Integrated Messaging and Reporting

(IMR)

Installation and Planning Guide

Tech Works ®

"Making Specialized Communication Easy"

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Introduction

Tech Works Integrated Messaging and Reporting System (IMR) is a Linux based Status-Server that provides facility users with a Patient or Room Status tracking system and priority call indication. The IMR is a single hardware and software solution with a Linux computer built into the hardware. Each IMR includes 2 USB 2.0 ports for serial interface, a TCP/IP network interface, a Hi-Resolution VGA video output, and Line Level Audio outputs so that the unit can connect directly to a Video Monitor with Speakers. No additional Servers are required. The system is Microsoft Windows, Android, and Apple Compatible.

The system acts as a web-based server to log and display the system activity on any product able to display a web browser. That means that any Tablet, Smart Phone, or PC, with access to the IMR network, has access to view the graphics and system status from anywhere at any time. Through password protection users can access and print management reports to monitor productivity and patient activity. Other types of messaging such as email, SMS Text Messaging, or Pocket Paging, are also available through this system on a point by point basis.

Each “Light” can be labeled according to the function or use of the associated point on the system. Points can be “Grouped” to create areas with associated points such as “Exam Room” and labeled to indicate a “Wing”, “Floor”, or skill set, related to an area of a property or building. Points can be “Assigned” with a “User” provider or service for viewing, reporting, and “Next Patient” tracking. When incorporated with Digital Signage the flexible labeling becomes very powerful.

When used as Digital Signage the initial screen is a generic list of the points in your system and displays the status of points that the system has recognized. If you have purchased a “Layout” or map of your facility it will automatically display. There are two themes that come shipped with the product “List” Mode or “Bubbles” Mode. Custom Graphics of your facility Floor Plans are available by contacting Tech Works. If new points are added, the software will identify them intuitively by monitoring buttons pushed, and lights that come on the system. The Installer can label, group, and map points to customize the display.

To get started we recommend that you plug a monitor, keyboard, and mouse directly into the IMR and power it up. These can be removed once the system is setup and editing can be done over the network.

Basic System Overview

Connections:

TCP/IP LAN –
RJ-45 Jack compatible with 568B connectors
IEEE 802.4 Ethernet Compliant

USB Connectors –
Two separate USB 2.0 connectors for serial connection to other systems such as Pocket Page Transmitters

Audio/Visual -
3.5mm Line Level Audio with Left/Right Output
HDMI Video for direct connection to a display

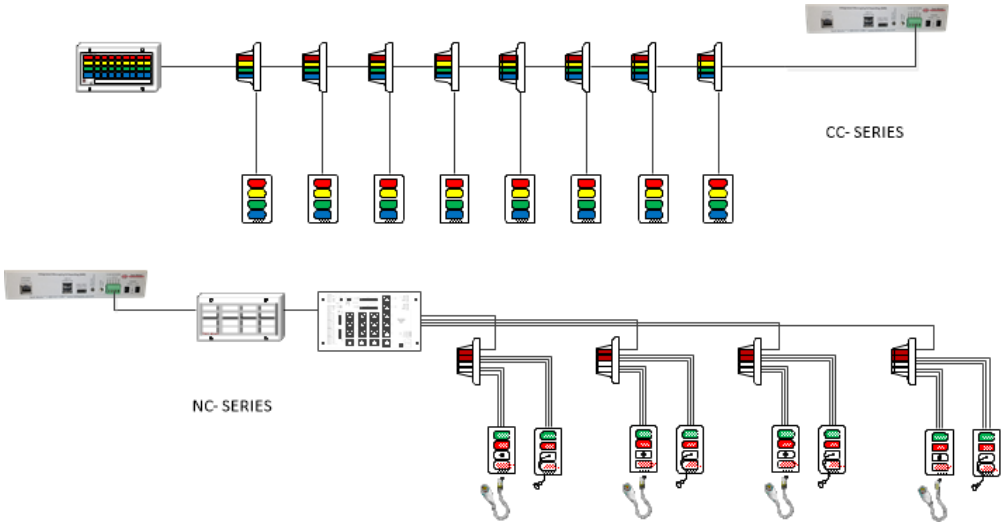
Data Network –
Tech Works standard LON Buss screw terminals for connection to any standard Tech works CC-Series or NC-Series RS485 data network.
Built in terminator resistor dip switch for end of line.

Power –
Two Power Barrel Connector Jack 2.00mm ID (0.079"), 5.50mm OD (0.217")

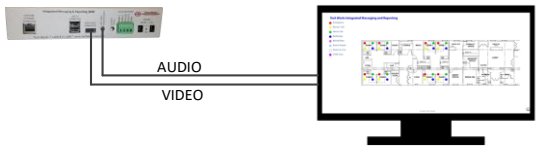
PS-2437B sold separately.

Typical Applications

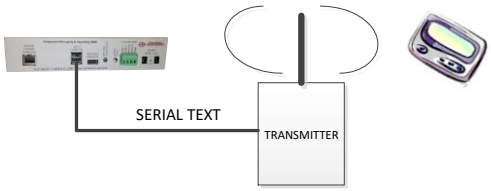
The IMR connects directly to any Tech Works light communication network such as the CC-Series or the NC-Series products just like a standard system annunciator.



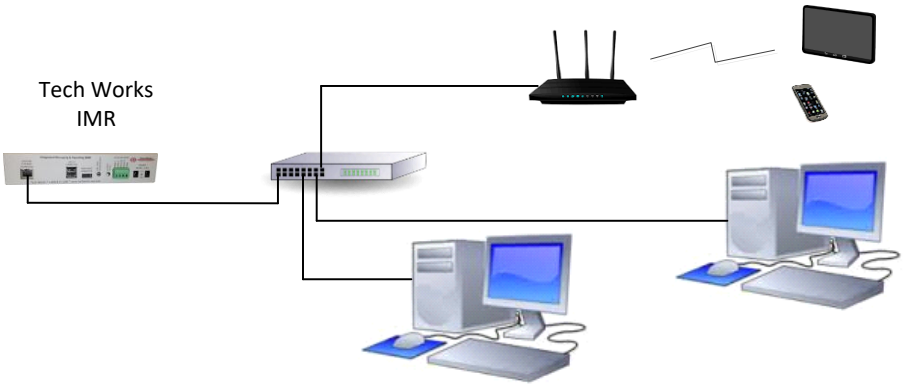
The IMR output can connect directly to a standard television set or A/V flat panel monitor with speakers.



The IMR can send messages or data to other systems like EMR or Pocket Page Transmitters for display.

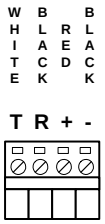


The IMR can connect to the LAN or WAN to share information with any device that has a standard Web Browser interface.



All of the above at the same time

Connecting to a Tech Works Network



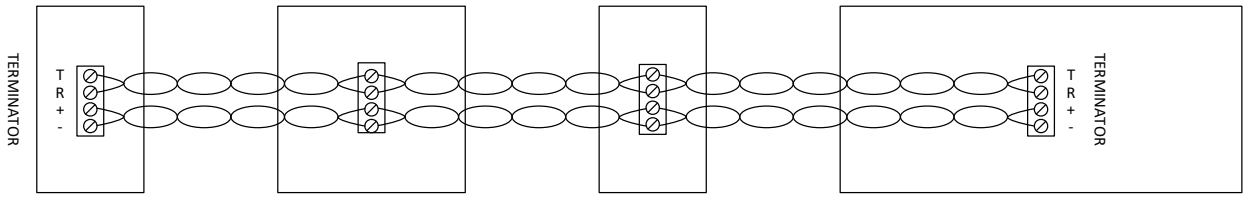
Wiring is four screw terminals to interface to the Tech Works Network. The Network is 2 twisted pair wires. One Pair of wires is Network Communication data and the other pair is power. **Wire must be connected "T" to "T", "R" to "R", "+" to +", and "-" to "-" between devices or from device to device for proper operation.**

Be sure to tighten the screw on the wire tightly. U.L. Torque Spec: 3.5 lb. / in.

The first pair is RS485 terminated bus topology, operating at 39K baud in a parallel connection plan. Because this is a distributed processor system, each intelligent device contains a micro controller, so there is "NO Central Processor". Each device is totally self-contained and can be used as stand alone or in combination with any other intelligent device.

The second pair is 12-24 VDC power in a parallel connection plan.

The system is designed to operate on unshielded twisted pair cable from 24 to 18 AWG. The twist of the cable is critical to the proper communication of data on the network to avoid noise interference. Any standard voice grade twist should provide adequate noise cancellation under normal operating conditions. All wiring is NEC Class 2.



Power

The IMR is powered locally from a dedicated PS-2437B Power Supply sold separately.

The Tech Works **PS-2437B** is a regulated computer grade power supply capable of providing 3.75 Amps of power at 24-Volts DC to any of our products. Ground is isolated from the power supply 24 VDC common connection to provide galvanic isolation in critical applications. This unit is UL and CSA listed in a surface mount enclosure. A 6-foot removable power cord with a North American standard Edison connector is included. This is a switching power supply designed to operate on worldwide AC input.

A metal mounting bracket is included to allow the unit to be screwed to the wall or under a counter. **PS-2437B sold separately.**

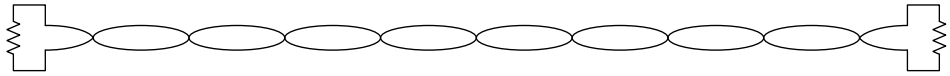
Network Termination

Two major factors contribute to the proper operation of the Tech Works Digital Network.

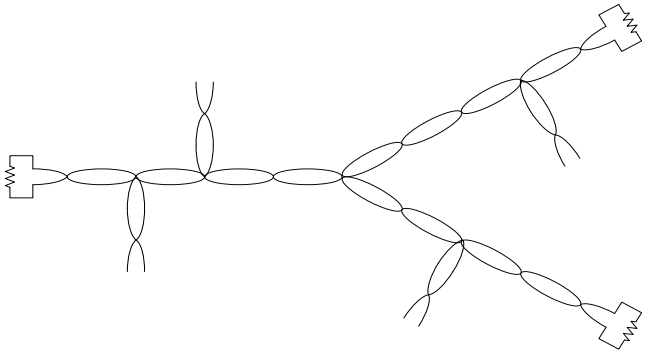
1. Twisted wire
2. Termination

The twisting of the wire is simple and easy. Twisted wire such as telecommunications voice or data cables all use twisted pairs to reduce noise and cross talk by 180 degree phase reversal of any Electro Magnetic Fields cutting through the cable. Tech Works Network uses a very stable and low speed data communication so just about any twisted wire will work, but twisting of the data communication pair is critical to proper operation.

Proper termination of a network is critical to proper operation due to noise and interference from things such as fluorescent lights and other electrical noise in the environment. The basic idea is to terminate the very ends of the wire loop. By placing a 120 ohm resistor across the network data pair, the noise is significantly reduced and performance improved.



The 120 ohm resistor is built in to all Tech Works Network products and is turned on by a dipswitch located near the data pair wiring connector screw terminals. On the first and last device on the network simply turn the dip switch to the “ON” position on that device. Leave the “Terminator” dip switch set to the OFF position on all other network devices.



Often times a Tech Works Network does not work out as a perfect loop and looks more like a modified star wiring plan. In that case do not terminate all network ends. Only turn on the Terminator on the longest wire runs of similar length. Leave the short branches unterminated. By terminating a short branch it acts like a traffic gate has been placed across the network and messages will not pass. The sections of the network on either side will communicate fine, but the left side will not talk to the right side of the network.

Configuring a New IMR

To get started, simply plug the 24 VDC power supply into either of the two power connectors on the back of the unit. The unit will boot automatically. The IMR software is running in the background, recording system activity from the Tech works data network, and displaying it on networked computers connected to the LAN/WAN.

You have 2 options of how to talk to and program your new IMR:

1. You can plug a monitor, keyboard, and mouse directly into the IMR. These can be removed once the system is setup.
2. Or you can connect to the IMR over a LAN by simply plugging it into the IP network and opening a browser on any network computer. ***WE HIGHLY RECOMMENDING USING ONLY GOOGLE CHROME AS YOUR BROWSER FOR FULL FUNCTIONALITY.***

   In the command line of the browser type the IP address of the IMR preceded by "//". In the case of a default IMR you should be able to find it by typing "//192.168.1.97".

If you can't find your IMR on the LAN contact the network administrator and read the section of this manual on IP Addressing.

Log In

Tech Works Integrated Messaging and Reporting System is Password protected to assure your data is safe while allowing a variety of users to view the screens without being able to change anything or run reports. The 'Log In' page is where you can verify your authority and connect to your viewing pages and allowed features.

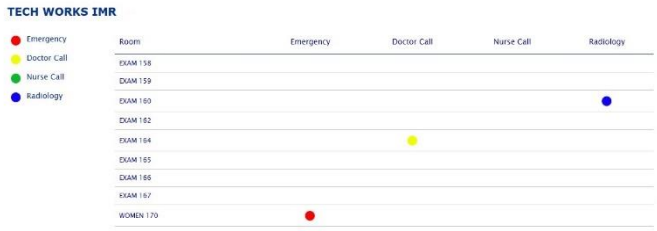
A default User of "installer" with a default password of "1234" is provided for initial use and set up. We encourage you to set up new users with secure passwords.

Log In and Click the “Home” tab to go to the live view of your IMR display. You can click home at any time during system setup and editing to see the effects of your changes**.**

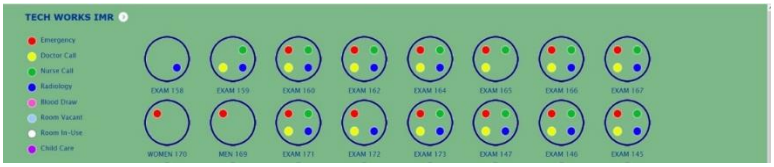
If your edits or changes do not seem to be taking effect, you must clear your browser cache. To do this in Chrome hold down the Ctrl key and hit F5.

The initial Home screen is a status of all the points that the system has recognized. If new points are added the software will identify them. The Installer then can Map them to the display. All of the data displayed on the initial screen can be edited in the Configuration settings. The screen consists of a title, a legend, settings icon, and the room’s groupings. There are two themes that come shipped with the product.

Listing Theme

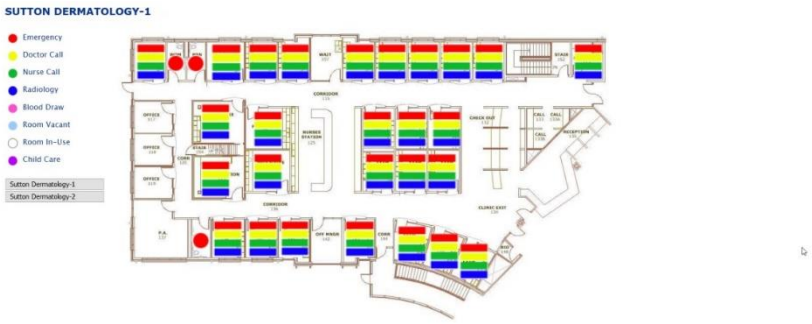


Bubbles Theme



OR

Custom Floor Plan Theme can be ordered separately



If you are interested in custom layouts for your interface, such as a Floor Plan of your facility, please contact your authorized sales representative.

Configuration Mode

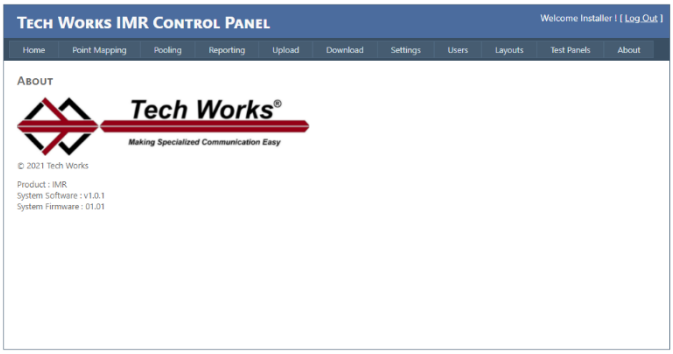
To configure your Integrated Messaging and Reporting System with your preferences, click on the Settings icon, located on the bottom right of the system display screen.

This will take you into the settings mode of the interface just like when you first logged in.

For the purposes of this training we will start on the “About” screen and work our way from right to left through the tabs at the top of the screen to describe the purpose of each screen. We will then work our way through the Configuration screens showing you in detail how to program all of the parameters of the system and what the results will look like to the user of the system. Because these stings are very interactive it is important to understand what each setting does and how it interacts with the other things that can be changed.

About

Once you are logged in the 1st screen you will see is the About screen. The “About” page is a simple page with information regarding this software, its developer, and its manufacturer, the Software and Firmware versions currently loaded.



Home: takes you back to the live display mode used for normal viewing of system activity. To re-enter the setup mode, you have to start over by clicking the “Settings” icon and logging back into the system.

Programming

When you first connect a new IMR to a Tech Works network it may or may not have any devices preloaded.

1. If you ordered the IMR with custom graphics then it probably was shipped from the factory with those graphics loaded and all addresses of existing system hardware already mapped to objects on the graphics.
2. If you did not order the IMR with custom graphics then the database is shipped with a few sample points to give the installer examples. These can be deleted or edited by the installer. New points can be added and you have to tell it what to display and how to display it.

To configure an empty IMR you can either log in to the IMR Configuration and manually type in the points and map them or if the IMR is installed on a Tech Works Network in the field then you can go around and push all of the buttons on the system and the IMR will log each point ID it sees.

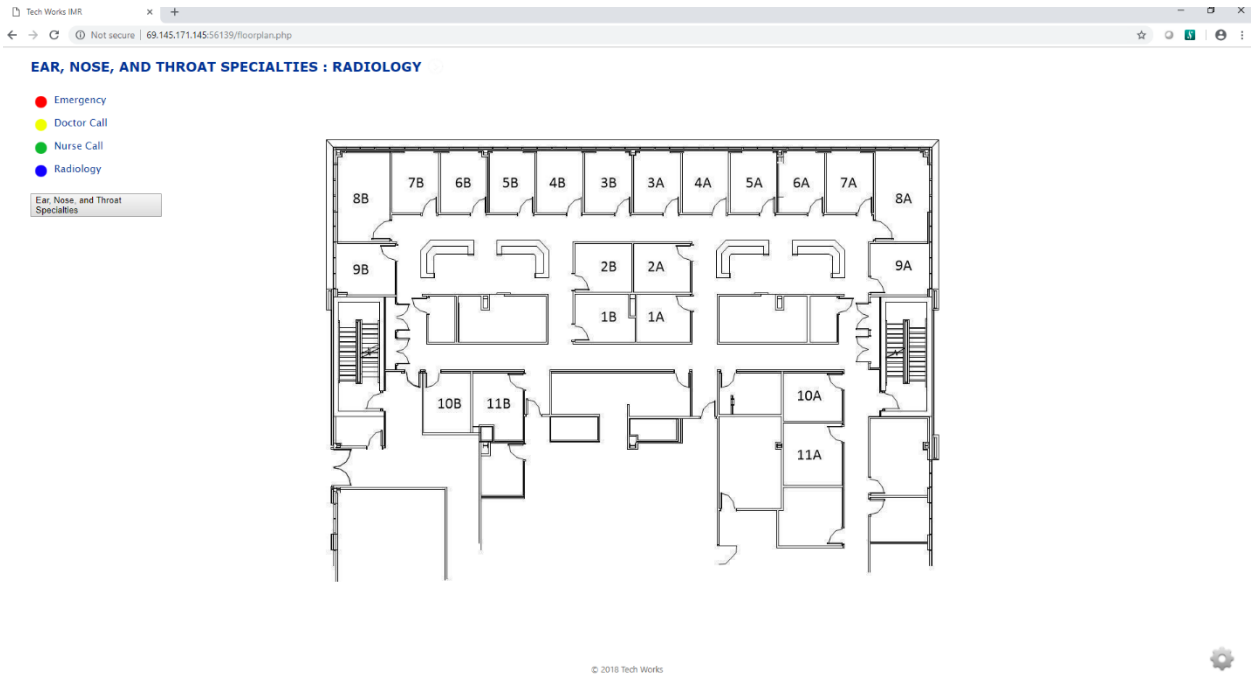
Once all of the buttons have been pushed and all of the points are in the system, no matter which way they were loaded, then you can proceed to system configuration to tell them what and how to map the points on displays.

To fully understand the end result of any configuration you must understand how the configuration effects the “User” and how the User determines what they see and can do. The IMR allows the Installer or Administrator to define an unlimited number of Users. Each unique User determines what is seen, what that User can do, and how the system functions. By defining a User, and editing the Point Mapping, creating Pools, and Assignments to support the User, you create a communication environment specific to that user’s needs. All of the settings in the IMR tie back to the User and what they need to know and how they receive the information.

As you go through your programming always make sure to hit the “Save” button to store all of your changes and return to the main menu or hit “Cancel” to throw away your changes and return to the main menu tab.

Home:

Home: takes you back to the live display mode used for normal viewing of system activity. To re-enter the setup mode, you have to start over by clicking the “Settings” icon and logging back into the system.



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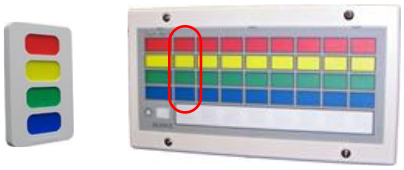
Point Mapping

Point mapping is the numeric value given to each light in a system. The format is Master, Column, Row . This corresponds to an 8 column master with 4 lights per column.
In a CC2-Series this is relative to the CC2-AN-84-BT where each column represents a CC2-RS-4 or CC2-DL-44 or both. The Point ID of the lower right Blue light is 184 (Master 1, Column 8, Row 4).



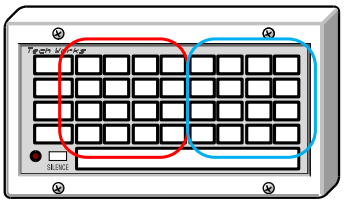
1 2 3 4 5 6 7 8

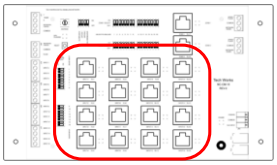
COLUMN

Masters and columns when addressed are 0-7 but because the point mapping does not allow a “0”, Address 0 = Point Map 1, 1 = 2, etc. A CC2-RS-4 with address Master “0”, Column “0” will have Point ID 111 for the Red or switch “1”, 112 for Yellow switch “2”, 113 for Green switch “3”, and 114 for Blue switch “4”.

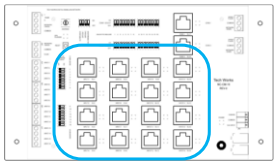
The same thing is true of the point mapping for NC-Series. The Ports on the Control Module correspond to lights on the Annunciator. Master Address “0”, Port “1” is the upper left light on the Annunciator with Address “0” and has a Point Map (ID) 111. Master Address “1”, Port “16” is the lower right light on the Annunciator with Address “0” and has a Point Map (ID) 184 (Master 1, Column 8, Row 4).

MASTER ADDRESS “0”



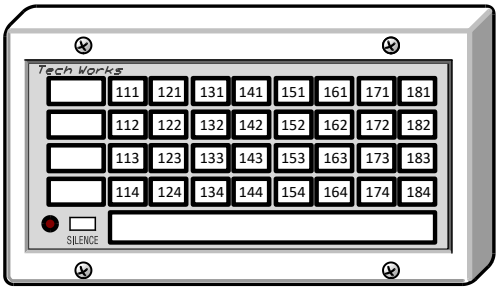


CONTROL MODULE “0”

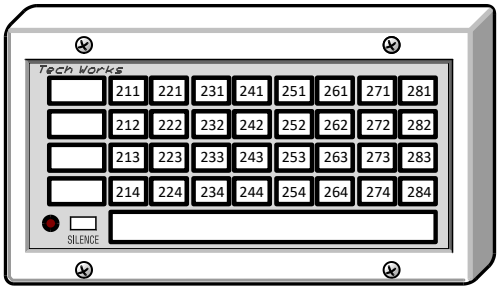


CONTROL MODULE “1”

So, if you just think in terms of an Annunciator/Master panel, and keep in mind that 0 = 1, 1 = 2, etc., then the Point values follow as:

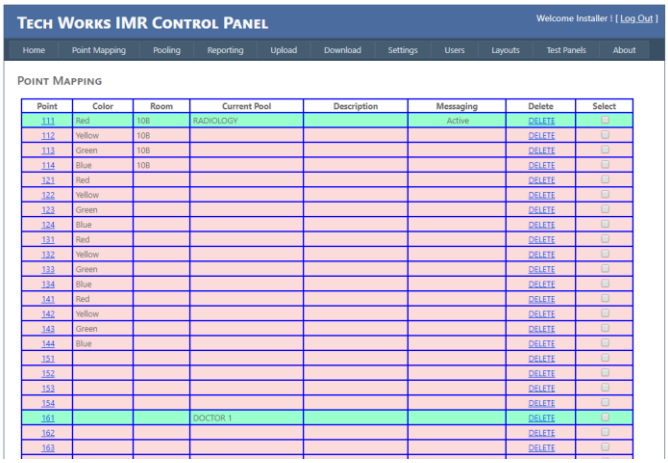


MASTER ADDRESS “0”



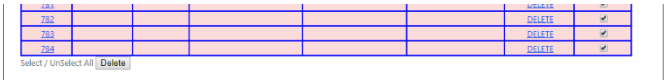
MASTER ADDRESS “1`”

The purpose of ‘Point Mapping’ is to decide which points map to which group or “Room” and label them as to their location in the facility. Using two addressable units in one physical room, such as both a “Primary Colors” device (CC-RS-4-B) and a “Secondary Colors” device (CC-RS-4-P) you can group both the Red-Yellow-Green-Blue unit with the Pink-Ice Blue-White-Purple unit for up to 8 customizable points per room.

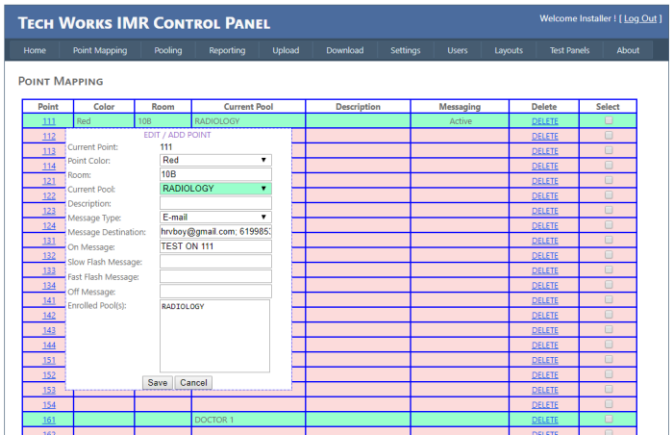


Only a security level of Installer can Delete Points from the system when addresses are changed or a point is no longer part of the system. Contact the factory for Installer access information. If the installer wants to add points in the system, they have 2 options, you can physically go to the station hardware and push the button, or push the associated button on the “Test Panel” and the button will be automatically added to the Point Map.
On the Point Mapping tab, you will see a list of all the points that the system has seen up until now. Each of these points represents a light on a panel. You must first identify which lights you are trying to group. Once you know which point ID you want, select it by double clicking on the address to show the details of that point.

You have 2 options to remove Points from the system; you can individually remove points by clicking the Delete button associated with each point, or to clear the entire system of all Points to start a new installation, you can scroll to the end of the Point list and you will see “Select / Unselect All”. Click on Select / Unselect All to check all of the Select boxes and the press the Delete button to remove all Points from the system.



Click on the Point #. The edit screen will appear. This is where you can change how this point will display on the status screen.



Point Color: Select the Color to display when this point is active.

Room: Type the name of this physical location (typically the Room #). The Room is what is used to create a group of devises or points associated with one location on the display. ***Note*: Room names are case and character sensitive. You must have the exact same Room name if you want multiple points to group together in the display.***

Current Pool: Shows what Pool this point is currently in and Assigned to for Tracking if it is in one.

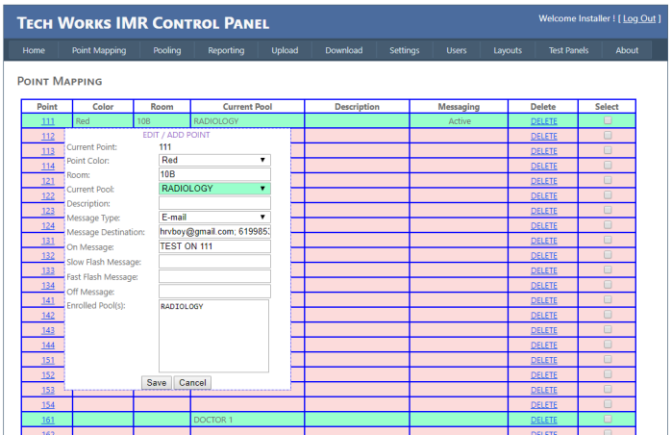
Description: This allows you to add more detailed definition of a points location or purpose so that it can clearly show system information in reports.

Message Type: The IMR allows for 2 basic types of messages to be sent to remote devices.

Email: makes the system send an email to a designated email address each time a light is active in the system. Through the use of features in Gmail and other services you can also make these messages be transmitted as text messages to designated cells phones.

To send an SMS text message, instead of an email, enter the 10-digit phone number of the person you're trying to reach followed by the appropriate "@gateway" address behind it. For example to reach a Verizon subscriber with a text message type *[insert 10-digit number]@vtext.com*

Serial: allows a message to be sent to a USB port on the IMR for connection to other devices such as Pocket Page Transmitters.



Message Destination: can be a specific email address, multiple email addresses or it can be a beeper # or beeper group # depending on the programming of 3rd party equipment and services.

On Message: is the text that will be sent and displayed on the 3rd party equipment whenever this point goes from On Steady.

Slow Flash Message: is the text that will be sent and displayed on the 3rd party equipment whenever this point goes to Slow Flashing.

Fast Flash Message: is the text that will be sent and displayed on the 3rd party equipment whenever this point goes to Fast Flashing.

Off Message: is the text that will be sent and displayed on the 3rd party equipment whenever this point goes to Off or no light on.

Enrolled Pool(s): shows what pools this point is listed in whether Assigned or Unassigned.

Save: Press the Save button to store the changes or Cancel to discard and return to the previous screen.

Pooling

This is the most powerful tool in the IMR. By coordinating Users, Pools and Point Mapping, you create the environment for the User. A Pool is a group of rooms Assigned to a User. Pools in the IMR can be any combination of rooms and points (aka buttons/lights) Mapped to that room. Typically, a provider is Assigned a color to watch for so they know where they are needed Next. Typical colors used are:

Red for emergency call for Help

Yellow for needs X-ray or Nurse (depending on the specialty)

Green ready for Doctor

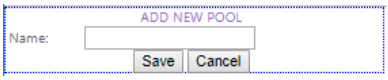
Blue for Nurse needed or room clean up (depending on the specialty)

A pool is typically a group of rooms tied to a skill or discipline within a facility and geographically to a group of room used for the practice of that skill. Doctors are typically Assigned to a small group of rooms like 3 or 4 while a Nurse may work with more than one Doctor while Imaging or X-ray staff may cover several Doctors.

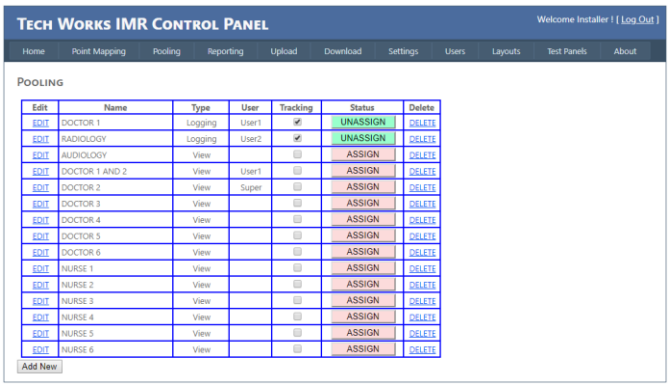
A pool can be used just to create a View of a certain group of rooms or a Pool can be a specific color in a Pool of rooms and be set to Track the Next room for that color. When Next Room is active the top priority or first button pushed will be slow flashing telling the provider that this is their Next room. If staff wants to move a patient to the top of the Call Pending list, all they need to do, is go to that room, and pushed the appropriate colored button twice within 5 seconds and that room or point will automatically move to the top of the Pending Calls and that light will begin slow flashing.

If a user only wants to see the lights from their rooms on their Home Page, make a Pool just for that User. In this way, a single Floor Plan Layout Graphic can be used by different Users and only display their rooms or lights. A Doctor might want to see only their color for their exam rooms and have the IMR tell them which patient is Next. But a Nurse might want a Pool that shows 2 Doctors exam rooms and where they are at all times as well as Track where the Nurse is needed Next.

Add New: To add a new pool, click on the “Add New” button at the lower Left and fill in the Pool and click Save.

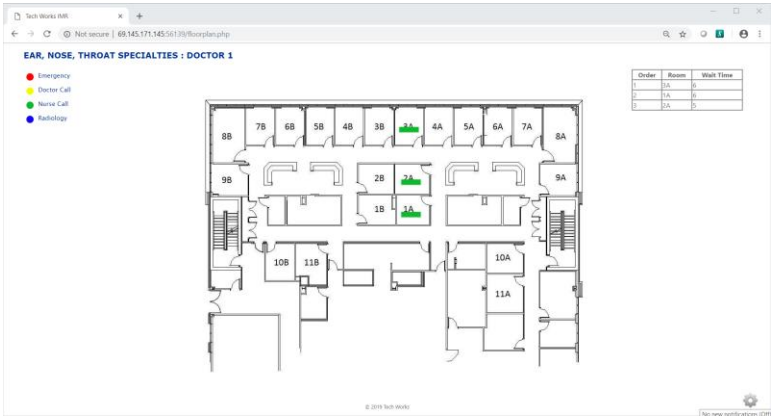


Name: Pools are processed by their Name so make each Pool have a unique Name.

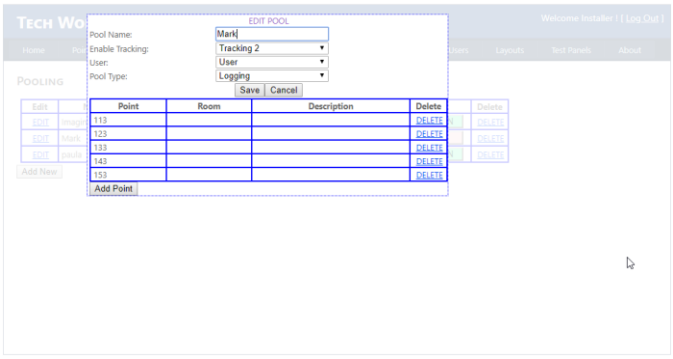


Above is a list of Pools that we created for testing the IMR. By clicking an Assign button, the pool is now active. This means that that User is Assigned to those rooms or lights and that is the only thing that will appear on their Home Page of the IMR. This also means that if this User is assigned to Next Patient Tracking on this Users Home page, in the upper right-hand corner, will appear a list of Pending Calls in the order which the buttons were pushed or arranged by double push. The Call Pending window shows the order of the calls with the most current or Next call on top with a wait time window showing staff how long each patient has been waiting. An alarm can also be set to tell staff when a patient has waited too long and needs to be made a priority.

This would be Doctor 1's Home page.



While in Pooling, by clicking on Edit, you can see Doctor 1's Pool. Because a Pool is actively tracking points it cannot be edited. You can see it but you cannot make changes. You must go to the previous screen and click Unassign if you want to Edit a Pool.



Pool Name: This is the screen where you tell the Pool what name to display on the User Home page. Whatever you call this Pool will be displayed for reference so you a name the staff will recognize.

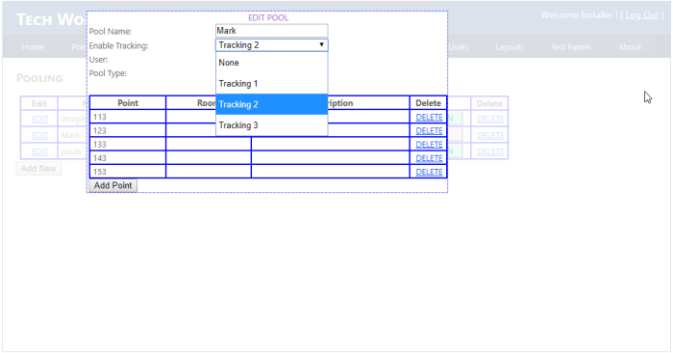
Enable Tracking: Tracking is the function of keeping track of the order in which buttons are pushed and Patients are to be seen. To enable Tracking a pool must be set up as a "Logging" pool in "Pool Type". There are 4 options for Tracking within each Pool.

None: There is no tracking in this pool

Tracking 1: Simple Tracking with only the "Next" room slow flashing

Tracking 2: 2 Level Tracking showing your current location Fast Flashing after the current Slow Flashing button is pushed plus the "Next" room Slow Flashing

Tracking 3: Automatic 2 level tracking, always showing the "Next" room Fast and the room after that Slow Flashing.

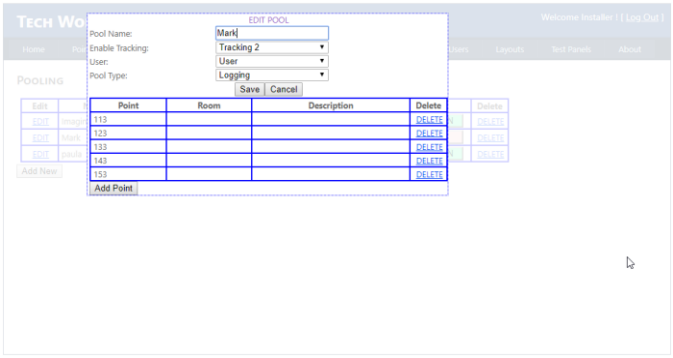


Tracking 1: This is Tech Works standard Doctor Follow where the next patient for this Pool will Slow Flash. When that light turns off the “Next” light in the que begins Slow Flashing.

Tracking 2: The next light in the que will Slow flash but when the slow flashing button is pushed and changes to Fast Flashing to tell staff that the provider is with this patient, the “Next” light begins slow flashing while the currant light is still Fast Flashing, telling staff 2 things; where the provider is and who is next.

Tracking 3: The “Next” light in the que will Slow flash but when a second button in the Pool is pressed the first light will automatically change to Fast Flashing, the second light begins Slow Flashing, and any subsequent buttons will be placed in the que and remain on Steady until one of the first 2 lights is turned Off. The 1st button in any Tracking 3 que is always Fast Flashing, the second button pushed in the que is always Slow Flashing, and any other button in the que is On Steady

If the “Double Press” box for this “User” is checked in the User setup then this Pool can be reprioritized by Double Pressing any button in the Pool and sending it to the top of the que or making it the “Next” patient/room for this provider. Displays will always follow the “Tracking” selected above, but the button that is Double Pressed will move to the top of the stack and display as the #1 button in the Pool, while all other buttons in the poll move down in the que and function according to the Tracking selected.



User: This is the User that when logged in will see the Pool and any feature you have associated with that Pool. User names along with Pool Names become very helpful in identifying Assignments to create the perfect environment for the User. Features selected in the User Settings (described elsewhere) effect what happens when a user is assigned to a Pool.

Pool Type: Each Pool can be one of 2 types:

View: is a Pool that is any combination of points that a User wants to see on their Home Page display. A point can be in multiple pools for viewing at the same time.

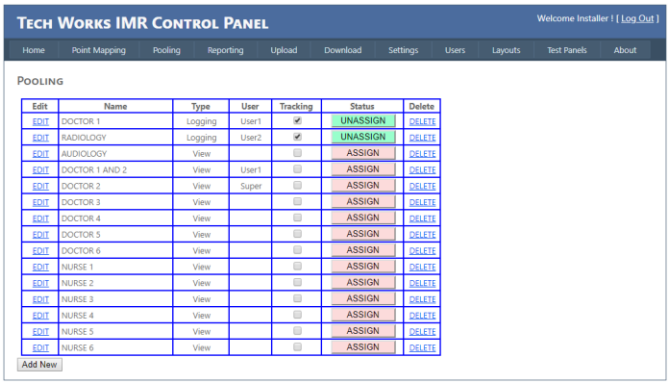
Logging: is a Pool that is any combination of points that a User wants to see on their Home Page display and Track for "Next" Room or Patient. To enable Tracking a Pool must be set to "Logging". A point can only be logged to a single user. I.e. Dr Bob Is assigned room 111, 211, 311, … When assigned these points cannot be assigned to another "Logging" type pool. However, they can be assigned to multiple "View" type pools. The logging type also "logs" the states of the lights for reporting purposes. I.e. Dr Bob went in room 111 at 11:37am 1/2/19.

Save: Press the Save button to store the changes to the top of this screen or Cancel to discard and return to the previous screen.

To change Doctor 1's Pool you can click Add and a list of all available points appears. By clicking on the box to the left of a point, a check mark is placed in the box to add this point to Doctor 1's Pool.

Save: By scrolling all the way to the bottom of the list you will see the Save button to store your changes or Cancel to discard and return to the previous screen. Pressing save will return you to the Main Pooling screen.

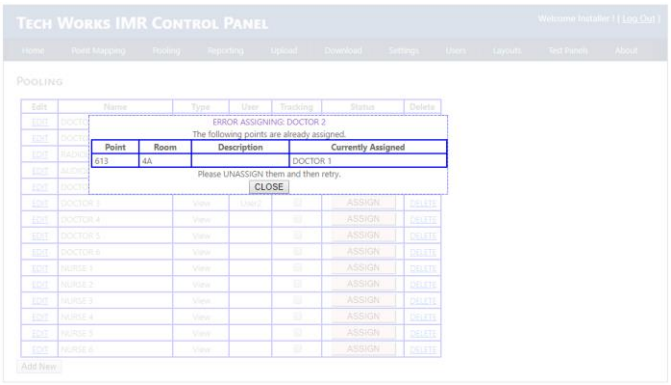
Until a Pool is Assigned it is essentially Inactive. When a User logs in and if they are not in a Pool that is Assigned, their Home page will show all active points available on the Display that they were assigned when they were setup as a User (see Users).



Assign: If a user is Assigned to a Pool then their Home page will display whatever they are Assigned to. All active lights will be visible on their display and a Pending Calls window will list active calls. If the Assigned Pool is a View Pool, they will be looking at any rooms including Pools assigned to other Users. If the Pool they are Assigned to is a Logging Pool with Tacking Enabled they will only see those rooms in their Pool.

Unassign: this turns off the assignment and changes the User Home page display back to the basic display described above.

A point cannot be in 2 Assigned Pools, with Logging or Tracking Enabled, at the same time. A User cannot be Assigned to 2 Pools at the same time. A Point can only be Logged to one User and a Point can only be Tracked in on Pool at a time.



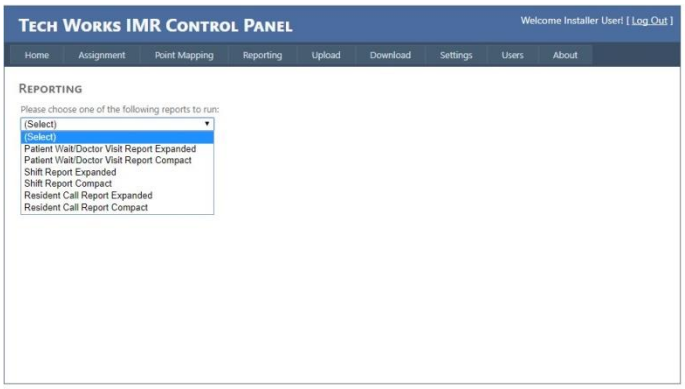
So, if a point is in 2 or more Pools then only one of those Pools can be Logging/Tracking and the others must be View only or the system will give you an Error message.

Another way to look at this is, if two Users want to see the same Points, one User can be Logging, which puts their Name on the point for later reporting, while another User is Viewing the same Point on their display. But only one User at a time can be Logging with a Point. The Green button belongs to Doctor #1 and it is labeled for Report as Doctor #1, while the Yellow button, for the same room, has a User of “None” and is Logging as “None” even though it belongs to Nurse #2. But if Nurse #2 wants to see both Doctor #1 and Nurse #2 lights, you would create a third pool that is a View only Pool called Doctor1 + Nurse 2, with a User of Nurse #2, and then the Nurse would see both colored lights.

When you Assign or Unassign any Pool with Tracking Enabled, all lights in that Pool will be automatically turned to Off. The only way to synchronize Tracking is to start from off and push the buttons involved in the order you want them Tracked. So be careful that you don’t change Tracking Pools with Patients in the rooms.

Reporting

Included with the Integrated Messaging and Reporting System is a complete Report Generator.



Select the Report you wish to create.

For each report you will see an “Expanded” version and a “Compact” version. The “Expanded” version of each report gives all of the Point Status details or transactions from the database along with the summary. The purpose of this is to make all of the transaction detail available for logging or recording and or exporting for further analysis.

The “Compact” version of each report is the same information as above but only the summary analysis without the details of each transaction or activity.

Premade reports include:

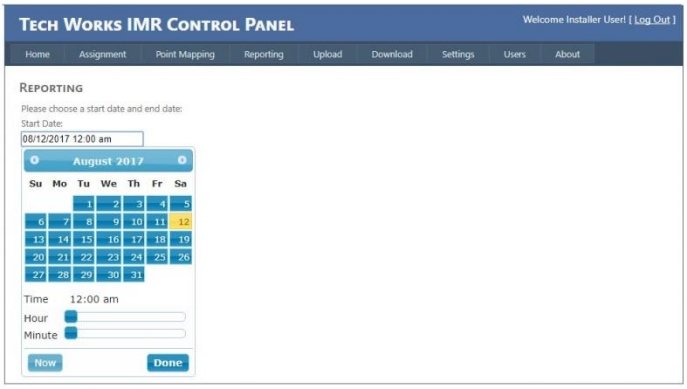
Patient Wait/Dr. Visit Report - Normally used by Out Patient Medical Clinics to evaluate how long Patients wait in an exam room to see a Doctor and How long a Doctor stays with each patient.

Shift Report - Normally used by healthcare facilities such as Long-Term Care Facilities, Skilled Nursing Facilities, Clinics and Medical Centers to track how long calls take to be answered during different times of the day or staffing levels.

Resident Call Report - Normally used by Long Term Healthcare facilities such as Assisted Living Homes and Skilled Nursing Facilities to show the number of calls placed by a Patient and how long it takes staff to respond.

Once you select the report you want to run you click “Next”

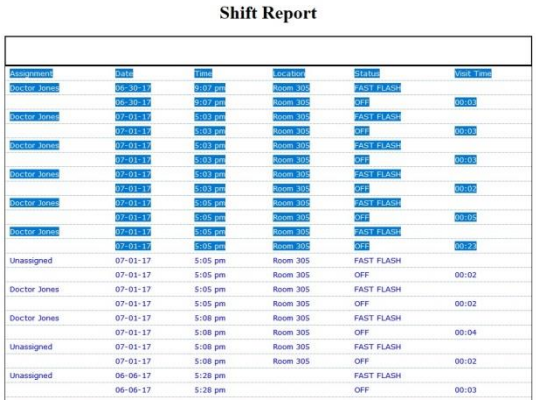
You will then see the option to select the Start and End date and time for you report.



Specify the Date on which to Start the report, the Time on which to Start the report, the Date on which to End the report, the Time on which to End the report. Click “Next”

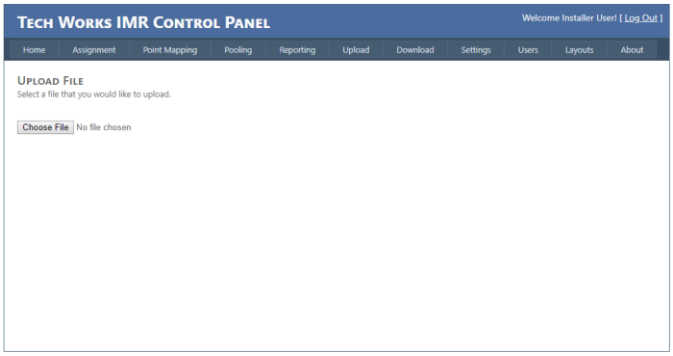
Select an “Assignment” to search on for a specific group of rooms or select “All” to retrieve all information for the specified Date range.

Click “Next” and the report will generate and give you printing options.



Exporting the data - The report is displayed in a file format that allows the viewer to simply copy the data and paste it into another program for further analysis. You can either rubber band around the data you want or right click and “Select All” and right click again to “Copy”. Simply open your favorite software such as Microsoft Excel and “Paste” the data into your spreadsheet.

Upload



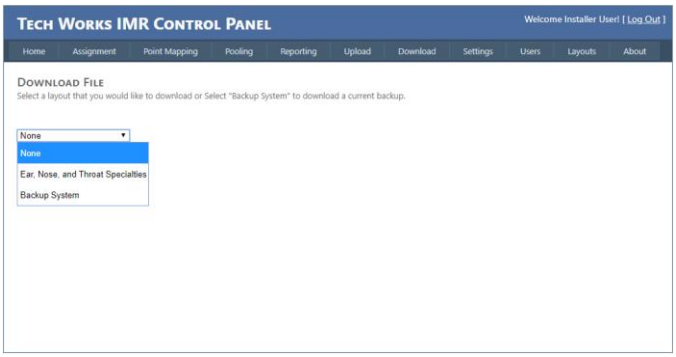
This feature is only available from a networked computer. If you are currently using a keyboard, mouse, and monitor, directly connected to an IMR you will not be able to Upload or Download to this unit. Access is restricted to protect your IMR.

This function is provided, to the Installer, to allow Upload of Backup files (Restore), Upload custom sound files, and custom graphic layouts such as floor plans to make the IMR into a custom display unit. If you have acquired a graphic layout from Tech Works, simply “Browse” to the file location where you have stored the “Layout” you want to use, select the layout file, and click the “Open” button. If you have more than one layout to Upload simply repeat these steps as many times as necessary.

To restore a Backup of your system files, “Browse” to the file location where you have stored the “Backup” you want to use, select the file, and click the “Open” button.
This will erase your existing database and restore the previous records. It is always a good idea to Download a Backup of your existing records before you Upload or Restore an older or newer version of the IMR database.

To add a new sound file to the IMR you must rename the file with the “.sound” extension and then upload it the same as a layout file above. The “.sound” extension tells the IMR where to store your new sound file.
So, let’s say that you have a new file called “ALARM.wav”. You would rename that file “ALARM.wav.sound” and upload it to the IMR as described above. After the upload is complete your new file will appear in the menu of available sound files in the Settings setup describe later.

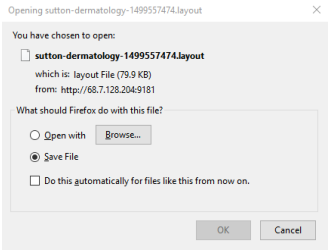
Download



This feature is only available from a networked computer. If you are currently using a keyboard, mouse, and monitor, directly connected to an IMR you will not be able to Upload or Download to this unit. Access is restricted to protect your IMR.

This function is provided to the Installer to allow them to back up the System and retrieve Layouts from an IMR for editing or updating. From the drop down, menu select the layout file you want or Backup and then click the “Download” button.

Depending on your browser and settings you may get the download dialog box to appear on your screen, select “Save File” and click “OK”.

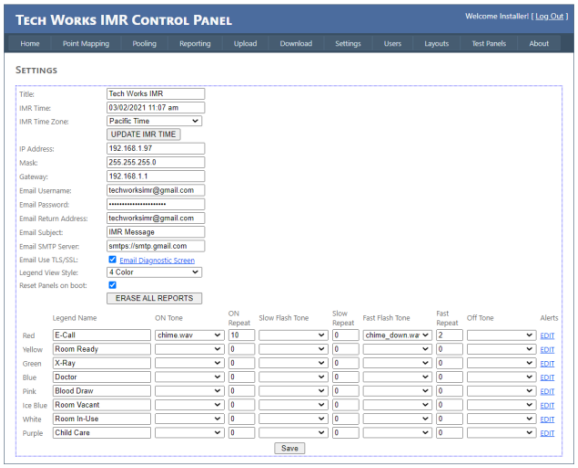


If you don’t get a download dialog box, your browser may automatically put your files in your computers “Download” folder.

If you have more than one layout to Download simply repeat these steps as many times as necessary. Layout files are not included in your Backup files. To Backup or save you layouts you must Download them separately and if necessary, Restore or Upload them separately. It is always a good idea to back up your files at least once a month.

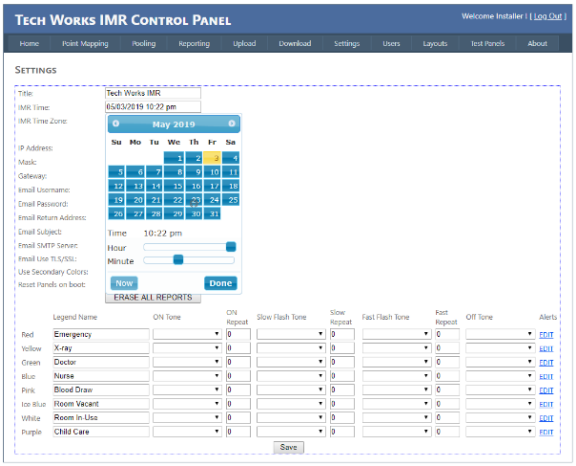
Settings

The “Settings”’ page lets the Installer edit the basic configuration of the IMR system.



Title: The title that is displayed on the initial interface screen. This will not override the Title put into a Layout such as a floor plan. This is only the default Title for the default List Mode or Bubbles Themes.

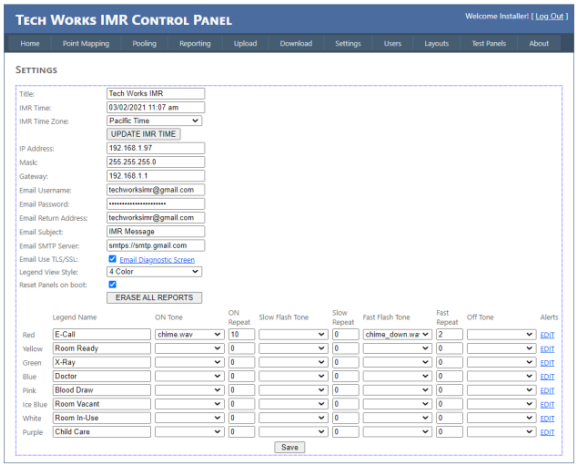
IMR Time: This is the date and time that the IMR will use to stamp every system event as it stores it in the database. You can manually edit the date time by clicking on the date in the IMR Time window.



A drop-down calendar appears that will allow you to input any date and time you wish. If you want to use the system time simply click the “Now” button and it will fill in today’s date and time from your computer. When you are finished you can click “Done to save your changes.

IMR Time Zone: If you wish to set the IMR to do its own time synchronization you can set the Time Zone that the IMR will reside in. This setting also allows you to choose Daylight Savings Time (DST) so the system will automatically adjust for Daylight Savings Time.

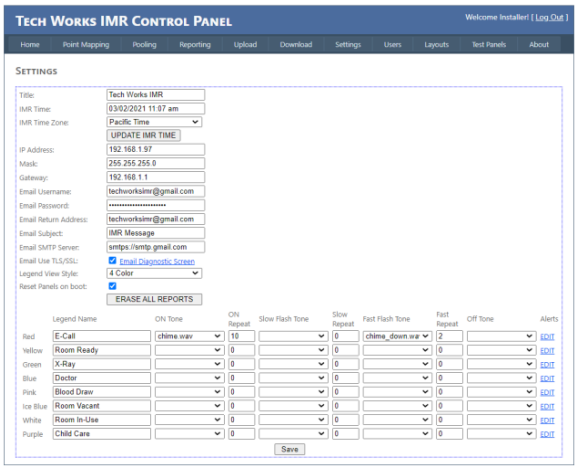
Update IMR Time: After you have made the changes above you press the “Update IMR” button to make your changes permanent and synchronize the IMR for all future events.



IP Address: This is the current IP address of this unit. The default IP address of all IMR is 192.168.1.97. The administrator cannot edit the IP Address. Only a security level of Installer can edit the IP Address. Contact the network administrator and plan ahead before making any changes here. This includes the Mask and Gateway settings as well. Once the IP address has been changed the unit must be rebooted for the IP address changes to take effect.

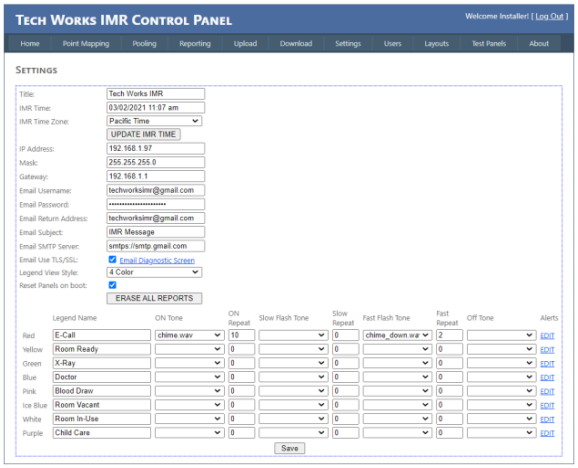
To view your IMR from a remote computer or device such as a tablet, make sure that the IMR is connected to the same network as the remote computer you want to view the IMR from. On the remote device, open a browser such as Chrome, and in the address bar type “//192.168.1.97” or whatever IP address you have assigned your IMR. You should get the login screen on the remote device just as if you were sitting at the IMR with a mouse and keyboard. When you log in as a user the screen for that user will display on your remote computer.

Email Username, Password, and SMTP are required to send emails from the system. The IMR must be connected to the internet and assigned to a valid email account from which to send email. We suggest setting up a Gmail account in the name of the facility in which the IMR is installed. That way any email or text messages sent by the system will be from the facility email and easily identified by the receiving party. By default the email sending is from techworksimr@gmail.com which is an email account that belongs to Tech Works. This account is not private and is subject to monitoring or changes by Tech Works at any time. Please do not use this account to send email.



To send any type of message via the internet (i.e. email or SMS text messages) the IMR uses email. You must enter a valid outgoing email account in order to send a text message or email to someone from the IMR. To send an email you enter the person's email address on the "Point" you want to send the message and you enter the text of the message you want to send to the person. This is all covered in more detail under "Point Mapping" later. A text message is sent as an email to the 10-digit phone number of the person you're trying to reach followed by the appropriate "@gateway" address behind it. For example, to reach a Verizon subscriber with a text message type (in the Point Mapping) *[insert 10-digit number] @vtext.com.* All of this starts with having a valid outgoing email account entered in the Settings screen or nothing will ever get out to the world.

Under "Email SMTP Server" you must put a prefix in of stmps:// or smtp://and then the server such as smtp.gmail.com or an IP address. The default outgoing smtp port is 587. To use a different port number "1234" you must put in smtps://xxxxxx:1234



Legend View Style: There are now 3 options for how the screen is displayed. Under "User" if "Show Controls" is selected the buttons will not appear unless 4 or 8 colors is selected under "Style".

1. OFF meaning it is used with NC-Series which does not use legend colors.
2. 4 Colors which, the IMR will automatically assume the 4 primary colors as Red, Yellow, Green, and Blue.
3. 8 Colors where the IMR will add Pink, Ice Blue, White, and Purple automatically to the list of available colors.

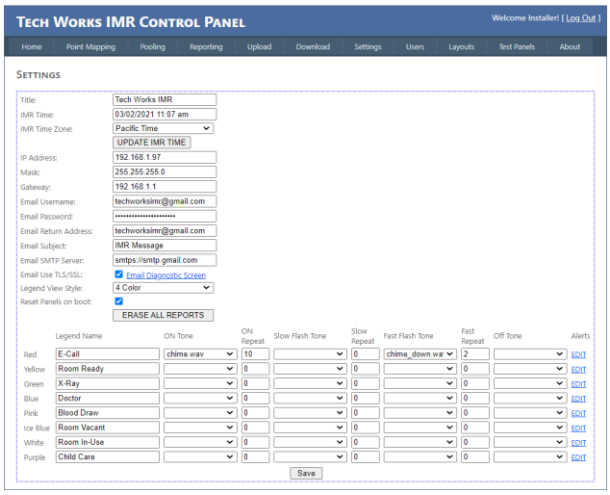
Reset Panels on Boot: This tells the IMR to send out messages and turn off all lights on all devices when the IMR is rebooted. The reason for this is that in some systems where you are using "Next Patient" Tracking, the system needs to be synchronized with the field devices in the sequence the buttons are pressed. So, to make everything work correctly you need to turn everything Off and go back to each room and press the right buttons in the desired sequence to get the system synchronized. ***For this reason, we do not recommend rebooting the IMR during normal business hours while patients are present.***

Erase All Reports: This allows you to purge the system and clear the log of all call / event history. This is normally only done on a new system after testing to clear the system of all of the calls that are not related to new business.

Please back up your system before hitting this button.

System Legend and Alerts

The bottom of the Settings page is where you set the Legend for the colors used in the system and add the sounds you want to hear when the lights change. This Legend will appear on the user screen in the upper left-hand corner to tell the user what the colors mean. The Alerts are system wide messages that can be sent after a set period of time.



Legend Name: allows the Administrator to label the lights as to their function or meaning in this installation. What you type here will appear in the upper left-hand corner of each Browser display panel.

Enabling Tones: allows you to specify a sound file to play when a light is activated in a specific state. The sound can be different for each color and each light function. Select a sound file from the drop-down list associated with each light in the system. If no sound is listed nothing will be played.

ON Tone is the sound that will be heard whenever a light goes ON steady

Slow Flash Tone is the sound that will be heard when a light goes to Slow Flashing

Fast Flash Tone is the sound that will be heard when a light goes to Fast Flashing

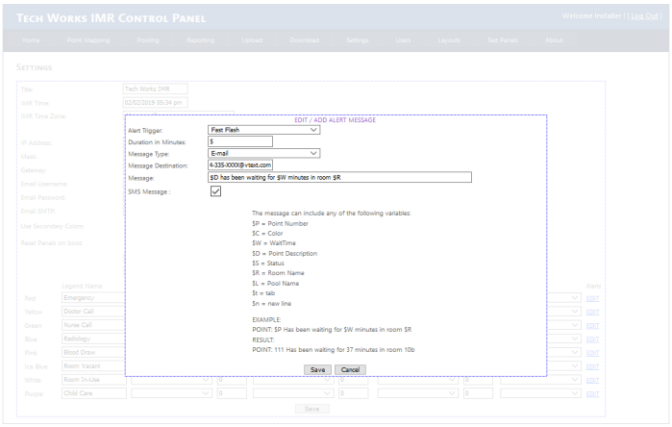
Off Tone is the sound that will be heard when a light changes to Off

Set the “Repeat” interval; for the tone. This is in seconds. So, values of “0” means no repeat or play the file once and then stop. A sound file with a length of 1 second and repeat of “1” would play continuously. A file with a length of 1 with a repeat of 4 would play, wait 3 seconds, and play again. Light “Off” tones will never repeat and only play once and stop when a light goes Off.

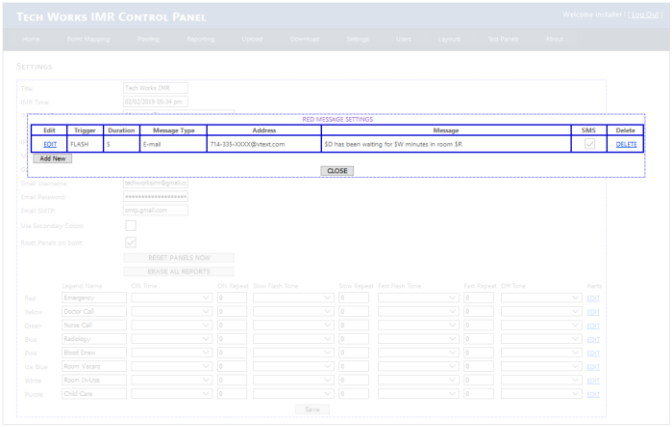
Alerts: let an administrator or backup staff get a text message, email, or pocket page if a call has not been answered within a set amount of time. This is a system wide alert to ensure that someone or something is not getting ignored or overlook due to high workloads or a patient getting forgotten.

To Add or Edit the alert to be sent when a particular color such as Red has been active for longer that a certain amount of time, click on the Edit link on the far-right hand side of that color.

Edit: If there is no existing Alert for that color you will be prompted to Add an alert. The following screen will appear.

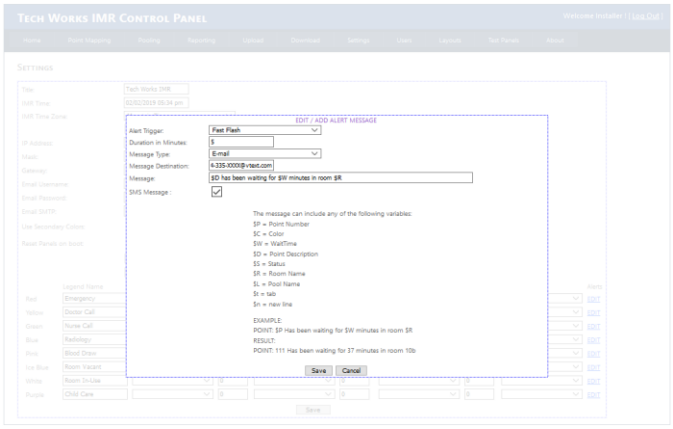


If an alert already exists this screen will appear



To make changes to the existing alert click edit.

Alert Trigger: Because we clicked on the Red-Light, Alert Edit, we now have to tell it what function of the Red Light do we want to time to activate an alert. Remember you can Add multiple Alerts to the Red light so you could have a different timer to Alert different people and you could have different Alarms of different light status. In this case we chose Fast Flashing, so the timer will measure how long the any system Red Light Fast Flashes.

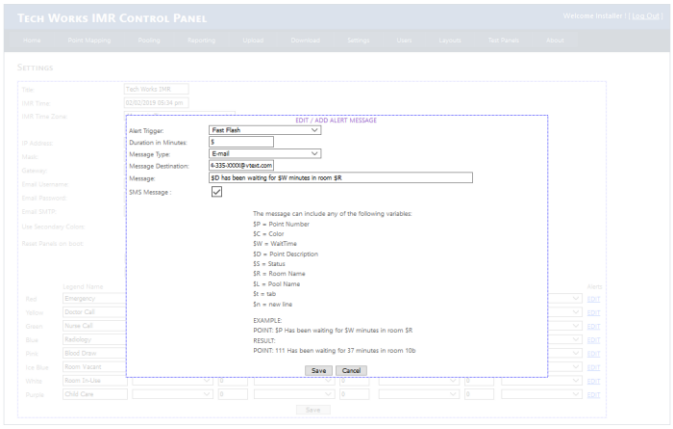


Duration in Minutes: This is how long a Red Light is flashing before sending out this message.

Message Type: The IMR allows for 2 basic types of messages to be sent to remote devices, Email or Serial. Serial is for interfacing to secondary systems like pocket pagers provided by others. “Email” makes the system send an email to a designated email address each time a light is active in the system. Through the use of features in Gmail and other services you can also make these messages be transmitted as text messages to designated cells phones.

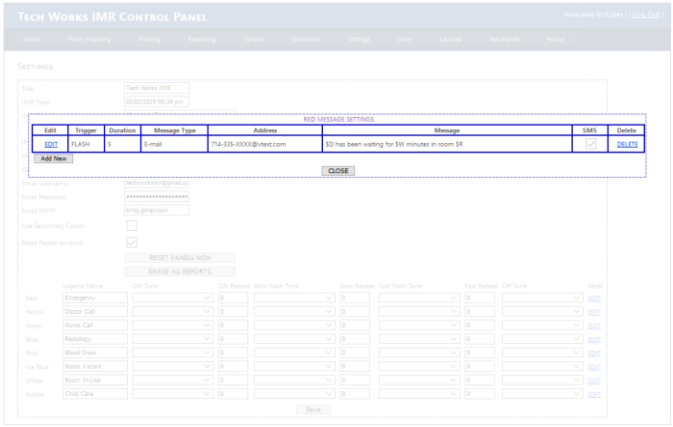
Message Destination: You can send multiple messages for a single alert. If you want to notify more than one person you can enter more than one email address and separate them by a semicolon “;”. To send an SMS text message, instead of an email, enter the 10-digit phone number of the person you’re trying to reach followed by the appropriate “@gateway” address behind it. For example to reach a Verizon subscriber with a text message type *[insert 10-digit number]@vtext.com*

Message: This is what the receiver of the alert will see on their text message or email. To give the receiver enough specific information about the alert the system allows you to use variable operators to insert the Point I.D. that placed the call, Color, Wait Time, Point Description, Status, Room Name, Pool Name, tab, or new line. So, in our example, we have “$D has been waiting for $W minutes in room $R”, which when received will read, “Rest Room Pull Station has been waiting for 5 minutes in room 201”



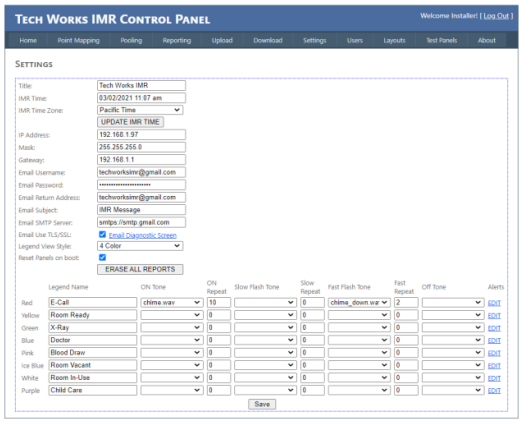
SMS Message: If our message destination is for one or more text message, we check this box to tell the IMR how to process the messages.

Save: Click “Save” after making your changes to update the web site.



Delete: If you want to get rid of any Alerts relative to this color, clicking one the Delete button will permanently remove them from the system.

Close: Will take you back to the main Settings menu.



Save: After you have made all of your changes and additions to the Settings you must click Save to store them in the IMR and make them active.

Failing to click SAVE will cause you to lose your edits.

Once the IP address has been changed the unit must be rebooted for the IP address changes to take effect.

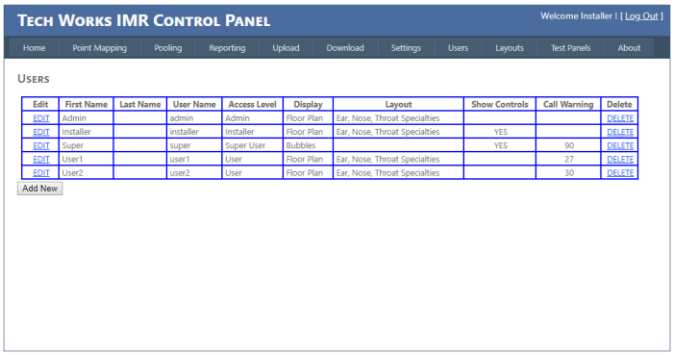
The Settings screen is one of the most important to proper system operation it is always recommended that you back up your system before editing this section.

Only Installer level access can edit these setting so be sure to document your changes and archive them in a safe place for future reference.

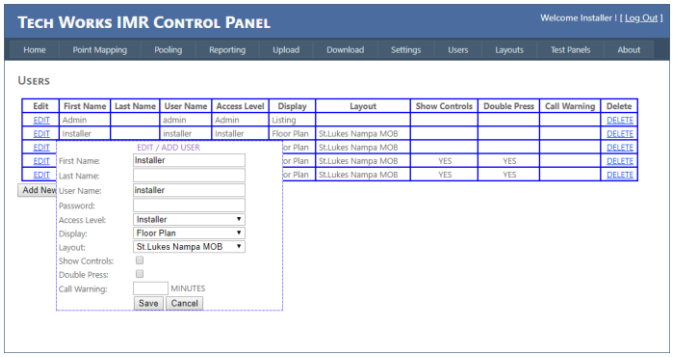
Users

The ‘Users’ Control panel allows the Installer or Administrator to Delete, or Edit User information. By default, there are 4 users in the system and they all have the default password of “1234”. We encourage the Installer or system Administrator to change the passwords and document them for security of your data. We also recommend making users by name with specific Access Levels and Displays for security and convenience. This also helps with Reporting and analyzing data logs later. To make changes the Installer or Administrator can click “EDIT” next to the user to be changed. Clicking

DELETE: will permanently remove a user.



Add New: will add Users to the system by clicking the button at the bottom and fill out the screen and hit save.



If you make changes to your “User” settings you must Log out and Log back in to see the effect of those changes.

The Access Level determines what a user, who is logged in, is allowed to see and do.

An Access Level of “User” goes only to a designated display panel but is not allowed to see the Control panels or change or save any settings or access Reports.

An Access Level of “Super User” is allowed to View and Print reports, edit Assignments, and change Settings, but not to change or adjust system Settings, Point Mapping, Users, Upload, or Download.

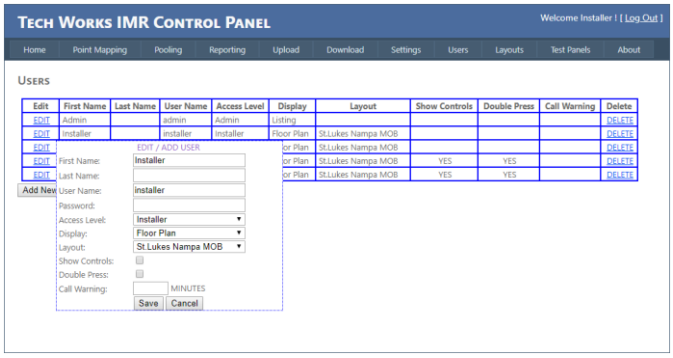
The “Administrator” is an Access Level with the ability to control, edit, and administer the entire site except for a few configuration settings reserved for the Installer.

“Installer” is the highest Access Level and is allowed to edit all aspects of the system including Installer users. ***Do not lose the password or you have to send the IMR back to the factory.***

More access levels can be added at your request to meet your user needs. Contact the factory for assistance.
The best practice for administrating users is to make new users with a unique User ID and Password for each person to be on the IMR. Once all of the real users are added the installer should delete the samples to eliminate unwanted use or abuse of the system.

DO NOT DELETE THE INSTALLER USER. CHANGE THE PASSWORD TO SOMETHING UNIQUE AND MAKE SURE TO RECORD IT FOR FUTURE REFERENCE. MAKE A 2ND INSTALLER USER WITH ITS OWN PASSWORD AS A BACKUP. IT MIGHT BE GOOD TO WRITE THE INSTALLER PASSWORD ON THE INSIDE OF THE IMR COVER.

How defining a User effects what they see and do



First Name: this is simply a label for the User to assist in Reporting and reviewing data for administration.

Last Name: this is simply a label for the User to assist in Reporting and reviewing data for administration.

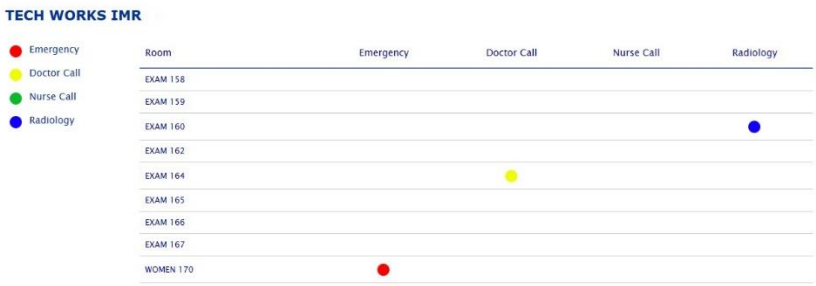
User Name: this is the Name used by the User to logon to the IMR. This is the User I.D. and should be similar to their personal name for easy identification by staff. Something like Nurse_Jones or Dr_Smith works best as it will be used in displaying information on user screens. There must not be any spaces in the User Name so please use the "_" (underscore) to separate titles from names or first and last names.

Password: as with any good data system, this is what really protects your data. Most management teams today have policies and recommended password rules that you should request before working with staff to assign passwords. There are no limits on the IMR password settings. A password can be any length and any combination of upper- and lower-case letters, numbers, and special characters.

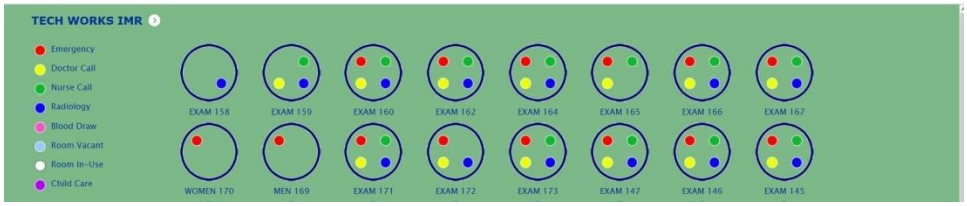
Access Level: determines the menu at the top as well as the fields that can be edited under each tab.

Display: determines what picture type a user sees on their screen when they login or hit the Home tab. Options are:

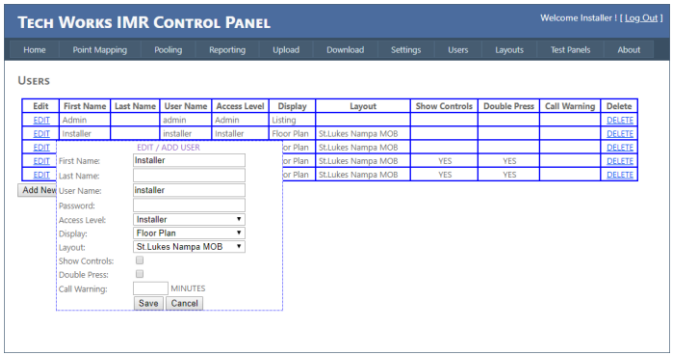
1. None = No graphic display and the user will get a blank screen when they hit the Home tab.
2. List = A list of the Rooms on the system with their associated lights to the right of the room name.



3. Bubbles = A circle representing each Room with all of the lights associated with that Room Name grouped in each circle.



4. Floor Plan = Custom Graphic display of the floor plan of the facility with the lights from each room displayed on the Floor Plan.



Layout: If “Floor Plan” is selected under “Display” a list of all Uploaded Layouts is available as a drop-down selection. This is the default Floor Plan that will be seen whenever this user logs on and goes to their individual Home page.

Show Controls: If a User needs to see more than one Floor Plan, and more than one Floor Plan Layout has been Uploaded, A button will be place on this user’s floor Plan Home Page for each Layout available with the Layout name on the button. This allows a user to switch back and forth between multiple displays on their “Home” page. These buttons only show on the “Home” screen if “Legend View Style” is set to “4 or 8 Colors” under “Settings”.

Double Press: The “Next” patient or Doctor Follow feature, and some others, allows the user to change priorities of the system by moving a button or room to the top of the “Next” que. By pressing a button twice within 5 seconds that button moves to the top of the que or becomes the “Next” patient in the system for that user. If this box is checked then this “User” is allowed to use this feature on their pool assignments. See more under “Pools”.

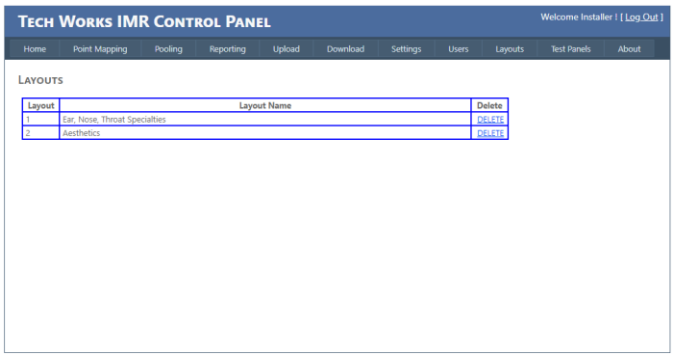
Call Warning: The system can notify the user if a call has been active for a long time and not addressed. By leaving the Minutes window blank the system ignores this option and will do nothing. If a value is placed in the Minutes window, several things happen:

1. On the User screen a Calls Pending Window will appear. One of the columns on the Call Pending window will show the “Wait Time” for each pending call.
2. If the Wait Time exceeds the value in Minutes entered in the User settings, for an individual Call Pending, the line for that call will change to Red and start flashing. The call will remain flashing until that button is pushed changing the status of that light.

Save or Cancel: Upon completing all of the boxes, hit the “Save” button to store all of your changes and return to the main Users list or hit “Cancel” to throw away your changes and return to the User list.

Layouts

Layouts are the Maps or Floor plans that you purchase as Custom Graphics and are Uploaded to the IMR. Each IMR can have any number of Layouts. It is always best to back up your system and Download any Layouts before you delete them. The reason to Delete unused Layouts is because under the “Users” tab you have the option to give a user “Show Controls” on their display. When this option is active, all available Layouts will be available to the user so that they can switch between Layouts and see different parts of the facility.



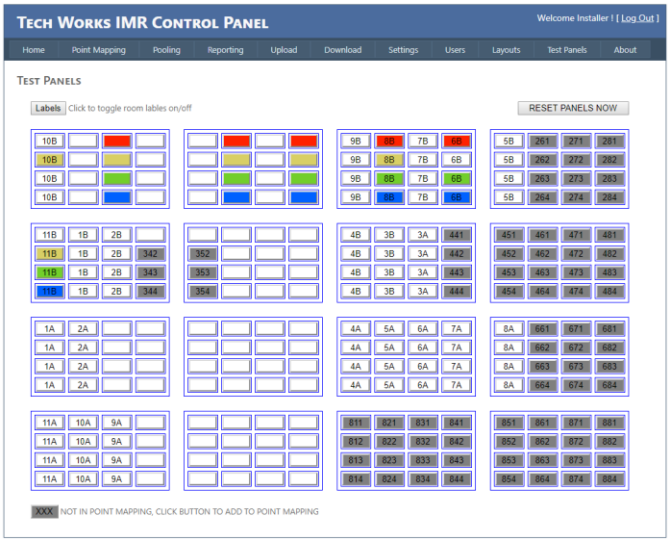
If you have Unused Layouts in the system, they will be confusing to the User with Show Controls on their screen. In the Layout Creator (a separate program not yet available for distribution and only available to Tech Works) the HTML screen Layouts are created. Each Layout is given a unique number for that Project. So, if you have 2 Layouts, they might be numbered 1 and 2. If you add a 3rd Layout it needs to be #3. If you Upload 2 different Layouts both labeled #2 only the last one you Upload will appear because it will overwrite the previous Layout #2

If you have 5 Layouts each with a unique I.D. number, they will all appear on the Layout page. If a user is given the “Show Controls” buttons on their screen they will have the ability to see and choose which floor plan or Layout they wish to see. If you do not give a user the “Show Controls” option, then the only screen they see is the one you assign them when you set up their User account.

Just because 2 different Users may see the same Layout does not mean that they will see the same lights. You can control which lights on a Layout are visible to a User by editing Pools and Assignments under the “Pooling” tab.

Test Panels

The Test Panel screen is there to let the Installer have total system control from the programming PC without having to run from room to room, pushing buttons to turn lights on and off for testing. By simply clicking on any of the numbered buttons you can turn on and off the field devices as well as logging a call, changing graphic displays, or sending messages. Through the use of this screen, the installer can change the setting in the IMR and test the results without getting up from the computer or having an assistant.



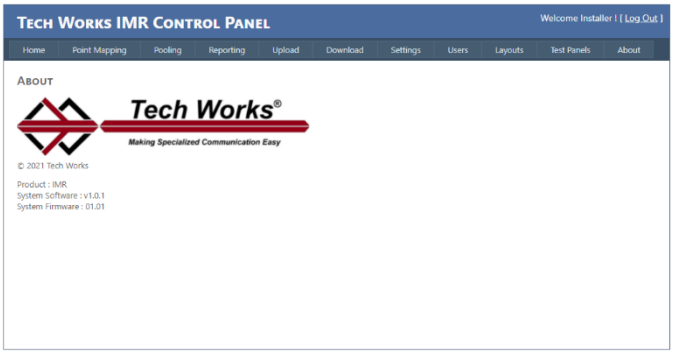
As you can see the buttons are arranged in groups of columns of 4 buttons each, just like the hardware is addressed. Buttons that are grayed out are currently not active points on this system. The active buttons are shown in white initially and change to their assigned color when active. If the station is actively flashing the button will flash at the same rate as the light on the room station hardware. If the installer wants to activate or add points in the system, they have 2 options, you can physically go to the station hardware and push the button, or push the associated button on the “Test Panel” and the button will be automatically added to the Point Map.

Labels: This button changes the display from the Point I.D. on each button to the room number for easier identification.

Reset Panels Now: This button is provided to turn off all pending calls with a single push. This is provided to easily allow total system reset.

About

Once you are logged in the 1st screen you will see is the About screen. The “About” page is a simple page with information regarding this software, its developer, and its manufacturer, the Software and Firmware versions currently loaded.



Keep this information handy when call for Tech Support

Also have a copy of this System Guide handy when calling for Tech Support

Setting up a new IMR for the first time

Every IMR is shipped with some default points and other settings to allow the installer to see what things should look like. Before you begin a new installation, we recommend that you make a Backup of the default setting so you can return to them at any time if you want to. Go to page 30 and follow the instructions to make a Backup, and clearly label it as “IMR Default”.

Now we will empty the IMR of all existing programming except the default Users.

1. Click on the Pooling tab and Unassign and then Delete any existing Pools.
2. Click on the Point Mapping tab and scroll all the way to the bottom.
   Click on Select / Unselect All to check all of the Select boxes and the press the Delete button to remove all Points from the system.
3. Click on the Settings tab and click on “Erase All Reports”
4. Click on the Layout tab and Delete all existing Layouts
5. Click on the Test Panels tab and all buttons should now be Grayed out.

Your IMR is now empty and ready for you to begin programming.

First go to the Users tab and add any User you need for your Logging and Viewing. Follow the instructions on page 16

If you have purchased a custom graphic Layout, go to page 31 and follow the instructions to Upload your Layout. Included with each Layout is a corresponding Point Mapping.
If you have not Purchased a custom graphic Layout, you have 2 options, you can physically go to the station hardware and push each button, or push the associated button on the “Test Panel” tab that is associated with your system and using either method the button will be automatically added to the Point Mapping.

Now click on Point Mapping and edit your Points following the instructions on page 41 adding the details regarding each Point.

Next click on the Pooling tab and set up any Pools for Tracking, Logging, or Viewing as described on page 34.

Setting up a new Pool for a single User

First determine what this User wants to see on any individual Home screen

Next make sure that you have a User in the system with a unique I.D.

Then, go to page 35 and follow the instructions, Add New, to add a new Pool.

Follow the instructions on page 36 to Edit the Pool to get the outcome desired:

1. Make this a Logging Pool
2. Add any Points to this Pool that are unique to the User
3. If they want to know which room is Next by slow flashing the Next room light, then check the Tracking box.

Assign the Pool by clicking the Assign button on the Pooling screen and this will present a display of only those rooms and only the colored lights on those rooms that this provider cares about.

Setting up multiple Pools to View by a single User

If a manager or staff want to view more than one Pool but not all lights in the system, then they want a View only Pool to display just the selected Points.

Next make sure that you have a User in the system with a unique I.D.

Then, go to page 35 and follow the instructions, Add New, to add a new Pool. Put all of the Points in this Pool that are in the other Pools they want to View. If some of the other Pools are Tracking then those lights will be flashing and showing whatever status they show in the field.

When you click the Assign button on the Pooling screen the User screen will update and show only the Points selected above along with a Call Pending window to the right that will show all Pools and their Point wait times.

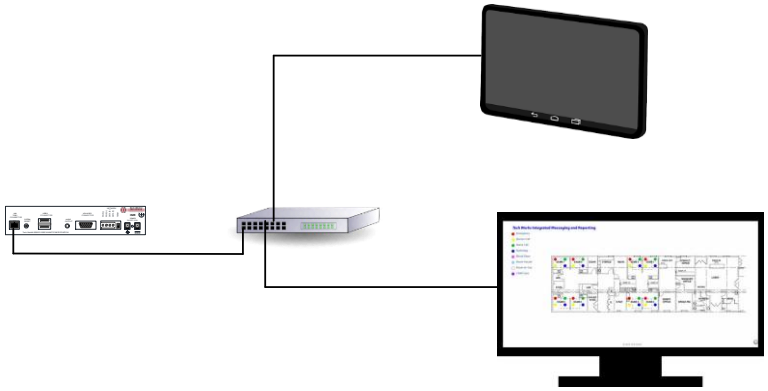
Setting up multiple Pools to View plus Tracking for this User

Follow the same steps as above but, Add a New Pool of points with a User of None, make it a Logging Pool containing only the points to Track for this User and check the Track box. Assign that Pool. This will act as a phantom Tracking Pool.

Then make another Pool as described above that is View only, containing all of the Points the User wants to see including those in the phantom Pool.

Digital Signage

The IMR was designed to provide colorful graphic displays on IP network devices using a browser to view the IMR. This allows any wall mounted tablet or smart TV to become a full motion and sound display.



It does not seem to matter if these are hardwired data connections using CAT cable of if they are Wi-Fi, the performance is based more on the performance of the network and how much bandwidth is available.

If you are using Smart TVs, Samsung works well because they are running the Android OS and a Chrome browser. We find it easiest to do initial configuration using a wireless keyboard and mouse connected directly to the TV. This same wireless keyboard and mouse can be used to configure the IMR itself. Once the TV is configured you can unplug the USB dongle from the TV or IMR and go to the next device to be programmed.

Using the remote that came with the TV go to “Sources” and select Browser. In the command line of the browser type the IP address of the IMR preceded by “//”. In the case of a default IMR you should be able to find it by typing “//192.168.1.97”. Log in as the User with the profile you want to display. If you have set this up as a “User” User level it will automatically go to the map Layout or whatever display settings you have selected. Bookmark this URL and make it the Home screen for this browser.

Hit F11 to make the browser boarder disappear and go to Full Screen mode. If F11 does not make the TV go to full screen, go to browser settings and look for “Hide Tool Bar”.

Most TVs have a screen saver that you have to turn Off or they will make the display go away after some amount of time. Use the TV remote to turn Off the screen saver.

Messaging

There are 3 basic types of messaging available in the IMR:

1. Serial Interface for third party Pocket Page Wireless Transmitters
2. Email
3. SMS Text Messaging

To set up a Pocket Page system interface:

1. Set up the Pocket Page Transmitter first
2. Assign individual pager numbers and group pager numbers inside the paging transmitter.
3. Set the Transmitter to receive COMP2 protocol, ASCII serial text, input from the IMR
4. On any Point in the IMR that you want to transmit to the Pocket Pager, set the Message Type to Serial, and in the Message Destination, enter the Beeper or Beeper Group #. Do not enter more than one Beeper or Group # per Point. Most Pocket Page Transmitters will lock up if they receive more than one Beeper # per message.
5. Enter the text that you want to send associated with the event which triggers the message.

To send an Email, SMS Text Message or multiple Emails, or any combination:

1. set the Message Type to Email
2. in the Message Destination enter as many email addresses as you want to receive the message. Follow the instructions on pages 27 and 42.
3. Make sure that you have a valid Email account set up properly under Settings as described on page 23.

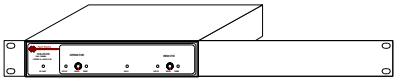
It is always best to test these settings by entering your own email address and then going to the Test Panel and pushing the button to see if you get an email. If you don't then probably nobody else is either.

Packaging and Mechanical

A wide variety of mounting options are available as standard configurations.

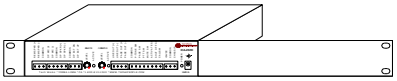
Desk Mount (DM)

Wall Mount (WM) (Under Counter)



Rack Mount (RM)

RM2 Dual Rack Mount

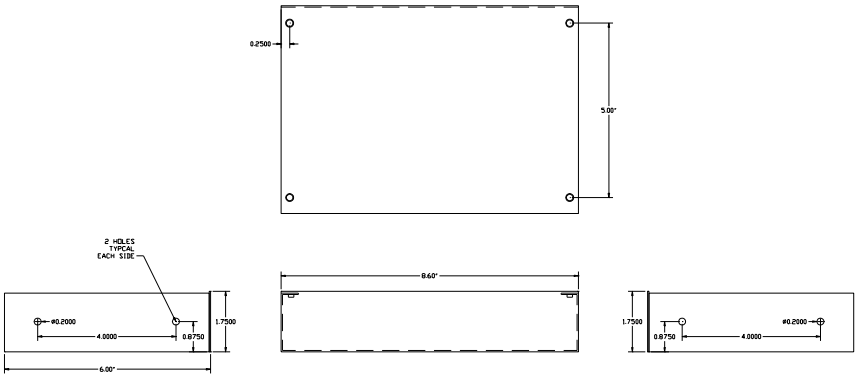


RM-Rear Rack Mount

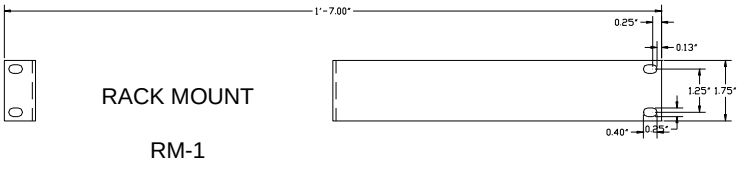
1U, Half Rack, 8.60” X 1.75” X 6.00”

Mounting Options: Table-Top; Under Counter; Rack

Modular aluminum and steel enclosure

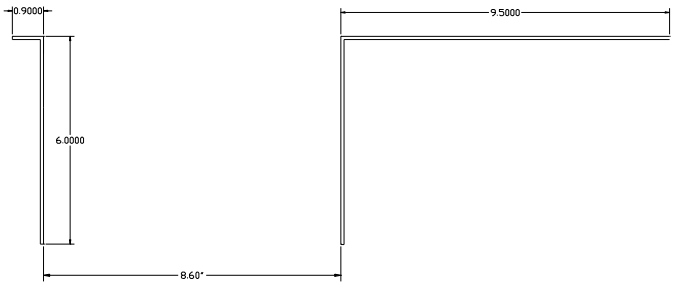


LEFT SIDE FRONT RIGHT SIDE



RACK MOUNT

RM-1



Frequently Asked Questions (Trouble Shooting

Do I need any other equipment to connect to my Tech Works network?

No. Just connect your IMR to your Tech Works network using the 4 screw terminal on the IMR.

What powers the IMR?

A Tech Works PS-2437B power supply is required to power each IMR.

PS-2437B sold separately.

How much data can the IMR store?

Even a heavily used, fully loaded system IMR can easily store up to 3 months of system transactions.

How do I backup my data?

See page 30 Download and select “Backup” from the drop-down menu.

Why can’t I hear the tones from my IMR on my PC?

It could be your Browser or your sound card settings. First make sure that you PC has speakers and then make sure that they are turned on and turned up by testing them using the “Control Panel” on you PC. Once you are sure your speakers are working correctly, then check your Browser and its settings. Some Browsers restrict sound. We recommend Google Chrome as your Browser because it will allow you to control your display and sounds and some browsers will not.

Why can’t I hear the tones from my IMR on my Tablet or Smart Phone?

Tablets and Smart Phones restrict the access of sounds from websites. Check your settings but your device may only allow notifications from approved Apps.

How do I group rooms together by Providers and or Services?

There are 2 types of grouping:

1. First is light grouping by room which is done in “Point Mapping” by defining a “Room”, see page 41.
2. The other is by “Assigning” a Group of Rooms or a “Pool” to a User which is a provider or discipline or both, see page 34.

I set up a Gmail account but I can’t get it to “Send” from my IMR. Why?

Check your new Gmail account. Gmail now has security setting which require you to recognize and allow devices to use your account for Sending messages.

How do I send text messages to phones?

There are 2 basic parts to sending text messages from the IMR:

1. First you have to set up an email sending account under “Settings”. This is just like setting up an email account in Outlook or any other email program. This is the account that the IMR will use to send email out to the world. Review page 23.
2. Next you have to tell each point where to send the email (text message is just an email to a subscriber phone number) and what to send and when to send it. Review page 42.

For additional information go to https://www.digitaltrends.com/mobile/how-to-send-e-mail-to-sms-text/

How do I get a custom Graphic display of my facility?

Contact your local Dealer or Tech Works and we will help you develop your custom displays.

Is the IMR a Standard or Secure (http or https) Web page?

The IMR is a Standard http web site with no internet security and is running on Port 80, because it is assumed to be running on a secure network inside of a facility and not a public web site.

Tech Works

System

Planning and Installation Manual

Back Page