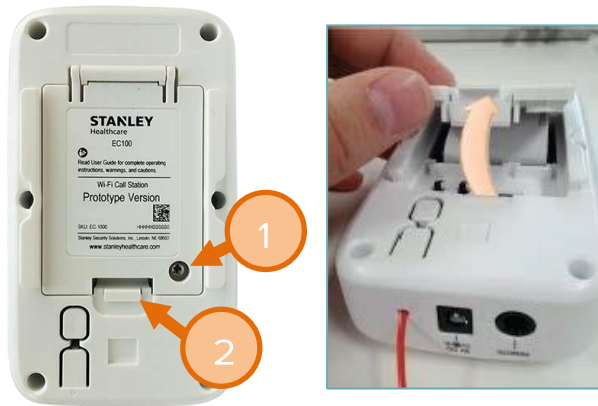
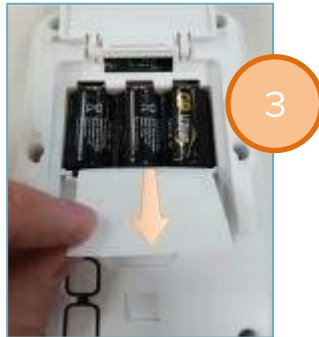


1. Unscrew (1) and open (2) the battery compartment.



2. You can then simply pull out the battery isolation strip, allowing the three pre-installed batteries to make their connections. (3).



The Call Station's LED flashes green and an audio confirmation tone is heard.

3. Close and re-screw the battery compartment.

External Power

An optional 5V/2A external power adaptor may be used to power the Call Station. Use only the following approved power adaptors:

- Adapter Technology – ATM012-W050U (ADP-080-U)
- MEOPS Electronic LTD – SMWA12A-S02

Batteries can also be inserted for back-up power, in case of power failures. When external power is used and batteries are installed, power is still drawn only from the external power adaptor, unless a power outage occurs.

Note: It is recommended to replace the back-up batteries at least once every two (2) years.



Using External Power

Insert the power adaptor plug into the Call Station's 5V DC jack (1).

An audio confirmation tone is heard.



Turning the Call Station On or Off

The Call Station turns on automatically and is ready for use once power is supplied (battery or power adaptor) and a confirmation tone is heard. To turn the Call Station Off, simply remove the batteries and/or un-plug the power adaptor.

Installing and Removing the Call Station

The Wi-Fi Call Stations are supplied with mounting brackets and screws for wall mounting.

IMPORTANT: The CS100 and CS100CD is for non-condensing environments only such as living rooms/bedrooms and common areas. The CS100MR (Moisture Resistant) Wi-Fi Call Station is specifically designed for high moisture and humid environments such as bathrooms, however, it can be placed anywhere indoors. The CS100MR is identified by a **'Bathroom Moisture Resistant'** marking on the side of the device and label. Please make sure to use the correct device version according to environment.



Mounting the Bracket

- **The Call Stations are intended for indoor use only.**

Do not place the Call Stations outside or where it may be continuously exposed to direct sunlight.

- **Mount the bracket securely.**

Mount on a flat, smooth, non-metallic surface. Use appropriate anchors and hardware for the mounting surface. Hardware is supplied for typical drywall mounting.

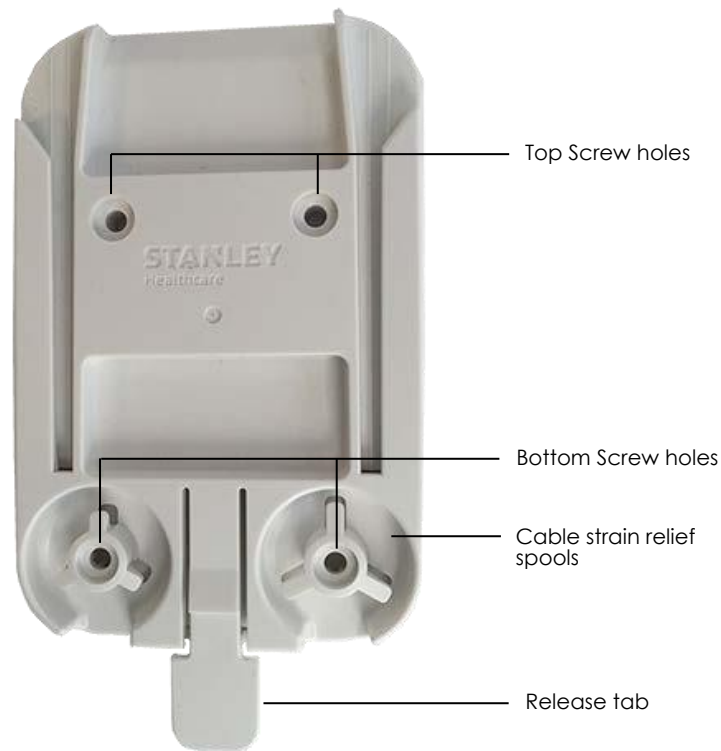


Figure 28. Call Station Mounting Bracket

To Mount the Bracket on Drywall

Note: This procedure is for mounting on a standard drywall surface. For other surfaces, use the appropriate fasteners in steps 2 to 5.

1. Hold the bracket, level, on the mounting wall.
2. Mark the four (4) screw holes with a pen or pencil.
3. Drill the four (4) screw holes.
4. Insert the four (4) screw anchors into the drilled holes.



5. Align the bracket over the holes and mount using the four (4) screws.

Note: Do not over tighten.

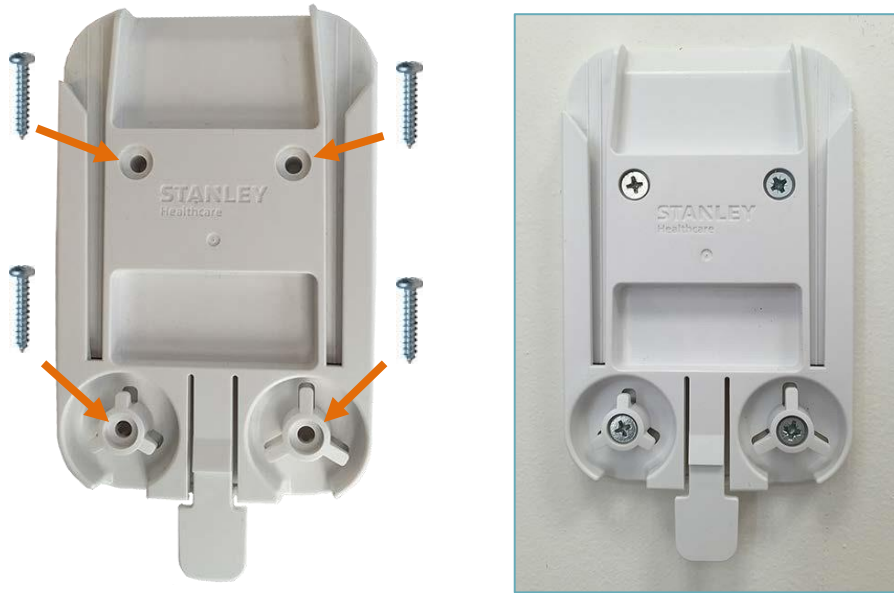
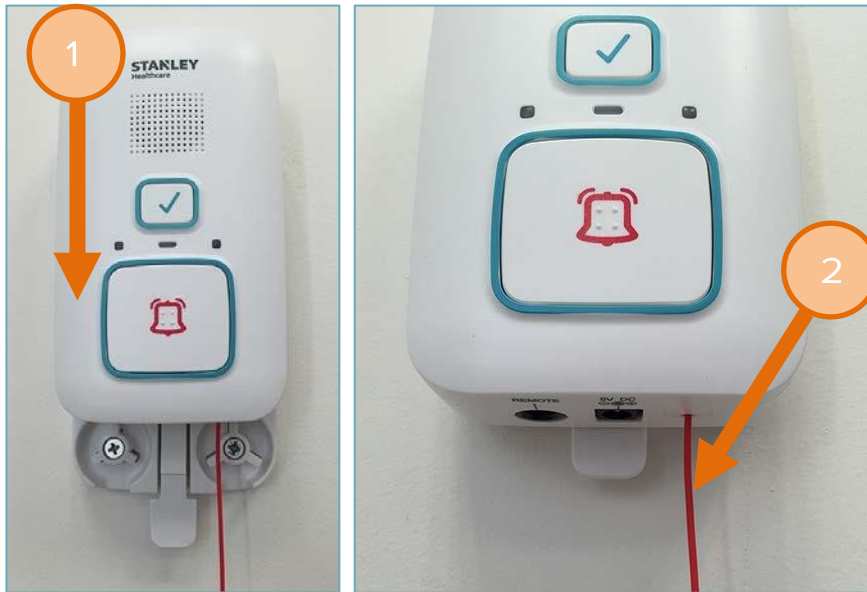


Figure 2: Mounting the Wi-Fi Call Station Bracket

Attaching the Call Station

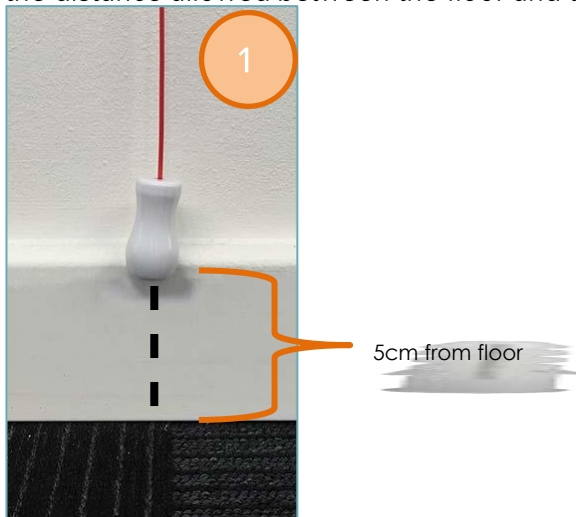
Note: Spool the cables before sliding the Call Station into the mounting bracket. See Using the Strain Relief Spools.

Slide the Call Station into the mounting bracket from the top **(1)** until it clicks into place **(2)**. Install and connect the remote push-button cord (if being used).



Adjusting the Pull Cord Length

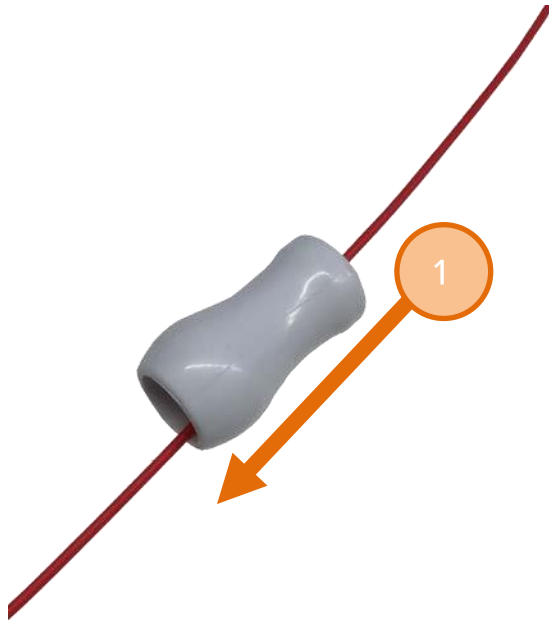
Adjust the length of the pull cord so that it can be easily reached by someone lying on the floor. It is recommended that the end of the cord reaches 5 cm from the floor (see image below). However, check with the local authority having jurisdiction regarding the distance allowed between the floor and the end of the cord.



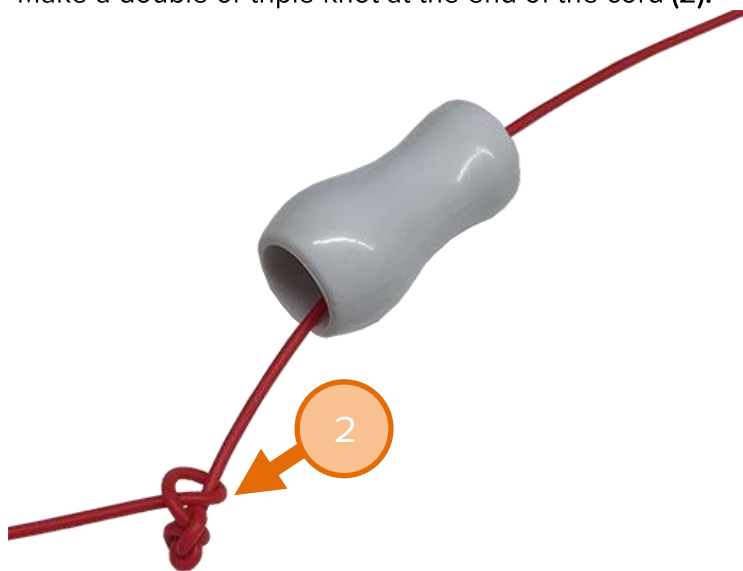
Shortening the Pull Cord

The pull cord can be easily shortened, if required.

1. Cut the pull cord at the required length.
2. Thread the end of the cord through the pull cord bead **(1)**.



3. Make a double or triple knot at the end of the cord (2).



Using the Strain Relief Spools

The Call Station mounting bracket includes two (2) cable strain relief spools for use with the external power adaptor cable and remote push-button cord. These are designed to help prevent cable disconnection from the call station.



Note: Spool the cables before sliding the Call Station into the mounting bracket.

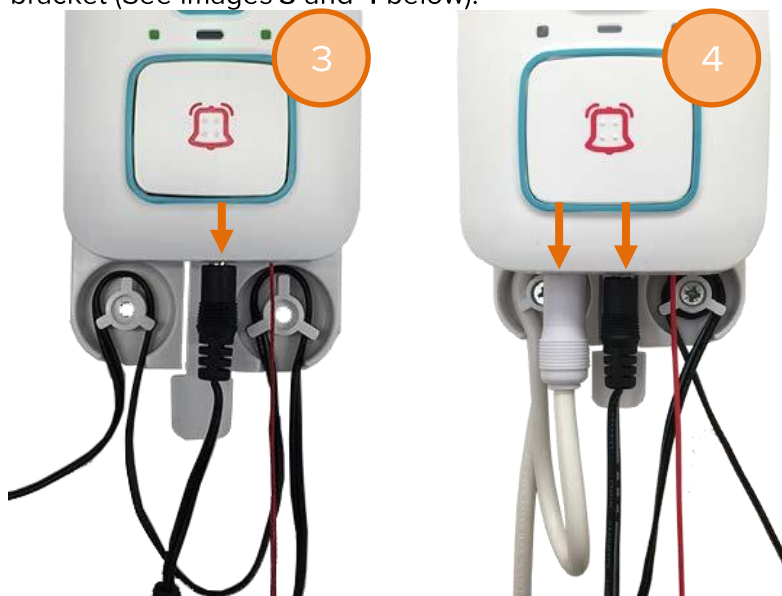
If using one cable, it's recommended to use both cable strain relief spools. When spooling the cable, make sure there is sufficient space between the cable and the mounting bracket's release tab (See image 1 below).



If using both power and remote cables, spool the power cable with 2-3 loops on the right side, and spool the remote cable with 1 loop on the left side (See image 2 below).



Plug the cables into the Call Station before sliding the device into the mounting bracket (See images 3 and 4 below).



Removing the Call Station

1. Press and hold the mounting bracket's release tab (1).



2. Slide the Call Station upwards (2).



Adding Call Stations to Arial

Call Stations are generally placed in resident bedrooms (CS100 or CS100CD) and bathrooms (CS100MR) enabling residents to call for help and perform daily check-ins. Call Stations can also be placed in common areas, such as dining rooms.

The following section assumes familiarity with Arial.

Pre-Requisites

Map location areas need to be defined in the AeroScout Location Engine.

Adding Call Stations to Arial involves the following tasks:

Task 1: Add a Call Station to Arial

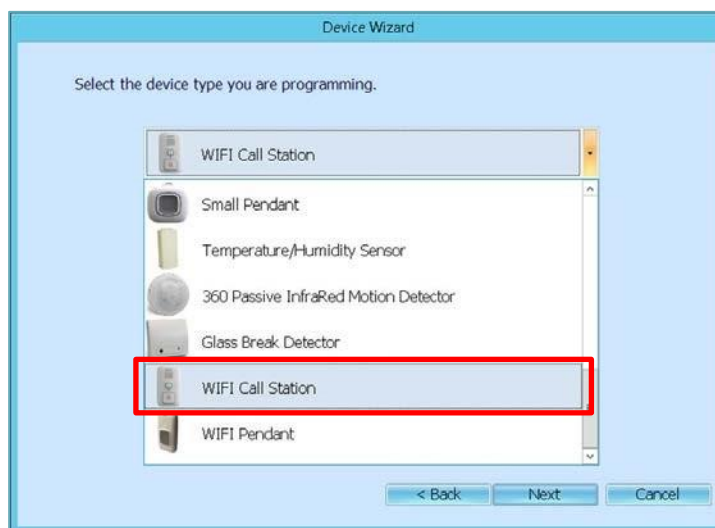
Task 2: Place the Call Station to a map

Task 1: Add a Call Station to Arial

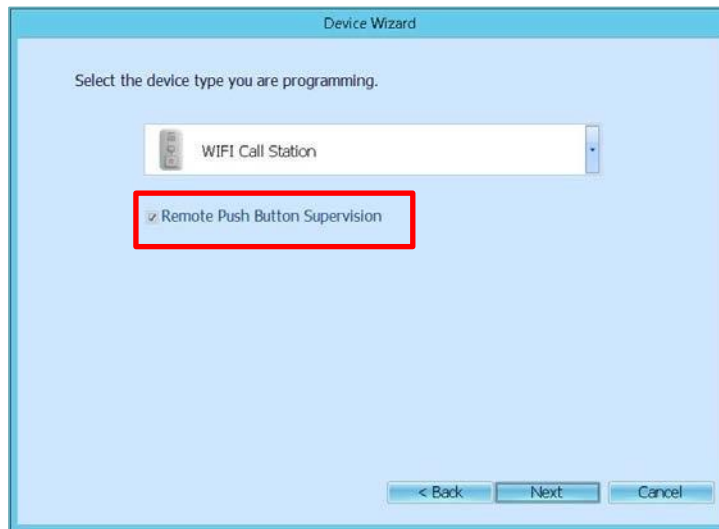
1. From **Arial** click on the **Home** tab.
2. Select the **Device Wizard**.
3. Click **Add a new device to my system**.



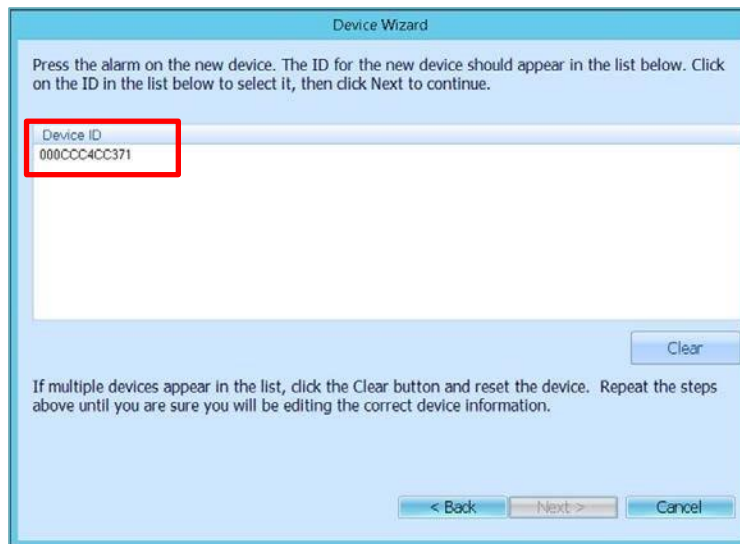
4. Click **Next**.
5. Scroll down and select '**WIFI Call Station**'.



6. When adding a WIFI Call Station, a check box displays with the option to select the **Remote Push Button Supervision** if the Call Station has a cord or not, as shown here (leave unchecked if there is no push button call cord).



7. Click **Next**.
8. Make sure the Call Station is On and then press the alarm button on the Call Station. The **Device ID** (Call Station MAC Address) appears in the Device Wizard window. Make sure the Device ID corresponds to the Call Station (The Call Station's MAC Address is located on the back of the device).



9. Select the Device ID.

NOTE: Be sure to choose the correct Device ID. The Arial system may read multiple devices. Compare the Device ID listed to the one on the actual device. Clear and repeat if necessary.

10. Click **Next**.

The screenshot shows a 'Device Wizard' window with the following fields and values:

Field	Value
ID	000CCC4CC371
Description	Call Station 1
Apartment	A101
Paging Zone	Zone 2
Category	Code Call
Serial Number	

At the bottom right, there are three buttons: '< Back' (disabled), 'Program' (highlighted in yellow), and 'Cancel'.

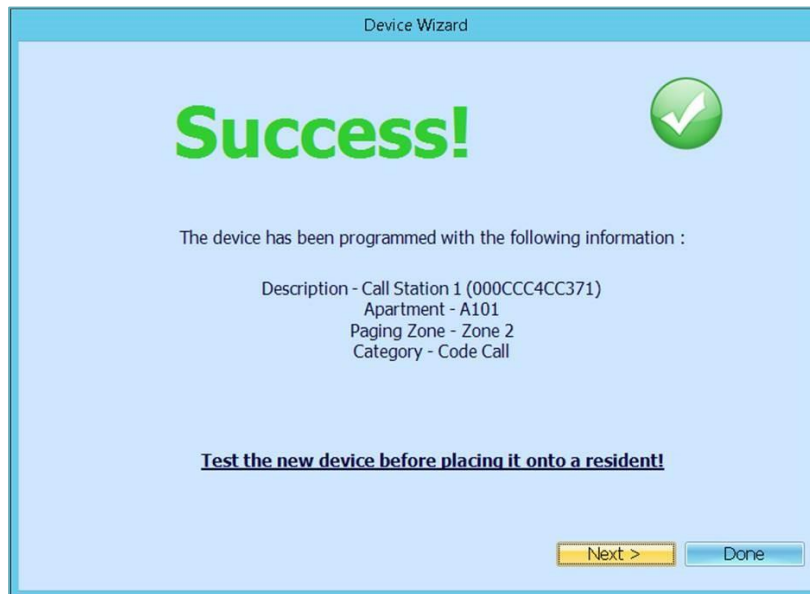
11. Perform the following according to the Call Station's placement:

- a. Enter in a **Description**.

***NOTE:** If adding a resident name, you can place \ \ around the name, allowing the name to appear on pagers, phones and the Home screen but not on signs in accordance with HIPPA regulations.*

- b. Select the **Apartment**, **Paging Zone** and **Category**.
- c. In the **Serial Number** field, enter in the Call Station's **MAC Address**.

12. Click on **Program**.



13. Click on **Next** to add another device or click on **Done** to close the Device Wizard.
14. Test the new Device before utilizing.

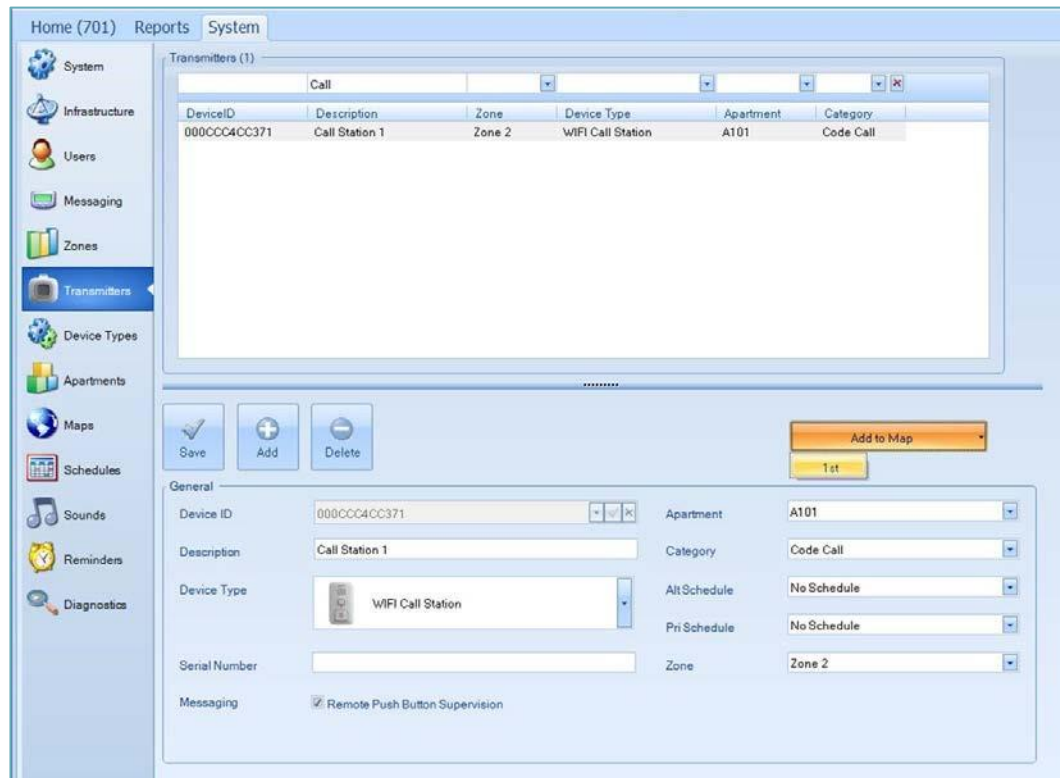
Task 2: Add the Call Station to a Map

Call Stations are placed in resident rooms, bathrooms and common areas and are therefore stationary devices.

***NOTE:** Make sure to add the call stations according to their correct locations, for example, if a CS100 or CS100CD is placed in a bedroom then its category will be 'Bed', if a CS100MR (Moisture Resistant) is placed in a bathroom then its category will be 'Bath'.*

Call Stations can only be added to maps after:

- The ALE and Arial have been integrated (Maps are automatically imported from the ALE).
 - The Call Stations have been added and configured in Arial.
1. From **Arial** click on the **System** tab.
 2. Select **Transmitters**.
 3. Search for the Call Station using the search fields.



4. Select the required Call Station.
5. Click on **Add to Map** and select the appropriate map.
6. The Map slides up. Move the cursor (appears as crosshairs) on the Map, as close as possible to the actual location of the Call Station, and then click the Map.

7. The Call Station appears on the Map.



For more information on Maps and Device icons, refer to the Arial Wireless Nurse Call Solution Admin Guide.

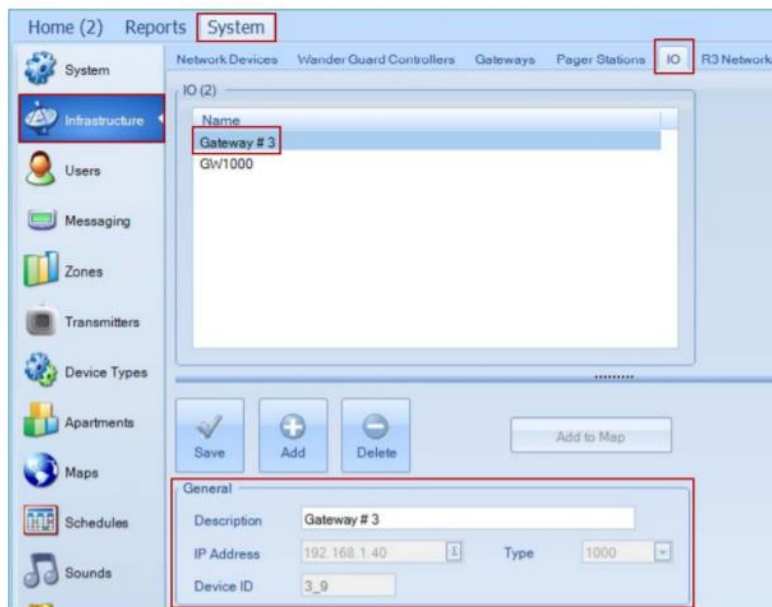
Configuring Gateways to Activate Dome Lights

Gateway outputs are configured in Arial to activate Dome Lights. The following section explains how to configure the Gateway's output settings in Arial to activate Dome Lights.

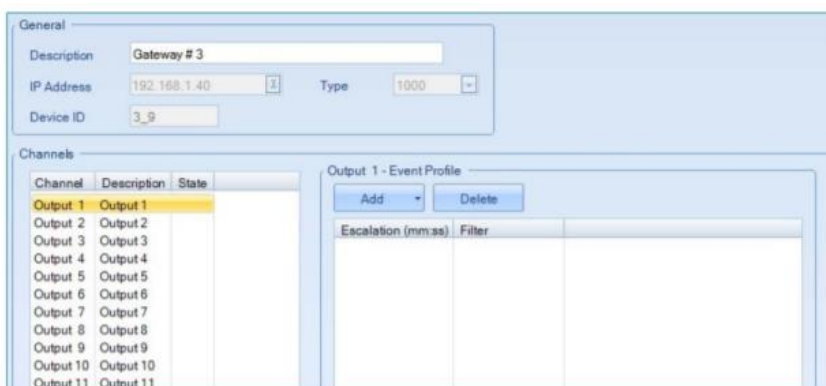
Prerequisite

- Gateways must be added and configured in the Engine.

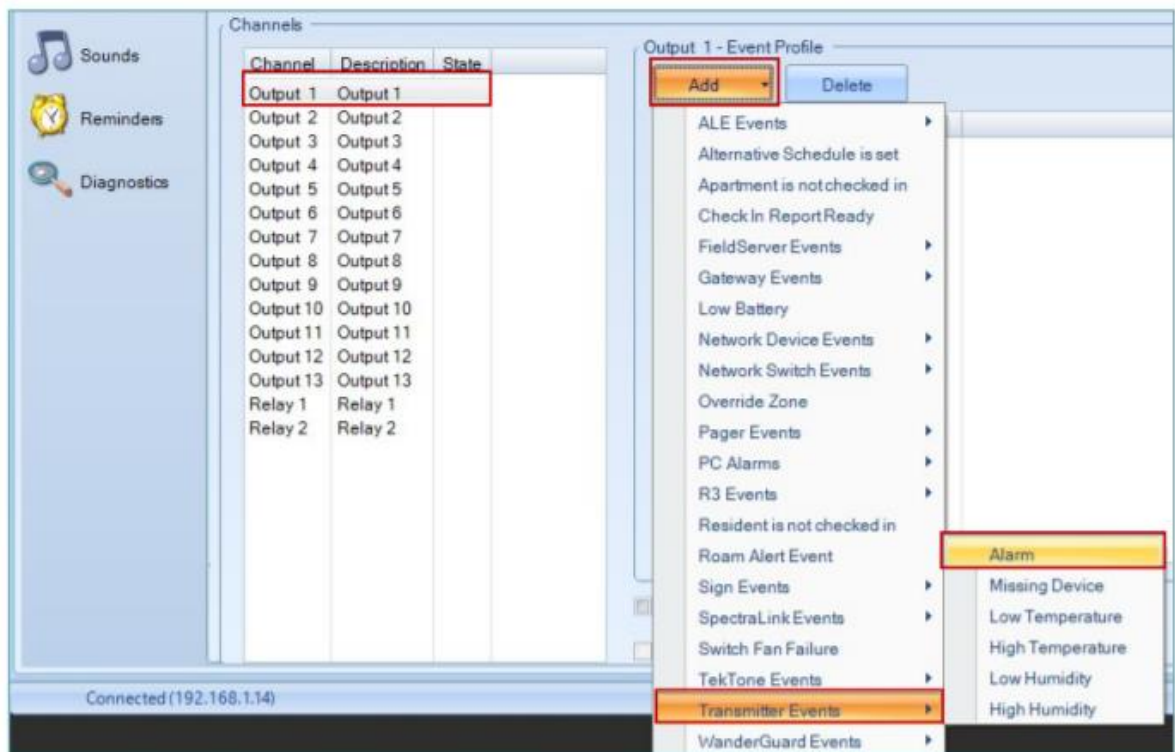
1. From Arial select System > Infrastructure tab.
2. Select the IO tab.



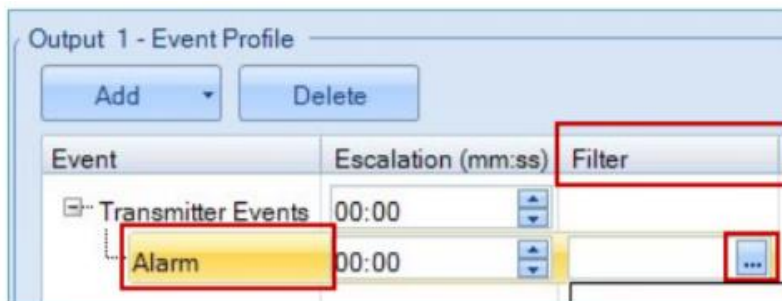
3. Select the required Gateway Name to configure, and verify that its General information is correct.
4. Select the Gateways Output Channel that is connected to the required Dome Light.
Note: GW1000 model shown. ADAM 6060 and GW3X00 models have different I/O options on the hardware, but the process to configure is otherwise the same.



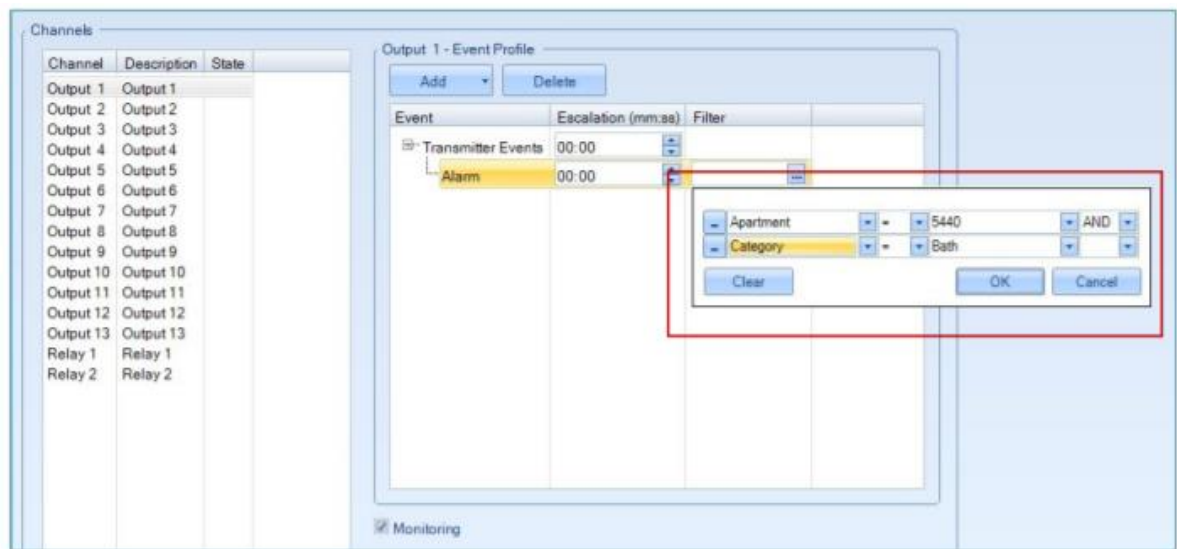
5. Under the Description column, triple click the Description name of channel, to edit its description name.
6. Enter in a new Description for the output that describes what the output is controlling on the Dome Light, for example; Rm A1 White, Rm A2 Red.
7. Click anywhere on the screen to accept the change.
8. Make sure the Channel Output you edited is still selected.
9. Click Add to add a new event profile for the selected output.
10. Select Transmitter Events > Alarm.



11. A new Alarm Event is added to the Event Profile.
12. Under the Filter column, click on the button next to the Alarm Event.



13. From the first drop down list select the required condition that will be used. The choices are Zone, Apartment and Category. See step 17 for figures depicting the next few steps.



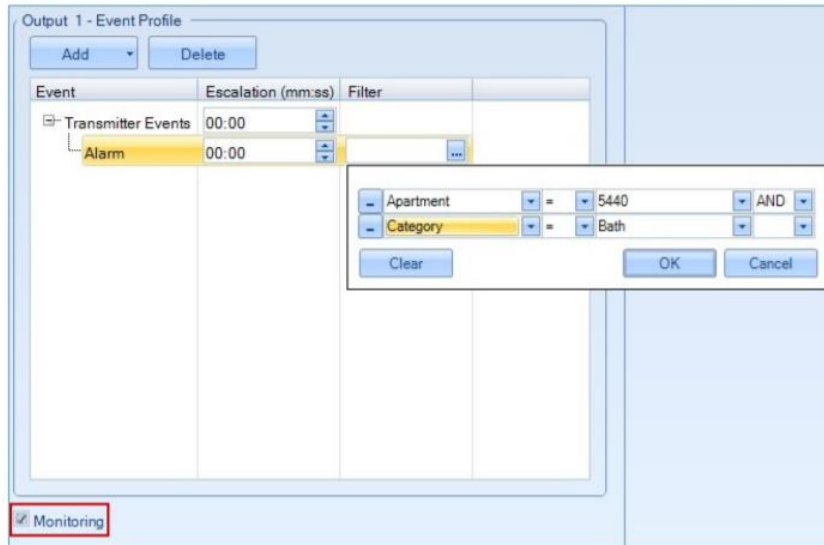
14. In the second drop-down, select the operation that will be used - equal or not equal (= or <>).

15. In the third drop-down, select the desired value.

16. In the fourth column, if multiple conditions will be used, select the logical operation that will be used. Choices are AND & OR. Note: All required conditions to activate an output will be evaluated simultaneously as one statement by the software. When AND is used, all conditions must be true; if OR is used, only one condition needs to be true.

17. If multiple conditions are being used, select their conditions from the four columns described in steps 13 to 16. Click the OK button to close the filter, then click the main Save button (top of screen) to save the output configuration.

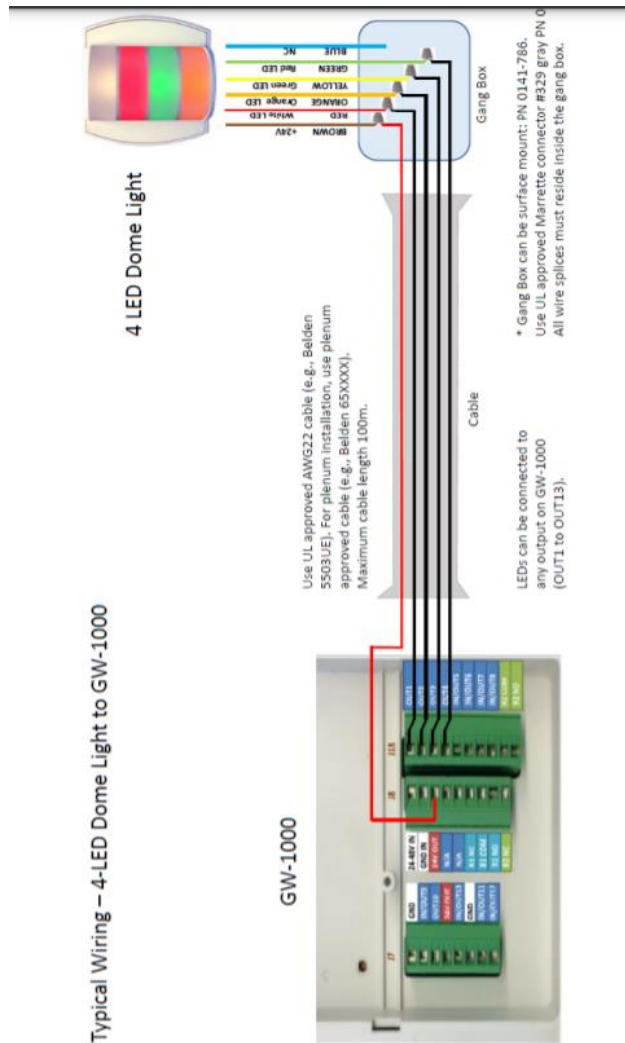
18. Check the Monitoring check-box to monitor the output.



19. Repeat steps 3 to 19 for any remaining outputs that will be configured.
20. Click the Save button to save all configurations you have made to the GATEWAY 1000 or 3X00 Module.

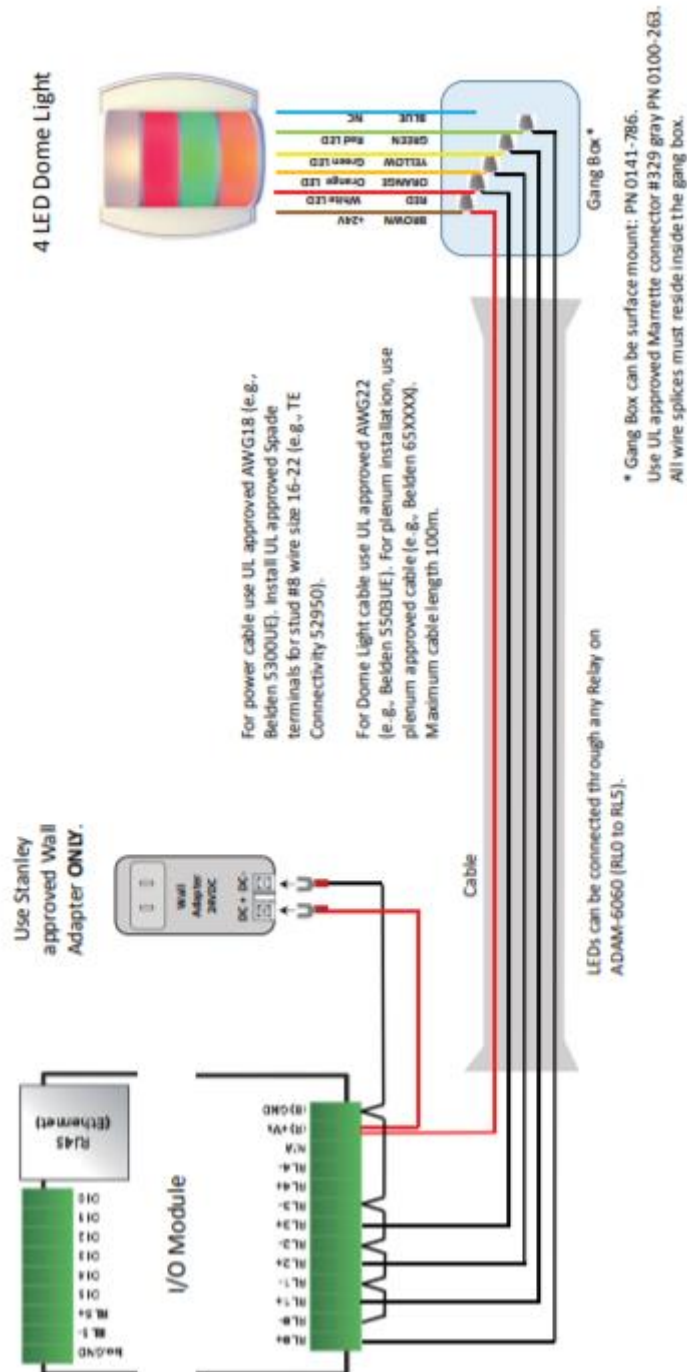
GW1000 to Dome Light 4 LEDs

The following diagram shows the wiring configuration between the GW1000 and a 4 LED dome light:



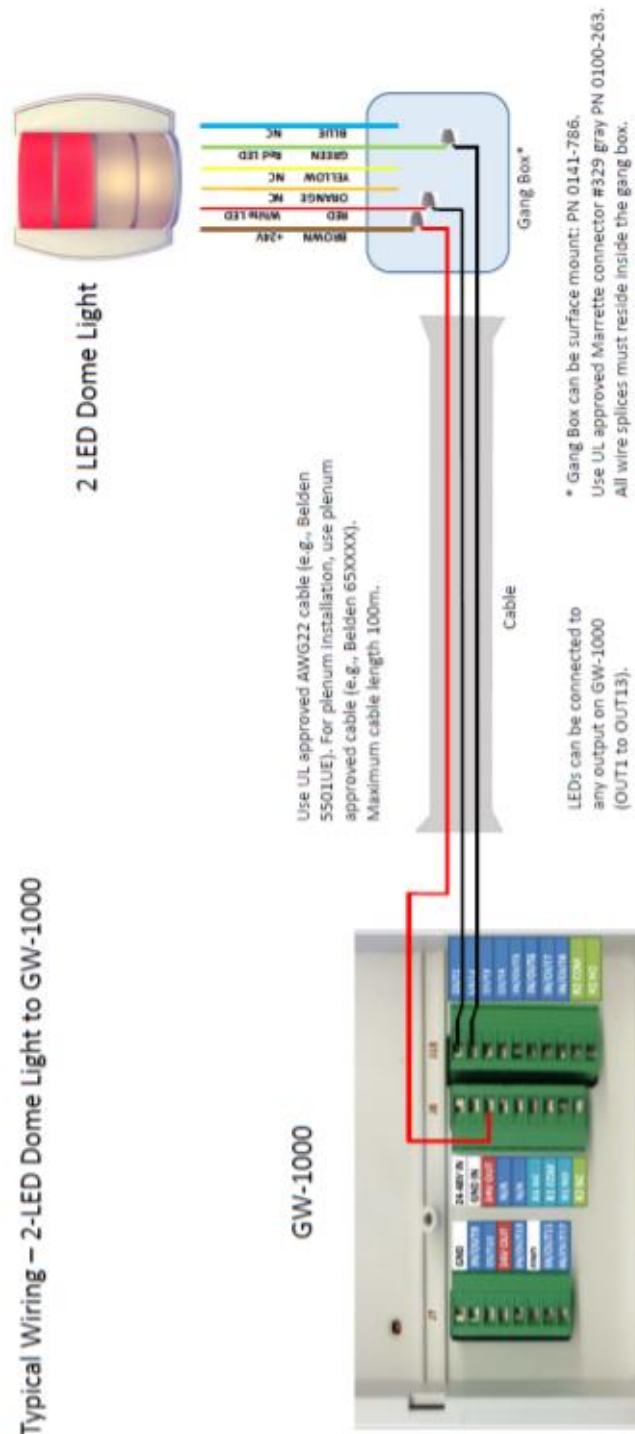
ADAM 6060 to Dome Light with 4 LEDs

The following diagram shows the wiring configuration between the GW1000 and a 4 LED dome light:



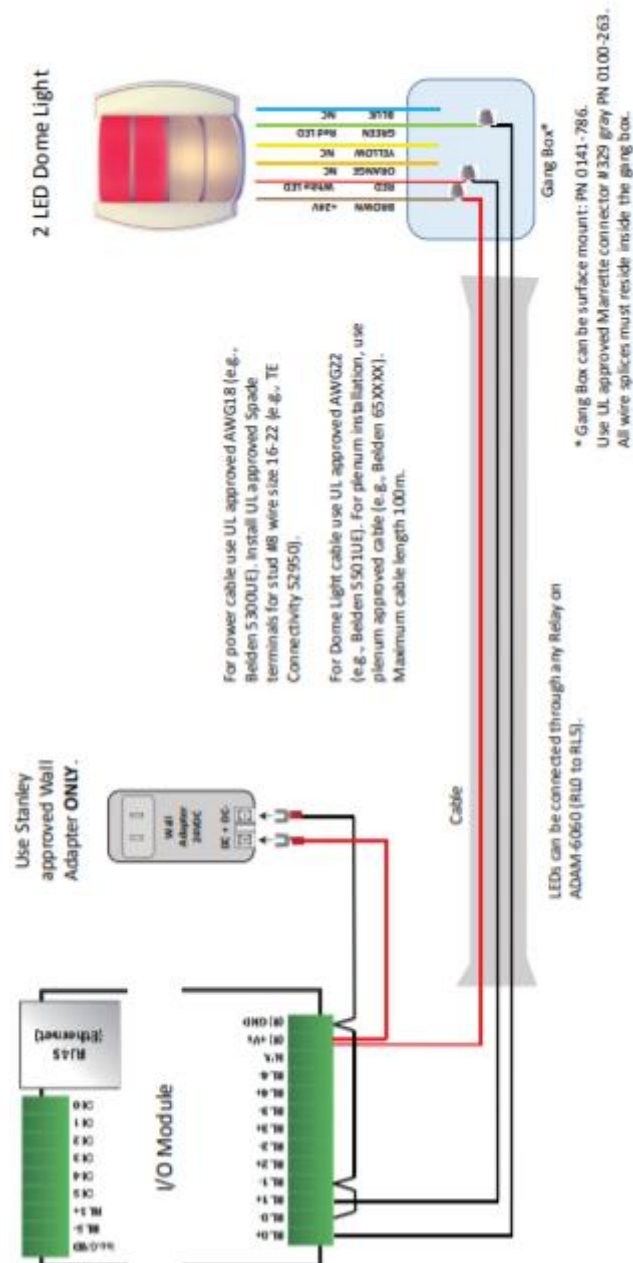
GW1000 to Dome Light with 2 LEDs

The following diagram shows the wiring configuration between the GW1000 and a 2 LED dome light:



ADAM 6060 to 2 LED Dome Light

The following diagram shows the wiring configuration between the ADAM 6060 and a 2 LED dome light:

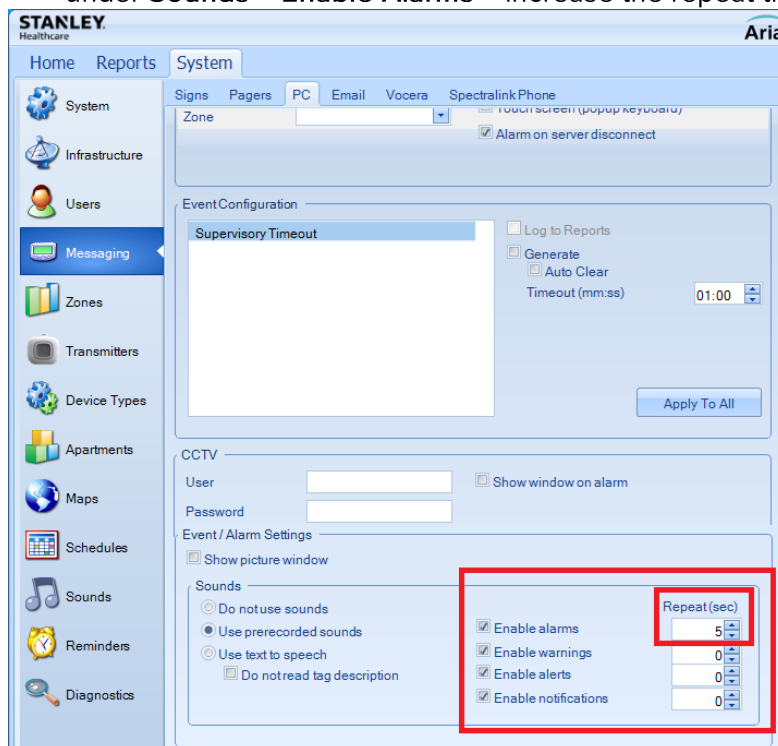


Setting the Default Alarm Sound

Call Station alarms in Arial need to be sounded for a minimum of 3 seconds and must be repeated at least every 10 seconds.

The following procedure explains how to select a default sound file from the Arial sound files library. All sound files that are over 3 seconds are set to repeat every 5 seconds by default.

1. From Arial select **System > System** tab.
2. Select **Sounds**.
3. Select a **Default sound** file that is a minimum of 3 seconds, such as Sonar Bell Pulse which is 3.5 seconds. The alarm is set by default to repeat every 5 seconds.
4. Click **Save**.
5. The alarm repeat time can be increased by clicking on **Messaging > PC** tab, and under **Sounds – Enable Alarms** – increase the repeat time in seconds.



Call Station Escalation Alerts

Certain states require reporting if a distress alert is not answered within a specified number of minutes. For example, if a distress call has not been dismissed within 5 minutes, then the alert is escalated, and a second alert is triggered.

Arial can be configured, according to a site request, to send pre-configured messages to the pagers and display signs that have been assigned to that zone.

Additionally, the system can be configured to continue sending messages for a specified time. If the alarm is not cleared within that time period, Arial can escalate the alarm, and send messages to supervisory pagers.

For more information and setup procedures refer to the **Arial Wireless Nurse Call Solution Admin Guide**.

Check-In Events (optional)

Check-In Events are optionally configured.

The Wi-Fi Call Station allows residents to perform a daily Check-In, within a configured time period, to indicate that they are OK. Check-ins are performed when a resident presses the Call Station's Dismiss/Check-In button. A Check-In message is then sent to Arial.

Arial automatically alerts staff if any resident fails to check in after the specified check-in period for the call station has passed.

For more information and setup procedures refer to the **Arial Wireless Nurse Call Solution Admin Guide**.

Reports

For the Arial Wireless Nurse Call Solution, reports are used to retrieve detailed information about check-ins and time taken to dismiss alerts (Avg. Response). Reports can be configured, at a customer's request, to generate at scheduled times. Instant reports can also be generated, if required.

For more information and setup procedures refer to the ***Arial Wireless Nurse Call Solution Administrator Guide***.

Solution Testing

Testing the solution is crucial for a successful deployment and must be done after a deployment.

General Solution Testing Requirements

- Arial is on-line
- AeroScout Location Engine is on-line
- All hardware devices are installed and configured

Call Station Testing

The following Call Station tests must be performed:

- Alarm
- Reset Alarm
- Escalation Alerts (if configured)

Testing Requirements

Check the following before testing.

- ✓ Call Stations are mounted and powered
- ✓ Call Stations have been added in Arial
- ✓ Call Stations have been added to maps (if desired)

Testing Call Station Alert/Dismiss Events

The following procedures test Call Station Alert and Dismiss Events.

Test Procedure	Expected Result
Resident Bedroom Trigger an alert by pressing the Call Station's call button, pulling the pull cord or pressing the remote push button. Dismiss the alert from the same Call Station by pressing the Dismiss/Check-In button.	Alarm message appears in Arial. Once the alert is dismissed at the Call Station, the alarm is cleared in Arial. For more information see Responding to alarms in the <i>Arial Wireless Nurse Call Solution Administrator Guide</i> .

Test Procedure	Expected Result
<p>Resident Bathroom</p> <p>Trigger an alert by pressing the Call Station's call button, pulling the pull cord or pressing the remote push button.</p> <p>Dismiss the alert from the same Call Station by pressing the Dismiss/Check-In button.</p>	<p>Alarm message appears in Arial.</p> <p>Once the alert is dismissed at the Call Station, the alarm is cleared in Arial.</p> <p>For more information see Responding to alarms in the <i>Arial Wireless Nurse Call Solution Administrator Guide</i>.</p>
<p>Common Area (if configured)</p> <p>Trigger an alert by pressing a Call Station's call button, pulling the pull cord or pressing the remote push button.</p> <p>Dismiss the alert by pressing the Call Station's Dismiss/Check-In button.</p>	<p>Alarm message appears in Arial.</p> <p>Once the alert is dismissed at the Call Station, the alarm is cleared in Arial.</p> <p>For more information see Responding to alarms in the <i>Arial Wireless Nurse Call Solution Administrator Guide</i>.</p>
<p>Escalation Alerts (if configured)</p> <p>Trigger an alert by pressing a Call Station's call button, pulling the pull cord or pressing the remote push button.</p> <p>Wait for the configured Escalation time to pass.</p>	<p>Check that the escalation alert has been sent to the specified messaging devices.</p>

Backing Up and Restoring

Arial

The Arial software contains a Backup command (manual tool) that creates copies of essential files used by the system that are unique to each site, including device configuration settings, map files and sound files. These are stored in a compressed backup file with the .bak extension.

STANLEY Healthcare recommends that the backup procedure be performed at least once a month, and whenever major changes are made to system settings.

For backup and recovery procedures, refer to the ***Arial Wireless Nurse Call Solution Administrator Guide***.

Location Engine

The AeroScout Location Engine performs an automatic back up each time a change is made to the configuration. The Location Engine stores the two most recent configurations in the backup folder.

By default the individual backup folders are stored in *C:\Program Files(x86)\AeroScout\AesBackup*

For more information on Location Engine backups refer to the ***AeroScout Location Engine Deployment Guide***.

IMPORTANT NOTES REGARDING BACKUPS AND RESTORING Backups:

Backups must be performed when Arial and Engine are in the same state. Since Engine performs an automatic backup each time a change is made, Arial must be manually backed up immediately after a change is made in the Engine. This will ensure that each system (Arial & Engine) is backed up in the same state.

Restoring:

When restoring a system, either Arial or Engine, both systems need to be restored regardless. Both systems must be restored using each system's latest backup. This will ensure that the systems' backup data is in sync. Restoring only one system will cause an inconsistency in synced data between the two systems.

Service and Maintenance

The Arial Nurse Call System is designed to be simple to install and maintain. The system continually monitors and reports faults on key equipment based on their severity and system configuration. Common system faults are described in this chapter.

Contact Technical Support at 800-380-8883 for assistance with operating, maintaining, and servicing the Arial Nurse Call System.

Servicing

***IMPORTANT** – Remove power before servicing any electrically powered components. This includes components connected to 120V outlets, PoE Network Switches, and Uninterruptable Power Supply.*

***IMPORTANT** – Unplugging the Uninterruptable Power Supply (UPS) alone does not remove power to devices it supplies power to. These devices remain powered using the internal battery of the UPS.*

Steps should be taken in the flowing order when servicing the UPS:

1. Turn the power switch OFF.
2. Disconnect the input power from wall.
3. Unplug all devices from the backed-up outlets.
4. Unplug all devices from the surge outlets.
5. Disconnect the 12VDC battery in the compartment of the UPS.

Fault Indicators Requiring Service

- Siren – Sounding of the Siren attached to the GW1000 is an indication that the entire Arial system may not be responding. This can be the result of the Arial Server or AeroScout Location Engine software no longer running. This can also happen if the computer where this software is installed has been turned off, is in the process of rebooting, or has locked up. **Immediate attention is required.**
- Warnings – Warning indications appear when there is a system fault that can impact multiple call points or residents. Warnings appear under a red banner on the Home screen of the Arial software. Clicking on this provides some basic information that can be used to indicate pieces of hardware that are involved. **Immediate attention is required.**

- Alerts – Alert indications appear when there is a system fault that can impact a single call point or resident. Alerts appear under a yellow banner on the Home screen of the Arial software. Clicking on the Alert banner provides basic information that can be used to indicate the hardware that needs servicing. Alerts appear when low batteries are detected in wireless call points. Alerts also appear if no communication has been received from a wireless call point for more than 12 hours. Alerts should be addressed within a week.
- Notifications – Notification indications appear when there is information available to you from the system. Generically, these appear when a reoccurring report is available to view. Clicking on the banner provides a brief description of the information that is available. Notifications are not from faults, therefore are not urgent. However, the community may need to take daily action based on the information in a scheduled report. Protocols should be defined and followed by the community, as needed, to provide proper care.

Routine Maintenance

Power Back-Up

UL1069 requirements along with most local regulations require that the nurse call system is connected to the facility's essential electrical system. Over time, it is possible that cords can be moved to different outlets and plugs. Refer to the Power Connection Overview section earlier in this document to confirm or correct as necessary:

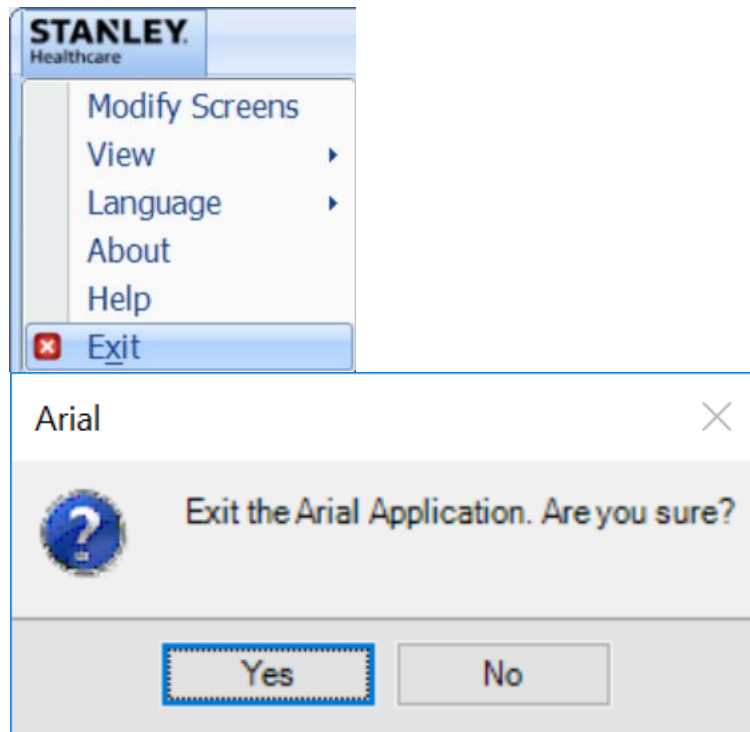
- Essential hardware is connected to the Battery Backup Outlets of the Uninterruptable Power Supply.
- The Uninterruptable Power Supply is plugged in a generator backed-up outlet on the essential electrical system.

Uninterruptable Power Supply Battery Replacement

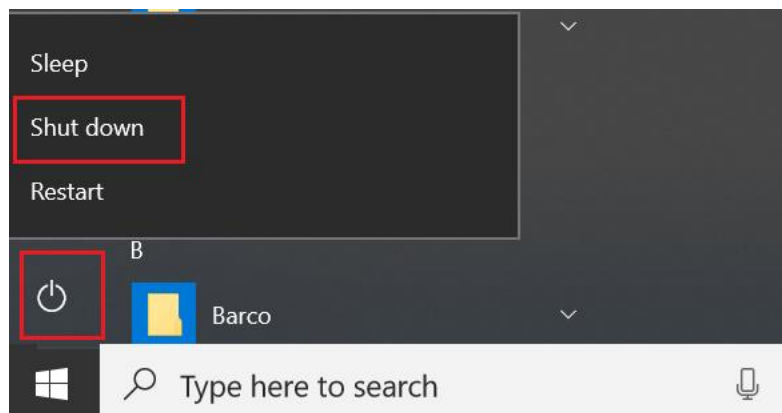
The batteries in an Uninterruptable Power Supply (UPS) should be replaced when they reach three years old.

It is recommended that you perform this procedure at a time when resident calls are expected to be unlikely or when residents are gathered and can easily be seen by caregivers (such as mealtimes).

1. **Close the Arial program** by logging into Arial with an Admin password as necessary, then go to the **STANLEY Healthcare Menu** and select **Exit**. Click **Yes** on the dialog window that appears.



2. Safely turn off the computer by going to the Start menu in the lower left corner of the screen then select Shutdown from the Power options. Wait for the computer to completely power off.



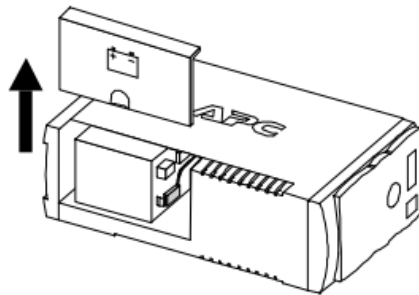
3. Turn the power switch of UPS off.
4. Unplug the power cord of the UPS from the outlet.
5. While viewing the UPS from the front, lay the UPS on its left side (diagram a).
6. Slide the battery compartment cover off the UPS (diagram a).
7. Grasp the tab attached to the battery and slide the battery partially out of the case. Grab the battery firmly and pull it straight out. The battery wires will disconnect as the battery is pulled out (diagram b).
8. Carefully unpack the new battery. Retain the packing carton so that the old battery can be recycled.
9. Insert the new battery halfway into the UPS (diagram d).

10. Connect the wires to the new battery as follows:
 - a. Red Wire - to red (positive) terminal
 - b. Black Wire - to black (negative) terminal

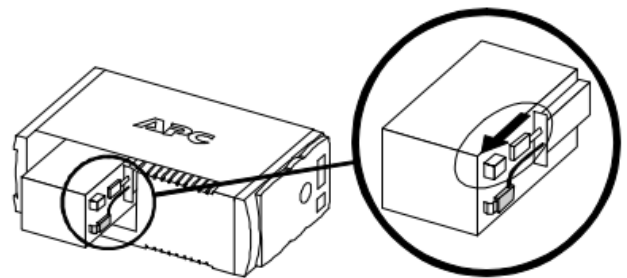
Note: Small sparks at the battery terminals are normal during connection.

11. Carefully insert the battery fully into the UPS.
12. Slide the battery compartment cover back into place.
13. Plug the power cord of the UPS back in the outlet on essential power with the generator backup.
14. Turn the power switch of UPS ON.
15. Press the Power button on the front of the computer. Wait for Arial to boot.
16. Use a pendant or call station to place a test call and verify the alarm appears on the correct computers and message devices. Confirm no Warning flags persist in Arial after 5 minutes.

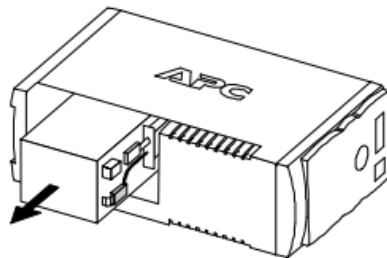
Note: Small sparks may occur during battery connection. This is normal.



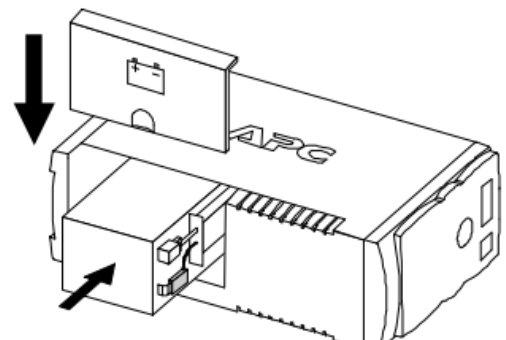
a. Open the battery compartment, as shown.



c. Connect the red battery wire to the \oplus positive battery terminal.



b. Pull the battery about half way out, as shown.



d. Push the battery into the battery compartment and re-install the cover, as shown.

Verifying Data Backups

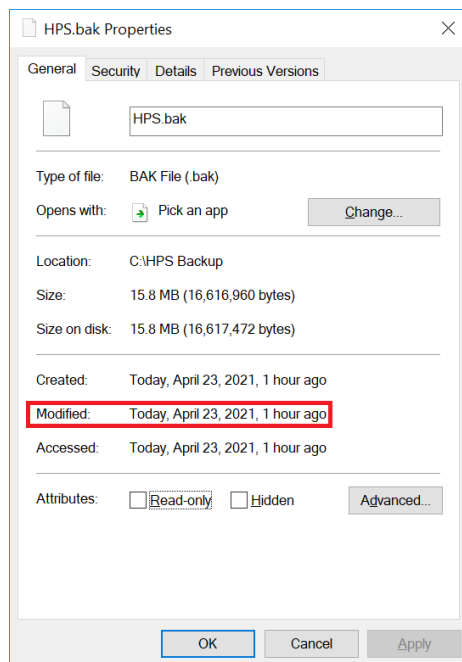
Data back-ups are crucial to quickly restore the Arial system to working order should there be a server failure or loss of data. Arial automatically creates back-ups of the database to a default directory located at C:\HPS Backup

It is strongly recommended that a back-up be created in a location that is not on the same disk drive where Arial is installed. Instructions for backing up the database are provided in the chapter of this document entitled **Backing Up and Restoring**.

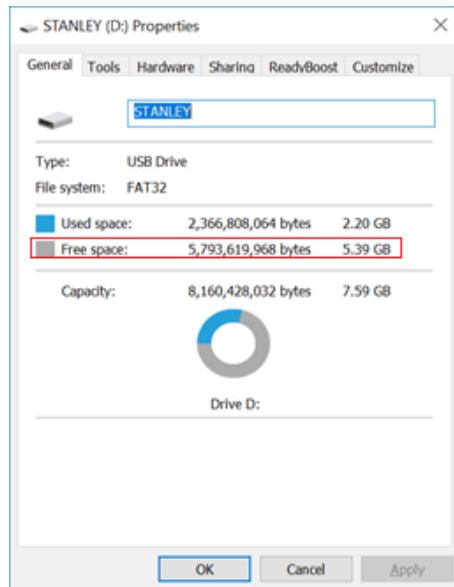
Periodically it is a best practice to confirm these backups are occurring.

1. In Arial, go to **System > System > Server**.
2. In the **Database Backup** section, make note of the path in **Server Backup Directory** and the drive name saved in the **Removable Name** field.

3. Using Windows Explorer, navigate to the directory listed in the **Server Backup Directory** field.
4. Right-Click on the HPS.bak file, select **Properties** then confirm the **Modified date** is within the last 24 hours.

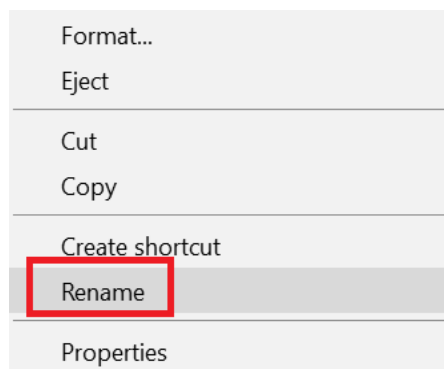


5. Use Windows Explorer and navigate to the USB drive listed in the Removable Name field. If the drive is not there, it the USB drive has likely been removed from the computer. See instructions later in this section to replace the drive.
6. In the root directory of this drive, locate then right-click on the HPS.bak file, select **Properties**, then confirm the **Modified date** is within the last 24 hours.
7. Use Windows Explorer to navigate to **My PC**. Individually right-click on the drive locations for the **Removable Drive** and **Server Backup Directory** and select **Properties**. Confirm you have at least **5 GB** of **Free space** remaining. If you need additional storage either remove unneeded files or replace with a larger drive. See **Replacing Removable Drive** later in this section for instructions.

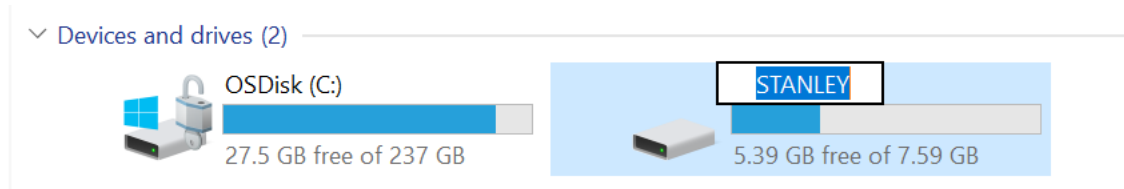


Replacing a Removable Drive

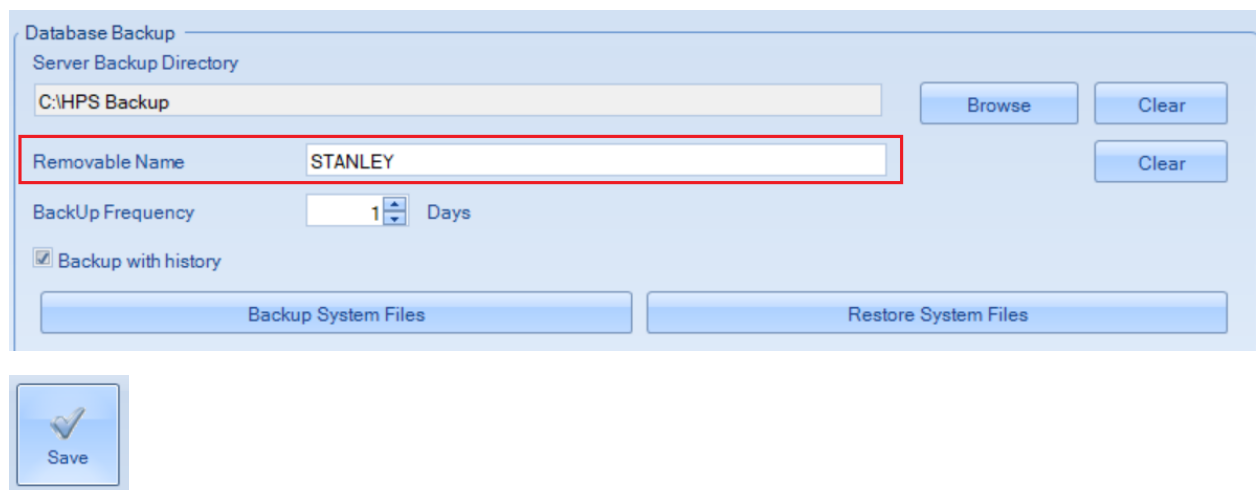
1. If the original USB drive has been lost or is full, insert a new USB drive into one of the USB ports on the computer (ports on the back are less likely to have the drive removed).
2. From Windows Explorer go to **My PC**, right-click on the USB drive, then select **Rename**.



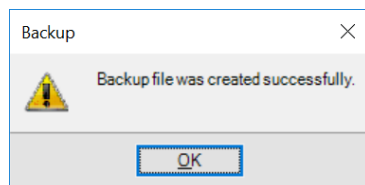
3. Copy this name, then click somewhere on the screen to deselect.



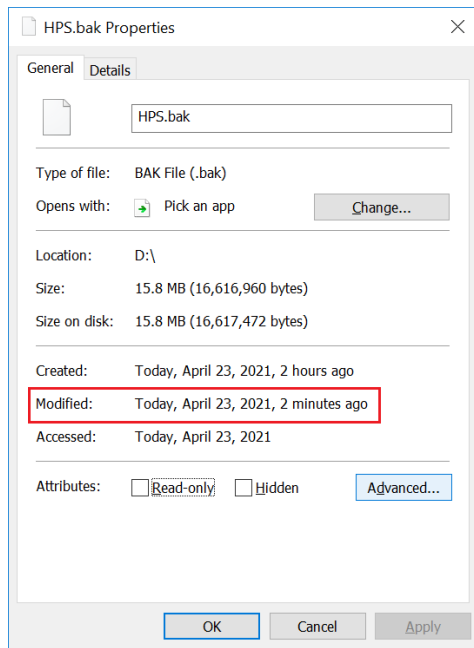
4. Go to **System > System > Server** in Arial and paste this new name into the **Removable Name** field. Click **Save**.



5. Create a back-up file by clicking the **Backup System Files** button. A confirmation window appears showing that the backup was **created successfully**. Click **OK**.



6. Use Windows Explorer and navigate to the **root directory** of your **backup drive**. Locate a file called **HPS.bak**. Right-click and select **Properties**. Confirm the **Modified** time is from just a moment ago when you clicked the **Backup Files** button, then click **OK** to close the Properties window.

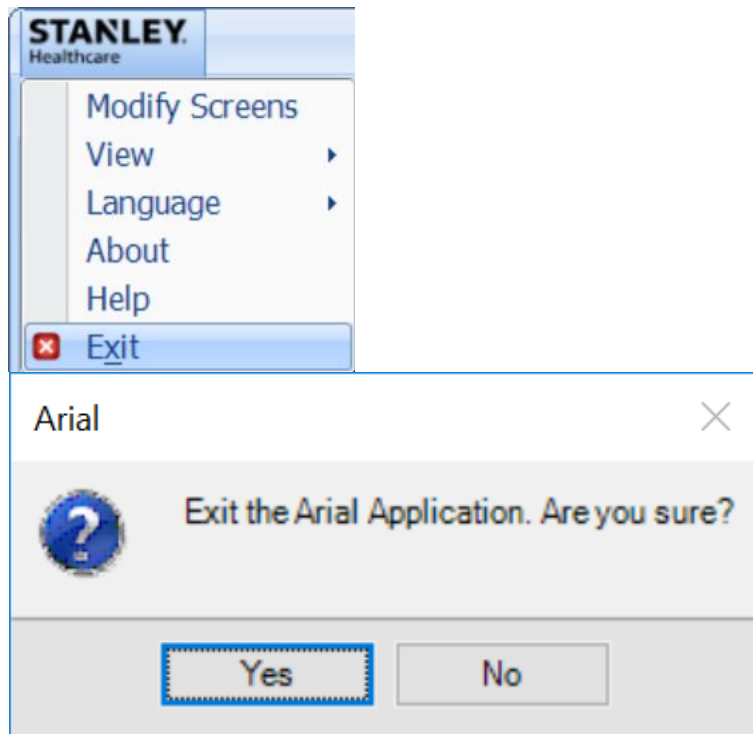


Cleaning the PC Fan

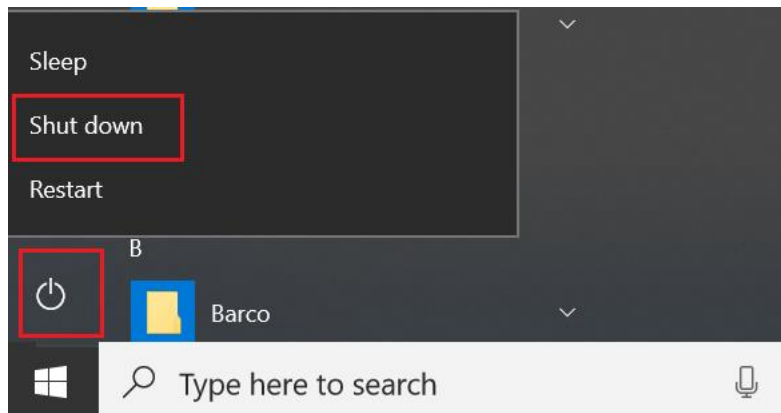
Over time, the cooling fans on a computer that runs constantly can cause dust and lint to build up and eventually stall the fan or limit air flow needed to properly cool the electronic components in the computer, and can lead to computer failures due to overheating. This is preventable by clearing the dust from the fans and air openings on the computer. Clean the fan annually or whenever dust build-up is noticed on the computer's fans and air openings.

***NOTE:** It is recommended that you perform this procedure at a time when resident calls are expected to be unlikely or when residents are gathered and are easily seen by caregivers (such as mealtimes).*

1. Refer to the backup procedure in the previous section for steps to **create a database backup** before proceeding.
2. **Close** the Arial program. Log into Arial with an Admin password as necessary, then go to the **STANLEY Healthcare Menu** and select **Exit**. Click **Yes** on the dialog window that appears.



3. **Safely turn off the computer** by going to the **Start Menu** in the lower left corner of the screen then select **Shutdown** from the Power options. Wait for the computer to completely power off.



4. After the PC turns off, **turn off the power switch** on the Uninterruptable Power Supply (UPS) and **disconnect the power cord** of the computer from the outlet on the back of the UPS to help prevent injury to yourself or damage to the computer.



5. Use a **can of compressed air** (available from most office supply stores) to **blow the dust out of the fans** on the back of the PC and any vent openings on the back or front cover of the computer.
6. **Open the computer case.** Usually there is a latch on the back and/or a couple screws that can be removed that allows one side of the computer case to be taken off. Sometimes the case side must be slid towards the back of the computer before it can be lifted off.
7. Inside of the PC, look for fans on the circuit boards. There is generally at least one fan on the main processor. **Blow the dust out of the processor fan** and any others you see.



8. Look for any other **fans on the case** and blow them out with the can of compressed air. Look at the **inside of the case** and **blow out any remaining dust** that has accumulated in the case.



9. **Reinstall the side cover** you removed in the early step back on by reversing the steps you used to remove the cover.
10. **Connect the power cord** of the computer back to the same **battery backed up outlet** on the back of the UPS.
11. Turn the **power switch** of the UPS on.
12. Press the **Power button** on the front of the computer. Wait for Arial to boot.
13. Use a pendant or call station to place a test call and verify the alarm appears on the correct computers and message devices. Confirm no Warning flags persist in Arial after 5 minutes.

***NOTE:** The steps above for cleaning the fans should also be performed on any computers running the Arial client software that are located at nurses' stations.*

Arial Software Updates

STANLEY Healthcare releases updates to the Arial software to help add additional capabilities to the system, maintain security and compatibility with hardware, and address recent software issues.

***IMPORTANT:** Contact STANLEY Healthcare Technical Support at 800-380-8883 before attempting a software update. They will work with you to ensure the proper upgrade steps are followed and that your hardware will be compatible with the new version of software.*

Computer Operating System Updates

The Arial system uses computers that run on approved versions of Microsoft's Windows Operating System. See the Arial Software Installation Guide for operating system requirements for your version of Arial.

Periodically Microsoft and other companies that manufacture hardware used in your computer will release updates to their software. These updates help to address

security vulnerabilities and other issues that have been discovered with the software or hardware on your system. STANLEY Healthcare recommends installing these updates to help maintain your system. Microsoft and other companies regularly release updates monthly. Microsoft has established the second Tuesday of every month as Patch Tuesday. The latest patches and updates to anti-malware programs are available during this time.

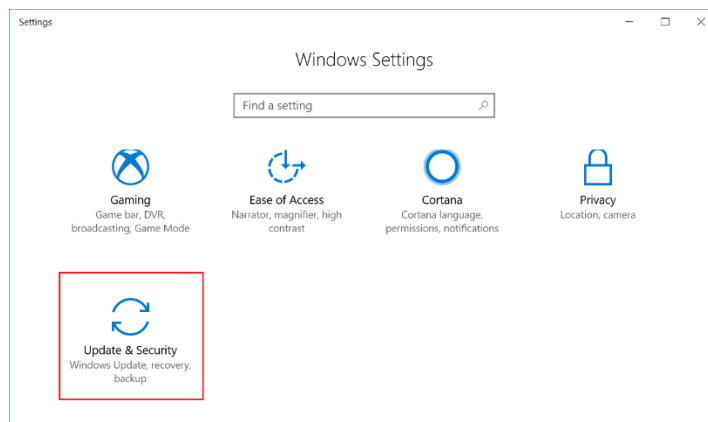
Choose a day within the week following Patch Tuesday to look for and install the latest system updates.

NOTE: *Some system updates are critical, and Microsoft will eventually force these to install.*

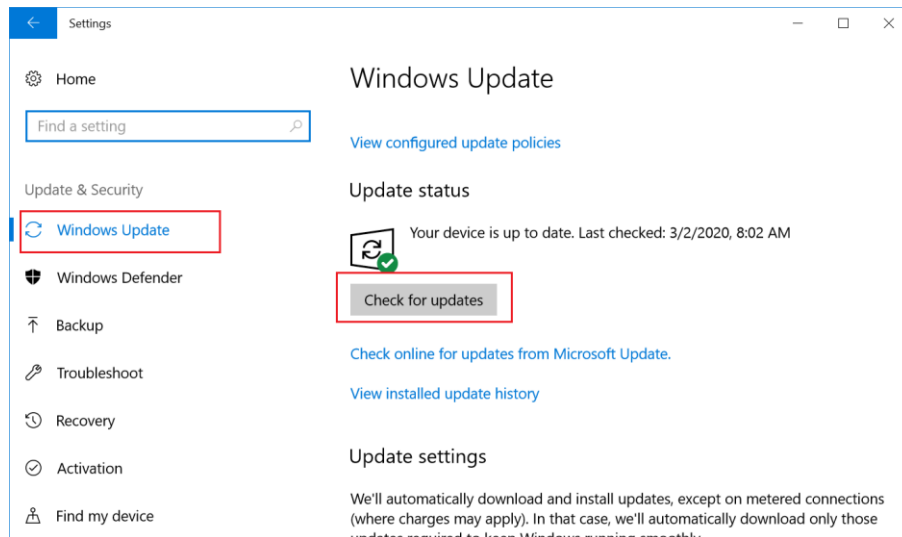
IMPORTANT: *Windows updates and similar software updates from other companies often require the computer to reboot. Arial will not receive calls from residents while the computer is rebooting.*

Some of these updates can take as long as an hour or more to load. It is recommended that you perform these updates at a time when resident calls are expected to be unlikely or when residents are gathered where they are easily observed by caregivers (such as mealtimes).

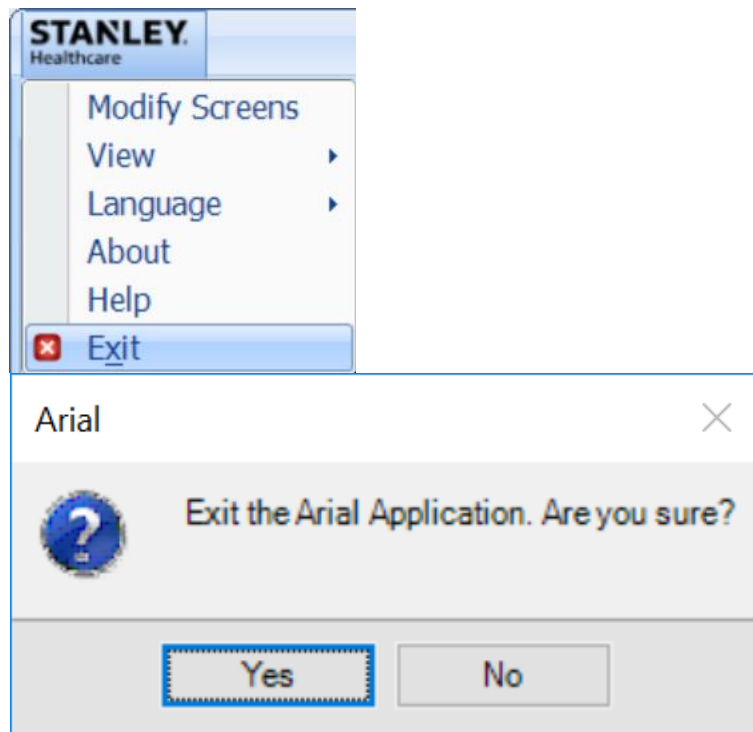
1. Refer to the backup section for steps to **create a database backup** before proceeding.
2. Press **Windows Key + I**, to open the **Windows Setting** screen.
3. Choose **Update & Security**.



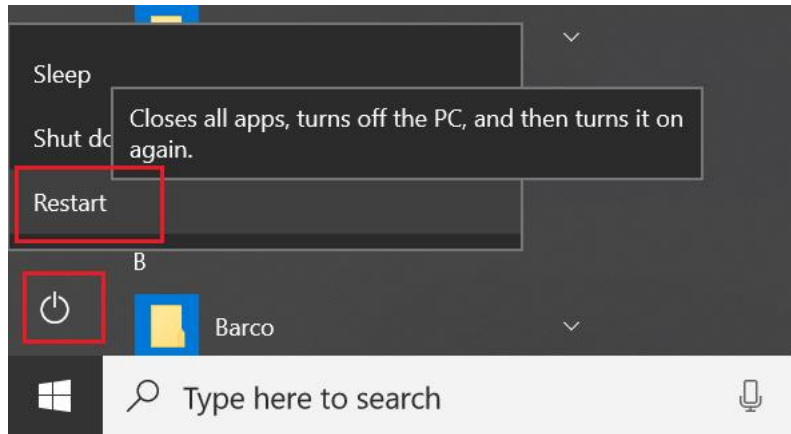
4. Select the **Windows Update** option along the left side, then click the **Check for Updates** button.



5. If updates are available, you will have the option to download and install them. Follow the onscreen prompts.
6. After all updates have been downloaded and installed, it is recommended that you reboot the computer to be sure that everything is fully installed, and the computer will not reboot by itself later.
7. **Close the Arial program** by logging into Arial with an Admin password as necessary, then go to the **STANLEY Healthcare Menu** and select **Exit**. Click **Yes** on the dialog window that appears.



8. **Safely turn off the computer** by going to the **Start Menu** in the lower left corner of the screen then select **Restart** from the Power options.



9. Wait for the computer to completely power off, then power on again.
10. Wait for Arial to launch.
11. Use a pendant or call station to **place a test call** and **verify the alarm appears** on the correct computers and message devices. Confirm **no Warning flags** persist in Arial after 5 minutes.

Operation Testing

***NOTE:** It is recommended that Operation Testing is performed annually or after any Arial software update.*

1. Use pendant or call station to place a test call in each zone.
2. Verify the alarm appears on the computer at the nurse station that responds to the alarms and Dome Light outside of room and zone dome light at corridor intersections.
3. If the Arial Mobile Application or Pagers are being used, confirm the alarm appears on the staff-carried devices for caregivers responsible for responding to the alarms.
4. If optional LED signs are installed, confirm the alarms appear on all LED signs where the call should appear.
5. Cancel the alarm from the device you used to create the alarm. Confirm the alarm is cleared on all appropriate devices described in the steps above.
6. Repeat the steps above for each zoned area of the community where different caregivers view alarms from a limited number of apartments.

Coverage Testing

***NOTE:** It is recommended that Coverage Testing is performed at least once a year or whenever there have been remodels, building additions, network upgrades, or other work that could have changed how wireless signals are received by the system.*

Using a pendant and a pager or phone with Arial Mobile app is recommended for the following test.

- Walk to the ends of the hallways on each floor of each building and place a test alarm and verify the alarm appears on the system. Clear the alarm after each test.
- For campus settings where there are smaller homes located outside of the main building, test alarms from outside the furthest homes in each neighborhood.
- If alarms are missed, confirm whether the alarm was missed only on the staff-carried device or if the alarm was not received by the system at all. Contact Technical Support at 800-380-8883 for additional troubleshooting assistance.

Recommended Maintenance Schedule

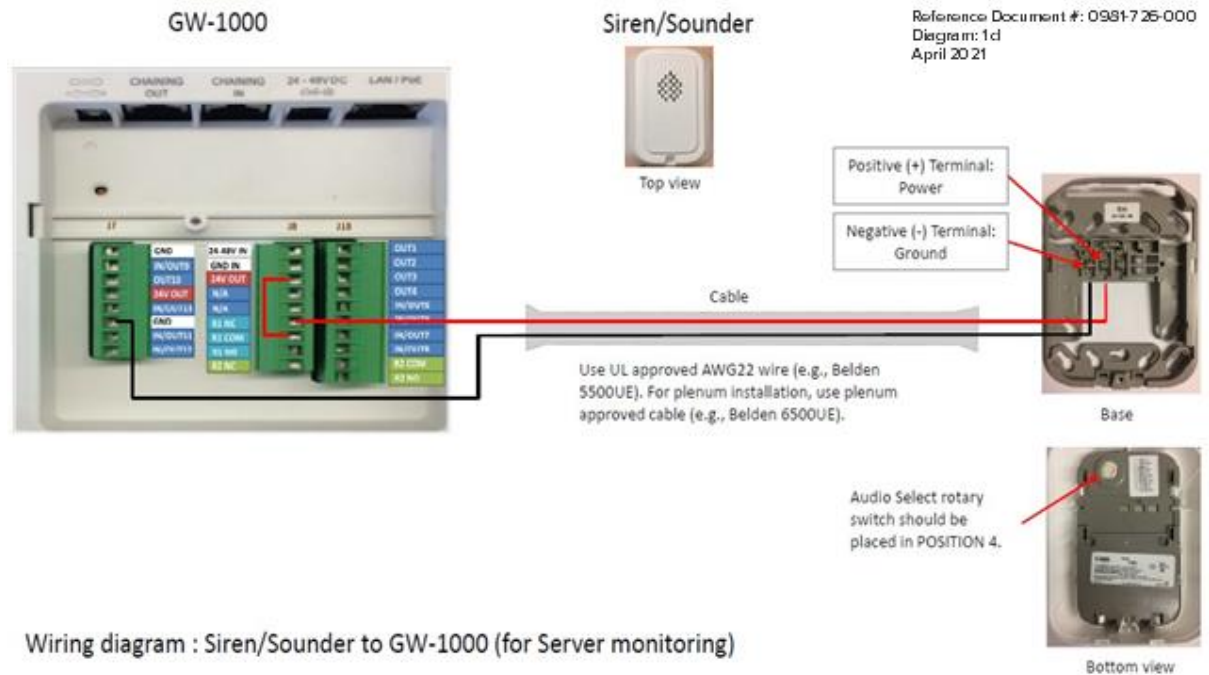
Task	Minimum Interval
Data Backups	Daily - Automatic Backup, Quarterly - Verify Drive Integrity
Computer Operating System Updates	Monthly
Arial Software Updates	Yearly
Power Backup	Annually
UPS Battery Replacement	3 Years
Fan Cleaning	Yearly
Operation Testing	Following Operating System or Arial Software Update
Coverage Testing	Yearly

Appendix

Wiring Diagrams

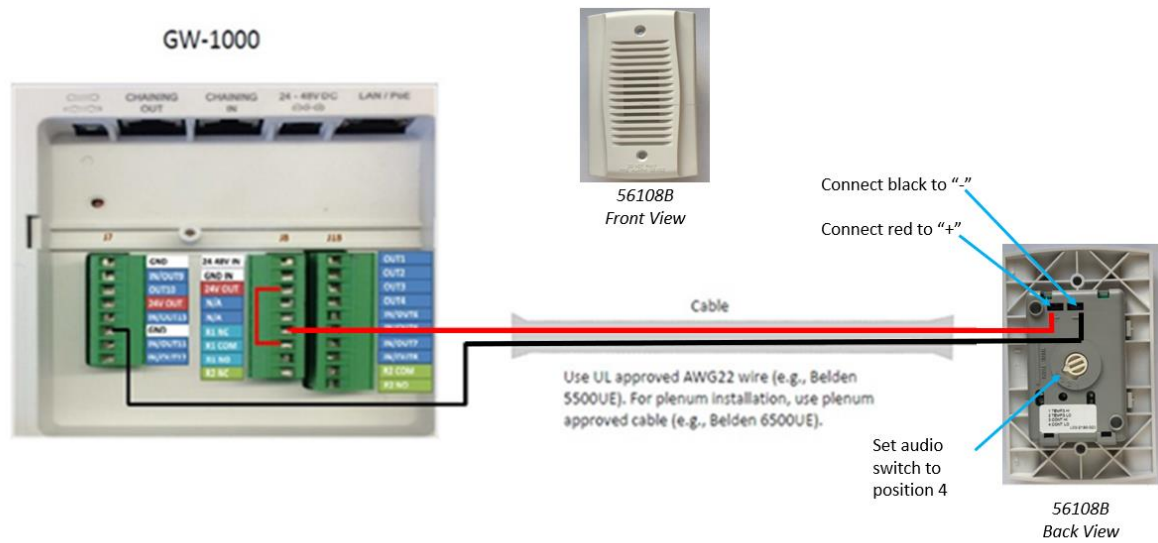
GW1000 to 56108 Siren (Chime) – Server

The following diagram shows the wiring configuration between the GW1000 and a 56108 siren for server monitoring:



GW1000 to 56108B Siren (Chime) – Server

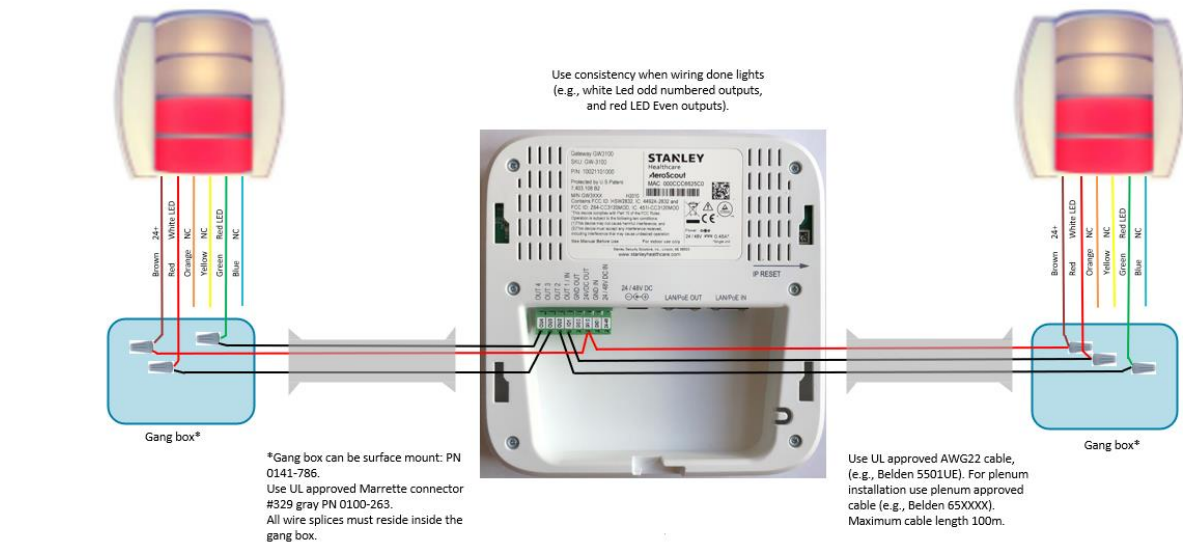
The following diagram shows the wiring configuration between the GW1000 and a 56108B siren for server monitoring:



Wiring diagram : Siren/Sounder to GW-1000 (for Server monitoring)

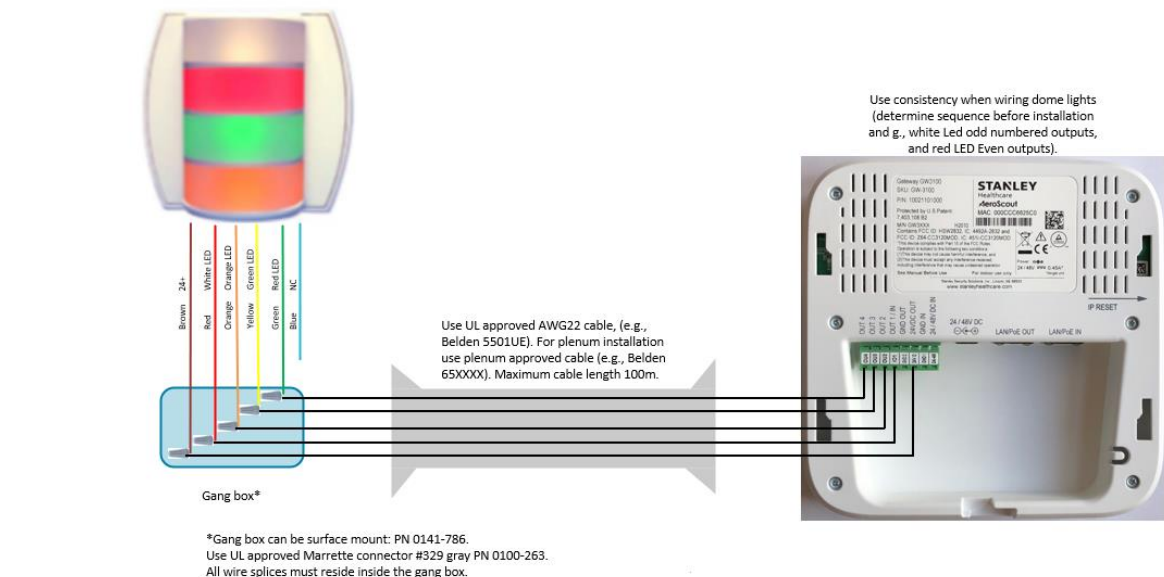
2-LED Dome Lights to GW3X00

Two 2-LED Dome Lights Wired to GW3X00



4-LED Dome Lights to GW3X00

4-LED Dome Light Wired to GW3X00



Troubleshooting

ALE SNMP Communication Failure

Arial has an SNMP Agent that monitors the status of all connected Gateway GW1000 devices from the ALE. Gateway faults and issues are reported via the SNMP Agent in Arial. The SNMP IP address must be the same as the Arial/HPS Server to prevent communication errors.

If an incorrect SNMP IP address is entered (in Arial under System>System), the SNMP agent will fail to communicate with the ALE and the following error message will appear:



To resolve the above issue, perform the following:

1. Check the SNMP IP address and make sure it is the same as the Arial/HPS Server.
2. Restart the HPS Server (psService from Services).

Safety, FCC Warnings and Warranty

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- a) Reorient or relocate the receiving antenna.
- b) Increase the separation between the equipment and receiver.
- c) Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- d) Consult the dealer or an experienced radio/TV technician.

Operation is subject to the following two conditions:

- a) This device may not cause harmful interference
- b) This device must accept any interference received, including interference that may cause undesired operation.

FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

WARNING: This device complies with Part 15 of the FCC Rules and RSS-210 of Industry and Science Canada. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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

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

STANLEY Healthcare (“STANLEY”) Standard Warranty and Disclaimer For Arial® Products (“Products”)

Warranty and Disclaimer. Products consisting of the Arial® Communications System (not including the Software which is covered by STANLEY’s separate warranty contained in the Software Licensing Agreement) is warranted to the Owner to be free of manufacturing defects for a period of one year from the date installation is completed. EXCEPTION: Certain portable pagers and accessory Products are warranted to be free from manufacturing defects for periods ranging from thirty (30) days to one (1) year as specified to Customer. EXCEPTION: WanderGuard® and Signaling Devices and RoamAlert® Tags (if used as part of an Arial system) are warranted to be free of manufacturing defects at the time they are put in service as set out in the operating instructions. Because signaling devices and tags are battery

powered, NO SPECIFIC LIFE IS GUARANTEED. If any defects covered by this warranty appear within the above stated one year period, upon delivery of the defective unit to STANLEY, STANLEY will, at its sole option, repair or replace the defective component on an exchange basis with new or rebuilt parts at its expense, without charge. On-site warranty service will be provided by STANLEY only if a reported problem is deemed by STANLEY to be not otherwise solvable through the exchange of defective components, the remote troubleshooting and diagnostics capabilities of the System or consultation with an STANLEY technician by phone. STANLEY is not responsible for warranty service should the STANLEY logo or the serial number be removed or should the Arial Communications System fail to be properly maintained or fail to function properly as a result of misuse, abuse, neglect, improper shipping, incorrect wiring not our own, damage caused by disasters, such as fire, flood and lightning, damage caused by faulty or leaking batteries not supplied by STANLEY, service other than by STANLEY or units in use in violation of instructions furnished by STANLEY. Travel expenses to and from the Facility and on-site labor charges will be the Owner's responsibility during the warranty period if a reported problem is the result of any of the aforementioned circumstances, a change in repeater locations not otherwise authorized by STANLEY, or a change in the Facility, e.g. removal of a wall or other remodel or structural change or the presence of a new interference source in the environment not present at the time of the Facility walkthrough, review of site plans, or during system installation, etc. Owner must obtain a return authorization number from STANLEY prior to returning equipment to STANLEY for warranty service. Postage, insurance, or shipping costs incurred in presenting the Arial Communications System for warranty service are Owner's responsibility. Because each radio system is unique, STANLEY disclaims liability for range, coverage, or operation of the Arial Communications System as a whole under this warranty. This warranty shall not be enlarged, and no obligation or liability shall arise out of STANLEY rendering of technical advice, facilities, or service in connection with Purchaser's purchase of the Arial Communications System. Owner recognizes that a properly installed and maintained Arial Communications System may only permit residents to seek assistance. It does not ensure or guarantee that there will be no death, personal injury and/or damage to property. As a result, STANLEY does not claim that the Arial Communications System may not be compromised and/or circumvented, or that the Arial Communications System will prevent any death, personal injury and/or damage to property in circumstances which might prompt the use of the Arial® Communications System, or that the Arial Communications System will in all cases provide adequate warning or protection. Except for the foregoing warranties, which shall be the exclusive warranties with respect to any Products, STANLEY MAKES NO WARRANTY OR REPRESENTATION OF ANY KIND, EXPRESS OR IMPLIED, WRITTEN OR ORAL, REGARDING INFORMATION GIVEN OR THE PRODUCTS OR SERVICES SUPPLIED AND EXPRESSLY DISCLAIMS ALL EXPRESS AND IMPLIED WARRANTIES, REPRESENTATIONS AND CONDITIONS, INCLUDING WITHOUT LIMITATION ALL WARRANTIES AND CONDITIONS OF QUALITY, NONINFRINGEMENT, MERCHANTABILITY AND SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE TO THE EXTENT PERMITTED BY LAW. STANLEY WILL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES FOR ANY CAUSE OF ACTION, WHETHER IN CONTRACT, TORT OR OTHERWISE. Consequential, incidental, and indirect damages include, but are not limited to, lost profits, lost revenue and loss of business opportunity, whether or not Stanley was aware or should have been aware of the possibility of these damages.

About STANLEY Healthcare

Over 15,000 hospitals and senior living communities rely on STANLEY Healthcare solutions to empower caregivers to deliver better care. STANLEY Healthcare is a part of Stanley Black & Decker and a proud supporter of the Alzheimer's Association®. Learn more at stanleyhealthcare.com.

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