

# NC403TS Monitor and NC404TS Master Station

Installation and Operation Manual

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## **IL1052 NC403TS and NC404TS Installation Manual**

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# Introduction

The NC403TS Monitor and NC404TS Master Station are both purpose-built to be proprietary LCD touch-screen nurse call event monitors and master stations for the Tek-CARE platform, and these devices run on the facility LAN. For more specific information on these devices, refer to IL1068 Master Station User Guide. An NC475 Tek-CARE Appliance Server is required for the installation of both devices.

All connections are located at the rear of the both devices, and they are designed to be either desk- or wall-mounted. The CL234/CL231 are used in conjunction with a TV/Monitor wall-mount bracket which must be a VESA mount design. A minimum clearance of 1.2" behind the monitor is required to accommodate the controller. The TekTone ST316, wireless keyboard and mouse, may be connected to the devices if desired.

In most facilities, both devices will be visible and installed to be accessible by all applicable staff. Calls are automatically sorted by priority and duration, with the highest priority calls being displayed first. If the handset for the NC404TS Master Station is lifted to answer a call, the highest priority call is answered unless another call is manually selected.

The devices must be dedicated to the Tek-CARE system. Do not attempt to install or connect non-TekTone applications with the Tek-CARE Network unless specifically instructed by TekTone Technical Support.

## ***NC403TS Monitor Components***

NC318 - touchscreen monitor

- USB cable
- Power cable

NC403NOTS - controller & case

- CA061 - 18" HDMI to HDMI cable
- HW336 - Four 10mm pan "head" screws
- Power Supply

CL234 NC403TS Monitor Mounting Bracket

- HW376 - Four 14mm VESA mounting screws

## ***NC404TS Master Station Components***

NC318 - touchscreen monitor

- USB cable
- Power cable

NC403NOTS - controller & case

- CA061 - 18" HDMI to HDMI cable
- HW336 - Four 10mm pan "head" screws
- Power Supply

NC404 - Master Station (sidecar)

- TA415LB - Handset
- CA043 - 6' Coiled phone cord
- HW379 - Four 10 X 3/8" Phlps, PH/ZP, Type B, Self-Tap

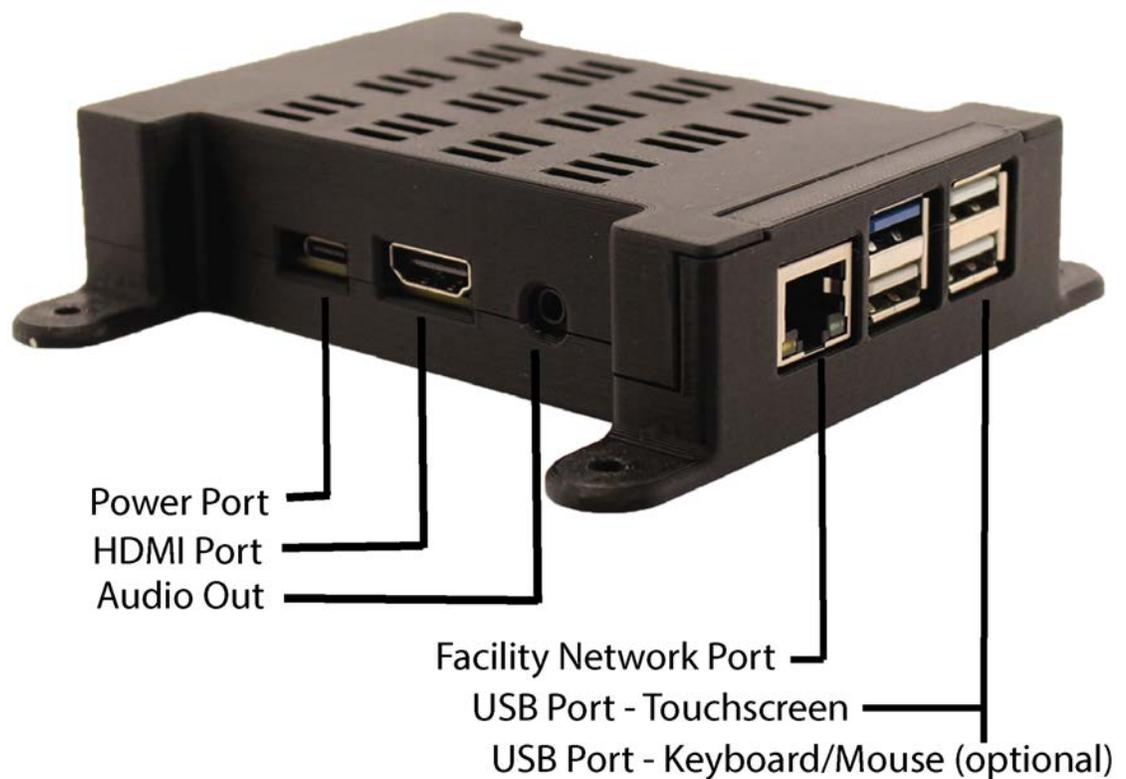
CL231 NC404TS Mounting Bracket

- HW376 - Four 14mm VESA mounting screws

## Installing the NC403TS Monitor and NC404TS Master Station

**NOTE:** The NC475 is required to be installed and running prior to the installation of the NC403TS Monitor and NC404TS Master Station.

**Figure 1 - NC403/4TS Controller Port ID**



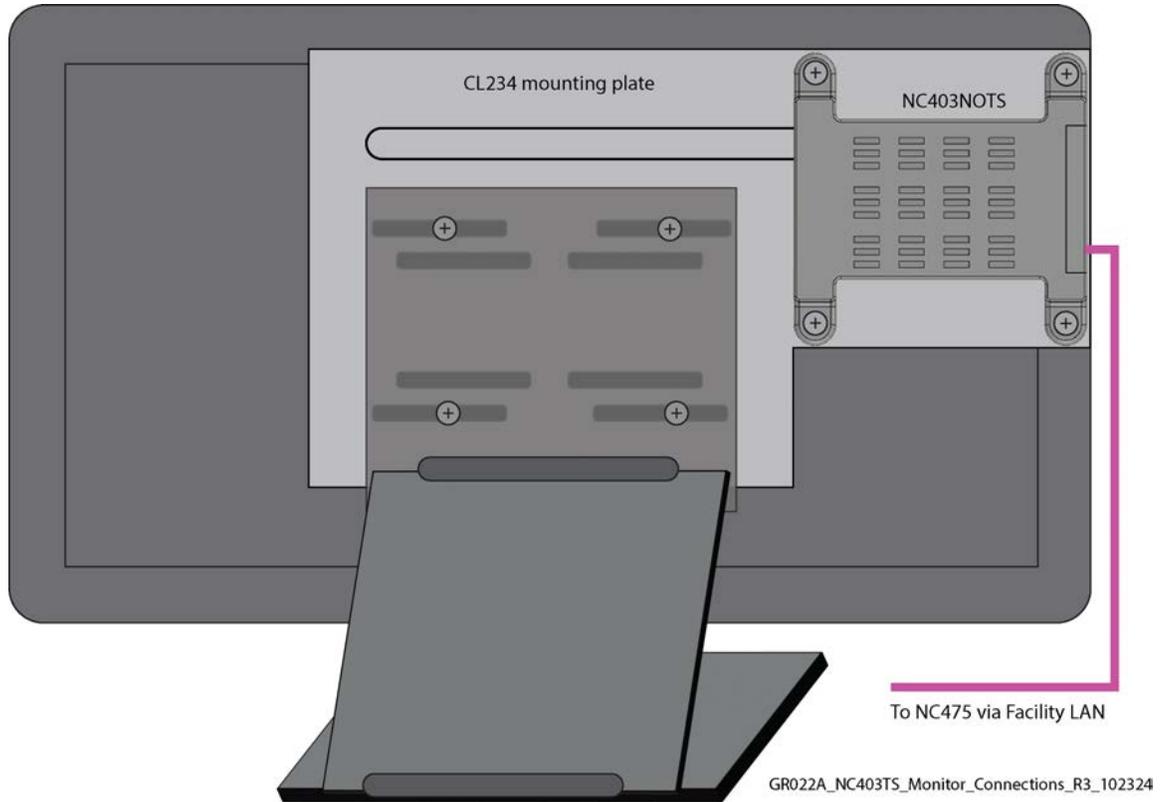
GR022B\_NC403/4TS\_Controller\_Port\_ID\_R1\_102224

### ***Installing the NC403TS Monitor***

Connect and screw in the following:

Remove monitor stand and mount CL234 to monitor with the four HW376 screws provided. Screw the NC403NOTS onto the CL234 that has been mounted to the rear of the monitor using the four HW336 screws provided. See **Figure 2** below for illustration. (If using the CL234 wall-mount bracket, screw the bracket to the NC318 monitor and to the NC403NOTS with the additional screws provided as shown below.)

**Figure 2 - NC403/4TS Monitor Connections**



On the back of the NC403TS Monitor, connect the following:

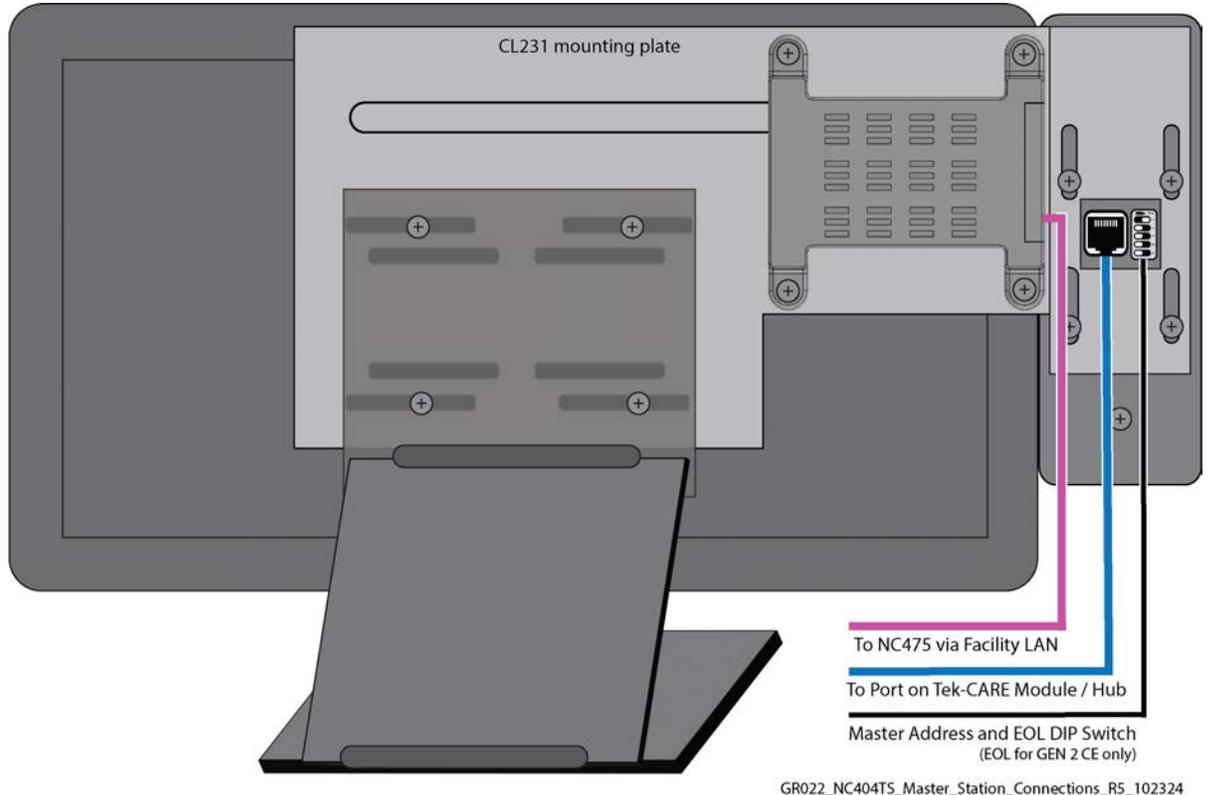
1. Connect the plug-in transformer to the DC Power Input of the NC403NOTS.
2. Connect the USB cable to the USB port on the NC403NOTS and the monitor.
3. Connect the CA061 HDMI cable to the HDMI on the NC403NOTS and the monitor.
4. Connect the NC403NOTS Ethernet jack to the Facility LAN.
5. Connect the monitor's power cord to an AC outlet and then to the NC318 monitor.

### ***Installing the NC404TS Master Station***

Connect and screw in the following:

1. Screw the NC404 to the CL231 bracket with the four HW379 screws.
2. Screw the CL231 bracket to the NC318 monitor with the four HW376 screws provided.
3. Screw the NC403NOTS to the CL231 bracket with the provided four HW336 mounting screws.

**Figure 3 - NC404TS Master Station Connections**



Connect the following on the back of the NC404TS Master Station:

1. Connect the plug-in transformer to the DC Power Input of the NC403NOTS.
2. Connect the USB cable to the USB port on the NC403NOTS and the monitor.
3. Connect the CA061 HDMI cable to the HDMI on the NC403NOTS and the monitor.
4. Connect the NC403NOTS Ethernet jack to the facility LAN.
5. Connect the included coiled cord between the handset and the 4-pin jack on the rear of the NC404.
6. Connect the CAT5e cable to the back of the NC404 and to the GEN2 CE module.
7. Assign a unique address for each NC404TS Master Station using the DIP switch at the rear of the NC404 sidecar.
8. Connect the monitor's power cord to an AC outlet and then to the NC318 monitor.

Refer to - **NC403/4TS Controller Port ID on page 5** for the various connections to the device.

Next, find the correct network IP address. To find the correct network IP address connected to the Tek-CARE Network, go to the NC475 Tek-CARE Appliance Server.

**NOTE:** For more information on setup, updates, and networking, refer to the NC475 Tek-CARE Appliance Server Installation Manual, IL1012.

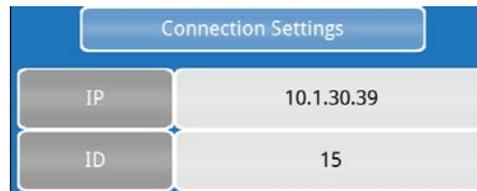
Use the arrow keys on the front of the NC475 to scroll to the right. At the **Menu** screen, scroll down to **Facility IP Setting** and scroll down to view the IP address, netmask (if applicable) and gateway (if applicable).

Note the IP Address assigned to the NC475 Tek-CARE Appliance Server here:

\_\_\_\_\_ . \_\_\_\_\_ . \_\_\_\_\_ . \_\_\_\_\_

Once you have noted the IP address, press the red **Exit** button to return to the setup menu. Use the arrow keys to scroll through the **Setup** menu and select the **Exit** option. Press the green **Okay** button. The NC475 Tek-CARE Appliance Server will reboot and return to the home screen.

Power up the device. Once the NC403TS Monitor or NC404TS Master Station is turned on for the first time, enter the IP address as noted above in the **Connection Settings** screen and choose a unique Device ID between 1 - 254. Below is an example of an IP address and Device ID entered in the **Connection Settings** screen.



Note the Device IDs of each NC403TS Monitor and NC404TS Master Station installed on the system. At the bottom of the **Connection Settings** screen, click **Network Setup**.

On the **Network Setup** screen, DHCP will be automatically defaulted. In most instances, the DHCP option should be chosen.

**NOTE:** Only use the Static option when directed by facility IT staff. They will have to provide the appropriate address and subnet information to enter into the Static IP address and Subnet fields.

If changes were made to the **Network Setup** screen, click **Save**. This option will apply the changes and force the NC403TS Monitor and NC404TS Master Station to reboot.

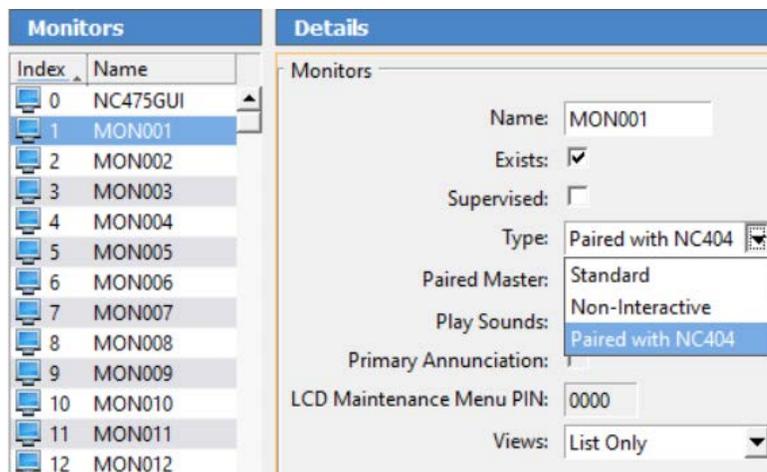
If there were no changes made to the **Network Setup** screen, click **Cancel** which takes you back to the **Connection Settings** screen. If you wish to reset the connection settings, touch **Reset Connection Settings**. This will force the device to reboot and change back to the default settings before any changes were made.

Click **Connect** to be redirected to the home page of the NC403TS Monitor and NC404TS Master Station.

## Configuring the NC403TS Monitor and NC404TS Master Station

Once hardware installation is complete, set up the system configuration. The LS450 ConfigTool is used to configure the system, and is installed on a programming laptop. Once the hardware is installed, choose **Load Configuration from System** on the splash screen.

Refer to the LS450 ConfigTool Installation and Operating Instruction Manual, IL855, for more information on how to set up the ConfigTool. The NC403TS Monitor and NC404TS Master Station settings can be found in the **Masters** and **Monitors** pages of the ConfigTool. Go to the **Masters** page first and enable the NC404TS Master Station and confirm the type. Apply and save the changes and then go to the **Monitors** page. Select an available monitor from the monitor index and click **Edit**.



Change the name of the monitor to something that is easily recognizable. If this monitor is to be recognized on the Tek-CARE Network, check **Exists**. If the monitor disconnects from the network and the facility wants a fault displaying that information, click **Supervised**.

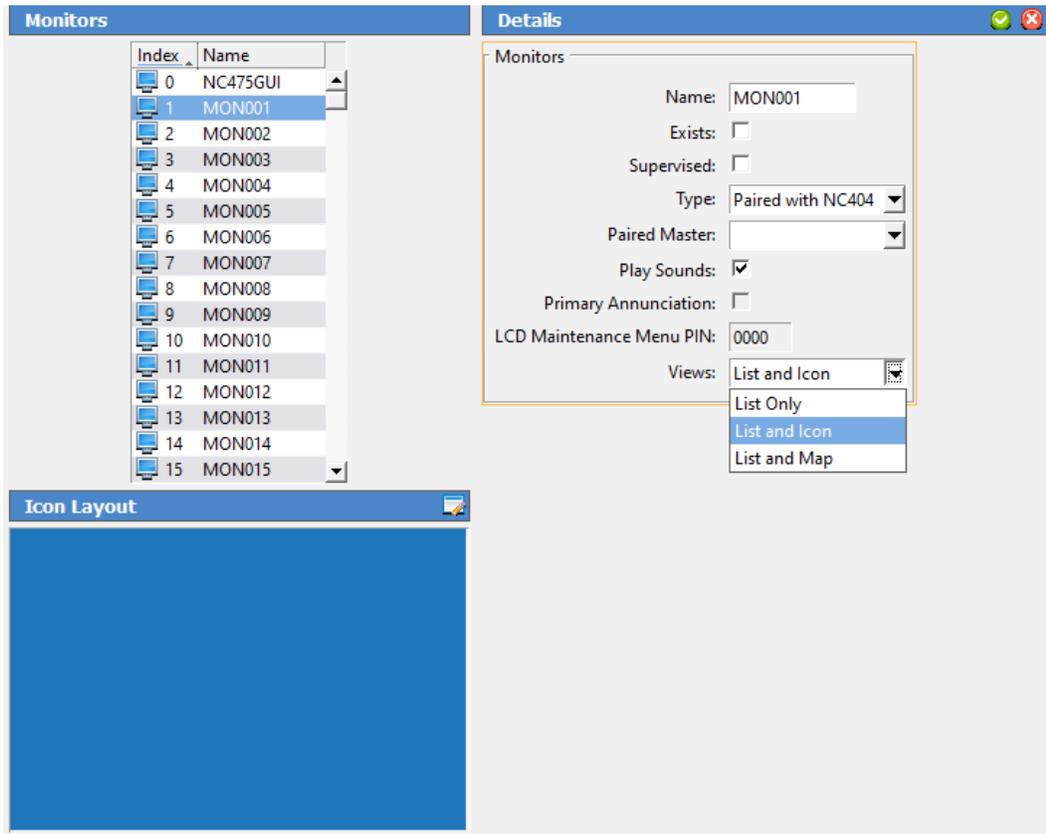
Under **Type**, choose **Standard** for the NC403TS Monitor or **Paired with NC404** for the NC404TS Master Station and select the paired master station which was created earlier.

Under **Views**, choose either **List only** (same functionality as an event monitor), **List and Icon**, or **List and Map** for the view mode of the devices.

Check **Play Sounds** if you want the monitor to play sounds when a call is coming in. The NC475 will serve as the primary annunciator on the system (Monitor ID 0000). However, if it will be unattended in an equipment room, uncheck **Primary Annunciation**.

Under **Zones** and **Call Filter**, select the applicable zones and call filters that are to be annunciated on the monitor. Click **Apply**.

The **List and Icon** view will give an icon layout.



Click **Edit** next to **Icon Layout**. Under the appropriate tab, select the station or master and click **Add** at the bottom right. Once all of the appropriate icons show on the grid, drag and drop the icons to configure the layout. Click **OK** once the icon layout is complete.

**List and Map** view will show a map view on the NC404TS Master Station. To upload a map of the facility, go to **Locations>Proximity Maps**. Acceptable file formats for proximity maps are .bmp, .gif, .jpeg, and .png. Click **Add** under **Details** and select **Load from file** to upload a map of the facility. Click **Add** under **Locations** to add stations. Create a name for the station and pick the proximity map and click **Save**.

Select **Edit** under **Proximity Maps**. Once the Proximity Map has loaded, click **Edit** for each location and choose the proximity map in the drop down under **Details**. Once all of the locations are saved, a red pin will appear to the left of the proximity map. Click **Edit** next to the **Proximity Map** and drag the red pin to the correct location on the map. Click **Save**. Once the configuration is committed, the red pins will display as gray pins on the NC404TS Master Station in Map view.



The master station can be password protected. Go to the **Passwords** page. Click **Add** and create a password. Select the appropriate settings which will require a password. Refer to IL855 LS450 ConfigTool Manual for more information. Click **Apply** and save the configuration. Then go to **File** and choose **Commit Configuration to System** once all changes have been made.

Once the configuration has been successfully loaded onto the nurse call system, go to the master station to review the changes. Start at **Calls Screen on page 12** to view and edit the different screens and settings on the master station or the monitor.

# Calls Screen

Once the configuration has been completed and committed to the system, the Master Station will show all active calls on the Tek-CARE system. The **Calls** screen is the home page of the master station.

Touch the navigation buttons to interact with the master station. To return to the home screen at any time, touch the background of the screen or the **Calls** button.

## List View

The List view is the default view that will show all of the calls in a list format.



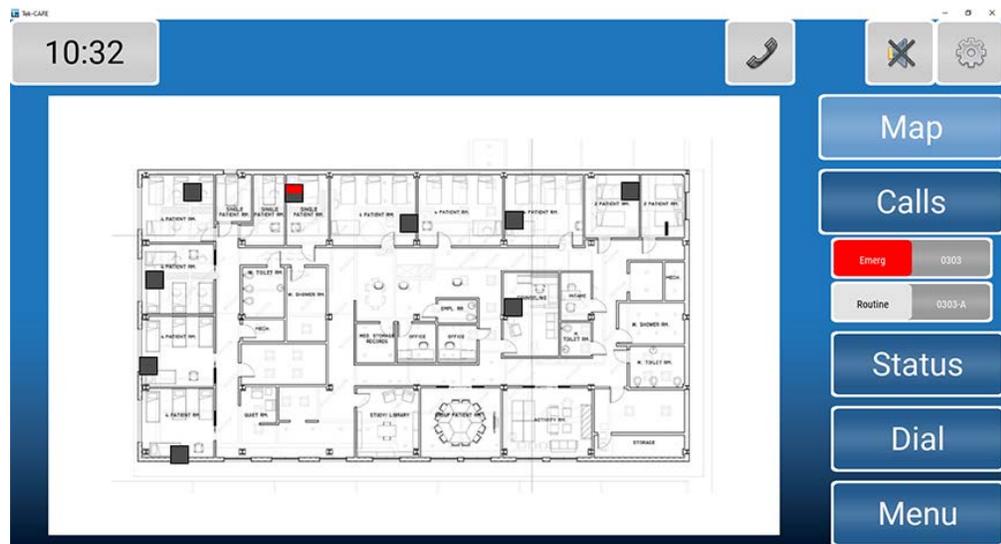
## The Icon View

The Icon view can show an icon layout of stations that are located throughout the facility and indicate incoming calls by changing the background color or flashing color on the icon. The icon can also be used for direct dialing and placing other visual indicators such as nurse requests.

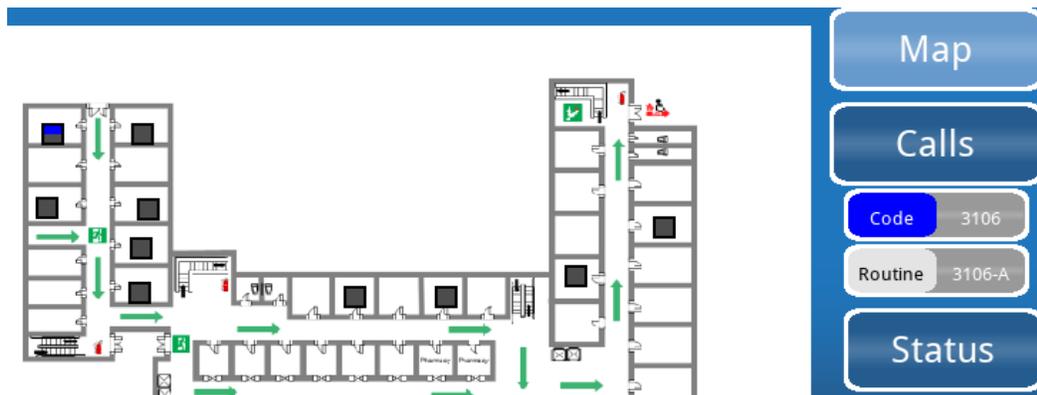


## The Map View

The Map view will show a map of the facility. The gray icons are stations and masters.



When a call is placed from a station, the top portion of the icon will change color depending on the type of call being placed — blue for code blue shown below. These icons can also be used to direct dial a station.



## Answering and Placing Calls on Master Stations

The NC404TS is capable of answering and placing calls within the facility.

To talk to the station that placed a call, simply lift the handset of the applicable master station and begin speaking. Picking up the handset or pressing the talk button will automatically answer the first call in the list. If more than one call is displayed, touch the call you wish to answer to select it before lifting the handset or pressing the **TALK** button. If you wish to use the push-to-talk feature instead of using the handset, press and hold the **TALK** button on the master station. Release the **TALK** button to listen.

Once the call is complete, either hang up the handset on the master station or press the **RESET** button.

## Password Protection

Some features may be password protected. If there is an icon with a key on the top of the screen, enter the password to view or edit a page.



Touch the key at the top left corner of the screen. Enter the password on the keyboard screen and press the key next to the password.



Once the password is entered correctly, the background of the key will turn yellow.

## Tone Silence

All low priority calls can be silenced with the tone silence icon on any master station.



The tone silence icon will show at the upper right corner of the screen. The gray background indicates calls are not silenced.



Once the icon has been pressed, the background of the icon will turn yellow and the tone for the call will silence. Select this option for each low priority call you wish to silence. Select the icon again to remove the tone silence.

If the tone silence feature is enabled and a new low priority call or fault comes in, the new call will not be silenced until the tone silence icon is pressed again. This feature will retain the assigned tone-off calls that have already been silenced.

## Fault

If fault filters have been selected, and a fault is on the system, a fault icon will appear at the top of the screen.



Click the icon to see which module has the fault. Once the fault is corrected, the icon will disappear.

# Time Screen

## Changing the Time

To change the system time, touch the clock in the upper left corner of the screen. The current system time and date will appear as shown below.



To change the system time or date, touch **Set Time** in the lower left corner of the screen. On the next window that appears, enter the date and time in YYYY-MM-DD HH:MM 24-hour format.



Select **Apply** (Green check mark) once the time is set.

## Settings Screen

The **Settings** screen offers several options for volume control, connection, and annunciations.

### Changing the Volume ( NC404TS and NC415G3 only)

To change the **Tone Volume** or **Voice Volume** for the handset, select **Low**, **Medium**, or **High**. Voice Volume also has a **Max** setting. The NC403TS Monitor will only display the **Play Tones** option checkbox when the Settings button is selected. **Tone Volume** and **Voice Volume** are both set to **Medium** in the example below.



Touch the down arrow to get to the **Handset Threshold**. This option will prevent undesirable vox to be present during a call with excessive background noise. Select the correct threshold setting for the master station.



Touch the up arrow to get back to the main **Settings** menu.

The **Annunciation** button allows for configuration of which calls can be annunciated from all selected zones and call types on these screens. **Zones Watched** comprises of a number of stations grouped together. Use the check boxes and the **All** or **None** buttons to select the desired zones to annunciate.

**NOTE:** Changing the annunciations will only change the annunciation settings on that master or monitor. This is not a global change.



On the **Call Filter** page, select which calls should be annunciated on the master station. Use the check boxes and the **All** or **None** buttons to select the desired call filters to annunciate.



On the **Fault Filter** page, select which faults should be annunciated on the master station. Use the check boxes to select the desired faults to annunciate.



Select **Back** to get back to the **Settings** page.



**Play Tones** will allow the option for notification sounds to play when there is a fault or an incoming nurse call. This feature is only available on the NC403TS Monitor.

If desired, select **Pre-Announce** which will indicate to the staff and personnel in the room of the station that an audio session is about to start.

**Connection** will show the **IP address** and **Device ID** that was originally assigned when the monitor was brought online.

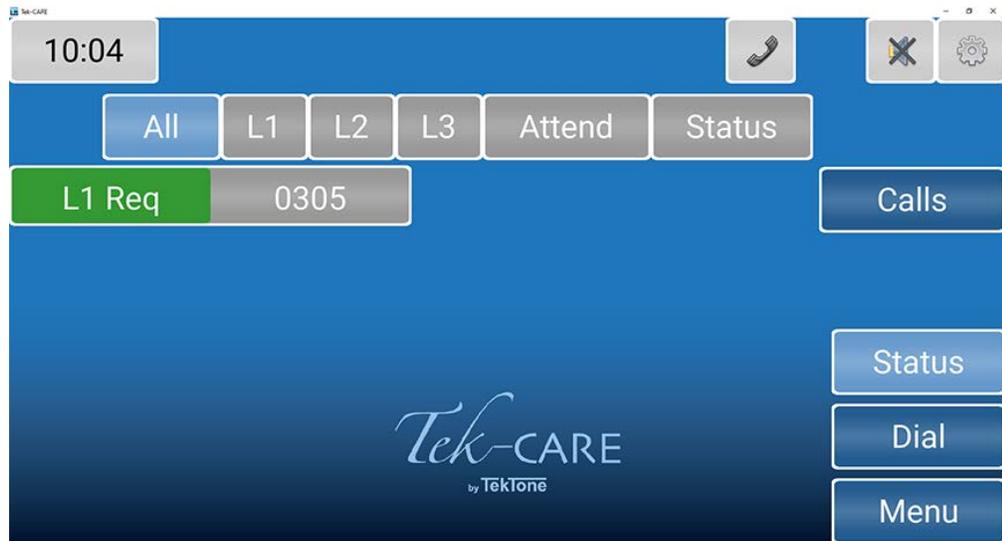
**WARNING:** Do NOT make any changes to the **Connection** screen without the presence of a technician or IT personnel.

## Status Screen

The **Status** screen shows a list of active calls with a status.

Once a status is selected, the button on the details screen changes color, and the status annunciates on the system.

If a status is annunciating, the **Status** button on the right side of the screen turns red to notify staff. Active statuses may be viewed by touching the **Status** button.



Touch the background or the **Calls** button to return to the home screen.

See [Dial Screen on page 20](#) on how to set a status.

# Dial Screen

Touch the **Dial** button to access the **Dial** screen. Enter the Station ID.



Touch the **Search** button to open the **Call Details** page.

Once on the **Call Details** page, you can use the buttons to place statuses on the station, attend calls, and other options.



A **Stat** call can be used as a staff emergency. Touch **Stat** if there is an emergency for the patient in the room with that station. Stat can only be reset at either the station itself, the NC402TS, NC404TS, NC415G3, or on the NC404 sidecar. To clear this option at the master station, select **Stat**, touch **Reset**, then press the **RESET** button on the sidecar.

**L1, L2, and L3** represent different levels of aid, such as housekeeping or a nurse is needed. Touch any of the levels of care to send out a request letting assigned staff know how to help the patient. To clear an **L1** through **Attend**, either touch the button on the master station, or go to the room and reset the station.

**Status 1** and **Status 2** can be used depending on the situation (like a fall risk) which triggers a dome light. Touch either **Status 1** or **Status 2** to either enable or disable them.

Touch **Send MSG** to send either a preprogrammed or custom message to individuals or a staff group about the station if a form of messaging has been integrated with the system.

Touch **Settings** to edit the settings for that station.

On the **Settings** page, **Zones** will show which zone the station is currently in or will allow you to add the specific station to additional zones that are watched by the master station. Touch the zones to include that station.



Select **Audio** to change the speaker volume and mic gain for that station.



Choose either **Full Duplex** or **Half Duplex**. **Full Duplex** enables simultaneous audio to and from the station (like a telephone - talk and listen simultaneously). **Half Duplex** only allows audio to work from one station at a time (like a radio - push to talk, release to listen).

**NOTE:** It is recommended to contact the facility's technician for more information on these two audio settings.

Select **Default** to revert back to the default audio settings. Change the **Speaker Volume** and **Mic Gain** with the blue arrows. **Speaker Volume** will change the volume of the speaker. **Mic Gain** will adjust the input volume on the station.

### Staff Rounding

With the staff rounding feature enabled, facilities can set schedules and reminders for rounds. This feature allows the nurse call system to register when a staff member enters a patient or resident room during their scheduled time period and presses the designated rounding button all in a timely manner.

If the rounding feature is available for the facility, touch **Dial** and enter the station or select the station icon. At the bottom, select Settings. On the **Station Settings** page, touch the arrow next to **Audio** and select **Rounding** to select a rounding schedule for the station. Select the applicable rounding schedule for the station. Touch **None** at the bottom of the screen if none of the rounding schedules should be selected for that station.

For more information on rounding schedules, please refer to the **Rounding Settings** and **Rounding Schedules** sections in the IL855 LS450 ConfigTool Installation Manual.



Touch **Check-In** to see what days and times the patient has to check-in. Typically, assisted living facilities use this feature. If the resident doesn't check-in on the station located in his/her room, an inactivity alarm will appear on the system.



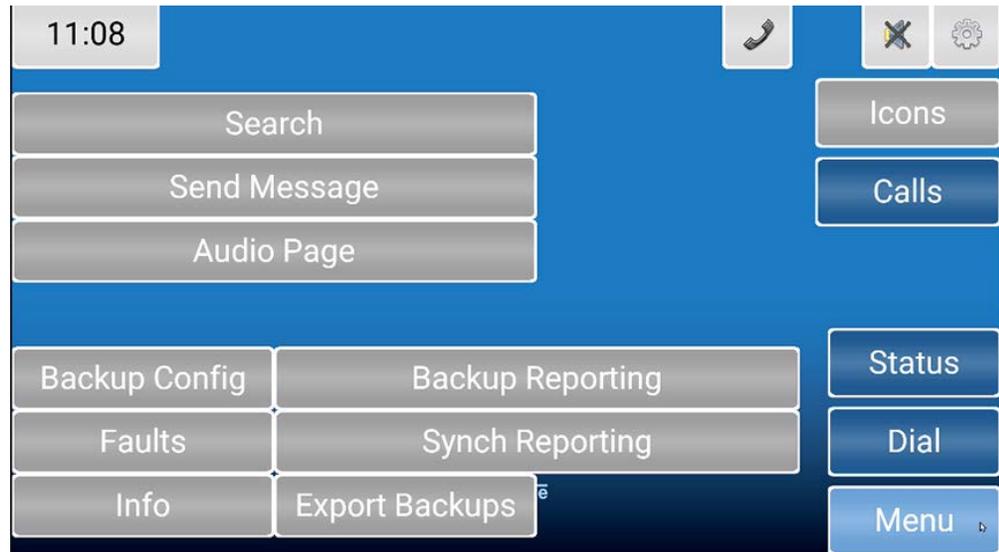
Touch **None** at the bottom of the screen if none of the check-in schedules should be selected for that station.

Touch **Vacation** at the bottom of the screen to turn off the check-in if the resident will be absent from the facility. To remove the station from vacation mode, either touch **Vacation** again or go to the patient station and press **Reset**.

Touch the blue arrow next to **Check-In** to add the station to zones and select the appropriate call types for that station.

## Menu Screen

The **Menu** screen is used to view system information, sync reporting, and create backups.



The **Search** button enables you to search for **Patients** or **Staff** that have been added into the system.

The **Send Message** button allows you to send either a preprogrammed or custom message to individuals or a staff group.

The **Audio Page** button will allow you to talk to all masters, stations, or zones the master station is assigned to watch. Touch **Master Page**, **Zone Page**, or **System Page** to page all audio capable masters, zones, and devices on the system that the master station is watching. Either pick up the handset, or hold down the **TALK** button next to the handset to communicate with the selected group.

The **Backup Config** button creates a backup file of the current configuration. Touching the **Backup Config** button or selecting the option display plays two tones, one low beep to indicate the process has been started, and a higher beep to indicate the process has been successful.

The **Backup Reporting** button creates a backup file of the reporting database. Touching the **Backup Reporting** button or selecting the option display plays two tones, one low beep to indicate the process has been started, and a higher beep to indicate the process has been successful.

The **Faults** button displays all current faults that are present on the Tek-CARE system. The **Repair** and **Redetect** options are also available from the **Faults** screen.

## Using the NC404 Sidecar Master

The NC404 audio-visual sidecar master pairs with the touchscreen monitor to complete the NC404TS Master Station console.

**NOTE:** If something were to happen to the monitor, the NC404 is considered a master station and can handle most functions of the monitor with the buttons on the sidecar such as answering calls and displaying faults.

The highest priority alarm is always shown at the top of the list of the NC404.

Select any active call on the main screen and go to the **Call Details** screen. Picking up the handset or pressing the **TALK** button will connect to that station placing a call. Press the **TALK** button to speak and release the button to listen.

If more than one call is active on the system, a scroll arrow will appear to the right of the list. Scroll through the list with the **CALLS** button to choose the call you wish to answer. Calls are sorted based on priority and time.

Once the call is complete, either hang up the handset or press the **RESET** button.

**NOTE:** Only calls with **Call Types** with **Attended** unchecked in the ConfigTool: Only certain calls will reset when the handset hangs up. Other call types have to be reset at the station where the call is placed.

Select **Faults** to view any faults present on the system.

