

Data Sheet:

STANLEY Healthcare EX4000 Series Ultrasound Exciters

Provides enterprise-wide visibility and room-level separation

Product Description

The STANLEY Healthcare EX4000 Series Ultrasound Exciters are components of the STANLEY Healthcare suite of enterprise visibility solutions that enable location-based applications. The EX4000 Series Exciters extend the suite to provide robust and sophisticated RFID detection capabilities, using the same STANLEY Healthcare Tags that can be accurately located in real time by the system.

The EX4000 Series Exciters transmit an ultrasound signal that does not pass through walls. As a result, Ultrasound Exciters enable room-level detection.

The detection and programming capabilities of the exciter, combined with the location features of the STANLEY Healthcare visibility system, make the suite the most sophisticated enterprise visibility solution for a wide variety of industries. The STANLEY Healthcare Wi-Fi Ultrasound Solution is ideal for applications such as Patient Flow and Nurse Call.

How it works:

- A person or an asset which is tagged with a STANLEY Healthcare Wi-Fi Tag, that includes an embedded ultrasound receiver, enters a room.
- The Tag receives the ultrasound signal from the ultrasound exciter and subsequently transmits a message over the Wi-Fi network, identifying the room in which the tag is located.

- MobileView software displays the assets, patients, and staff at their specific locations, and allows the user to utilize location data from the tags.

Key Features

RFID Detection of STANLEY Healthcare Wi-Fi Ultrasound Tags

The Ultrasound Exciters trigger ultrasound tags to transmit when entering a room.

Room-Level Separation

Ultrasound signals do not pass through walls, and thus ensure accurate room-level resolution.

Message Programming Functions

Provide the ability to use the EX4000 Exciters to store messages on the tag for later transmission. Message transmission can subsequently be triggered by other exciters, enabling sophisticated process control functions.

Configurability

The EX4220 Exciters are configured and monitored over the network by the AeroScout Engine, while the EX4120 offline Exciters are configured locally using the Ultrasound Exciter Configuration Tool.

Flexible Mounting and Usage Options

The Exciters can be mounted on ceilings or walls for optimum coverage of rooms. Additionally the Exciter's cover hides its cables, giving a more tidy look.



Functional Highlights

- Locate assets and people throughout entire facilities
- Uses Wi-Fi network for true enterprise-wide asset tracking and management
- Integrated ultrasound capability ensures precise room-level resolution
- Instant detection capability drives alerts and events
- Enables precise visibility of progression through each step of a process
- Leverages the same Wi-Fi tags that also provide real-time location
- Supports multiple power options for flexible and low cost deployment
- Modern look and feel
- Exciter cables are hidden when mounted

Multiple Power Options

The EX4220 Exciters can be powered either by PoE or a 48VDC power source via the exciter's power jack. A 110VAC/220VAC to 48VDC Power Supply Adaptor is also available. The EX4120 Exciters are battery powered, enabling a higher level of deployment flexibility.

Exciter 4000 Series Models

EX4120

EX4120 Exciters are battery powered Ultrasound Exciters and do not require a network or a power connection. These exciters enable customers to further reduce deployment cost and time. The EX4120 Exciters support the Generation 2 Ultrasound Protocol and therefore have longer battery life.

EX4220

EX4220 Exciters are equipped with both Ultrasound and Low Frequency transmitters. They can be powered via an external power source or PoE. The EX4220 Exciters have a LAN connection option or can be configured to work without network connectivity.

External Units

External Speakers

The optional small form-factor External Speaker unit is designed to cover small rooms such as restrooms adjacent to patient rooms or to extend the coverage of the Exciter in a large room. The Exciter communicates and provides power to the External Speaker unit via a standard CAT5 cable connection.

External LF Antenna Unit

The small form factor External LF Antenna unit can be used as an additional LF unit that is connected to the EX4220 Exciter. The Exciter communicates and provides power to the External LF unit via a standard CAT5 cable connection.

Applicable Software

Exciter Manager

The Exciter Manager is an application for configuring the IP addresses of the EX4220 Exciters to facilitate communication with the AeroScout Engine.

Ultrasound Exciter Configuration Tool

The Ultrasound Exciter Configuration Tool is an application for configuring the EX4120 offline Exciters.

Product Specifications	
EX4120, and EX4220 Ultrasound Exciters	
Dimensions	162mm x 201mm x 51mm (6.3in x 7.9in x 2.0in.)
Weight	EX4120 – 600gm (22oz.), EX4220 – 300gm (11oz.)
Housing	ABS, indoor use only
Range	Adjustable room coverage range up to 8 x 8m (26 x 26ft.)
Ultrasound Transmitter	Frequency 40KHz
Power	4120 Exciters: Battery powered – 2 x D size 3.6V Lithium batteries EX4220 Exciter: Input voltage: 48VDC PoE (IEEE 802.3af) Maximum power consumption: 6W
Environmental	Operating temperature: 0 to 50 °C (32 °F to 122 °F)
Certification	FCC Part 15, sub-part C class B, sub-part B EN 300-328, EN 300-330, EN 301-489 Safety: CE and cTUVus (EN60950)
Safety Certifications	US – cTUVus: UL 60950 Europe – CE mark: EN 60950
External LF Antenna	
Dimensions	93 x 84 x 34mm (3.7 x 3.3 x 1.3in.)
Weight	100gm (3.5oz.)
Housing	ABS, indoor use only
Range	Adjustable coverage range up to 5 x 5m (16.4 x 16.4ft.)
Power	Powered directly from the Exciter Maximum power consumption: 6W
Environmental	Operating temperature: 0 to 50 °C (32 °F to 122 °F)
External Speaker	
Dimensions	93 x 84 x 34mm (3.7 x 3.3 x 1.3in.)
Weight	80gm (2.8oz.)
Housing	ABS, indoor use only
Range	Adjustable coverage range up to 5 x 5m (16.4 x 16.4ft.)
Power	Powered directly from the Exciter Maximum power consumption: 6W
Environmental	Operating temperature: 0°C to +50°C (32°F to 122°F)

Exciter Detector

The Exciter Detector is a handheld device for evaluating the coverage area of an

Exciter. It connects to a computer via a USB port and is configured using the Exciter Detector software.