STANLEY®
Healthcare

Empowering Caregivers

Arial® Wi-Fi Wireless Nurse Call System

Deployment & Maintenance Guide for UL1069

Arial®

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Introduction

The STANLEY Healthcare Arial Wi-Fi Wireless Nurse Call System, for Skilled Nursing Communities, is designed to enhance the safety of senior living residents, while also providing advanced tools for event management, staff notification and reporting.

The Solution uses fixed Call Stations, in resident rooms and bathrooms, together with Wi-Fi wireless technology, to help provide residents throughout the senior living community a convenient way to summon help.

When a resident activates a call for assistance, an alert signal is sent over the wireless network to the Arial Server and is displayed at a nurse's station PC with the alarm point's details and room information. Alarms are reset physically from the device that generated the alert.

Reports

Reports are available to show alarm activity, caregiver response times, as well as other maintenance and system information.

This guide covers the deployment steps, best practices, and maintenance procedures for the Arial Wi-Fi Nurse Call System.

Supervised Wireless and Electrical Data Circuits
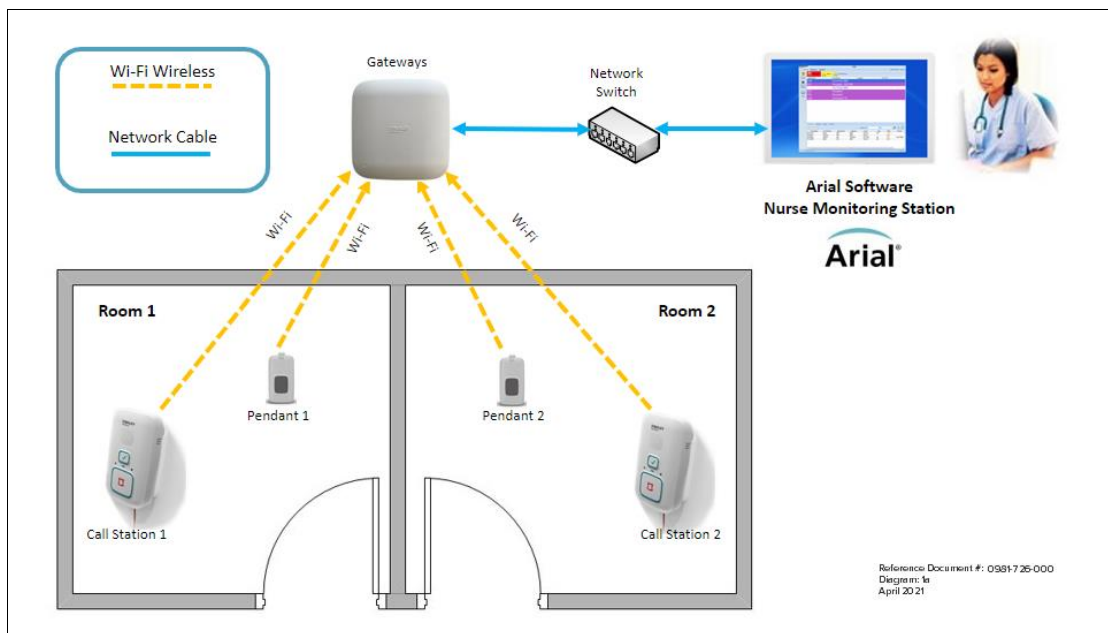
Figure 1.   *Supervised Wireless and Electrical Data Circuits*

Arial Wi-Fi Power Connection Overview
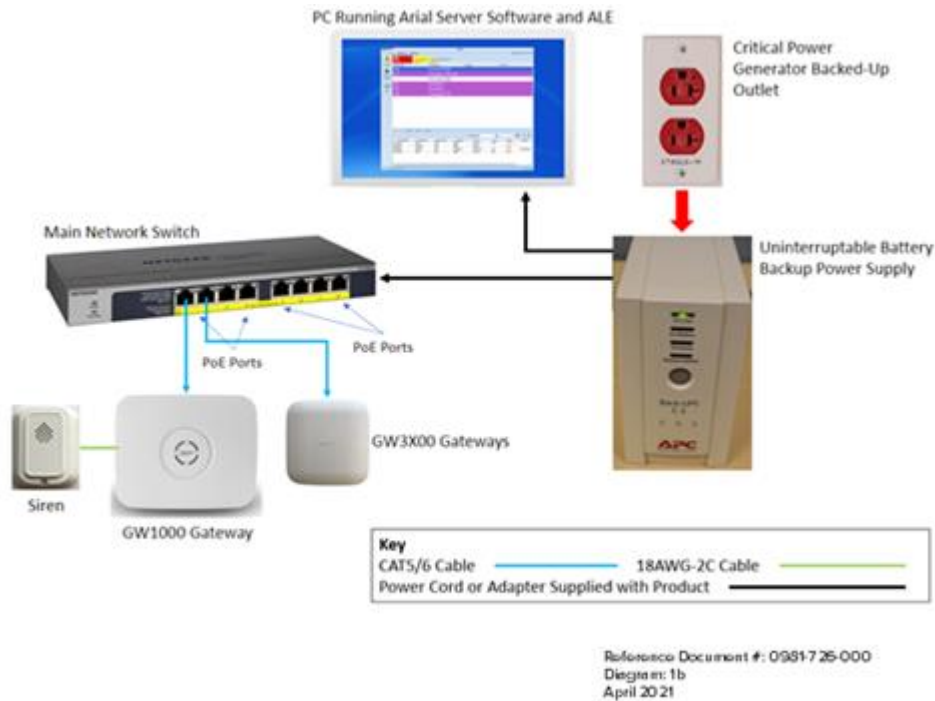
Figure 2.   *Arial Wi-Fi Power Connection Overview*

Devices that connect to Battery Backup side of an Uninterruptable Power Supply (UPS):

- PC Running Arial Server and ALE Software
- Main Network Switch

IMPORTANT: The UPS must be connected to a generator backed up outlet. *The battery backup will all keep the server PC and these critical pieces of equipment running for at least five minutes while the generator starts and takes load, and once again when power from the grid is restored and the generator backed-up outlet transfers back to grid power.*

NOTE: The GW1000 and Siren are backed up as well since they are powered from the POE port of the Main Network Switch, which is backed up by the UPS.
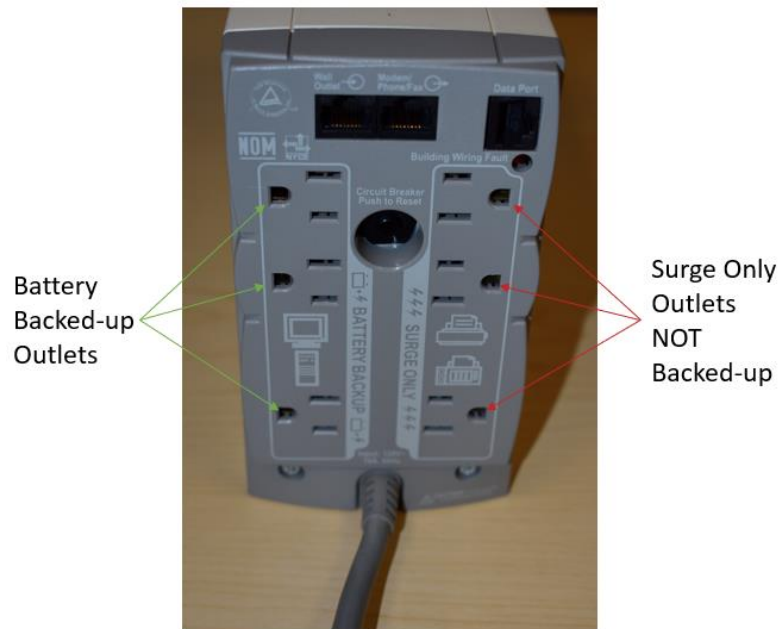
Figure 3.   *Backup and Surge outlet locations on the back of the UPS*

Uninterruptable Power Supply

STANLEY Healthcare supplies an Uninterruptable Power Supply (sold as item number 0768-004) with systems it installs.

Manufacturer & Model	APC BK500
Output	10A Max 120VAC 60Hz +/- 3Hz
Input	98-140VAC 60Hz +/- 3Hz
Backup Time	95.5 Min @ 30W, 3.4 min @ 300W (Max Load)
Battery	Lead-acid RBC2, 106VA, 4-6 Yr. Life
Physical	3.58" x 11.18" x 6.5" (28.4 cm x 9.1 cm x 16.5cm) 13.82 lbs (6.27Kg)
Environmental	32-104 °F (0-40 °C), 0-95% RH
Compliance	UL1778, Energy Star V2.0, FCC Part 15, RoHS

Arial Wi-Fi Supervised Data Connection Diagram
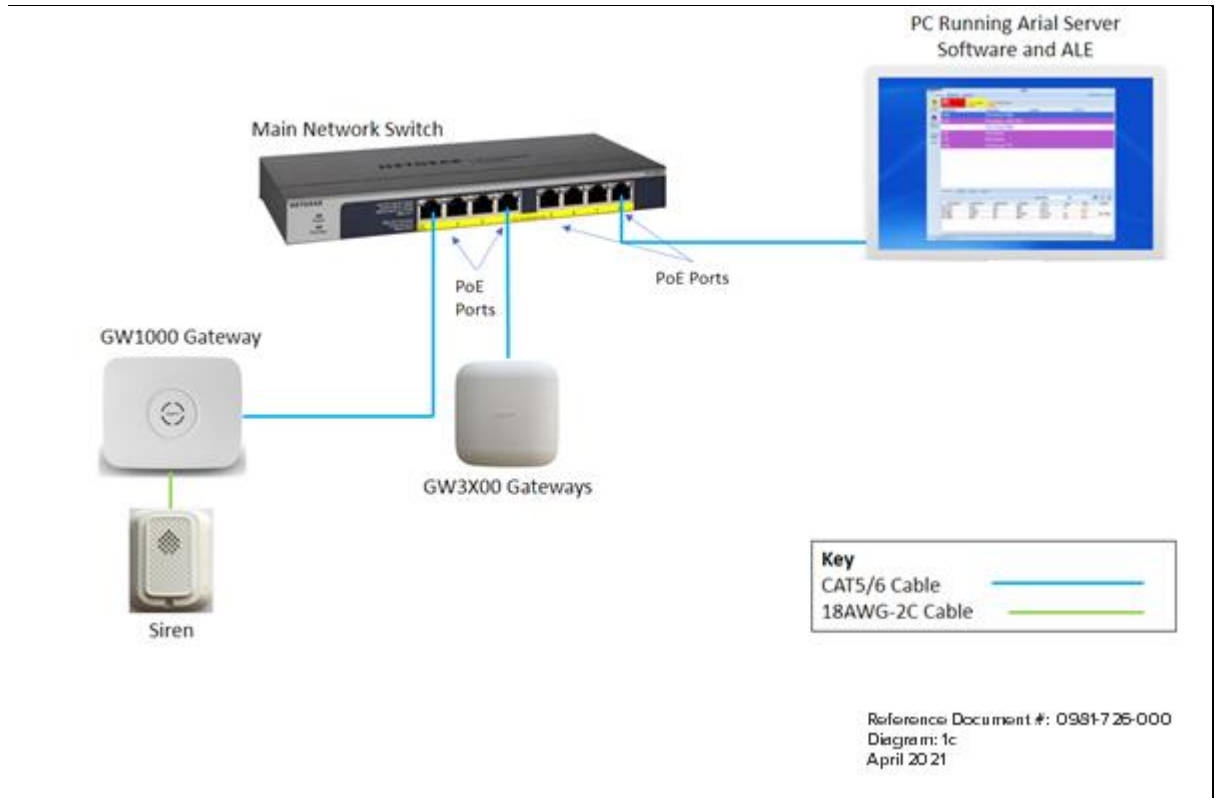
Figure 4.   *Arial Wi-Fi Supervised Data Connection Diagram*

System Software Requirements

This section describes required software requirements for the Arial™ Wireless Nurse Call System.

Software	Minimum Requirements & Notes
Arial	10.6.2 and above
AeroScout Location Engine (ALE)	5.5 (5.5.5.168) and above *Refer to the AeroScout Location Engine 5.5 Deployment Guide for full ALE system requirements.*

Wireless Infrastructure Compatibility

The Arial Wireless Nurse Call system uses a Wi-Fi wireless infrastructure that uses a network of gateways to receive transmissions and relay them to the Arial™ software.

The Arial Wireless Nurse Call system's software and fundamental components must be installed on a separate and dedicated network that connects to the Gateways. Other network connections can be made to the Arial server, provided it is not part of the UL1069 network.

Reference Documents & Software

The following articles can be accessed by logging into the STANLEY Healthcare Support Community site at the following
URL: https://stanleyhealthcare.force.com/HomePage.

KB #	Documents
12472	Arial Wi-Fi Nurse Call System Deployment and Maintenance Guide for UL1069
12138	Arial 10.6 Quick Reference Guide
12137	Arial 10. 6 Wireless Emergency Call Solution Admin Guide
12139	Arial 10.6 Software Installation Guide
11837	Gateway GW3000 and GW3100 Data Sheet
11715	Gateway GW3000/GW3100 Installation & Configuration Guide
10334	Arial 56108 Siren Datasheet
12473	Arial 56108B Siren Datasheet
12271	AeroScout Location Engine 5.5 Deployment Guide
1100	Product Versions Compatibility Matrix Reference Guide
7870	Arial Paging Transmitter Installation Guide
12141	Arial 10.6 Mobile Application User Guide
10336	Arial 2-LED Datasheet
10337	Arial 4-LED Datasheet

KB #	Software
12322	Arial 10.6 Software Download
12274	Location Engine 5.5 for Non-Cisco Environment Download

Solution Component Overview

This Chapter describes the fundamental and supplemental hardware and software components used for the Arial Wi-Fi Nurse Call System for UL1069 Deployments.

Fundamental Components
The fundamental components are the <u>required</u> components for the Arial Nurse Call System.

> *NOTE: It is required that one of the CSK-1000, CSK-1000-CD, or CSK-1000MR call stations be assigned to each resident apartment and be permanently located in the bathroom of that apartment. At least one 1069-54372 call notification station serving the property must be permanently placed and continually operating at a fixed location. Dome lights shall be located in the corridor directly outside of each resident apartment.*

Supplemental Components
The supplemental components may already exist in a facility from a previous Arial deployment or can be optionally added. They are not required for the Arial Wi-Fi Nurse Call System.

> NOTE: The nurse call system must not share its nurse call communication network with any other network or system. All transmitters using the same frequency or channel and that are within range of a receiver of a wireless system, must be compatible with the nurse call system and evaluated for the intended purpose. Supplementary devices not evaluated for the intended purpose are permitted only if their connection to the network utilizes a compatible device evaluated for the purpose.
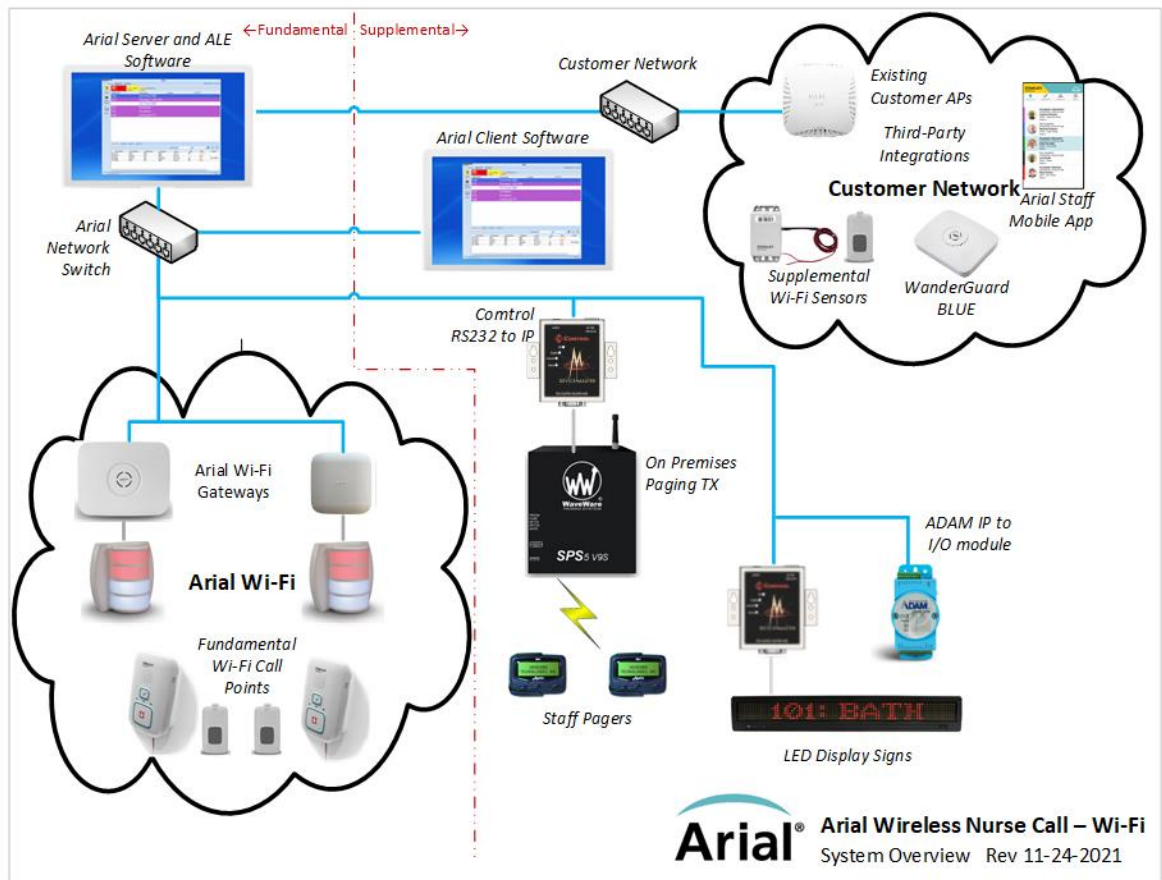
Figure 5.   *Arial Wi-Fi Nurse Call System Overview*

Fundamental Arial Wi-Fi Nurse Call System Components

This section describes the following fundamental software and hardware components.

- Server Software
- Ethernet Switches
- Gateway GW3000 & GW3100
- Gateway GW1000
- System Sensor Siren (Chime)
- Wi-Fi Call Stations
- Remote Push Button Cords
- Pendants

Server Software

Model	Comments
SKU: 54302 Arial Software	Latest version of Arial Server Software
SKU: 1069-54304 Arial UL1069 License	License that grants customer the right to use one instance of the Arial Server Software in their community. Application of license automatically adjusts key settings for compatibility with UL1069 devices.
SKU: ENG4100 Arial Wi-Fi and Location Engine Integration License	License that grants customer the right to use one instance of the AeroScout Location Engine software in their community. License is required to support GW1000 and Trouble Siren that are required for UL1069

The Arial Server software runs on a Windows PC. The Arial Server receives alarm and status signals from call stations, processes this information, and relays it to Client computers and messaging devices such as IP and mobile phones, pagers and display signs. The Server also stores the database of system activity. Note that the Server can also act as a Client PC, displaying the Arial software for alarm annunciation and other day-to-day tasks.

Arial 10.6 supports the integration of the Arial software with the AeroScout Location Engine (ALE).

Ethernet Switches

Models	Comments
SKU: SWC-POEP8-1000 8 Port Switch	Unmanaged 8-Port Ethernet Switch with PoE Outputs UL 60950 Listed
SKU: SWC-POEP16-1000 16 Port Switch	Unmanaged 16-Port Ethernet Switch with PoE Outputs UL 60950 Listed

The Ethernet Switch is the 'central hub' for the solution's components and must conform to UL60950 or UL62368 standards.
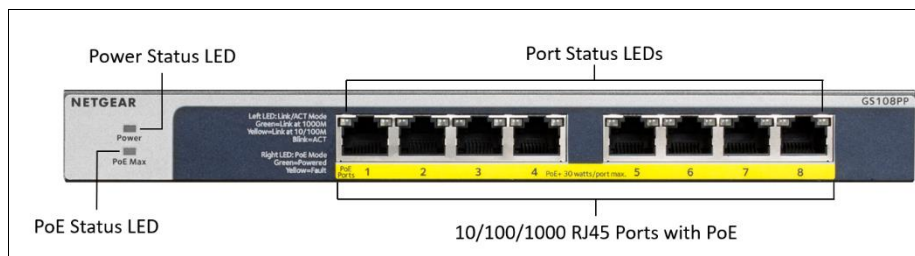
Figure 6.   *8-Port Switch Front View*
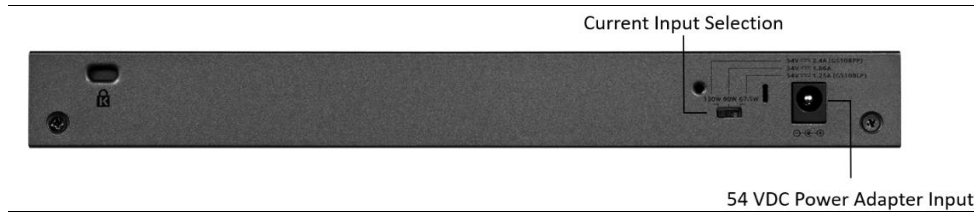
Figure 7.   *8-Port Switch Back View*
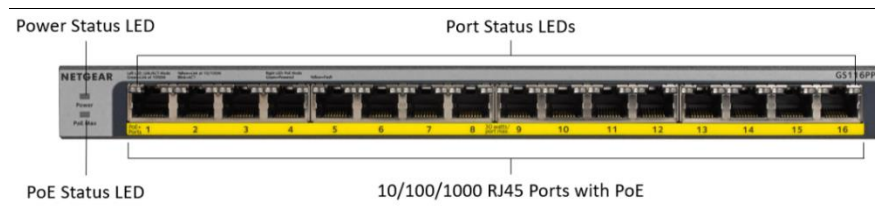
Figure 8.   *16-Port Front View*
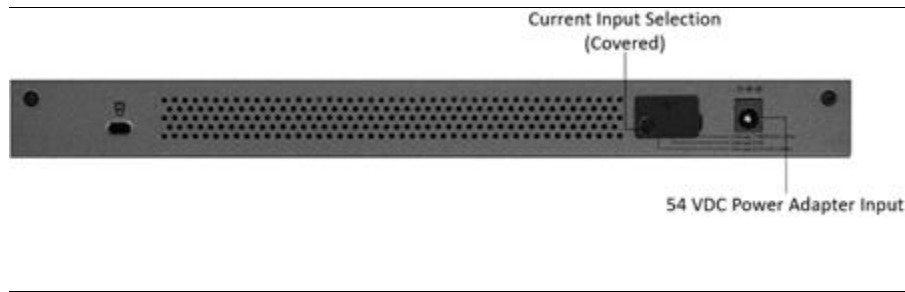
Figure 9.   *16-Port Back View*

Gateway GW3X00

Models	Comments / Firmware Version
SKU: GW3000 and GW3100	Wi-Fi receiver and dome light controller Firmware Version: 415.15 or higher

Gateways GW3100 and GW3000 serve as receivers for messages from Wi-Fi and BLE Tags. Received Tag messages are relayed to the AeroScout Location Engine (ALE).

The Gateways also include Wi-Fi and BLE transceivers, which monitor the Wi-Fi and BLE receivers. The Gateways report an error if an issue with the receivers is detected.

The LED indicator of the GW3000/GW3100 Gateways displays color based on the device status as follows:

Status	LED
Connected to the network via LAN	Green
Connected to the network via Wi-Fi	Ivory
Not Connected to the Network	Blinking Green
Malfunction	Red
Blink	Blink 5 times in Ivory for a total duration of 3 seconds
Firmware Update	Blink in Ivory (similar to phase 4)
IP Reset	Upon Reset, single LED blink

LED   GW3000/GW3100 Gateway

Figure 10.   *Gateway GW3000/GW3100*
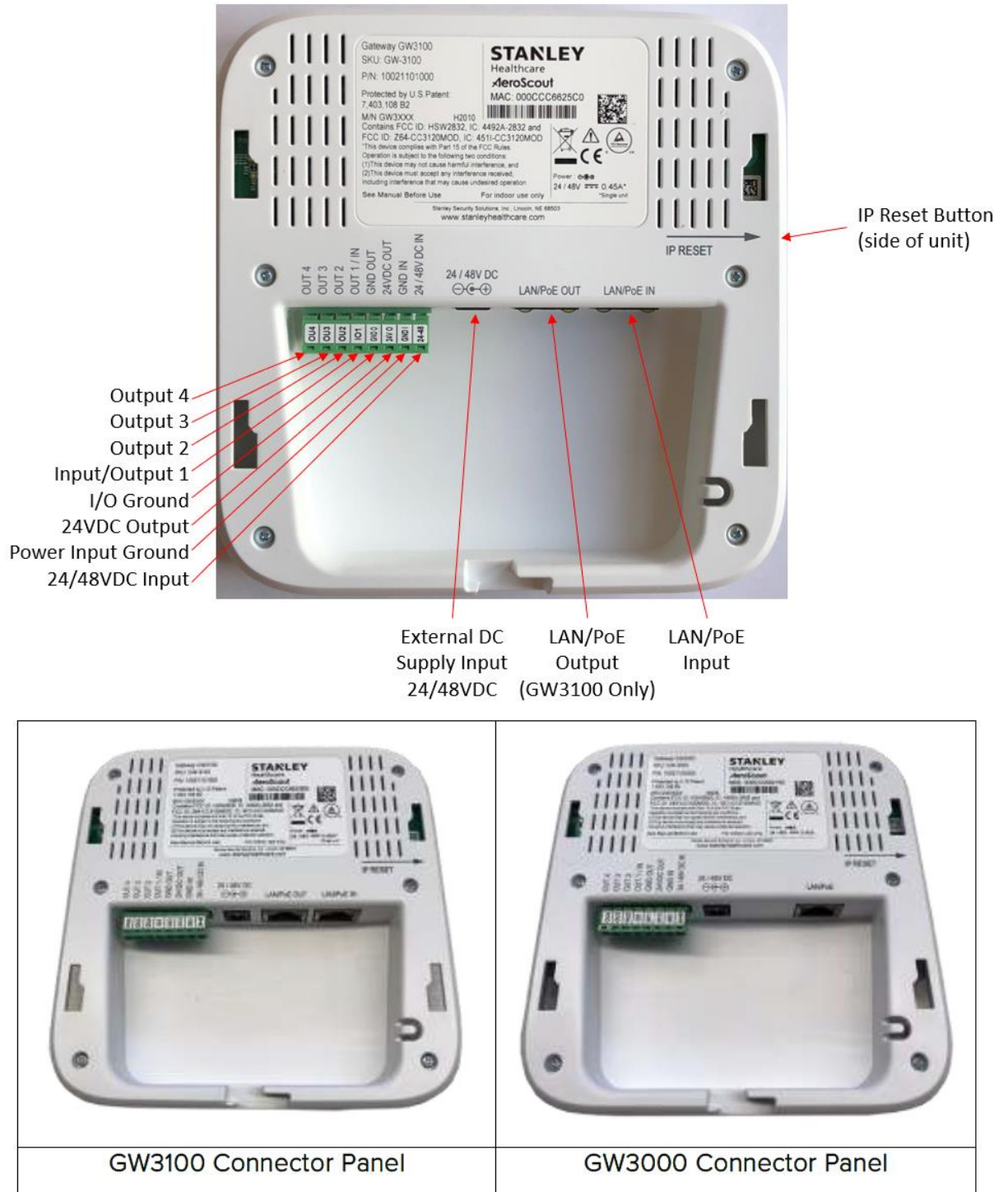
Figure 11. *GW3000 & GW3100 Connections and Controls – Viewed from Back*

Specifications: GW3X00

Physical and Mechanical	Dimensions: 5.5 Length x 5.5 Width x 1.19 Thickness inches (140 x 140 x 30 mm) Weight: Including mounting plate: GW3000 243.0 g (8.57 ounces) GW3100 245.5 g (8.65 ounces) Housing: Polycarbonate and ABS
Power	Input Voltage: 24-48 VDC Power Consumption: 10.2 Watts @ 24 VDC, 30 Watts @ 48VDC PoE (802.3af) PoE+ (802.3at)
Network Interface	Ethernet 802.3 100Base-T (RJ-45) WI-FI 802 11 b/g/n
Output Ratings	Up to 30mA @ 24VDC per output using 24VDC output of the Gateway. 120mA total @ 24VDC if all four outputs used at maximum can be supplied by the GW3X00. If an external power supply is used to power remote devices, each output can switch up to .5A @ 30VDC.
Environmental	Operating temperature: 0°C to 49°C (32°F to 120°F) Humidity: 0 to 93%, non-condensing
Certification and Regulatory Compliance	UL2560, UL1069 Safety: USA/Canada: UL 60950-1 2nd edition; CAN/CSA-C22.2 No. 60950-22:17; UL 62368-1 2nd edition; IEC 62368-1:14 Europe: EN 60950-1:06+A11:09+A1:10+A12:11+A2:13; EN 62368-1:14+A11:17 International: IEC 60950-1:05+A1:09+A2:13; IEC 62368-1:14

	EMC: EU/USA/Canada: Draft EN 301 489-1 V2.2.0; Draft EN 301 489-17 V3.2.0; 47 CFR Part 15 Sub B; ICES-003 Radio: Europe: EN 300 328 V2.1.1:16 Canada: RSS-247 USA: FCC-certified

GW3X00 Accessory Power Supply

STANLEY Healthcare sells a separate power supply (Item WGB-ADP-047-U) that can be used with Gateways GW3100 and GW3000 if they are not powered from a PoE network switch.

Manufacturer & Model	Adapter Tech. ATS050T-P480
Input Power	100-240VAC 50/60Hz 1.2A Max
Output Power	48VDC 1.05A
Environmental	32- 104°F (0-40°C), 20-80% RH
Size and Weight	115mm x 53mm x 38mm, 310g
Compliance	UL2468, UL94V-0, FCC Part 15 Class B, RoHS

Gateway GW1000

Models	Comments / Firmware Version
SKU: GW-1000 (GW-1000)	Wi-Fi receiver and dome light and siren controller Firmware Version: 415.15 or higher

The GW1000 monitors the software on the PC, acting as a watchdog. If the PC or software stops running, the GW1000 activates an output to turn on a siren that is controlled by the output. This siren serves as a trouble signal and will activate within 90 seconds should the Engine software or PC stop executing.

Figure 12.   *Gateway GW1000*
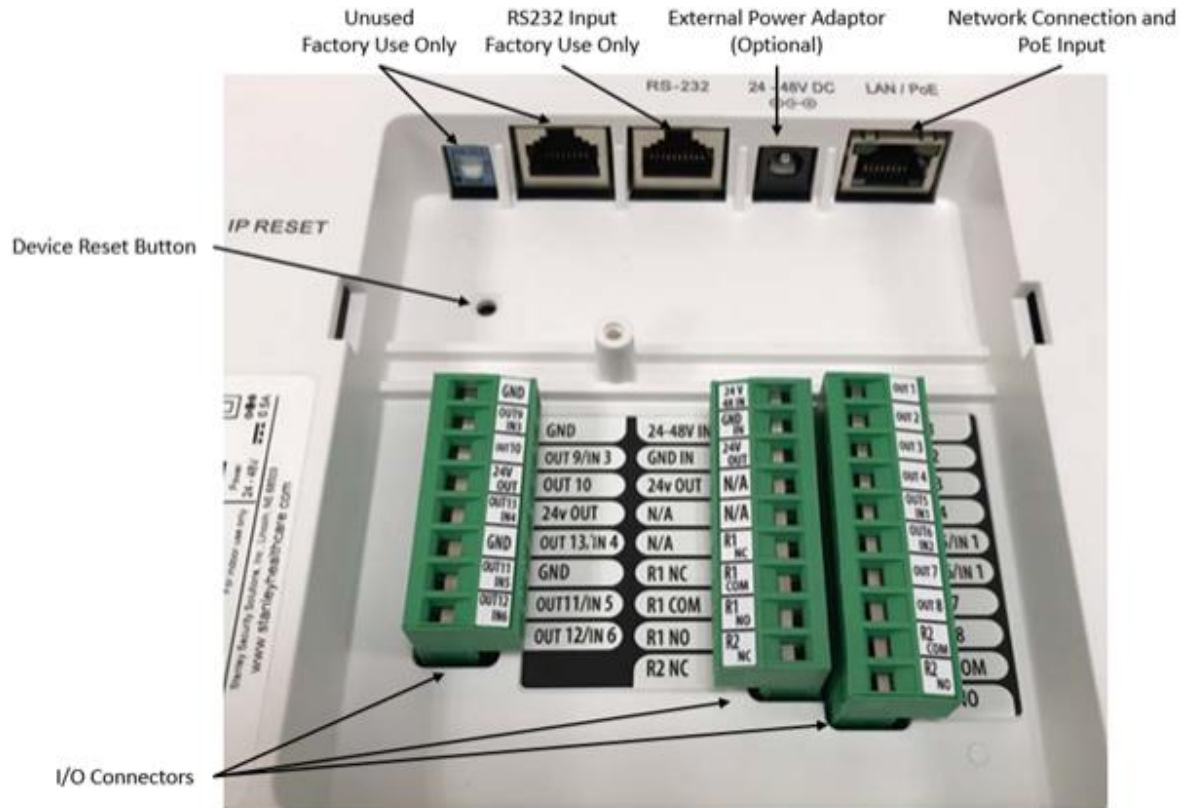
Figure 13.   *GW1000 Connections and Controls – Viewed from Back*
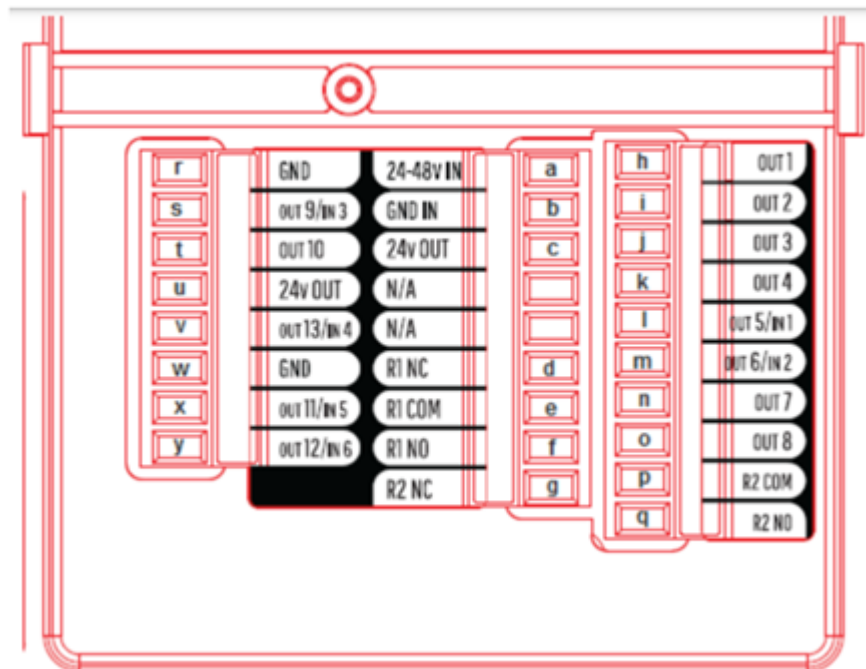
Figure 14.   *GW1000 I/O Connectors*

IO Connector Descriptions

Letter	Description
a	24-48 IN: Power connection accepts 24-48 V Direct Current
b	GND IN: Ground/Earth
c	24V OUT 1: 24V output
d	R1 NC: Relay 1 normally closed connection
e	R1 COM: Relay 1 common connection
f	R1 NO: Relay 1 normally open connection
g	R2 NC: Relay 2 normally closed connection
h	OUT1: Open drain output 1
i	OUT 2: Open drain output 2
j	OUT 3: Open drain output 3
k	OUT 4: Open drain output 4
l	OUT 5/IN 1: Open drain output 5 / Input 1
m	OUT 6/IN 2: Open drain output 6 / Input 2
n	OUT 7: Open drain output 7
o	OUT 8: Open drain output 8
p	R2 COM: Relay 2 common connection
q	R2 NO: Replay 2 normally open connection
r	GND: Ground Input connection/Earth
s	OUT 9/IN 3: Open drain output 9 / Input 3
t	OUT 10: Open drain output 10
u	24V OUT 2: 24V output
v	OUT 13/IN 4: Open drain output 13 / Input 4
w	GND: Ground Input connection/ Earth
x	OUT 11/IN 5: Open drain output 11 / Input 5
y	OUT 12/IN 6: Open drain output 12 / Input 6

Specifications: GW1000

Physical and Mechanical	Dimensions: 245mm X 200mm X 60mm (9.6in x 7.9in x 2.4in) Weight: 865g (31oz) Housing: Polycarbonate and ABS
Network Interface	Ethernet (RJ-45) Wi-Fi 802.11b/g/n
Firmware	DSP: 415415 or higher, BOOT: 61515 or higher
Power	Input voltage: 24-48VDC PoE (802.3af) 48VDC Maximum power consumption: 10W.
Environmental	Operating temperature: 0°C to 49°C (32°F to 120°F) Humidity: 0 to 93%, non-condensing
Relays	Two: 220 VDC/ 250 ACD, 1 Amp, NO (Normally Open) or NC (Normally Closed) 24VDC Output, up to 300mA 13 Open-Drain Outputs (up to 100mA each)
Certification and Regulatory Compliance	UL2560, UL1069

System Sensor Siren (Chime)

Model	Comments
SKUs: 56108 (System Sensor CHWL) and 56108B (System Sensor MHW)	Chime with selectable chime tones and volume settings. 24V, UL approved.

Sirens (Chimes) produce a distinctive chime tone for alerting trained personnel to investigate Server Software or Hardware failures.

Specifications: 56108 and 56108B Sensor Sirens

Physical and Mechanical	56108 Dimensions: 5.6 in L × 4.7 in W × 1.25 in D (143 mm L × 119 mm W × 32 mm D) Wall Surface Mount Black Box (SBBWL): 5.6 in L × 4.7 in W × 4.3 in D (142 mm L × 119 mm W × 109 mm D) 56108B Dimensions: 4.6 in L x 2.9 in W x .45 in D (117 mm L x 74 mm W x 11 mm D)
Environmental	Standard Operating Temperature: 32°F to 120°F (0°C to 49°C) Humidity: 10 to 93% Non-condensing
Voltage	Nominal Voltage: Regulated 12VDC or regulated 24DC/FWR
Input terminal wire gauge	12 to 18 AWG
Certification and Regulatory Compliance	UL2560, UL1069, UL464

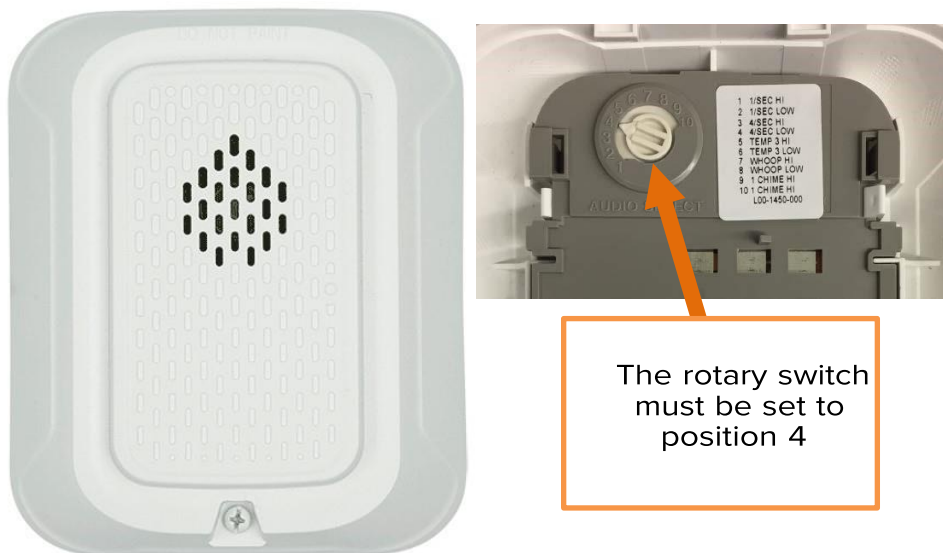The rotary switch must be set to position 4

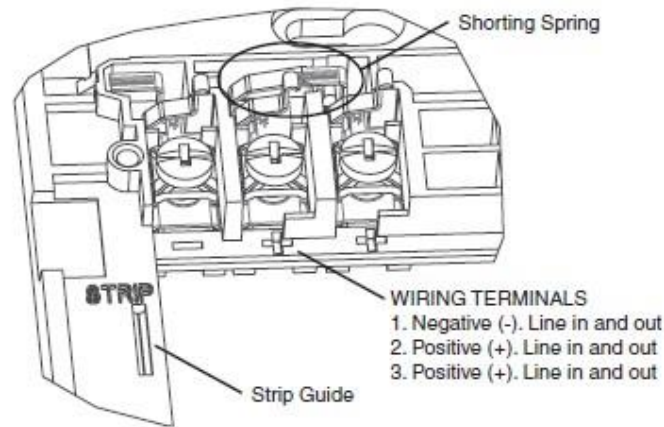Figure 15. *56108 Siren*

Figure 16.   *56108 Siren Wiring Illustration*

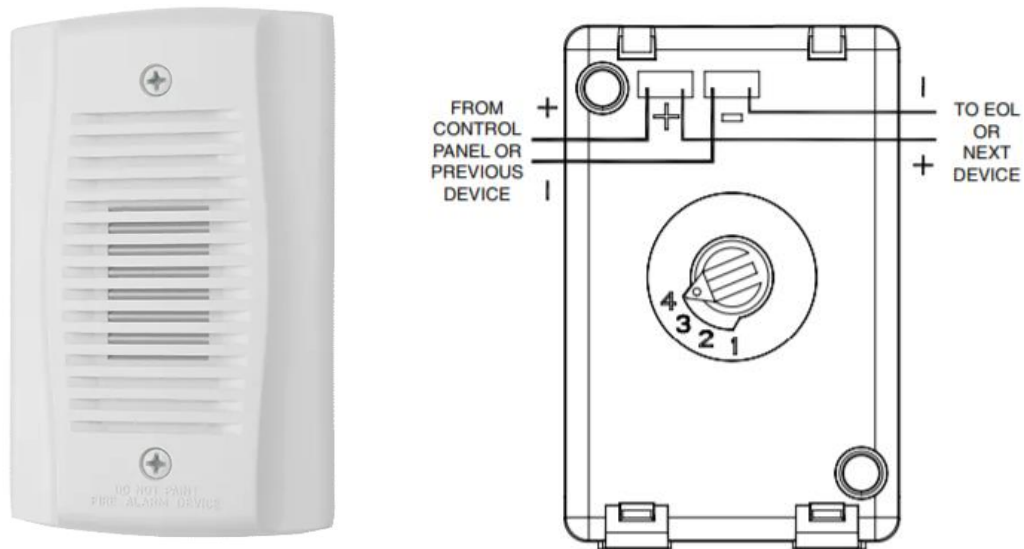*The siren only requires two wires for power and supervision.*

Figure 16B 56108B Siren shown (left) with wire connections and sound select switch shown (right).

Use Position 4 (normal) or 3 (loud) for sound select switch. Positions 1 and 2 shall not be used.

Wi-Fi Call Stations (CSK-1000 and CSK200 Series)

It is required that one of the Call Stations assigned to each resident apartment should be permanently located in the bathroom of that apartment.

CSK-1000 Series

Models	Comments
SKU: CSK-1000	Standard Wi-Fi Call Station
SKU: CSK-1000-MR	Moisture Resistant Call Station
SKU: CSK-1000-CD	Code Call Station

The CSK-1000, CSK-1000-MR (Moisture Resistant) & CSK-1000-CD (Code Call) Wi-Fi Call Stations are components of STANLEY Healthcare's Wireless Call Solutions. The wireless, battery-operated fixed-location devices are designed to trigger alarms when the call button is pressed, the pull cord is pulled, or when an optional remote push-button (EAC-1000) is used.

The Wi-Fi Call Stations are equipped with a large call button, a durable antibacterial pull cord and a dual-purpose Dismiss/Check-In button for dismissing alarms and daily resident check-ins. Triggered alarm information is shown in Arial, and includes the device's fixed location, resident details and event times. Additionally, response time and resident check-in reports can be generated by the Arial software.

CSK-1000 Series Key features:

- Wi-Fi Compatible
- Large and Tactile Call Button
- Durable Antibacterial Pull Cord
- Battery and Optional AC/DC Power
- Back-Up Power
- Visual and Audible indications
- Resident Check-Ins
- Night Illumination
- Fully Supervised by Arial
- Easy Mounting
- Moisture Resistant (CS100MR)

Front View

- Speaker
- Dismiss/Check-In button
- Status indication LED
- Night Illumination LEDs
- Call button
- Antibacterial Pull cord

Back View
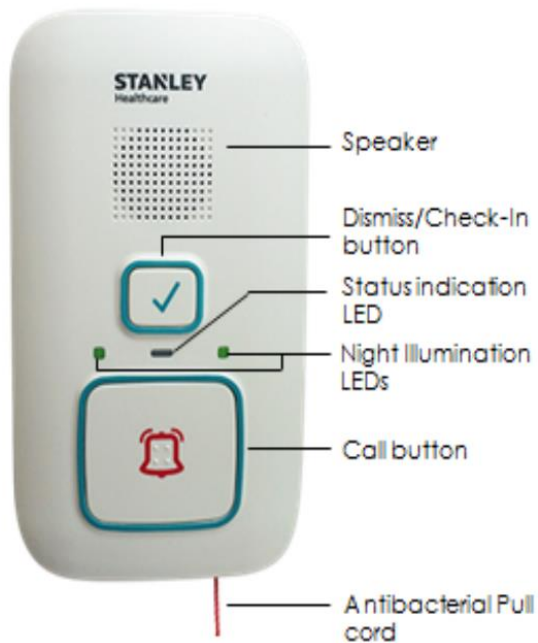
- Battery compartment
- Mounting flanges
- Battery compartment screw
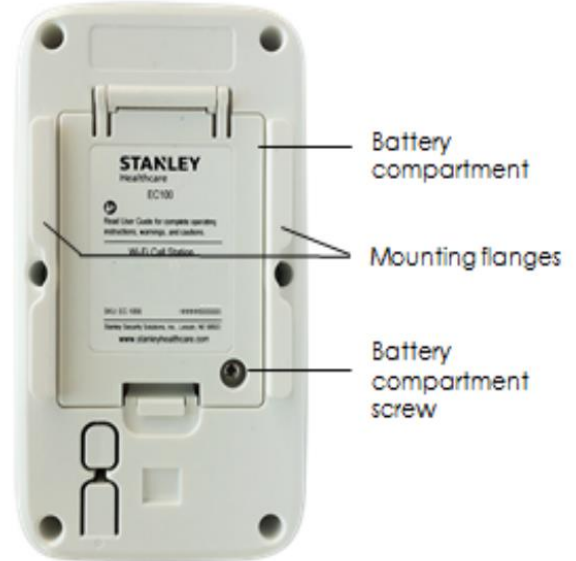
Figure 17. Call Station Features and Controls

Battery Compartment

- Battery contacts
- Volume up/down buttons

Bottom View

- Remote push button cable jack
- 5V DC Power jack
- Antibacterial Pull cord
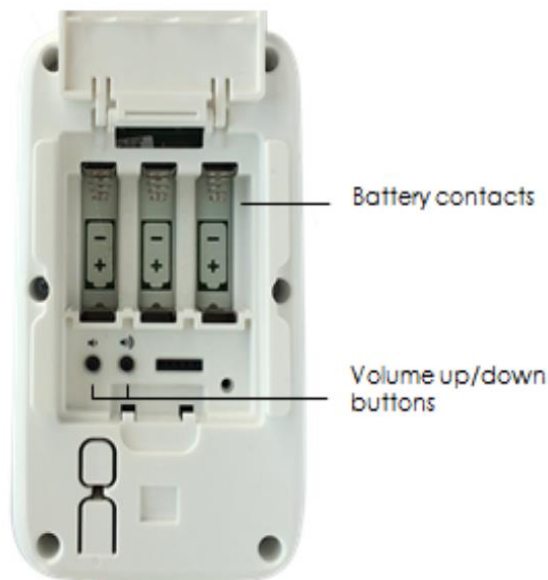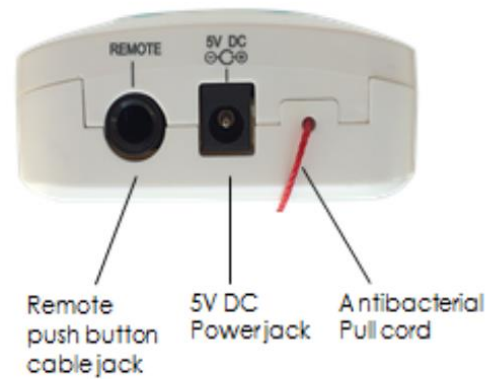
Figure 18. Call Station Features and Controls

Figure 19. *Code Call Station*

How to Use a Call Station (CSK-1000 Series)

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 or un-plug the power adaptor.

Activating a Call Station Alarm

The Call Station alarm is activated by performing either of the following:

- Pressing the large call button (1)
- Pulling the pull cord (2)
- Optional: Pushing the remote push-button

A confirmation tone is heard when an alarm is activated. An alarm message is sent to Arial. The Call Station remains in alarm mode (flashing red LED) until the alarm is physically dismissed.
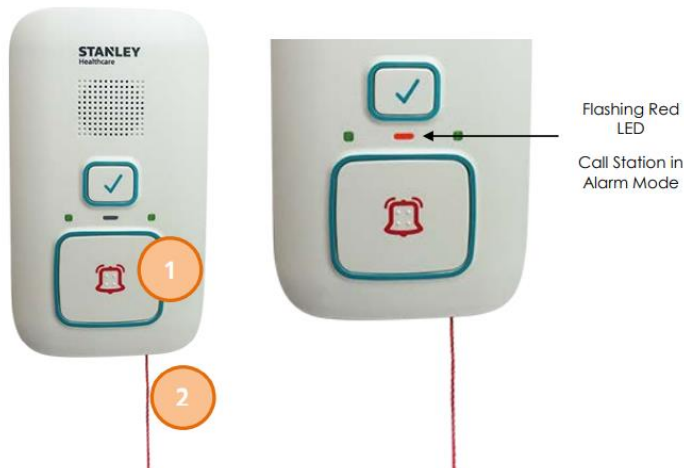
Dismissing a Call Station Alarm

IMPORTANT! Before dismissing an alarm, a staff member must attend to the resident and dismiss the alarm on the Call Station.

Press on the Dismiss/Check-in button (**1**) to dismiss the alarm. A confirmation tone is heard and LED stops flashing red. The alarm is automatically dismissed in Arial.

Volume Settings

The Wi-Fi Call Station has eight (8) volume levels ranging from silent (mute) to high. The volume buttons are located inside the battery compartment. Voice commands ('minimum volume', 'maximum volume') are heard when minimum or maximum volume is reached.

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

2. Press the volume down (3) or volume up (4) buttons repeatedly to select the desired volume. A tone is heard as you adjust the volume. A voice command is heard once minimum or maximum volume is reached.
3. You can mute the volume by pressing the volume down (3) button repeatedly until the 'Minimum Volume' voice command is heard.

CSK-1000 Series LED and Audio Indications

Action	LED Indication	Audio Indication
Power On	Green	Confirmation tone
Alarm Call	Flashing Red	Confirmation tone
Alarm Reset	Green	Confirmation tone
Check-In	Green	Confirmation tone
Low Battery	N/A	Single negative tone. *Low battery levels are displayed in Arial.*
Volume Up/Down	N/A	Tone on presses and voice feedback for minimum or maximum volume

Night Illumination
The Wi-Fi Call Stations have two (2) green dim night illumination LEDs on the front panel for use in darkness. The LEDs are On by default, and provide enough light for comfort and don't illuminate the room. The LEDs flash dimly every 3 seconds if the Call Station is powered by batteries. When the device is powered by the power adaptor, the LEDs are On constantly.

Night illumination LEDs
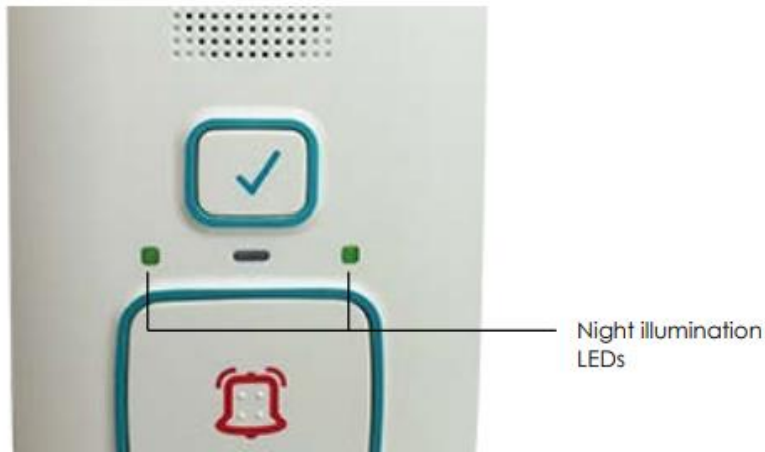
Daily Check-in

A check-in is performed by pressing the Dismiss/Check-In button (1) once. A confirmation tone is heard and a check-in alert is sent to Arial.

Turning Night Illumination Off/ON

The night illumination LEDs can be turned off at any time, if needed. The LEDs are turned Off by pressing the volume up and volume down buttons simultaneously and holding for 3 seconds. The same procedure is used to turn the LEDs back On.

1. Unscrew (1) and open (2) the battery compartment.
2. Press the volume down (3) and volume up (4) buttons simultaneously and hold for 3 seconds. The night LEDs are turned Off/On.
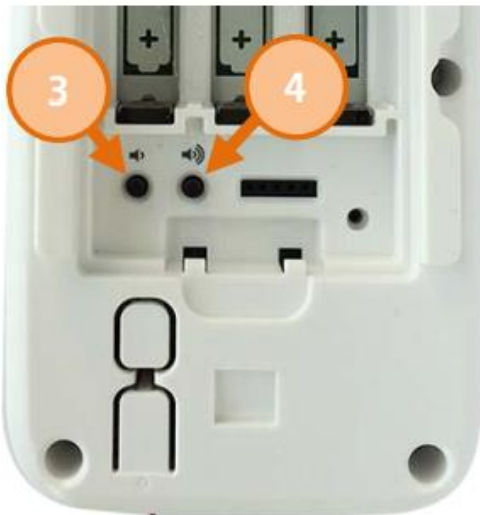
Specifications (CSK-1000, CSK-1000-MR, CSK-1000-CD)

Physical and Mechanical	Dimensions: 415 mm x 84 mm x 40 mm (5.70 in x 3.30 in x 1.57 in) Weight: 200 g (7.05 oz)
Radio	802.11 radio (2.4 GHz); b/g/n compliant Low frequency receiver for chokepoint detection (125kHz) Transmission power: up to +19dBm (~81mW) Patented clear channel sensing avoids interference with wireless networks
Security Protocol	WPA2 security with AES-256 encryption
Environmental	Operating temperature: 0°C to 49°C (32°F to 120°F) Humidity: 0 to 93%, non-condensing (CSK-1000 & CSK1000-CD) Humidity: Condensing (CSK-1000-MR) Ingress Protection Rating: IP 20
Electrical	Battery: 3x 3.0V CR123A Lithium batteries (replaceable) AC/DC Power input: 5V 2A
Audio	Volume Level: Max 96dBA
Certifications	Radio: FCC Part 15, sub-part C class B, sub-part B EN 300-328, EN 300- 330, EN 301-489, RSS 210 (Canada) Safety: US: UL 60950, IEC60601-1 and applicable, IEC60601-1-X standards. Europe: CE mark - EN 60950, IEC/EN 60601-1 and applicable IEC 60601-1-X standards UL1069, UL2560

CSK200 Series Call Stations

Models	Comments
CSK200-1069	Standard Wi-Fi Call Station for UL1069 Systems
CSK200-1069MR	Moisture Resistant Wi-Fi Call Station for UL1069 Systems

It is required that one of the Call Stations assigned to each resident apartment should be permanently located in the bathroom of that apartment.
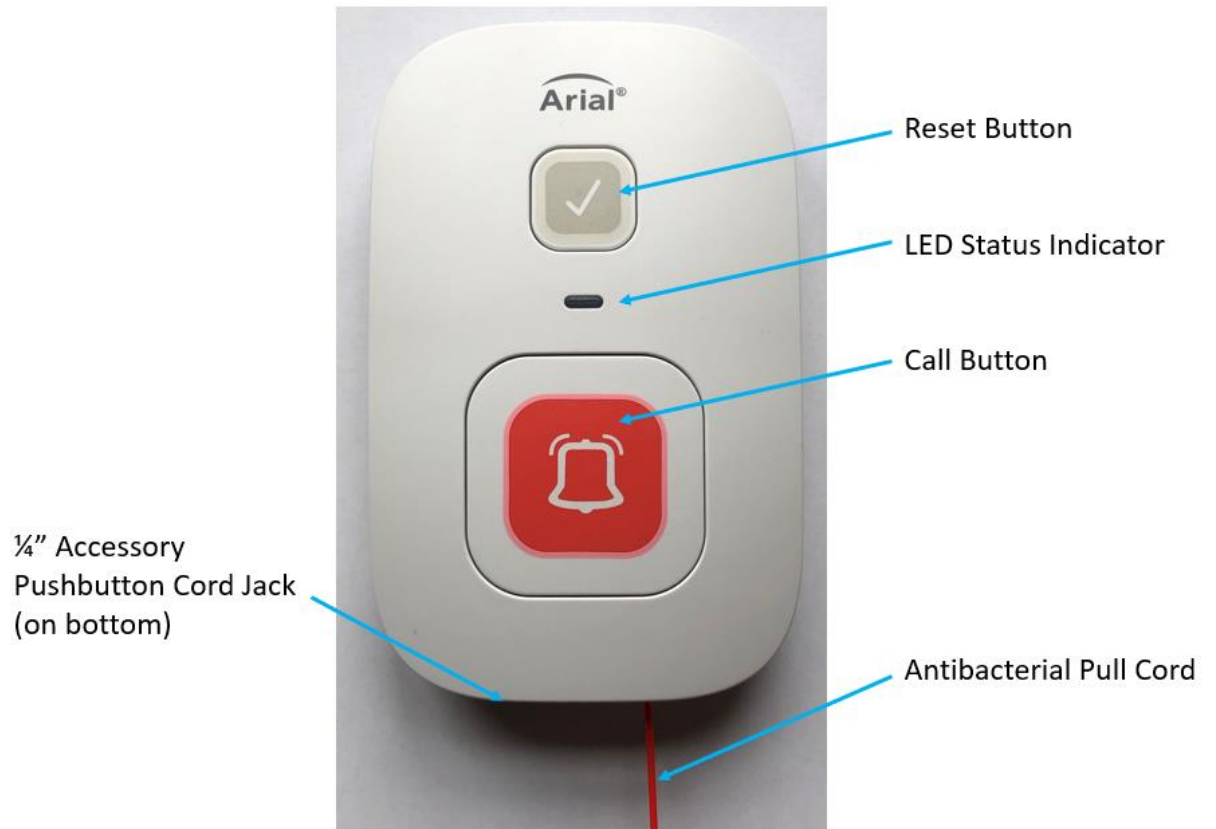
The CSK200 and CSK200-MR (Moisture Resistant) Wi-Fi Call Stations are components of STANLEY Healthcare's Wireless Call Solutions. The wireless, battery-operated fixed-location devices are designed to trigger alarms when the call button is pressed, the pull cord is pulled, or when an optional remote push-button (56115 and 56116) is used.

The Call Stations are equipped with a large call button, a durable antibacterial pull cord and a dual-purpose Dismiss/Check-In button for dismissing alarms and daily resident check-ins. Triggered alarm information is shown in Arial and includes the device's fixed location and event times. Additionally, response time and resident check-in reports can be generated by the Arial software.

CSK200 Series Key features:

- Wi-Fi Compatible
- Large and Tactile Call Button
- Durable Antibacterial Pull Cord
- Battery Power
- Visual Status Indication
- Resident Check-Ins
- Fully Supervised by Arial
- Easy Mounting
- Moisture Resistant Option

Front View

Back View

Mounting Slots

MAC:0E3FE4

Secondary Alarm Wire Access

Mounting Slot

¼" Accessory Pushbutton Cord Jack

Antimicrobial Pull Cord
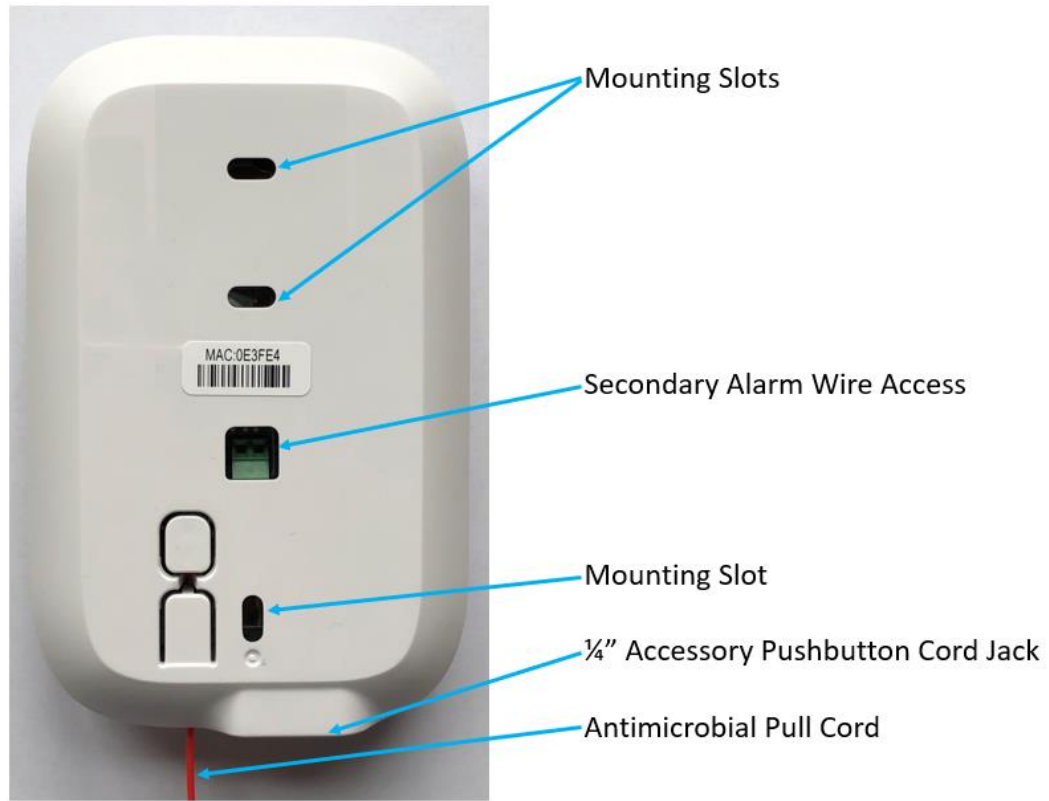
Bottom View

Antimicrobial Pull Cord

Case Retaining Screw

¼" Accessory
Pushbutton Cord Jack

Battery Location (Inovonics)
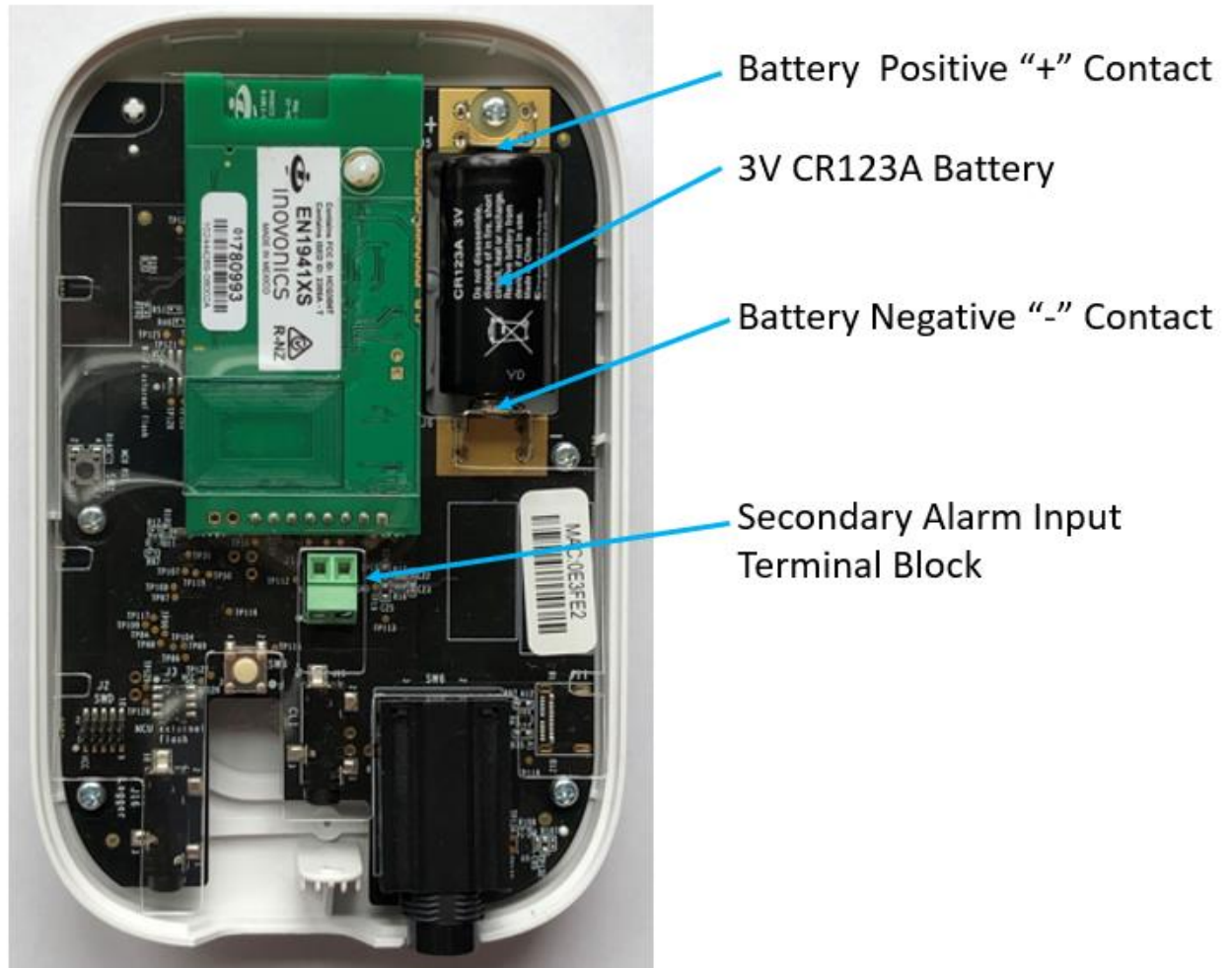
Battery Location (Wi-Fi)
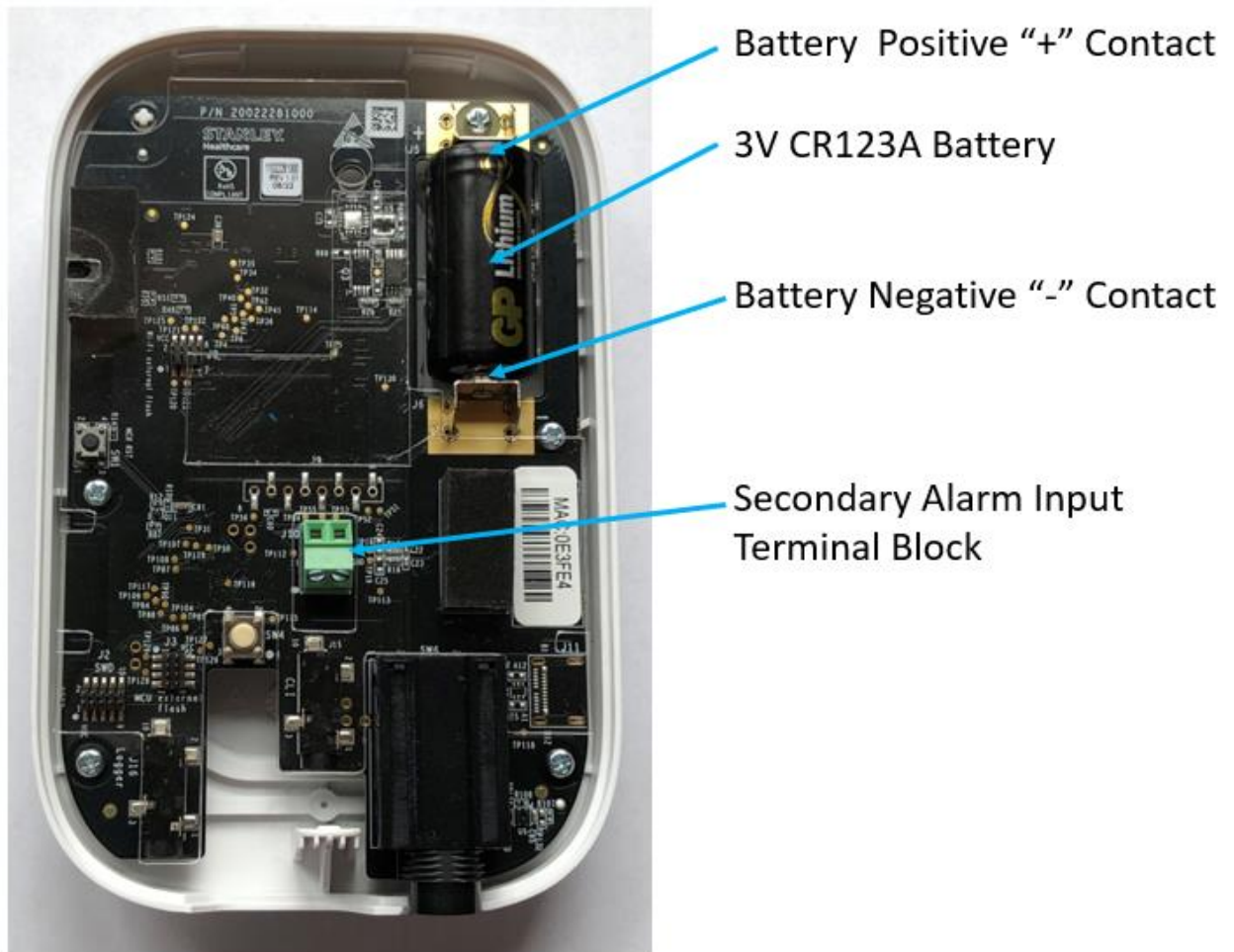
How to Use a Call Station (CSK200 Series)

The Call Station turns on automatically and is ready for use once power is supplied by inserting the battery. To turn the Call Station Off, simply remove the battery.

Activating a Call Station Alarm
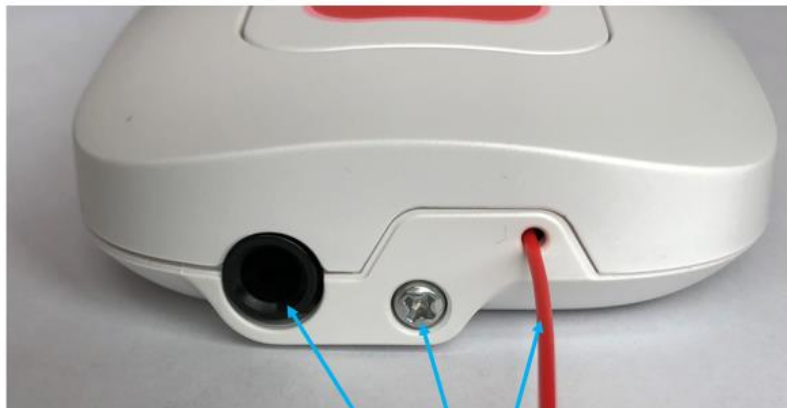
The Call Station alarm is activated by performing any of the following:

- Pressing the large call button (1)
- Pulling the pull cord (2)
- Optional: Pushing the remote push-button

The alarm is confirmed by a flashing red LED indicator (3). An alarm message is sent to Arial. The Call Station remains in alarm mode (flashing red LED) until the alarm is physically dismissed by pressing the reset button (4).

Dismissing a Call Station Alarm

IMPORTANT! Before dismissing an alarm, a staff member must attend to the resident and dismiss the alarm on the Call Station.

Press on the Dismiss/Check-in button (**4**) to dismiss the alarm. The LED stops flashing red. The alarm is automatically dismissed in Arial.

IMPORTANT! If an optional remote push button cord is used, verify the cords are securely connected. Failure to correct a loosened connection may prevent the remote cord from placing an alarm. A cord out notice will be active in Arial if the cord is disconnected.

CSK200 Series LED Indications

Action	LED Indication
Alarm Active	Red LED – "Fast" 3Hz Flash
Standby (No Active Alarm)	LED Off
Staff Presence	Red LED – "Slow" .5Hz Flash Note: LED Stops after 10 minutes
Resident Check-in	Red LED – Single Flash

Daily Check-in
A check-in is performed by pressing and releasing the Dismiss/Check-In button (1) once. The Red LED (2) will flash once to provide feedback that a check-in event was sent to Arial.
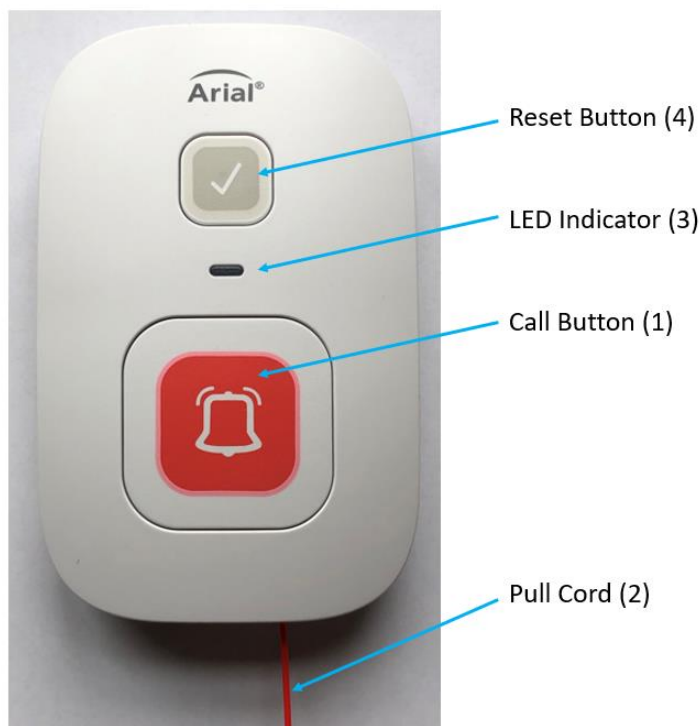
Staff Presence
Staff presence can optionally be used by facilities to indicate when staff enter a resident room to respond to an active alarm. A caregiver presses and holds the Dismiss/Check-In button (1) for at least two seconds on the Call Station that the resident used to place an alarm. The LED (3) changes from the fast-flashing rate of an alarm to a slower flashing rate indicating a staff presence. A staff presence message is

sent to Arial. Once the caregiver is finished assisting the resident, they press and release the Dismiss/Check-In button to end the alarm and staff presence events.

Note: After 10 minutes, the Call Station LED indicator stops flashing for staff presence to extend the battery life, but the alarm and staff presence events remain active in Arial until the Call Station is reset using the Dismiss/Check-In button.

CSK200 Series Specification Table

Models	CSK200 / CSK200-1069 Series Specifications (Wi-Fi)
Physical and Mechanical	Dimensions: 132mm x 85mm x 33mm (5.2in x 3.3in x 1.3in)
	Weight: 145 g (5.1 oz)
Radio	802.11a/b/g/n 2.4 GHz Transmission power: up to +19dBm (~81mW)
Visual Indicator	Red LED Indicates alarm (3Hz), Staff Presence (.5HZ) and 2 second blink for Check-In
Features Activation	Primary Alarm Activation: Push button, pull cord, or remote button Staff Presence: >2 second press of check/reset pushbutton while in Primary Alarm Resident Check-in Activation: Press check/reset pushbutton on call station Primary Alarm Cancel: Press check/reset pushbutton on call station Secondary Alarm: Closed condition across secondary alarm input terminals (Not for use on UL call points) Secondary Alarm Cancel: Open condition across secondary alarm input terminals
Field Connections	One 1/4 inch mono jack for pushbutton or accessory cord Primary Alarm input Two position terminal block for Secondary Alarm input
Environmental	Operating temperature: 0°C to 49°C (32°F to 120°F)
	Humidity: 0 to 93%, non-condensing (CSK200 & CSK200-1069)
	Humidity: Condensing (CSK200MR and CSK200-1069MR)
	IP 20
Electrical	Battery: 1x 3.0V CR123A Lithium batteries (replaceable)
Certifications	
	FCC Part 15 sub part C, EN 401 489-1, EN 301 489-17, EN 300 328, EN 300 220*, RSS 247
	UL 1069* (CSK200-1069 and CSK-1069MR)
	UL 2560* (CSK200, CSK200MR)
	UL/IEC 62368

*Depends on device model/SKU.

Accessories

Models	Comments
CSK200-PLATE	Plate to cover paint/wallpaper lines exposed by removing old call stations when displacing older system or call points.
CSK200-AH	Cover that fits around call station for use in rooms where ligature resistance is required.

CSK200-PLATE Specifications

Characteristic	Specification
Dimension	137mm x 90mm x 3mm (5.4in x 3.5in x .1in)
Weight	8.5g (.3 oz)

Figure 20. *CSK200-PLATE*

CSK200-AH Specifications

Characteristic	Specification
Dimension	145mm x 90mm x 22mm (5.7in x 3.5in x .9in)
Weight	28 g (1 oz)

Figure 21. *CSK200-AH Cover*

Remote Push Button Call Cords

Model	Comments / Version
SKU: 56115 SKU: 56116	Single Call Station Remote Push Button Call Cord – 7' (2.1 m) Single Call Station Remote Push Button Call Cord – 15' (4.6 m)

This optional Remote Push Button Call cord can be used for Residents to quickly call for help by pushing the call button to trigger an alarm.

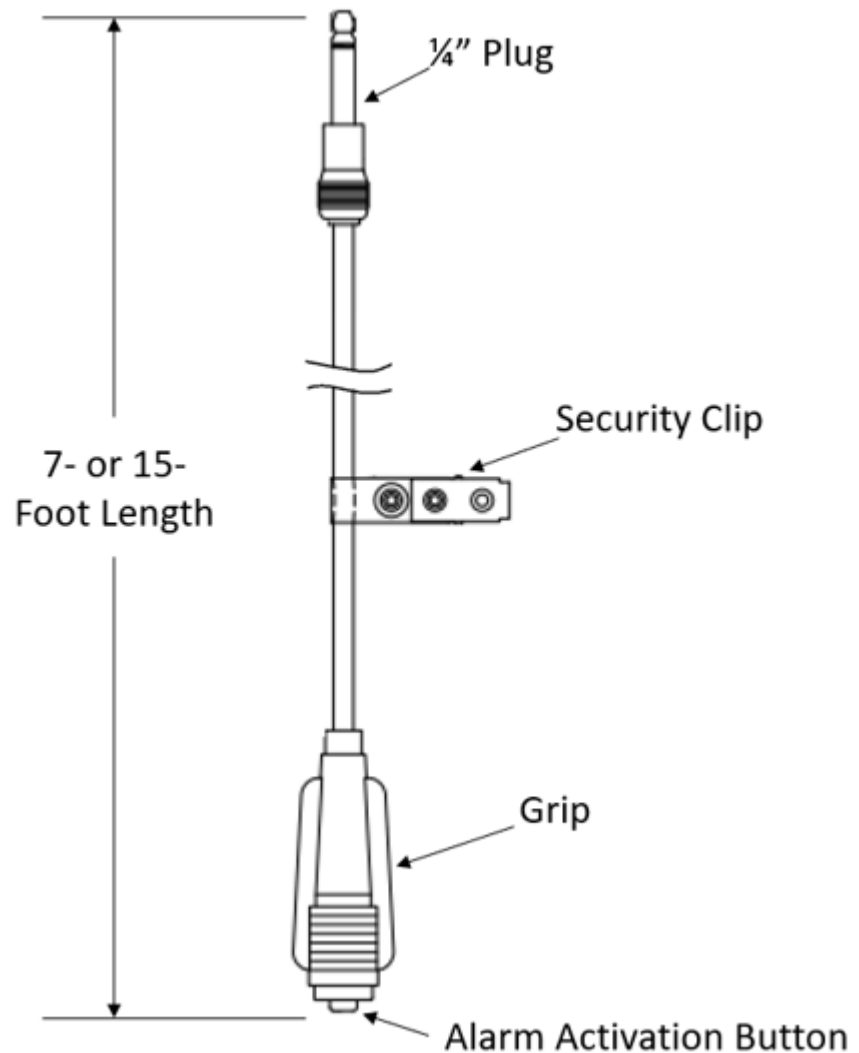Figure 22. *Remote Push Button Call Cord*

Figure 23. *Remote Push Button Call Cord Component Locations*

Specifications: Remote Push Button Call Cord

Physical and Mechanical	Length: Approximately 7 feet/2.1 m (56115) or 15 feet/4.6 m (56116) Diameter: 1.25" (3.18 cm) at widest point Button Life: 100,000 cycles Switch Type: Normally Open SP/ST
Electrical:	Max Voltage Rating: 30 VDC
Certification and Regulatory Compliance	RoHS UL2560, UL1069

Dome Lights

Models	Comments
SKU: 0900-685	2 LED Dome Light
SKU: 0900-686	4 LED Dome Light

It is required that one of the Dome Lights shall be installed in the corridor outside of the resident room and that the light shall illuminate when call station(s) in the room are in alarm.

The LED Dome Lights are used to indicate a call for assistance from a resident's room, common area, or as a zone indication.

Key features:

- Long-life LED
- Modern appearance
- Bright white color with frosted lens
- Mounts to standard single or double-gang electrical boxed

Specifications: LED Dome Lights

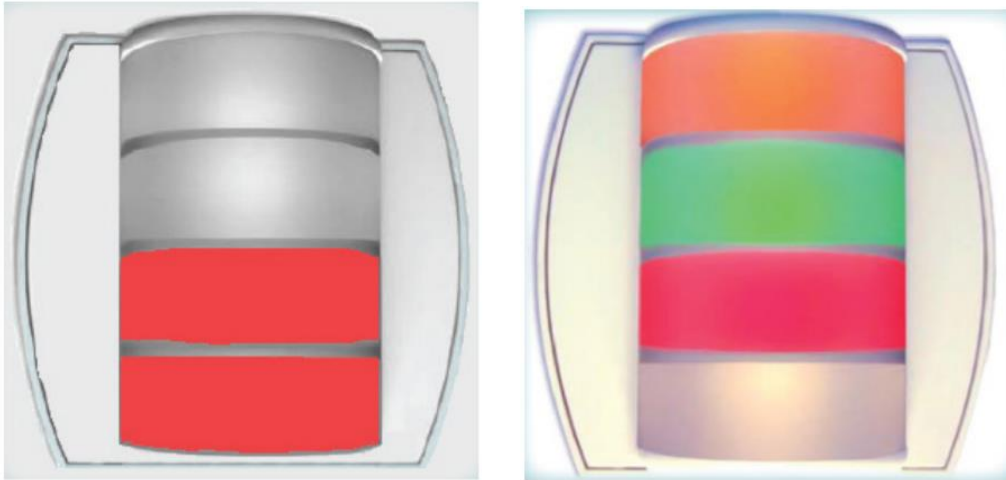| Dimensions:	5.0 x 4.8 x 2.755" (12.7 x 12.2 x 7.0 cm)
Electrical:	24VDC, 40 mA per indicated LED color
Weight:	10 oz. (280 g)
Environmental:	Indoor 32°–120° F (0°–49° C) Up to 90% relative humidity (non-condensing)
Certification and Regulatory Compliance	UL 1069

Figure 24.   *0900-685 2 LED Dome Light (right) and 0900-686 Dome Light (left)*

Pendants

Model	Comments
SKU: TAG-P1000	P10- Wi-Fi Resident Pendant Tag Basic model includes lanyard

The P10 Pendant is a component of the STANLEY Healthcare Arial Wi-Fi Nurse Call Solution targeted for the Senior Living market. The battery powered P10 Pendant is worn by residents, and enables them to move about the facility, be accurately located and, by pressing a single button, alert staff for assistance.
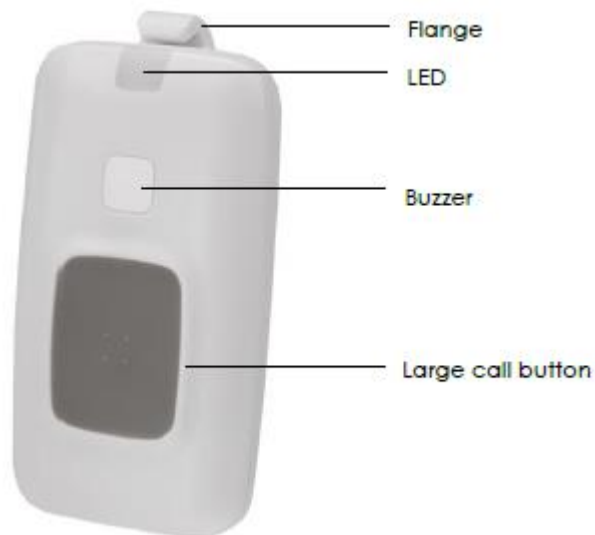
Key Features
- Leverages standard Wi-Fi infra-structure for low total cost of ownership and ease of deployment
- Large and tactile call button with LED and buzzer indications
- Designed for durability against significant impacts and for water and dust resistance
- Bi-directional communication for over-the-air updates
- Lanyard and belt clip attachment options
- Colored clip-on covers provide personalization for residents
- Rugged performance

How to Use the P10 Pendant

Activating the Pendant for the First Time
1. After attaching the lanyard, activate the pendant by pressing the call button for 3 seconds.
2. The LED lights green and an audible tone is played to indicate that the pendant is activated.