

EX3300 SERIES EXCITERS

INSTALLATION & CONFIGURATION GUIDE

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Introduction

The EX3300 Series Embedded Exciters are key components of STANLEY Healthcare's Hand Hygiene Compliance Monitoring Solution. Together with STANLEY Healthcare's suite of enterprise visibility solutions, the EX3300 Exciters provide robust and sophisticated RFID detection and monitoring capabilities.

The EX3300 Exciters are designed specifically to be embedded in touch free or automated Hand Hygiene dispensers. When a dispenser with an embedded EX3300 Exciter is activated, the Exciter triggers a tag located in range of the Exciter and the tag in turn transmits a message to a location receiver or compatible access point in range. This provides instant acknowledgment that a tagged staff member has used the dispenser. The Hand Hygiene Compliance Monitoring Solution detects, records, and reports dispenser usage by staff member, providing a revolutionary way for healthcare facilities to monitor staff compliance with the hand hygiene policy.



Figure 1: EX3300 embedded in a dispenser triggering a staff tag

EX3300 Features

Hand Hygiene Dispenser Integration

EX3300 Exciters are designed to be embedded in specific touch free or automated GoJo or Ecolab dispensers. The embedded Exciter reacts to dispenser activation and triggers the tag, in range, to transmit a message.

Configurable Transmission Range

EX3300s have a range of up to 2 meters (6.5 ft.) which can be configured using the Exciter Manager Tool.

Exciter Type Identification

EX3300 Exciters are configured with a predefined message identifying them as Hand Hygiene devices. The triggered tag transmits the message over the network. MobileView identifies the message as a Hand Wash event.

Supported Dispenser Models

The EX3300 Exciters are designed for integration in the following GoJo and EcoLab dispensers.

Image	Description
	GOJO TFX Touch Free Dispensers Includes the following TFX dispenser brands: • PURELL TFX Touch Free Dispenser • PURELL Surgical Scrub TFX Touch Free Dispenser • PROVON TFX Touch Free Dispenser
	GOJO LTX Touch Free Dispensers
	GOJO TFX Provon with CHG Dispensers
	EcoLab Next Gen Touch-Free Dispenser
	EcoLab NEXA Touch-Free Dispensers

Installing the Exciters

This chapter describes how to install the EX3300 Exciters in the different dispenser models. Each dispenser model is compatible with a specific EX3300 Exciter model.

**Note**

The EX-3300 Exciter must only be installed in the EcoLab Hand Sanitizer Dispenser or the GoJo Hand Sanitizer Dispensers.

Installing the EX3300 Exciter in an EcoLab Next Gen Dispenser

To open the dispenser:

1. Press the large button situated on the bottom of the dispenser. This releases the (bottom) hinged dispenser outer casing from the back panel, allowing it to open forwards.

**Note**

Approach the dispenser from the side, being careful not to activate the dispensing mechanism.

**To Install the EX3300 Exciter:**

1. Remove the tape from the double sided Velcro on the back of the Exciter casing.
2. Align the positioning nodes on the Exciter casing with the holes on the dispenser's front panel and fix the Exciter in place.

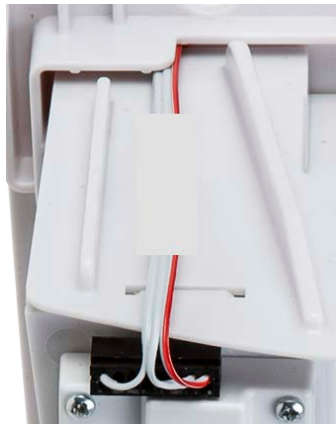


To attach the Exciter Connector Cable:

3. Connect the black connector of the connector cable into the Exciter.



4. Remove the entire internal dispenser mounting assembly from the dispenser casing by depressing the holding clip on the top of the assembly.
5. Route the cable over the top of the assembly ensuring the cable is not snagged or twisted.
6. Apply the connector wire retaining tape to the top of the mounting assembly.



7. Connect the white connector in the socket provided on the back of the mounting assembly.



8. Replace the dispenser mounting assembly in the case.

To Install the Soap Container:

The soap dispenser is installed with the offset dispensing nozzle on the bottom of the container positioned facing forwards.



1. Remove the protective cap covering the dispensing nozzle
2. On the dispenser tilt the white cylindrical nozzle mount forwards.
3. In the tilted position align and insert the dispenser nozzle in the cylindrical mount.
4. Once aligned push the soap container into the vertical position, locking the container in place.
5. After replacing the soap dispenser and/or the Exciter, close the dispenser casing and test the both the dispensing mechanism and Exciter operation.

Installing the EX3300 in an EcoLab NEXA Dispenser

To open the dispenser:

1. Simultaneously press the two buttons situated on both sides of the dispenser. This releases the front of the dispenser's outer casing, allowing it to open forwards.



To Install the EX3300 Exciter:

2. Remove the tape from the double sided Velcro on the back of the Exciter casing.
3. For the standard NEXA dispenser, place the Exciter vertically on the front panel of the dispenser.
4. For the compact NEXA dispenser, place the Exciter horizontally on the internal side panel of the dispenser.



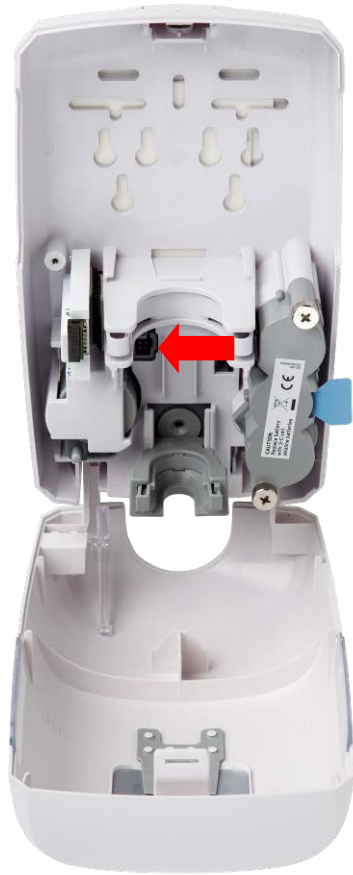
Figure 2: Exciter placement in NEXA standard (right) and NEXA Compact (left)

To attach the Exciter Connector Cable:

1. Connect the black connector of the connector cable to the Exciter.



2. Remove the soap container if needed.
3. Insert the white connector into the socket provided on the front of the dispenser. A protective rubber cover may need to be removed from this socket before inserting the connector.



4. After replacing the soap container, close the dispenser casing and test both the dispensing mechanism and Exciter operation.

Installing the EX3300 in a GOJO TFX Dispenser

To open the dispenser:

1. Open the dispenser by pressing the large button situated on the bottom of the dispenser. This releases the (bottom) hinged outer casing of the dispenser, from the back panel, allowing it to open forwards.



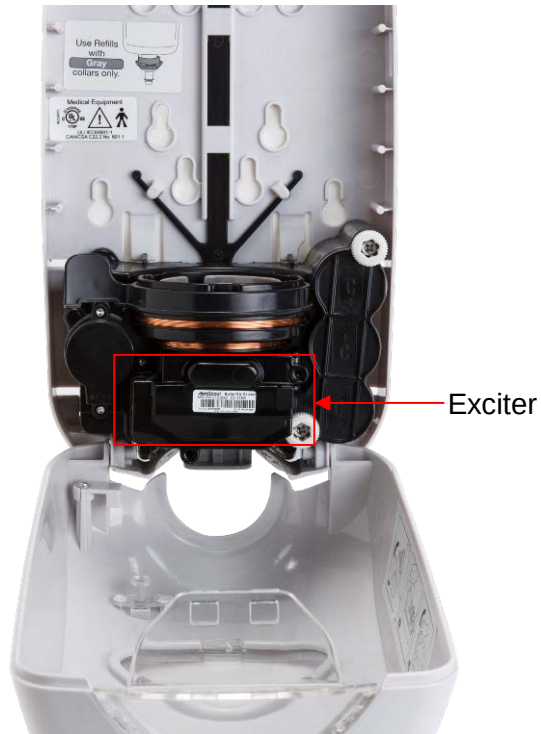
Note

Approach from the side, being careful to not activate the dispensing mechanism.



To install the Exciter:

1. Remove the soap container if needed.
2. Remove at least one of the batteries in the dispenser to disable the power.
3. Insert the Exciter in the slot provided. A grey plug may be located in the connector slot. This plug must be removed before the Exciter can be inserted.



4. Re-insert the battery into the dispenser.
5. Reinstall the soap container back into the dispenser.
6. Close the dispenser casing.
7. Test the Exciter and dispenser operation.

Installing the EX3300 in a GOJO LTX Dispenser

To open the dispenser:

Simultaneously press the two buttons situated on both sides of the dispenser. This releases the front of the dispenser's outer casing, allowing it to open forwards.



To install the Exciter:

1. Remove at least one of the batteries of the dispenser to cut the power to it.
2. Snap the Exciter into its customized compartment in the front side of the dispenser. There may be a need to remove a plastic placeholder from the compartment. This is done by simply snapping it out.
3. Plug the Exciter's audio jack cable into the dispenser's connector.



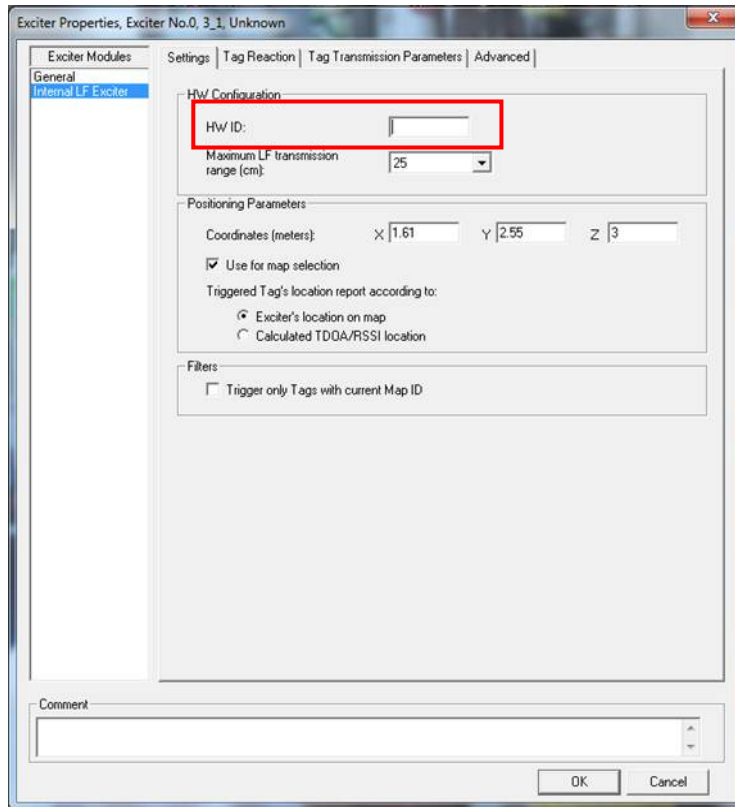
4. Insert the battery/s that was removed back into the dispenser.
5. Insert the soap container back into the dispenser.
6. Close the dispenser casing.
7. Test the Exciter and dispenser operation.

Adding the Exciters to the Engine Manager

Follow these steps:

1. Do one of the following:
 - In a Cisco-based configuration using MSE 7.4 or below, add Exciters via the Cisco NCS/PI when, Consult Cisco documentation for further information
 - In a non Cisco environment or when using Cisco MSE 7.5 or above add Exciters via AeroScout Engine Manager
2. Access Engine Manager and perform the following steps for each one of the Hand Hygiene Exciters:
 - a. In the **Configuration** menu select **Advanced Mode**.
 - b. Double-click on the Exciter icon on the map to access the **Exciter Properties**.
 - c. In the **Exciter Modules** dialog box, check the **Internal LF Exciter** box.
 - d. Ensure the **Connected to Network** check-box is not selected.
 - e. Select the **Settings** tab.
 - f. In **HW ID**, enter the Exciter ID.

The Exciter ID is located on a sticker on the front cover of the Exciter.
The ID can also be read from the Exciter using the Exciter Manager Tool and the Exciter's serial cable.



Note

If the ID is already in use by another Exciter, and the Exciter is reachable (not offline), the system automatically switches IDs between the two Exciters. If the Exciter is unreachable, change the ID manually.

- g. Click **OK**.
- h. Ensure all dispenser Exciters appear offline on the map 

Advanced Configuration

Advanced configuration of the EX3300 Exciter is done via the Exciter Manager. The Exciter Manager Tool enables configuring the Exciter's maximum transmission range and Exciter ID.

EX3300 Exciters are configured using a customized serial cable via the Exciter Manager Tool. The cable is not supplied with the Exciters and must be ordered separately.

For more instructions on configuring the EX3300 Exciter, please refer to the Exciter Manager User Guide.

Depending on the dispenser type (GoJo, EcoLab), embedded EX3300 Exciters require different serial cables.



Figure 3: Customized EX3300 Serial Cable for GoJo TFX Dispensers (SKU: CAB-3300)



Figure 4: Customized EX3300 Serial Cable for EcoLab Dispensers (CAB-3300-CN)



Figure 5: Customized EX3300 Serial Cable for GOJO LTX and TFX Dispensers (CAB-3300-LTX)

Replacing a Malfunctioning Exciter

If an embedded EX3300 Exciter is identified as malfunctioning or damaged it can be replaced on site by performing the following tasks:

1. Open the dispenser and remove the EX3300 Exciter.
2. Using the Exciter serial configuration cable and the Exciter Manager Tool configure the Exciter ID of the replacement Exciter, with the same ID as the malfunctioning/damaged Exciter. It is recommended to annotate the new ID on the Exciter housing for future needs.
3. Configure the range of the Exciter (if required).
4. Install the replacement EX3300 Exciter in the Dispenser.
5. Test the Exciter.

EX3300 Series Exciter Models and Cables Summary

Vendor	SKU	Name	Dispenser Type	Dispenser Image	Part Number	Exciter Image	eKey	Configuration Cable	Cable Image
EcoLab	EX-3300-ELB	EX3300 Hand Hygiene Exciter for EcoLab Next Gen Dispensers	Next Gen		92021121	 Long Cable	N/A	CAB-3300-CN	
	EX-3300-NEXA	EX3300 Hand Hygiene Exciter for EcoLab NEXA Dispensers	NEXA		92021188 (large) 92021184 (small)	 Short Cable	N/A	CAB-3300-CN	
GOJO	EX-3300-LTX	EX3300 Hand Hygiene Exciter for GOJO LTX Dispensers	LTX		1971-04 (large) 1371-04 (small)		N/A	CAB-3300-LTX	
	EX-3300-PRL	EX3300 Hand Hygiene Exciter for GOJO TFX Purell Dispensers	TFX		2720-12		Grey	CAB-3300	
	EX-3300-PRV	EX3300 Hand Hygiene Exciter for GOJO TFX Provon Dispensers	TFX		2745-12		Grey	CAB-3300	
	EX-3300-PRS	EX3300 Hand Hygiene Exciter for GOJO TFX Purell Surgical Scrub Dispensers	TFX		2785-12		Orange	CAB-3300	
	EX-3300-CHG	EX3300 Hand Hygiene Exciter for GOJO TFX Provon with CHG Dispensers	TFX		2845-12		Natural	CAB-3300	

EX3300 Specifications

Physical and Mechanical for the GoJo TFX Exciter (including housing)

- Dimensions: 80 x 48 mm x 45 mm (3.2 in. x 1.9 in. x 1.8 in.)
- Weight: 30 g (1.1 oz.)

Physical and Mechanical for the GoJo LTX Exciter (including housing)

- Dimensions: 80 x 48 mm x 20 mm (3.2 in. x 1.9 in. x 0.8 in.)
- Weight: 30 g (1.1 oz.)

Physical and Mechanical for the EcoLab Exciters (including housing)

- Dimensions: 62 x 63 mm x 13 mm (2.4 in. x 2.5 in. x 0.5 in.)
- Weight: 20 g (0.7 oz.)

Coverage

- Adjustable coverage range up to 2 m (6.5 ft.) by intervals of 0.25 m (0.8 ft.)

LF Channel

- 125 kHz
- Field intensity limits: 37.3 dB μ A/m at 10 m (ETSI)
- Propagation limits: 21.8 dB μ V/m at 300 m (FCC)
- Modulation: ASK

Power

- Use only alkaline batteries as provided by the manufacturer
- Input voltage range:
- GoJo 3V – 4.6V
- Ecolab 3.6V – 4.6V
- Maximum power consumption: 1 W
- Maximum current: 6A (including short circuiting and overload)

Environmental

- Operating temperature: 0 to 50 °C (32°F to 122°F)
- Humidity: 0 to 95%, non-condensing

Certifications

- EMC Certifications
 - o US standard: FCC part 15
 - o European standard: ETSI 300.328, 300.330, ETSI 301.489
 - o Canada: RSS 210 per demand
 - o EMC standard for healthcare: IEC 6100 / EN 60601
 - o Japan : ARIB per demand
 - o Australia : C-tick per demand
 - o Korea : MIC per demand
- Safety Certifications
 - o US – cTUVus: UL 60950
 - o Europe – CE mark: EN 60950



WARNING: Insertion of an EX-3300 Exciter into any host other than the EcoLab Hand Sanitizer Dispenser or the GoJo Hand Sanitizer Dispenser invalidates the FCC ID authorization and Industry Canada certification of the EX-3300 Exciter.



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.



WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Statement

This device 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 residential installations. 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 and television reception.

However, there is no guarantee that interference will not occur in a particular installation. If this device does cause such interference, which can be verified by turning the device off and on, the user is encouraged to eliminate the interference by one or more of the following measures:

- Re-orient or re-locate the receiving antenna.
- Increase the distance between the device and the receiver.
- Connect the device to an outlet on a circuit different from the one that supplies power to the receiver.
- Consult the dealer or an experienced radio/TV technician.

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