Grace-Watch®Advanced Safety Monitoring System

User's Information







Patent Protected US 7,538,666

Grace Industries, Inc.

Grace-Watch® 3.05.0100

Protecting Personnel



With advanced hardware and software features, Grace-Watch® systems provide an unbeatable method of protecting your personnel at any facility while simplifying the Accountability responsibilities of monitoring personnel.

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Introduction



Thank you for purchasing a Grace Industries Accountability System

<u>Grace-Watch® Advanced Safety Monitoring System</u> uses Grace-Watch® Software and the components listed below to provide complete accountability for your personnel.

System Components

- MX900-H Transceiver
- Worker worn man-down devices assigned to personnel for monitoring
- Repeaters, Remote Enhanced Transceivers, External Antennas, and Locators may be added as needed to enhance system effectiveness

Safety Monitoring of Personnel









- Each individual equipped with a worker worn man-down device is monitored for PASS Status such as ON, OFF, or ALARM. *PASS stands for Personal Alert Safety System
- Each worker worn device can be sent an Call-Back, Report-In, or Roll Call Signal with a simple button press
- All personnel within range at the facility are automatically populated in the Grace-Watch software and are sorted in real-time based on priority, with Fall-Alarm being the highest priority
- When an Alarm, Call-Back, Report-In, or Roll Call signal is present, the worker worn device will go into a loud audio alarm indicating to the wearer that action is required

MX900-H Transceiver



- Receives and processes radio signals from Grace worker worn devices and transmits Call-Back, Report-In, and Roll Call signals to those devices
- Monitors PC communications through the USB port and goes into Alarm if the communications fail at any time
- External Antennas may also be used as needed

Minimum Computer Requirements for Grace-Watch Systems

- Processor:
 - □ 1 GHz 32-bit (x86) (2Ghz or faster processor recommended)
- Operating Systems:
 - □ Windows 7, 8, 10 (32-bit and 64-bit)
 - Administrative rights required
- RAM:
 - □ 4GB
- Monitor:
 - □ 1024×768 (Touchscreen Recommended)
 - Note: Use of two screens is recommended when mapping modes are in use
- Internet Connection:
 - Required for GPS functionality
- Hard Disk Size:
 - 80GB Minimum
- USB 2.0:
 - 1 Available Required per Receiver.
- Speakers

Installing the USB Drivers from FTDI

USB Drivers must be installed on your PC before MX900-H can be recognized on the PC. FTDI is the world leader in USB development and supplies robust USB communication and functionality in our product.

Grace-Watch® Installation Flash Drive:

- Insert the Installation USB flash drive.
- When prompted, select Open folder to view files (or manually go to USB flash drive directory) and select
 GCLaunch.exe
- When you have the option, left-click the Install button for Drivers.





Connecting the MX900-H

- Set the Laptop on a flat, level surface
- Attach the MX900-H to Laptop using the duallock Velcro.
- Plug the MX900-H USB cable into the Laptop Computer
- This will connect and power up the MX900-H
- Microsoft Windows recognizes the MX900-H as a USB device
- This action will create a new com port on your Windows computer populated anywhere from Com2 - Com32, depending on your existing Com Ports available in Windows

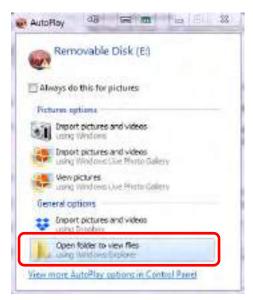


Installing Software for Grace-Watch

The install will not complete unless you have administrative rights.

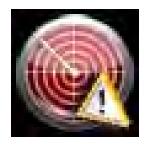
Grace-Watch® Installation Flash Drive:

- Insert the Installation USB flash drive.
- When prompted, select Open folder to view files (or manually go to USB flash drive directory) and select GCLaunch.exe
- When you have the option, left-click the Install button for Grace-Watch Software.
- Follow the on screen prompts.
- You must accept the license agreement to install the product.
- A serial key is required to complete the installation and should have been provided when you purchased the software.



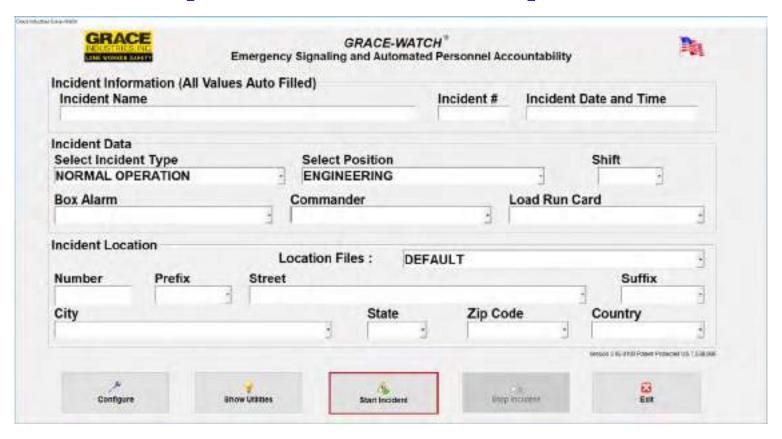


Starting the Software



- Locate the Grace-Watch Icon on the Desktop and double click
- The software will start up and the Operation Setup Screen will appear

The Operation Setup Screen



- Incident Name, Incident Number, and Time/Date are auto-filled
- Must Enter Incident Type and Position to Start an Incident
- Location Files May be Pre-Loaded to fill in Location Fields Automatically
- Utilities Bar Can be Shown or Hidden by Pressing Show Utilities Button

Operation Setup Definitions

RETURN TO INCIDENT BUTTON

This button is invisible at startup and does not appear until an incident is started. If you return to the setup screen after the incident has started, the return to incident button replaces the start incident button and allows display of the main monitor screen once again. Note that once an incident is started, entering the configuration and utilities area is disabled.

STOP INCIDENT BUTTON

This button ends an incident and saves the incident information in a file on the hard drive specified by the Incident Name field. This is the method of stopping an incident that should be used for all active incidents monitored by the Grace-Watch system.

EXIT BUTTON

This button exits the application and prompts to save an incident if one is currently active.

INCIDENT AUTO RUN

If the system is configured where all required fields and connections are ready when the application starts, the Start Incident button becomes enabled. You can use the -r switch as a parameter to the application shortcut to automatically start the incident.

Use C:\Program Files (x86)\Grace Industries\Grace-Watch\GBase.exe" –r as the target information for the windows shortcut.

INCIDENT NUMBER

This field contains the Incident number and is auto loaded by the Grace-Watch software when an incident is started. The value will begin at 1 and continue incrementing for every incident saved. If an incident is canceled, the incident number will not be incremented on the next start of Grace-Watch.

INCIDENT DATE AND TIME

This field contains the Incident date and time stamp of when the incident was started and is auto loaded by the Grace-Watch software when an incident is started. This value is un-changeable and records the moment the incident start button was first pressed.

INCIDENT TYPE

This field contains the Incident Type such as structure, warehouse, etc. and must be selected before an incident can be started. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the Incident Type is also permitted.

SELECT POSITION

This field contains the Position such as Line Supervisor, Safety Officer, etc., and must be selected before an incident can be started. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the Position is also permitted.

SHIFT

This field contains the Shift such as A, B, 1, 2, etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the Shift is also permitted.

(continued...)

Operation Setup Definitions

Continued...

INCIDENT BOX ALARM NUMBER

This field contains the Incident Box Alarm Number and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. The Label Box Alarm can also be changed to a preferred field setting, allowing this field to be configured as any valuable incident label used by your organization. Direct typing of the Incident Box Alarm Number is also permitted.

COMMANDER

This field contains the incident Commander's name such as Smith, Jones, etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the Commander is also permitted.

INCIDENT RUN CARD

This field contains the Incident Run Card and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the Incident Run Card is also permitted.

LOCATION

This field allows the loading of pre-configured Incident Locations such as Grace Industries, Mercy Hospital, etc., and is an optional setting. The combobox drop down items contain the location files that are present on the hard drive of the computer. Location files can be created in the configuration area so that easy loading of locations is available. Direct typing of the location field is not permitted, i.e. all locations must be pre-configured.

LOCATION STREET NUMBER

This field contains the Incident address Street Number and is an optional setting. Direct typing of the Incident Street Number is required as the combination of numbers is too great to allow a combobox.

LOCATION STREET PREFIX

This field contains the incident address street prefix such as N.,S., E. W., etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the street prefix is also permitted.

LOCATION STREET

This field contains the incident address street name such as Maple, Oak, etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the street name is also permitted.

LOCATION STREET SUFFIX

This field contains the incident address street suffix such as DR.,RD., AVE., etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the street suffix is also permitted.

LOCATION CITY

This field contains the incident address city such as Hermitage, New York, etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the city is also permitted.

(continued...)

Operation Setup Definitions

Continued...

LOCATION STATE

This field contains the incident address State such as PA, CO, OH, etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the state is also permitted.

LOCATION ZIP CODE

This field contains the incident address zip code such as 16148, 44403, etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the zip code is also permitted.

LOCATION COUNTRY

This field contains the incident address country such as USA, Canada, etc., and is an optional setting. The combobox drop down items can be customized in the configuration area so that easy entry is available. Direct typing of the country is also permitted.

CONFIGURE BUTTON

This button enters the configuration area of the Grace-Watch software for setting up the preferences for comboboxes, System ID and settings, etc. Note that once an incident is started, entering the configuration area is disabled.

SHOW UTILITIES BUTTON

This button displays the utilities menu bar across the top of the Grace-Watch setup screen. Available utilities such as Help, PASS Device Programming and File Maintenance are available from this menu bar. Note that once an incident is started, entering the configuration area is disabled.

START INCIDENT BUTTON

This button starts the incident and displays the main monitor screen of the Grace-Watch Software. This is the main screen used when running an incident. Note that once an incident is started, entering the configuration and utilities area is disabled.

RETURN TO INCIDENT BUTTON

This button is invisible at startup and does not appear until an incident is started. If you return to the setup screen after the incident has started, the return to incident button replaces the start incident button and allows display of the main monitor screen once again. Note that once an incident is started, entering the configuration and utilities area is disabled.

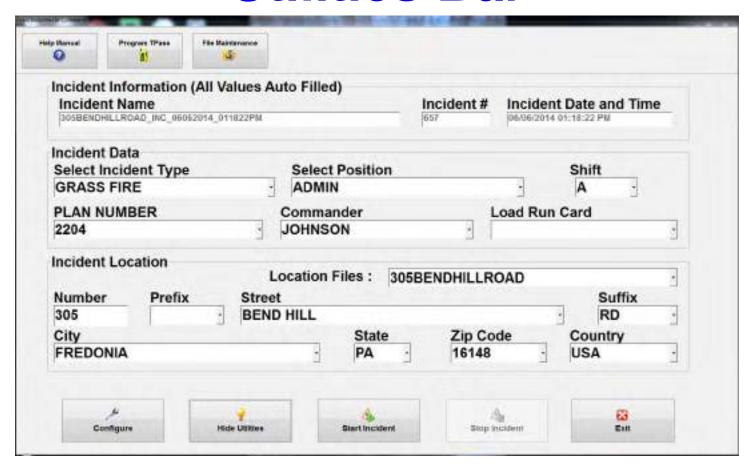
STOP INCIDENT BUTTON

This button ends an incident and saves the incident information in a file on the hard drive specified by the Incident Name field. This is the method of stopping an incident that should be used for all active incidents monitored by the Grace-Watch system.

EXIT BUTTON

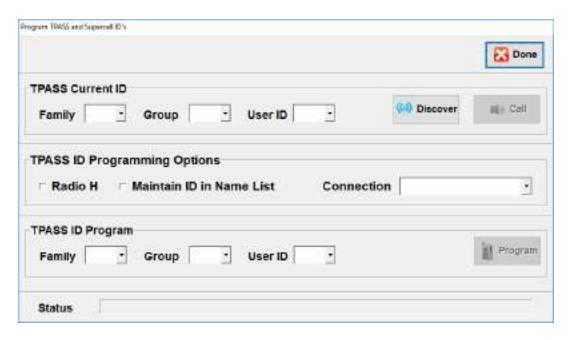
This button exits the application and prompts to save an incident if one is currently active.

Utilities Bar



- Help Manual: Launches Grace-Watch Help Manual
- Program TPass: Program Worker Worn Device ID Numbers
- File Maintenance: Backup/Restore Grace-Watch Settings, Import/Export Names, Messages, Etc.

Program Worker Worn Device ID Numbers



- Use the discover button while putting the device into alarm to learn the current settings of the device you want to change.
- Once discovered, enter the new device ID in the TPASS ID Program section
- Press Program and wait for power-up chirp to verify ID programming was successful.

Configuration

Enter the Configuration Area by pressing the Configure Button on Operation Setup Screen. There are 4 main areas as described below.

INCIDENT SETUP

The Incident Setup section allows the configuration of the drop down boxes on the Operation Setup screen.

USER SETUP

The User Setup allows the configuration of the drop down edit boxes on the User Profile screen. This includes User Ranks, User Division, User SubDivision, and User. In addition, it allows the creation of a user name file specific to your system and worker worn devices being used.

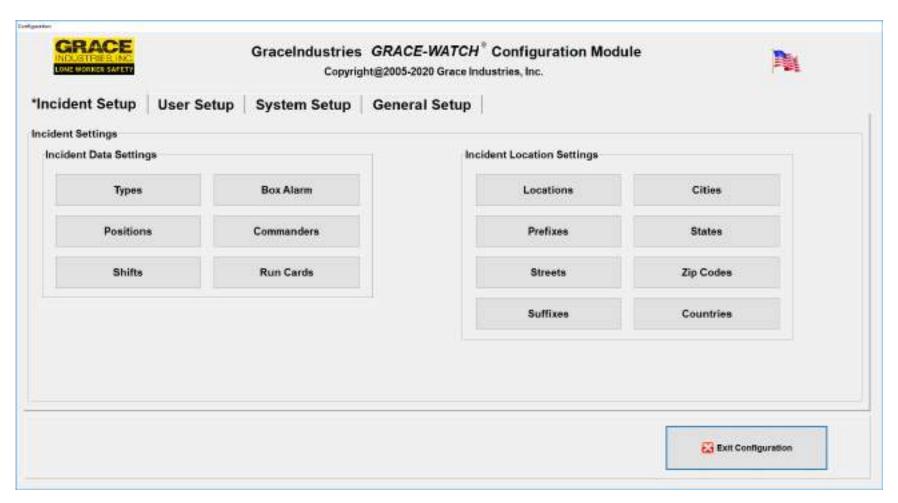
SYSTEM SETUP

The System Setup section allows the configuration of all the operation specific options on the system including System ID, Aux ID, Groups to allow receiving, etc.

GENERAL SETTINGS

This section allows some general operation settings to be changed such as Customer Logo displayed, additional utilities, Audio Alarms, etc.

Configuration Screen



Setting The System ID

- The first operation that should be performed is setting the proper System ID for the Grace-Watch System
 - NOTE: System ID must match System ID of the worker worn devices for the units to be displayed and monitored
- Click the System Setup tab near the top of the screen to access the System Settings Dialog

System ID Explanation

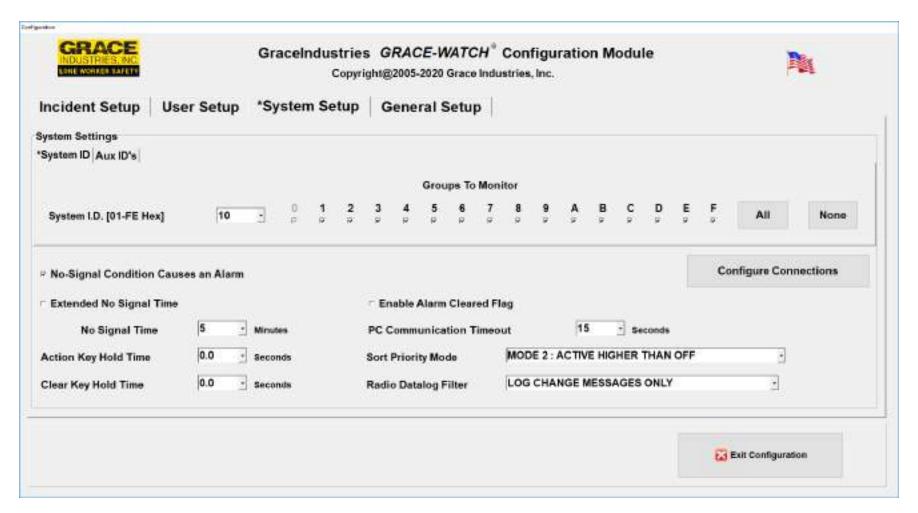
System ID = 51

most significant digit->5

1<-least significant digit

- The System ID of the Grace-Watch Software sets the receive parameters for the MX900-H unit allowing reception of worker worn device messages from users within a block of 16 groups, 1-99 users per group plus 9 Micro Repeaters per group. A System ID is a Hexadecimal Number and can be split into two distinct portions, the most significant digit and the least significant digit. The above example shows this.
- Note the most significant digit <u>5</u>. This indicates the block of 16 groups that can be received by the software, i.e. any worker worn device with a group ID of 5 as it's most significant digit will be received by the MX900-H. Using the hexadecimal numbering system, the system block consists of the groups 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 5A, 5B, 5C, 5D, 5E, 5F.
- Each group has 1-99 users (worker worn devices) and 9 Micro-Repeaters available.
 - □ Example worker worn device ID range would be from 5101 to 5199
 - Repeater ID range would be from 51R1 to 51R9
 - Repeaters may not be programmed in the ID range of 5101 to 5199 or 01 through 99
- This allows for 1728 total users to be programmed for monitoring within the system block
- The least significant number in the System ID indicates the system group, or the sub group within the system block with the highest priority. All IDs within the system group will be displayed before the other users in the remaining groups that have an equal priority.

System Settings Dialog



System Settings

- On the System ID Tab, Set the System ID
- Leave Groups To Monitor Checkbox Checked.
- On the Aux IDs Tab, leave Enable Aux IDs unchecked.
- Leave No-Signal Setting to 15 Minutes
- Leave the Action and Clear Key Hold Times Set a .5 and 1 second
- Leave No-Signal Causes Alarm, Enable Alarm Clear Flag, Sort Priority
 Mode and Radio Data Log Filter set to default values
- Use the Configure Connections button to manually configure com ports.
 See Configure Connections on page 25.

System Settings

Continued...

The following are descriptions of each of the fields on the System Setup screen:

SYSTEM ID TAB \ SYSTEM ID

This field sets the System ID for the Grace-Watch system.

SYSTEM ID TAB \ GROUPS TO MONITOR

These check boxes enable the receiving of worker worn device messages for an entire group within the system block.

AUX IDs TAB \ ENABLE AUX IDs CHECK BOX

This check box enables or disables the configuration of Aux IDs for the Grace-Watch Software.

AUX IDs TAB \ AVAILABLE

This field list the pool of available IDs that can be used as Aux IDs.

AUX IDs TAB \ ASSIGNED

This field lists the assigned Aux IDs. Use the arrow buttons to managed IDs between these two fields.

AUX GROUPS TO MONITOR

These check boxes enable the receiving of worker worn device messages for an entire group within the Aux ID block that is currently selected in the assigned field.

EXTENDED NO SIGNAL TIMES

This check box sets the no signal time range from the default of 3-60 minutes to an extended time of 1-24 hours.

NO SIGNAL TIME

Set the amount of time that a worker worn device radio signal must be received within, in order to avoid a no-signal flag from being activated.

ACTION KEY HOLD TIME

This field allows setting of the action key hold time required to perform a device command from the monitor screen.

CLEAR KEY HOLD TIME

This field allows setting of the clear key hold time required to perform a device clear of a status image from the monitor screen.

NO-SIGNAL CONDITION CAUSES AN ALARM

Check this box to force an alarm when a no signal occurs.

ENABLE ALARM CLEARED FLAG

This check box checked causes a no signal flag status box to appear when an alarm is cleared.

PC COMMUNICATION TIMEOUT

This allows you to adjust the timeout setting between the PC and the MX900-H or other receiver.

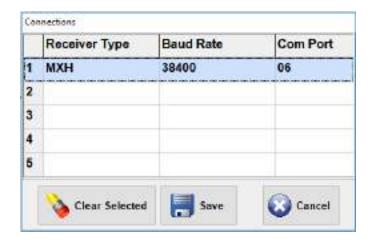
SORT PRIORITY MODE

This combo box allows the sorting of users on the monitor screen to be modified to place users in OFF mode to be sorted above users in online only mode.

RADIO DATALOG FILTER

This combo box allows the selection of logging either all worker worn device messages or only change of status messages in the radio data log.

Configure Connections



RECEIVER TYPE

Dropdown used to select type of receiver for the connection.

BAUD RATE

- Dropdown used to select baud rate.
- Select 38400 when using the MXH.

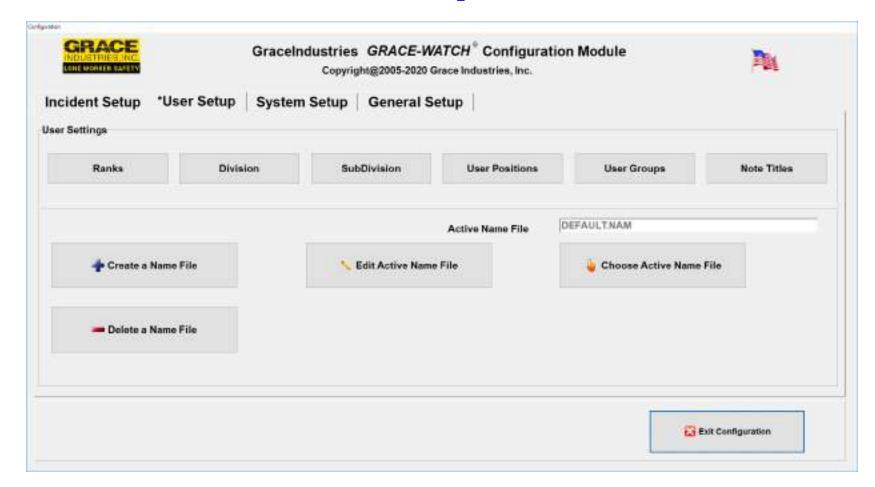
COM Port

Dropdown used to select from available port numbers.

Clear Button

Used to clear the selected row.

User Setup Screen



Press the User Setup Tab to Access the User Setup Area

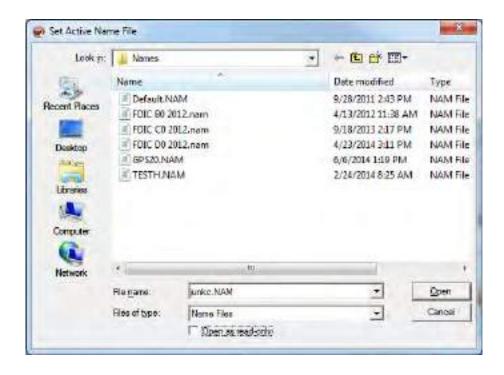
Creating a Name File

- Press the Create a Name File Button to Access the Name File Creator Wizard
- Enter the File Name, e.g. Acme Iron Works
- Notice the System ID is set and cannot be changed from this screen
- Select Groups to include in the Name File
- Set Range of Users in Each Group
- Enable Micro Repeater IDs In Each Group
- Set Range of Micro Repeaters In Each Group
- Leave all 3 Special Instructions Check Boxes on Bottom Left <u>Unchecked</u>
- Select Default Names, e.g. 01-01
- Press Create Name File Button
- Press Done When Finished

Name File



Setting the Active Name File



- The Name File just created must now be set to the Active Name File so that it is loaded when an incident is started
- Press the Choose Active Name File Button and select the file just created

Listing the Available User Titles



- Press the User Ranks Button to Edit User Title
- Enter a Title into the Create New Box and Press Add User Rank
- The Title Will Be Added to the Dialog Box on the Right
- Highlight a Title and Press Remove button to Remove a Title from the List
- Highlight a Title and Press Make Default to Make the Selected Title the Default
- Check Load Default Title to Load this Rank as the Default when a name file is created
- Press Done when finished

Setting the User Divisions



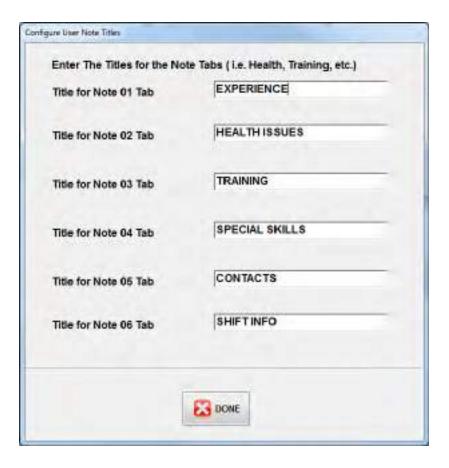
- Press the User Divisions Button to Edit User Divisions
- Enter a Division into the Create New Box and Press Add User Division
- The Division Will Be Added to the Dialog Box on the Right
- Highlight a Division and Press Remove to Remove A Division from the List
- Highlight a Division and Press Make Default to Make the Selected Division the Default
- Check Load Default Checkbox to Load this Division as the Default when a name file is created
- Enter the Custom Label to use for Divisions, e.g. Sector, Unit, etc.
- Press Done when finished

Setting the User Sub-Divisions



- Press the User Sub-Divisions Button to Edit User Sub-Divisions
- Enter a Sub-Division into the Create New Box and Press Add User Sub-Division
- The Entry Will Be Added to the Dialog Box on the Right
- Highlight an Entry on the right and Press
 Remove to Remove a Sub-Division from the List
- Highlight an Entry and Press Make Default to Make the Selected Entry the Default
- Check Load Default Checkbox to load the Default when a name file is created
- Enter the Custom Label to use for Sub-Divisions, Resource, Room, etc.
- Press Done when finished

Setting the User Note Titles

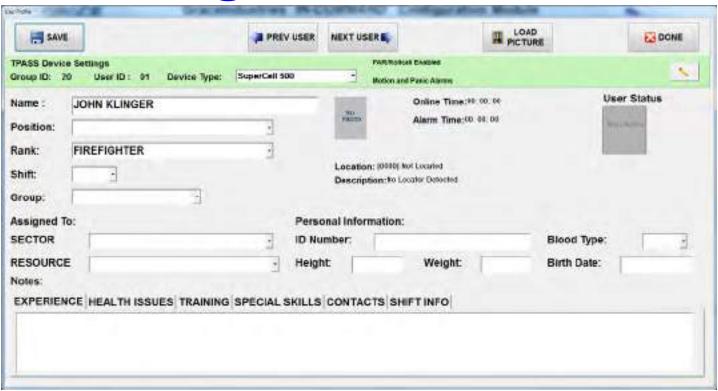


- Press the Note Titles Button to Edit User
 Note Titles
- Enter the Titles for Each User Notes Tab to be displayed on the User Profile Screen
- Press Done when Finished

Editing the Name File Information

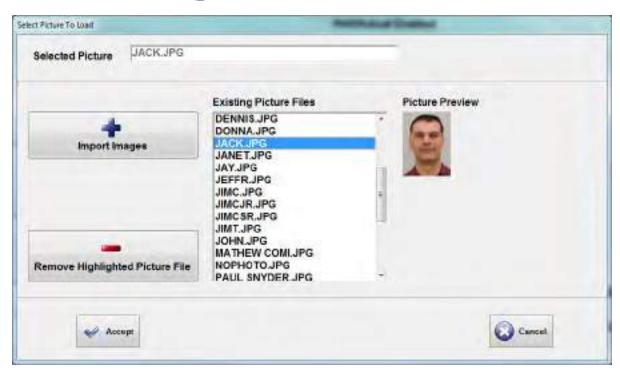
- Press the Edit Name File Button from the User Setup Screen to Access the Edit Names Dialog
- Double-Click a user name or Highlight the User and Press the Edit Button to view the User Profile Dialog
- Enter Information and Press Save to Save the Changes
- Continue with each User until all user information has been entered using the next and previous buttons to step through the name file

Editing the User Profile



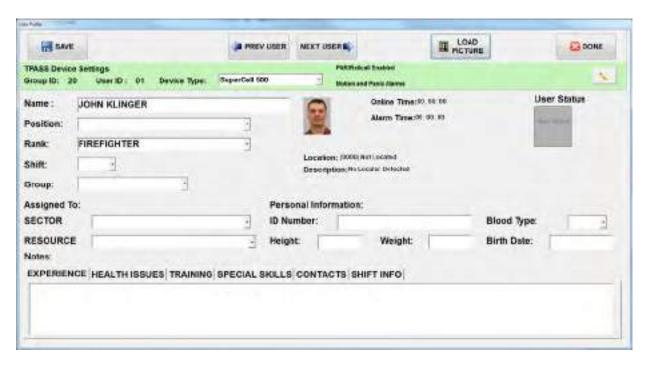
- Enter in User Name, Title, and Personal Information fields as needed
- Select the device type to be displayed.
- Add a User Picture if Desired for best results use a picture size is 75 by 100 pixels
- Note that pictures must be added to the <Program Path>\UserImages Folder. An import button is provided to make this process easier.
- Add Notes To Each User Notes Tabbed Area
- Each Note may be up to 255 characters in length

Adding a User Picture



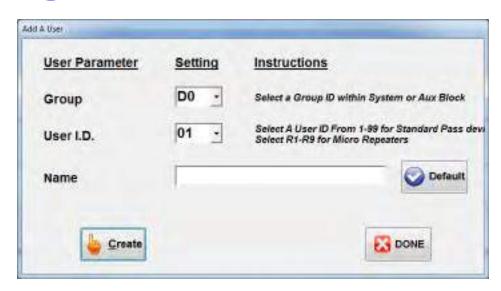
- Double-click the Picture image or press the Picture button from the User Profile Screen
- Highlight the Picture Desired and press select Highlighted Picture
- Press the Accept Button to load the picture into the profile

Editing User Notes



- Click on Each Note Tab to Reveal the Memo Area for Each User Note Memo
- Enter information into each note memo
- Press Save when Complete

Adding a User to a Name File



- Users May Be Added to the Name File from the Edit Name File List screen by pressing Add User
- Enter the Group and User ID for the User desired
- Press Default to automatically create a default name entry or enter the name manually
- Press the Create Button
- If the Name Exists, a warning will be issued; otherwise the name will be created in the user list
- Press Done when Complete

Deleting a User from a Name File



- Users May Be deleted from the Name File from the Edit Name
 File List screen by pressing Delete User
- A Confirmation Window will appear to insure deletion is desired
- Press Yes to delete the Name

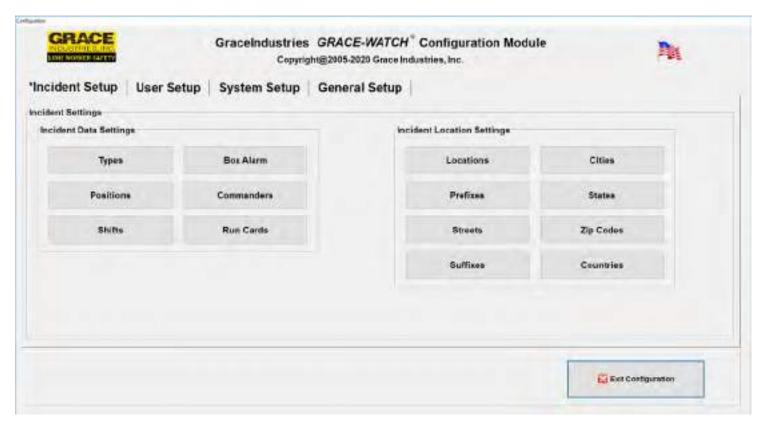
Deleting a Name File

- Name Files May Be Deleted from the System using the Delete Name File Button on the User Setup Screen
- Press the Delete File Button and select the file to be deleted
- Press Yes to confirm and delete the file

Prepared to Monitor Users

- After completing the above procedures, the system is able to monitor the worker worn devices assigned to users
- The five critical steps to prepare the software for use with worker worn devices and the MX900-H are:
 - 1. Set the System ID
 - 2. Set the Receiver Type to MX900-H
 - 3. Set the Com Port for the MX900-H Communications
 - 4. Create a Name file based on your System ID with the correct range of user IDs representing your worker worn man-down devices and Micro-Repeaters
 - 5. Make this created Name file the Active Name File
- Once these Five Steps are complete, the system can monitor worker worn devices
- Press the Save Changes and Exit Button to Save this configuration and return to the operation setup screen if so desired

Configuring Incident Settings



- Press the Incident Settings Tab from the Configuration Area
- There are two basic sub-categories:
 - Incident Data Settings
 - Incident Location Settings
- Press Each Button to Access the area to configure

Configuring Incident Types



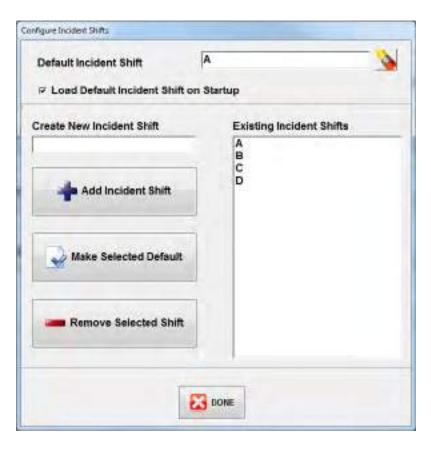
- Press the Incident Types Button to Edit Incident Types
- Enter a Type into the Create New box and Press Add Incident Type. The Type Will Be Added to the Dialog Box on the Right
- Highlight a Type and Press Remove to Remove a Type from the List
- Highlight a Type and Press Make Default to Make the Selected Type the Default
- Check Load Default Type to Load this Type as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Positions



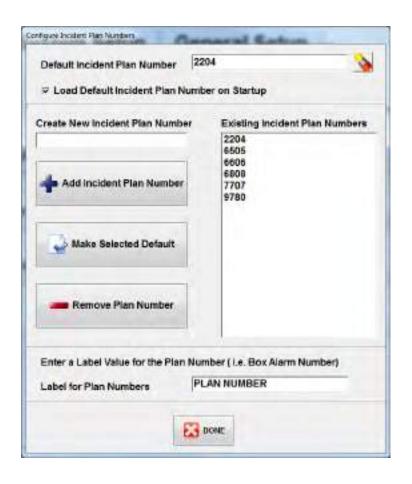
- Press the Incident Positions Button to Edit Incident Positions
- Enter a Position into the Create New box and Press Add Incident Position - The Position
 Will Be Added to the Dialog Box on the Right
- Highlight a Position and Press Remove to Remove a Position from the List
- Highlight a Position and Press Make Default to Make the Selected Position the Default
- Check Load Default Position to Load this Position as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Shifts



- Press the Incident Shifts Button to Edit Incident Shifts
- Enter a Shift into the Create New box and Press Add Incident Shift - The Shift Will Be Added to the Dialog Box on the Right
- Highlight a Shift and Press Remove to Remove a Shift from the List
- Highlight a Shift and Press Make Default to Make the Selected Shift the Default
- Check Load Default Shift to Load this Shift as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Plan Numbers



- Press the Plan Numbers Button to Edit Plan Numbers
- Enter a Plan Number into the Create New box and Press Add Plan Number - The Entry Will Be Added to the Dialog Box on the Right
- Highlight an Entry and Press Remove to Remove A Plan Number from the List
- Highlight an Entry and Press Make Default to Make the Selected Plan Number the Default
- Check Load Default Checkbox to Load this Plan Number as the Default on the operation setup screen when Grace-Watch is started
- Enter the Custom Label to use for Plan Numbers, e.g. Box Alarm, etc.
- Press Done when finished

Configuring Incident Commanders



- Press the Commanders Button to Edit Incident Commanders
- Enter a Commander into the Create New box and Press Add Incident Commander - The Commander Will Be Added to the Dialog Box on the Right
- Highlight a Commander and Press Remove to Remove a Commander from the List
- Highlight a Commander and Press Make
 Default to Make the Selected Commander the
 Default
- Check Load Default Commander to Load this Commander as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Run Cards



- Press the Incident Run Cards Button to Edit Incident Run Cards
- Enter a Run Card into the Create New box and Press Add Incident Run Card - The Run Card Will Be Added to the Dialog Box on the Right
- Highlight a Run Card and Press Remove to Remove a Run Card from the List
- Highlight a Run Card and Press Make Default to Make the Selected Run Card the Default
- Check Load Default Run Card to Load this Run Card as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

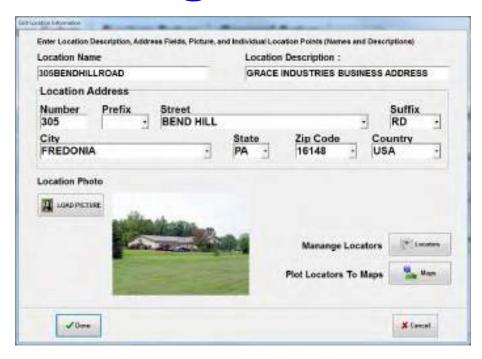
Configuring Incident Locations



- The number of Location files possible is virtually unlimited
 - limited by available hard drive space -

- Press the Locations Button to Create Incident Locations
- Location stores a Location's Address information and can be retrieved as a file
- Press Create new Location to Create a Location
 File or Edit to Edit a Highlighted Location
- Highlight a Location and Press Remove to Remove a Location from the List
- Highlight a Location and Press Make Default to Make the Selected Location the Default
- Check Load Default Location to Load this Location on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Creating a Location



- Enter all fields including name, description and address fields
- Press Load Picture to add a picture of the location
- Press Done when finished

Adding a Location Picture



- Select The picture desired from the existing pictures box
- Press Select Highlighted Picture
- Press Accept to accept the picture
- Press Cancel to cancel the action

Editing an Existing Location



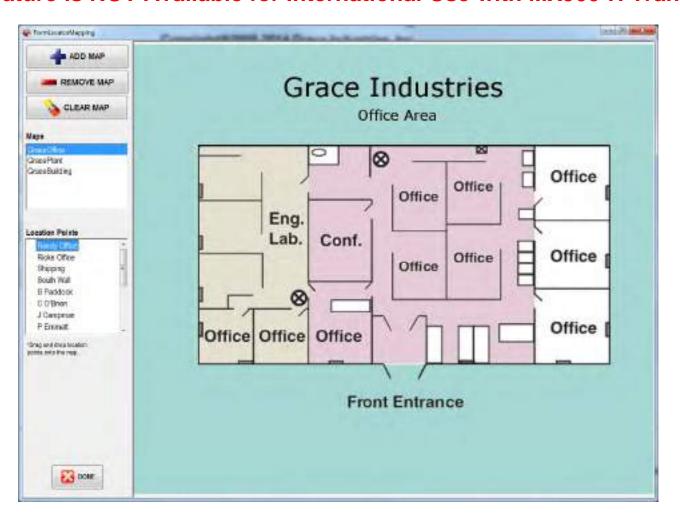
- Select a Location from the list on the Edit Locations
 Dialog and press the Edit Location button
- Change any fields (except the name) and picture desired
- Press Done when finished

*This Feature is NOT Available for International Use with MX900-H Transceiver

Locator Image Mapping provides the ability to associate locators to points on an image. Images would typically be maps of your establishment where locators are positioned.

The configuration screen can be invoked by editing a location and selecting "Plot Locators To Maps"

DISBENDHILLROAD	GR	Location Description : GRACE INDUSTRIES BUSINESS ADDRESS	
Location Address Number Prefix Street 305 BEND H	2000	E	Suffix RD -
FREDONIA	- State		santry
acation Photo			
	Son4	Manange Locators	· Prison
And in case of the last		Plot Locators To Mape	N. mar



- Add Map Button
 - The add map button allows you to load a new image by browsing the file system. A copy of the loaded image is saved to the configuration folder.
 The original is not disturbed.
- Remove Map Button
 - Removes a map association and any locator mapping that was already configured.
- Clear Map Button
 - Clears any locator mappings that are already in place.
- Maps Window
 - Displays a list of loaded maps.
- Location Points
 - Displays a list of location points. This is a list of locators defined under locator setup.

- To map a location point, click and drag the desired locator to a point on the map and drop it.
- The mapping details screen will pop up.



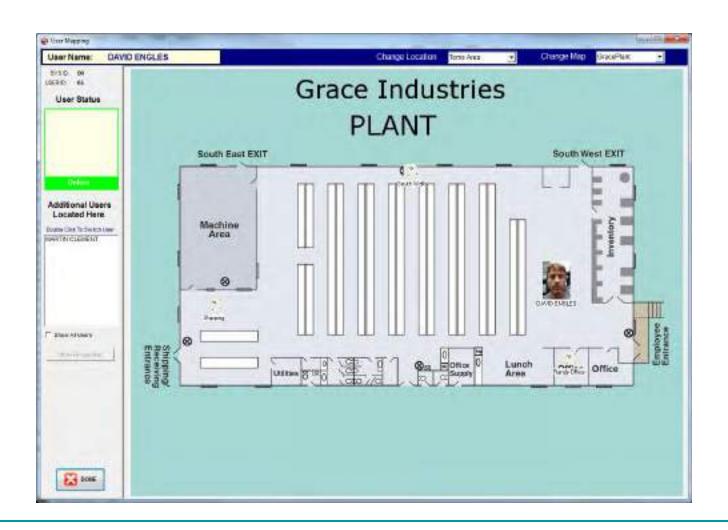
*This Feature is NOT Available for International Use with MX900-H Transceiver

Design Time Parameters

- These options describe how the locator will appear on an image during configuration.
- Include Locator Name
 - This will place the Location Point name next to the desired image on the map.
- Display Image
 - The image to be displayed. Two locator image provided for contrast.

Run Time Parameters

- These options describe how the location point will appear on an image at run time.
- Include Text
 - There are two options for the text to display with the image. The locator name or the User name.
- Display User Image
 - This option will use the User Image assigned to a given user in user setups.
- Display Image
 - Select an image to display from the icons provided.



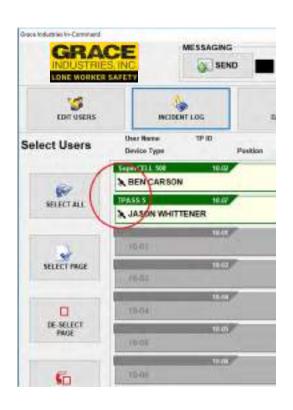
*This Feature is NOT Available for International Use with MX900-H Transceiver

Run Time Screen

- The image section of the screen will display the selected users location as described in setup. Other locations that have been mapped will also display.
- Selecting the mapped user or any other location on the map will display a list of users located in that area. You can choose a user from the list to make that user the selected user.
- There are drop down boxes at the top of the screen to allow you to quickly select a different map or location.
- The upper left of the screen will always show the selected users status bits.
- The list box to the left of the screen can display other users located at the current location or all users of the system.
- If a selected user has a GPS enabled device or the current location has been configure with GPS coordinates, the Show Map button will be enabled and launch the GPS Map screen when clicked.

When using GPS Enabled worker worn devices, you can view the device's actual location on a real-time map. Units that have acquired a GPS lock will appear on the main incident screen with the GPS symbol next to the device type.

Double-clicking the GPS symbol will invoke the map.





Base Maps

The mapping feature allows you to choose your map type. Several base map options are provided, including imagery and street views from Esri, OpenStreetMaps and Bing Maps. The mapping functions use caching so that previously loaded maps are also available offline.

Caching an area can be achieved by viewing the location at various zoom levels or by using the built-in caching tool that works with the Esri style base maps.

Available Mana

*Bing Maps requires a license key provided by Microsoft to use.

	<u>Avallable Maps</u>		
World Imagery	Nat Geo World	Bing Imagery	
World Street Maps	USA Topography	Bing Hybrid	
World Topography	OpenStreet Maps	Bing Road	

Layers

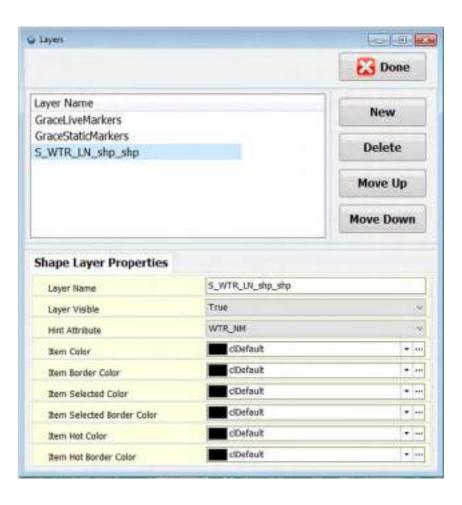
This mapping feature allows you to apply User provided layers to base maps. A map layer is a custom overlay that is displayed as a visible layer on top of the Base Map. Supported layer formats are Esri Shapefiles and Google KML. You can apply multiple layers and manipulate properties of each layer to adjust order, colors and hint attributes.

You can Add new layers, Delete layers and change the order of layers using the top right control buttons. The 2 base "Grace" layers do not have properties and cannot be removed.

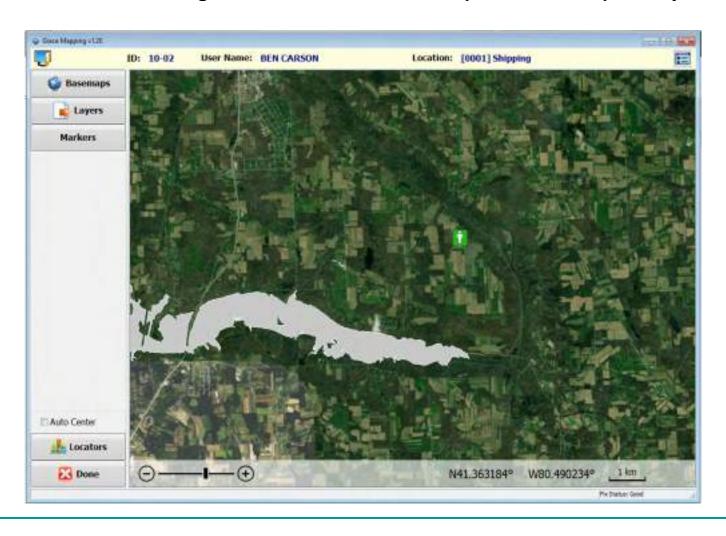
Once a layer is loaded and selected, you will see a list of properties. Here you can change the name of the layer and show or hide the layer. The Hint attribute dropdown may contain a list of attributes from the metadata of the layer file. Here you can select the attribute field that may contain appropriate hint data for when mouse over elements on the map.

The color attributes are used to define the appearance of elements on the layer. Color and Border Color settings are available for the elements in various states. Normal, Selected and Hot (Hot happens on mouse over)

Layer Management Screenshot



Screenshot showing local lake marked with an imported Esri Shapefile layer





Static Markers

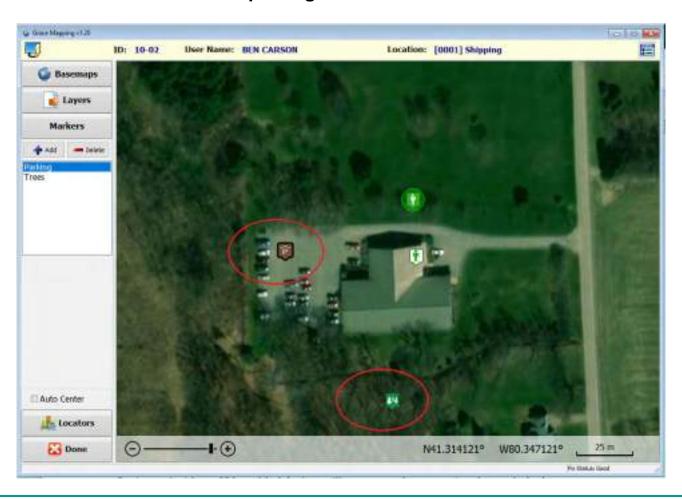
You can manually mark any location on the map using Static Markers. There are hundreds of predefined images included or you can import your own images to be used. Static Markers are saved when the program closes and will automatically be placed every time you start an incident and open the map tool.

When creating or editing a static marker, the marker management window is used to make changes to the Title, Marker Image, Latitude and Longitude, and Notes fields.

There is a search function below the markers to help you find a marker by key word. The search function works across all categories.

Latitude and Longitude values will be automatically populated when invoking the marker window or by clicking on the map at any time. You can also manually type in these values.

Screenshot showing 2 static markers used to mark a parking area and wooded area.



Incident Device Live Markers

During an incident, GPS enabled devices will appear on the map using the symbols shown below and will depend on the status of the device. Non-Selected devices will display in the reverse colors of the selected device. The GPS fix quality will be seen as a semi-transparent radius around the marker that will vary in size depending on the quality of the signal.

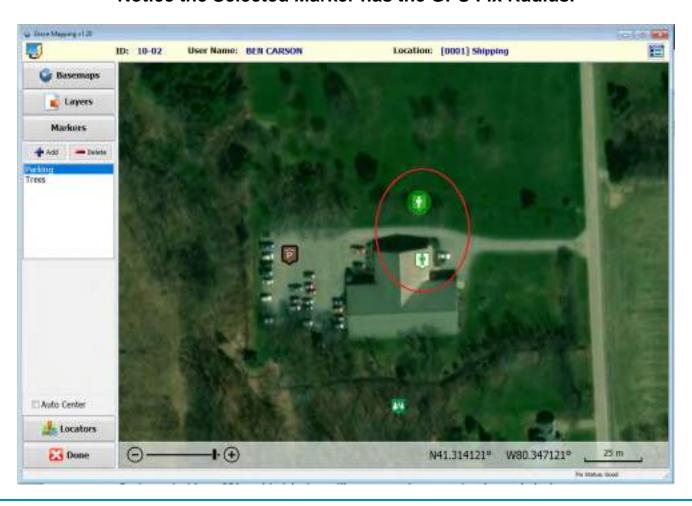
A smaller radius indicates a better signal. The radius will also use color as a visual indicator of signal quality (Green=Good, Yellow=Fair, Red=Poor). Fix Radius will only apply to the selected user and can only be seen at certain zoom levels of the map.

Live Marker Images Showing Selected Device Status Colors vs Other Mapped Device Status



Screenshot showing Selected and Non-Selected Device Markers.

Notice the Selected Marker has the GPS Fix Radius.



Configuration

All of the features described above are also available in configuration mode before an Incident is started. Here you can preconfigure available maps, load layers and place static markers so they are available when an incident is started. You can also limit the functionality that will be available when an incident is started. You can specify which base maps Commander can choose from. You can pre-cache areas of the map for offline use. You can preconfigure and hide mapping functionality. As an example, you could create static markers and then set the Static Markers button to be hidden so that you cannot change static markers during an incident.



Offline Cache Button

The offline cache button allows you to select an area and build an offline map tile cache for the current and higher zoom levels. The feature is only available at zoom levels showing an area approximately 250 square miles or less. Multiple downloads will be needed to cache larger areas. The Green band around the map is a visual indicator that this area is cacheable. Press the cache button to display the caching start/progress window. You must have an internet connection for this feature to be available.

Warning: Caching maps requires large amounts of map-data to be downloaded over an internet connection. Depending on the internet connection speed, this may take a considerable amount of time to complete. It is highly recommended the map caching setup be completed before using the Grace-Watch system.

Example: Caching the maximum cache area (approximately 250 sq. miles) with a 50MB/s connection will take approximately 60 minutes.

Configure / General

The configuration general settings screen allows you to turn the Layer and Static Marker buttons on and off. This allows you to define these items in configuration mode so that layers and static markers are projected on to the map but the Grace-Watch user cannot modify them. You can also change the look of the mapping screens by using the Application Skin drop down and selecting an alternate skin.



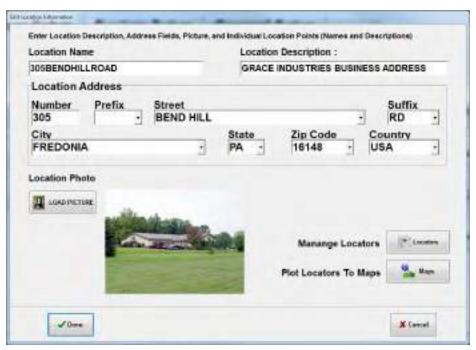
Configure / Base Maps

Here you can choose the Base Maps that will be available to the Grace-Watch. When choosing any of the Bing map types, the Bing Maps API Key is required.

The Clear Map Cache button is available so you can delete all of the map tiles that are currently downloaded and available to the application.



Creating a Location



- Enter all fields including name, description and address fields
- Press Load Picture to add a picture of the location
- Press Done when finished
- Manage Locators and Plot Locators To Maps are only used when using Grace Locators.

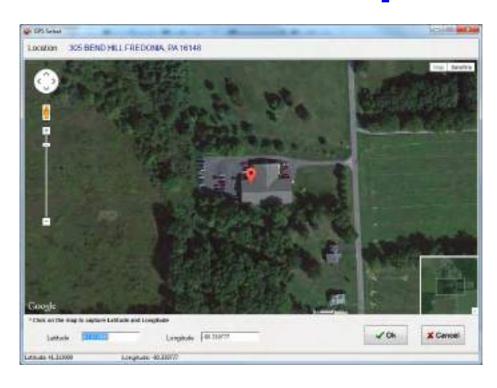
Locator Configuration

*This Feature is NOT Available for International Use with MX900-H Transceiver

Number	Name	Description	Latitude	Longitude	3
0001	Randy Office	Randy Office	41.313099	-80.339777	
0002	Ricks Office	Research	41.313212	-80.339494	
0003	Shipping	Plant Shipping			
0004	South Wall	Plant South			
0005	B Paddock	R&D Cubicle			
0006	C O'Brien	R&D Cubicle			
0007	J Campman	Main Office			
8000	P Emmett	Main Office			
0009	B Phillips	Main Office			
0010	Toms Area	Toms Area			
0011	Reception	Main Office			

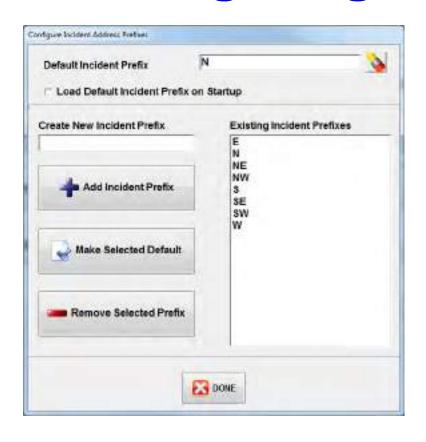
- For each Grace Locator used, enter name and description information in the row that corresponds to the locator ID.
- Locators can be associated to GPS Coordinates by entering the latitude and longitude values. Use the lookup to assist in entering these values.

GPS Lookup



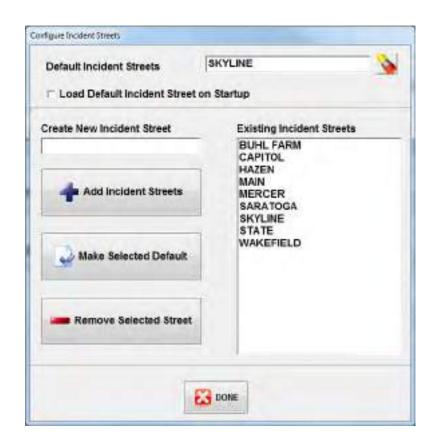
- Use the navigation tools to find the desired location on the map.
- Use the mouse to choose the location on the map.
- The latitude and longitude fields will be populated.
- Press ok and the locator fields will be populated with these values.

Configuring Incident Prefixes



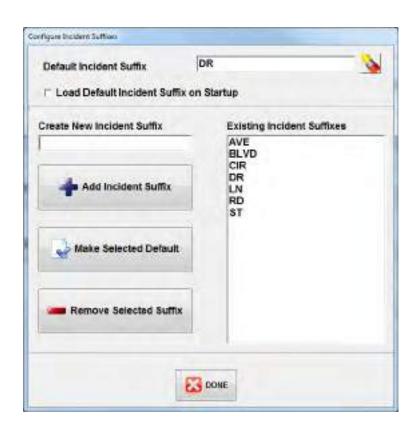
- Press the Prefixes Button to Edit Incident Prefixes
- Enter a Prefix into the Create New Box and Press Add Incident Prefix
- The Prefix Will Be Added to the Dialog Box on the Right
- Highlight a Prefix and Press Remove to Remove a Prefix from the List
- Highlight a Prefix and Press Make Default to Make the Prefix the Default
- Check Load Default Prefix to load this Prefix as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Streets



- Press the Streets Button to Edit Incident Streets
- Enter a Street into the Create New Box and Press Add Incident Street - The Street Will Be Added to the Dialog Box on the Right
- Highlight a Street and Press Remove to Remove a Street from the List
- Highlight a Street and Press Make Default to Make the Street the Default
- Check Load Default Street to load this Street as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Suffixes



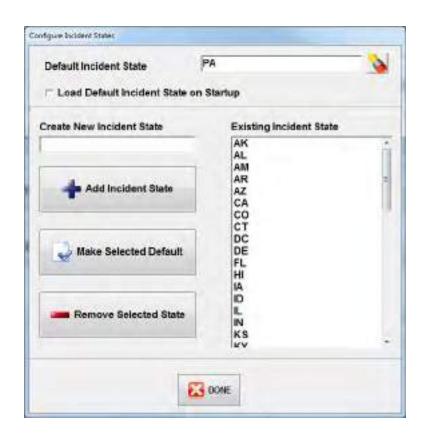
- Press the Suffixes Button to Edit Incident Suffixes
- Enter a Suffix into the Create New Box and Press Add Incident Suffix - The Suffix Will Be Added to the Dialog Box on the Right
- Highlight a Suffix and Press Remove to Remove a Suffix from the List
- Highlight a Suffix and Press Make Default to Make the Suffix the Default
- Check Load Default Suffix to load this Suffix as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Cities



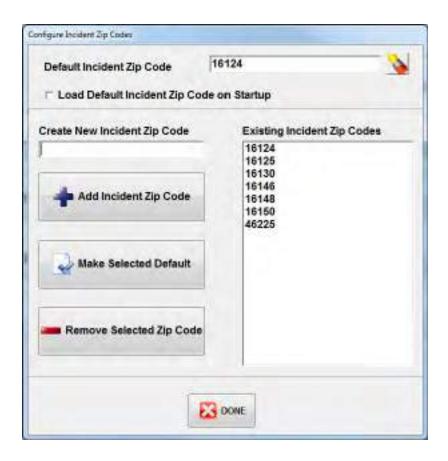
- Press the Cities Button to Edit Incident Cities
- Enter a City into the Create New Box and Press Add Incident City - The City Will Be Added to the Dialog Box on the Right
- Highlight a City and Press Remove to Remove a City from the List
- Highlight a City and Press Make Default to Make the City the Default
- Check Load Default City to load this City as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident States



- Press the States Button to Edit Incident States
- Enter a State into the Create New Box and Press Add Incident State - The State Will Be Added to the Dialog Box on the Right
- Highlight a State and Press Remove to Remove a State from the List
- Highlight a State and Press Make Default to Make the State the Default
- Check Load Default State to load this State as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Zip Codes



- Press the Zip Codes Button to Edit Incident Zip Codes
- Enter a Zip Code into the Create New Box and Press Add Incident Zip Code - The Zip Code Will Be Added to the Dialog Box on the Right
- Highlight a Zip Code and Press Remove to Remove a Zip Code from the List
- Highlight a Zip Code and Press Make Default to Make the Zip Code the Default
- Check Load Default Zip Code to load this Zip Code as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring Incident Countries



- Press the Countries Button to Edit Incident Countries
- Enter a Country into the Create New Box and Press Add Incident Country - The Country Will Be Added to the Dialog Box on the Right
- Highlight a Country and Press Remove to Remove a Country from the List
- Highlight a Country and Press Make Default to Make the Country the Default
- Check Load Default Country to load this Country as the Default on the Operation Setup Screen when Grace-Watch is started
- Press Done when finished

Configuring General Setup



Changing the Custom Logo



- Select Browse from the General settings Tab
- Select a picture from the list and press Select Highlighted Picture
- Logo graphic files must be placed in <Program Folder>\logos
- Press Accept to Accept the new picture or Cancel to cancel the action

Audio Alarms



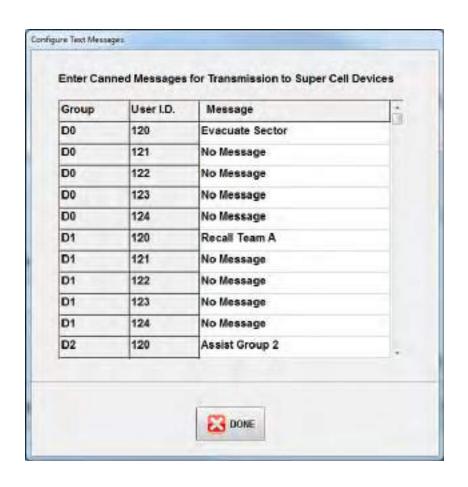
- Audio Alarms can be configured by going to Configuration/General Setup and selecting the Audio Alarm Tab next to Custom Logo.
- Check the box that says 'Play Sound File For Alarms'.
- Select the audio file from the drop down and test it.
- Custom audio files can be used by creating a sound file in the .mid, .wav or .mp3 format and placing a copy of it into the 'Alarms' folder in the user configuration folder where the application is installed.
 - Ex: C:\ProgramData\Grace Industries\Grace-Watch\Alarms

Configuration Protection

∇onfiguration Protection						
Show Warning Message On Entry						
□ Log Date And Time When Changes Are Made						
□ Password Protect	Password					
	Retype Password					

- Check Show Warning Message on Entry to display a warning message when entering the configuration screens.
- Check Log Date and Time to force the system to log a timestamp when configuration changes are made. Located in Program Data/Logs.
- Check Password Protect and provide a password to force a login screen when a user invokes the configuration screens.
- NOTE: Passwords are not managed by the software. If a password is forgotten, administrators can reset this feature using the DisableConfigPassword.exe tool located in the program folder.

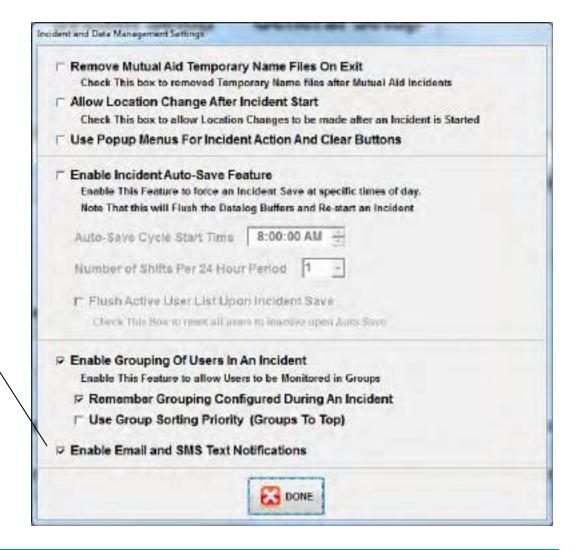
Adding Canned Messages for SuperCELL and WorkForce



- Add canned messages desired to all 120 locations
- SuperCELL and WorkForce WF2 currently support 16 canned messages
- Grace-Watch supports <u>80</u> canned messages to account for future SuperCELL and WorkForce Development
- Each canned message may contain 16 Characters

Email/SMS Notifications

A notification is the ability of the system to be configured to respond to a specific event by sending an email, text message or Grace system message to one or more recipients.



Connections



- Choose Configuration/General Setup/Notifications.
 The fourth tab over is where you will setup your connections to SMTP servers.
- There are two separate setups. One for Email and one for SMS Messages. This is for flexibility. These setups could be the same.
- SMTP Server
 - Specify the SMTP server address.
- SMTP Port
 - Specify the Port used. Typically 25 unless the server uses TLS/SSL
- Requires SSL
 - Check this if your server uses TLS/SSL encryption.
- Authentication
 - Select 'Login' if your server requires credentials.
- User Name
 - User Name for the account if required.
- Password
 - Password for the account if required.
- Press the test button to test your setup. You should receive a 'Tested Ok' message once the configuration is correct.

Triggers



Triggers Continued

Select the fifth tab on the notification configuration screen to setup triggers. Triggers are the events that take place to cause a notification. This is where you describe the conditions that must occur to 'trigger' a notification.

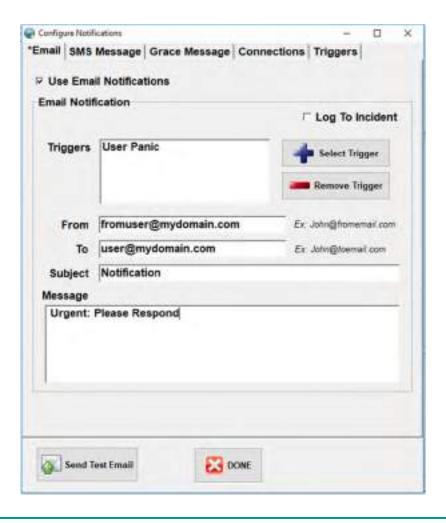
- Create Trigger Name
 - Select this button to create a new empty trigger that will need configured.
- Modify Trigger
 - Select this button to change the selected trigger.
 This puts it into an edit state.
- Delete Trigger
 - Select this button to remove the selected trigger.
- Trigger Name
 - Enter a meaningful name for the trigger. This will be used in a selection screen when setting up the email and sms messages. It will also be included in the message that gets sent.
- Sys ID Range
 - Select a range of IDs that the trigger should apply to.
 To set it up for only one ID, you should include that ID in both boxes.
- User ID Range
 - Select a range of user IDs that the trigger should apply to. To set it up for only one user ID, you should include that ID in both boxes.

- Time Range
 - Enter the time range that this trigger will be active.
 Providing the same time for upper and lower ranges will cause the trigger to always be active.
- Trigger Event
 - This is the actual event of the trigger.
 Ex: Alarm, low battery etc.
- Locator Range
 - This is only available when the trigger event is Location. Enter a range of locator IDs to check for.
- Grace Message IDs
 - Select the ID of a worker worn (SuperCELL or WorkForce WF2) device message to use as a trigger.
- Treat Trigger as Alarm
 - Check this box to treat the notification event as an alarm. This will trigger an alarm condition in the incident monitor. Some Trigger Events are already alarms, so this box will not be enabled for those event types.
 - In the incident, you will see the notification alarm image



 You can define as many triggers as you want, they will not be used until they are associated with an Email, SMS Message or Grace Message.

Email



Email Continued

Select the first tab on the notification configuration screen to setup an email.

This is the email template that is used when a notification is triggered by the system.

Field Descriptions

- Use Email Notifications
 - You must check this box to activate email notification.
- Log To Incident
 - Check this box if you want to write to the incident log when a notification occurs.
- Triggers
 - Use the Select Trigger button to bring up the list of triggers you created in Trigger setup. Select one or more to associate them to the email notification.
 - Use the Remove Trigger button to remove a trigger from the email notification.
- From
 - Enter a valid email address. Most SMTP servers require that a 'from' field is provided.
- To
 - Enter a valid email address to send the email to. You can provide multiple addresses by using a semicolon as a separator.

- Subject
 - Enter a short generic description about the email.
- Message
 - You can provide additional information in the message part of the email to give special instructions to the recipient.
 - The system will prefix additional information to the message. System ID, User ID, User Name and the Trigger Name.
- Send Email Test
 - Press the test button located on the bottom toolbar. Be sure that your SMTP Server information has been setup and tested. If the button is not visible, then you might not have completed all of the required fields.
 - If the test is successful, you will see the message 'Email sent ok' you will also receive a test email at the location you provided in the 'To' field.

SMS Message



Select the second tab on the notification configuration screen to setup an SMS Message

The fields for an SMS Message are the same as the fields for an email with the exception of 'Mobile #' and 'Carrier'.

Field Descriptions

- Use SMS Notifications
 - You must check this box to activate SMS notification.
- Log To Incident
 - Check this box if you want to write to the incident log when a notification occurs.
- Triggers
 - Use the Select Trigger button to bring up the list of triggers you created in Trigger setup. Select one or more to associate them to the SMS notification.
 - Use the Remove Trigger button to remove a trigger from the SMS notification.
- From
 - Enter a valid email address. Most SMTP servers require that a 'from' field is provided.
- To
 - Enter a valid phone number to send the SMS notification to.

Grace Message



Select the third tab on the notification configuration screen to setup a Grace Message notification.

Field Descriptions

- Use Grace Message Notifications
 - You must check this box to activate canned message notification.
- Log To Incident
 - Check this box if you want to write to the incident log when a notification occurs.
- Triggers
 - Use the Select Trigger button to bring up the list of triggers you created in Trigger setup. Select one or more to associate them to the Grace Message notification.
 - Use the Remove Trigger button to remove a trigger from the Grace Message notification.
- Grace Message To Send
 - Select on or more messages to send using the Select Messages button.
- Remove Messages
 - Used to remove a message from the send list.

Incident and Data management



Done with Configuration

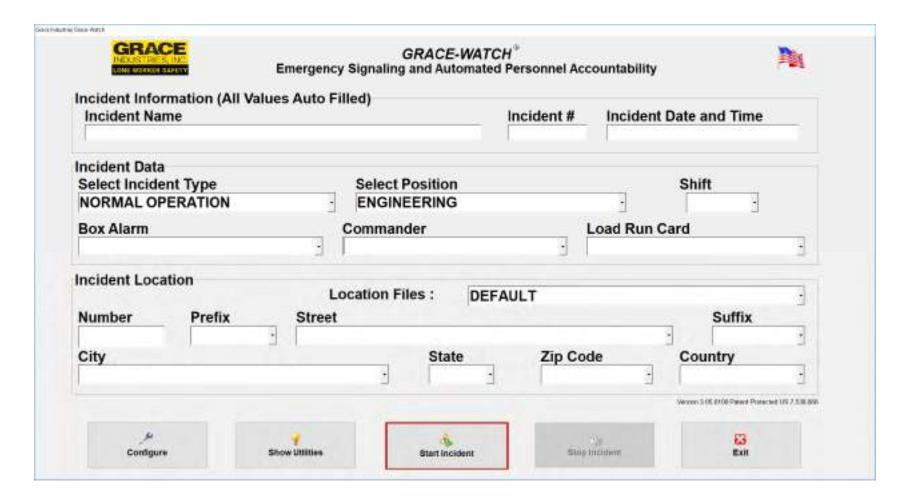


EXIT CONFIGURATION BUTTON

This button prompts the user to save changes. The user will be prompted with yes, no and cancel options. Choose "yes" to save changes, "no" to discard changes and "cancel" to remain in the configuration screen. After choosing "yes" or "no" the user will be returned to the Operations screen.

Note that changes to name files, location files and canned messages are updated and saved immediately upon exit of the edit screens and aren't affected by this button.

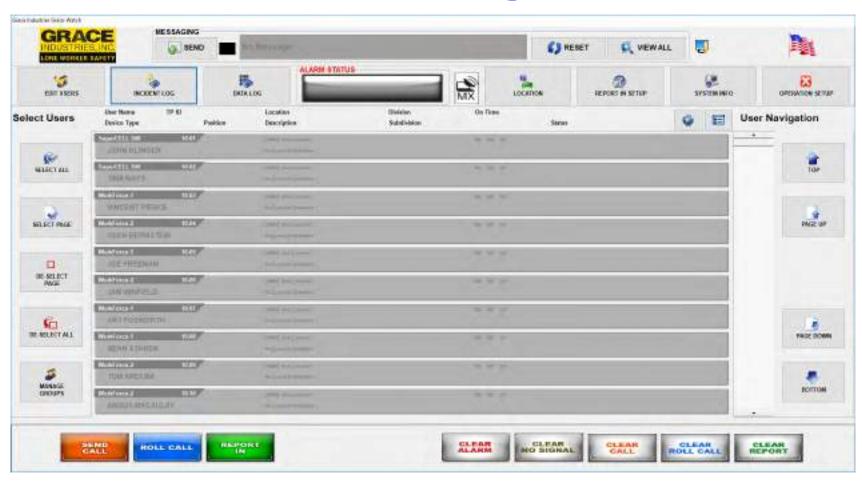
The Operation Setup Screen



Starting an Incident

- Once the Configuration is complete, you are ready to start an Incident
- The only fields that need populated are the Incident Type and Position. These fields <u>MUST</u> be populated to access the Start Incident Button and start an incident.
- The Name, Incident Number and Time/Date fields are auto-filled once an Incident is started
- Selecting a location auto-fills all location fields
- Press the Start Incident Button to Advance to the Monitoring screen

The Monitoring Screen



The Monitoring Screen

- The Main Monitoring Screen has Four Major Areas:
 - The Main Bar (also contains the Alarm Box)
 - □ The Grace Messaging Bar
 - □ The Monitoring Window with users monitored, a Selection Bar and Navigation Bar
 - □ The Action Bar with action buttons and clear buttons
- Note that users are "grayed out" until they come online
- If the MX900-H communication is not established, a Communications Alarm will show up flashing red in the Alarm Box

Managing an Incident

Incident Management from the Monitor Screen is efficiently achieved using the Grace-Watch System.

All users initially start out "grayed out" with gray letters on a light grey background.

Users that check in to the Grace-Watch system light up with a light yellow background and the active users are sorted the top of the user list based on Sort Priority.

Users may be selected and de-selected for sending commands to the users worker worn devices. Selection of users is performed by single clicking on the desired user or using the Selection Bar on the left of the screen. When a user is selected, his background will turn light blue to indicate the selection. To de-select the user, simply single click on the user or use the selection bar. Deselected users will return to a light yellow background. Note that you cannot select in-active users.

Active users will continue to populate the monitor screen until all users on scene are shown as active. Use to the navigation buttons and scroll bar on the right of the screen to move up and down the list of users.

If a user's worker worn device goes into alarm, an immediate alarm status image will be displayed in that user's block and the user will be sorted to the top of the screen. In addition, a flashing ALARM message will be displayed in the alarm status box. Once a user's alarm has been reset, the alarm status image may be cleared using the Clear Alarm button located on the action bar.

Call-Back, Report-In, and Roll Call commands may be manually sent to the worker worn devices by selecting a user or user's and pressing the appropriate button on the action bar. A message will be transmitted to the worker's device and the appropriate status image will be set. The user will then be sorted to the top of the screen. In addition, a flashing ALARM message will be displayed in the alarm status box.

Report-In and Roll call commands can also be sent automatically to the worker worn devices at regular time intervals using the Auto Report-In setup page and setting the desired parameters.

Managing an Incident

Continued

Canned or free form messages may be sent to SuperCELL and WorkForce WF2 devices using the Grace messaging screen accessed using the Send Button in the Grace messaging box. Grace messages received from SuperCELL and WorkForce will be displayed in the Grace message box display block.

User assignments may be quickly changed by double-clicking on a user's block assignment column and displaying the User Assignment Dialog. User profiles may be quickly viewed by double-clicking on the user's block in the name column.

All incident events and radio messages are stored in the Incident log and the Radio data log during an incident. These logs are saved in an incident file and can be viewed at a later date using the Grace-Watch Incident Viewer. The logs can be viewed at any time by pressing the appropriate buttons on the monitor main tool bar.

A snapshot of the incident details can be viewed at any time by pressing the View System Info button on the Main Monitor Bar.

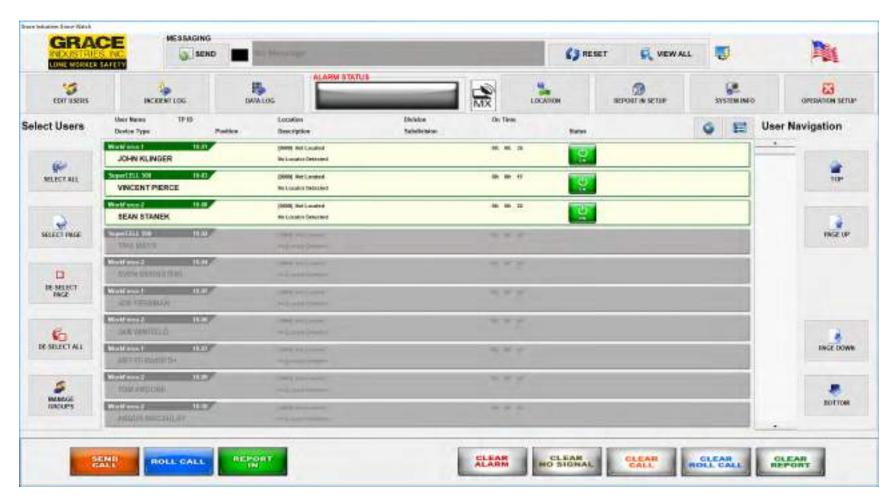
When an incident is complete, use the Operation Setup button to return to the Operation setup screen and press the stop incident button to stop and save all the incident data. The incident can later be viewed using the Grace-Watch Incident Viewer.

Communications Fault



- If the MX900-H does not communicate at least once every 2 seconds with the computer, a Communication Fault will appear in the Alarm Status Box.
- The Communication Fault will clear automatically when communication is restored between the computer and the MX900-H.

Monitor Screen with Active Users



Monitor Screen with Active Users

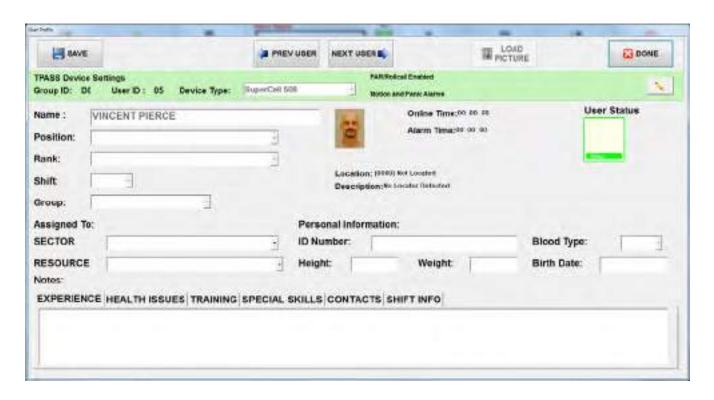
- Users that are active will "light up" in the Status column shown on the right
- Users are sorted real-time based on status
- Alarm is the highest, followed by Abandon, Call-Back, Report-In, Roll Call, Auto Report-In, No-Signal, PASS Device ON and PASS Device OFF
- The Monitor window may be scrolled down to see all users that are active on the system

User Information Bar



- Each user present on the system has a user information bar displaying the user's Name, Group and User ID, Rank, Assignment, Online Time and status images
- User status images reflect the various functions of the user including Alarm, No Signal, Call-Back, Report-In and Roll Call
- User Profiles may be viewed quickly by double-clicking on the User Name column of the Information Bar
- User Assignments may be changed quickly by double-clicking in and around the user assignment column of the Information Bar

Viewing a User Profile



- The User Profile may be quickly viewed from the monitor screen by clicking on that user's name column in the user's information bar
- When complete, press the Done Button to close

The User Assignment Dialog



- Select the Division/Group and Resource for the individual
- When complete, press the Save button
- Then select Previous or Next Button to adjust another individual or Press Done to close the dialog

Assigning Users

- Users may be assigned to a Division and Sub-Division to help track their location and assignment during a work operation
- Users may be assigned at any time by clicking on the User's Assignment column in the Information Bar in the Monitor Area

Navigating the Monitor Screen

- The Monitor Window may be navigated using the Navigation Bar at the Right
- Use the Top Button to return quickly to top of the list
- Use the Page Up button to move up ten users.
- Use the Page Down Button to move down ten users
- Use the Bottom Button to move to the end of the list
- Use the Scroll Bar to freely position anywhere within the list

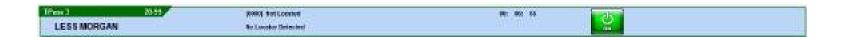


Selecting a User or Users



- Users must be selected to perform an action such as Call-Back, Report-In, or Roll Call or clear a status condition such as Alarm, Report-In, Roll Call, or No-Signal
- Only Active Users Can Be Selected
- Use the Select All button select all active users in the list
- Use the Select Page to select the ten users on the monitor screen
- Use De-select Page to de-select the ten users on the monitor screen
- Use De-Select All to de-select all users in the list
- You can also select a user by single-clicking on that user's information bar
- Single-clicking again will de-select that user

Selected Users will Turn Blue



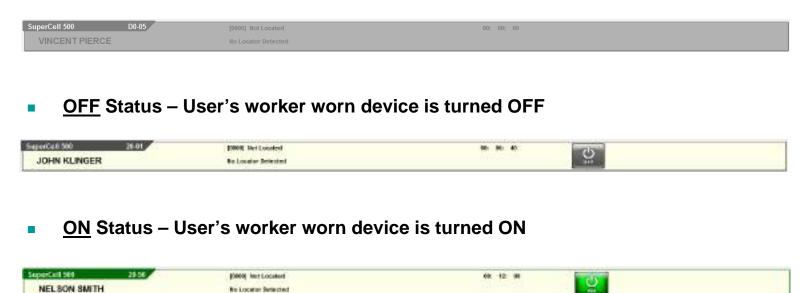
- Note that users that are selected will show a blue background
- Multiple Users may be selected or de-selected at any one time
- Selection is used to perform actions on users
- Once an action is performed, the users are automatically deselected
- To perform another action, re-select the users
- This prevents selected users from being sorted off-screen and inadvertently being tagged for an action at a later time

User Status Images

- User Status Images give a quick visual representation of a user's status during an incident
- Status Images for Grace-Watch Systems are:
 - On, Off, None (Only when user is inactive)
 - Alarm, Alarm Cleared
 - No-Signal, No-Signal Cleared
 - Abandon,
 - Call-Back Command, Call-Back Sent, Call-Back Rxd, Call-Back Ack
 - Report-In Command, Report-In Sent, Report-In Rxd, Report-In Ack
 - Roll Call Command, Roll Call Sent, Roll Call Rxd, Roll Call Ack
 - Auto Report-In Command, Auto Report-In Sent, Auto Report-In Rxd, Auto Report-In Ack

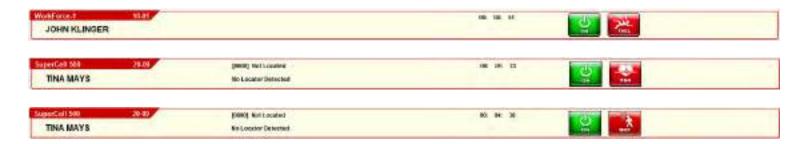
On, Off, or No Status

No Status – User Inactive, i.e. has not checked into the system



Alarm/Alarm Cleared Status Images

- Alarm Status Image Worker Worn Device is in ALARM
- Caused by Emergency Alarm Button Press on worker worn device or from a Lack of Motion condition, or by a fall detected with the WorkForce



- Alarm Cleared Status Alarm has been cleared at computer
- May be enabled or disabled from configuration



No-Signal / No-Signal Cleared Status

- No-Signal Status Image Indicates Grace-Watch has not received a Message from a device within the No-Signal Time setting
- Default setting for No-Signal is 5 minutes
- Automatically Clears when a Message is received from the device



- No-Signal Cleared Status Image No-Signal condition has been Manually cleared
- Places Marker for devices in which signal is no longer present



Abandon Command* / Sent / Received / Acknowledge Status

(*Abandon is an optional feature in the Grace-Watch System)

Abandon Command – Abandon has been commanded



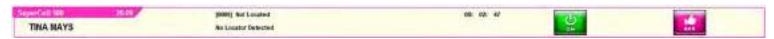
Abandon Sent Status Image – Abandon Message has been sent to the worker worn device



 Abandon Received Status Image – Abandon Received Message has been transmitted from the worker's device



 Abandon Acknowledged Status Image – Abandon Acknowledge Message has been transmitted from the worker's device



Call-Back / Sent / Received / Acknowledge Status

Call-Back Command – A Call-Back has been commanded



Call-Back Sent Status Image – A Call-Back Message has been sent to the worker worn device



 Call-Back Received Status Image – A Call-Back Received Message has been transmitted from the worker's device



 Call-Back Acknowledged Status Image – A Call-Back Acknowledge Message has been transmitted from the worker's device



Report-In / Sent / Received / Acknowledge Status

Report-In Command – A Report-In has been commanded



Report-In Sent Status Image – A Report-In Message has been sent to the worker worn device



 Report-In Received Status Image – A Report-In Received Message has been transmitted from the worker's device



Report-In Acknowledged Status Image – A Report-In Acknowledge Message has been transmitted from the worker's device



Auto Report-In Command / Sent / Acknowledge Status

Auto Report-In Command – An Auto Report-In has been issued



 Auto Report-In Sent Status – An Auto Report-In Message has been sent to the worker worn device



 Auto Report-In Received Status – A Report-In Received Message has been transmitted from the worker's device



 Auto Report-In Acknowledged Status – An Auto Report-In Acknowledge Message has been Automatically transmitted from the worker's device



Roll Call Command / Sent / Received / Acknowledge Status

Roll Call Command – A Roll Call has been commanded



Roll Call Sent Status Image – A Roll Call Message has been sent to the worker worn Device



 Roll Call Received Status Image – A Roll Call Received Message has been transmitted from the worker's device



 Roll Call Acknowledged Status Image – A Roll Call Acknowledge Message has been transmitted from the worker's device



User Sort Priority

All users monitored on the Monitor screen are sorted real-time in the user name list by status priority, i.e. users with the highest status priority are sorted to the top of the list.

The following is an explanation of the various status priorities on the Grace-Watch System sorted from highest priority to lowest priority:

Fall Alarm Status: Highest priority; always sorted to the top of the user list on the monitor screen.

Alarm Status: Second highest priority.

No Signal Status

Abandon Status: (Abandon Commanded, Sent, Received, and Acknowledged)

Call-Back Status: (Call-Back Commanded, Sent, Received, and Acknowledged)

Roll Call Status: (Roll Call Commanded, Sent, Received, and Acknowledged)

Report-In and Auto Report-In Status: (Report-In Commanded, Sent, Received, and Acknowledged)

Withdrawn Status: in Mode 2. NOTE: In Mode 1, this status will be sorted below Off status.

User On Status: in Mode 2. NOTE: In Mode 1, this status will be sorted below Off status.

User Off Status: in Mode 2. *NOTE: In Mode 1, this image will be sorted above the On status images.*

Alarm Cleared Status: has no effect on the sort order of the user on the monitor screen.

No Signal Cleared Status: Lowest priority score of all online status images.

Micro-Repeater: Always displayed below normal users in the same system ID range.

Non-Active User: Users that have not checked into the system; always sorted below the users that have checked into the system with any status listed above.

User Sort Priority

Continued...

Users with Equal Priority: If multiple users have the same priority scores based on the above statuses, then the users will be sorted within that score based on Group ID and User ID.

System and Aux ID priority: The assigned ID adds another level to the sorting scheme. The highest priority would belong to the root System ID followed by the remaining System IDs and then the Auxiliary IDs would fall in line after that based on the order they are listed in system setups. i.e. Alarms in the Root System ID and an Auxiliary ID would be grouped together, but the Root System ID alarm would take precedence and display on top.

Mode 1 vs. Mode 2

The mode used for sorting can be configured on the System Setup Screen of the Configuration Module. There are two options:

Mode 1: OFF HIGHER THAN ACTIVE

Mode 2: ACTIVE HIGHER THAN OFF

These two options reverse the order in which On and Off units are displayed.

With Mode 1, all Off units display above On units.

In Mode 2, all On units display above Off units. Mode 2 is the most commonly used mode.

Note: All other sorting rules apply regardless of which mode is chosen.

Grouping



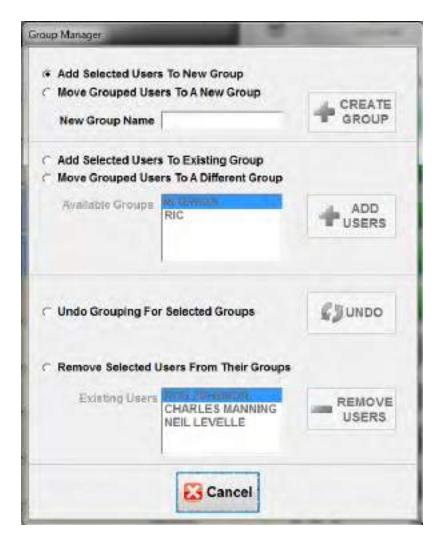
- Grouping is the ability to combine users into groups for display purposes in the incident monitoring screen.
- In this example we have 3 users in a group called 'INTERIOR'
- Groups can be collapsed so that you only see the group as an item in the monitored list.
 The example above shows the group expanded so you can see the details for each user.
- The Group displays status images just like a user does except the images displayed are calculated from the users that the group contains.

Grouping

Continued

- The order of users within the group is determined by the incident priority configuration. This is the same ordering that the incident uses.
- The order of a group within the incident is determined by the groups status images and will follow normal priority as configured.
- Selecting a group and performing an operation such as Call-Back, Roll Call and Report-In will apply the action to all of the active users within the group.
- Users within a group cannot be individually selected, so individual operations cannot be performed.
- There is no notion of grouping outside the incident monitoring screen. What this means is that when you look at logs, they will reflect individual users as you would normally see.

Managing Groups



Managing Groups

Continued

- The Group Manager dialog is invoked by selecting a user, group or both within the incident monitoring screen and then pressing the Manage Groups button.
- The available options are determined by what has been selected.

Options

- Add Selected Users to New Group.
 - Enabled whenever an individual user is selected. Type a new group name in the box provided and press Create Group.
- Move Grouped Users To A New Group.
 - Enabled when a group is selected. Type a new group name and press the Create Group button.
- Add Selected Users To Existing Group.
 - Enabled when one or more users are selected and there are available groups. Select a group and press the Add User button.
- Move Grouped Users To A Different Group.
 - Enabled when a group is selected and there are available groups. Select a group and press the Move Users Button.
- Undo Grouping For Selected Groups.
 - Enabled whenever a Group is selected. Press the Undo button to undo the grouping.
- Remove Selected Users From Their Groups.
 - Enabled when a group is selected. This allows you to remove individual users from a group. Select the users to remove and press the Remove Users button.

Group Configuration

- ☑ Enable Grouping Of Users In An Incident
 Enable This Feature to allow Users to be Monitored in Groups
 - ▼ Remember Grouping Configured During An Incident
- In Configuration/General Setup/Incident And Data Management Options, you can turn the grouping feature on and off by checking the Enable Grouping Checkbox.
- The second checkbox is only enabled when grouping is enabled and lets you choose whether changes made to grouping during and incident are retained.
 - If this checkbox is not checked, you will have to pre configure your grouping. This is done by creating Groups (See next page) and configuring each user to belong to a group. This is done in the User edit screen under configuration.
 - When checked, this tells the system that any changes made to grouping during an incident will be maintained. You can create groups and assign users to groups from the manage groups screen which is available during an incident by selecting a group or user and pressing the button.

Group Configuration

Continued



 Group Names can be pre-configured by going into Configuration/User Setup and choosing the Groups button. Here you can add or remove groups from the list.

Performing Actions on User(s)



- The Monitor Action Bar is located at the Bottom of the screen and allows Action to be performed on Active User(s) in the list
- User(s) must be selected before an action can be performed
- Actions Available are:
 - Send Abandon
 - Send Call-Back
 - Call for Report-In
 - Call for Roll Call
 - Clear Alarm
 - Clear No-Signal Condition
 - Clear Abandon
 - Clear Roll Call
 - Clear Report-In
 - Clear Call-Back

Send Abandon to User(s)



- Select User(s) to send Abandon
- Press and hold the Send Abandon Button for .5 seconds (or longer than the hold time set in configuration)
- Watch as Abandon Commands are Initiated and Sent to the selected user(s)
- Watch for the Abandon Received Status Image for each user being sent abandon to be achieved, indicating the worker worn device has received the signal
- Watch for the Abandon Acknowledge Status Image for each user being sent Abandon to be achieved, indicating the user has pressed his side reset buttons to acknowledge the Abandon Command

Clearing an Abandon Command













- Select User(s) to have their Abandon Status Images cleared
- Press and hold the Clear Abandon Button for one second (or longer than the hold time set in configuration)
- Watch as Abandon Status Images are Cleared from the Monitor Screen

Call-Back a User(s)



- Select User(s) to Call-Back
- Press and hold the Send Call-Back Button for .5 seconds (or longer than the hold time set in configuration)
- Watch as Call-Back Commands are Initiated and Sent to the selected user(s)
- Watch for the Call-Back Received Status Image for each user being called back to be achieved, indicating the worker worn device has received the signal
- Watch Call-Back Acknowledge Status Image for each user being called back to be achieved, indicating the user has pressed his side reset buttons to acknowledge the Call-Back Command

Clearing an Call-Back Command













- Select User(s) to have their Call-Back Status Images cleared
- Press and hold the Clear Call-Back Button for one second (or longer than the hold time set in configuration)
- Watch as Call-Back Status Images are Cleared from the Monitor Screen

Performing a Manual Report-In



- Select user(s) to contact for Manual Report-In
- Press and hold the Report-In Button for .5 seconds (or longer than the hold time set in configuration)
- Watch as Report-In Commands are Initiated and Sent to the selected user(s)
- Watch for the Report-In Received Status Image for each user being contacted for Report-In to be achieved, indicating the worker worn device has received the signal
- Watch Report-In Acknowledge Status Image for each user being contacted for Report-In to be achieved, indicating the user has pressed his side reset buttons to acknowledge the Report-In Command

Clearing an Manual Report-In













- Select User(s) to have their Report-In Status Images cleared
- Press and hold the Clear Report-In Button for one second (or longer than the hold time set in configuration)
- Watch as Report-In Status Images are Cleared from the Monitor Screen

Performing a Roll Call



- Select User(s) to contact for Roll Call
- Press and hold the Roll Call Button for .5 seconds (or longer than the hold time set in configuration)
- Watch as Roll Call Commands are Initiated and Sent to the selected user(s)
- Watch for the Roll Call Received Status Image for each user being contacted for Roll Call to be achieved, indicating the worker worn device has received the signal
- Watch Roll Call Acknowledge Status Image for each user being contacted for Roll Call to be achieved, indicating the user has pressed his side reset buttons to acknowledge the Roll Call Command

Clearing a Roll Call













- Select User(s) to have their Roll Call Status Images cleared
- Press and hold the Clear Roll Call Button for one second (or longer than the hold time set in configuration)
- Watch as Roll Call Status Images are Cleared from the Monitor Screen

ALARM Conditions





- When a user goes into ALARM, that user will be immediately sorted to the top of the list, with it's Alarm Status Image showing
- The Alarm Status Box at the top of the screen will show a flashing red alarm active message

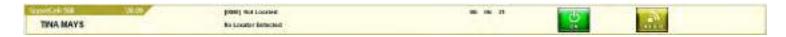


Once a User has reset the ALARM condition at the worker worn device, you can clear the alarm condition on the screen by selecting that user(s) and holding the Clear Alarm Button for one second

User(s) will be sorted to normal priority position in the list



No Signal Condition



When a message has not been received from a worker worn device within the No-Signal Timeout (default = 5 minutes), the No-Signal Status will appear and the user(s) will be sorted to the top of the list



If a message from the worker worn device in No-Signal is received, the No-Signal Condition will be cleared automatically

To Manually Clear the No Signal Condition, select the User(s) and hold the Clear No-Signal Button for 1 second

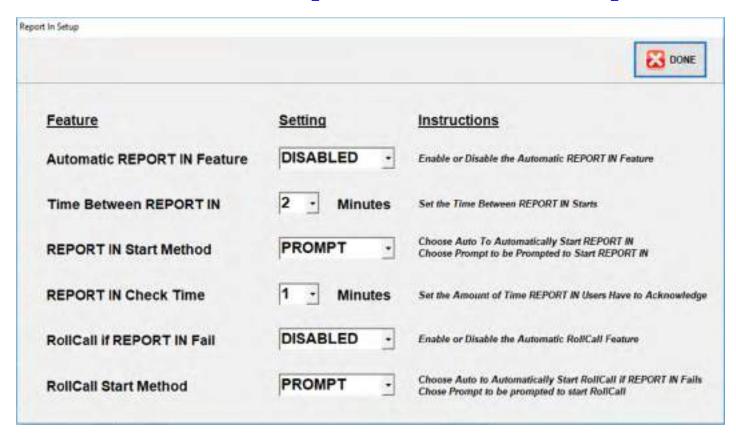


Monitor Main Bar



- The Monitor Main Bar located at the Top of the Screen contains the ALARM Status Box along with functionality to Edit User(s), View Incident Log, View Data Log, System Info. and Location information, and to Report-In Setup
- It also contains the Operation Setup button to return to operation setup and save or cancel an incident
- The Auto Report-In feature is a great way to perform Report-In checks at regular intervals with minimal time and labor required

Auto Report-In Setup



- Press the Report-In Setup button on Main Bar (the above dialog will appear)
- Automatic Report-In must be enabled and setup before use

Auto Report-In Setup



- Set the Time Between Report-In to the number of minutes between automatic Report-In checks (Typically 15 Minutes)
- Set the Report-In Start Method to Prompt or Automatic, depending on preference (Prompt will Prompt the user before Auto Report-In starts)
- Set the Report-In Check Time to the time limit that all Report-In responses should be received in order to recognize the Report-In check as successful
- Set the Report-In Feature to Enabled and Press the Done Button

Automatic Report-In Countdown



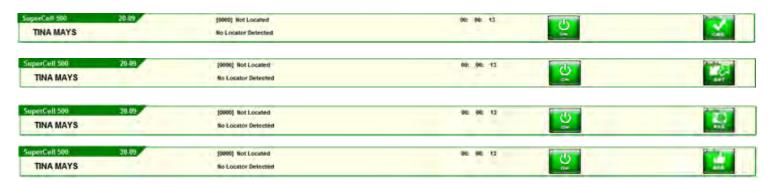
- Once the Auto Report-In is enabled, notice that the Alarm Status
 Box will display the remaining time before the Report-In is initiated
- If an Alarm occurs, the Alarm Message will be displayed over top of the Auto Report-In countdown

Automatic Report-In Time Reached



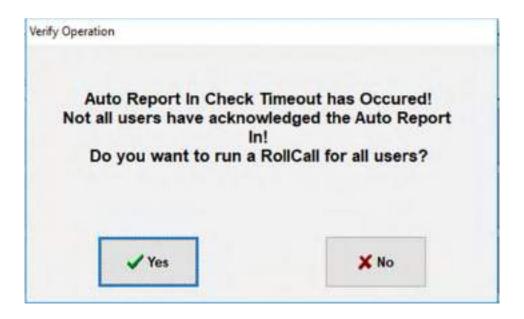
- Once the Report-In Time reaches zero, the Report-In check will begin automatically if the Report-In start method is set to Automatic
- Otherwise the above message will appear
- Selecting Yes will start the Report-In check
- Selecting No will reset the Report-In timer to the Report-In Check time value and begin counting down once again

Automatic Report-In Started



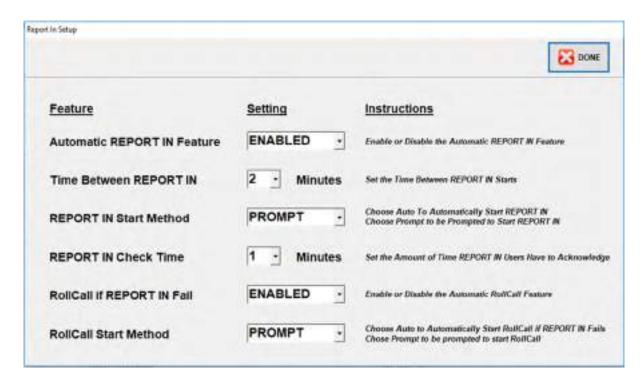
- Each Active User will be commanded for Auto Report-In and a message will be sent to the worker worn device
- Each worker worn device silently recognizes the Auto Report-In signal and automatically responds with an acknowledge signal
- Auto Report-In commands will be sent until all users have responded with an Acknowledge
- If all users do not respond within the Report-In check time, the Report-In check should be considered as Failed
- Auto Report-In Status Images must be cleared using the Clear Report-In button
- If a new Auto Report-In check starts, all Auto Report-In Status are cleared automatically

Auto Report-In Check Failure



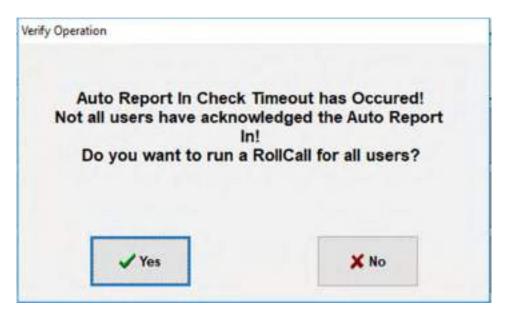
Should an Auto Report-In check Fail, i.e., not all users have acknowledged within the Report-In check time, a Roll Call should be initiated, either using the Report-In button on the Action Bar, or by setting up the Auto Roll call feature in the Report-In setup area, which will display the above prompt before starting Auto Roll Call

Setting up Auto Roll Call



- Press the Report In Setup button on the Main Bar and the above Dialog will appear
- Automatic Roll Call must be enabled and setup before use

Automatic Report-In Time Reached



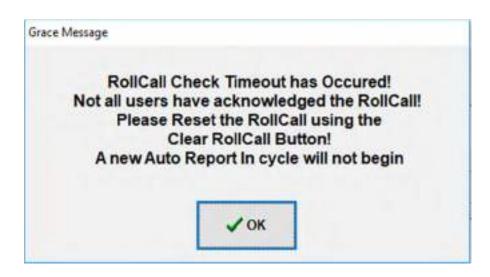
- Once a Report-In check has failed, the Auto Roll Call will begin automatically if the Roll Call start method is set to Automatic
- Otherwise the above message will appear
- Selecting Yes will start the Auto Roll Call
- Selecting No will reset the Report-In timer to the Report-In time value and begin counting down once again

Automatic Roll Call Started



- Each Active User will be commanded for Auto Roll Call and a message will be sent to the worker worn device
- Each worker worn device silently recognizes the Auto Roll Call signal, goes into audible alarm and automatically responds with a received signal
- As each User acknowledges Roll Call, the Roll Call Ack will appear
- Auto Roll Call will be sent until all users have responded with an Acknowledge
- If all users do not respond within the Report-In check time, the Roll Call check should be considered as Failed
- Roll Call status must be cleared using the Clear Roll Call button
- All Roll Call must be cleared before a new Auto Report-In check time can start

Auto Roll Call Failure



- Should the Roll Call check fail, it either means the user(s) that have not responded are either unable to or are out of range
- In either case, an active check on that user(s) should be performed
- It may be desirable to perform an Call-Back if a Roll Call check fails
- Note once again that a new Report-In check will not begin until the Roll Call Status have been cleared using the Clear Roll Call Button

Viewing Location Information



- Location Information may be viewed for the incident at any time by selecting the View Location Button from the Main Bar
- Note that Locations must have been created in Configuration and loaded from the Operation Setup Screen to be Viewed

Location View Dialog

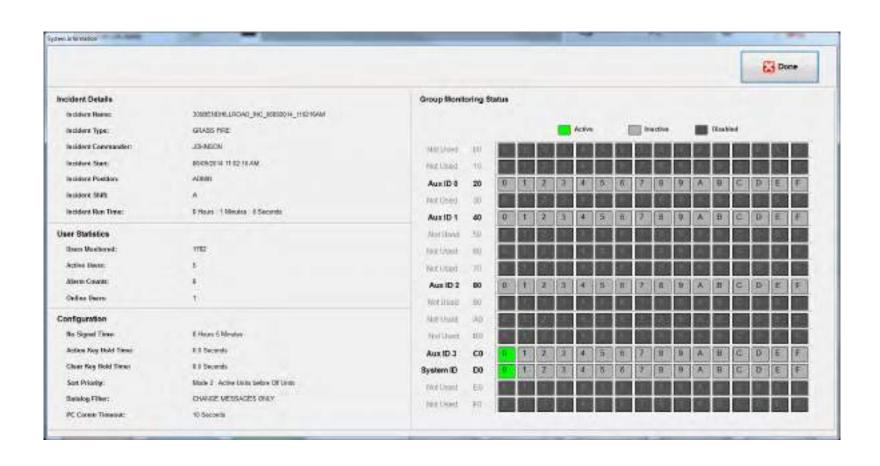


Viewing System Information



- System Information may be viewed at anytime for the incident by Pressing the View System Info Button on the Main Bar
- System Information contains Incident Details, Active groups and user count, System and Aux ID values and Options set on the system

System Information Dialog



Viewing the Incident Log



- A complete log of important incident events is kept with time and date stamps and may be viewed at any time during the incident by pressing the View Incident Log Button on the Main Bar
- Important events during the incident are automatically logged with a time and date stamp in an easy-to-read sentence format

The Incident Log



Adding Custom Notes to the Incident Log



- Custom Notes can be Added to the Incident Log at any time by pressing the Add Note Button from the Incident Log Dialog
- Simply type the note on the line provided and press Add
- The Note will be added to the Incident Log with a Time and Date Stamp

Viewing the Data Log – Radio Data



- A complete log of the worker worn device radio messages received is kept with time and date stamp and may be viewed at anytime during the incident by pressing the View Incident Log Button on the Main Bar
- Radio messages are logged either by change messages only or all messages depending on configuration
- Grace messages received are also logged

The Radio Data Log



Editing User Information During an Incident

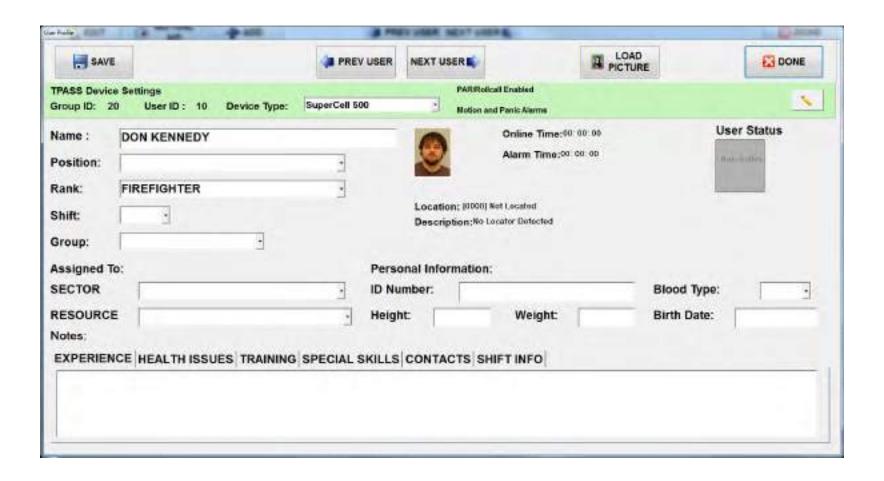


- User's Information may be edited during an incident if necessary by pressing the Edit Users Button on the Main Bar
- The Edit Users Dialog will appear as described in the configuration section
- User Profiles are accessible from the Edit Dialog as described in the configuration section
- Users may be added to the incident from here, but the delete user function is disabled during an incident
- User Status will be updated real-time on the User Profile screen while editing

Edit Users Dialog



User Profile Dialog



Sending & Receiving Grace Messages from SuperCELL and WorkForce WF2 Devices



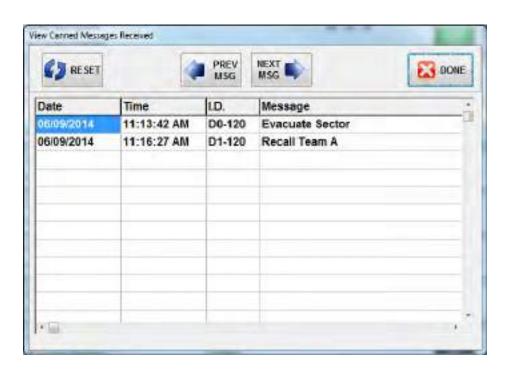
- The Grace Message area is located just beneath the Action Bar on the Monitor screen
- When no messages are active, the message area will be "grayed out" with the No Message status displayed

Receiving a Grace Message



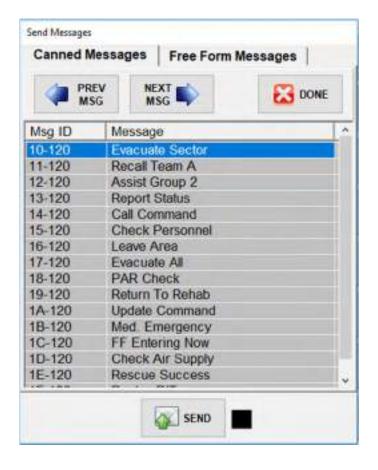
- When a Grace Message is received, the message area will "light up" with a green background and the Grace Message will be displayed along with a time and date stamp
- The red indicator square will flash on and off
- To reset this active message, press the Reset button
- The message box will return to the No Message status
- Only the most recent Grace Message received will be displayed in the message box

Viewing All Received Canned Messages



- To View All Canned Messages received, press the View All button and the dialog at the right will appear listing all canned messages received with time and date stamp
- These messages are also stored in the incident and radio data logs
- Press Done to exit

Sending a Canned Message



- To Send a Canned Message, press the Send Button from the Grace message box
- The send Grace message dialog will appear
- Select the Canned message tab.
- Simply use the Prev and Next buttons or select the message from the list.
- Press the send button.
- The indicator box will flash red indicating the message has been sent
- There are <u>16</u> messages available
- SuperCELL Devices <u>must have the same</u> 16
 Canned Messages programmed to properly display the message
- Messages sent will be added to the Incident Log

Sending a Free Form Message

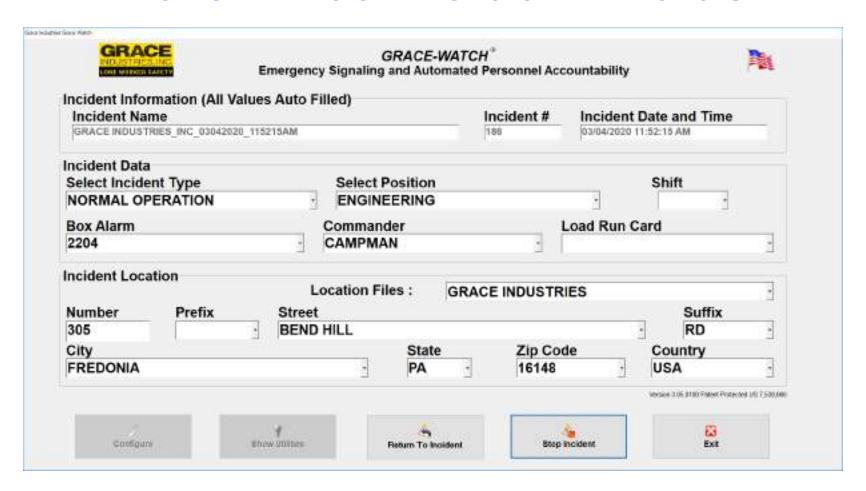


- To Send a Free form Message, press the Send Button from the Grace message box
- The send Grace message dialog will appear.
- Select the Free Form Tab.
- Key in your message.
- Select destination device IDs or select All.
- Press the send button.
- The indicator box will flash red indicating the message has been sent
- Messages sent will be added to the Incident Log

Returning to Operation Setup Screen

- When an incident has been complete, or even during an incident, you can return to the Operation Setup Screen to save or cancel an incident by pressing the Operation Setup Button located in the upper right hand corner on the Main Bar
- Notice the incident name, number, and time/date fields have been auto-populated
- The name filled will be auto-filled using the Location file name followed by Inc_date_time (e.g. 305BendHillRd_Inc_040207_092823am)
- If no location file is specified, the street address will be used with PreSreetSuffix followed by Inc_date_time (e.g. 305BendHillRd_Inc_040207_ 092823am)
- Blank fields will be ignored
- If no street address data is present, the Incident file will simply be named Inc_Date_Time (e.g. Inc_040207_092823am)
- The incident number increments automatically for each incident
- The time/date stamp is filled when the start incident button is pressed for the first time

Auto-Filled Incident Fields



Returning to the Current Incident

- To return to the current Incident from the Operation Setup Screen, simply press the Return To Incident Button
- The Incident will not be saved and you will return to the Monitor screen with all incident data preserved

Saving the Incident

- To Save the Incident, simply press the Save and End the incident, simply press the Stop Button located at the bottom of the screen
- The Incident File will be saved to the file name indicated in the Incident name field
- The file is saved in the <Program Folder>\Incidents Folder on your hard drive
- The Incident may be later viewed by using the Grace-Watch Incident Viewer program
- The Incident number will be automatically incremented for the next incident

Cancelling the Incident

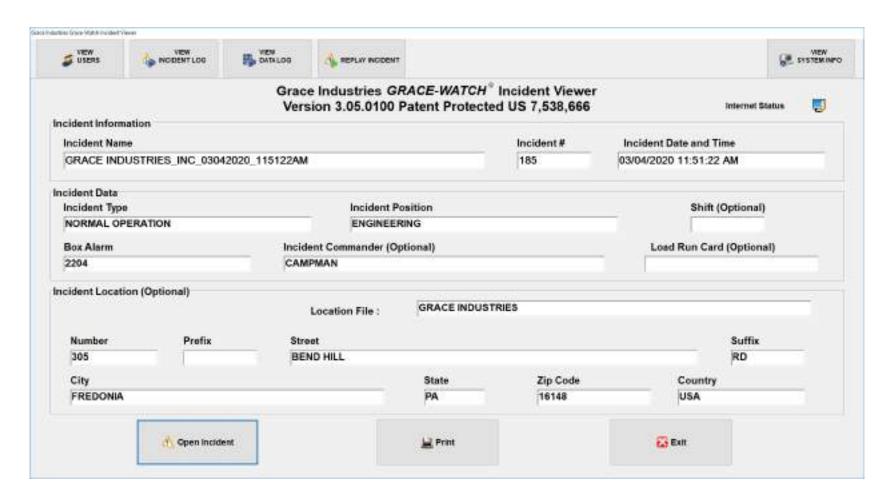
- To Cancel an Incident without saving, simply press the Cancel Button located at the Bottom of the Operation Setup screen
- A Confirmation dialog will appear
- Selecting No will return to the Operation Setup Screen
- Selecting yes will cancel the Incident
- All Incident data will be lost
- The Incident Number will not be auto-incremented for the next incident started

Using the Incident Viewer



- To View Saved Incident Data the Incident Viewer is installed along with the Grace-Watch Software
- Select the Incident Viewer Icon and double-click to start the program

Incident Viewer Screen



Incident Viewer Description

- The Last Incident Viewed will be re-opened upon start up of the program. (On initial startup, a default incident provided with installation will be opened)
- Select Open an Incident to view the saved incident files on the Hard Drive
- Select the Print Option to print the Incident Data
- The Main Form show the Incident Data entered from the Operation Setup Screen of Grace-Watch for that incident, including Incident name, number, time/date, Incident Data Settings and Location Settings. Incident data saved includes:
 - Incident Details of the Incident
 - Active Users that checked in at the incident, along with profiles
 - Complete Incident Log of the Incident
 - Complete Radio Data Log of the Incident
 - System Info at the time the Incident was saved

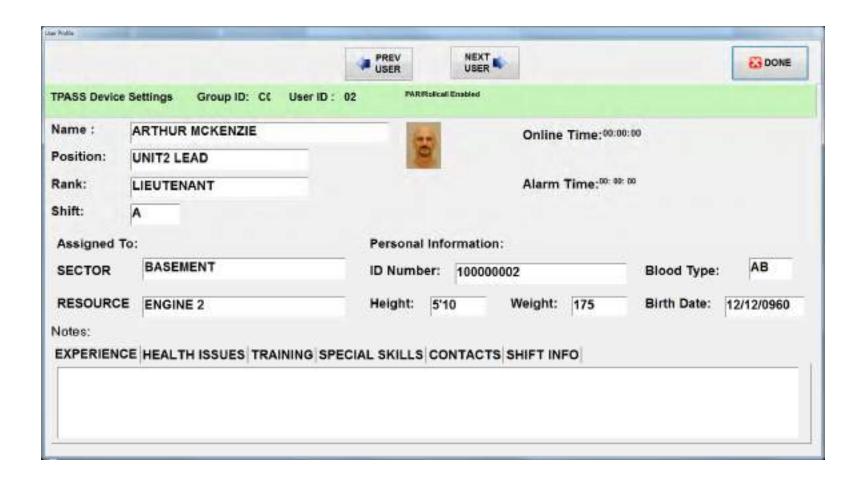
Users Present at the Incident



Viewing Users Present at the Incident

- Press the View Users button from the Main Bar to view the users that were present at the scene of the Incident
- Only users with devices that checked into the Grace-Watch System during the incident will be saved in the incident file
- Users are sorted by Group and ID Number
- The User Profile may be viewed for any user on the list by double-clicking on that user
- User Information can be printed from the Print Button on the Main Form

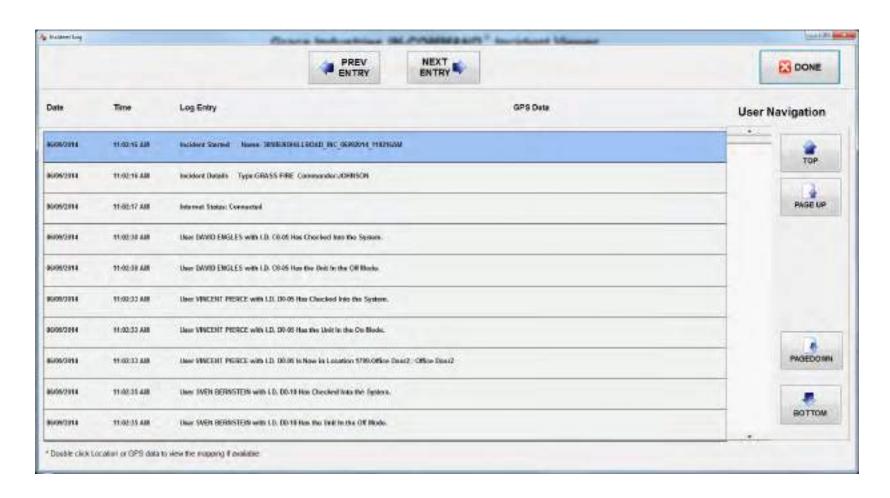
Viewing User Profiles



Viewing The Logs and System Information of an Incident

- The Complete Incident Log and Radio Data log for an incident can be viewed by pressing the View Incident Log Button and View Radio Data log Button from the Main Bar
- All Logs begin with an Incident Started Entry
- These Logs can be printed using the Print Button on the Main Form
- System Info at the time the Incident was saved can also be viewed, showing total Incident time, total users monitored, etc.

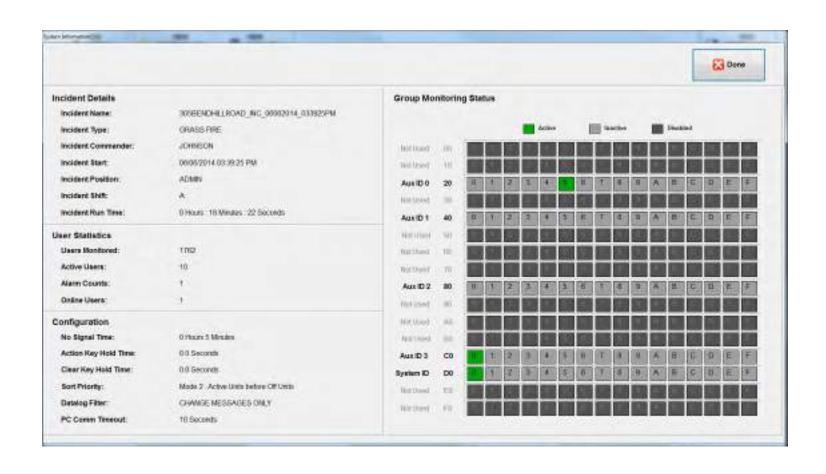
Viewing the Incident Log



Viewing the Radio Data Log



Viewing the System Information



Grace-Watch with Location Utilizing Locator Beacon LT100-H

(Works with Grace worker-worn man-down devices and Grace-Watch Monitoring Systems)



The Locator Beacon is a compact signaling device that transmits a location code to a worker worn device when the user is in range of the Beacon. Once updated with a location code from the Locator Beacon, all worker worn device transmissions will contain the last Location Code received, thus providing location to a Grace-Watch monitoring system.

The LT100-H-L is powered by a D-size Lithium battery. The LT100-H-EP is powered by 12 VDC with a Lithium battery backup. Both models are suitable for mounting on ceilings, doorways and walls throughout a facility, including outdoor areas.

The Grace-Watch System supports over 4,000 unique locations and is scalable to any size facility. Location resolution (the number of Coverage Zones in a given area) is adjustable and is determined by the proximity and placement of Beacons.

When the Coverage Zone of a Locator Beacon is entered by a user wearing a worker worn device, the device receives the Location Code and transmits a radio signal to a Grace-Watch (monitoring station) with its current status and the new Location Code. The Locator Beacon has an adjustable Coverage Zone to accommodate various environmental factors and zone area sizes. Internal jumpers allow the Coverage Zone to be set to 6 different sizes: 1-Smallest to 6-Largest, as needed.

Summary



- The Grace-Watch® systems utilize a reliable two-way communication and monitoring solution to provide complete accountability for your firefighters and other personnel.
- The system provides the necessary incident management features and documentation for tracking personnel on the scene.
- The system is easy to setup and operate, allowing personnel to achieve their primary goal: WORKING THE SCENE AND STAYING ALIVE!

FCC Statements

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

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Industry Canada Statements

This Class A digital apparatus complies with Canadian ICES-003.

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada. (select the class for your device)

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

WARRANTY

Grace Industries, Incorporated warrants your Product to be free from defects in workmanship and materials for a period of one year from the date of purchase. This warranty is valid only when the returned Product is accompanied by a sales slip or other proof of purchase that states the date and location of purchase. Grace Industries, Inc. will not repair or replace any merchandise that has been damaged because of accident, misuse or abuse of the Product while in the possession or control of the consumer. This warranty is void if any attempt to repair or replace parts was made or attempted by other than qualified Grace Industries, Inc. personnel. This warranty is void if any of the sealed compartments are opened or tampered with. Send all returned merchandise prepaid and accompanied by proof of purchase to: Grace Industries, Inc., Repair Division, 305 Bend Hill Road, Fredonia, PA 16124. Grace Industries, Inc. shall not be liable for any direct, incidental or consequential loss or damage arising out of the failure of the device to operate.

The sole and exclusive remedy under all guarantees or warranties, expressed or implied, is strictly limited to repair or replacement as herein provided. ALL IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF FITNESS AND MERCHANTABILITY, ARE HEREBY LIMITED IN DURATION TO A PERIOD ENDING ONE (1) YEAR FROM THE DATE OF PURCHASE. The warranty and liability set forth in the prior paragraphs are in lieu of all other warranties, expressed or implied, in law or in fact, including implied warranties of merchantability and fitness for a particular purpose. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

NOTE: The information contained in this booklet is believed to be accurate and reliable. Grace Industries, Inc. provides this information as a guide only.

305 Bend Hill Road Fredonia, PA 16124 U.S.A. 724-962-9231 www.graceindustries.com

Grace-Watch® Monitor MX900-H Installation and User's Information

Only To Be Removed By End User

NOTE: Grace-Watch Software MUST be installed before connecting to PC

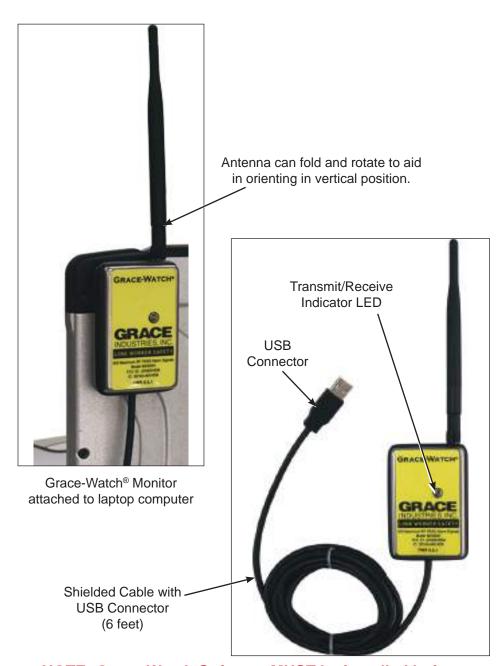






Printed in the U.S.A. P/N: MX900-H-GW UI 0718

Grace-Watch® Monitor Installation and User Information



NOTE: Grace-Watch Software MUST be installed before connecting to PC

Grace-Watch® Monitor, Micro-Transceiver with USB, is a compact radio transceiver designed as part of the Grace-Watch® Lone Worker Emergency Signaling and Automated Accountability Systems.

Grace-Watch® Monitor Package includes Grace-Watch® Monitor MX900-H-GW and Grace-Watch® Monitor Software package. Grace-Watch® Monitor software requires a user supplied Windows 7/10 computer with available USB port. Grace-Watch® Monitor is compatible with Grace Industries' Radio-H radio platform telemetry devices.

The Grace-Watch® Monitor sends and receives data transmissions from Grace Industries Lone Worker Devices. The Grace-Watch® Monitor is powered from its USB connection and is suitable for mounting on the back of a laptop display screen or on a window.

Grace-Watch® Monitor comes with 6 feet of shielded cable for ease of mounting.

With proper attention given to the following important items, optimum performance can be achieved for most applications:

1. For Installation, the Grace-Watch® Monitor may be mounted on the back of a laptop display screen where the antenna has a clear, unobstructed path to the outside environment. Another typical location for the Grace-Watch® Monitor would be on a window with an unobstructed path to the outside environment.

Always mount MX900H in a vertical orientation, with antenna pointing up. **Note:** Antenna can be fold and rotate to aid in orienting in the vertical position.

2. Grace-Watch® Monitor should be located as far away as possible from other radio equipment antennas. This

includes cell phone boosters, Wi-Fi, and other 2-way radio equipment antennas. It is also recommended to keep the Grace-Watch® Monitor antenna a minimum of six inches away from metal surfaces.

Grace-Watch® Monitor Specifications

Description: Grace-Watch® Monitor is a compact radio transceiver designed for use as part of the Grace-Watch® Lone Worker Emergency Signaling and Automated Accountability System.

Model: MX900-H-GW Case: Stainless steel

Power: Powered by USB connection

Cable: 6 feet shielded cable with USB

connection

Size: 2.0 x 3.0 x .75 inches

Antenna: 5.75 inches long when extended. 1.25 x 5 inches when folded.

Compatibility: Radio-H Radio Platform ONLY - Grace Industries SuperCELL® SC500-SM, SC500-LW, SC500-CS, SuperPASS®5X, TPASS®5, TPASS®3, and TPASS® Micro Repeater

Frequency Range: 902-928 MHz FHSS (frequency hopping spread spectrum) Non-Licensed ISM

Data Output: Serial USB 2.0, 38400bps ASCII encoded numeric data

Certifications

FCC ID: J5MXHEM -- Meets FCC Part 15 IC: 5916A-MXHEM -- Complies with Canadian ICES-003