following use models serve as examples of multiple equipment use models in combination with PIIC iX. Various other setting combinations are possible for different workflow needs.

Equipment Transfer Settings

IntelliVue Equipment can provide Transfer Settings for automatic transfer and transfer conflict resolution. The combination of settings in PIIC iX and Monitor define the workflow behavior of the equipment.

NOTE: Some settings have precedence over others. For more details, see below.

Patient Orientation to Device

The equipment to patient relationship can be established in multiple ways:

- Admit the patient to the system where devices have already been added.
- Add new equipment to an admitted patient at the PIIC iX or bedside.

Once equipment is added, it will not be available for any other patient and the relationship of patient to device needs to be ended.

NOTE: During a pending patient conflict the equipment management functions are restricted: The user must resolve the patient conflict before equipment can be added!

The equipment to patient relation can be ended by:

- Discharge or end case
- Transferring the patient without the device
- Manually removing the device
- Automatic freeing of the device when not used for some time.

For a Monitor set as a Transport Monitor, removing the device will NOT discharge the patient from the device. In this case, to end the equipment to patient relationship:

- End Case/Discharge at the device
- Configured for automatic freeing of the device.

Multiple Equipment Assignment

While equipment is connected, any patient management action is executed in all affected devices and therefore the patient identification is updated and thus kept identical in all devices.

When a device is freed, the patient identification in this device is cleared. If the patient identification or equipment assignment is changed while the device is not connected, a patient conflict is detected when the device is reconnected.

Conflicts

The main reasons for patient conflicts are:
Transfer of patient with equipment; e.g. patient is transferred with X2 and plugged to a monitor currently used for another patient
Adding equipment currently used for another patient, such as plugging in a different X2 or MMS.
Adding equipment currently assigned a different Internal ID.
Offline changes of patient identification or equipment.

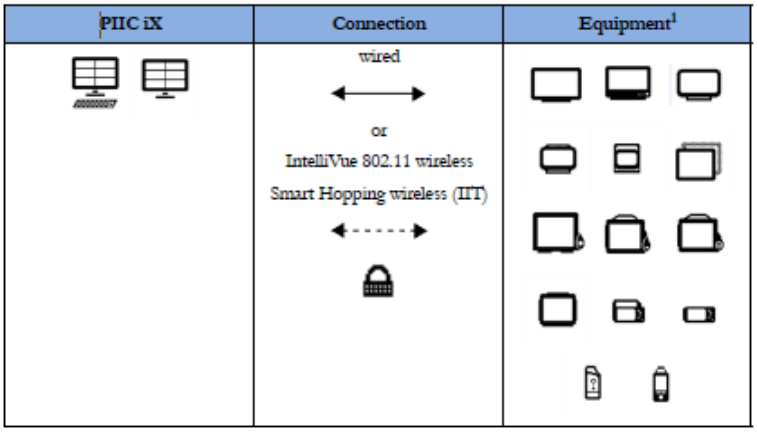
Some of these patient conflicts are automatically resolved by system or monitor (e.g. equipment removed while not connected). Some conflicts are resolved by policies (e.g. this type of equipment is not used for transfer), the remaining conflicts must be resolved by the user.

NOTE: Most conflicts can be avoided by properly freeing the equipment when no longer used for a patient. This is supported by the Auto Free and the Ask For New Pat settings, see Bedside Configuration Guide.

This is especially important if the use model is to power off monitors, such as X2 monitors normally docked to host monitors, and place on a shelf until needed

Use Model 1 - Locked Equipment

Equipment is locked to a bed label/sector at the PIIC iX. This is done in System Configuration > Topology > Bed Assignment. Devices cannot be locked after monitoring has begun.



1 TRX Telemetry devices only support IIT wireless

Description

PIIC iX allows equipment to be locked to a sector bed label. The clinical user cannot remove locked equipment.

Results

If a locked device (e.g. X2) is plugged into another monitor, a locked device conflict occurs.
Specific limitations in the usage apply when used at another location. See also Restrictions below.

NOTE: The locked device conflict message text is provided by the PIIC iX. Locked Settings have precedence over other workflow settings.

Advantages

Locked equipment does not require additional steps to assign it to a bed.
A user will be notified if they attempt to transfer a patient with locked equipment to another sector bed label.

Restrictions

Locked equipment cannot be used at another location.

CAUTION: If locked equipment with wireless option is used at a different location, data will still be sourced to the locked sector.

Configuration

Use Model 1: Locked Equipment

Required Configuration on Monitor	
Assign Equipment label	Yes
Workflow setting **Use Model**	**Bedside**
Workflow setting **Allow Discharge**	**Yes**
Workflow setting **Assign to Patient**	**Yes**
Tele Workflow settings	**Enhanced**
Patient Selection setting	Depending on individual use model
Auto Free setting	**Never**
Ask For New Patient setting	Depending on individual use model
Settings Upload	Depending on individual use model
Trend Upload	Depending on individual use model. With Release B, vital signs can be uploaded to the PIIC iX when the device is off network.
PW Sync	Depending on individual use model
System Settings	Depending on individual use model
Required Configuration at Information Center iX	
Equipment label requirement	Yes
Equipment setting **Locked / Unlocked**	**Locked**
ADT Workflow Setting **Keep with Patient**	N/A (Locked setting has priority over this setting.)
ADT Workflow Setting **Clear at Discharge**	N/A (Locked setting has priority over this setting.)

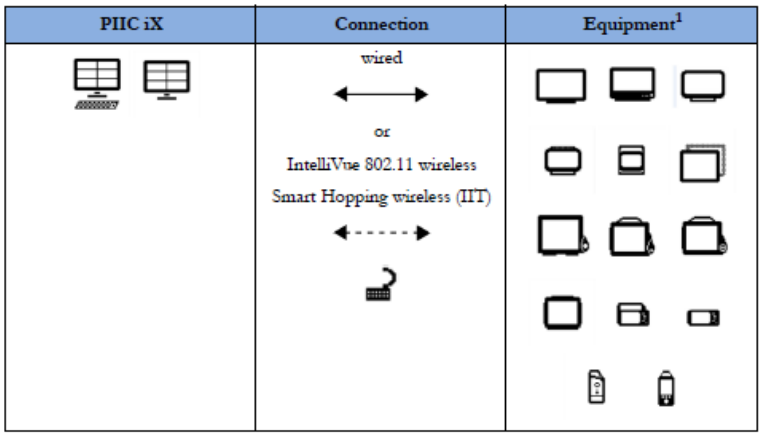
Troubleshooting - FAQ

"On my patient monitor, a* Check Equipment *INOP appears. Why is that and what can I do?"

The device is locked to another bed, or the device is configured for use in another clinical unit. In case of emergency, you can use this monitor for your patient. The INOP will remind you to bring back this monitor to the locked bed or assigned unit. Check the status message on the bedside monitor.

Use Model 2 - Unlocked Equipment

All devices that are not locked to a bed label in System Configuration are Unlocked. Also see Use Model 3 for Pooled (Unlocked) Equipment



1 Telemetry Devices have limited connectivity options

Description

Equipment is unlocked by default in the PIIC iX. The clinical user can add and remove unlocked equipment.

Results

Transfer

If unlocked equipment (e.g. X2) is plugged to another monitor, it can be used at this location.

Discharge

Unlocked equipment may be cleared automatically with discharge (or transfer out of a unit) by default if configured.

Advantages

Transfer

Settings allow simple transfer of a patient to another sector bed label as well no need to add equipment at new location.

Discharge

Settings allow equipment to be automatically free for use for another patient without removal from the original sector.

Restrictions

Transfer

Check settings in PIIC iX – if not checked to **Keep with Patient,** equipment will have to be manually added at new location.

Discharge

Check settings at PIIC iX- if not checked to **Clear with Discharge**, equipment will have to be manually removed from sector at discharge.

CAUTION:	If setting at the PIIC iX does NOT keep the equipment with transfer, the equipment will remain at the original sector, and will discharge the patient from the device. The device will have to be manually added at the new sector.

Configuration

Use Model 2: Unlocked Equipment (Not Pooled)	
Required Configuration on Monitor	
Assign Equipment label	Yes
Workflow Setting **Use Model**	**Bedside**
Workflow Setting **Allow Discharge**	Depending on individual use model
Workflow Setting **Assign to Patient**	n/a (controlled by PIIC iX)
Tele Workflow Settings	**Enhanced**
Patient Selection Setting	Depending on individual use model
Auto Free Setting	**Never**
Ask For New Patient setting	Depending on individual use model
Settings Upload	Depending on individual use model
Trend Upload	Depending on individual use model
PW Sync	Depending on individual use model
System Settings	Depending on individual use model
Required Configuration on X2	
System Setting	**Synchronized** (Not Sync'd – please see the Bedside Config Guide)
Transport Profile	**As Is:** User does not want to use a specific Transport Profile **Ask User**: Select a Profile from a list **Def. Profile**: Use the default Profile
Tele Workflow	Enhanced
Required Configuration at Information Center iX	
Equipment label requirement	Yes
Equipment setting **Locked / Unlocked**	**Unlocked**
ADT Workflow Setting **Keep with Patient**	Depending on individual use model
ADT Workflow Setting **Clear at Discharge**	Depending on individual use model

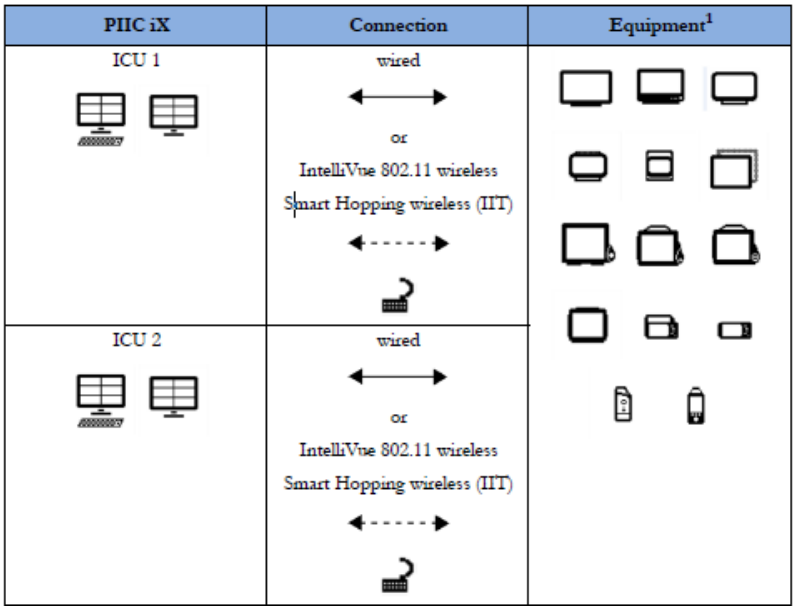
Troubleshooting - FAQ

"When I transferred my patient with the monitor, the patient's monitor is still displayed in the original sector on the PIIC iX. Why is that?"

If your configuration is to NOT keep the unlocked equipment with a transfer, the monitor will stay in the original sector and will have to be manually removed. The patient demographic and monitoring history will be removed and the monitor will return to default.

Use Model 3 - Pooled Unlocked Equipment

All equipment devices that are not locked to a bed label in System Configuration are Unlocked. Pooled equipment are set in Topology by creating a Central Supply Unit, entering monitor labels, and then assigning which units will share the equipment.



1 Telemetry devices have limited connectivity options

Description

All equipment devices that are not locked to a bed label in System Configuration (Topology > Bed Assignment) are Unlocked. Only pooled devices can be used in more than one unit. With PIIC iX, all units on the system can share equipment easily with transfers to other units.

Advantages

Transfer

If unlocked equipment (e.g. X2) is plugged into another monitor, it can be added to the new sector automatically

Discharge

Unlocked equipment may be cleared automatically with discharge or transfer out of a unit by default if configured.

Restrictions

Transfer

Check settings in PIIC iX – if not checked to Keep with Patient for Out-Of-Unit Transfer, equipment will have to be manually added at new location.

Discharge

Check settings at PIIC iX- if not checked to clear with discharge, equipment will have to be manually removed from sector at discharge.

CAUTION: If setting at the PIIC iX does NOT keep the equipment with transfer, the equipment will remain at the original sector, and will discharge the patient from the device. The device will have to be manually added at the new sector.

When the patient is transferred with pooled equipment, but equipment is not allowed in destination unit, patient data and settings can be uploaded to new monitor, but a Check Equipment Inop will be generated.

Configuration

Configuration of Use Model 3	
Required Configuration on Monitor	
Assign Equipment label	Yes
Workflow Setting **Use Model**	**Bedside**
Workflow Setting **Allow Discharge**	Depending on individual use model
Workflow Setting **Assign to Patient**	Yes
Tele Workflow Settings	**Enhanced**
Patient Selection Setting	Depending on individual use model
Auto Free Setting	**Never**
Settings Upload	Depending on individual use model
Trend Upload	Depending on individual use model
PW Sync	Depending on individual use model
System Settings	Depending on individual use model
Required Configuration on X2	
System Setting	**Synchronized** (Not Sync'd – please see the Bedside Config Guide)
Transport Profile	**As Is:** User does not want to use a specific Transport Profile **Ask User**: Select a Profile from a list **Def. Profile**: Use the default Profile
Tele Workflow	Enhanced
Required Configuration at Information Center iX	
Equipment label requirement	Monitor label in Central Supply Unit
Equipment setting **Locked / Unlocked**	Unlocked in Central Supply Unit and assigned to particular units
ADT Workflow Setting **Keep with Patient**	Depending on individual use model
ADT Workflow Setting **Clear at Discharge**	Depending on individual use model

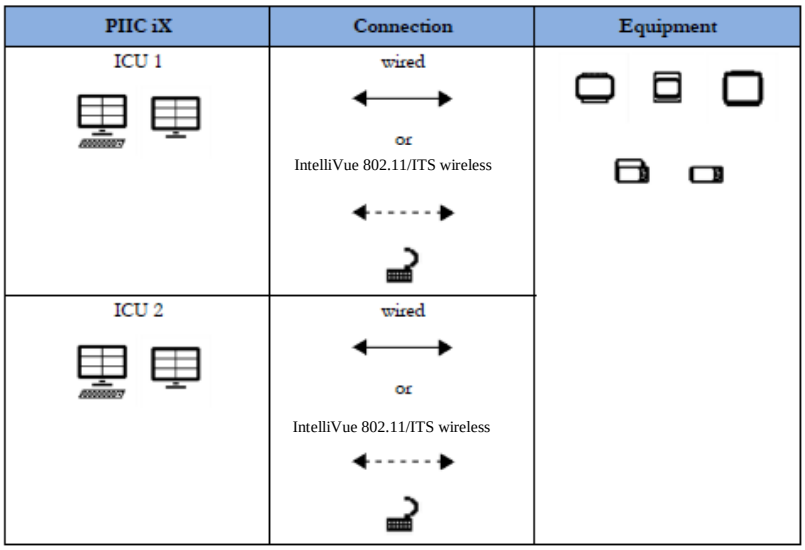
Troubleshooting - FAQ

"On my patient monitor, the* Check Equipment *INOP appears, although we have an equipment pool within our PIIC iX?"

The unit you have transferred to is either NOT part of the equipment pool, or the sending unit has configured to NOT Keep pooled equipment with patient with Transfer Out of Unit.

Use Model 4 - Transport Equipment

This is a unique setting in the monitor, and allows equipment to be used for transporting patients without concerns about PIIC iX ADT Workflow settings.



Description

Transport Monitors can be set up for a specific transport use model. Transport Monitors can be set to be in an equipment pool if desired but is not required.

NOTE: Do not lock a Transport Monitor to a sector.

Transport monitors
Operate automatically as a **transport device**, setup for a specific transport scenario
Remains patient-centric throughout the workflow
Setting has priority over unlocked equipment settings of the PIIC iX.

Advantages

This Use Model allows transfer of patients with transport equipment.
Admitting a new patient at a transport monitor will never affect the other equipment assigned to the patient in the bed.
When the patient is discharged from the bed or the bed is used for another patient ("New Patient" operation at the patient monitor), it will automatically remove the transport monitor from the equipment list.

Restrictions

Transport equipment is still assigned to the patient upon discharge or transfer, therefore the transport monitor needs to be freed separately from other equipment.
A transport monitor can lose PIIC iX connectivity if the assigned bed is used for a different patient.

Configuration

Configuration of Use Model 4	
Required Configuration on Monitor	
Assign Equipment label	Yes
Workflow Setting Use Model	**Transport**
Workflow Setting **Allow Discharge**	No
Workflow Setting **Assign to Patient**	Yes
Tele Workflow Settings	**Enhanced**
Patient Selection Setting	Depending on individual use model
Auto Free Setting	After specified time
Settings Upload	Depending on individual use model
Trend Upload	Yes
PW Sync	Yes
System Settings	Depending on individual use model
Required Configuration on X2	
System Setting	**Synchronized** (Not Sync'd – please see the Bedside Config Guide)
Transport Profile	**As Is:** User does not want to use a specific Transport Profile **Ask User**: Select a Profile from a list **Def. Profile**: Use the default Profile
Tele Workflow	Enhanced
Required Configuration at Information Center iX	
Equipment label requirement	Monitor label
Equipment setting **Locked / Unlocked**	Unlocked
ADT Workflow Setting **Keep with Patient**	Depending on individual use model
ADT Workflow Setting **Clear at Discharge**	Depending on individual use model

Troubleshooting - FAQ

"My Transport Monitor has lost central connection. Why did this happen?"

When the current bed is used for a different patient, the transport monitor stays with current patient. Ensure that before you use the bed for a new patient, you transfer the previous patient out of the bed. Alternatively the patient assigned to the transport monitor is not assigned to a bed in the system.

Use Model 5 –Location Mapping

The use model of Location Mapping, also called Switch Port Mapping, is often used to simplify equipment management. A physical location, usually a patient bed, is directly mapped to a bed and sector of PIIC iX via the switch port at the location. Once a patient monitor is plugged into the location, the equipment is assigned to the bed and central monitoring will begin. (Please see Caution statement below). Bed labels on the PIIC iX should be locked because if connected to a switch port that has no sector assignment, there will be no central monitoring. Equipment labels should not be locked to bed labels.

Description

Equipment is moved to a different bed and connected to a mapped switch port.

Results

Central monitoring automatically begins in the mapped bed under most circumstances. (See Caution statement).

Advantages

Equipment is automatically assigned to a bed and sector and central monitoring will begin.
If the equipment is from another sector, the user will be asked a smart question on the bedside, to confirm if they wish to transfer the patient to this new bed. A user will be notified if they wish to transfer a patient to another sector/bed label.

Restrictions

Discharging the patient at the mapped port does not remove the equipment from the sector/bed label, even if the workflow is configured to remove with discharge. Equipment must first be removed from the port, then if associated via wireless network, discharge at the monitor or the PIIC iX. If not associated upon removal, the discharge must be done at both the PIIC iX and the monitor.

Alternatively, a discharge can be done at the PIIC iX, and the device removed. The device may be freed (with the next association to the PIIC iX) with one of the auto free settings, such Power Off.

The device will also be removed when another device is added to the port.

CAUTION: Equipment used for Location mapping should never be locked to a bed label. If equipment locked to one bed label is used at a different mapped port location, a Check Equipment Inop is displayed and only local monitoring is available.

Configuration

Use Model 5: Port Mapping	
Required Configuration on Monitor	
Assign Equipment label	Yes
Workflow setting **Use Model**	**Bedside**
Workflow setting **Allow Discharge**	**Yes -**
Workflow setting **Assign to Patient**	**Yes**
Tele Workflow settings	**Enhanced**
Patient Selection setting	Depending on individual use model
Auto Free setting	Depending on individual use model
Ask For New Patient setting	Depending on individual use model
Settings Upload	Depending on individual use model
Trend Upload	Depending on individual use model. With Release B, vital signs can be uploaded to the PIIC iX when the device is off network.
PW Sync	Depending on individual use model
System Settings	Depending on individual use model
Required Configuration at Information Center iX	
Bed Label locked to sector	Recommended
Equipment label requirement	Yes
Equipment setting **Locked / Unlocked**	**Unlocked**
ADT Workflow Setting **Keep with Patient**	Depending on individual use model. If used, the setting will apply after removal of the device from the mapped port
ADT Workflow Setting **Clear at Discharge**	Devices still in the port will not be cleared and must first be removed prior to discharge. If there is no association/network to the PIIC iX upon removal, devices must be manually removed at the PIIC iX, and the patient must be discharged at the device.

Troubleshooting - FAQ

"On my patient monitor, a* Check Equipment *INOP appears. Why is that and what can I do?"

The device may be locked to another bed, or the mapped port believes other devices should still be monitoring in this port. In case of emergency, you can use this monitor for local monitoring of your patient. The INOP will remind you to resolve the equipment conflict.

If equipment was locked in error to the bed label, the equipment must be unlocked by your system administrator or Philips support personnel.

If equipment was not properly removed with a prior discharge, equipment must be manually removed at the PIIC iX.

Local Surveillance

Local Surveillance settings determine how the information in the patient sectors and Patient Window will appear, as well as the volume of alarms. These are local settings. Care must be taken to customize each information center (Surveillance or Overview Stations) within the unit.

CAUTION: Some Local Surveillance settings may not apply from an archive if migrating from PIIC iX Release A to Release B. Check all clinical settings prior to start of monitoring.

There are four groups of settings accessed from the tabs across the top as shown in Figure 3-1.

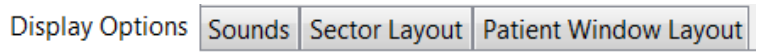


Figure 3-1

Display Options

Display Settings

Factory defaults are shown in Figure 3-2.

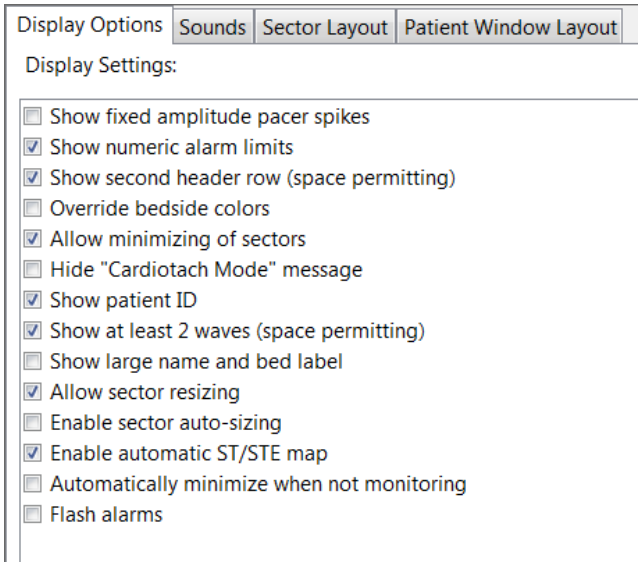


Figure 3-2

Information

Show fixed amplitude pacer spikes: If checked, pacer spikes will be displayed the same size with every paced beat. The real pacer spikes will show as a solid line with the fixed size showing as a dotted line.

Show numeric alarm limits: If checked, alarm limits will show to the left of alarm parameters, if the sector and parameter is large enough to show limits.

Show second header row: If checked, a second row beneath the name row will show. Icons will show in the second row and will not be obscured by alarms. A second header row is the only way to display Screen Notes but there are size restrictions (see Table 3-1 at end of chapter) The second row will never display when an application is open and sectors are “scrunched”.

Override bedside colors: If checked, the system will use the colors configured in the Information Center for all waves and parameters (see the Colors section of this guide).

*Allow minimizing of sectors: If checked, a sector can be minimized to just the header row. This control will be available If there is no monitoring activity (devices are either in standby or off, or an unlocked sector has been cleared). This allows the other sectors in that column to display additional data for those patients. It will show as a light gray bar. The sector will automatically restore when monitoring resumes.

Hide Cardiotach Mode message: If Arrhythmia Analysis is turned off, instead of a rhythm status message in the ECG wave, such as Normal Sinus Rhythm, the message "Cardiotach Mode" is displayed. Check this box if you wish to hide this rhythm status message.

Show Patient ID : If checked, the Patient ID, as configured in Patient Management, will display next to the Bed Label in the sector.

NOTE: If Patient ID is configured to Last Name, First Name, and only Lifetime ID is entered to admit, no patient ID will display.

NOTE: If you select not to show Patient ID, and the patient is admitted, the word "Admitted "will show next to the Bed Label.

Show at least 2 waves (space permitting): This option allows at least 2 waves to show whenever possible although the waves will be smaller. See Table 3-1 at the end of this chapter for additional information. Note that in scrunch mode, the size of the sector may also be such that only one wave can show.

Show Large Name and Bed Label: If checked, the font used will be font size 14 instead of the standard size 11.

NOTE: Note that in narrow sectors, the names/bed labels may not be shown in entirety if using "Show Large Name and Bed Label".

*Allow Sector Resizing: If checked, this feature allows the user to make an individual sector larger or smaller. The sector will only get so big as to assure that all the other sectors in that column will show at least 1 full size wave, or two smaller waves (if configured).

*Enable Sector Auto-sizing: If checked, the sectors will automatically size according to the amount of data per patient. So if one patient has additional waves, or ST monitoring, this sector can be automatically larger.

NOTE: Manual or Auto sector resizing is only effective if fewer than 7 sectors in a column (or 7 without a second header row) with 1280x1024 and 1920x1080 screen resolutions.

Enable automatic ST/STE Map: If MAP is licensed and configured to show in a sector, the ST Map and STE Map will be shown based upon which measurement is on. For example, if STE Map is configured to be in the sector, but only ST is on, then ST Map will display automatically.

* This feature will not be available in monitoring mode for the PIIC iX Express.

*Automatically minimize when not monitoring: If checked, the sector will automatically minimize if the equipment is either off, in standby, or none is assigned to a sector, such as clearing equipment with discharge or transfer. The sector will automatically restore when monitoring resumes.

Flash alarms: This is used almost exclusively in China to meet their specific alarm requirements.

Short Cut Keys

Short cut keys are navigation buttons that show when a sector is in focus, meaning the mouse has hovered, or with touch screens, that the first touch has been made in the sector. Record/Silence and Patient Window keys are permanent. The factory default is shown in Figure 3-3.

Information

Choices include:

Figure 3-3

- Review
- Equipment
- Manage Patient
- Measurements
- Standby
- Transfer – shortcut to Transfer screen of Manage Patient
- Save- will create a User Saved Delayed Strip
- None – if you do not wish any additional key to show. Any or all of the three sector buttons may be set to none. It is important to understand that navigation to other applications can be accomplished from the sector by other means.
    - Navigation to Manage Patient can be done by selecting the patient name.
    - Navigation to Equipment can be done by selecting the bed label.
    - Navigation to Measurements can be done by selecting the wave, i.e., select ECG wave and choose Setup ECG.

Screen Calibration

If the screen resolution distorts the width of the ECG waves, you can adjust the screen calibration. The factory default is shown in Figure 3-4. Click on the ellipsis button, then use a ruler held up to the screen to calibrate using the plus or minus buttons on the right as shown in Figure 3-4.

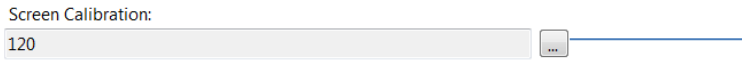


Figure 3-4

Idle Timeout (seconds):

This setting determines the length of time that temporary menus and buttons disappear from the PIIC iX when the system is idle. The default is shown in Figure 3-6.

Information

- Choices range from 3-30 seconds in single second steps.

Default Wave Speed

Set the default wave speed. Note that Respiratory waves will always display at 6.25mm/second. The factory default is shown in Figure 3-7.

Information

Choices include:

- 25.0 mm/second
- 12.5 mm/second

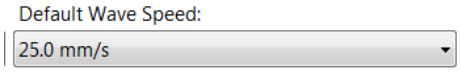


Figure 3-7

Caption Bar Action Button

Set the action to be done for All Strips in unit, or set to None to remove the icon in the caption bar on Main Screen. The factory default is shown in Figure 3-8.

Information

Choices include:

- Print All
- Record All
- Save All (creates a User Saved Strip for all patients in unit)
- None

Figure 3-8

Sector Action Button

Set the action to be done for a Delayed Wave in a sector, or set to None to remove the icon in the sector. The factory default is shown in Figure 3-9.

Information

Choices include:

- Record
- Print
- Save
- Print/Save
- Record/Save

Figure 3-9

- None

Show Silence Review Button

This setting determines if the Silence button can be configured to also show Fast Alarm Review of the alarm condition if selected when silencing an alarm. The factory default of All Alarms is shown in Figure 3-10.

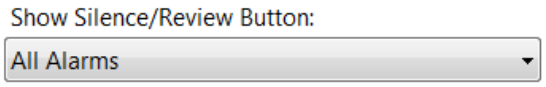


Figure 3-10

Choices include:

- Never
- Red Alarms Only
- All Alarms

Sounds

Set the alarm volume for each Information Center in the unit. Factory defaults are shown in Figure 29.

WARNING: Consider environment noise when setting alarm volume. Be sure the **Minimum Volume** setting is audible in your care unit. If you adjust the Alarm Volume too low during patient monitoring it may result in patient danger. Do not rely exclusively on the audible alarm system for patient monitoring. The most reliable method of patient monitoring combines close personal surveillance with correct operation of monitoring equipment.

Information

Sound Scheme: indicate the type of alarm sounds, often set by geography. Factory default is shown in Figure 3-11.

Choices include

- Traditional - Continuous tone
- Iso- Repeated intervals of beeps
  - Choices for red interval
    - 5 seconds
    - 10 seconds
    - 15 seconds
  - Choices for yellow interval
    - 10 seconds
    - 20 seconds
    - 30 seconds

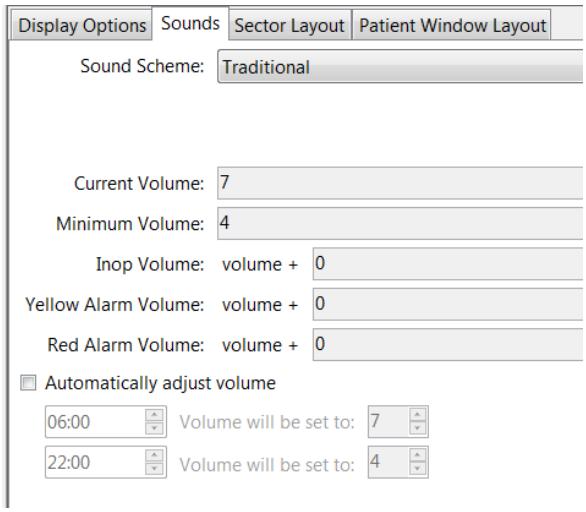


Figure 3-11

Current Volume: Sets the initial volume of alarms. Users may still change the volume up to 10 or down to minimum volume.

- Choices range from 1 -10, 10 being the loudest possible volume

Minimum Volume: Set the number to the lowest possible volume choice. The number cannot be set higher than current volume.

- Choices range from 1 to Current Volume.

Inop, Yellow and Red Volume +: Each of the three types of alarms may be set to be louder than current volume. These volumes are all dependent on each other. The Inop volume cannot be set higher than yellow, nor can yellow be set higher than red.

Choices include

- Current volume +1
- Current volume +2

Automatically Adjust Volume: If checked, the volume will automatically adjust at the two configured times and volumes. See Figure 3-11 for the factory default times and volumes.

Choices include:

- Times: 00:00-23:59
- Volumes – Minimum Set Volume to Maximum Allowed.

NOTE: To change the volume to less than the Minimum set volume, you must first adjust this value.

Sector Layout

Sector Layout allows configuration of the default sector elements, including type and placement of waves and numerics. . *Please refer to Table 3-1 at the end of this chapter for specific information about size of sectors and elements available due to size*.

To configure the default sector layout, first choose the display resolution , and the number of columns and rows to set the layout option to the proper size as shown in Figure 3-11. Please check with your Philips clinical specialist or field service engineer for display resolution information if you are unsure.

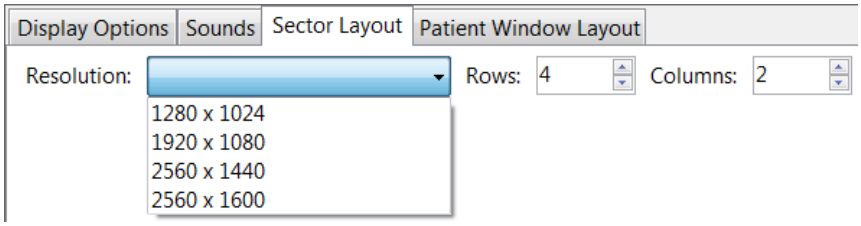


Figure 3-11

After choosing the display resolution, rows and columns, you will see the approximate size of the patient sector. The primary ECG will always be the first row, unless ECG is turned off at the device. The factory default for a 1280x1024 (19 inch) display resolution is shown in Figure 3-11.

NOTE: Choosing the resolution is only a guide – even if you choose a different resolution, changes will still be made. You may wish to reduce the rows to see how the sector will look if another sector is minimized.

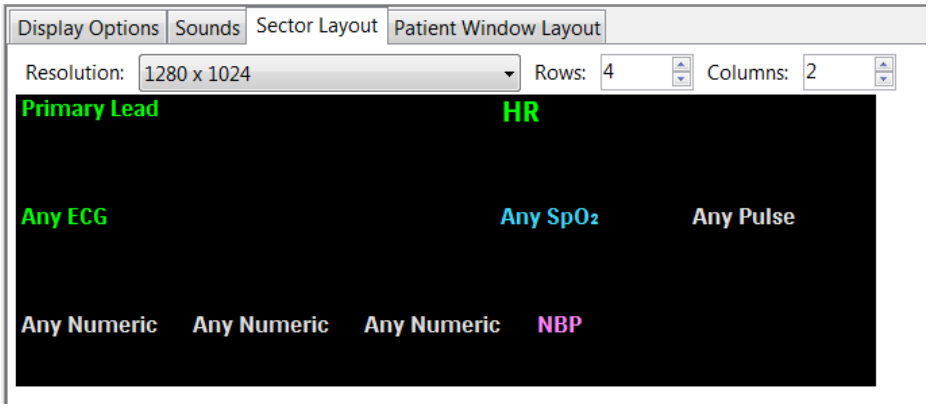


Figure 3-11

To change any of the elements in the sector, select the wave or numeric you wish to change, or choose Change Layout.

Waves and Numerics

Information

Choices for Waves include:

- Any ECG
- Any Pleth
- Any Press
- Any Resp
- Any EEG
- Any Agent
- Any Vent
- Any RT (real-time) wave

NOTE: The first wave will always be the Primary ECG wave if ECG is being sourced. If a default wave is not available in surveillance, it will be substituted first by the next configured wave. If this wave is not available, then the wave will be substituted by the next available highest priority wave.

Choices for Numerics include:

- NBP
- Blank
- Any Pulse
- Any SpO2
- Any Press
- Any Resp
- Any EEG
- Any Agent
- Any Vent
- Any Temp
- Any SvO2
- To choose ST numerics, select the HR numeric next to the primary ECG wave. Only certain groups of ST numerics can be added to the sector.
    - None
    - Lateral
    - Inferior
    - Anterior
- Any numeric

NOTE: If a default numeric is not available in surveillance, it will be substituted by priority.

Layout options

Choices for Layout include and more than one option can be selected, but only one of the MAPs. Please see Table 1 to assure elements will be visible due to sector size.

- Big Numerics (one small wave will also display)
- Additional layout options are available if licensed and include:
  - Horizon Numerics.
  - Trends
  - ST Map
  - STE Map
- Dedicated Numeric (one numeric that will always show in the lower right side of the sector)
  - PVC
  - NBP
  - MEWS
  - SPS
  - Blank
  - Any Pulse
  - Any SpO2
  - Any Press
  - Any Resp
  - Any EEG
  - Any Agent
  - Any Vent
  - Any Temp
  - Any SvO2

Patient Window Layout

Patient Window Layout allows configuration of the default Patient Window elements. As in the Sector Layout enter the Display Resolution, and check if applications will open in Full or Half Screen. The default is half screen as shown in Figure 3-12.

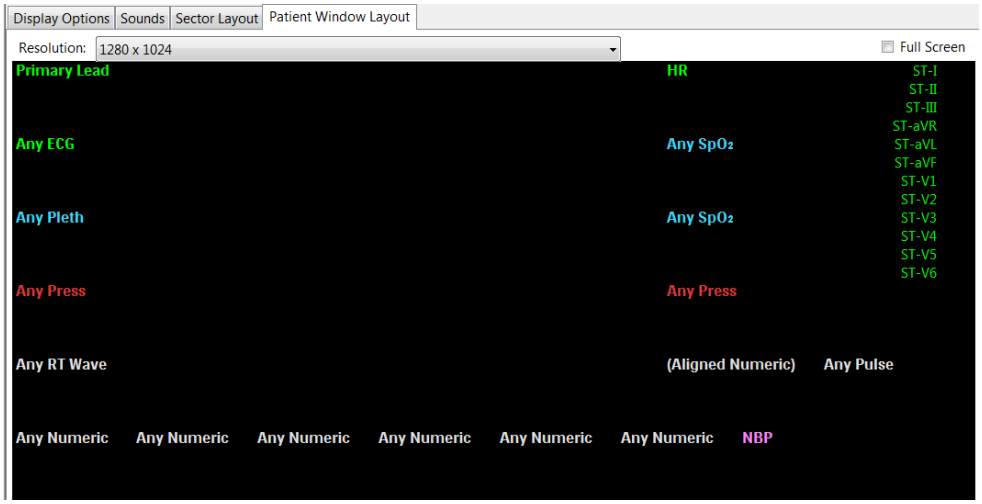


Figure 3-12

Waves and Numerics

Information

Choices for Waves include:

- Any ECG
- Any Pleth
- Any Press
- Any Resp
- Any EEG
- Any Agent
- An Vent
- Any RT (real-time) wave

***NOTE:** The first wave will always be the Primary ECG wave if ECG is being sourced. If a default wave is not available in surveillance, it will be substituted first by the next configured wave. If this wave is not available, then the wave will be substituted by the next available highest priority wave.*

Choices for Numerics include:

- NBP
- Blank
- Any Pulse
- Any SpO2
- Any Press
- Any Resp
- Any EEG
- Any Agent
- Any Vent
- Any Temp
- Any SvO2
- To add ST numerics, select the HR numeric next to the primary ECG wave.
    - None
    - Lateral
    - Inferior
    - Anterior
    - All (shown in Figure 33)
- Any numeric

NOTE: If a default numeric is not available in surveillance, it will be substituted by priority except for the Dedicated Numeric. If that is not available, the space will be blank.

Layout options

Choices for Layout include and more than one option can be selected, but only one of the MAPs and corresponding ST Snippets.

- Horizon Numerics – only displays if TRE licensed.
- Additional layout options are available if licensed and include:
    - Trends
    - ST Map
    - ST Snippets
    - STE Map
    - STE Snippets

- Dedicated Numeric (one numeric that will always show in the lower right side of the sector)
  - PVC
  - NBP
  - MEWS
  - SPS
  - Blank
  - Any Pulse
  - Any SpO2
  - Any Press
  - Any Resp
  - Any EEG
  - Any Agent
  - Any Vent
  - Any Temp
  - Any SvO2

Table 3-1

NOTE: To always show HR limits in a sector, follow guidelines for Trends.

1280x1024 (typical 19 inch screen)

	Max Per Column	Max Per Display with 2 columns
Max number of sectors	8	16
Max number of sectors and 2 waves	8	16
Max number of sectors 2 waves and second header row	7	14
Max number of sectors with 3 waves per sector	3	6
Max number of sectors with 3 waves and second header row	3	6
Max number of sectors with 4 waves per sector	2	4
Max number of sectors with 4 waves and second header row	2	4
Max number of sectors with 5 waves per sector	2	4
Max number of sectors with 5 waves and second header row	2	4
Max number of sectors with ST Map (one wave)	3	6
Max number of sectors with ST Map (one wave) and second header row	3	6
Max number of sectors with Trends (one wave)	5	10
Max number of sectors with Trends (one wave) and second header row	4	8

1920 x 1080 (typical 24 inch screen)

	Max Per Column	Max Per Display with 3 columns
Max number of sectors	8	24
Max number of sectors and 2 waves	8	24
Max number of sectors 2 waves and second header row	7	21
Max number of sectors with 3 waves per sector	3	9
Max number of sectors with 3 waves and second header row	3	9
Max number of sectors with 4 waves per sector	2	6
Max number of sectors with 4 waves and second header row	2	6
Max number of sectors with 5 waves per sector	2	6
Max number of sectors with 5 waves and second header row	2	6
Max number of sectors with ST Map (one wave)	3	9
Max number of sectors with ST Map (one wave) and second header row	3	9
Max number of sectors with Trends (one wave)	5	15
Max number of sectors with Trends (one wave) and second header row	4	12

2560 x 1440 (typical 27 inch screen)

	Per Column	Max Per Display with 4 columns
Max number of sectors	8	32
Max number of sectors and 2 waves	8	32
Max number of sectors 2 waves and second header row	8	32
Max number of sectors with 3 waves per sector	5	20
Max number of sectors with 3 waves and second header row	4	16
Max number of sectors with 4 waves per sector	4	16
Max number of sectors with 4 waves and second header row	3	12
Max number of sectors with 5 waves per sector	3	12
Max number of sectors with 5 waves and second header row	3	12
Max number of sectors with ST Map (one wave)	5	20
Max number of sectors with ST Map (one wave) and second header row	4	16
Max number of sectors with Trends (one wave)	7	28
Max number of sectors with Trends (one wave) and second header row	6	24

2560 x 1600 (typical 29 inch screen)

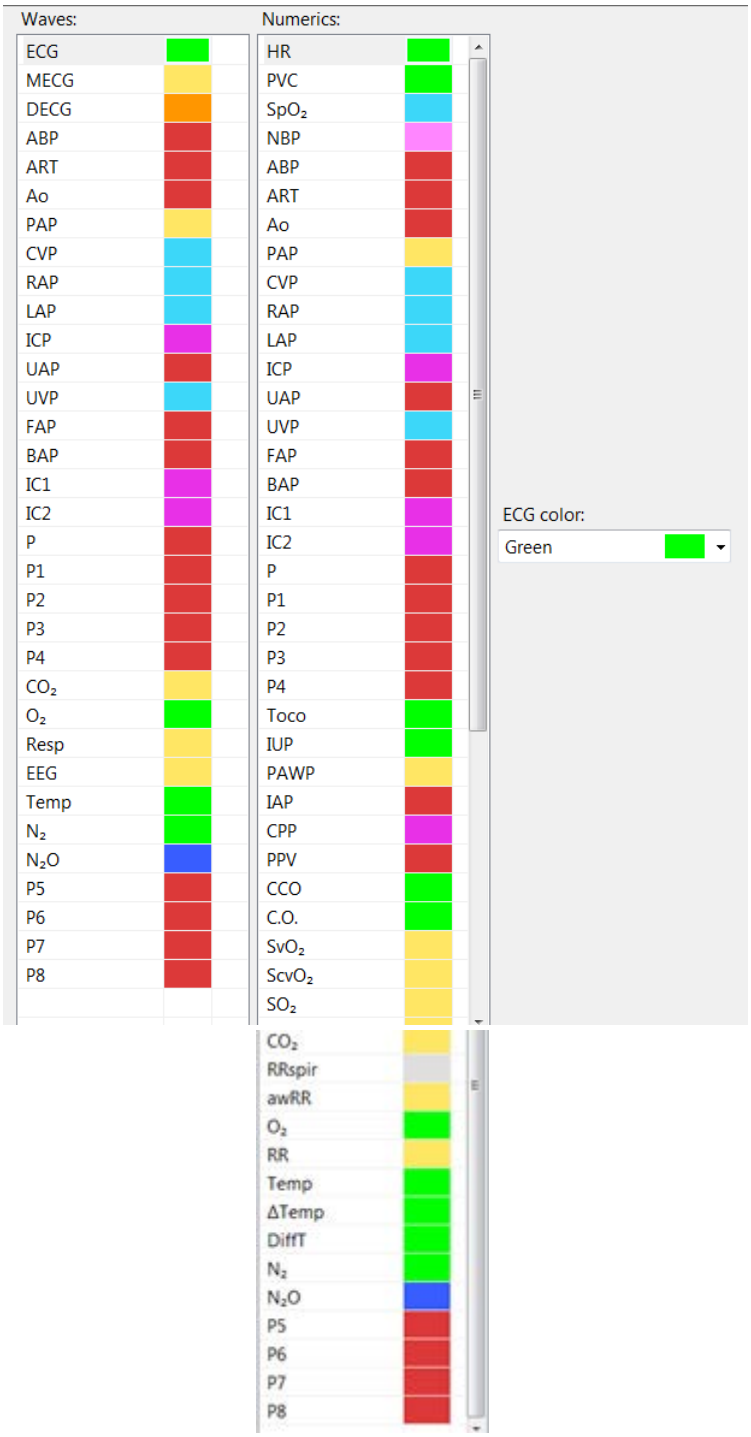
	Per Column	Max Per Display with 4 columns
Max number of sectors	8	32
Max number of sectors and 2 waves	8	32
Max number of sectors 2 waves and second header row	8	32
Max number of sectors with 3 waves per sector	5	20
Max number of sectors with 3 waves and second header row	5	20
Max number of sectors with 4 waves per sector	4	16
Max number of sectors with 4 waves and second header row	4	16
Max number of sectors with 5 waves per sector	3	12
Max number of sectors with 5 waves and second header row	3	12
Max number of sectors with ST Map (one wave)	5	20
Max number of sectors with ST Map (one wave) and second header row	5	20
Max number of sectors with Trends (one wave)	8	32
Max number of sectors with Trends (one wave) and second header row	7	28

Seconds of ECG or other waves per number of columns per screen resolution

Resolution	# columns for 3 sec of ECG	# columns for 6 sec of ECG	# columns for 10 sec of ECG
1280x1024	2	1	N/A
1920x1080	3	2	1
2560 x 1440	3 or 4	2	1
2560 x 1600	3 or 4	2	1

Colors

The color settings are used for either the color of the waves and numerics sent from telemetry devices, or if you have chosen to override bedside colors in the setting in the Display Option section of Local Surveillance. Factory defaults are shown in Figure 4-1.



Information

To change colors, select parameter, and label on the right drop box will change. Select the drop box arrow to see color choices, and then select color.

Scroll down each column to see additional wave and numeric colors.

NOTE: ***These settings are also found on the bedside monitor, and should be set to be match if using both telemetry and bedside monitors.***

Figure 4-1

Global Settings

Global Settings apply to Telemetry devices and include Alarm Management, Telemetry Setup and Remote Controls. The Remote Control setting is for both telemetry and bedside monitors. If you are using the MX40 Monitor, the settings will be sent from the Information Center to the device, upon association.

WARNING: When changing these settings for the MX40, the device will need to be restarted for new changes to take effect.

Alarm Management

Settings for alarms and Inops are configured in Alarm Management. Factory defaults are shown in Figure 5-1.

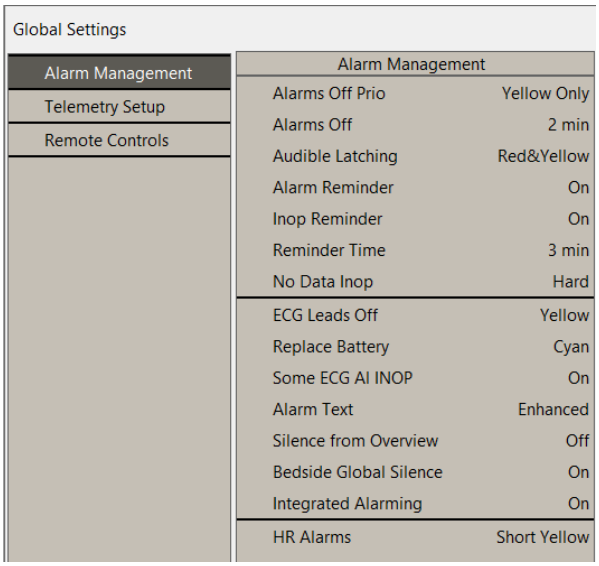


Figure 5-1

Information

Alarms Off Priority: Users may have the ability to pause alarms for a configured amount of time. This setting sets the types of alarms that can be paused for any device at the Information Center. If using IntelliVue bedside monitors, remote controls must first be enabled for this setting to have effect, but will also pause the bedside alarms up to the level permitted by the bedside configuration.

Choices include:

- Red & Yellow
- Yellow Only: red alarms must be paused at the device
- Not Allowed

NOTE: ***Pause alarms are one of the permissions that can also be set to require user authentication in System Configuration***.

Alarms Off: Set the amount of time all alarms will be paused if selected by a user.

Choices include:

- 1, 2, or 3 minutes

NOTE: If different pause times are configured at the bedside monitor, when switching the ECG source, the lowest pause time will always be used by the system.

Audible Latching: Use to latch alarms both audible and visually. Latched alarms must be silenced even if the condition no longer exists. This setting only applies to non-arrhythmia alarms, such as SpO2 or NBP. (Arrhythmia alarms always visually latch for 3 minutes).

Choices include:

- Red and Yellow
- Red only

Alarm Reminder: Used to set how an alarm will remind if an alarm condition persists.

Choices include:

- On: if a condition still exists after being silenced, the reminder alarm will cause the sector to turn blue, and alarm sound to be played for a short time after every reminder time interval. This will not cause a new alarm strip to be stored in Alarm Review.
- Realarm: a new alarm will be generated, but no additional alarm strip. If automatic paging is being used, a new page will also be sent.
- Off: no reminders will be issued if the alarm condition continues.

NOTE: The Reminder time in the MRx monitor is always 2 minutes. If configuration for other devices is different, assure users understand the implications.

Inop Reminder: Used to set how an Inop will remind if an Inop condition persists.

Choices include:

- On: if a condition still exists after being silenced, the reminder Inop will cause the sector to turn blue, and an Inop sound to be played for a short time
- Realarm: a new Inop is generated
- Off: no reminders will be issued if the Inop condition is continuing

Reminder Time: Applies to both Alarm and Inop Reminders.

Choices include:

- 1, 2 or 3 minutes.

NOTE: Reminders must be set to On or Realarm for the Reminder Time setting to take effect.

No Data Inop: When a bedside monitor is no longer connected to the PIIC iX, an Inop indicating "NO DATA FROM MONITOR will show in surveillance. This can be set to be a Hard Inop (with sound) or Soft. The Inop for Telemetry devices is always a Hard Inop.

Choices include

- Hard
- Soft

ECG Leads Off: When ECG leads are off, ECG monitoring is no longer available. This technical condition may be set to a higher severity Inop if desired.

Choices include:

- Cyan
- Yellow
- Red

Replace Battery: All telemetry monitoring will cease if batteries are empty. This technical condition may be set to a higher severity Inop if desired.

Choices include:

- Cyan
- Yellow
- Red

SOME ECG Alarms Off Inop: If users want to be notified whenever the On/Off settings for ECG/Arrhythmia alarms differ from the current Profile, this setting must be On for the Inop "ECG Alarms Off" message. If this message is configured Off, it is important for the clinician to check the on/off status of the alarms.

Choices include:

- On
- Off

Alarm Text: Use this setting to define how alarm messages are presented on the patient sector and window.

Choices include:

- Standard: Alarm texts are displayed in text form, for example, ****SpO2 Low**
- Enhanced: Alarm texts are displayed as numeric values, for example, ****SpO2 94 < 96**, where the second number shows the current alarm limit, and the first number shows the maximum amount by which this limit

NOTE: Use enhanced text if you would like to capture data in the Audit Log regarding limit alarms. ITS Wireless bedside monitors only send Standard Alarm text.

Silence from Overview: This enables the silence key in an overview window at the bedside, so alarms from another bedside could be silenced..

Choices include:

- On
- Off

WARNING: Silence Overview Alarms at Bedside enables the remote silence key in the IntelliVue monitor overview window. This may enable remote silencing for these beds in other clinical units.

NOTE: If changes are made to this setting, the bedside monitors will have to be powered on/off or removed/added for this setting to take effect.

Bedside Global Silence: When set to On, the clinical user will be able to silence Own Bed Overview telemetry alarms with the bedside silence key.

Choices include:

- On
- Off

Integrated Alarming: When on, other device alarms are announced at the IPM bedside monitor

HR Alarms: Heart rate limit alarms may be set to short yellow or yellow.

Choices include:

- Short Yellow: follows the Arrhythmia behaviors
- Yellow: Follows yellow limit alarms

CAUTION: **It is very important that all devices are configured to have the same alarm behavior for HR alarms, or that users are aware of the differences. For example, the HR alarm on the MRx monitor is always short yellow (three short yellow alarm sounds) – if HR alarms on other devices are yellow (continuous yellow sound), assure users understand the implications.**

Telemetry Setup

These settings are for both IntelliVue Telemetry Transceivers and the MX40 Patient Worn Monitor. Settings under the line in the list are for the MX40 only. In Monitoring Mode, these settings are found in Measurements. Defaults are shown in Figure 5-2.

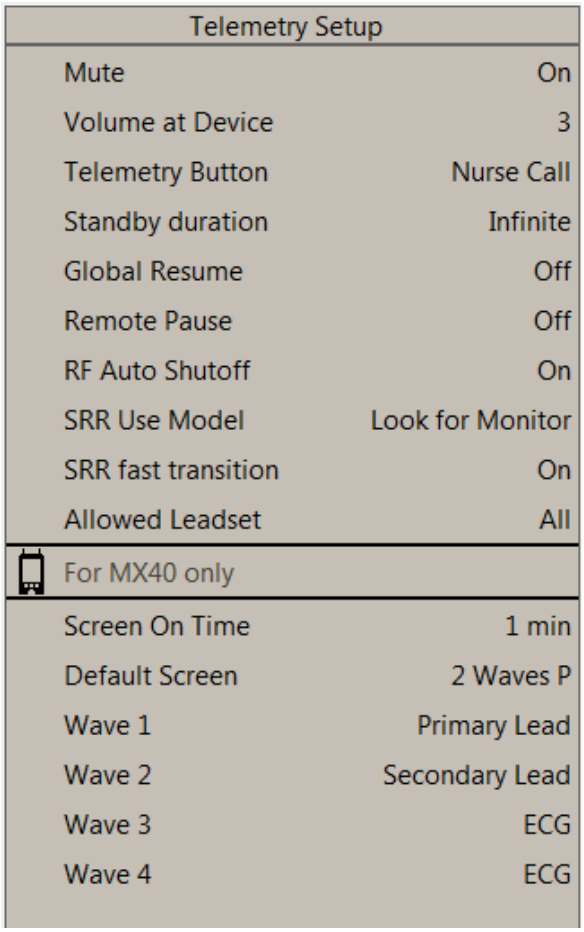


Figure 5-2

Mute: Mute must be off for the volume setting at the device to have effect.

Choices include:

- On
- Off

Volume at Device: For IntelliVue Telemetry devices, this setting affects the volume for SpO2 tone during a manual measurement.

Choices include:

- 1 – 5 (5 is the loudest)

Telemetry Button: On either the Telemetry transceiver or the MX40, there is a round hard key that can be configured per unit for nurse call and/or recordings

Choices include:

- Nurse Call: Creates a Yellow “Nurse Call” Alarm to mark as an event in alarm review. May be used if patients experience a cardiac event, such as chest pain or palpitations, and are capable of understanding they should select the button with an event. Alarms can then be re-labeled and/or annotated.
- Record: generates an automatic recording when the button is pressed.
- Call & Record: Creates both the “Nurse Call” alarm and automatically starts a recording.
- Off

Standby Duration: When a telemetry device is placed on Standby at the PIIC iX, a message to automatically wake up at a certain time can be sent to the device with the Standby message. This is known as the Standby Duration. This setting is for the unit default duration time; it can be changed per patient in the Transport/Standby window of the Manage Patient application.

Choices include:

- 10 minutes
- 20 minutes
- 30 minutes
- 1 hour
- 2 hours
- 3 hours
- 4 hours
- Infinite

Global Resume: When Global Resume is On, resuming a device from the MX40 will also resume the bedside monitor if both are in Standby.

Choices include:

- On
- Off

Remote Pause: When Remote Pause is On, the clinician can pause all alarms *from the device* for the same configured amount of time that alarms can be paused at the Information Center.

Choices include:

- On
- Off

RF Auto Shutoff: When RF Auto Shutoff is on, the telemetry will stop broadcasting (RF shutoff) and display the technical alarm, "No Signal", followed by the "Transmitter Off" INOP at the Information Center. Please check with the Philips clinical specialist or field service engineer for information.

RF Auto Shutoff is triggered when:

- There is no ECG signal for longer than 10 minutes (ECG Leads Off)
- If the SpO2 sensor cable is *not* present in the SpO2 sensor port for longer than 10 minutes

Choices include:

- On
- Off

SRR Use Model: Short Range Radio may be used to either assign a telemetry device to a monitor for Wireless Telemetry As A Parameter (WTAAP), or to Cableless sensors. Please check with the Philips clinical specialist or field service engineer for information.

Choices include

- Look for Sensor (must be using either MX40 devices, or telemetry D.00 revision to use CL sensors)
- Look for Monitor

SRR Fast Transition: This setting is used in conjunction with the SRR Use Model Setting of "Look for Monitor", (WTAAP). This setting keeps both the Smart-Hopping radio and the Short Range Radio on when assigned to MP5/MP2/X2 so that transitions from direct connect to own bed overview is faster. Please check with the Philips clinical specialist or field service engineer for information.

Choices include:

- On
- Off

Allowed Leadset: This setting is for IntelliVue Telemetry devices, and determines what types of ECG leadsets will be used in your unit.

Choices include:

- All
- EASI: Choose this if you are using only EASI ECG derivation, and an Inop will be generated if the user plugs in the cable on the transceiver into the Standard slots. This does not apply to the MX40
- No EASI
- 3-lead only: Choose this if you are using only 3 lead cables, and an Inop will be generated if the user plugs the cable into the transceiver into the Standard slots. This does not apply to the MX40

Please note the line in the menu list. All settings below the line are exclusive to the MX40.

Screen-On Time: This setting determines how long the screen will stay on by default for the MX40 telemetry monitor. Clinicians will always be able to adjust the screen times per patient. Power usage is increased during screen-on time, reducing battery life.

Choices include:

- 1 min
- 2 min
- 5 min
- 15 min
- 30 min

Default Screen: This setting determines the default screen of the MX40 telemetry monitor.

Choices include:

- 2 waves P: the "P" stands for Portrait mode or vertical
- 1 wave P
- 2 waves L: the "L" stands for Landscape mode or horizontal
- Chest Diagram: shows how leads should be placed on the chest

Wave 1-4: These are the waves that will be sent and stored from the MX40 by default. If you wish to have Pleth or Resp waves stored by default, you will need to change Wave 3 and 4. Wave 1 and 2 will always be Primary and Secondary ECG wave.

Choices include:

- ECG
- Pleth
- Resp

NOTE: Waves in Telemetry Setup must be set to 4 ECG waves if using Hexad derivation and storing 12 waves of ECG is desired. If set to less than 4 ECG waves, the MX40 will continue to derive, and 12 ST Snippets will be sent, but the number of ECG waves available for storage will be reduced.

NOTE: Waves in Telemetry Setup must be set to 3 ECG waves if using EASI derivation and storing 12 waves of ECG is desired. If set to less than 3 ECG waves, the MX40 will continue to derive, and 12 ST Snippets will be sent, but the number of ECG waves available for storage will be reduced.

WARNING: If you reduce the number of ECG waves to less than 3, only Primary and Secondary ECG waves will be available at the PIIC iX for surveillance and storage.

Remote Controls

Currently, there are two remote control settings. . Factory defaults are shown in Figure 5-3.

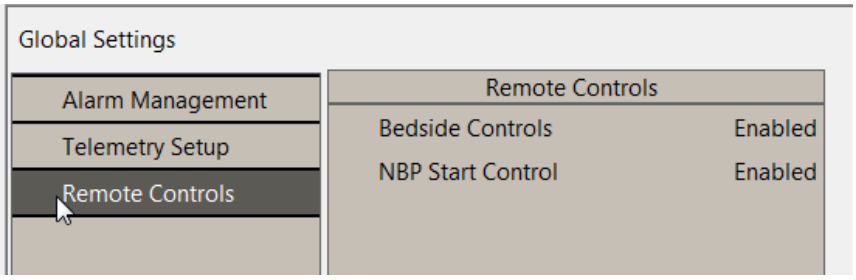


Figure 5-3

Bedside Controls: When Bedside Controls are enabled, the user can change Alarm state, alarm limits, silence alarms and pause alarms from the PIIC iX, assuming the bedside is also configured to enable Remote Controls. When disabled at the PIIC iX, these controls are no longer available even if the bedside is set to enable controls. Alarm limits will show in the sector.

Choices include:

- Enabled
- Disabled

NBP Start Control: Determines if user can start NBP measurements (cuff inflation) from the Information Center.

Choices include:

- Enabled
- Disabled

Profiles

This chapter provides the settings for telemetry profiles. Bedside profiles are configured at the bedside.

WARNING: The PIIC iX default Profile settings will overwrite the default profile bedside monitor settings for Patient Category and Paced Mode (only). Each bed label in the monitoring system can be set to a different PIIC iX default profile if the unit has mixed Patient Categories. Care must be taken to assure the appropriate PIIC iX default Profile has been assigned to the appropriate bed label, and matches the default beside profile settings for Patient Category and Paced Mode.

A PIIC iX Profile is a combination of the following:

- Patient Category
- Paced Mode
- Measurements and their associated alarm settings

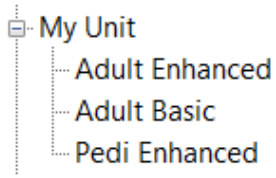


Figure 6-1

The factory default is shown in Figure 6-1. Each unit can have up to 25 profiles. This becomes a powerful method to easily adapt the settings needed for a particular type of patient, or clinical scenario. For example, maybe ST monitoring is not part of the default profile, but can be added by just changing the profile. In addition, clinicians can further customize the profile based upon individual patient needs and unit policies.

System vs. Unit Configuration

There are additional features when configuring Profiles from System Configuration, including Factory, Import, Add Profile, Remove Profile and Set Default. See Figure 6.2.

Within Unit Settings, the additional feature of Set Default per bed label is available.

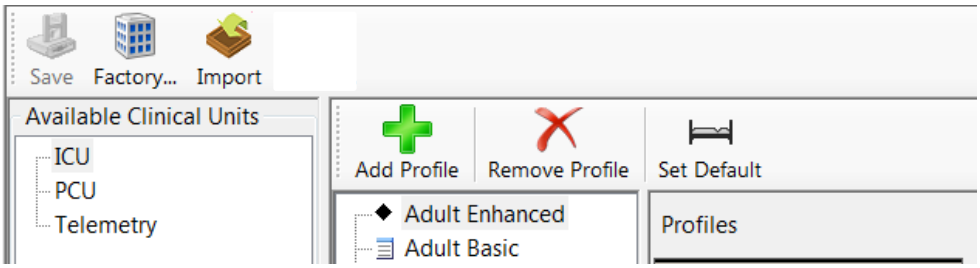


Figure 6-2

Factory

This feature allows you to return any selected profile to the factory settings. See Figure 6-3.

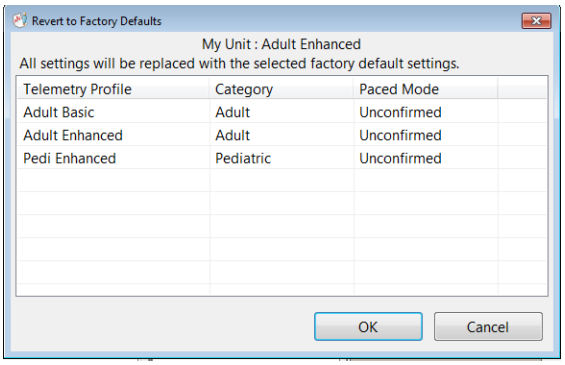


Figure 6-3

1. Choose a profile
2. Select Factory Default
3. Select the Desired Factory Default Profile
4. *The name you have configured WILL NOT revert to the factory settings*

Import

This feature allows you to import the bedside profiles you have created within the Support Tool. Only those elements that are shared with telemetry and the MX40 will be imported, including Patient Category, Paced Mode, and specific Measurements (ECG, Arrhythmia, SPO2 and Resp). The name will be synced.

Generating a file from the Support Tool to import to PIIC iX

1. Run the SupportTool on your PC
2. Select the monitor
3. Choose “Clone from Medical Device”. You will get the cfg file
4. Use Configuration editor under Configuration to import the cfg file. In the Configuration editor, you can look at all the settings
5. Choose File->Configuration export to generate the setting xml file
6. Save to a USB flash drive

Importing Bedside Profiles

See Figure 6-4.

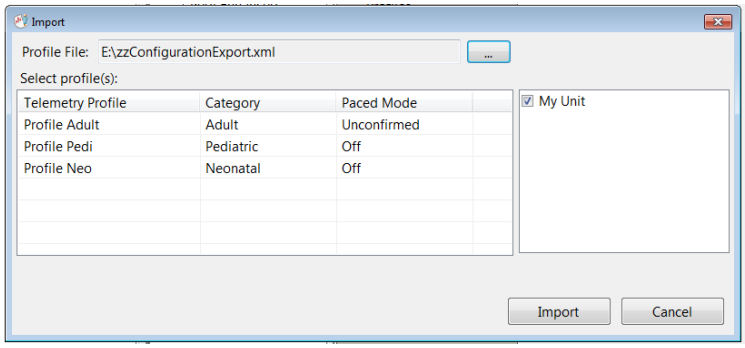
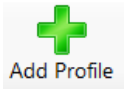


Figure 6-4

1. Select the Import button
2. Select the ellipsis button
3. Choose the .xml file from your USB stick.
4. Select the bedside profiles you wish to import
5. Select the units to import the profiles to
6. Select Import
7. These files will now be listed in each selected unit, in addition to any existing files (ex. Factory default Profiles)

CAUTION: When importing bedside profiles, the SpO2T will remain at the PIIC iX default. The SPO2T measurement will not use the values of the SpO2 imported in the bedside profile.

Add Profile



Selecting Add Profile will open a window. This is a per unit feature.

1. Select a profile for which the new profile settings will be based.
2. Enter a name for the new profile. If you do not rename the profile immediately, it will be called, "Copy of <selected profile>".

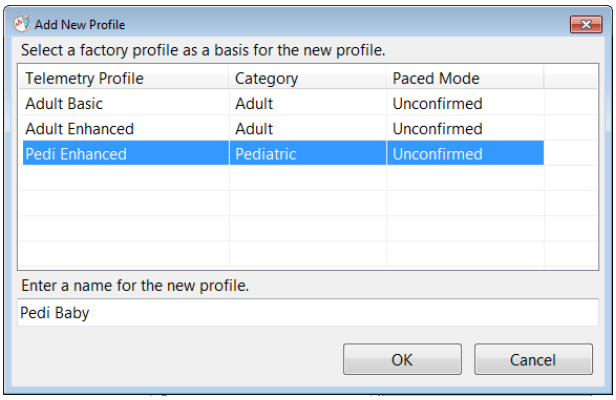
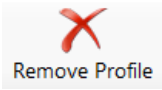


Figure 6-6

Remove Profile



Select this to permanently delete a Profile, and confirm. You will not be able to remove a Profile that is either a default for all or any beds, or is currently assigned to a patient.

NOTE: ***If you permanently delete a Factory Profile, you can choose another profile and revert to Factory as above.***

Set Default

Choose the unit default, as well as configure different default Profiles per bed label.

1. From the drop box, assign the unit default as in Figure 6-7.

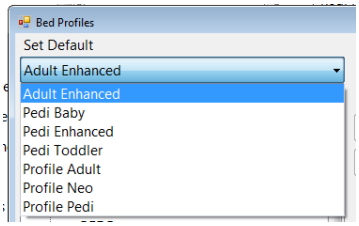


Figure 6-7

2. If there are bedside monitors with different Patient Category defaults
   a. Select the bed label on the left
   b. Select the profile on the right.
   c. Select the double arrows >> in the middle.
3. All bed labels on the left will remain at the unit default. If you wish to return any bed labels to the unit default, select the bed label on the right, and then choose the left-facing arrows. <<

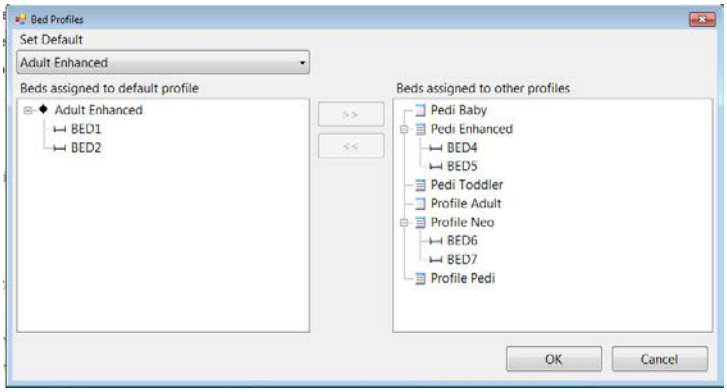


Figure 6-8

Customizing Profiles

To customize a unit profile, select the name of the profile you wish to edit from the list on the left. The profile name will show at the top of the menu on the right. Factory defaults are shown only for the Adult Enhanced Profile. ***To see the factory defaults for each of the three profiles, please see Chapter 14***.

Naming the Profile

The names of existing profiles can be changed. Right click on the profile to Rename as in Figure 6-9.

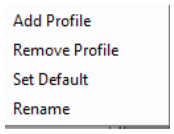


Figure 6-9

Profiles

The first section to edit is called Profiles, and contains two important elements. Factory defaults are shown in Figure 6-10. Remember that these settings for Category and Paced Mode will overwrite the assigned bedside monitor defaults.

Category: For each profile, a patient category is defined. It determines:

- The algorithm the system uses to process and calculate certain measurements, for example, arrhythmia

The safety limits that apply for certain measurements, for example, NBP

Choices are

- Adult
- Pediatric
- Neonatal

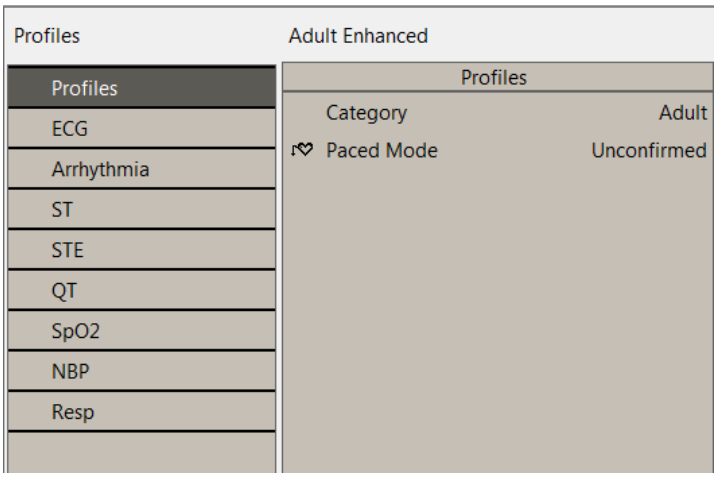


Figure 6-10

CAUTION: Changing the patient category will not change any alarm limits, only the ranges that can be set in configuration. In monitoring mode, changing only the category will only change the algorithms and safety limits – not the alarm limits.

CAUTION: Neonatal should only be used as the default when using bedside monitors in a Neonatal unit. It should not be used on telemetry units or mixed device units, as telemetry is not approved for use with Neonatal patients.

Paced Mode: For each profile, the paced mode is defined, and will become active upon selection of the profile. It is very important the paced mode be set correctly for each patient in order for the algorithm to correctly process the ECG.

Choices are

- Unconfirmed: presents as an icon with a question mark to the clinician, but will process the ECG with Paced Mode On
- On
- Off

WARNING: The Patient Category and Paced Mode set at the default for the PIIC iX Profile will overwrite the default set at the bedside monitor default profile. Care must be taken to assure the defaults for these two settings match.

ECG

Set up ECG settings for each profile. The factory default profile settings are shown in Figure 6-11. Note that some ECG settings, formerly found in Global Settings, have been moved to each profile, in order to match the behavior of the bedside profiles when imported. If you are using an A.x archive, these settings will migrate to all profiles in the Release B system.

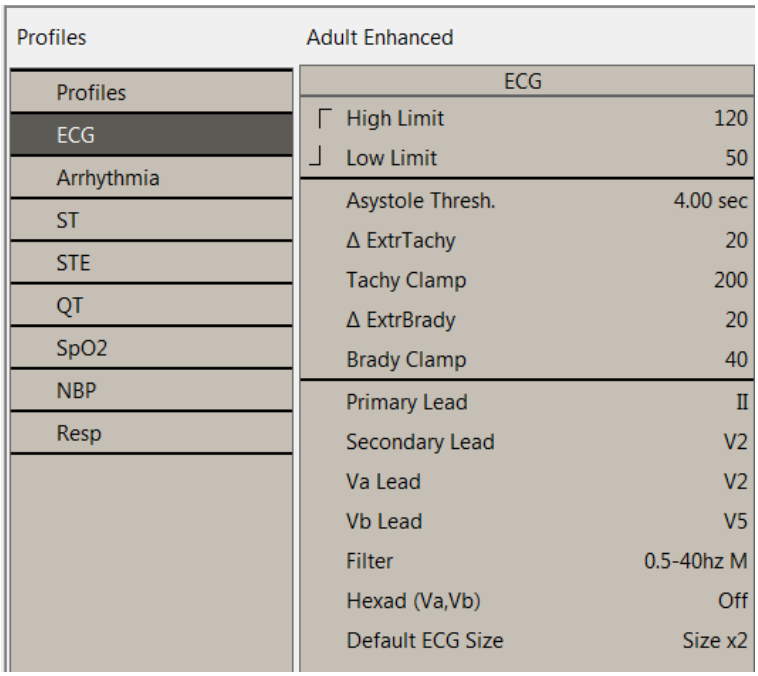


Figure 6-11

High Limit: Set the High Heart Rate limit.

- The range is from the Low Limit (plus an interval) to 300, and choices are 5 beat steps (60. 65, 70…) until <40, then single steps are available (39, 38, 37…).

Low Limit: Set the Low Heart Rate Limit.

- The range is from 15 to the High Limit (minus the interval) and choices are 5 beat steps (60. 65, 70…) until <40, then single steps are available (39, 38, 37…).

Asystole Threshold: This setting lets you adjust the time period between the point where the monitor cannot detect a QRS complex and the indication of an asystole alarm.

- The range is 2.5 to 4.0 seconds, in 0.25 second steps.

Δ(Delta) Extreme Tachycardia: Extreme tachycardia alarms are based on the ECG limit alarms. Use the Δ **ExtrTachy** setting to define the difference between the heart rate limit and the extreme limit. For example, if the heart rate high limit is 120 bpm and the difference is 20 bpm then the extreme tachycardia limit is 140.

- The range is 0 bpm to 50bpm, in 5 bpm steps.

Tachycardia Clamp: The Tachy clamp allows you to configure a safety threshold for the extreme tachycardia alarm limits. For example, if the high heart rate limit is 150 bpm and the Δ **ExtrTachy** setting is 20 bpm (150 + 20= 170) with a Tachy clamp set at 150, the resulting extreme Tachycardia limit would be 150 bpm (instead of 170 bpm).

- The range is 150 bpm to 300 bpm in 5 bpm steps.

Note: The Tachy clamp may change if the High HR limit is raised above the clamp. There will never be a HR High alarm once the limit is above the clamp. Please review the table for further explanation.

If the Tachy delta is 20 and the Tachy clamp is 200:

High HR limit	*Extreme Tachy limit*
170	*190*
175	*195*
185	*200*
190	*200*
195	*200*
200	*200 From here, HR High will never announce, only ***Tachy*
205	*205*
210	*210*

Δ(Delta) Extreme Bradycardia: Extreme bradycardia alarms are based on the ECG limit alarms. Use the Δ **ExtrBrady** setting to define the difference between the heart rate limit and the extreme limit. For example, if the heart rate low limit is 60 bpm and the difference is 20 bpm then the extreme bradycardia limit is 40.

- The range is 0 bpm to 50 bpm in 5 bpm steps.

Bradycardia Clamp: The Brady clamp allows you to configure a safety threshold for the extreme bradycardia alarm limits. For example, if the low heart rate limit is 50 bpm and the Δ **ExtrBrady** setting is 20 bpm (50 bpm - 20 bpm = 30) with a Brady clamp set at 40, the resulting extreme bradycardia limit would be 40 bpm (instead of 30 bpm).

- The range is 15 bpm to 100 bpm in 5 bpm steps

Note: The Brady clamp may change if the HR is lowered to below the clamp. There will never be a HR Low alarm under the clamp, but there may be Pause alarms if the threshold for that alarm is met. Please review the table for further explanation.

If the Brady delta is 20 and the Brady clamp is 40:

Low HR limit	*Brady Limit*
70	*50*
65	*45*
60	*40*
55	*40*
50	*40*
40	*40 From here, HR Low will never announce, only ***Brady*
39	*39*
30	*30*

Primary Lead: This setting determines which lead will default to the primary lead for ECG analysis, as well as which lead will show as the first wave in the sector and Patient Window.

Choices include:

- I
- II
- III
- aVR
- aVF
- aVL
- V1-6
- V7-9: Only used with 6 lead cables for Va and Vb labels, and are not generally used as the default. These V leads would be placed on the posterior chest.
- V3R-V5R: Only used with 6 lead cables for Va and Vb labels, and are not generally used as the default. These V leads would be placed on the right side of the chest.

Secondary Lead: If you are using a 5 or 6 lead cable, this setting determines which lead will default to the secondary lead for ECG Multi Analysis. Choices are the same as for Primary Lead.

NOTE: If you are using a 5 lead cable and you choose V1-V6 as default, it will be labeled V.

Va Lead: If you are using 6 lead cables, this setting determines the default Va lead label.

Choices include:

- V1-6
- V7-9: Only used with 6 lead cables for Va and Vb labels, and are not generally used as the default. These V leads would be placed on the posterior chest.
- V3R-V5R: Only used with 6 lead cables for Va and Vb labels, and are not generally used as the default. These V leads would be placed on the right side of the chest.

Vb Lead: If you are using 6 lead cables, this setting determines the default Vb lead label. Choices are the same as for Va Lead.

Filter: This setting is for the filter on the display of the ECG waves.

- 0.5 - 40 Hz M
- 0.05 – 40 Hz ST – It is not necessary to set the filter to ST when using ST monitoring, and this filter may increase baseline wander.

Hexad (Va, Vb): Hexad is a method to obtain 12 Leads of ECG using a 6-lead cables with the standard placement of electrodes (Mason-Likar). Please see," 12 Lead ECG Monitoring Using a Reduced Lead Set Application Note" - publication# 452296278591.

Note: Pleth wave is On by default for ITS Telemetry in the SpO2 measurement and will have to be turned off in order to turn on Hexad.

Choices include:

- Off
- V1, V3
- V1, V4
- V1, V5
- V2, V4
- V2, V5
- V3, V5
- V3, V6

Default ECG Size: This setting sets the default size of the waves on the sector and Patient Window. Each wave can be changed per patient.

Choices include:

- Size x 0.5
- Size x 1
- Size x 2
- Size x 4

Arrhythmia

Set up arrhythmia settings for each profile. The factory default profile settings are shown in Figure 6-12.

Arrhythmia On/Off: If Off these are the only alarms that will announce:

- Asystole
- Extreme Tachy
- Extreme Brady
- VFib
- High and Low HR

Alarm Thresholds

Alarms will only sound when the configured thresholds are met.

Asystole Threshold: This setting lets you adjust the time period between the point where the monitor cannot detect a QRS complex and the indication of an asystole alarm. This is also available in ECG Settings. (last one configured is saved)

- The range is 2.5 to 4.0 seconds, in 0.25 second steps.

Pause Threshold: This setting lets you adjust the time period between the point where the system cannot detect a QRS complex and the indication of a Pause alarm.

- The range is between 1.5 seconds and 2.5 seconds, in 0.25 steps.

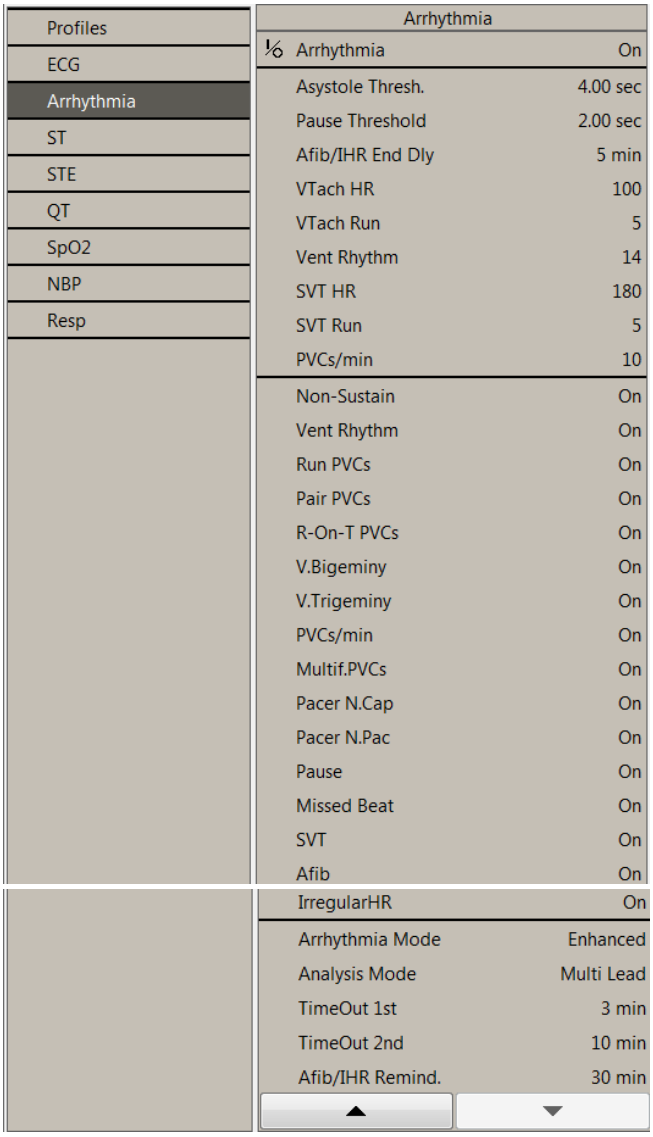


Figure 6-12

Afib/IHR Reminder: This time marks how long the Afib or Irregular HR condition must be absent before the End of Afib/IHR alarm will be announced. There is no separate on/off setting for the End of Afib Alarm or End of Irregular HR alarm. It will follow the state of the Afib and/or IHR alarm.

Choices include:

- 0 min
- 1 min
- 3 min
- 5 min
- 10 min
- 15 min
- 30 min

VTach HR: Both the **VTach HR** and **VTach Run** thresholds must be met for Ventricular Tachycardia alarms to be announced.

- The range is 20 – 300 in steps of 5 bpm.

VTach Run:

- The range is 3 to 99 ventricular beats, in steps of 1 beat.

Vent Rhythm: This is the threshold for the Vent Rhythm short yellow alarm to announce – It will announces if the V's exceed the VTach Run limit but do not exceed the VTach HR limit.

- The range is 3 to 99 vent beats.

SVT HR: Both the SVT HR and SVT Run threshold must be met to announce an SVT alarm.

- The range is 120-300 bpm in 5 bpm steps.

SVT Run:

- The range is 3 to 99 supraventricular beats in steps of 1 beat.

PVCs/min:

- The range is 1 – 99 PVCs/ min in steps of 1 PVC/min

On/Off of the Yellow Arrhythmia Alarms

Set each of the arrhythmia alarms to be on or off by default for each profile.

Choices include:

- On & Unlocked
- On & Locked
- Off & Unlocked
- Off & Locked
- Off & Hidden (if your unit would never use this alarm)

NOTE: If alarms are locked, they will not be able to be changed per patient in monitoring mode.

CAUTION: The Hidden or Locked state will not synchronize with multiple equipment use. For example, if the Pair of PVC alarm is configured to be ON&LOCKED at the bedside monitor, but ON&UNLOCKED at the PIIC iX, the alarm will be available to edit at the PIIC iX when the ECG source is switched to telemetry. It is very important that arrhythmia settings are configured exactly the same in both the monitor and telemetry profiles.

Arrhythmia Basic/Enhanced

You can quickly switch from Basic to Enhanced Arrhythmia settings for a particular profile by indicating this per profile. This is only available in clinical settings, and only applies to IntelliVue Telemetry devices. Bedside monitors and Mx40 Telemetry devices determine if Arrhythmia can be Enhanced.

Choices include

- Basic Arrhythmia
- Enhanced Arrhythmia

CAUTION: The IntelliVueMX40 device controls if the Arrhythmia Mode will be Basic or Enhanced. If configuring Telemetry Profiles for the MX40, always choose that option for the Arrhythmia Mode.

Analysis Mode

This setting is for the analysis of both ST and arrhythmias.

Choices include:

- Multi Lead
- Single Lead

Arrhythmia Time- Out Periods

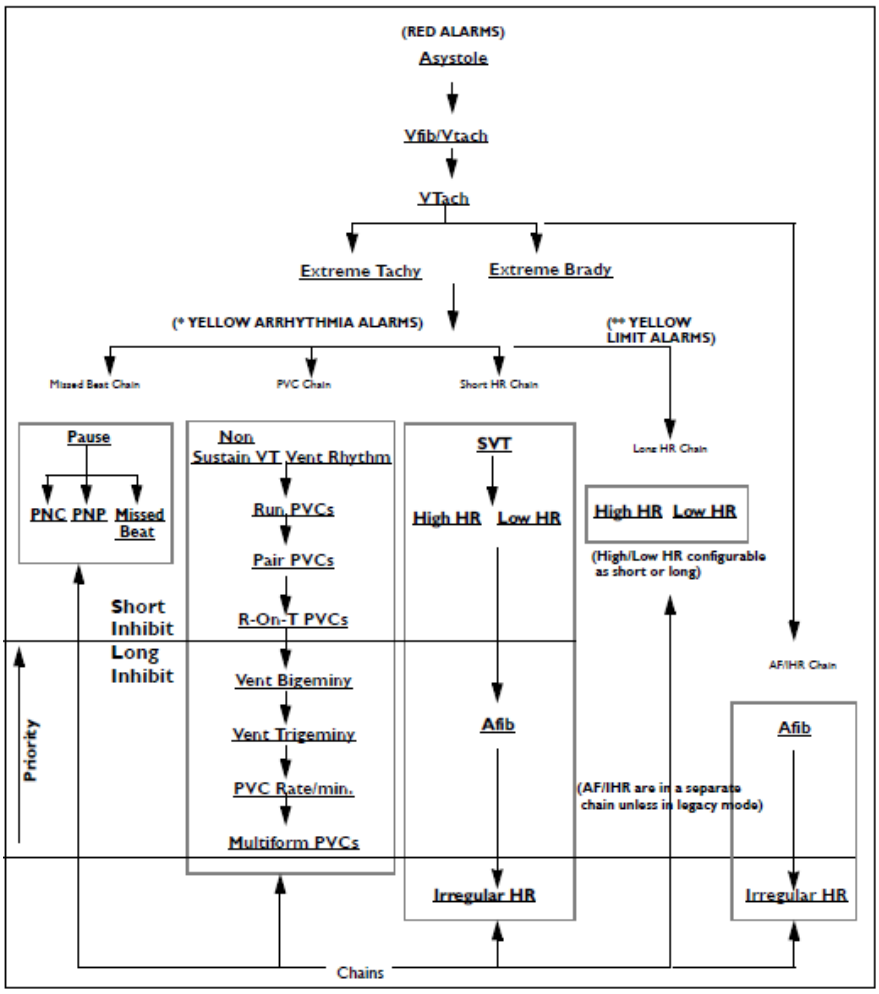
During a timeout period for a particular alarm condition the re-occurring alarm condition or a lower priority alarm condition in the same chain will not annunciate. However, alarm conditions in another priority chain will still annunciate.

CAUTION: Be aware that if you configure a Timeout period to equal or less than two minutes, any arrhythmia alarm condition that reoccurs frequently (more than once per minute), if not silenced, generates an audible alarm only once when it first occurs. For more detail on how arrhythmia alarms are indicated, refer to the section on Arrhythmia Alarms in the Information Center iX Instructions for Use.

Timeout 1st: - Also called the Short Inhibit period - The timeout period for first level yellow alarms can be configured for between 0 and 5 minutes. This setting applies to the Missed Beat, PVC and HR Chains, if HR is configured to Short Yellow (ECG Settings)

Timeout 2nd: Also called the Long Inhibit period - The timeout period for second level yellow alarms can be configured for between 0 and 15 minutes. This setting applies to the Missed Beat, PVC and HR Chains.

Afib/IHR Reminder: Many patients are in Afib or have an Irregular HR for long periods of time. The Afib/IHR alarms are not part of the second timeout period. This setting is to remind users that the patient remains in Afib or continues to have an Irregular HR.



Choices include:

- 10 min
- 20 min
- 30 min
- 60 min
- 120 min

NOTE: Only short yellow arrhythmia alarms have these inhibitory periods. HR can be a short yellow or yellow.

ST

Set up ST settings for each profile. The factory default profile settings are shown in Figure 6-13.

ST Analysis: Analysis must be on for ST values to be determined and alarms to announce.

Choices include:

- On
- Off

ISO/J Point

Choices include

- Auto: determined by the STAR algorithm
- Manual: set by the user

ST Offset:

Choices include

- J+0
- J+20
- J+40
- J+60
- J+80

ISO Point:

Choices include:

- The range is -460msec to 460msec in 4 millisecond increments

J Point:

Choices include:

- The range is -460msec to 460msec in 4 millisecond increments.

Alarms On/Off: Set the default for ST alarms. ST analysis must be on for alarms to announce.

Choices include:

- On
- Off

Auto ST Limits: When configured to be on by default, the ST limits will be the current value +/- 1 mm for all leads with an ST value. These will be rounded to the nearest .02 mm step. The limits are always clamped at +/- 20mm. In order to assure the ECG has stabilized with the initiation of ST monitoring, the first values used for the Auto ST limits will be the first STAR ST baseline, set at about 5 minutes. If a previous baseline has been set, the last stored baseline will be used to generate the auto alarm limits when ST monitoring resumes, or with a transfer from another unit.

Choices include:

- On
- Off

ST Alarm Limits: Select this to choose the limits for all leads. A sub menu of all ST leads will appear to set the High and Low limit alarm for all ST leads. ST alarms will only annunciate if 2 contiguous leads are both in alarm, unless a single lead is only available, such as a V lead in a 5 lead cable. The factory defaults are shown in Figure 6-14.

- The range is -19.8mm to 20.0 mm for High Limits in 0.2mm increments.
    - The High limit can never be set lower than the Low Limits.
- The range for Low Limits is -20mm to 19.8mm in 0.2mm increments.
    - Low limit can never be set higher than the High Limit – and will only show the possible limits

NOTE: ***To return to the original ST menu, select ST again from the left menu.***

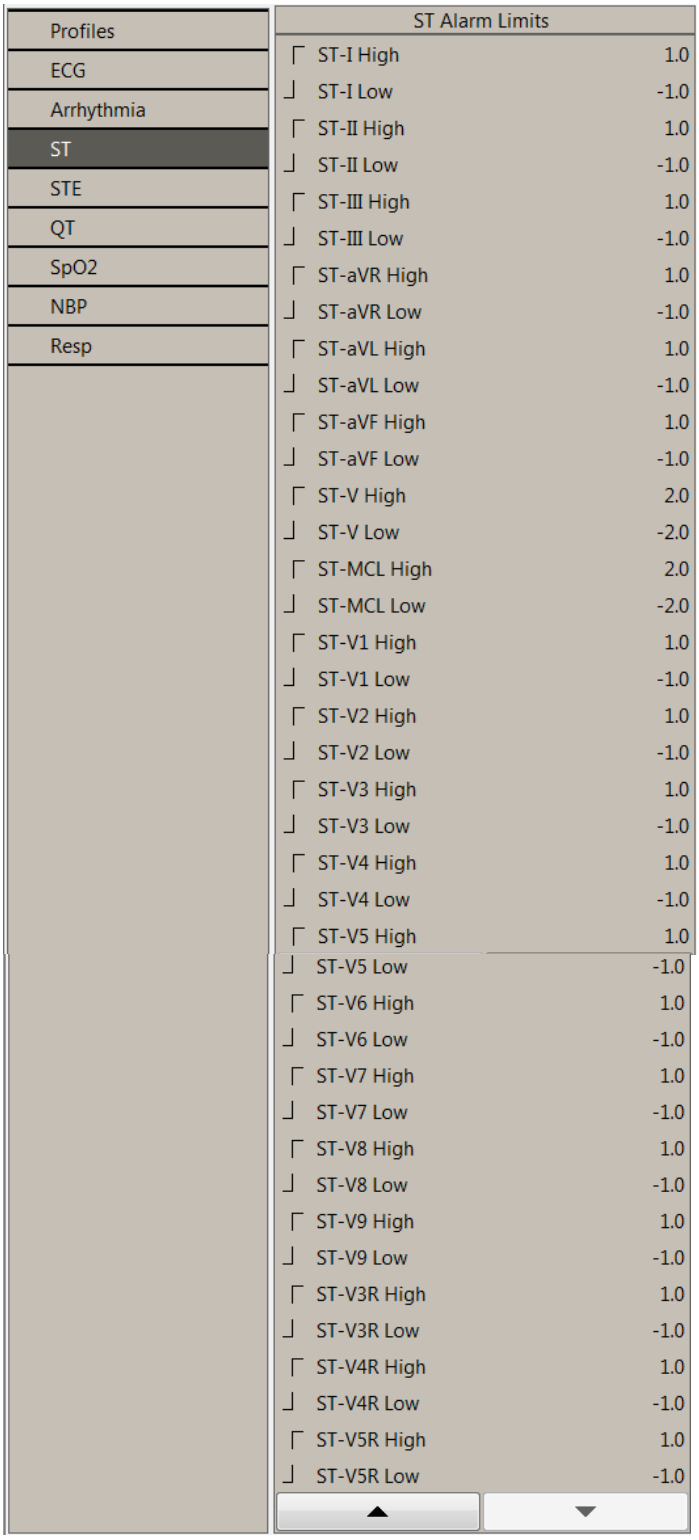


Figure 6-14

STE

Set up STE or ST Elevation settings for each profile. STE always uses the automatic J Point with no offset, just like on 12-lead ECG carts. These automatic measurements are based upon recommendations from Guidelines from the American Heart Association[1] and the American College of Cardiology[2] when looking specifically for ST Elevation**.** Please see, "ST Segment Monitoring Application Note", Publication Number : 4522 962 78611 for further details. The factory default profile settings are shown in Figure 6-15.

STE: This setting determines if STE analysis will be on be default.

Choices Include

- On
- Off

Alarms: This setting determines if the STE alarms will be on by default.

Choices Include

- On
- Off

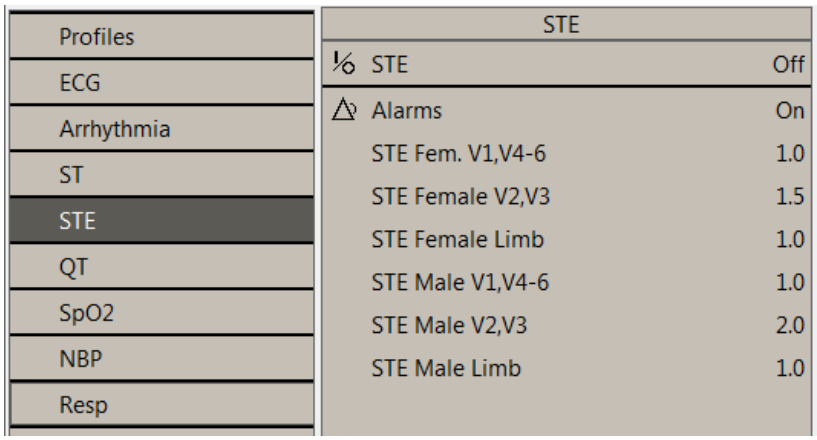


Figure 6-15

STE Alarm Limits: There are only High Limits for STE alarms. Please note the factory default limits in Figure 46, and the lower limit of V2, V3 for female vs. male patients.

- The range for High -19.8mm to 20.0 mm for High Limits in 0.2mm increments

[1] Wagner, Macfarlane, Wellens, Josephson, Gorgels, et. Al. (2009) AHA/ACCF/HRS Recommendations for the Standardization and Interpretation of the Electrocardiogram: Part VI: Acute Ischemia/Infarction: A Scientific Statement from the American Heart Association Electrocardiography and Arrhythmias Committee, Council on Clinical Cardiology: The American College of Cardiology Foundation: and the Heart Rhythm Society: Endorsed by the International Society for Computerized Electrocardiology. *Circulation* 2009;119;e262-e270.

[2] Thygesen, Alpert and White. (2007) Universal Definition of Myocardial Infarction. *Journal of the American College of Cardiology*, Vol. 50, No. 22, 2007

QT

Set up QT settings for each profile. The factory default profile settings are shown in Figure 6-16. Please see, “QT Interval Monitoring Application Note” - Publication Number: 4522 962 78601

QT Analysis On/Off:

Choices Include

- On
- Off

QT Lead:

Choices include:

- All
- Any ECG single lead

QTc High Limit:

- The range is 200 – 800 msec

Δ (Delta) QTc High Limit:

- The range is 30 – 200 msec

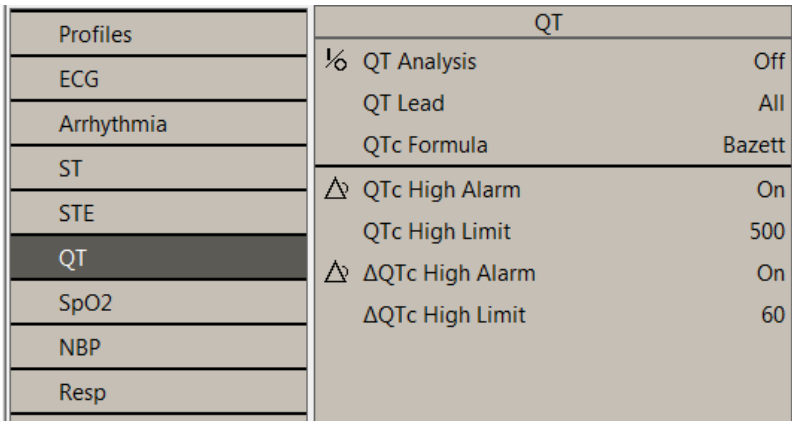


Figure 6-16

QT Analysis On/Off:

Choices Include

- On
- Off

QTc Formula:

Choices Include:

- Bazett
- Fredericia

SpO2

Set up SpO2 settings for each profile. This setting is for telemetry equipment that utilizes SpO2, either from the device or with the Cableless SpO2 pod. The factory default profile settings are shown in Figure 6-17.

High Limit:

- The range is from 100-51% in increments of 1% . The High Limit cannot be lower than the Low limit and will dynamically change to reflect this.

Low Limit

- The range is from 99- 50% in increments of 1%. The Low Limit cannot be higher than the High Limit and will dynamically change to reflect this.

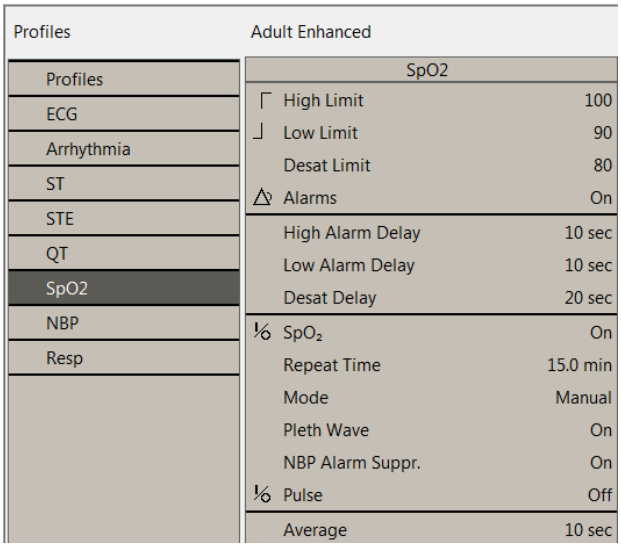


Figure 6-17

Desat Limit:

- The range is from 99-50% in increments of 1%. The Desat Limit cannot be higher than the Low Limit and will dynamically change to reflect this.

Alarms:

Choices include:

- On
- Off

High Alarm Delay: Time the averaged SpO2 needs to be above the limit before an alarm is activated.

- The range is from 0 – 30 seconds in 1 second intervals.

Low Alarm Delay: Time the averaged SpO2 needs to be below the limit before an alarm is activated.

- The range is from 0 – 30 seconds in 1 second intervals.

Desat Delay: Time the averaged SpO2 needs to be at the Desat limit before an alarm is activated.

- The range is from 0 – 30 seconds in 1 second intervals.

SpO2

Choices include:

- On
- Off

Repeat Time: When SpO2 is in Auto mode, you can set the default auto repeat time

Choices include:

- 1 min
- 2 min
- 2.5 min
- 3 min
- 5 min
- 10 min
- 15 min
- 20 min
- 30 min
- 45 min
- 60 min
- 120 min
- 240 min

Mode

Choices include:

- Manual
- Continuous
- Auto

Pleth Wave: For M4841 telemetry transceivers, this setting determine if the Pleth wave will be displayed and stored at the PIIC iX. If this is on, only 3 waves of ECG will be available so assure this is known if the customer is using Hexad monitoring with a 6 lead cable.

Choices include:

- On (default)
- Off

NBP Alarm Supprs: This setting suppresses this Inop that would otherwise be generated when you measure NBP on the same limb as SpO2. If configured on, the system will automatically remember the SpO2 value measured before cuff inflation and suppresses any SpO2 INOPs while the cuff is inflated on the same limb as the SpO2.

Choices include:

- On
- Off

Pulse On/Off: This setting determines if the pulse from SpO2 will be on or off by default.

Choices include:

- On
- Off

Average: The SpO2 numeric represents an average value calculated from several SpO2 values. This setting allows you adjust the averaging time between **5**, **10**, and **20** seconds. It represents the approximate time period used for the calculation. The exact averaging algorithm depends on the SpO2 technology (option) used and on the signal conditions. The longer the averaging time, the longer the time needed until the SpO2 value reflects the physiological event. Fast averaging is useful for situations where an extremely fast measurement is required or few artifacts are expected. Use slow averaging where you expect the number of artifacts to be relatively high.

Choices include

- 5 seconds
- 10 seconds
- 20 seconds

NBP

Set up NBP settings for each profile. This setting is for telemetry equipment that utilizes the Cableless NBP pod. The setting is shared with the NBP CL for MX40 ONLY. The setting will determine which limits show in the sector for M4841 transceivers with NBP CL. The factory default profile settings are shown in Figure 6-18.

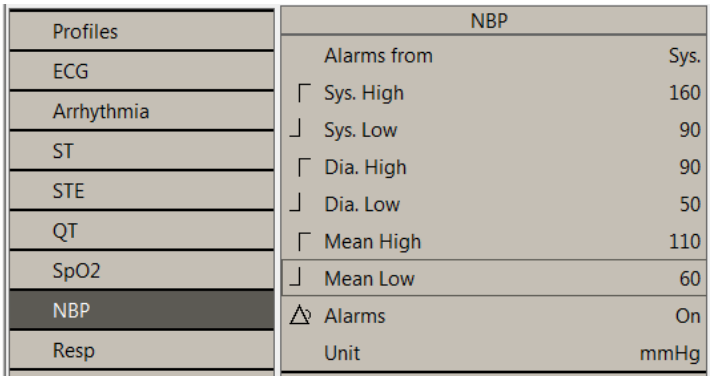


Figure 6-18

Alarms from:

Choices include

- Sys
- Diastolic
- Mean
- Any combination of these

Systolic High

- The range is from 30 to 270 in increments of 5. The High Limit can never be set lower than the Low Limit.

Systolic Low

- The range is from 30 to 270 in increments of 5. The High Limit can never be set lower than the Low Limit.

Diastolic High

- The range is from 30 to 270 in increments of 5. The High Limit can never be set lower than the Low Limit.

Diastolic Low

- The range is from 30 to 270 in increments of 5. The High Limit can never be set lower than the Low Limit.

Mean High

- The range is from 30 to 270 in increments of 5. The High Limit can never be set lower than the Low Limit.

Mean Low

- The range is from 30 to 270 in increments of 5. The High Limit can never be set lower than the Low Limit.

Alarms:

Choices include:

- On
- Off

Unit of Measure:

Choices include:

- mmHg
- KPa

Respiration

Set up Resp settings for each profile. The Respiratory measurement is available by purchase on the Mx40 only. The factory default is shown in Figure 6-19 and is the same in all three Telemetry Profiles.

High Limit

- The range is from 1-100 in increments of 5 until it is set lower than 20, then the increments are in single steps. The High Limit will never be set lower than the Low Limit.

Low Limit

- The range is from 1-95 in increments of 5 until it is set lower than 20, then the increments are in single steps. The Low Limit cannot be set higher than the High Limit.

Apnea Time

Choices include:

- 10 seconds
- 15 seconds
- 20 seconds
- 25 seconds
- 30 seconds
- 35 seconds
- 40 seconds

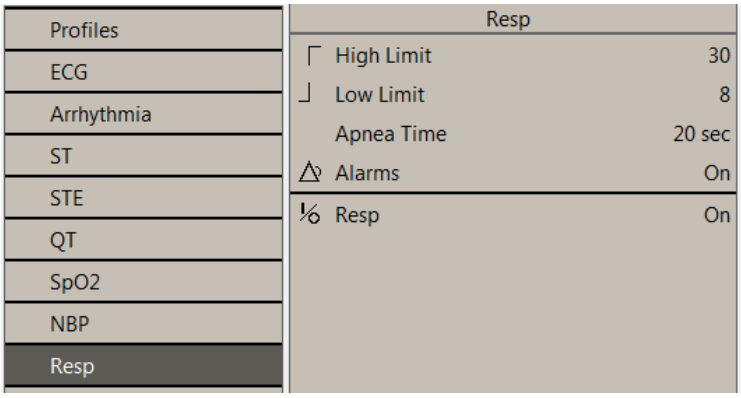


Figure 6-19

Alarms

Choices include:

- On
- Off

Resp: This setting turns the Respiratory Measurement on or off by default on the Mx40

Choices include:

- On
- Off

Alarm Notification

Alarm Notification settings are for secondary alarm notification, such as Paging or for Bed to Bed Overview with IntelliVue bedside monitors.

There are three groups of settings accessed from tabs across the top of the application as shown in Figure 51.

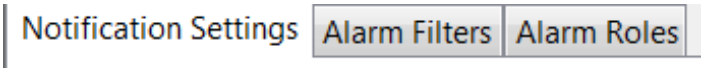


Figure 51

Notification Settings

These settings are used for both types of secondary alarm notification: Paging and Bed to Bed Overview.

Paging Settings

Factory defaults are shown in Figure 7-1.

Automatically Send Alarms: If checked, alarms will be sent to paging devices automatically. You may wish to uncheck this setting in a model where monitor techs manually page alarms via Fast Alarm Review.

Include Patient Name: Check if you wish to see the Patient Name in the paging text, whether using the staff assignment from the PIIC iX or IntelliSpace Event Management.

Inop Delay: Set the time delay that the Inop condition must exist before an alarm is paged or for Bed to Bed Overview Popups.

Choices include:

- The range is 0 seconds to 300 seconds in 5 second intervals.

Wave Pre-Context: Use if your paging devices are sent a picture of the wave; determines how many seconds of wave prior to alarm onset time will be shown in the picture. Six seconds of wave is the total wave duration that can be shown on an end device. For example, if you set your pre time to 3 seconds, you will see 3 seconds before the event and 3 seconds after the event was announced.

- The range is from 1-5 seconds, in 1 second intervals.

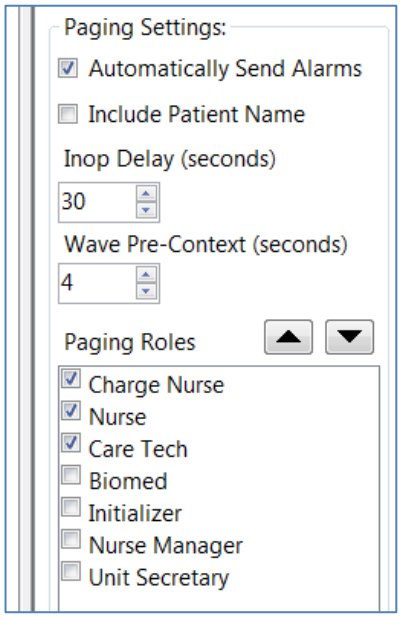


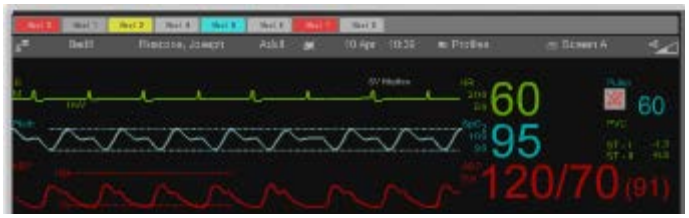
Figure 7-1

Paging Roles: Choose the roles, configured in Security Access > Users and Roles, that will participate in paging for the selected unit. Use the arrow keys to sort up and down, which will then determine the order that the roles are shown in Caregiver Assignment.

Bedside Overview Settings

Bed to Bed Overview provides the ability of caregivers to see alarms on the bedside monitor for other patients in the unit. Factory defaults are shown in Figure 7-2.

Status Bar: A list of beds can show across the top of the bedside monitor if desired. If any of the beds are in alarm, the color of the alarm will be shown with the bed label. The bedside monitor must be configured to show the status bar in the screen.



Choices include:

- Off: The status bar is not used
- By Caregiver: Bed list will include Caregiver Assignment only (size of this type of caregroup is up to 64)
- By Unit: Bed list will include all beds in unit (a unit may be up to 64 beds) (default)

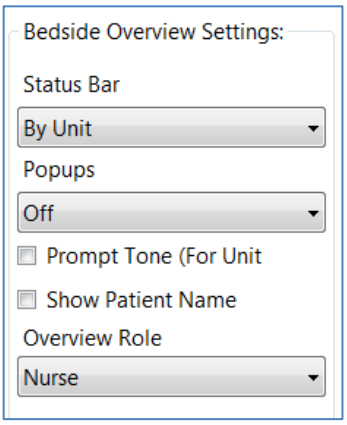


Figure 7-2

Popups: Alarm popup windows will occur on the bedside monitors based upon this setting. The specific type of alarms that will popup are determined in both the Alert Filters and Alarm Roles tab but must be set to By Unit or By Caregiver to show in these tabs.

Choices include:

- Off: no alarms will pop up on bedsides (default)

  By Caregiver: Alarms will pop up for the Caregiver Assignment. You will also need to select the Overview Role below. This option is not available if there are more than 512 beds configured in the unit.

  By Unit: Alarms will pop up for every bed in the unit – no Caregiver Assignment by the user is necessary. Alarm types must still be configured in the Alarm Filters and Roles tabs. This option is not available if there are more than 64 beds configured in the unit.

CAUTION: If the unit has more than 64 beds, Popups must be configured to By Caregiver in order for Own Bed Overview to work.

NOTE: ***The type of popup window is configured in the bedside monitor.***

Prompt tone: If using Unit Popup – check if you wish a tone to announce alarm popup at all the bedside monitors. The volume of the tone is set by the monitor. If using Caregiver Popups, each Caregiver can determine whether their assignment will have a prompt tone.

Show Patient Name: This setting determines if the patient name will show on the alarm popup on the bedside monitor.

Overview Role: Choose the role that will be assigned to the patient for Status Bar or Popup notifications if these are selected to be By Caregiver.

Caregiver Settings

Factory defaults are shown in Figure 7-3.

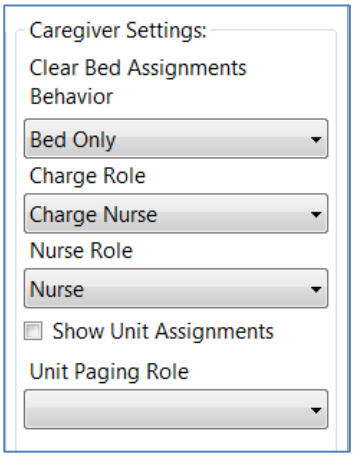


Figure 7-3

Clear Bed Assignment Behavior: This setting determines the behavior of the Clear Assignments button in the Caregiver Assignments application.

Choices

- Bed Only: Clears assignments and color if used
- All: Clears assignments, color and paging devices (if used)

Charge Role: Choose the role that will be assigned to receive Charge Nurse alarm notifications. Always assure the role is configured to receive paging settings.

Nurse Role: Choose the role that will be assigned to receive Nurse alarm notifications. Always assure the role is configured to receive paging settings. The Nurse Role is the only role displayed in Patient Management and the bedside and also is the role associated with color in the sector.

Show Unit Assignments: Unit Assignments allow a caregiver to receive paging alarm notifications for the entire unit without being assigned to a specific bed, similar to the Charge Nurse Role. If not checked, the Unit Assignment area will not display in Caregiver Assignments.

Unit Paging Role: If using Unit Assignments, choose the role that will be assigned to receive Unit Notifications. Note that this role must be different than the Nurse, Charge Nurse, any paging role or Overview Role.

Alarm Filters

Set default alarms for automatic recording, alarm popup at the bedside monitors, and paging.

Record

Choose the alarms that will automatically record. Default settings are shown in Figure 7-4. At the top of the selection, you can choose to turn all alarms on at one time using the “All On” selection.

NOTE: ***Automatic alarm recordings are not possible for an overview patient. Manual recording from the sector, Patient Window or from any review application is available.***

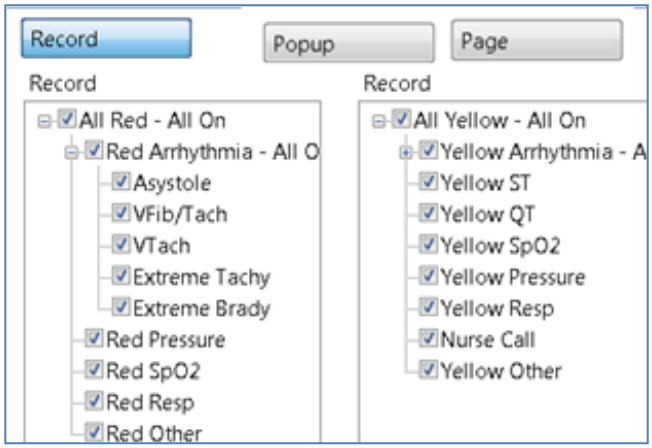


Figure 7-4

Lock Record Settings

You can lock or unlock red and/or yellow recordings. If unlocked, users can turn them on or off per patient. You can also set the status, and then choose Hide if desired. The default settings are shown in Figure 7-5.

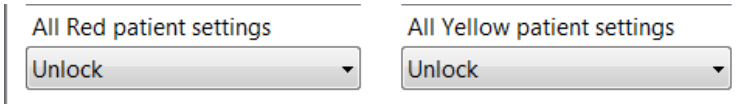


Figure 7-5

Popup

Choose the alarms that will automatically pop up on a bedside monitor. Default settings are shown in Figure 7-6. At the top of the selection, you can choose to turn all alarms on at one time using the “All On” selection. The selection of alarms per patient is not available for Popup. For a list of specific alarms included in the Inop Categories, please see Appendix 3.

NOTE: ***This choice will not be displayed if the Bedside Overview Setting: Popups is set to Off in Notification Settings tab. The alarm category (Red, Yellow, Inop) must still be configured in the Alarm Roles tab.***

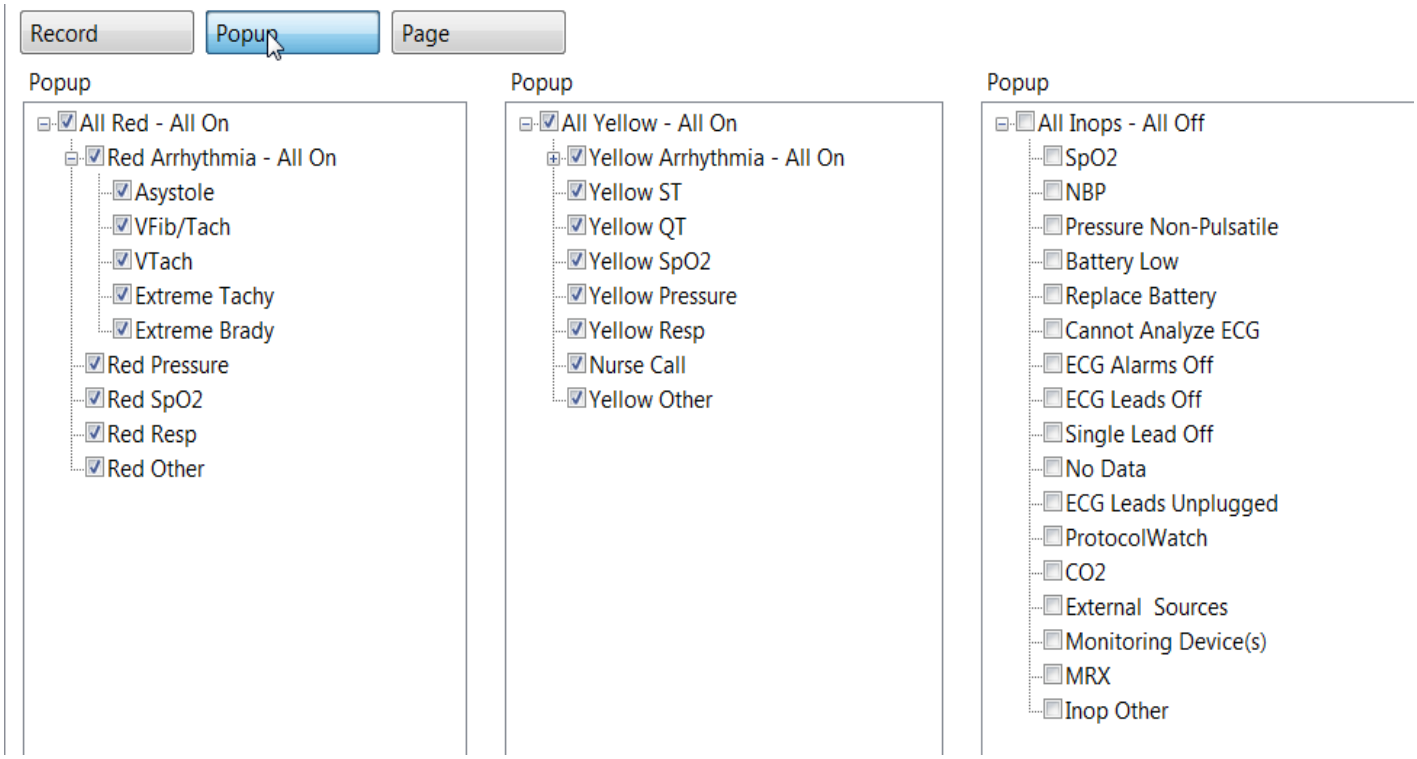


Figure 7-6

Page

Choose the alarms that will automatically page, if set to auto page in Notification Settings. Default settings are shown in Figure 7-7. At the top of the selection, you can choose to turn all alarms on at one time using the "All On" selection. You can also select whether to Lock the Alarm type for paging. Filters determine specific types within the alarm categories for paging. For a list of specific alarms included in the Inop Categories, please see Appendix 3.

NOTE: ***The alarm category (Red, Yellow, Inop) must still be configured in the Alarm Roles tab.***

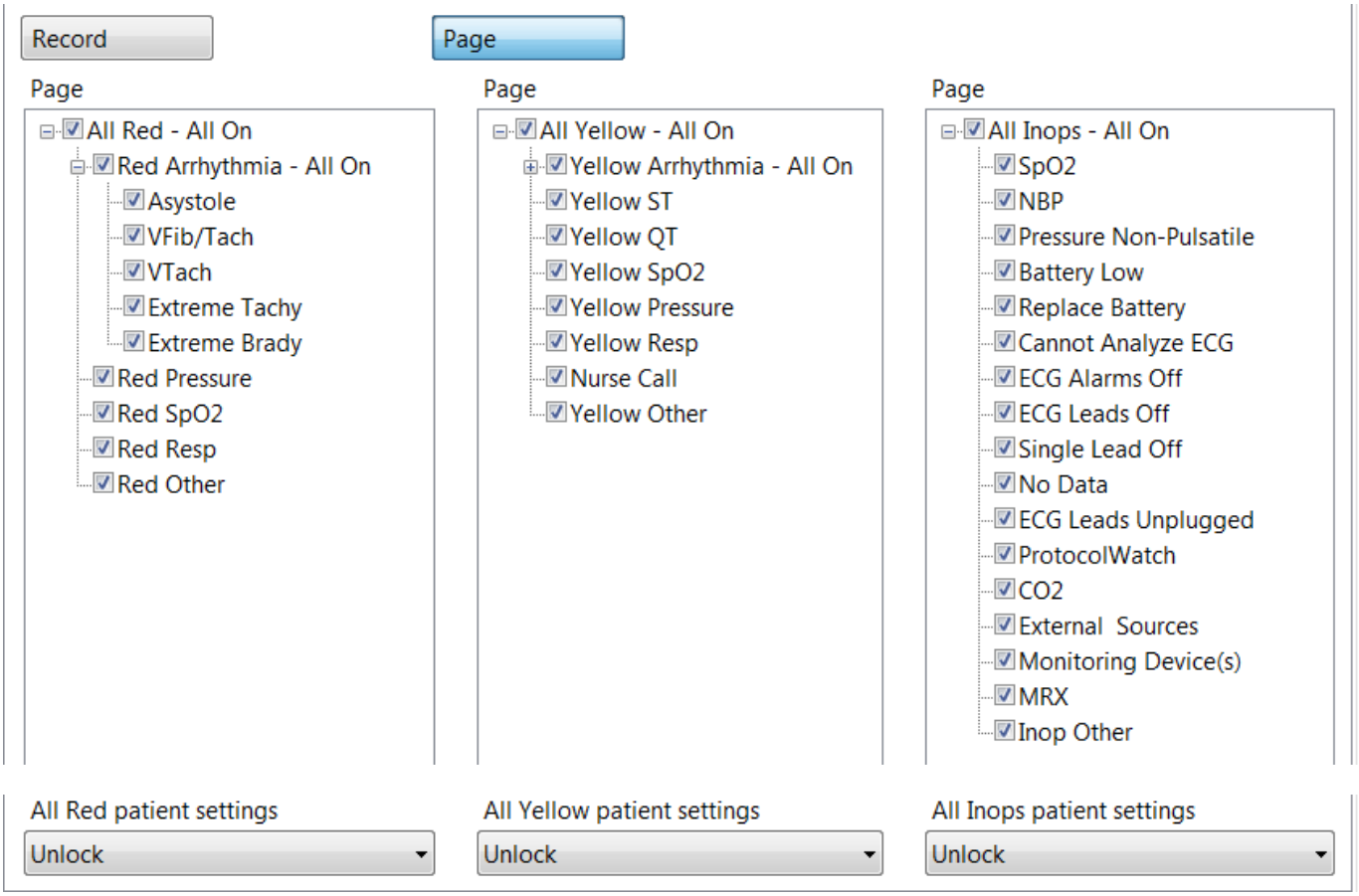


Figure 7-7

Lock Page Settings

You can lock or unlock each category of settings. If unlocked, users can turn them on or off per patient. You can also set the status, and then choose Hide if desired.

Alarm Roles

The roles selected for paging and overview roles from the Notification Settings tab are displayed here.

Each role can be configured to receive certain types of alarms. For example, a nurse may be configured to receive red and yellow alarms, and a care tech may receive Inop alarms. Reminder times for Unsilenced alarms are also set here.

Reminder Intervals

An Unsilenced Alarm Reminder time can be configured for two escalation levels. First and Second Level Unsilenced will be a choice for alarm type to send to a role – for example, the charge nurse role might receive all first level unsilenced red alarms in the unit. The defaults are shown in Figure 7-8.

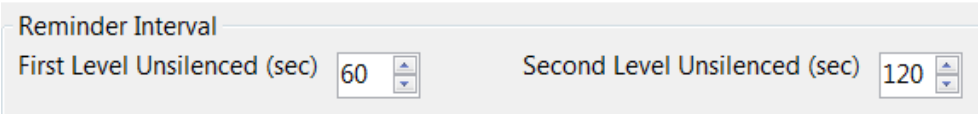


Figure 7-8

First Level Unsilenced: This is a first level of alarm escalation. Select the time to send a page if an alarm has not yet been silenced.

Choices include:

- The range is 0- 120 seconds (default is 60 seconds)

Second Level Unsilenced: This is a second level of escalation and the paging reminders will be based upon this time. The time is from the onset of the alarm, not after the first level unsilenced time.

Choices include:

- The range is 1-300 seconds, but is also dependent on the value chosen for the first level. The second level is always 1 second higher than the First Level Unsilenced value. Default is 60 seconds.

Severities

For each role, select which types of alarms that role should receive. Do this by selecting the box under the role next to the type of alarm. The box will turn green when the alarm type is selected. Factory defaults are shown in Figure 7-9. These must be enabled in conjunction with the Alarm Filters for Paging and popups.

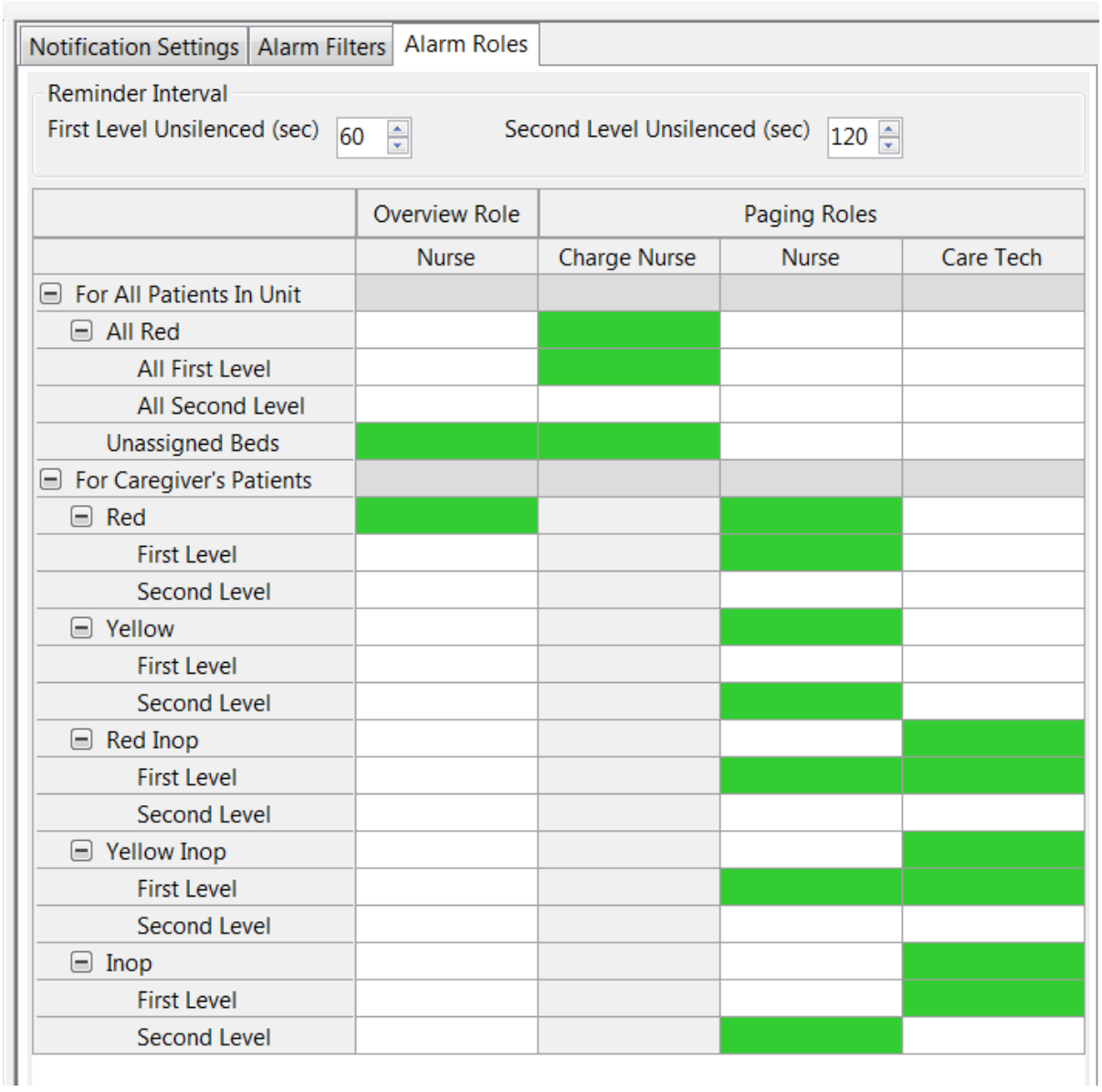


Figure 7-9

Information

For All Patients in Unit

- All Red in Unit: every red alarm in the unit will be sent to that role.
    - All First Level Unsilenced Red in Unit: every first level unsilenced red alarm for all patients in the unit will be sent to that role. If the default is 60 seconds, then every red alarm that has not been silenced for 60 seconds will be paged or popup on bedsides.
    - All Second Level Unsilenced Red in Unit: every second level unsilenced red alarm in the unit will be sent to that role.
- Unassigned Beds – any alarm that would normally be paged or popup, but is not because no one is assigned to the bed, will be sent to this role, often used for the charge nurse role.

For Caregiver's Patient (each also has a first and second level unsilenced reminder choice)

- Red
- Yellow
- Red, Yellow and Cyan Inops

Inop Categories for Paging and Alarm Popup Configuration

Category	Inop
SpO2	SpO2 No Pulse
	SpO2 Poor Signal
	Spo2 Low Perf
	SpO2 Sensor Off
	SpO2 No Sensor
	SpO2 Equip Malf
	SpO2 Sensor Malf
	SpO2T unavailable
NBP	Cuff Not Deflat
	Cuff Overpress
	NBP Equip Malf
	NBP Measure Failed
Pressure Non-Pulsatile	<label> No Pulse
Battery Low	Battery Low, Tele Battery Low, Batt Low
	Batt1 Low
	Batt2 Low
	Batteries Low
	ExtBat Low
	Charge Batt 1 Now
	Charge Batt 2 Now
Replace Battery	Replace Battery, Replace Tele Batt
	Batt Empty
	Batteries Empty, Batt1/Batt2 Empty
	Ext Bat Empty
	Ext Bat Malfunction
	Insert Battery
	Batt1/Batt2 Missing
	Ext Bat Missing
	Batteries Empty
	Batt Malfunction
	Batteries Malfunct, Batt 1, Batt2 Malfunct
	Batt Extensn Malf
	Batt Incompat.
	Batteries Incompat, Batt 1 Batt 2 Incompat

	Ext Bat Incompat.
	SpO2T Unavailable
CannotAnalyzeECG	Cannot Analyze ECG
ECGAlarmsOff	ECG/AR Alarms Off, ECG/Arrh Alarms Off
	Some ECG Alarms Off
	Resp Leads Off
	Pulse Not Alarming
ECGLeadsOff	ECG Leads Off, !! ECG Leads off, !!! ECG Leads off
	Pads Off
	Paddles Off
	Check Pads
	Resp Lead Off
SingleLeadOff	C Lead Off, V Lead Off, RA Lead Off, RL Lead Off, LA Lead Off, LL Lead Off, ECG Lead Off, AS Lead off, AI Lead off, ES Lead off
NoData	Transmitter Off
	No Data PWM, No Data Mon, No Data Tele
ECGLeadsUnplugged	Leadset Unplugged
Protocol Watch	PW: Check Settings
	PW: Action Required
	!!PW: Action Requ'd
CO2	CO2 Occlusion
	O2/CO2 No Sensor
	CO2 No Sensor
	CO2 No Transducer
	O2/CO2 Equip Malf
	CO2 Equip Malf
External Sources	Vuelnk Check Setup, Device Check Setup
	Device Chk Config, VueLnk Chk Config
	<type> Equip malf
	<type> Unplugged
	Device Unsupported
	VueLnk Equip Malf
	No Device Data
	VueLnk Chk Config

Monitoring Devices	No Central Monitoring
	Central: Tele Only
	Tele Disconnected
	No ECG at Central
	TAAP Disabled
	Out of area
	No ECG Source
	Check ECG Source
	Check Equipment
	Check ECG Settings
	Chk SpO2T Settings
	More Bed Alarms
	!! More Bed Alarms
	!!! More Bed Alarms
	cl NBP Batt Low, cl SpO2 Batt Low
	cl NBP Batt Empty, cl SpO2 Batt Empty
	cl NBP Serv Batt, cl SpO2 Serv Batt
	cl NBP Check Batt, cl SpO2 Check Batt
	cl NBP Batt Incomp, cl SpO2 Batt Incomp
	cl NBP Batt Malf, cl SpO2 Batt Malf
	cl NBP Batt Temp, cl SpO2 Batt Temp
	cl NBP No Cradle, cl SpO2 No Cradle
	cl NBP Remove, cl SpO2 Remove
MRX	Defib Shutdown
	Pacing Stopped
	Pace on Batteries
	Pads ECG Malf,
	Paddles Cable Malf
	Pads Cable Malf
	Defib Malf
	ECG Cable Malf
Inop Other	EC10/40/80 Device Inops (from the device itself)
	Any Inop not in another Inop Category

Reports

Set up report templates, reports and choose destination printers.

Figure 8-1

There are seven groups of settings accessed from tabs across the top of the application as shown in Figure 8-1. Four of these are require clinical configurations, although consultation with each may be needed. These include Layouts, Scheduled, Monitor Reports and Strip Settings. Details for Destinations, Monitor Queus and Electronic Reports settings Information can be found in the Service Guide.

Layouts

Setup Layout allows configuration of the templates for both portrait and landscape reports. Both must be set up separately. The specific report will be configured to print in either Portrait or Landscape in the Destinations tab.

Configure Layout Type

First set up the template for all Portrait reports. When complete, use the drop box in Figure 8-2 to change to Landscape and set up the template for all Landscape Reports.

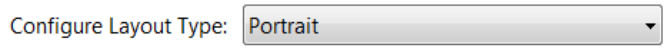


Figure 8-2

Then configure the header and footer as shown in Figure 8-3.

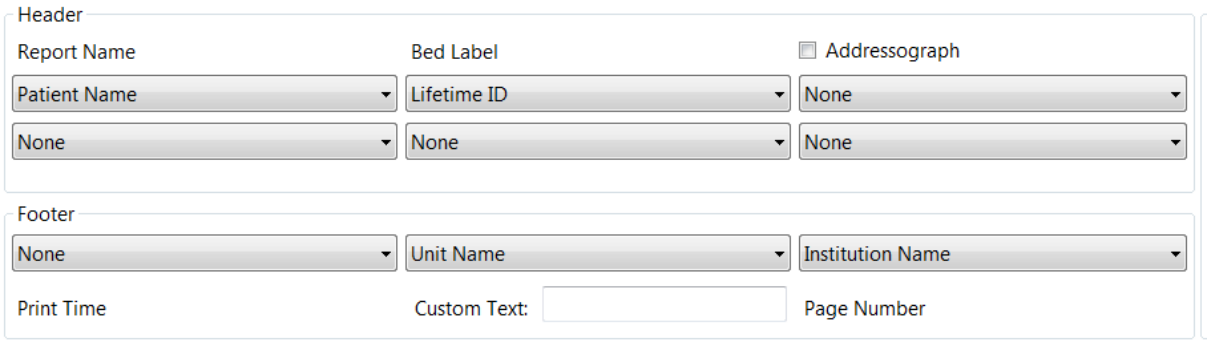


Figure 8-3

Header:

There are up to 3 rows that can be configured for the Header.

1. Top row of header
    a. Report Name: This field is not configurable. The report name will always show on the top left of the report.
    b. Bed Label.
    c. Addressograph: Check the box if used; this will take the space of two choices below it.

2. Middle row of Header: There are 3 fields available to configure
3. Bottom row of Header: There are 3 fields available to configure

Choices for the Middle and Bottom Header row (and top row of Footer) include:

- Patient Name
- Lifetime ID
- Unit Name
- Institution Name
- Encounter ID
- Alternative ID
- DOB
- None

Footer

There are 2 rows that can be configured in the Footer.

1. Top row of Footer: There are 3 fields available to configure.
2. Bottom row of Footer
    a. Print time: This is not configurable. Print time will always print in the lower left of the footer
    b. Custom text: Add custom text if desired.
    c. Page Number: This is not configurable. The Page number will always print in the lower right side of the footer. The format is Page # of Total Pages, as in Page 5 of 6.

Margins

On the far right, choose margins for each type of report (Figure 8-4).You may have to move some of the panes on the left over to see this.

- The range is 0-100centimeters.

NOTE: ***Once you have completed the template for Portrait, don't forget to change to Landscape and configure that report template***.

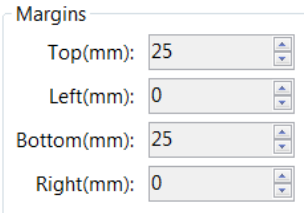


Figure 8-4

Destinations (Service Setting)

This tab provides the settings needed to set up which printers will be assigned to each report available in the PIIC iX. It also is used to determine if the report will be Portrait or Landscape, and if it will print to Paper, Electronic, Both or Ask the user to choose.

Other settings include setting Max pages for the following reports- note that 10 is the maximum number for any report:

- Alarm
- ECG statistics
- Tabular Trend

IN addition, each report can be configured to print either in color, in duplex, or both. The second tab is covered in detail in the Service guide.

NOTE: ***It is in the Destinations tab that reports are configured to print Landscape or Portrait. Note that the following always print in Landscape no matter the configuration:***

- 12 Lead Capture Report
- QT Report
- ST Snippets Report
- Review Report (Cardiac only – and only if ST Snippets tile is included in the report)

Scheduled

Certain reports are available to be set up to automatically print on a set schedule. You can set certain defaults for each type of report. No reports are scheduled by factory defaults. Reports available for scheduling are shown in Figure 8-5. Click on the report and then configure the start time, frequency, and for certain reports, the settings.

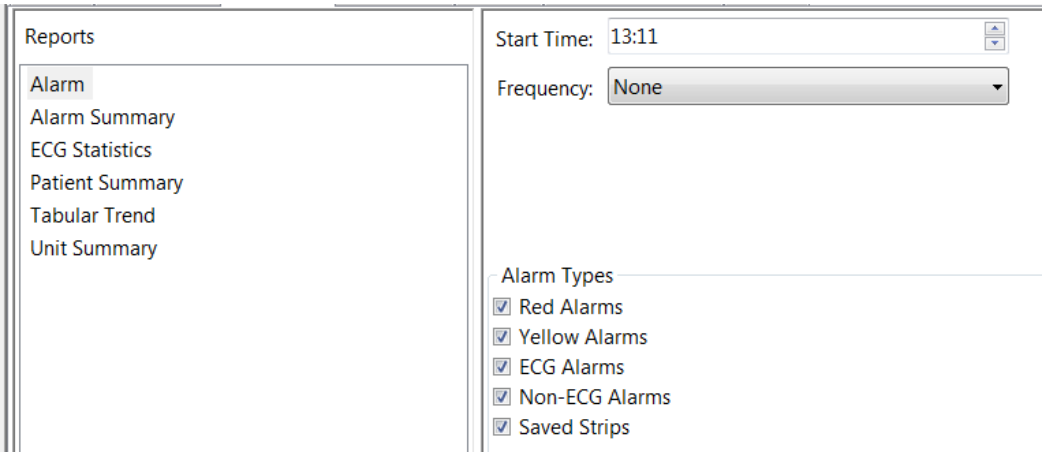


Figure 8-5

Available Reports:

- Alarm – A defined set of alarm and/or saved strips
- Alarm Summary – A report of the highest number of alarms with its associated trend to assist in the proper setting of alarms per patient. The alarm trends include Heart Rate, SpO2, NBP, Arterial Pressure, Resp, and PVC with the highest number of alarm in each measurement. Additionally, there is a table of the highest number of alarms for ST and Inops.

Note: The frequency set for printing determines the duration of trends and alarm count in the report. For example if you print every 4 hours, you will see a 4 hour trend, and the total alarms for each parameter in the last 4 hours (minus 1 minute)

- ECG Statistics – Statistics gathered from the STAR analysis of ECG, for example, percent paced.
- Patient Summary – includes demographics, most recent vital signs, last 5 alarms (within the last 12 hours) and a wave strip.
- Tabular Trend- vital sign table
- Unit Summary – a unit report with all the information included in the Patient Summary without the strips.

Start Time: The start will default to the current time. Highlight the hours and minutes to set to a certain time for the first printing. The frequency will then determine the next print time. Each report can be set to have its own schedule frequency.

NOTE: A scheduled report follows the same settings set in destinations for that report.

NOTE: Consider starting time to be after the hour, such as 8:05 to assure 8am data is present as it takes up to one minute to store to the database.

Frequency: Choose how often the report will automatically print.

Choices include:

- None (default)
- Every hour
- Every 2 hours
- Every 4 hours
- Every 6 Hours
- Every 8 Hours
- Every 12 Hours
- Every 24 Hours

Alarm Report

Strip Filter: Choose the type(s) of alarm strips to print in the scheduled Alarm Report.

NOTE: The report will only be able to show the last 40 alarms maximum, if margins are kept to a default and reports are printed in portrait. This also assumes a maximum number of pages of 10.

In Portrait mode with no change to default margins, 4 alarms will print per page. In Landscape mode, 3 alarms will print per page. Check with service installation as to layout.

Choices include:

- Red Alarms
- Yellow Alarms
- ECG alarms
- Non-ECG alarms
- Saved Strips

Tabular Trend

Tabular Interval: Choose the time intervals for the report.

NOTE: Only 10 pages will print at a maximum. (duplex printing will be 5) with 10 intervals per page. Schedule the frequency accordingly.

Choices include:

- NBP Interval
- 10 Minutes
- 15 Minutes
- 30 Minutes
- 1 Hour

ECG Statistics

Tabular Interval: Choose the time interval for the report.

NOTE: This report, if shown at the Algorithm Interval, should be scheduled to print at the Every Hour frequency to assure all intervals are documented. Due to how the ECG statistics are calculated, only the Algorithm interval will have all available statistics.

Choices include:

- Algorithm Interval (default)
- 10 Minutes
- 15 Minutes
- 30 Minutes
- 1 Hour

Monitor Reports

From a bedside or MX40, you can generate three reports, labeled Report A, B and C on the device. The type of report that will print is configured here. The available reports are shown in Figure 8-6.

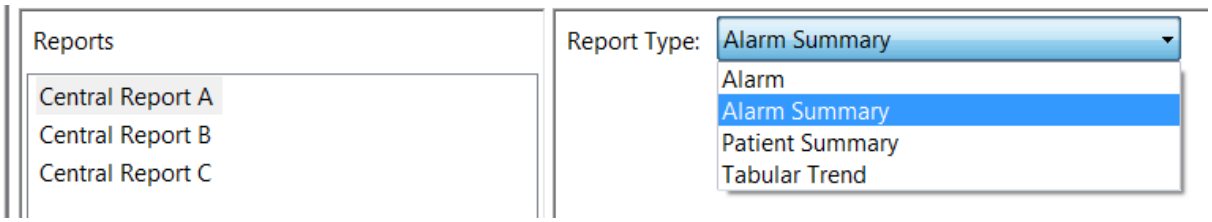


Figure 8-6

Report Configuration

Choose the Report name on the left and then configure the report on the right. Repeat for each report.

Report Type:

Choices include:

- Alarm (default Report A)
- Alarm Summary
- Patient Summary (default Report B)
- Tabular Trend (default Report C)

Max Number of Pages: only available for Alarm and Tabular Trend Reports.

Choices include:

- 1 page
- 2 pages
- 3 pages
- 4 pages
- 5 pages
- 10 pages (default)

Strip Filter: only available for Alarm Reports. Choose the type of alarms to print in the scheduled Alarm Report.

Choices include:

- All Strips (default)
- All Alarms

- Red Alarms
- Yellow Alarms
- ECG alarms
- Non-ECG alarms
- Saved Strips
- Red and Yellow Alarms

Tabular Interval: only available for Tabular Trend Report

Choices include:

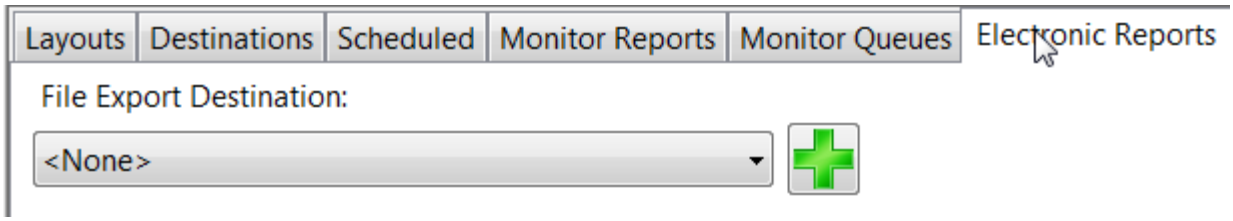
- NBP Interval
- 1 minute
- 5 Minutes
- 10 Minutes
- 15 Minutes
- 30 Minutes (default)
- 1 Hour
- 2 Hours

Monitor Queue (Service Settings)

These settings configure the queues in the bedside queue list. Three print queues can be configured. Select the Edit button next to each queue. If you want paper reports, select a printer. If you want Electronic Reports, select None and check the box for Electronic Document. (default). It is here that the paper size, Duplex and Color settings are also configured for the bedside reports.

Electronic Reports (Service Settings)

This tab permits configuring the destination of electronic (pdf) reports. File shares are created in the Interfaces tab of File Destinations, or can be created here by selecting the large green icon.



Strip Settings

This tab can be used to set the pre and run time of a printed strip, very similar to Recording. (Figure 8-7)

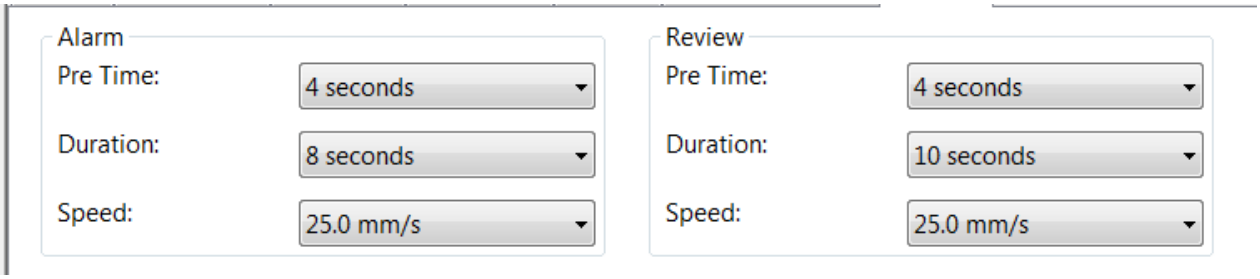


Figure 8-7

Real Time/Alarm reports

Alarm strips will print automatically if checked in Alarm Notification settings, or manually from Alarm Review. Real Time refers to the delayed recording that can be initiated any time from the sector. These settings also apply to the Continuous recording which can be initiated from the Patient Window.

PreTime: Set the amount of time before the time focus of the strip to print.

Choices include:

- 2 seconds
- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds

Run Time: This is the total duration of the recording and includes the above Pre Time.

Choices include:

- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds
- 15 seconds
- 20 seconds

Speed:

Choices include:

- 6.25 mm/sec
- 12.5mm/s
- 25.0 mm/s
- 50.0 mm/s

Review application print

When you are in any of the review applications, you can choose to print a wave strip.

PreTime: Set the amount of time for a strip to record before the time focus in the review applications.

Choices include:

- 2 seconds
- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds

Run Time: This is the total duration of the recording and includes the above Pre Time.

Choices include:

- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds
- 15 seconds
- 20 seconds
- 30 seconds

*NOTE: **These settings now override any run time settings made. Please assure your strip settings are saved at the same speed as the strip in Retrospective Configuration. Users cannot change the speed and print with the new speed – they will always print at the speed selected here.***

Recordings

Configure settings for recorders when recording wave strips. There are two groups of settings accessed from tabs across the top of the application as shown in Figure 9-1. Recorder Settings will be reviewed in this document. Details for Recorder Assignment information can be found in the Service Guide.

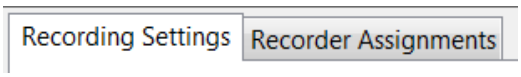


Figure 9-1

Recording Settings

Recording settings are needed for both delayed/alarm and review application recordings. Factory defaults are shown in Figure 9-2.

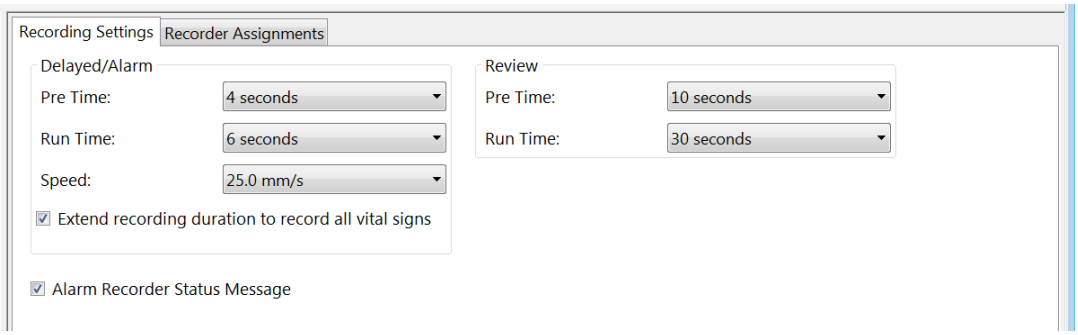


Figure 9-2

Real Time/Alarm recordings

Alarm strips will record automatically if checked in Alarm Notification settings, or manually from Alarm Review. Real Time refers to the delayed recording that can be initiated any time from the sector. These settings also apply to the Continuous recording which can be initiated from the Patient Window.

Delayed and Continuous recordings can also be generated from the bedside. The bedside recording settings can be configured (within the bedside) to use IIC Unit settings described here or settings entered at the bedside.

PreTime: Set the amount of time for a strip to record before the beginning of the event for alarm strips, and from time of request for all other recordings.

Choices include:

- 2 seconds
- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds

Run Time: This is the total duration of the recording and includes the above Pre Time.

Choices include:

- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds
- 15 seconds
- 20 seconds

Speed:

Choices include:

- 6.25 mm/sec
- 12.5mm/s
- 25.0 mm/s
- 50.0 mm/s

Review application recordings

When you are in any of the review applications, you can choose to record a wave strip.

PreTime: Set the amount of time for a strip to record before the time focus in the review applications.

Choices include:

- 2 seconds
- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds

Run Time: This is the total duration of the recording and includes the above Pre Time.

Choices include:

- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds
- 15 seconds
- 20 seconds
- 30 seconds

NOTE: Settings for the Run Time will be as close as possible if set to less than 10 seconds. However, alarm label length and associated vital signs may extend the run time of the recording.

Extend Recording Length to Include All Vital Signs

New in B.01, if you do not want the recording to automatically extend to include all available vital signs, but instead to ONLY follow the duration, uncheck this box.

Alarm Recorder Status Message

If you are not using recorders in your unit, uncheck this box, in order to prevent a Status Message of "Recorder Not Connected".

Recording Assignments

Recording Assignments are used to remote recordings to a different Surveillance or Overview stations. Each station can have only one recorder. Auto alarm recordings will always record at the recorder assigned to the Surveillance station on which the patient resides.

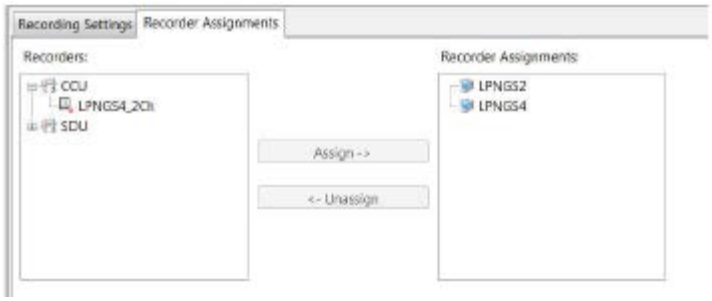


Figure 9-3

All stations have a recorder assigned by default. The red x next to the name indicates a recorder is not physically plugged into the station as shown in Figure 9-3.

To assign remote recorders, select a PIIC iX name on the left, then a Recorder name on the right , then click the Assign button in the middle. Un-assign remote recorders in the same fashion.

12-Lead ECG

If you have purchased the option to Analyze/Export 12-Lead ECG, 12-lead Capture Review or the Specialty Review applications, you will need to configure these settings.

There are four groups of settings accessed from tabs across the top of the application as shown in Figure 10-1, and include Setup, Analyze, Export and Order Reasons.

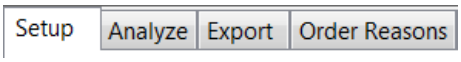


Figure 10-1

Setup

These settings are for the display and printout of the Multi-Lead tile which is available for specialty review applications, and is included in the factory default of Cardiac Review. This is especially important if you have also purchased either EASI, Hexad or 12 Lead Full Disclosure wave storage.

NOTE: ***For 12-lead ECG Captures performed at the bedside, the settings from the bedside are used at the Information Center and will be exported. The settings is both devices should be set to match. Please consider harmonizing the settings across multiple units and devices.***

Defaults are shown in Figure 10-2.

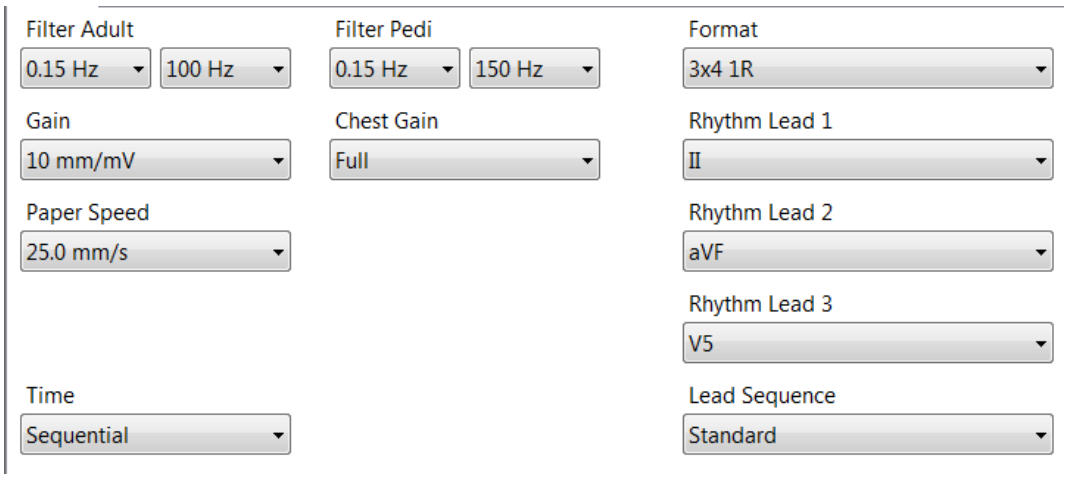


Figure 10-2

Filter Adult: These settings only apply as the backup settings for captured 12 Lead ECGs.

High Pass Choices

- 0.15 Hz
- 0.05 Hz
- 0.5 Hz

Low Pass choices include

- 40 Hz
- 100 Hz
- 150 Hz

Filter Pedi: These settings only apply as the backup settings for captured 12 Lead ECGs.

High Pass choices include

- 0.05 Hz
- 0.15 Hz
- 0.5 Hz

Low Pass choices include

- 40 Hz
- 100 Hz
- 150 Hz

Gain (Limb): This setting lets you select the limb lead gain for both display and printout

Choices include

- 2.5 mm/mV (x ½)
- 5 mm/mV (x 1)
- 10 mm/mV (x 2)
- 20 mm/mV (x4)

Chest Gain: This setting lets you select the chest lead gain for both display and printout, relative to the limb lead gain. Minimum size for Limb Gain must be 5 mm/mV in order to choose Half for Chest Gain.

Choices include

- Full
- Half

Paper Speed: This setting lets you select the speed for both display and printouts.

Choices include

- 25 mm/s
- 50 mm/s

Time: This setting lets you define the interval of time for all leads, when displaying or printing two or more columns.
Choices include

- **Sequential**: Time is the same for the first column then the next column will be the next time sequence, depending on format.

  For example, with a 3 x 4 format, all ECG signals start at 0 in the first column, 2.5 seconds in the second column, 5.0 seconds in the third column, and 7.5 seconds in the fourth column. (Figure 10-3)

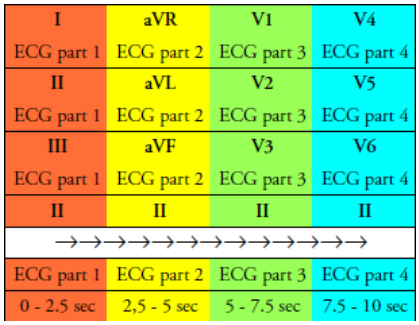


Figure 10-3

  In a 6.2 format, the first column would start at 0 and the second column at 5 seconds. In a 12 x 1 format, all leads would start at the same time.

- **Simultaneous**: The ECG starting point of each lead is the same time even though they may appear to start at different times on the ECG. (Figure 10-4)

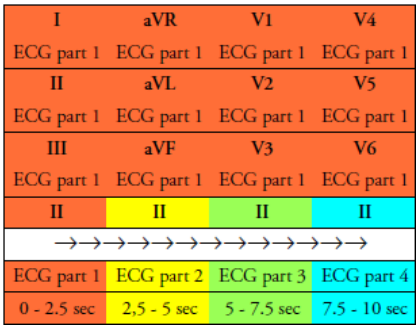


Figure 10-4

Format: This setting lets you select the layout for display and printout.

Choices include

- 12 x 1
- 6 x 2
- 3 x 4
- 3 x 4 1R
- 3 x 4 3R
- 3 x 4 ST Map
- 3 x 4 1 R ST Map

Note: If using extended V labels, these will always show below the standard labels.

NOTE: ***Extended V labels will always display under the standard lead space. For example, with a 3x4 layout, a 4th row will be added for extend V labels.***

NOTE: ***Extended V labels will not display in an ST Map, but will be displayed in a column beside the Chest Map.***

Note: If including ST Map, extended V labels are not shown in the Map, but are shown next to the Chest Map.

Rhythm Lead 1, 2 and 3: This setting lets you select which lead will be used as rhythm lead 1, 2 or 3, depending on the format chosen.

Choices include

- I
- II
- III
- aVR
- aVF
- aVL
- V1
- V2
- V3
- V4
- V5
- V6

Lead Sequence: This setting lets you define the sequence in which the leads are presented.

Choices include

- Standard (I, II, III, aVL, aVF, aVR – V leads in order)
- Cabrera (aVL, I, -aVR, II, aVF, III – V leads in order) Cabrera order makes it easier to visualize waveform progression in the frontal plane. Please see the Philips DXL ECG Algorithm Physician's Guide.

Analyze

These settings only apply to diagnostic 12 Lead Captures. Factory defaults are shown in Figure 10-3.

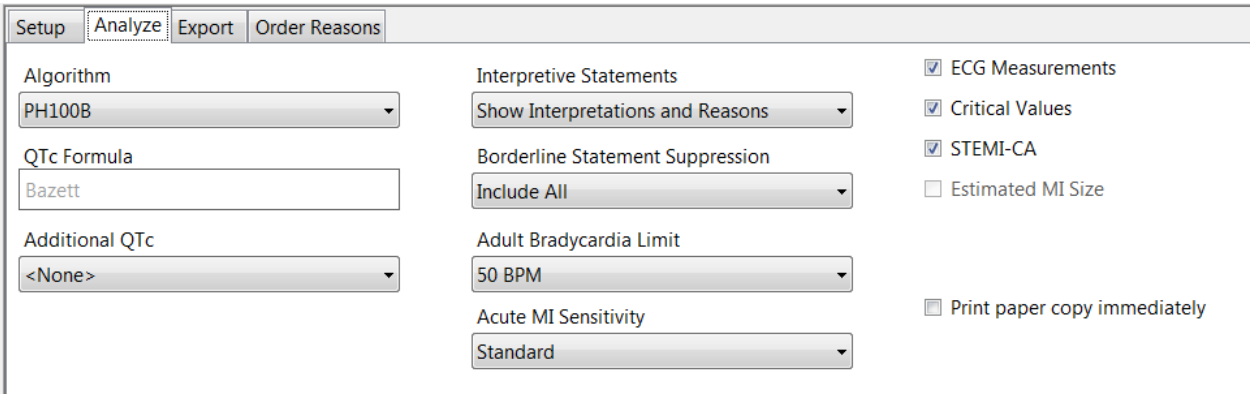


Figure 10-5

Algorithm: Choose the DXL algorithm[1] to be used for analysis. Care should be taken to use the same algorithm of the Philips ECG cart if necessary.

Choices include

- PH100B
- PH110C

CAUTION: If different algorithms are used in other PIIC IX centers or the 12 Lead Cart, care must be taken when comparing captures from different sources. Computerized ECG interpretation is not intended to be a substitute for interpretation by a qualified physician.

Print paper copy immediately: Paper copy will print upon capture.

QTc Formula: This will always be Bazett (QTc) no matter the algorithm.

Additional QTc: You may choose to have an additional QTc formula calculated and printed on a report.

Choices include

- None
- QTcF (Fridericia)- only additional choice available with PH100B
- QTcH (Hodges)
- QTcFm (Framingham)

[1] *Please see the Philips DXL ECG Algorithm Physician's Guide for an explanation of the two algorithms.*

Interpretive Statements: The Philips DXL ECG Algorithm produces precise and consistent ECG measurements that are used to generate interpretive statements and reasons. These can be configured to display on the report.

Choices include

- Show Interpretations and Reasons
- Show Interpretations Only
- Hide Interpretations and Reasons

Borderline Statement Suppression: This feature is used to exclude interpretive statements from appearing on the ECG report that indicate a borderline or otherwise normal condition. Borderline interpretive statements are generated by measurements that are above an abnormal threshold, but may in fact indicate a non-pathological condition. These statements indicate to the clinician that a condition may be present, but there is no decisive indicator. These statements often include the terms “minimal,” “consider,” or “borderline.”

Choices include

- Include All: No statements are suppressed
- Exclude Low Certainty
- Exclude All

Adult Bradycardia Limit: Determine the threshold for calling Bradycardia in the analysis**.**

Choices include

- 50 BPM
- 60 BPM

Acute MI Sensitivity: In some rare cases, customers may want fewer AMIs called in the analysis but want those that are called to be more likely to be true. If this is the case, choose the Low Sensitivity/High Specificity MI

ECG Measurements: Check if you wish to see ECG Measurements, such as PR Intervals on the 12-Lead report

Critical Values: Check if you wish to see Critical Values on the 12-Lead ECG report. The purpose of this feature is to provide warning statements that employ simple, easy-to-use terminology to identify life threatening conditions including ACUTE MI, GLOBAL ISCHEMIA, COMPLETE HEART BLOCK, and VERY HIGH HEART RATE. The clear and concise identification of these conditions allows anyone who records an ECG to be able to quickly identify patients that require urgent care.

STEMI CA- Culprit Artery: Check if you wish to see a STEMI alert with culprit artery on the 12-Lead ECG report. These are Myocardial Infarction statements that indicate the infarct location have alternate versions that indicate the likely culprit artery (CA).

Low Sensitivity Acute MI: Check if you wish the algorithm to have a higher specificity but a lower sensitivity for acute MI, most notably in the presence of other possible causes of ST elevation than can mimic AMI, such as Bundle Branch Blocks.

CAUTION: Before enabling this feature, carefully consider clinical implications of this algorithm configuration choice. Selecting "Low Sensitivity Acute MI" results in a decrease in sensitivity compared to the AMI detection sensitivity reported in the latest edition of the Philips' DXL 12-Lead Algorithm Physicians Guide. This could result in a reduction of automated Acute MI interpretation messages. This feature of the DXL algorithm is generally for the EMS pre-hospital analysis, where false positive AMI ECG interpretation which may result in inappropriate cath lab activation. Computerized ECG interpretation is not intended to be a substitute for interpretation by a qualified physician.

NOTE: See the *Philips 12-Lead Algorithm Physicians Guide* for theoretical and practical aspects of ST Elevation Myocardial Infarction (STEMI) detection.

Estimated MI size: This is only available when using the PH110C algorithm. Check this feature if you wish to see the estimated MI size. There is a strong correlation between MI size and ejection fraction. The PH110C algorithm uses the Selvestor QRS score as recommended in the 2009 AHA/ACCF/HRS recommendations[2]

CAUTION: This feature is only an estimate. Echocardiography is the gold standard for measuring left ventricular ejection fraction which is often used for prior MI risk stratification"

Print paper copy immediately: Check if you wish a 12-Lead ECG report to automatically print upon capture

[2] *2009 AHA/ACC/HRS Recommendations. Page e267 "Algorithms capable of determining the Selvester score in tracings that meet the criteria for prior infarctions should be developed and available for use by the reader if so desired."*

Export

If exporting 12-lead ECG captures to TraceMasterVue or other Cardiology Management system, you can pre-populate certain fields if desired. You can also make certain fields required for export.

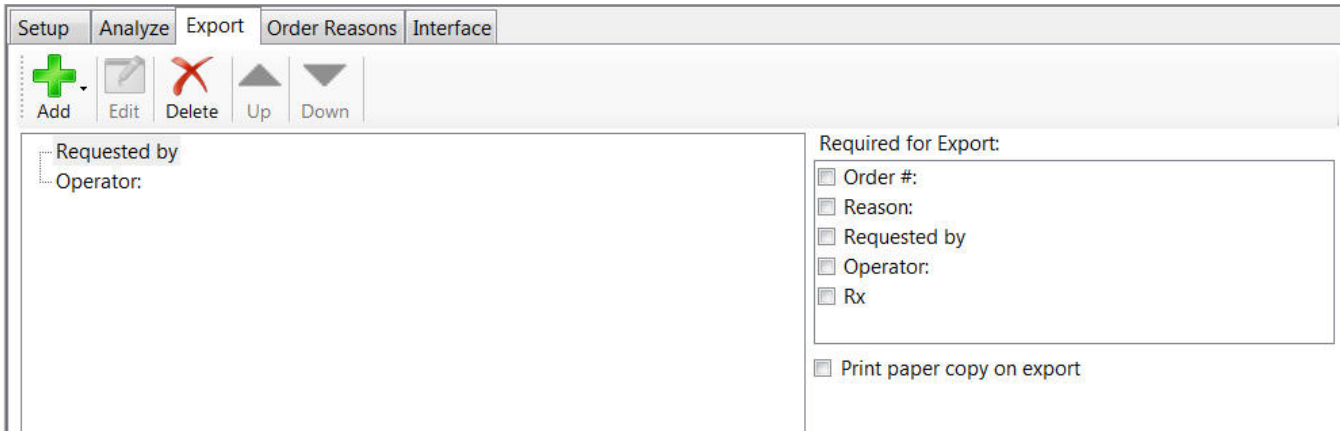


Figure 72

Add

Select the green plus Add icon as shown in Figure 72. Then select “Requested By” or “Operator” from the drop down list. After making a selection, type a list in the box as shown in Figures 73 and 74.

- Requested By: Pre-populate ordering clinicians for users to choose.

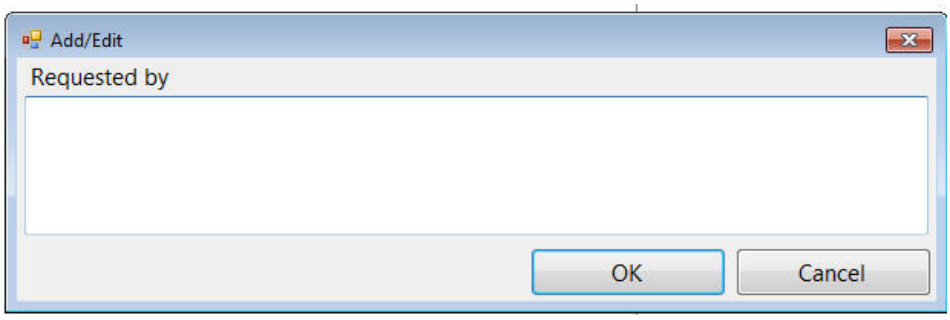


Figure 73

- Operator: Pre-populate clinicians performing the 12 Lead captures at the bedside

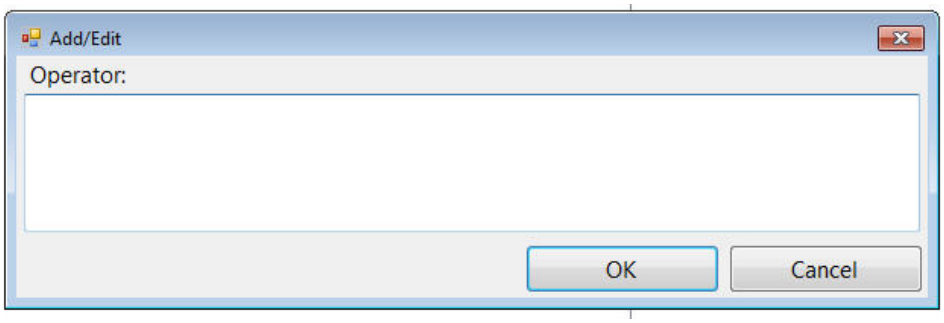


Figure 74

NOTE: Users may also add names in monitoring mode for a particular 12-lead ECG but the entered text will not be saved in the selection list.

Edit Delete Sort

Once you have entered the fields, choose one from the list, and the Edit, Delete and Sort icons will become operational as shown in Figure 75.

Figure 75

Required for Export

Field may be set to be mandatory prior to export. Patient Name and Lifetime ID are always required for export.

Choices include:

- Order
- Reason
- Requested by
- Operator
- Rx

NOTE: Only the Order Number can be entered at the bedside, so if you wish clinicians to export from the bedside, do not make other fields required.

Print on Export

Check if you wish to have 12 Lead ECG reports automatically print with Export

Order Reasons

Order Reasons may be either configured individually, or a pre-defined list of order reasons can be loaded.

CAUTION: Custom reasons will be deleted if you Load Reasons after adding custom ones. If you are going to Load Reasons, always do this first.

Add

Select the Add button to create custom list of Order Reasons. Then select Category or Reasons. Categories must be created first, and reasons can then be added to categories. Select Apply.

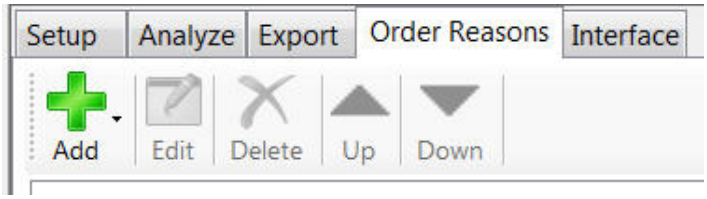


Figure 76

- Category: a broad group of reasons, such as Cardiac or Neurological. Type in category and select OK.

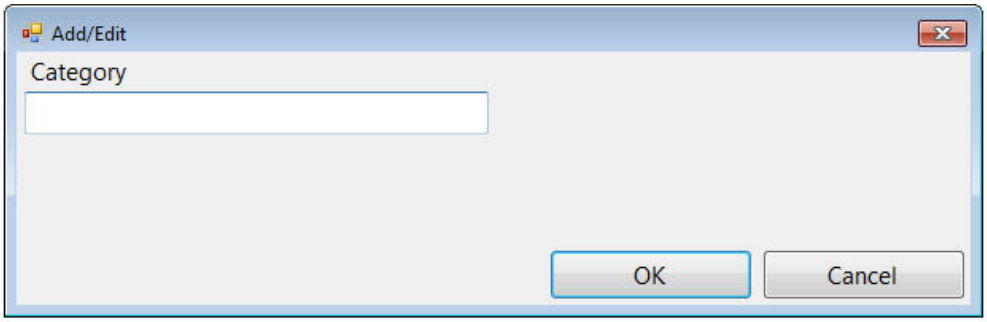


Figure 77

- Reasons: Add reasons under each category, and add diagnostic code number if applicable

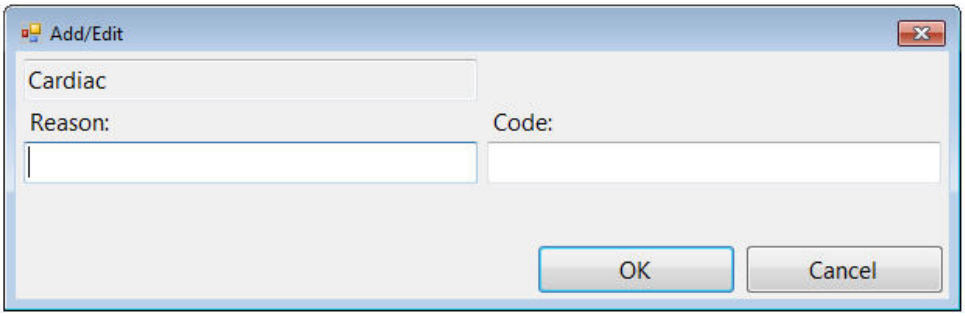


Figure 78

Philips provides a list of Order Reasons and diagnostic codes. Select the Load Reasons button found in the bottom right of the screen.

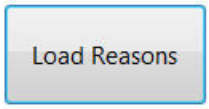


Figure 79

Once Reasons are loaded, you may edit, delete and sort as desired as shown in Figure 80.

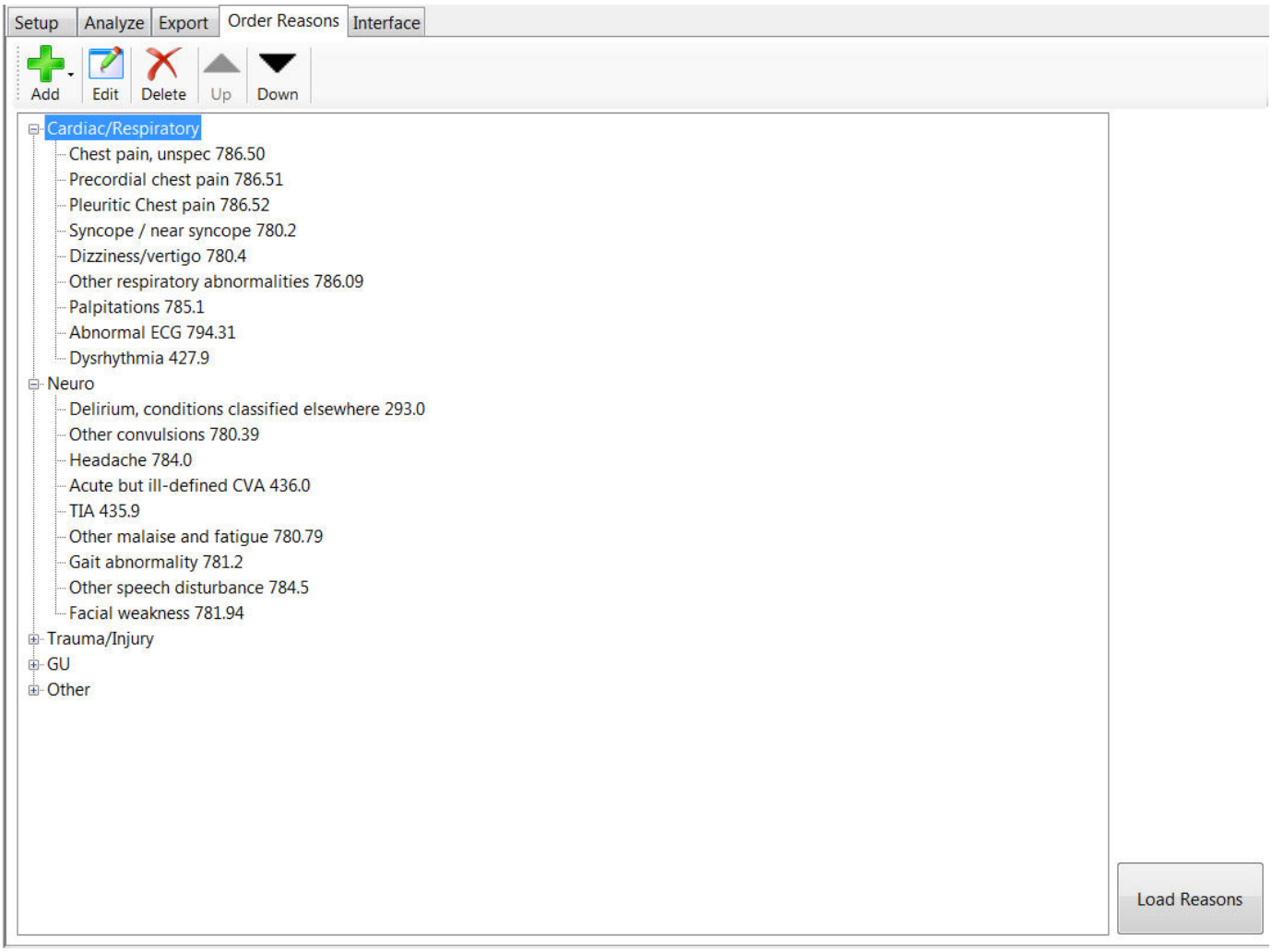


Figure 80

Security Access

The settings for Security Access are a mix of Support and Clinical. Access to hosts, permissions, roles and users are all assigned in this wizard. This is found outside of the Clinical Settings folder, at the bottom of the Configuration tree in System Configuration (Figure 11-1). These settings are necessary for both the type of access to every PIIC iX (whether Surveillance or Overview) as well as Users and Roles for permissions, paging and bed to bed overview (caregroups).

In unit Clinical Settings, only the ability to Update Users is available. Please go to the section on **Users** on page 11-7 if you are accessing User Management from the unit Clinical Settings.

Security Access is a setup wizard. Select the Next button to advance to the next page of the wizard. Select the Back button to go to the previous page. As you advance to the next page, settings are applied immediately.

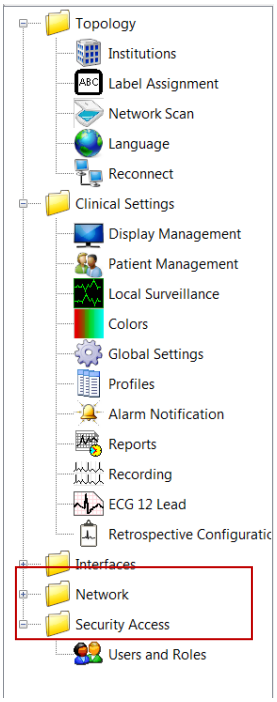


Figure 11-1

Configure host access

Select a host in a unit, and then then configure what type of access to other units from this host (Figure 11-2). All hosts have Full Access to each other by factory default.

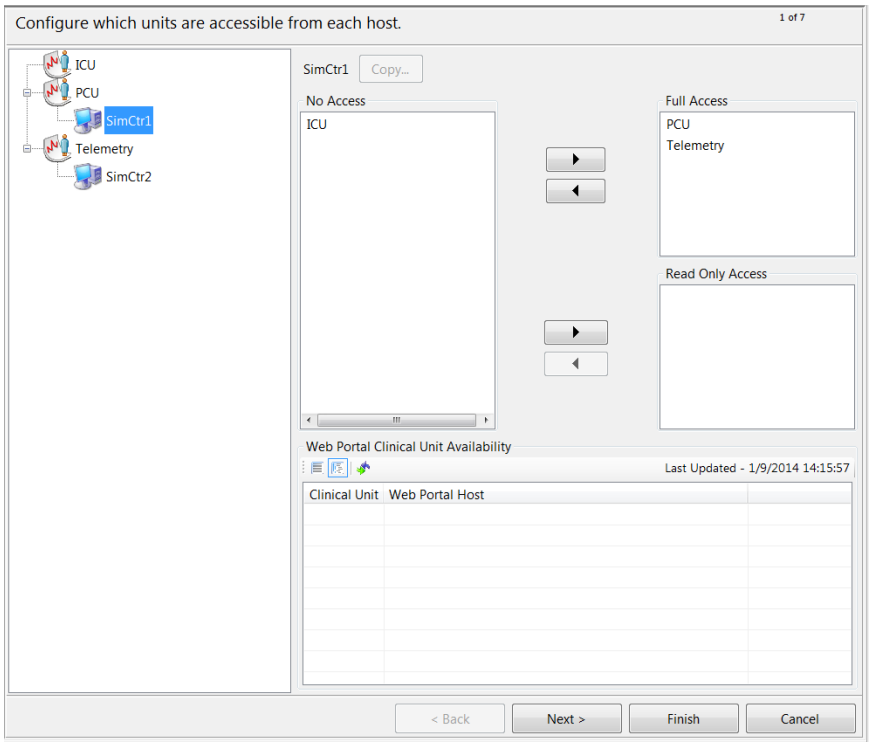


Figure 11-2

Choices include:

- No Access
- Full Access
- Read Only Access

NOTE: Carefully consider the action of choosing Read Only access to the same host. If a host is Read-Only to itself, no functions are available, including clearing/assigning sectors. Consider locking beds to a host which is read-only to itself. In order to clear or assign sectors, access to Display Setup would be needed.

Permissions

The second page of the wizard shows the list of clinical permissions that may be set for each unit that would require either authentication, meaning entering a user name and password before allowing the function, or no ability to perform the action. Defaults are shown in Figure 11-3.

Unit	Action	Permission
My Unit		
My Unit	Apply Caregiver Assignment	Allow All
My Unit	Label Assignment	Password Protect
My Unit	Pause Alarms	Allow All
My Unit	Display Setup	Password Protect
My Unit	Clinical Settings	Password Protect
My Unit	Silence Red Alarms	Allow All
My Unit	Remote Access To Patient Data	Password Protect
My Unit	IntelliBridge Device Monitoring	Password Protect
My Unit	Remote IntelliBridge Device Assignment	Password Protect
My Unit	Export Audit Trail	Password Protect

Figure 11-3

These include:

- **Apply Caregiver Assignments**: for Paging and Caregroup assignments
- **Label Assignment**: to replace a label on an existing monitoring device, for example, if a telemetry device fails in the night and must be replaced.
- **Pause Alarms**: Pauses all alarms for a patient for the configured time (see Global Settings)
- **Display Setup**: Edit the number of rows and columns on the Information Center
- **Clinical Settings**: Allows configuration of unit settings
- **Silence Red Alarms**: If this is Password Protected, yellow and Inop alarms may be silenced at the PIIC iX from the sector, but red alarms may only be silenced in the Patient Window and requires authentication. This may also be configured to Deny All. Users would then go to device to silence Red Alarms.
- **Remote Access to Patient Data**: Requires permission to see patients within this unit using PIIC iX web and mobility applications.
- **IntelliBridge Device Monitoring:** this permission is support related for monitoring and troubleshooting of IntelliBridge Hubs.
- **Remote IntelliBridge Device Assignment:** this permission relates only to the assignment of third party equipment via the web/web browser, such as Hospira devices

- **Export Audit Logs:** Audit logs will always be viewable, but the ability to export the logs is now password protected by factory default.

To change the security level, select the permission and use the buttons at the bottom of the screen to:

- **Password Protect**: Requires authentication
- **Allow All:** No password needed
- **Deny All:** No one will have access to this function

Override Permissions for Selected Hosts

The third page of the wizard allows you to override certain permissions set at a Unit Level for certain hosts such as an Overview PIIC iX (Figure 11-4). For example, a unit may have a Permission Deny All to Silence Red Alarms, but want the monitor techs at the Overview PIIC iX to be able to silence Red Alarms.

The unit permissions that can be overridden include:

- **Apply Caregiver Assignments**: for Paging and Caregroup assignments
- **Clinical Settings**: Allows configuration of unit settings
- **Display Setup**: Edit the number of rows and columns on the Information Center
- **Export Audit Trail**: Audit logs will always be viewable, but the ability to export the logs is now password protected by factory default.
- **Label Assignment**: to replace a label on an existing monitoring device, for example, if a telemetry device fails in the night and must be replaced.
- **Pause Alarms**: Pauses all alarms for a patient for the configured time (see Global Settings)
- **Silence Red Alarms**: If this is Password Protected, yellow and Inop alarms may be silenced at the PIIC iX from the sector, but red alarms may only be silenced in the Patient Window and requires authentication. This may also be configured to Deny All. Users would then go to device to silence Red Alarms.

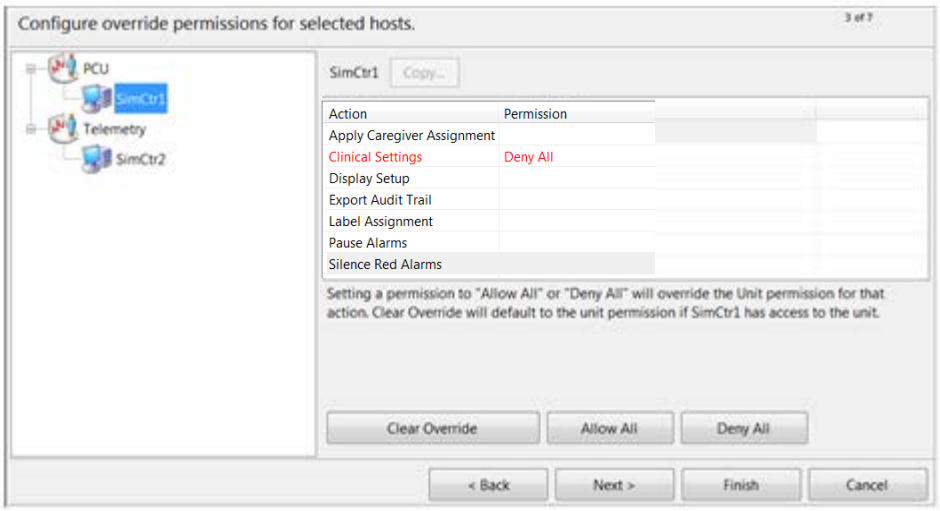


Figure 11-4

Select one of the permissions, and then choose

- Allow All
- Deny All

To clear one of the overrides, select the permission and then Clear Override.

Configure the Active Directory

If the customer will be using Active Directory (AD) for user authentication, the Philips Field Service Engineer will be adding the Domain on this page of User and Roles wizard. See Figure 11-5.

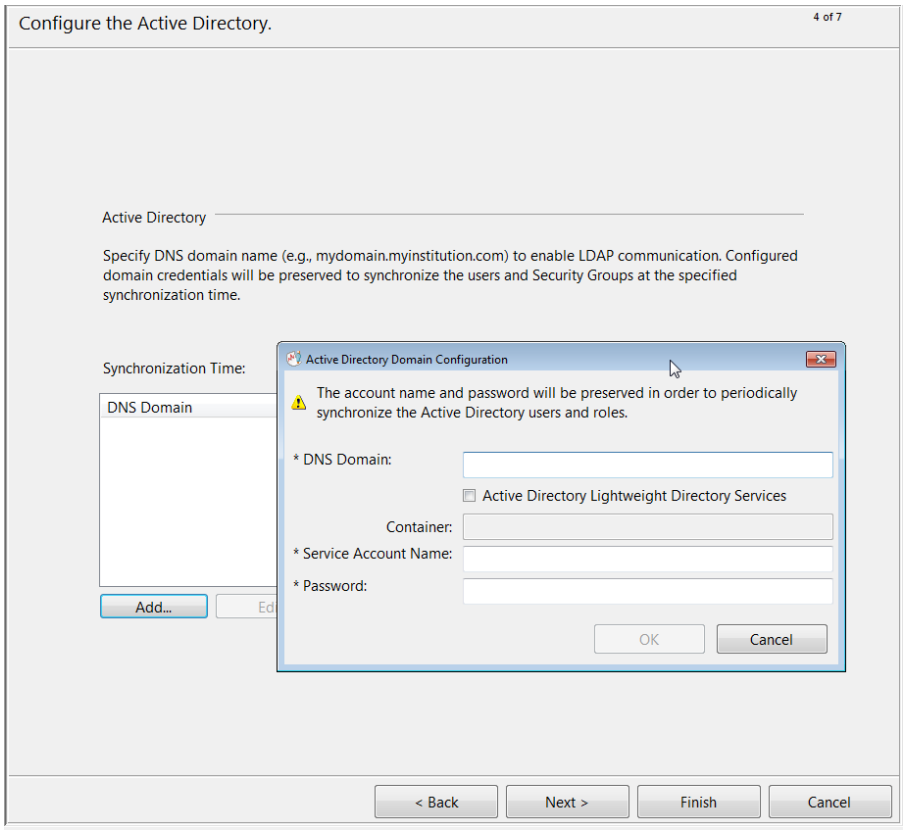


Figure 11-5

Roles

The next page of the wizard is where roles are set up. Roles can be deleted, edited or added. The factory default Local Directory roles are shown in Figure 11-6.

WARNING: A role cannot be deleted if a caregiver with this role is currently assigned.

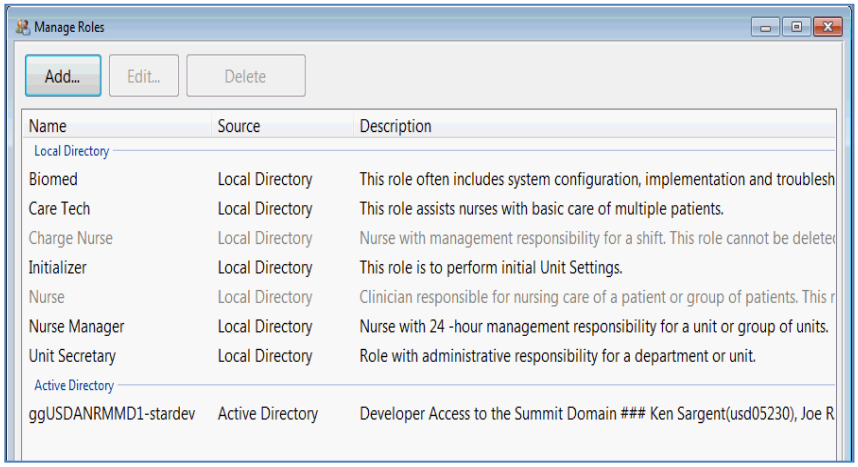


Figure 11-6

If you are only using Local Directory, Click the Add button and a popup will display, as shown in Figure 11-7. Choose the source to be Local Directory, type in the name of the role, then click the Add button to add new roles, or the Edit/Delete to change existing roles.

If you are using Active Directory, the AD roles that will be used in the monitoring system need to be added. This will be the responsibility of the hospital, generally the IT department, with assistance from Philips Field Service Engineers.

Click the Add button, but this time choose the source to be Active Directory. You will need to have a list of roles from Active Directory that you wish to add. If you know the exact name of the role, you can type it and click Add.

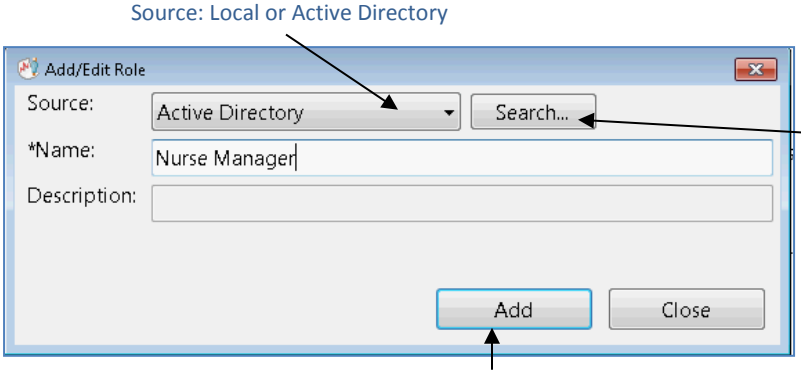


Figure 11-7

If you do not know the exact name of the role, click the Add button to open the dialog box, but this time click the Search button. This will open the Search Active Directory Groups dialog box (Figure 11-7).Type in some of the search criteria, then select Search, and a list of matching roles will appear. Use a * as a wildcard to increase the searching criteria.

NOTE: ***Search criteria from the Add/Edit popup will not populate the Search function in The Search Active Directory Groups. It must be added again.***

Choose one or more roles (multi-select) and then select the Add button to add Active Directory roles as shown in Figure 11-8.

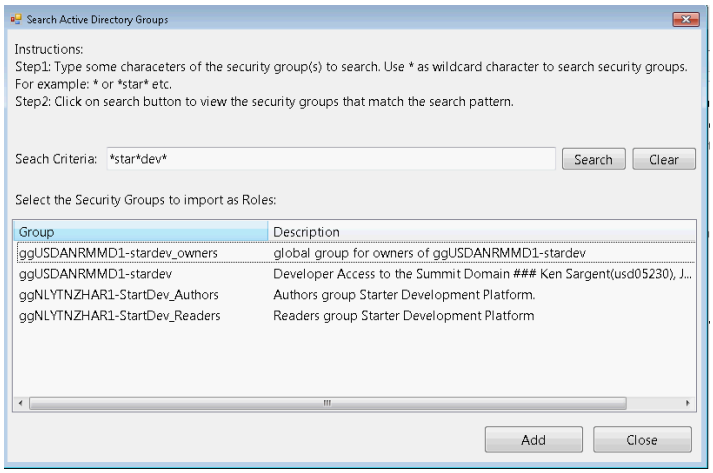


Figure 11-8

As Active Roles are added, users associated with those roles will import as the role is added. When complete, select the Next button at the bottom.

Configure the Role Permissions

The next page of the wizard allows you to assign permission to roles (Figure 11-9). Only the permissions that have been selected to be password protected will display. The permission can be different in each unit for the same role. In addition, you can assign support permissions to a role in the second tab of the screen.

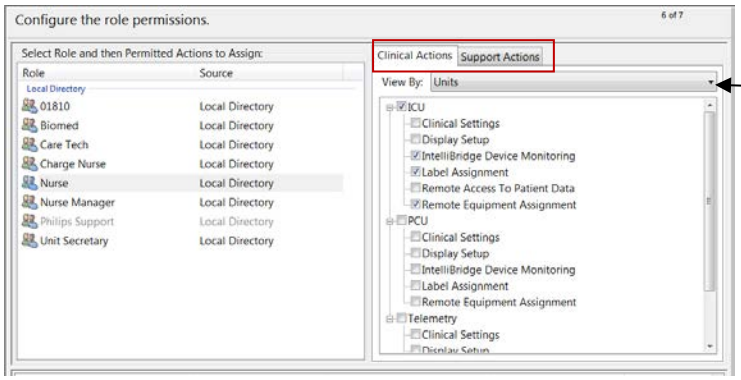


Figure 11-9

Choose a role and then select the associated permissions for that role in each unit. If you prefer, you can view by Permitted Actions rather than Unit, by changing this in the drop box at the top right. This allows you to more easily enable certain permissions for roles across the hospital, rather than just within a unit. For the list of all factory default role permissions, please see Chapter 14 - Factory Clinical Defaults and Settings.

The Philips Support role cannot be deleted, nor can the permissions be edited, but the password can be changed.

The following are Support permissions (second tab) that are always Password Protected and are not unit specific.

- **Clinical Settings Configuration**: Allow changes in Clinical Settings folder. Requires access to System Configuration.
- **Interfaces Configuration:** Allow changes in Interfaces folder. Requires access to System Configuration
- **Network Configuration**: Allow changes in Network folder. Requires access to System Configuration
- **Reboot Machine**: To reboot a PIIC iX host
- **Security Configuration**: Allow changes in Security folder. Requires access to System Configuration
- **Software Update:** Permission to apply software updates, such as Microsoft updates
- **Start/Stop Patient Monitoring:** Permission to Stop Monitoring (Alt F4 command)
- **System Configuration Access**: Log onto System Configuration. This permission is not full access to all features – only those not specified as other support permissions.
- **System Setup Access:** Accessing System Setup from System Configuration requires all monitoring to go to local mode (if done at the Primary Server) or to stop (if done from the PIIC iX)**.**
- **Topology Configuration Access**: Allow changes in Topology folder. Requires access to System Configuration.
- **Windows Desktop Access:** Permission to view the desktop (Alt F11command)

Users

Users are either added in Local Directory or imported from Active Directory.

Active Directory

If using Active Directory, synchronization between the PIIC iX and the AD will occur in a configured timeframe, typically daily. Users and their corresponding roles, even if new, will be added, deleted or edited during this synchronization. Synchronization can be manually started as well as set to run on a schedule as set by the IT administrator.

AD roles used for Paging and Caregroups

Roles from AD will be auto assigned with the user as they are imported. These roles cannot be unassigned within the PIIC iX.

It is important to note that every user assigned to an AD role chosen for paging or Caregroups will show in each unit that chooses that role. For example, The AD role of "NurseX" is added in Users and Roles from AD, then chosen in Alarm Notification to be used in Paging in 10 different units within the hospital. When a user is imported from AD, that user will now display in all 10 units.

If the desired behavior is to only have certain users show in certain units, then one of two models must be used.

1. The IT department setting up the AD must create different NurseX roles for different units, and these roles are then chosen to be used for Alarm Notification in that unit. (i.e., ICUNurseX, CCUNurseX, etc)
2. Use Local Directory. Users would be imported from AD, but the Local Directory roles would need to be added manually.

Local Directory

Add Users

Select the Add button under the User section as shown in Figure 11-10.

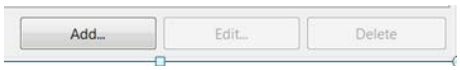


Figure 11-10

A dialog box will open as shown in Figure 11-11. The user name can consist of numbers or letters, but must be 4 characters in length. ***Initially, the user name will also be the password***. Upon first entry, users will be instructed to change their password.

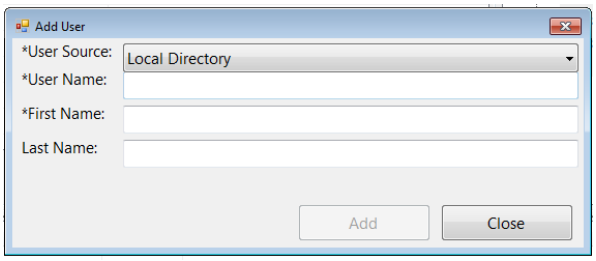


Figure 11-11

Tab to each of the three fields. Select the Add button for single user additions. If you select the enter button on your keyboard, you can add another user without closing the window. When all users are entered, select the Add button, or close the window.

Assign Roles to Users in Local Directory

When all users are added, assign one or more clinical and/or support roles to each user. Select the user and then check the roles you wish to add for that user. Until you add a role, the Status of the User will show as unassigned, as shown in Figure 11-12. Roles may also be added or removed from current users in the same fashion.

NOTE: ***It is important to add as many roles as is required for a user – for example if a nurse is also a charge nurse, both roles must be assigned to that user.***

If you prefer, you can view by clinical roles by changing the drop box at the top right. This allows you to quickly assign a role to all units within the hospital.

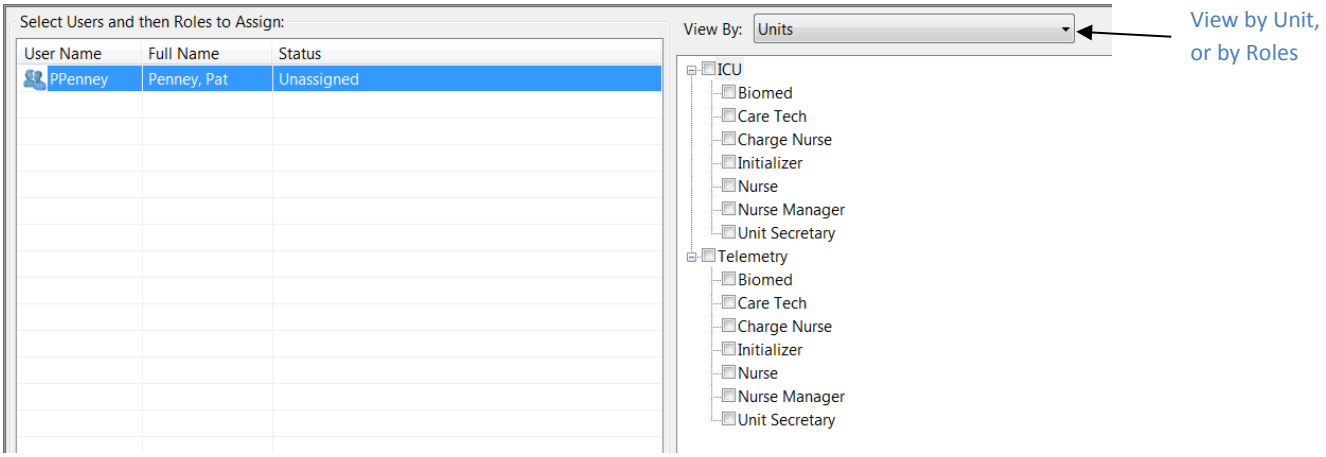


Figure 11-12

Edit Users

Highlight the User you wish to edit. If you want to edit the log on information, select the Edit Button at the bottom of the section. The same dialog box will open as for the Add User.

IF you wish to edit the roles, highlight the user and then check or uncheck roles and edit as needed.

Delete Users

Highlight the name of the user you wish to delete and then select the Delete button at the bottom of the section. You will have to confirm the delete.

NOTE: ***If a user is currently assigned to a patient, you will not be able to remove a role from that user, or delete that user until they are unassigned from the bed/patient.***

Reset Password

Right click on the user name (if Local Directory or Philips Factory user) to see the option to reset a password. It will reset the password to the user name for Local Directory users.

WARNING: If the Philips Factory User password is changed, please assure this change is known if support is required. Support may be delayed if the new password is not known at the time needed for assistance..

When a Local Directory user logs on, they will be directed to change their password. Users may bypass this if needed, but will see the message every time they log on. Users can set a security question to use if they forget their password. If answered correctly, the password will be changed to the user name again, and the user will again be prompted to change their password.

If the user forgets their user name, they will be prompted to contact their System Administrator.

Display Setup

Display Setup determines the number of sectors to be shown on each display, the label assignment for each sector including Overview beds, and whether the bed label is locked to that sector. These are host settings. By default, there are no bed assignments, and displays are set up with 2 columns and 4 sectors.

Display Setup is password protected as a factory default. Consult your system administrator if you do not know your user name and password. The application opens as shown in Figure 12-1 in System Configuration. On the PIIC iX station, the Display Setup application does not show the list of Available hosts, and the user will select Apply in the lower right instead of the Save button.

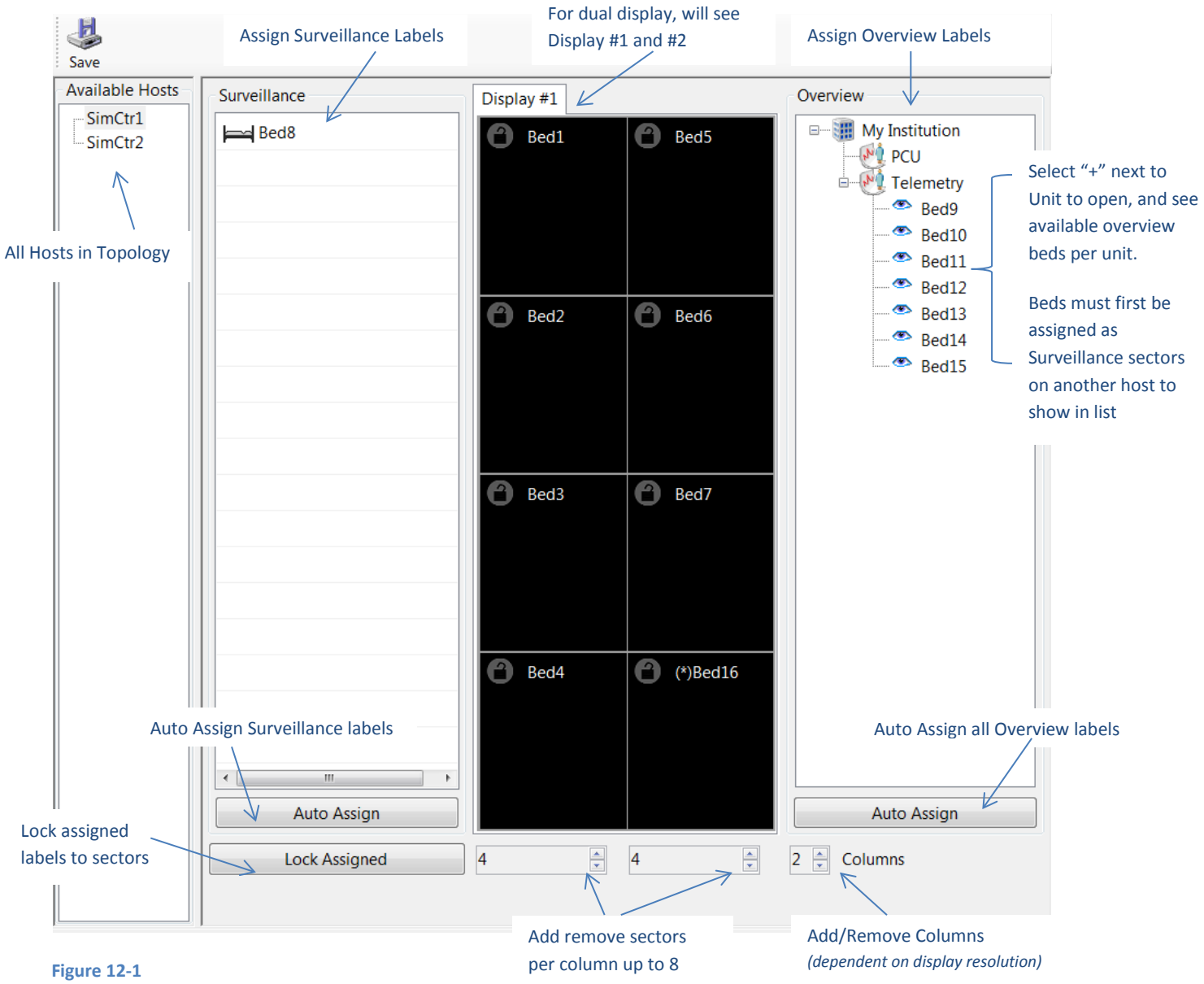


Figure 12-1

Sector Layout

On the bottom right of the application, select the up or down arrows to add or remove columns. The number of columns you can select is determined by the resolution of the display. The preview will dynamically change on the right as you add and remove columns and sectors.

Controls for the number of sectors per column are directly under the column. Use the up and down arrows to add and remove sectors per column. The maximum number of sectors per column is 8 for all screen resolutions; however, fewer are needed if you wish to also have a second header row.

NOTE: ***If you are using two displays, remember to configure the columns and rows for both.***

Assign Bed Labels to Sectors

A list of available bed labels will show in the center. To manually assign a label, select the desired bed label from either the Surveillance or the Overview label lists, and

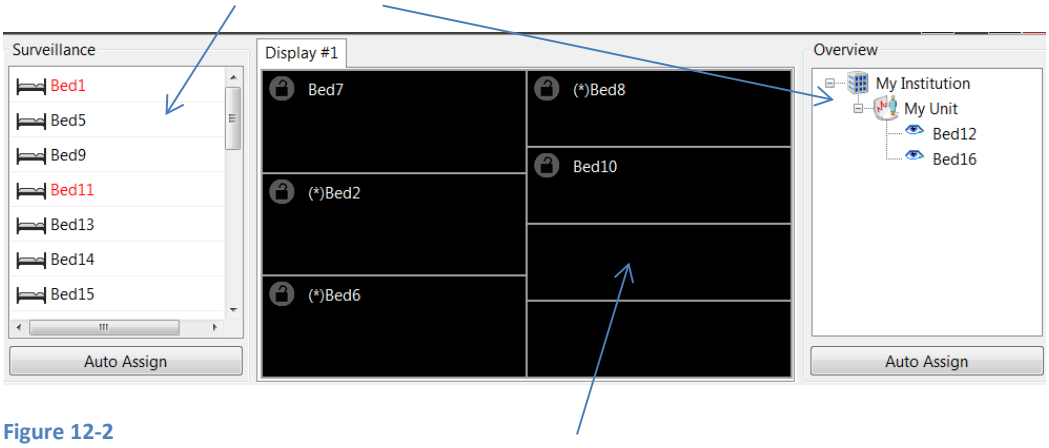
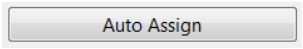


Figure 12-2

then select the desired sector location. (Figure 12-2)

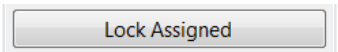
Auto Assign

You can also select the auto assign at the bottom of either the Surveillance or Overview lists to quickly assign bed labels to sectors. Bed labels will fill in down the column, and then move to the next column.



Lock Assigned

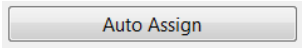
Select this button to lock all bed labels to their assigned sectors. If a bed label is locked to a sector, it cannot be cleared with discharge or transfer. This is not dependent on whether equipment is locked to a bed label. If you wish to only lock certain bed labels, select the lock icon in the top left of the desired sector.



CAUTION: If you are using Switch Port Mapping, you MUST lock bed labels to the sector, You should not clear a sector that is port mapped.

Remove a label

Labels can be removed or changed to a new location by selecting the X when you select the desired sector. It will show as a red label until either re-assigned or you select the Apply.



CAUTION: If a patient is currently being monitored in the sector and you un-assign the bed label, and then Save/Apply, the patient will be discharged, and you will be asked to confirm the warning message.

Save/Apply

In System Configuration, select the Save button.

In Clinical Settings, select the Apply (or Cancel) all changes and the settings will take effect immediately. Log out if using a second dedicated application display.

Retrospective Configuration

Retrospective Configuration (Figure 13-1) allows customization of the retrospective review applications. These settings are only available in System Configuration, and are a Local Setting, not a unit setting. The settings can be copied to other hosts in the unit or in other units. Individual review applications cannot be copied – only the entire retrospective configuration.

NOTE: ***The Configurator is always available in System Configuration. However, licensing will determine what setting changes will apply/display in monitoring mode.***

- ***PIIC iX Express – no settings changes will be displayed in monitoring mode.***
- ***No license for Advanced Specialty Review - only basic setting changes in Alarm Review and General Review will display in monitoring mode.***

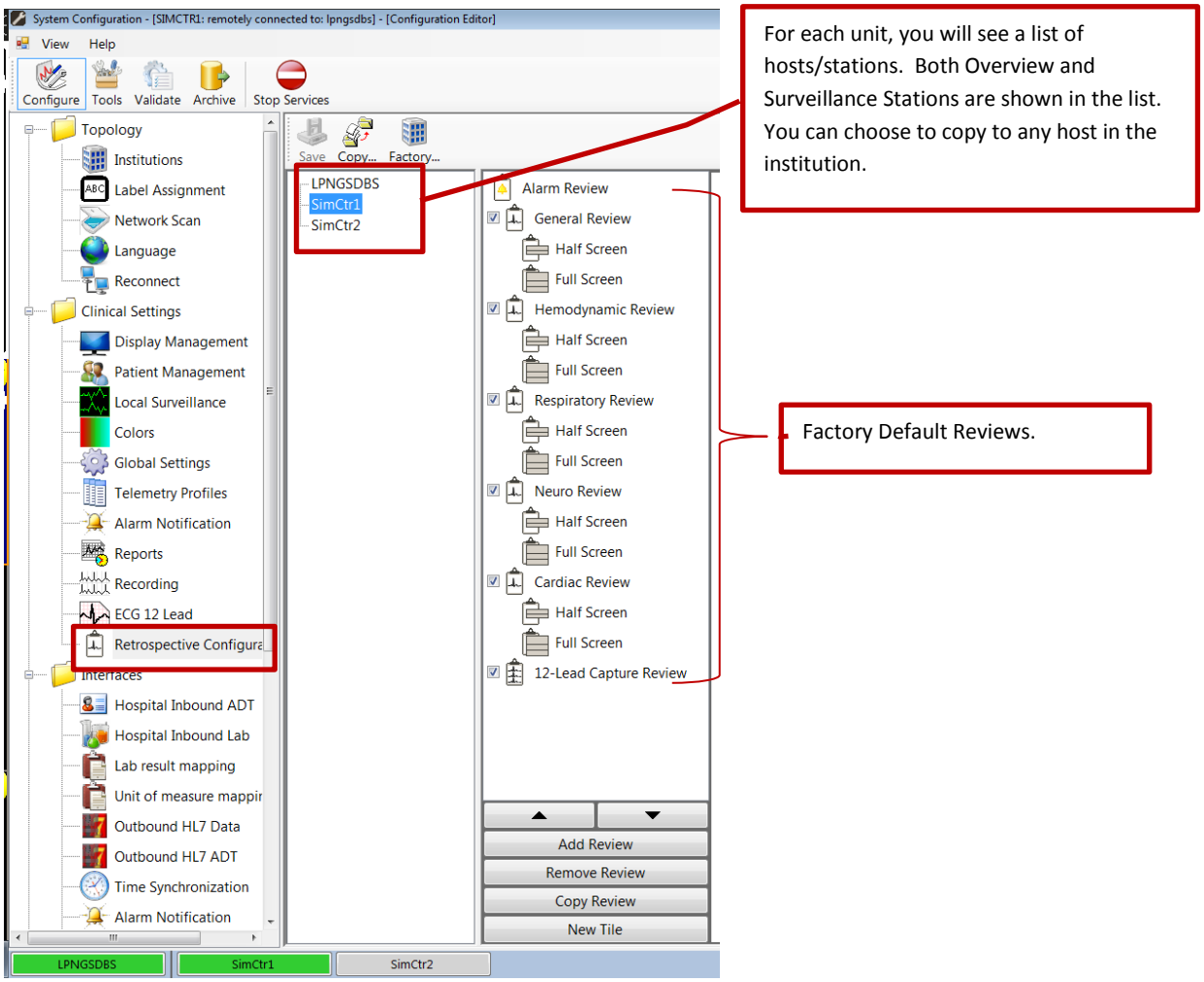


Figure 13-1

General Information (Figure 13-2)

Half Screen/Full Screen

To begin configuration, first click on the desired review application, then click either Half or Full Screen. A template will be shown on the right. You may need to customize each of these depending on the hosts within the unit. Settings configured in the Half Screen will not carry over to the Full Screen version or vice versa.

Choose Reviews to Display

Use the checkboxes to determine which review applications will display per unit. Up to 12 Review applications, including existing reviews, can be added and/or displayed. Alarm Review is always visible.

Sorting

Use the Up and Down arrows to determine the sort order of the Review application in the menu. Highlight the review to sort, then use the Sort buttons to change the order. The topmost review application will be the one that users will navigate to from the Review button in the sector. The total sort determines how it appears in the Main Setup or Review application menu structure.

Add Review

Click the Add Review to create a blank review for a completely customized application. The name of the review will be highlighted in blue as a Copy. Simply type to rename. If you choose to rename later, select the name of the review and wait for the name to show in blue with a box around it, then type in new name. You can also select the name and then select F2.

Remove Review

Click Remove Review for any reviews that have been created

NOTE: ***Factory Review applications do not have to be displayed, but cannot be removed.***

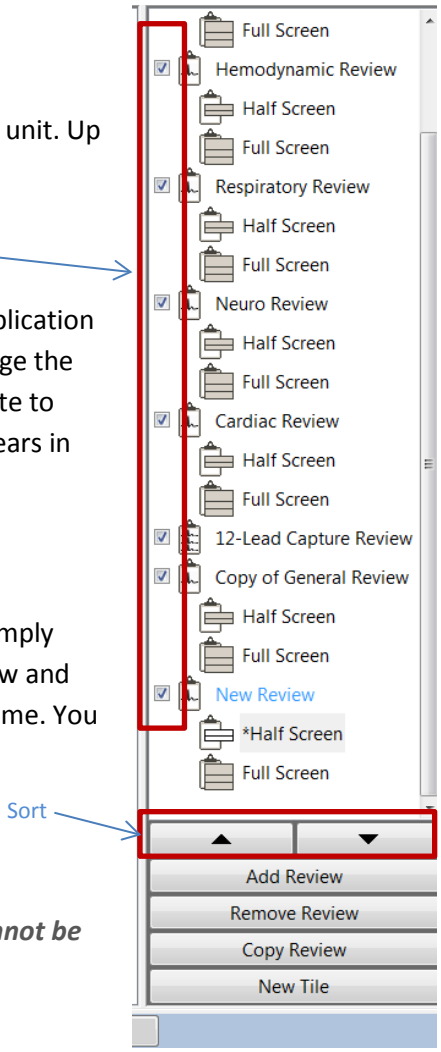


Figure 13-2

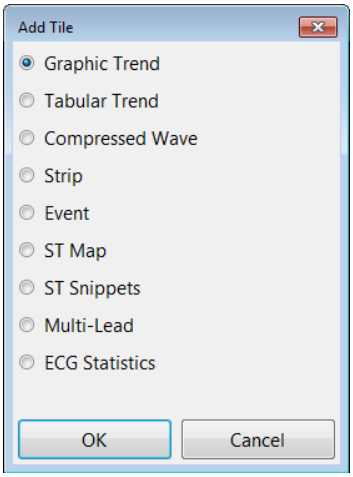
Copy Review

Click on a Review application to create a copy to customize. It may be easier to copy a review than to Add a blank Review. The name of the review will be highlighted in blue as a Copy. Simply type to rename. If you choose to rename later, select the name of the review and wait for the name to show in blue with a box around it, then type in new name. You can also select the name and then select F2.

NOTE: ***Alarm Review and 12 Lead Capture Review cannot be copied.***

Adding New Tiles to a Copied/New Review

New tiles may be added to either a new or copied review application. See Figure 13-3 for the available tiles that can be added.



1. Select the New Tile button and the cursor will change to a new icon of an arrow with a plus sign (Figure 13-4).
2. Move the cursor to the desired spot and click the Mouse to accept.
3. Choose the type of tile. ***You must edit the tile***, as there will be no default settings in a New Tile.
4. You may add multiple tiles of the same view, such as multiple graphical trend views.

Figure 13-4

Editing Tiles (Figure 13-5)

Tiles can be customized. In the template select the message, "Click to Edit". Each tile will have different choices for settings.

Delete Tile

Click the X in the top right of the tile to delete.

Note: Tiles can only be deleted from New or Copied Review applications.

Re-size Tile

Hover over horizontal lines to see the ability to drag tiles to a smaller or larger size.

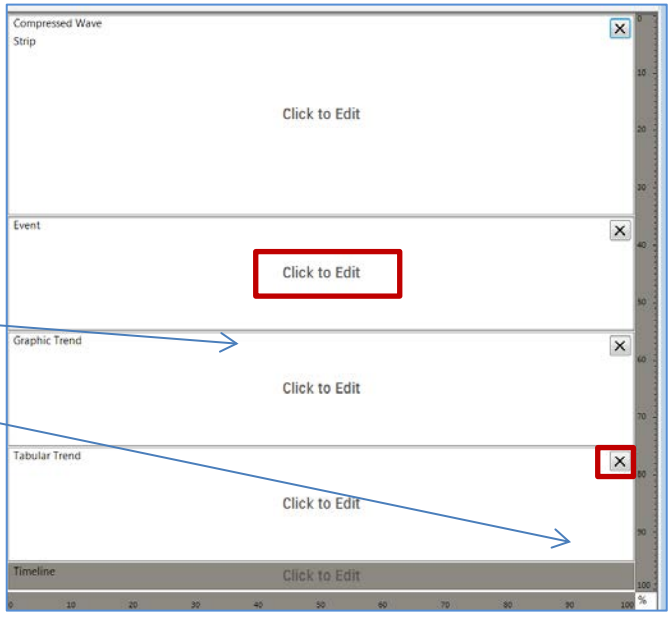


Figure 13-5

Add Multiple Tiles to a Single Space

Up to 5 tiles can be added to single tile space. When there is more than one, the toggle icon will be shown to the user in monitoring mode. The tile in focus is shown with a light background. In Figure 13-6 the Compressed Tile is the one selected for editing.

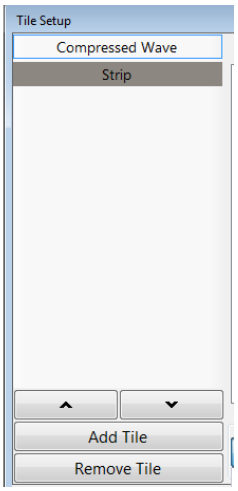


Figure 13-6

Add Tile to an Existing Tile

Click the Add Tile to add additional tiles to this space.

NOTE: Remember that new tiles have NO default settings and will be BLANK until added.

Remove Tile

Select a tile (it will show without any gray shading) then select the Remove Tile button.

Sort order for Toggle

Use the Up and Down arrows to sort tiles. The topmost tile will determine which view is the default upon opening the review application. In our example, Compressed Wave is the default. The user can toggle to Strip.

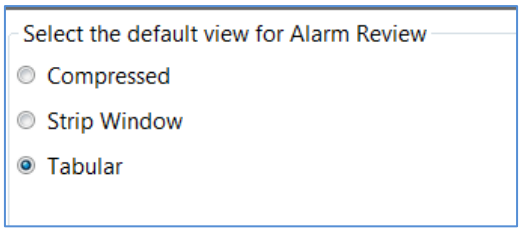
Alarm Review

Alarm Review will always be displayed and cannot be copied. The Advanced Specialty Review license is not necessary to make setting changes, including the default view.

NOTE: Any changes made to Alarm Review in configuration will not display if licensed for a PIIC iX Express.

Set the Default View (Figure 13-7)

This will be the view that will display every time the application is opened for a new patient. The view changed during monitoring mode will not "stick" but will always return to unit default. Tabular View is the factory default.



Timeline Duration

The timeline duration can be set in any of the Review Applications and will populate for all as there is ONLY one timeline setting. There is no View Duration in Alarm Review, meaning all alarms will display for the given Timeline Duration (Figure 13-8). The View Duration will need to be set in one of the other review applications in the Timeline tile settings.

NOTE: Any changes made to the Timeline settings in configuration will not display if licensed for a PIIC iX Express.

Choices are:

- 1 Hour
- 2 Hours
- 4 Hours
- 6 hours
- 8 Hours
- 12 Hours
- 24 Hours (default)
- 48 hours

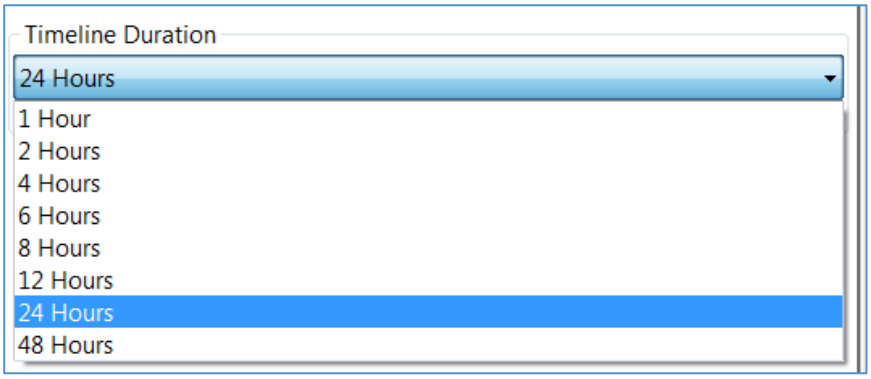
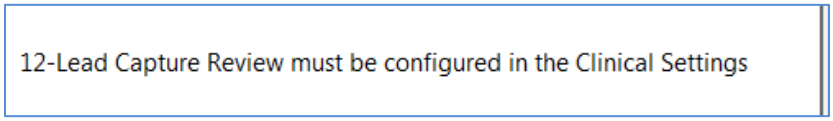


Figure 13-8

CAUTION: Any changes to the Timeline settings in ANY review application will change it in ALL review applications, including Alarm Review.

12 Lead Capture Review

This review application is configured in its own Clinical Setting. It is located here to assist with the sorting order of the applications. It is displayed in monitoring mode if customer has purchased the C17 license. If you attempt to edit, you will get the following warning:



Factory Defaults for the Specialty Reviews

The factory defaults for the Timeline are shown in Figure 13-9, and for the Review applications in Figure 13-10. Available Settings for these are found in the next section.

Timeline

View Duration	8 hours
Timeline	24 hours

Figure 13-9

Reviews

	General	Hemodynamic	Respiratory	Neurological	Cardiac
Compressed Waves	Any ECG	Any ECG	Any ECG	Any ICP	Any ECG
Strip	Any ECG Any ECG Any BP Any Pleth Any Resp	Any ECG Any BP Any PAP Any CVP Any ICAP Any Resp	Any ECG Any BP Any Pleth Any Gas Any Resp Any Pulm Function Any Pulm Function Any Pulm Function	Any ECG Any BP Any ICP Any ICP Any CVP Any EEG Any EEG Any EEG Any Resp Any Pleth	Any ECG Any ECG Any ECG Any ECG Any BP Any Pleth
Events	Arrhythmia Pressure Respiratory Alarms Off Technical	Cardiac Output Pressure Alarms Oxygenation Alarms Off	Respiratory Ventilator Sedation Hyperthermia Alarms Off	Pressure Respiratory Neuro ICP Sedation Hyperthermia Alarms Off	Signal Quality Arrhythmia ST QT Alarms Off Technical
Graphical Trends	Any HR Any BP Any SpO2 Any Resp Any Temp	Any HR Any BP Any CVP Any PAP Any PAWP	Any HR Any BP Any SpO2 Any Gas Any Resp	Any HR Any BP Any ICP Any CPP Any CVP	Any HR Any PVC Any BP Any ST Any QT
Graphical Trends	N/A	Any ICAP Any PPV Any CO Any CO Any SpO2	Any Pulm Function Any Pulm Function Any Pulm Function Any Pulm Function Any Pulm Function	Any LOC Any EEG Any EEG Any ICP Any ICP	N/A
Tabular Trends	All*	All*	All*	All*	All*

Figure 13-10

*All sourced numerics or waves. If a wave is not being sourced during the view duration, the next wave on the list will show in its place. If the numeric is not being sourced in Tabular, the row will not show.

Review Tile Configurations

Licensing will determine which configurations will display during monitoring mode. See page 13-1. A warning will be given upon saving changes to review the licenses after saving changes to assure they will display as expected.

Graphic Trend (Figure 13-11)

The graphic trend tile may have up to five parameters in the tile.

Add/Remove Parameters

Choose parameters to add to a single graphic trend tile. This tile must have at least one parameter selected, and can have up to five

To Add

Select Available Parameters on the Right, then select the green arrow pointing to the right. To add a specific parameter, open the + tree, and add the one. If a specific trend numeric is added and is not being sourced, it will show in gray and not substitute.

To Remove

Select the parameter on the right and then select the green arrow pointing to the left.

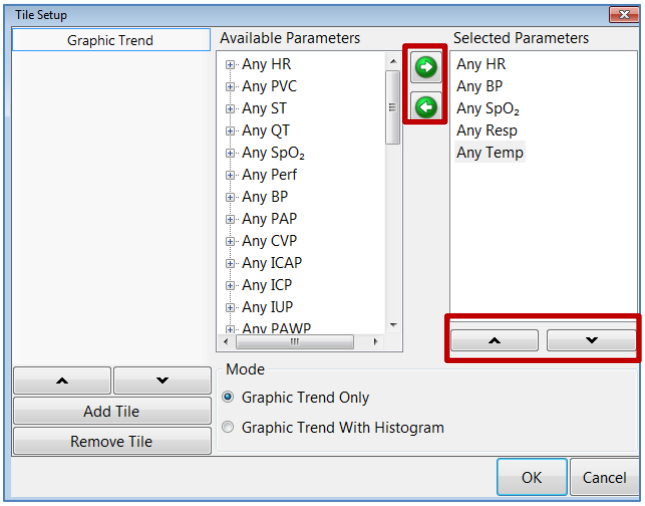


Figure 13-11

Choices include:

- Any HR
- Any PVC
- Any ST
- Any QT
- Any SpO2
- Any Perf
- Any BP
- Any PAP
- Any CVP
- Any ICAP
- Any ICP
- Any IUP
- Any PAWP
- Any Abdominal Press
- Any CPP
- Any PPV
- Any CO
- Any Metabolic Function
- Any SvO2
- Any Gas
- Any Resp
- Any Pulmonary Function
- Any Metabolic Lab
- Any LOC
- Any CPBP
- Any EEG
- Any Temp
- Any Neuro Exam
- Any Blood Gas
- Any CBC
- Any UA Lab
- Any Body Measurement
- Any Chemistry Lab
- Any UO
- Any Liver Lab
- Any Coagulation Lab
- Any Cardiology Lab
- Any Lipid Lab
- Any IV Fluid Rate
- Any ECG

Sort Parameters

Highlight the parameter you wish to sort. Use the Up and Down arrows to move to the desired position. ***The topmost parameter will show first in the graphical trend, and only the first is active upon entry.***

Graphic Trend or Graphic Trend with Histogram

Choose If the Graphic Trend will default to open with the histogram view. Only one parameter is available with this view for trending.

Tabular Trend Figure 13-12)

The only setting to configure in Tabular Trend is the Tabular Interval. Choices are dependent on the View Duration setting.

Choices include:

- NBP Interval
- 10 Minutes
- 15 Minutes
- 30 Minutes
- 1 Hour

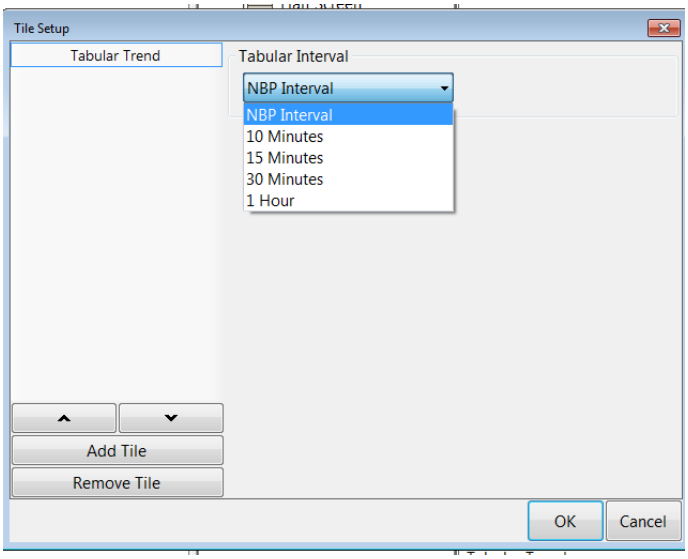


Figure 13-12

Compressed Wave (Figure 13-13)

Add Remove Waves

Choose which waves to show in the Compressed Wave view by default. Use the green Add and Remove arrows. Select one of the Any Wave categories on the left and choose the arrow pointing to the right to add to the view.

NOTE: You can add additional waves in configuration mode, but only the number that can display based upon the selected duration will be seen in monitoring mode. See Figure 13-14.

Choices are shown in Figure 13-13.

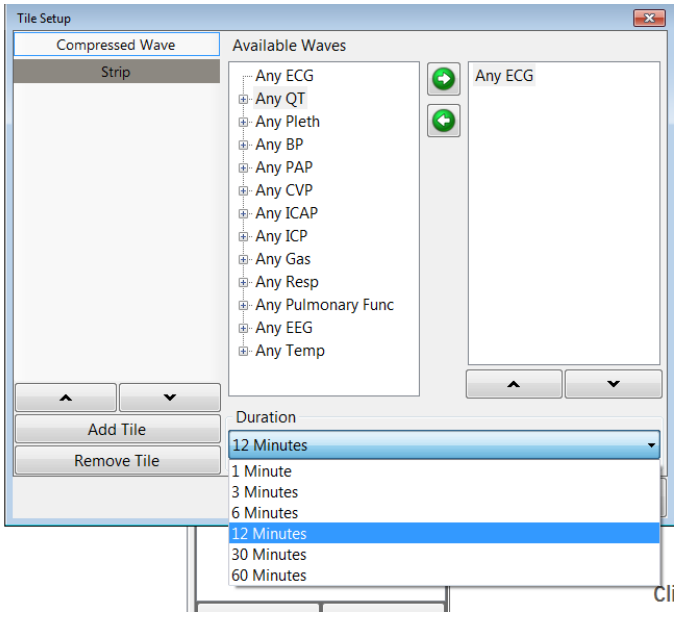


Figure 13-13

Sort

Use the Sort arrows to sort which wave will show topmost if more than one will show by default.

Duration

Choices include

- 1 Minute
- 3 Minutes
- 6 Minutes
- 12 Minutes (Default)
- 30 Minutes
- 60 Minutes

Duration (Minutes)	Maximum Number of Displayed Waves
1	6
3	5
6	4
12	3
30	2
60	1

Figure 13-14

Strip (Figure 13-15)

You can configure the waves and the order of the waves for the review applications. This does not apply to Alarm Review. Alarm Review will always display the primary ECG and the alarming wave. If the alarm has no wave, then the secondary ECG will show, or waves will show by priority.

Add/Remove Waves

Select the Wave and use the appropriate arrows to Add and Remove waves.

Choices are shown in Figure 13-15.

Sort

Use the Sort Arrows to determine the order the waves will appear.

NOTE: If a wave is not available when viewing in monitor mode, the next configured wave will show in its place.

Wave Speed

Choices include:

- 6.25mm/s

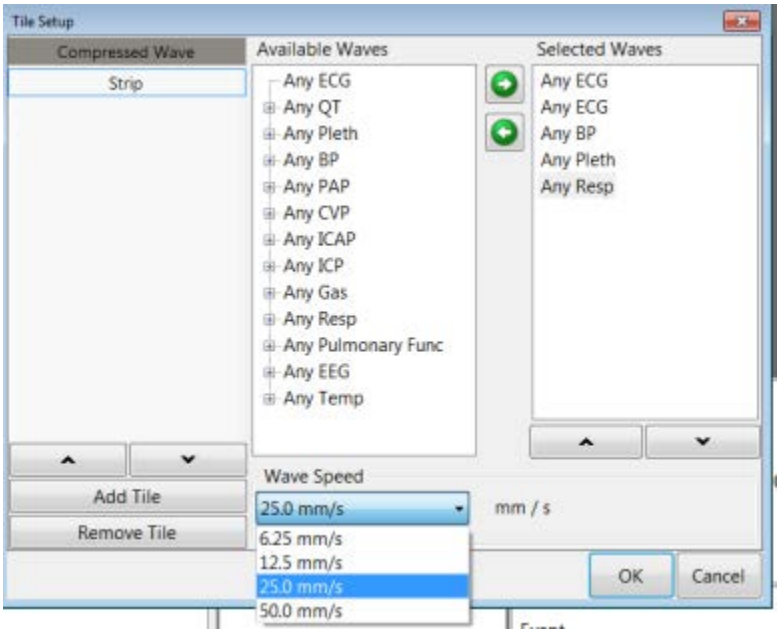


Figure 13-15

- 12.5mm/s
- 25mm/s
- 50mm/s

Event (Figure 13-16)

Add/Remove

Choices include

- General
- Hemodynamic
- Neurological
- Cardiac
- Neonatal

NOTE: Select the plus sign in front of the category to open up the tree view. If you add a selection with a "+" sign, it will display in monitoring mode as closed. If you open the tree and add a single event, it will show as a single row. Consider the size of your event tile if you have added many single rows.

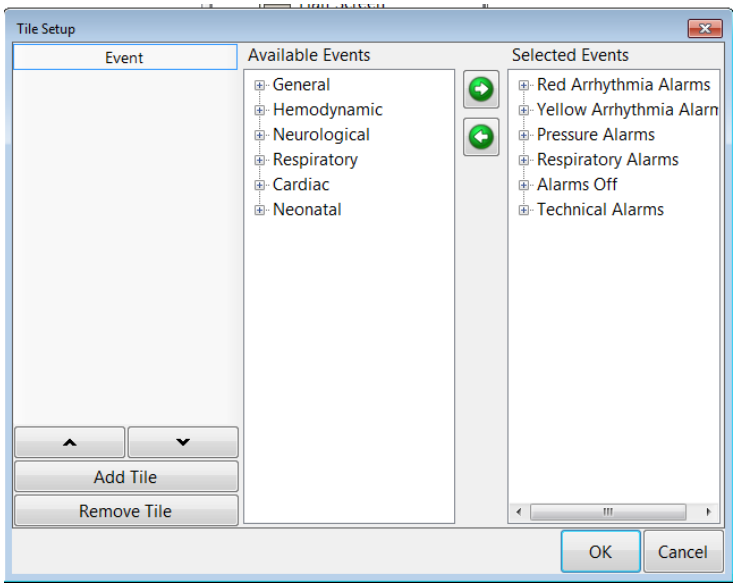


Figure 13-16

ST Map (Figure 13-17)

Scale

Choices include:

- -15 to +15mm in 1mm increments

Show Baseline

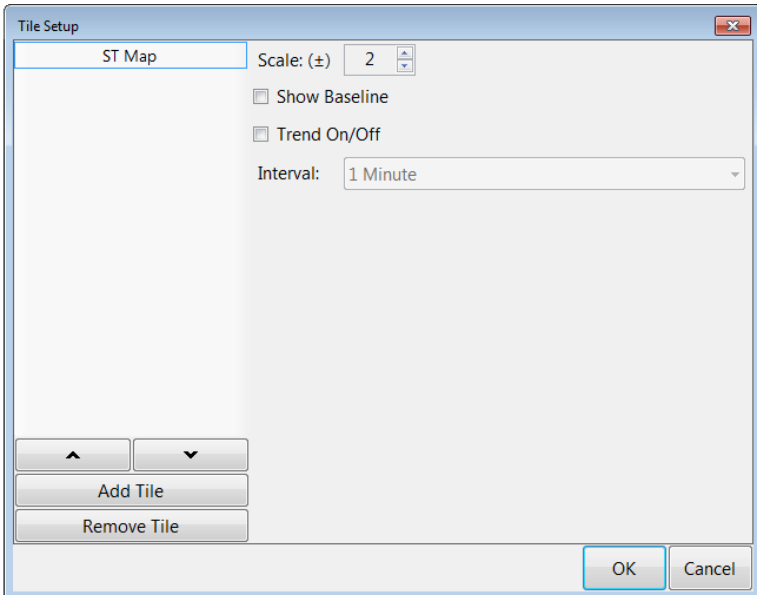
Check this box if baseline will be shown by default

Trend On/Off

Check this box if the Trend Interval will be on by default.

Trend Interval

When Trend is On, select the default interval.



Choices include

- 15 seconds
- 1 minute
- 5 minutes
- 15 minutes
- 30 minutes

ST Snippets (Figure 13-18)

Speed

Choices include:

- 25mm/s (default)
- 50mm/s

Show Measurement Points

Check this box if the ST Measurements will display measurement points by default.

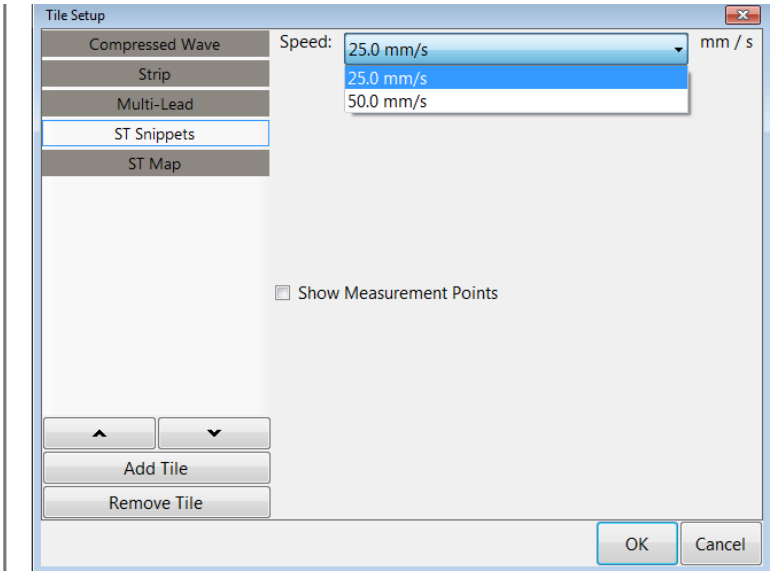


Figure 13-18

Multi-lead (Figure 13-19)

Gain

Choices include

- X 1/2
- X 1
- X 2
- X 4

Speed

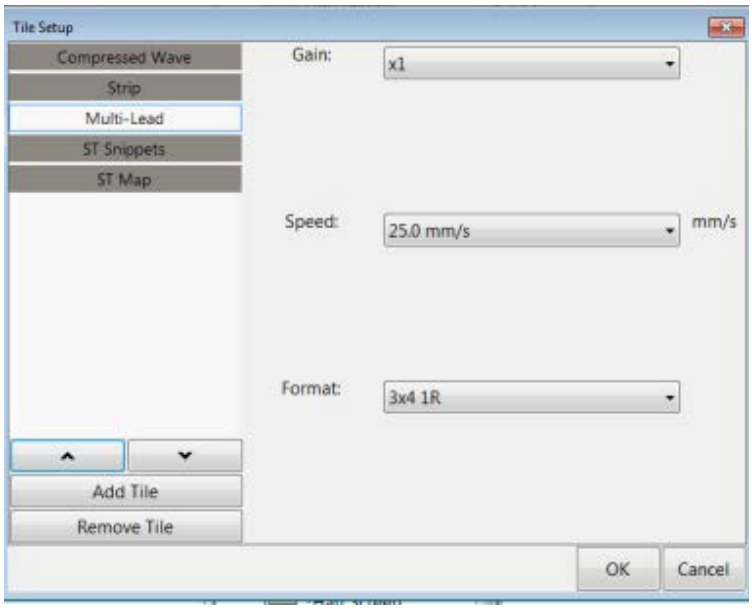
Choices include

- 25.0 mm/s (default)
- 50.0 mm/s

Format

Choices include:

- 12x1
- 6x2
- 3x4



- 3x4 1R (default)
- 3x4 3R
- 3x4 ST Map
  - ST Map is at the bottom
- 3x4 1R ST Map
  - This format only shows 8 seconds of data across the width
  - ST Map is vertically oriented on right side

NOTE: If licensed for 12Lead Full Disclosure, EASI or Hexad Full Disclosure, assure there is an event tile in the Review application with the 12 Lead Signal Quality Index as an event

NOTE: The choice of displaying the leads in Standard or Cabrera is made in the 12 Lead ECG settings

ECG Statistics

The only setting to choose is the default Trend Interval.

Choices include:

- Algorithm Interval (default)
- 1 minute
- 5 minutes
- 10 Minutes
- 15 Minutes
- 30 Minutes
- 1 Hour

NOTE: Available choices are determined by the default View Duration. Figure 13-20 shows the choices available with the default View Duration of 8 hours

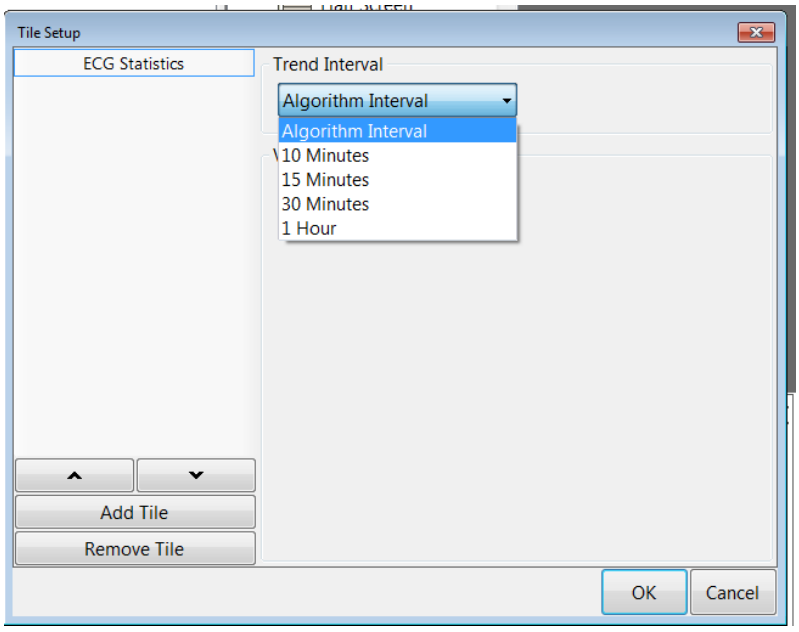


Figure 13-20

Wave Strip Export

This setting is only available in System Configuration. Wave Strip Export is licensed, and will send a .png image to a file folder for import into electronic medical records.

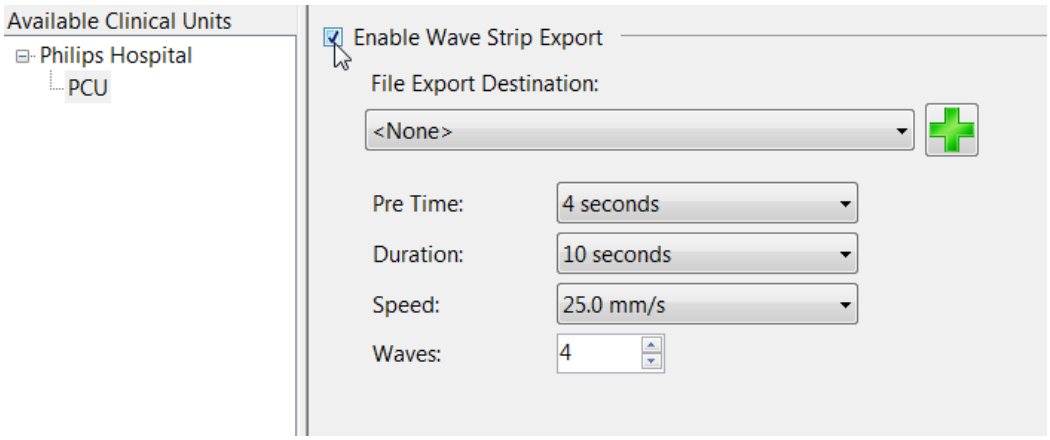


Figure 14-1

Enable Wave Strip Export: If checked, all strips from Alarm Review, including Saved Strips and discarded strips will be exported to the configured file export destination.

Choices include:

- Checked
- Not Checked

File Export Destination: Choose the file share to export strip images. File shares are created in the Interfaces tab of File Destinations, or can be created here by selecting the large green icon.

PreTime: Set the amount of time in the strip image before the beginning of the event for alarm strips, and from time of request for review application strips.

Choices include:

- 2 seconds
- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds

Duration: This is the total duration of the image and includes the above Pre Time.

Choices include:

- 4 seconds
- 6 seconds
- 8 seconds
- 10 seconds
- 15 seconds
- 20 seconds

NOTE: Choosing a duration less than 20 seconds may result in annotations not visible in the image. If annotations are available but not part of the image, an ellipsis (…) will show in the image.

Speed:

Choices include:

- 6.25 mm/sec
- 12.5mm/s
- 25.0 mm/s
- 50.0 mm/s

Waves: Choose the number of waves on each strip, based upon priority and availability to display in every exported strip. As ECG waves are the highest priority, and you may have from 3-6 ECG waves, increase the number if other choices, such as Pleth or Pressure are desired on the exported strips.

Choices include:

- 1-20

Data Warehouse Connect (Service Settings)

Data Warehouse Connect is a licensed feature (PDXS or PDXSR) that exports all waves, numerics, alarms and events to a customer supplied server (on which our software is installed). Users can utilize the built-in DWC Viewer to display data via a web application, or extract raw data via SQL or other applications. These settings are found in the Interfaces folder in System Configuration. (Figure 15-1) In Clinical Settings, only the Bed Assignment tab is available.

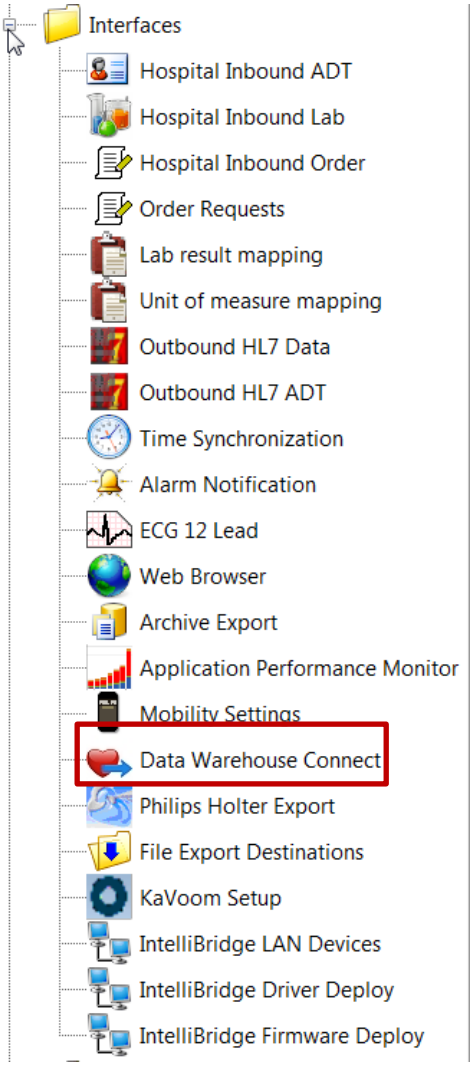


Figure 15-1

Device Properties (Service Setting)

This is the configuration for the customer supplied server to which data will be exported (Figure 15-2).

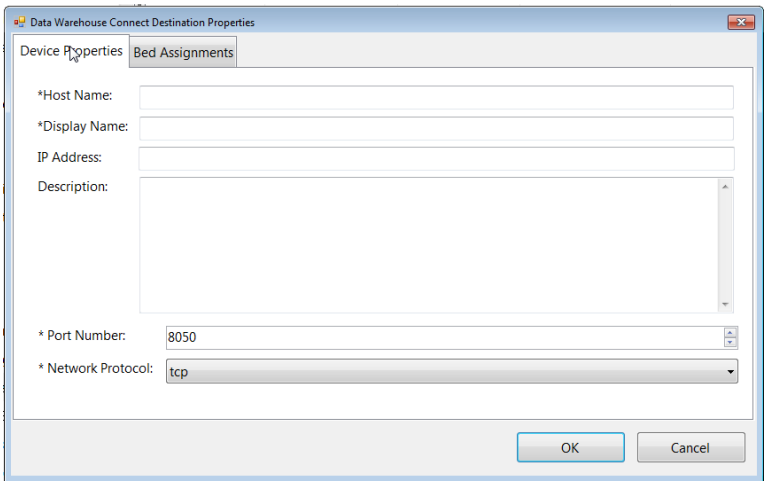


Figure 15-2

Bed Assignments

These assignments are also available in Clinical Settings on the PIIC iX. (Figure 15-3)

Default Export Settings:

Select a Clinical Unit, and then check the beds on the left, and then choose the settings on the right. These settings include:

- ☐ Parameters
- ☐ Events (includes Alarm events)
- ☐ Waves

Notes can be added to bed for export, such as “Dr. Researcher’s patients”. They are not seen in the Viewer, but can be used when researchers perform queries and filter on notes when extracting data via SQL or other application.

Select the “Apply to Assigned Beds” to assign clinical settings and notes to all checked beds.

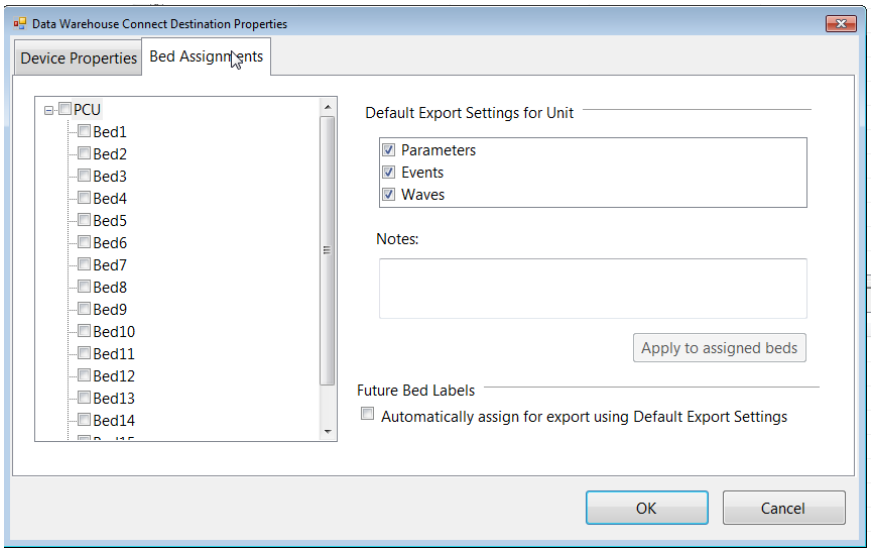


Figure 15-3

Auto apply settings for future Bed Labels

In addition, you can check the box to automatically include any future bed labels assigned to the unit. (Figure 15-4).

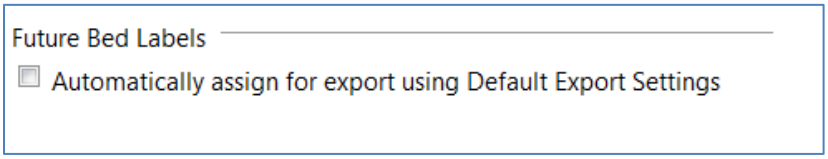


Figure 15-4

Holter Data Export (Service Settings)

The B.01 release introduced the license for Holter export. Configuration is available only in System Configuration, in the Interfaces folder (Figure 16-1).

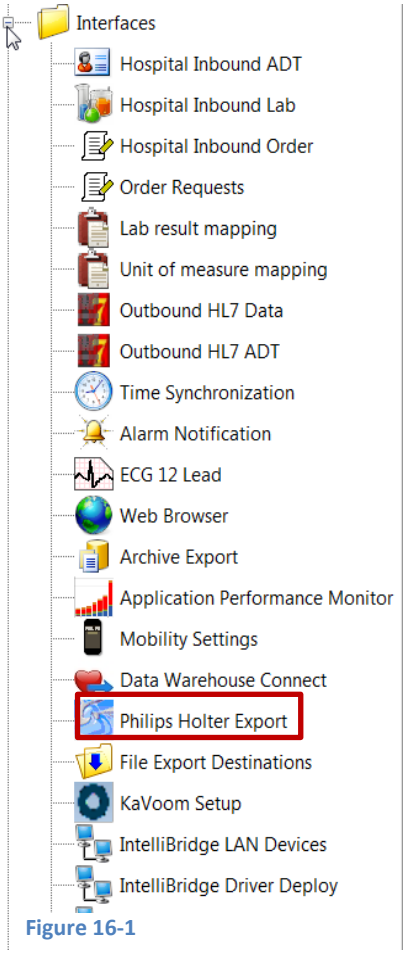


Figure 16-1

Exports are manual only, and are set to a file folder where they can be retrieved by the Philips Holter system.

NOTE: *These files are ONLY compatible with Philips Holter systems, not existing Classic RDE Viewers.*

Once licensed, enabled, and a destination added, the Holter export in Manage Patient becomes visible (Figure 16-2).

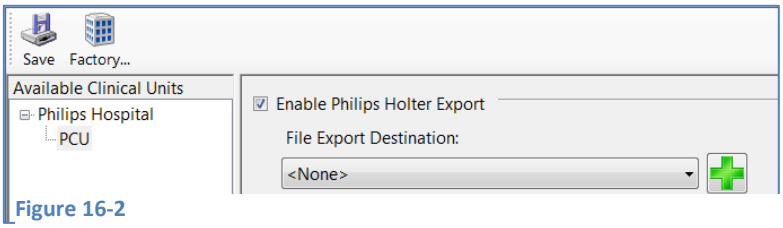


Figure 16-2

Manage Patient application with Holter Export enabled (Figure 16-3).

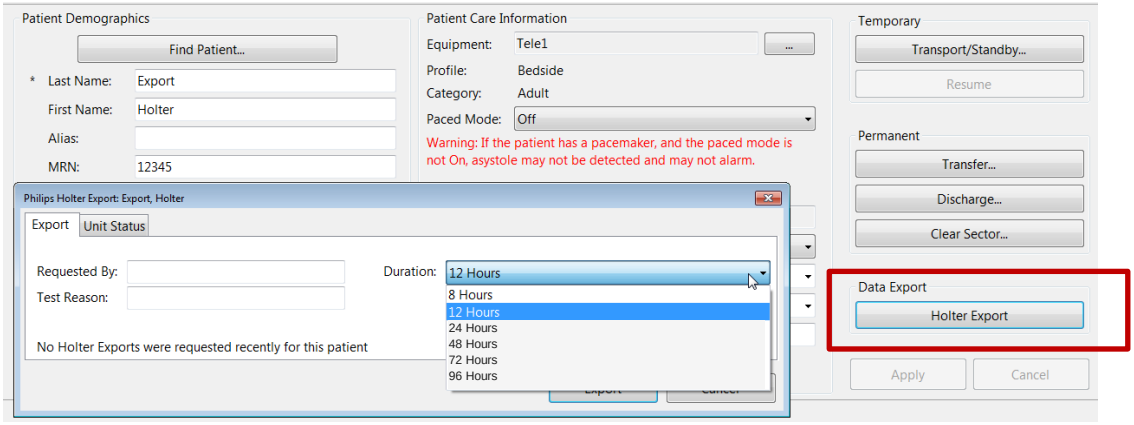


Figure 16-3

Factory Clinical Default and Settings

Chapter 2: Patient Management

Fields

At least one demographic field must be set to required

Element	Factory Default	Choices	Additional Choices	Change from Factory
Last Name	Required	Required Optional Hidden		
First Name	Optional	Optional Hidden		
Middle Name	Hidden	Optional Hidden		
Alias	Hidden	Optional Hidden		
Lifetime ID	Optional MRN	Required Optional Hidden	MRN SSN Military ID Medicaid ID Driver's License	
Encounter ID	Optional Visit Number	Required Optional Hidden	Visit Number Account Number	
Alternate ID	Hidden	Required Optional Hidden		
Gender	Optional	Optional Required		
Date of Birth	Optional	Required Optional		
Age	Optional	Optional Hidden		
Height	Optional	Optional Hidden		
Weight	Optional	Optional Hidden		
Profile	Optional	Optional Hidden		
Change Bed Label	Hidden	Optional Hidden		
Resuscitation	Hidden	Optional Hidden		

Nurse	Optional	Optional Hidden		
Group	Optional	Optional Hidden		
Screen Notes	Optional	Optional Hidden		
Screen Notes (2)	Hidden	Optional Hidden		
Primary ID	Lifetime ID	Lifetime ID Encounter ID Alternate ID		
Patient ID Format	Last Name and First Name	Last Name Only ID Only Last Name and First Name Last Name and ID		

Lists

Patient Group

Create up to 12 groups. Shown below are the defaults only.

Item Name	Factory Default Color	Change from Factory
Afib	Red	
Diabetic	Orange	
Epileptic	Yellow	
Ventilator	Aqua	
Cardiology	Lavender	
Surgical	Peach	
Pulmonary	Gray	
Neurological	Neon Green	
(other)		
(other)		
(other)		
(other)		

Temporary Locations

Create up to 12 locations. Shown below are the defaults only.

Item Name	Change from Factory
X-Ray	
CT Scan	
MRI	
Ultrasound	
Nuc Med	
Surgery	
Procedure	
Shower/Bath	
Off Unit	
Discharge	
Bio Med	
Dialysis	
Cath Lab	
(other)	
(other)	

Units of Measure

Item Name	Factory Default	Choices	Change from Factory
Height	cm	in cm	
Weight	kg	lbs kg	

ADT Workflow

Item Category	Item Name	Factory Default	Change from Factory
Admit	Twelve Lead Export Reminder	Checked	
Discharge/Transfer	Clear Sector for Unlocked Beds	Not Checked	
Discharge	Print Report	Not Checked	
	Twelve Lead Export Reminder	Checked	
	Clear all unlocked caregiver assignments from bed	Not Checked	
	Put all equipment in infinite Standby	Checked	
	Clear unlocked Telemetry Devices from bed	Not Checked	
	Clear unlocked X2 Monitors from bed	Not Checked	
	Clear unlocked Bedside Monitors from bed	Not Checked	
	Clear unlocked IntelliBridge LAN Devices from bed	Not Checked	
Transfer In Unit	Print report	Not Checked	
	Keep caregiver assignments with patient	Checked	
	Keep unlocked Telemetry Devices with patient	Checked	
	Keep unlocked X2 Monitors with patient	Checked	
	Keep unlocked Bedside Monitors with patient	Checked	
	Keep unlocked IntelliBridge LAN Devices with patient	Checked	
Transfer Out of Unit	Print report	Not Checked	
	Twelve Lead Export Reminder	Checked	
	Clear all unlocked caregiver assignments from bed	Not Checked	
	Keep pooled equipment with patient	Checked	

Chapter 3: Local Surveillance

These are not unit settings. Each Information Center, whether Surveillance or Overview iX, must be configured.

Display Options

Item Category	Item Name	Default	Choices	Change from Factory
Display Settings	Show fixed amplitude pacer spikes	Not Checked		
	Show numeric alarm limits	Checked		
	Show second header row (space permitting)	Checked		
	Override bedside colors	Not Checked		
	Allow minimizing	Checked		
	Hide “Arrhythmia Off” message	Not Checked		
	Show Patient ID	Checked		
	Always Show at Least 2 Waves	Checked		
	Show Large Name and Bed Label	Not Checked		
	Allow sector resizing	Not Checked		
	Enable sector auto-sizing	Not Checked		
	Enable automatic ST/STE map	Not Checked		
	Automatically minimize when not monitoring	Not Checked		
	Flash Alarms (China)	Not Checked		
Short Cut Keys		Manage Patient Review Measurements	None Review Equipment Manage Patient Measurements Standby Transfer Save	
Screen Calibration		120	Varies	
Idle Timeout		15 seconds	3-30 seconds	
Default Wave Speed		25 mm/s	25 mm/s 12.5 mm/s	
Caption Bar Action Button		Record All	Print All Record All Save Strips None	
Sector Action Button		Record	Print Record Save Print/Save	

			Record/Save None	
Show Silence Review Button		All Alarms	Never Red Alarms Only All alarms	

Sounds

Item Name	Item Name	Default	Choices	Change from Factory
Sound Scheme		Traditional	Traditional Iso	
Current Volume		7		
Minimum Volume		4		
Inop Volume		Volume +0	Volume +0 Volume +1 Volume +2	
Yellow Alarm Volume		Volume +0	Volume +0 Volume +1 Volume +2	
Red Alarm Volume		Volume +0	Volume +0 Volume +1 Volume +2	
Automatically Adjust Volume		Not Checked	Checked Not Checked	
	1st volume	6:00	00:00 – 23:59	
	1st time	7	Minimum volume to 10	
	2nd volume	22:00	00:00 – 23:59	
	2nd time	4	Minimum volume to 10	

Sector Layout

PIIC Name_____

Resolution _____ x _____ Rows _____ Columns _____

Factory Default Wave	Wave Change from Factory	Factory Default Numeric	Numeric Change from Factory
Primary ECG	n/a	Aligned Numeric (HR)	n/a
Any ECG wave		Any SpO2	
Any Pleth wave		Any Pulse	
Any Press wave		Any SpO2	
Any RT wave		Any RT Numeric	
Any RT wave		Any Press	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	

PIIC Name_____

Resolution _____ x _____ Rows _____ Columns _____

Factory Default Wave	Wave Change from Factory	Factory Default Numeric	Numeric Change from Factory
Primary ECG	n/a	Aligned Numeric (HR)	n/a
Any ECG wave		Any SpO2	
Any Pleth wave		Any Pulse	
Any Press wave		Any SpO2	
Any RT wave		Any RT Numeric	
Any RT wave		Any Press	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	

PIIC Name_____

Resolution _____ x _____ Rows _____ Columns _____

Factory Default Wave	Wave Change from Factory	Factory Default Numeric	Numeric Change from Factory
Primary ECG	n/a	Aligned Numeric (HR)	n/a
Any ECG wave		Any SpO2	
Any Pleth wave		Any Pulse	
Any Press wave		Any SpO2	
Any RT wave		Any RT Numeric	
Any RT wave		Any Press	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	

PIIC Name_____

Resolution _____ x _____ Rows _____ Columns _____

Factory Default Wave	Wave Change from Factory	Factory Default Numeric	Numeric Change from Factory
Primary ECG	n/a	Aligned Numeric (HR)	n/a
Any ECG wave		Any SpO2	
Any Pleth wave		Any Pulse	
Any Press wave		Any SpO2	
Any RT wave		Any RT Numeric	
Any RT wave		Any Press	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	
Any RT wave		Any RT wave	

Patient Window Layout

PIIC Name_____ Full/Half Screen

Factory Default Wave	Wave Change from Factory	Factory Default Numeric	Numeric Change from Factory
Primary ECG	n/a	Aligned Numeric (HR)	n/a
Any ECG		Any ST	
Any Pleth		Any SpO2	
Any Press		Any SpO2	
Any RT wave		Any Press	
Any RT wave		Any RT Numeric	
Any RT wave		Any Pulse	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	

PIIC Name_____ Full/Half Screen

Factory Default Wave	Wave Change from Factory	Factory Default Numeric	Numeric Change from Factory
Primary ECG	n/a	Aligned Numeric (HR)	n/a
Any ECG		Any ST	
Any Pleth		Any SpO2	
Any Press		Any SpO2	
Any RT wave		Any Press	
Any RT wave		Any RT Numeric	
Any RT wave		Any Pulse	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	

PIIC Name_____ Full/Half Screen

Factory Default Wave	Wave Change from Factory	Factory Default Numeric	Numeric Change from Factory
Primary ECG	n/a	Aligned Numeric (HR)	n/a
Any ECG		Any ST	
Any Pleth		Any SpO2	
Any Press		Any SpO2	
Any RT wave		Any Press	
Any RT wave		Any RT Numeric	
Any RT wave		Any Pulse	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	

PIIC Name_____ Full/Half Screen

Factory Default Wave	Wave Change from Factory	Factory Default Numeric	Numeric Change from Factory
Primary ECG	n/a	Aligned Numeric (HR)	n/a
Any ECG		Any ST	
Any Pleth		Any SpO2	
Any Press		Any SpO2	
Any RT wave		Any Press	
Any RT wave		Any RT Numeric	
Any RT wave		Any Pulse	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	
Any RT wave		Any RT Numeric	

Chapter 4: Colors

Item Name: Waves	Default	Change from Factory	Item Name: Numerics	Default	Change from Factory
ECG	Green		HR	Green	
DECG	Orange		PVC	Green	
ABP	Red		ST	Green	
ART	Red		QT	Green	
Ao	Red		DFHR1	Orange	
PAP	Yellow		DFHR2	Orange	
CVP	Cyan		DFHR3	Orange	
RAP	Cyan		SpO2	Cyan	
LAP	Cyan		NBP	Pink	
ICP	Magenta		ABP	Red	
UAP	Red		ART	Red	
UVP	Cyan		Ao	Red	
FAP	Red		PAP	Yellow	
BAP	Red		CVP	Cyan	
ICP1	Magenta		RAP	Cyan	
ICP2	Magenta		LAP	Cyan	
P	Red		ICP	Magenta	
P1	Red		UAP	Red	
P2	Red		UVP	Cyan	
P3	Red		FAP	Red	
P4	Red		BAP	Red	
CO2	Yellow		IC1	Magenta	
O2	Green		IC2	Magenta	
Resp	Yellow		P	Red	
EEG	Yellow		P1	Red	
Temp	Green		P2	Red	
N2	Green		P3	Red	
N2O	Blue		P4	Red	
P5	Red		Toco	Green	
P6	Red		IUP	Green	
P7	Red		PAWP	Yellow	
P8	Red		IAP	Red	
			CPP	Magenta	
			PPV	Red	
			CCO	Green	
			C.O.	Green	
			SvO2	Yellow	
			ScvO2	Yellow	

			SO2	Yellow	
			CO2	Yellow	
			RRspir	White	
			awRR	Yellow	
			O2	Green	
			RR	Yellow	
			Temp	Green	
			Delta Temp	Green	
			DiffT	Green	
			N2	Green	
			N2O	Blue	
			P5	Red	
			P6	Red	
			P7	Red	
			P8	Red	

Chapter 5: Global Settings

Alarm Management

Item Name	Factory Default	Choices	Change from Factory
Alarms Off Prio	Yellow Only	Red & Yellow Yellow Only Not Allowed	
Alarms Off	2 min	1 min 2min 3min	
Audible Latching	Red & Yellow	Red & Yellow Red Only	
Alarm Reminder	On	On Realarm Off	
Inop Reminder	On	On Realarm Off	
Reminder Time	3 min	1 min 2 min 3 min	
No Data Inop	Hard	Hard Soft	
ECG Leads Off	Cyan	Cyan Yellow Red	
Battery Empty	Cyan	Cyan Yellow Red	
SOME ECG…INOP	On	On Off	
Alarm Text	Enhanced	Standard Enhanced	
Silence From Overview	Off	On Off	
Bedside Global Silence	On	On Off	
HR Alarms	Short Yellow	Short Yellow Yellow	

Telemetry Setup

Item Name	Factory Default	Choices	Change from Factory
Mute	On	On Off	
Volume at Device	3	1-5 (5 is loudest)	
Telemetry Button	Nurse Call	Nurse Call Record Call & Record Off	
Standby Duration	Infinite	10 minutes 20 minutes 30 minutes 1 hour 2 hour 3 hour 4 hour Infinite	
Remote Pause	Off	On Off	
RF Auto Shutoff	On	On Off	
SRR Use Model	Look for Monitor	Look for Monitor Look for Sensor	
SRR Fast Transition	On	On Off	
Allowed Leadset	All	All EASI No EASI 3 lead only	
Screen On Time	1 min	1 min 2 min 5 min 15 min 30 min	
Default Screen	2 Waves P	2 Waves P 1 Wave P 2 Waves L Chest Diagram	
Wave 1	Primary ECG	No changes allowed	
Wave 2	Secondary ECG	No changes allowed	
Wave 3	ECG	ECG Pleth Resp	

Wave 4	ECG	ECG Pleth Resp	

Remote Controls

Item Name	Factory Default	Choices	Change from Factory
Bedside Controls	Enabled	Enabled Disabled	
NBP Start Control	Yes	Enabled DIsabled	

Chapter 6: Profiles

Adult Enhanced

Item Category	Item Name	Factory Default	Choices	Change from Factory
Profiles	Category	Adult	Adult Pediatric Neonatal	
	Paced Mode	Unconfirmed	Unconfirmed On Off	
ECG	High Limit	120	Range: One step above Low Limit to 300 in 5 beat steps until less than 40, then single steps	
	Low Limit	50	Range: 15 to one step below High Limit in 5 beat steps until less than 40, then single steps	
	Asystole Thresh.	4.00 sec	Range: 2.5 – 4 seconds, in 0.25 second steps	
	Δ ExtrTachy	20 bpm	Range: 0-50 bpm, in 5 bpm steps	
	Tachy Clamp	200 bpm	Range: 150 bpm to 300 bpm in 5 bpm steps	
	Δ ExtrBrady	20 bpm	Range: 0-50 bpm, in 5 bpm steps	
	Brady Clamp	40 bpm	Range: 15 bpm to 100 bpm in 5 bpm steps	
	Primary Lead	II	Any of the 16 ECG leads	
	Secondary Lead	V2	Any of the 16 ECG leads	
	Va Lead	V2	Any of the 16 ECG leads	
	Vb Lead	V5	Any of the 16 ECG leads	
	Filter	0.5-40hz M	0.5-40hz M 0.05-40hz ST	
	Hexad	Off	On Off	
	Default ECG size	Size x2	Size x 0.5 Size x1 Size x2 Size x4	
Arrhythmia	Arrhythmia	On	On Off	

	Asystole Thresh	4.00 sec	Range: 2.5 – 4.0 sec in 0.25 second steps	
	Pause Threshold	2.00 sec	Range:1.5 – 2.5 sec in 0.25 second steps	
	Afib/IHR End Dly	5 min	0 min 1 min 5 min 10 min 15 min 30 min	
	VTach HR	100	Range: 20-300 V beats in steps of 5 bpm	
	VTach Run	5	Range: 3-99 V beats in steps of 1 beat	
	Vent Rhythm	14	Range: 3-99 V beats in steps of 1 beat	
	SVT HR	180	Range: 120-300 SV beats in 5 bpm steps	
	SVT Run	5	Range: 3-99 SV beats in steps of 1 beat	
	PVCs/min	10	Range: 1-99 PVC/min in steps of 1 PVCs/min	
	Non-Sustain	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Vent Rhythm	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Run PVCs	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pair PVCs	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	R-on-T PVCs	On & Unlocked	On & Unlocked On & Locked Off & Unlocked	

			Off & Locked Off & Hidden	
	V. Bigeminy	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	V. Trigeminy	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	PVCs/min	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Multif.PVCs	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pacer N. Cap	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pacer N. Pac	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pause	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Missed Beat	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	SVT	On & Unlocked	On & Unlocked On & Locked Off & Unlocked	

			Off & Locked Off & Hidden	
	Afib	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	IrregularHR	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Arrhythmia Mode	Enhanced	Basic Enhanced	
	Analysis Mode	Multi Lead	Multi Lead Single Lead	
	Timeout 1st	3 min	0 min 1 m in 2 min 3 min 4 min 5 min	
	Timeout 2nd	10 min	0 min 1 m in 2 min 3 min 4 min 5 min 10 min 15 min	
	Afib/IHR Remind.	30 min	10 min 20 min 30 min 60 min 120 min	
ST	ST Analysis	Off	On Off	
	ISO/J-Point	Auto	Auto Manual	
	ST Offset	J+60	J+0 J+20 J+40 J+60 J+80	
	ISO Point	-80msec	Range: -460 msec to 460	

			msec in 4 msec steps	
	J Point	40 msec	Range: -460 msec to 460 msec in 4 msec steps	
	Alarms	On	On Off	
	ST-I High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-I Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-II High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-II Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-IIIHigh	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-III Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVR High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVR Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVL High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVL Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVF High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVF Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-MCL High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-MCL Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V1 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V1 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V2 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V2 Low	-1.0	Range: -20 mm to 19.8	

			mm in 0.2 steps	
	ST-V3 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V3 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V4 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V4 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V5 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V5 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V6 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V6 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V7 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V7 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V8 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V8 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V9 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V9 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V3R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V3R Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V4R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V4R Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V5R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V5R Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	Auto Limits	Off	On Off	
STE	STE	Off	On	

			Off	
	Alarms	On	On Off	
	STE Fem V1, V4-6	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Fem V2. V3	1.5	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Fem Limbs	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male V1, V4-6	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male V2, V3	2.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male Limbs	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
QT	QT Analysis	Off	On Off	
	QT Lead	All	All Any ECG Lead	
	QRc Formula	Bazett	Bazett Fredericia	
	QTC High Alarm	On	On Off	
	QTc HighLimit	500	Range: 200-800msec	
	Δ QTc Alarm	On	On Off	
	Δ QTc High Limit	60	Range: 30-200 msec	
SpO2	High Limit	100	Range: 51-100% in 1% steps.	
	Low Limit	90	Range: 50-99% in 1% steps	
	Desat Limit	80	50-99% in 1% steps	
	Alarms	On	On Off	
	High Alarm Delay	10 sec	Range: 1-30 seconds in 1 second steps	
	Low Alarm Delay	10 sec	Range: 1-30 seconds in 1 second steps	
	Desat Delay	20 sec	Range: 1-30 seconds in 1 second steps	
	SpO2	On	On Off	
	Repeat Time	15.0 min	1 min	

			2 min 2.5 min 3 min 5 min 10 min 15 min 20 min 30 min 45 min 60 min 120 min 240 min	
	Mode	Manual	Manual Continuous	
	Pleth Wave	On	On Off	
	NBP Alarm Suppr.	On	On Off	
	Pulse	Off	On Off	
	Average	10 sec	5 sec 10 sec 20 sec	
NBP	Alarms From	Sys	Systolic Diastolic Mean Any combination	
	Sys High	160	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Sys. Low	90	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Dia High	90	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Dia. Low	50	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Mean High	110	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Mean Low	60	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Alarms	On	On Off	
	Unit	mmHg	mmHg kPa	
Resp	High Limit	30	Range: 1-100 in steps of 5	

	Low Limit	8	Range: 1-95 in steps of 5	
	Apnea Time	20 sec	10 sec 15 sec 20 sec 25 sec 30 sec 35 sec 40 sec	
	Alarms	On	On Off	
	Resp	On	On Off	

Adult Basic

Item Category	Item Name	Factory Default	Choices	Change from Factory
Profiles	Category	Adult	Adult Pediatric Neonatal	
	Paced Mode	Unconfirmed	Unconfirmed On Off	
ECG	High Limit	120	Range: One step above Low Limit to 300 in 5 beat steps until less than 40, then single steps	
	Low Limit	50	Range: 15 to one step below High Limit in 5 beat steps until less than 40, then single steps	
	Asystole Thresh.	4.00 sec	Range: 2.5 – 4 seconds, in 0.25 second steps	
	Δ ExtrTachy	20 bpm	Range: 0-50 bpm, in 5 bpm steps	
	Tachy Clamp	200 bpm	Range: 150 bpm to 300 bpm in 5 bpm steps	
	Δ ExtrBrady	20 bpm	Range: 0-50 bpm, in 5 bpm steps	
	Brady Clamp	40 bpm	Range: 15 bpm to 100 bpm in 5 bpm steps	
	Primary Lead	II	Any of the 16 ECG leads	
	Secondary Lead	V2	Any of the 16 ECG leads	
	Va Lead	V2	Any of the 16 ECG leads	
	Vb Lead	V5	Any of the 16 ECG leads	
	Filter	0.5-40hz M	0.5-40hz M 0.05-40hz ST	
	Hexad	Off	On Off	
	Default ECG size	Size x2	Size x 0.5 Size x1 Size x2 Size x4	
Arrhythmia	Arrhythmia	On	On Off	
	Asystole Thresh	4.00 sec	Range: 2.5 – 4.0 sec in 0.25 second steps	

	VTach HR	100	Range: 20-300 V beats in steps of 5 bpm	
	VTach Run	5	Range: 3-99 V beats in steps of 1 beat	
	PVCs/min	10	Range: 1-99 PVC/min in steps of 1 PVCs/min	
	PVCs/min	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pacer N. Cap	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pacer N. Pac	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Arrhythmia Mode	Basic	Basic Enhanced	
	Analysis Mode	Multi Lead	Multi Lead Single Lead	
	Timeout 1st	3 min	0 min 1 m in 2 min 3 min 4 min 5 min	
	Timeout 2nd	10 min	0 min 1 m in 2 min 3 min 4 min 5 min 10 min 15 min	
ST	ST Analysis	Off	On Off	
	ISO/J-Point	Auto	Auto Manual	
	ST Offset	J+60	J+0 J+20	

			J+40 J+60 J+80	
	ISO Point	-80msec	Range: -460 msec to 460 msec in 4 msec steps	
	J Point	40 msec	Range: -460 msec to 460 msec in 4 msec steps	
	Alarms	On	On Off	
	ST-I High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-I Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-II High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-II Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-IIIHigh	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-III Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVR High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVR Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVL High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVL Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVF High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVF Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-MCL High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-MCL Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V1 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V1 Low	-1.0	Range: -20 mm to 19.8	

			mm in 0.2 steps	
	ST-V2 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V2 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V3 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V3 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V4 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V4 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V5 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V5 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V6 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V6 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V7 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V7 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V8 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V8 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V9 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V9 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V3R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V3R Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V4R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V4R Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V5R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V5R Low	-1.0	Range: -20 mm to 19.8	

			mm in 0.2 steps	
	Auto Limits	Off	On Off	
STE	STE	Off	On Off	
	Alarms	On	On Off	
	STE Fem V1, V4-6	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Fem V2. V3	1.5	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Fem Limbs	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male V1, V4-6	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male V2, V3	2.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male Limbs	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
QT	QT Analysis	Off	On Off	
	QT Lead	All	All Any ECG Lead	
	QRc Formula	Bazett	Bazett Fredericia	
	QTC High Alarm	On	On Off	
	QTc HighLimit	500	Range: 200-800msec	
	Δ QTc Alarm	On	On Off	
	Δ QTc High Limit	60	Range: 30-200 msec	
SpO2	High Limit	100	Range: 51-100% in 1% steps.	
	Low Limit	90	Range: 50-99% in 1% steps	
	Desat Limit	80	50-99% in 1% steps	
	Alarms	On	On Off	
	High Alarm Delay	10 sec	Range: 1-30 seconds in 1 second steps	
	Low Alarm Delay	10 sec	Range: 1-30 seconds in 1 second steps	
	Desat Delay	20 sec	Range: 1-30 seconds in 1	

			second steps	
	SpO2	On	On Off	
	Repeat Time	15.0 min	1 min 2 min 2.5 min 3 min 5 min 10 min 15 min 20 min 30 min 45 min 60 min 120 min 240 min	
	Mode	Manual	Manual Continuous	
	Pleth Wave	On	On Off	
	NBP Alarm Suppr.	On	On Off	
	Pulse	Off	On Off	
	Average	10 sec	5 sec 10 sec 20 sec	
NBP	Alarms From	Sys	Systolic Diastolic Mean Any combination	
	Sys High	160	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Sys. Low	90	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Dia High	90	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Dia. Low	50	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Mean High	110	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Mean Low	60	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Alarms	On	On Off	

	Unit	mmHg	mmHg kPa	
Resp	High Limit	30	Range: 1-100 in steps of 5	
	Low Limit	8	Range: 1-95 in steps of 5	
	Apnea Time	20 sec	10 sec 15 sec 20 sec 25 sec 30 sec 35 sec 40 sec	
	Alarms	On	On Off	
	Resp	On	On Off	

Pediatric Enhanced

Item Category	Item Name	Factory Default	Choices	Change from Factory
Profiles	Category	Pediatric	Adult Pediatric	
	Paced Mode	Unconfirmed	Unconfirmed On Off	
ECG	High Limit	160	Range: One step above Low Limit to 300 in 5 beat steps until less than 40, then single steps	
	Low Limit	75	Range: 15 to one step below High Limit in 5 beat steps until less than 40, then single steps	
	Asystole Thresh.	4.00 sec	Range: 2.5 – 4 seconds, in 0.25 second steps	
	Δ ExtrTachy	20 bpm	Range: 0-50 bpm, in 5 bpm steps	
	Tachy Clamp	220 bpm	Range: 150 bpm to 300 bpm in 5 bpm steps	
	Δ ExtrBrady	20 bpm	Range: 0-50 bpm, in 5 bpm steps	
	Brady Clamp	40 bpm	Range: 15 bpm to 100 bpm in 5 bpm steps	
	Primary Lead	II	Any of the 16 ECG leads	
	Secondary Lead	V2	Any of the 16 ECG leads	
	Va Lead	V2	Any of the 16 ECG leads	
	Vb Lead	V5	Any of the 16 ECG leads	
	Filter	0.5-40hz M	0.5-40hz M 0.05-40hz ST	
	Hexad	Off	On Off	
	Default ECG size	Size x2	Size x 0.5 Size x1 Size x2 Size x4	
Arrhythmia	Arrhythmia	On	On Off	
	Asystole Thresh	4.00 sec	Range: 2.5 – 4.0 sec in 0.25 second steps	
	Pause	2.00 sec	Range:1.5 – 2.5 sec in	

	Threshold		0.25 second steps	
	Afib/IHR End Dly	5 min	0 min 1 min 5 min 10 min 15 min 30 min	
	VTach HR	120	Range: 20-300 V beats in steps of 5 bpm	
	VTach Run	5	Range: 3-99 V beats in steps of 1 beat	
	Vent Rhythm	14	Range: 3-99 V beats in steps of 1 beat	
	SVT HR	200	Range: 120-300 SV beats in 5 bpm steps	
	SVT Run	5	Range: 3-99 SV beats in steps of 1 beat	
	PVCs/min	5	Range: 1-99 PVC/min in steps of 1 PVCs/min	
	Non-Sustain	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Vent Rhythm	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Run PVCs	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pair PVCs	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	R-on-T PVCs	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	V. Bigeminy	On &	On & Unlocked	

		Unlocked	On & Locked Off & Unlocked Off & Locked Off & Hidden	
	V. Trigeminy	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	PVCs/min	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Multif.PVCs	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pacer N. Cap	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pacer N. Pac	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Pause	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Missed Beat	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	SVT	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Afib	On &	On & Unlocked	

		Unlocked	On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Irregular HR	On & Unlocked	On & Unlocked On & Locked Off & Unlocked Off & Locked Off & Hidden	
	Basic Arrhythmia	Not Checked	Not Checked Checked	
	Enhanced Arrhythmia	Checked	Not Checked Checked	
	Analysis Mode	Multi Lead	Multi Lead Single Lead	
	Timeout 1st	3 min	0 min 1 m in 2 min 3 min 4 min 5 min	
	Timeout 2nd	10 min	0 min 1 m in 2 min 3 min 4 min 5 min 10 min 15 min	
	Afib/IHR Remind.	30 min	10 min 20 min 30 min 60 min 120 min	
ST	ST Analysis	Off	On Off	
	ISO/J-Point	Auto	Auto Manual	
	ST Offset	J+60	J+0 J+20 J+40 J+60 J+80	
	ISO Point	-56msec	Range: -460 msec to 460 msec in 4 msec steps	

	J Point	32 msec	Range: -460 msec to 460 msec in 4 msec steps	
	Alarms	On	On Off	
	ST-I High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-I Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-II High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-II Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-III High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-III Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVR High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVR Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVL High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVL Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-aVF High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-aVF Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-MCL High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-MCL Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V1 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V1 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V2 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V2 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	

	ST-V3 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V3 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V4 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V4 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V5 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V5 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V6 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V6 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V7 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V7 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V8 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V8 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V9 High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V9 Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V3R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V3R Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V4R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V4R Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
	ST-V5R High	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	ST-V5R Low	-1.0	Range: -20 mm to 19.8 mm in 0.2 steps	
STE	STE	Off	On Off	
	Alarms	On	On Off	

	STE Fem V1, V4-6	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Fem V2. V3	1.5	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Fem Limbs	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male V1, V4-6	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male V2, V3	2.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
	STE Male Limbs	1.0	Range: -19.8 mm to 20 mm in 0.2mm steps	
QT	QT Analysis	Off	On Off	
	QT Lead	All	All Any ECG Lead	
	QTc Formula	Bazett	Bazett Fredericia	
	QTC High Alarm	On	On Off	
	QTc High Limit	500	Range: 200-800msec	
	Δ QTc Alarm	On	On Off	
	Δ QTc High Limit	60	Range: 30-200 msec	
SpO2	High Limit	100	Range: 51-100% in 1% steps.	
	Low Limit	90	Range: 50-99% in 1% steps	
	Desat Limit	80	50-99% in 1% steps	
	Alarms	On	On Off	
	High Alarm Delay	10 sec	Range: 1-30 seconds in 1 second steps	
	Low Alarm Delay	10 sec	Range: 1-30 seconds in 1 second steps	
	Desat Delay	20 sec	Range: 1-30 seconds in 1 second steps	
	SpO2	On	On Off	
	Repeat Time	15.0 min	1 min 2 min 2.5 min 3 min	

			5 min 10 min 15 min 20 min 30 min 45 min 60 min 120 min 240 min	
	Mode	Manual	Manual Continuous	
	Pleth Wave	On	On Off	
	NBP Alarm Suppr.	On	On Off	
	Pulse	Off	On Off	
	Average	10 sec	5 sec 10 sec 20 sec	
NBP	Alarms From	Sys	Systolic Diastolic Mean Any combination	
	Sys High	120	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Sys. Low	70	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Dia High	70	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Dia. Low	40	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Mean High	90	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Mean Low	50	Range: 30-270mm/Hg in steps of 5 mm/Hg	
	Alarms	On	On Off	
	Unit	mmHg	mmHg kPa	
Resp	High Limit	30	Range: 1-100 in steps of 5	
	Low Limit	8	Range: 1-95 in steps of 5	
	Apnea Time	20 sec	10 sec 15 sec	

			20 sec 25 sec 30 sec 35 sec 40 sec	
	Alarms	On	On Off	
	Resp	On	On Off	

Chapter 7: Alarm Notification

Notification Settings

Item Category	Item Name	Default	Choices	Change from Factory
Paging Settings	Automatically Send Alarms	Checked	Checked Not Checked	
	Include Patient Name	Not Checked	Checked Not Checked	
	Inop Delay	30 seconds	0-300 seconds in 5 second increments	
	Wave Pre-Context	4 seconds	1-5 seconds	
	Paging Roles	Charge Nurse Nurse Care Tech	Variable	
Bedside Overview Settings	Status Bar	By Unit	Off By Caregiver By Unit	
	Popups	Off	Off By Caregiver By Unit	
	Prompt Tone	Not Checked	Checked Not Checked	
	Show Patient Name	Not Checked	Checked Not Checked	
	Overview Role	Nurse	Variable	
Caregiver Settings	Clear Bed Assignments	Bed Only	Bed Only All	
	Charge Role	Charge Nurse	Variable	
	Nurse Role	Nurse	Variable	
	Show Unit Assignments	Not Checked	Checked Not Checked	
	Unit Paging Role	None	Variable	

Alarm Filters

Item Category	Item Name	Default	Choices	Change from Factory
Record	All Red – All On	Checked	Checked Not Checked	
	Red Arrhythmia – All On	Checked	Checked Not Checked	
	Asystole	Checked	Checked Not Checked	
	VFib/Tach	Checked	Checked Not Checked	

	VTach	Checked	Checked Not Checked	
	Extreme Tachy	Checked	Checked Not Checked	
	Extreme Brady	Checked	Checked Not Checked	
	Red Pressure	Checked	Checked Not Checked	
	Red SpO2	Checked	Checked Not Checked	
	Red Resp	Checked	Checked Not Checked	
	Red Other	Checked	Checked Not Checked	
	All Yellow – All On	Checked	Checked Not Checked	
	Yellow Arrhythmia	Checked	Checked Not Checked	
	HR	Checked	Checked Not Checked	
	Non-Sustain VT	Checked	Checked Not Checked	
	Vent Rhythm	Checked	Checked Not Checked	
	Run PVCs	Checked	Checked Not Checked	
	Pair PVCs	Checked	Checked Not Checked	
	R-on-T PVC	Checked	Checked Not Checked	
	Vent Bigeminy	Checked	Checked Not Checked	
	Vent Trigeminy	Checked	Checked Not Checked	
	PVCs/Min	Checked	Checked Not Checked	
	Multiform PVC	Checked	Checked Not Checked	
	Pacer Not Capture	Checked	Checked Not Checked	
	Pacer Not Paced	Checked	Checked Not Checked	
	Missed Beat	Checked	Checked Not Checked	

	Pause	Checked	Checked Not Checked	
	SVT	Checked	Checked Not Checked	
	Afib	Checked	Checked Not Checked	
	Irregular HR	Checked	Checked Not Checked	
	Yellow ST	Checked	Checked Not Checked	
	Yellow QT	Checked	Checked Not Checked	
	Yellow SpO2	Checked	Checked Not Checked	
	Yellow Pressure	Checked	Checked Not Checked	
	Yellow Resp	Checked	Checked Not Checked	
	Nurse Call (tele)	Checked	Checked Not Checked	
	Yellow Other	Checked	Checked Not Checked	
Popup	All Red – All On	Checked	Checked Not Checked	
	Red Arrhythmia – All On	Checked	Checked Not Checked	
	Asystole	Checked	Checked Not Checked	
	VFib/Tach	Checked	Checked Not Checked	
	VTach	Checked	Checked Not Checked	
	Extreme Tachy	Checked	Checked Not Checked	
	Extreme Brady	Checked	Checked Not Checked	
	Red Pressure	Checked	Checked Not Checked	
	Red SpO2	Checked	Checked Not Checked	
	Red Resp	Checked	Checked Not Checked	
	Red Other	Checked	Checked Not Checked	

	All Yellow – All On	Checked	Checked Not Checked	
	Yellow Arrhythmia	Checked	Checked Not Checked	
	HR	Checked	Checked Not Checked	
	Non-Sustain VT	Checked	Checked Not Checked	
	Vent Rhythm	Checked	Checked Not Checked	
	Run PVCs	Checked	Checked Not Checked	
	Pair PVCs	Checked	Checked Not Checked	
	R-on-T PVC	Checked	Checked Not Checked	
	Vent Bigeminy	Checked	Checked Not Checked	
	Vent Trigeminy	Checked	Checked Not Checked	
	PVCs/Min	Checked	Checked Not Checked	
	Multiform PVC	Checked	Checked Not Checked	
	Pacer Not Capture	Checked	Checked Not Checked	
	Pacer Not Paced	Checked	Checked Not Checked	
	Missed Beat	Checked	Checked Not Checked	
	Pause	Checked	Checked Not Checked	
	SVT	Checked	Checked Not Checked	
	Afib	Checked	Checked Not Checked	
	Irregular HR	Checked	Checked Not Checked	
	Yellow ST	Checked	Checked Not Checked	
	Yellow QT	Checked	Checked Not Checked	
	Yellow SpO2	Checked	Checked Not Checked	

	Yellow Pressure	Checked	Checked Not Checked	
	Yellow Resp	Checked	Checked Not Checked	
	Nurse Call (tele)	Checked	Checked Not Checked	
	Yellow Other	Checked	Checked Not Checked	
	All Inops – All Off	Not Checked	Checked Not Checked	
	SpO2 Inops	Not Checked	Checked Not Checked	
	NBP Inops	Not Checked	Checked Not Checked	
	Pressure Non-Pulsatile	Not Checked	Checked Not Checked	
	Battery Low	Not Checked	Checked Not Checked	
	Replace Battery	Not Checked	Checked Not Checked	
	Cannot Analyze ECG	Not Checked	Checked Not Checked	
	ECG Alarms Off	Not Checked	Checked Not Checked	
	ECG Leads Off	Not Checked	Checked Not Checked	
	Single Lead Off	Not Checked	Checked Not Checked	
	No Data from device	Not Checked	Checked Not Checked	
	ECG Leads Unplugged	Not Checked	Checked Not Checked	
	CO2 Inops	Not Checked	Checked Not Checked	
	External Sources Inops	Not Checked	Checked Not Checked	
	Monitoring Device Inops	Not Checked	Checked Not Checked	
	MRx Inops	Not Checked	Checked Not Checked	
	Inop Other	Not Checked	Checked Not Checked	
Page	All Red – All On	Checked	Checked Not Checked	

	Red Arrhythmia – All On	Checked	Checked Not Checked	
	Asystole	Checked	Checked Not Checked	
	VFib/Tach	Checked	Checked Not Checked	
	VTach	Checked	Checked Not Checked	
	Extreme Tachy	Checked	Checked Not Checked	
	Extreme Brady	Checked	Checked Not Checked	
	Red Pressure	Checked	Checked Not Checked	
	Red SpO2	Checked	Checked Not Checked	
	Red Resp	Checked	Checked Not Checked	
	Red Other	Checked	Checked Not Checked	
	All Yellow – All On	Checked	Checked Not Checked	
	Yellow Arrhythmia	Checked	Checked Not Checked	
	HR	Checked	Checked Not Checked	
	Non-Sustain VT	Checked	Checked Not Checked	
	Vent Rhythm	Checked	Checked Not Checked	
	Run PVCs	Checked	Checked Not Checked	
	Pair PVCs	Checked	Checked Not Checked	
	R-on-T PVC	Checked	Checked Not Checked	
	Vent Bigeminy	Checked	Checked Not Checked	
	Vent Trigeminy	Checked	Checked Not Checked	
	PVCs/Min	Checked	Checked Not Checked	
	Multiform PVC	Checked	Checked Not Checked	

	Pacer Not Capture	Checked	Checked Not Checked	
	Pacer Not Paced	Checked	Checked Not Checked	
	Missed Beat	Checked	Checked Not Checked	
	Pause	Checked	Checked Not Checked	
	SVT	Checked	Checked Not Checked	
	Afib	Checked	Checked Not Checked	
	Irregular HR	Checked	Checked Not Checked	
	Yellow ST	Checked	Checked Not Checked	
	Yellow QT	Checked	Checked Not Checked	
	Yellow SpO2	Checked	Checked Not Checked	
	Yellow Pressure	Checked	Checked Not Checked	
	Yellow Resp	Checked	Checked Not Checked	
	Nurse Call (tele)	Checked	Checked Not Checked	
	Yellow Other	Checked	Checked Not Checked	
	All Inops – All Off	Checked	Checked Not Checked	
	SpO2 Inops	Checked	Checked Not Checked	
	NBP Inops	Checked	Checked Not Checked	
	Pressure Non-Pulsatile	Checked	Checked Not Checked	
	Battery Low	Checked	Checked Not Checked	
	Replace Battery	Checked	Checked Not Checked	
	Cannot Analyze ECG	Checked	Checked Not Checked	
	ECG Alarms Off	Checked	Checked Not Checked	

	ECG Leads Off	Checked	Checked Not Checked	
	Single Lead Off	Checked	Checked Not Checked	
	No Data from device	Checked	Checked Not Checked	
	ECG Leads Unplugged	Checked	Checked Not Checked	
	CO2 Inops	Checked	Checked Not Checked	
	External Sources Inops	Checked	Checked Not Checked	
	Monitoring Device Inops	Checked	Checked Not Checked	
	MRx Inops	Checked	Checked Not Checked	
	Inop Other	Checked	Checked Not Checked	

Alarm Roles

Item Category	Item Name	Default	Choices	Change from Factory
Reminder Interval	First Level Unsilenced	60 seconds	0-120 seconds	
	Second Level Unsilenced	120 seconds	0-300 seconds	

Overview Role

Item Category	Item Name	Default	Choices	Change from Factory
For All Patients in Unit	All Red	Not Assigned	Assign Unassign	
	All First Level Red	Not Assigned	Assign Unassign	
	All Second Level Red	Not Assigned	Assign Unassign	
	Unassigned Beds	Assigned	Assign Unassign	
For Caregiver's Patients	Red	Assigned	Assign Unassign	
	First Level Red	Not Assigned	Assign Unassign	
	Second Level Red	Not Assigned	Assign Unassign	
	Yellow	Not Assigned	Assign Unassign	
	First Level Yellow	Not Assigned	Assign Unassign	
	Second Level Yellow	Not Assigned	Assign Unassign	
	Red Inop	Not Assigned	Assign Unassign	
	First Level Red Inop	Not Assigned	Assign Unassign	
	Second Level Red Inop	Not Assigned	Assign Unassign	
	Yellow Inop	Not Assigned	Assign Unassign	
	First Level Yellow Inop	Not Assigned	Assign Unassign	
	Second Level Yellow Inop	Not Assigned	Assign Unassign	
	Inop	Not Assigned	Assign Unassign	
	First Level Inop	Not Assigned	Assign Unassign	
	Second Level Inop	Not Assigned	Assign Unassign	

Charge Nurse

Item Category	Item Name	Default	Choices	Change from Factory
For All Patients in Unit	All Red	Assigned	Assign Unassign	
	All First Level Red	Assigned	Assign Unassign	
	All Second Level Red	Not Assigned	Assign Unassign	
	Unassigned Beds	Assigned	Assign Unassign	
For Caregiver's Patients	Red	Not Assigned	Assign Unassign	
	First Level Red	Not Assigned	Assign Unassign	
	Second Level Red	Not Assigned	Assign Unassign	
	Yellow	Not Assigned	Assign Unassign	
	First Level Yellow	Not Assigned	Assign Unassign	
	Second Level Yellow	Not Assigned	Assign Unassign	
	Red Inop	Not Assigned	Assign Unassign	
	First Level Red Inop	Not Assigned	Assign Unassign	
	Second Level Red Inop	Not Assigned	Assign Unassign	
	Yellow Inop	Not Assigned	Assign Unassign	
	First Level Yellow Inop	Not Assigned	Assign Unassign	
	Second Level Yellow Inop	Not Assigned	Assign Unassign	
	Inop	Not Assigned	Assign Unassign	
	First Level Inop	Not Assigned	Assign Unassign	
	Second Level Inop	Not Assigned	Assign Unassign	

Nurse

Item Category	Item Name	Default	Choices	Change from Factory
For All Patients in Unit	All Red	Not Assigned	Assign Unassign	
	All First Level Red	Not Assigned	Assign Unassign	
	All Second Level Red	Not Assigned	Assign Unassign	
	Unassigned Beds	Not Assigned	Assign Unassign	
For Caregiver's Patients	Red	Assigned	Assign Unassign	
	First Level Red	Assigned	Assign Unassign	
	Second Level Red	Not Assigned	Assign Unassign	
	Yellow	Assigned	Assign Unassign	
	First Level Yellow	Not Assigned	Assign Unassign	
	Second Level Yellow	Assigned	Assign Unassign	
	Red Inop	Not Assigned	Assign Unassign	
	First Level Red Inop	Assigned	Assign Unassign	
	Second Level Red Inop	Not Assigned	Assign Unassign	
	Yellow Inop	Not Assigned	Assign Unassign	
	First Level Yellow Inop	Assigned	Assign Unassign	
	Second Level Yellow Inop	Not Assigned	Assign Unassign	
	Inop	Not Assigned	Assign Unassign	
	First Level Inop	Not Assigned	Assign Unassign	
	Second Level Inop	Assigned	Assign Unassign	

Care Tech

Item Category	Item Name	Default	Choices	Change from Factory
For All Patients in Unit	All Red	Not Assigned	Assign Unassign	
	All First Level Red	Not Assigned	Assign Unassign	
	All Second Level Red	Not Assigned	Assign Unassign	
	Unassigned Beds	Not Assigned	Assign Unassign	
For Caregiver's Patients	Red	Not Assigned	Assign Unassign	
	First Level Red	Not Assigned	Assign Unassign	
	Second Level Red	Not Assigned	Assign Unassign	
	Yellow	Not Assigned	Assign Unassign	
	First Level Yellow	Not Assigned	Assign Unassign	
	Second Level Yellow	Not Assigned	Assign Unassign	
	Red Inop	Assigned	Assign Unassign	
	First Level Red Inop	Assigned	Assign Unassign	
	Second Level Red Inop	Not Assigned	Assign Unassign	
	Yellow Inop	Assigned	Assign Unassign	
	First Level Yellow Inop	Assigned	Assign Unassign	
	Second Level Yellow Inop	Not Assigned	Assign Unassign	
	Inop	Assigned	Assign Unassign	
	First Level Inop	Assigned	Assign Unassign	
	Second Level Inop	Not Assigned	Assign Unassign	

Chapter 8: Reports

Scheduled

Item Category	Item Name	Default	Choices	Change from Factory
Alarm	Start Time	Current time will default	Set clock	
	Frequency	None	None Every hour Every 2 hours Every 4 hours Every 6 hours Every 8 hours Every 12 Hours Every 24 Hours	
	Strip Filter	All	Multi Select: Red Alarms Yellow Alarms ECG Alarms Non-ECG Alarms Saved Strips	
Alarm Summary	Start Time	Current time will default	Set clock	
	Frequency	None	None Every 4 hours Every 8 hours Every 12 Hours	
ECG Statistics	Start Time	Current time will default	Set clock	
	Frequency		None Every hour Every 2 hours Every 4 hours Every 6 hours Every 8 hours Every 12 Hours Every 24 Hours	
	Interval	Algorithm Interval	Algorithm Interval 10 minutes 15 minutes 30 minutes 1 hour	
Patient Summary	Start Time	Current time will default	Set clock	

	Frequency		None Every hour Every 2 hours Every 4 hours Every 6 hours Every 8 hours Every 12 Hours Every 24 Hours	
Tabular Trend	Start Time	Current time will default	Set clock	
	Frequency		None Every hour Every 2 hours Every 4 hours Every 6 hours Every 8 hours Every 12 Hours Every 24 Hours	
	Interval	1 hour	NBP Interval 10 minutes 15 minutes 30 minutes 1 hour	
Unit Summary	Start Time	Current time will default	Set clock	
	Frequency	None	None Every hour Every 2 hours Every 4 hours Every 6 hours Every 8 hours Every 12 Hours Every 24 Hours	

Monitor Reports

Item Category	Item Name	Default	Choices	Change from Factory
Central Report A	Report Type	Alarm	Alarm Alarm Summary Tabular Trend Patient Summary	
	Max # Pages	Unlimited	1 page 2 pages 3 pages 4 pages 5 pages 10 pages Unlimited	
Central Report B	Report Type	Patient Summary	Alarm Alarm Summary Tabular Trend Patient Summary	
	Max # Pages	Unlimited	1 page 2 pages 3 pages 4 pages 5 pages 10 pages Unlimited	
Central Report C	Report Type	Tabular Trend	Alarm Alarm Summary Tabular Trend Patient Summary	
	Max # Pages	Unlimited	1 page 2 pages 3 pages 4 pages 5 pages 10 pages Unlimited	
When configuring Alarm, also configure	Strip Filter	All	Multi Select: Red Alarms Yellow Alarms ECG Alarms Non-ECG Alarms Saved Strips	
When configuring Tabular, also configure	Max Pages	10	1, 2, 3, 4, 5, or 10	
	Interval	1 hour	NBP Interval	

			1 minute 5 minutes 10 minutes 15 minutes 30 minutes 1 hour 2 hours	

Strip Settings

Item Category	Item Name	Default	Choices	Change from Factory
Alarm	Pre Time	4 seconds	2 seconds 4 seconds 6 seconds 8 seconds 10 seconds	
	Durations	6 seconds	4 seconds 6 seconds 8 seconds 10 seconds 15 seconds 20 seconds	
	Speed	25 mm/sec	6.25 mm/sec 12.5 mm/sec 25 mm/sec 50 mm/sec	
Review	Pre Time	10 seconds	2 seconds 4 seconds 6 seconds 8 seconds 10 seconds	
	Duration	30 seconds	4 seconds 6 seconds 8 seconds 10 seconds 15 seconds 20 seconds	
	Speed	25 mm/sec	6.25 mm/sec 12.5 mm/sec 25 mm/sec 50 mm/sec	

Chapter 9: Recording

Item Category	Item Name	Default	Choices	Change from Factory
Real Time/Alarm Recording	Pre Time	4 seconds	2 seconds 4 seconds 6 seconds 8 seconds 10 seconds	
	Run Time	6 seconds	4 seconds 6 seconds 8 seconds 10 seconds 15 seconds 20 seconds	
Review Recording	Pre Time	10 seconds	2 seconds 4 seconds 6 seconds 8 seconds 10 seconds	
	Run Time	30 seconds	4 seconds 6 seconds 8 seconds 10 seconds 15 seconds 20 seconds 30 seconds	
Alarm Speed		25 mm/sec	6.25 mm/sec 12.5 mm/sec 25 mm/sec 50 mm/sec	
Extend Recording duration to record all vital signs		Checked	Checked Not Checked	
Alarm Recorder Status Message		Checked	Checked Not checked	

Chapter 10: ECG 12 Lead

ECG 12 configurations are broken into five sections- only the Setup and Analyze are reviewed here. Export, Order Reasons and Interface are technical support settings.

Setup

Item Category	Item Name	Default	Choices	Change from Factory
Filter Adult	High Pass	0.15 Hz	0.15 Hz 0.05 Hz 0.5 Hz	
	Low Pass	100 Hz	40 Hz 100 Hz 150 Hz	
Filter Pedi	High Pass	0.15 Hz	0.15 Hz 0.05 Hz 0.5 Hz	
	Low Pass	150 Hz	40 Hz 100 Hz 150 Hz	
Gain		10 mm/mV	2.5 mm/mV (x1/2) 5 mm/mV (x1) 10mm/mV (x2) 20 mm/mV (x 4)	
Chest Gain		Full	Full Half	
Paper Speed		25 mm/sec	25 mm/sec 50 mm/sec	
Time		Sequential	Sequential Simultaneous	
Format		3x4 1 R	12 x 1 6 x 2 3 x 4 3 x 4 1R 3 x 4 3R 3 x 4 ST Map 3 x 4 1R ST Map	
Rhythm Lead 1		II	I II III aVR aVF aVL V1 V2 V3	

			V4 V5 V6	
Rhythm Lead 2		aVF	 III aVR aVF aVL V1 V2 V3 V4 V5 V6	
Rhythm Lead 3		V5	 III aVR aVF aVL V1 V2 V3 V4 V5 V6	
Lead Sequence		Standard	Standard Cabrera	

Analyze

Item Name	Default	Choices	Change from Factory
Algorithm	PH100B	PH100B PH110C	
Additional QTc	None	Depends on Algorithm: None QTcF (Fridericia) QTcH (Hodges) QTcFm (Framingham)	
Interpretive Statements	Show Interpretations and Reasons	Show Interpretations and Reasons Show Interpretations Only Hide Interpretations and Reasons	
Borderline Statement Suppression	Include All	Include All Exclude Low Certainty Exclude All	
Adult Bradycardia Limit	50 BPM	50 BPM 60 BPM	
Acute MI Sensitivity	Standard	Standard Low Sensitivity/High Specificity	
ECG Measurements	Checked	Check Uncheck	
Critical Values	Checked	Check Uncheck	
STEMI-CA	Checked	Check Uncheck	
Estimated MI Size (PH110C)	Not Checked	Check Uncheck	
Print Immediately	Unchecked	Check Uncheck	

Export

Item Name	Default	Choices	Change from Factory
Requested By	None	Manual Entry	
Operator	None	Manual Entry	
Order #	Not Checked	Check Uncheck	
Reason:	Not Checked	Check Uncheck	
Requested By:	Not Checked	Check Uncheck	
Operator:	Not Checked	Check Uncheck	

Rx	Not Checked	Check Uncheck	
Print paper copy on Export	Not Checked	Check Uncheck	

Order Reasons

Item Name	Default	Choices	Change from Factory
Add	None	Manual Entry	
Load Reasons	Not loaded by default	Do not load Load Reasons	

Chapter 12: Local Display Setup

PIIC Name_________________________________ # Columns ______________ # Rows ___________

Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked

PIIC Name_________________________________ # Columns ______________ # Rows ___________

Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked
Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked	Bed Label ____ Locked/Unlocked

Chapter 13: Retrospective Configuration

Review	Element	Default	Choices	Change from Factory
Alarm Review	Default View	Tabular	Compressed Strip Window Tabular	
Timeline	Timeline Duration (applies to all)	24 Hours	1 Hour 2 Hour 4 Hour 8 Hour 12 Hour 24 Hour 48 Hour	
	View Duration (applies to all except Alarm Review – no View Duration)	8 Hours	15 Minutes 30 Minutes 1 Hour 2 Hour 3 Hour 4 Hour 6 Hour 8 Hour 12 Hour 24 Hour	

Defaults for each Review application –

	General	Hemodynamic	Respiratory	Neurological	Cardiac
Compressed Waves	Any ECG	Any ECG	Any ECG	Any ICP	Any ECG
Strip	Any ECG Any ECG Any BP Any Pleth Any Resp	Any ECG Any BP Any PAP Any CVP Any ICAP Any Resp	Any ECG Any BP Any Pleth Any Gas Any Resp Any Pulm Function Any Pulm Function Any Pulm Function	Any ECG Any BP Any ICP Any ICP Any CVP Any EEG Any EEG Any EEG Any Resp Any Pleth	Any ECG Any ECG Any ECG Any ECG Any BP Any Pleth
Events	Arrhythmia Pressure Respiratory Alarms Off	Cardiac Output Pressure Alarms Oxygenation	Respiratory Ventilator Sedation Hyperthermia	Pressure Respiratory Neuro ICP Sedation	Signal Quality Arrhythmia ST QT

	Technical	Alarms Off	Alarms Off	Hyperthermia Alarms Off	Alarms Off Technical
Graphical Trends	Any HR Any BP Any SpO2 Any Resp Any Temp	Any HR Any BP Any CVP Any PAP Any PAWP	Any HR Any BP Any SpO2 Any Gas Any Resp	Any HR Any BP Any ICP Any CPP Any CVP	Any HR Any PVC Any BP Any ST Any QT
Graphical Trends	N/A	Any ICAP Any PPV Any CO Any CO Any SpO2	Any Pulm Function Any Pulm Function Any Pulm Function Any Pulm Function Any Pulm Function	Any LOC Any EEG Any EEG Any ICP Any ICP	N/A
Tabular Trends	All*	All*	All*	All*	All*

Chapter 14: Wave Strip Export

Item Name	Default	Choices	Change from Factory
Enable Wave Strip Export	Not Checked	Checked Not Checked	
File Export Destination	None	Varies	
Pre Time	4 seconds	• 2 seconds • 4 seconds • 6 seconds • 8 seconds • 10 seconds	
Duration	10 seconds	• 4 seconds • 6 seconds • 8 seconds • 10 seconds • 15 seconds • 20 seconds	
Speed	25 mm/sec	• 6.25 mm/sec • 12.5mm/s • 25.0 mm/s • 50.0 mm/s	
# of Waves	4	•	

Chapter 15: Data Warehouse Connect

Item Name	Default	Choices	Change from Factory
Bed Assignments	Not Checked	Checked Not Checked	
Default Export Settings	Parameters Events Waves	Varies	
Notes	None	Free Text	
Automatically assign future beds for export using Default Export Settings	Not checked	Checked Not Checked	

Chapter 16: Holter Data Export

Item Name	Default	Choices	Change from Factory
Enable Philips Holter Export	Not Checked	Checked Not Checked	
File Export Destination	None	Varies	

Configuration Guide Approval Page

Date: _____

Unit Name(s):_____

Configuration created by: _____

Comments: _____

Reviewed and approved by customer (signature):_____

About Configuration Settings

The IntelliVue Information Center iX is pre-configured with factory default settings when it is shipped. This section documents the factory default settings and lists the configuration choices available for changing settings from their default. The configuration implications are only provided in the Clinical Configuration Guide **4535 644 62971**. It is recommended that you read this document before you modify system configurations.

Documenting Information Center iX Configurations

To document the configurations you create, edit this document using a word-processing program to reflect the configuration and then save it under an appropriate name.

As Philips cannot take responsibility for changes made to this editable "Configuration Settings Appendix", you must only use this Configuration Guide (**4535 645 40521**) as a reference for the initial configuration settings supplied with the Information Center iX.

When you permanently change any element of the configuration, you must consider the effect of the new configuration on both patient and application behavior.

PHILIPS

Notice

Proprietary Information

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