



E / F / G Series

POLARA iNX/iDX RETROFIT GUIDE

**For all pedestrian pushbutton-activated E/F/G Series
and legacy R920 / SC315 RRFB systems**



89525_RETROFIT-GUIDE_Polara-iNX-iDX_RevB

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1.0 Warnings and Precautions

The following symbols indicate important safety warnings and precautions throughout this guide:



WARNING indicates that serious bodily harm or death may result from failure to adhere to the precautions.



CAUTION indicates that damage to equipment may result if the instructions are not followed.



NOTE suggests optimal conditions and provides additional information.

1.1 Warranty Disclaimer

This guide will familiarize you with the features and installation of the Polara iNX pedestrian pushbutton as a retrofit into a compatible Carmanah system. Failure to comply with the use, storage, maintenance, installation or placement instructions detailed in this guide could void the warranty.

1.2 Standards

Perform all installation, wiring, grounding and maintenance in conformance with local building and electrical codes. Adherence to the National Electrical Code (NEC) is mandatory to comply with any certification markings. Non-adherence to code may void the warranty.

1.3 Safety and Usage Precautions



Use extreme caution when handling the batteries as they can generate hazardous short-circuit currents. Remove all jewelry (bracelets, metal-strap watches, etc.) before entering the cabinet.



Before lifting any heavy or bulky equipment, ensure the load is secured so moving parts do not shift, and that it can be lifted as far as needed without back strain or loss of grip. Installation may require more than one person.



Ensure the equipment is not powered during installation and wiring of the system.



Recheck all completed wiring for proper polarity prior to energizing the system.

NOTE

Changes or modifications to Carmanah equipment not expressly approved by Carmanah could void both the user's authority to operate the equipment and the warranty.

NOTE

All Carmanah traffic products use a constant-current LED output circuit. Not all traffic beacons are compatible with this output. Please contact Carmanah for additional information and guidance when adding or replacing beacons or other hardware.

NOTE

Visit support.carmanah.com to download the complete product user manual for your specific system.

 **WARNING**

Circuit boards are sensitive to electrostatic discharges (ESD). Care should be taken when handling electronics to prevent discharges. Use of an ESD wrist strap and connection to cabinet ground is recommended.

This guide is specific to retrofitting the Polara iNX/iDX with an applicable crosswalk system and is not a replacement for the complete E/F/G Series product user manuals.

2.0 Introduction

2.1 About the Polara iNX

iNX is the next generation of crosswalk accessibility, wireless connectivity and communication. iNX is designed for rectangular rapid flashing beacons (RRFB) and other approved flashing pedestrian crosswalk systems. It replaces Model-X and sets a new standard for pedestrian crosswalks with more features such as Bluetooth® 5 providing more speed, range and app capabilities.

The iNX provides an instructional sign, a pushbutton with directional arrow for activating the flashing lights, a voice message, and a yellow LED which flashes upon actuation and continues to flash while the beacons are active.

2.2 Theory of Operation

Polara APS products for use on mid-block RRFB crosswalks use a control signal provided by the flash controller to trigger the voice message. For Carmanah systems using the older “Model-X” series products, this control signal was provided by the LED driver output. On newer Carmanah systems, using the new iNX/iDX products, this control signal is provided by a dedicated digital output from the flash controller (EMS). Older Carmanah controllers did not have this dedicated output and are not compatible with the iNX/iDX series pushbuttons. This document describes the process for changing out the Carmanah controller to the new version across several Carmanah product models.

3.0 Available Kits and Included Components

The R920 Polara iNX with EMS* retrofit kit includes:

- EMS (control board) with aluminum cover (1)
- Cable ties (4)

The R920-E/F Polara iNX retrofit kit includes:

- EMS (control board)
- Cable ties (4)

The SC315 Polara iNX with EMS retrofit kit includes:

- EMS (control board) (1)
- Security bit (1)
- #8-32 stainless steel nut (4)
- Coaxial cable extension (1)
- 12" Red 18AWG wire (1)
- Cable ties (4)






The SC315-G Polara iNX retrofit kit includes:

- EMS (control board) (1)
- Cable ties (4)

*EMS = Energy Management System – System controller PCBA

4.0 Supported Systems and Firmware Check

This guide details how to install the Polara iNX retrofit kit into one of the following compatible Carmanah systems:

System Model ¹	Product Image	Existing Pushbutton	Minimum EMS Firmware Required ²	New Pushbutton Harness Needed
R920		Polara Bulldog	1.1.5.0	Yes
SC315 ³ (Single EMS only)		Polara Bulldog Polara Model X	1.1.5.0	Yes
R920-E		Polara Bulldog	1.1.5.0	Yes
R920-F		Polara Bulldog Polara Model X	1.1.5.0	Yes
SC315-G ⁴		Polara Bulldog Polara Model X	1.1.5.0	Yes

¹ Not all legacy systems or configurations may be compatible.

² There is a wide range of firmware versions that have been deployed over several hardware releases. Version 1.1.5.0 is for systems that are able to change the input type, "INPT", between these options: NO, NC, BTTN.

³ Single EMS version only, AC or solar powered.

⁴ Single or dual EMS version, AC or solar powered.

- EMS = Energy Management System (circuit board assembly).
- EMS firmware is not field upgradable.

4.1 General Notes

Refer to the applicable product user manual for more details at support.carmanah.com. Prior to installation, a [Solar Power Report](#) must be provided to verify system sustainability with the addition of the iNX pushbutton. If you have not received a solar power report, please [contact Carmanah](#).

If your existing Energy Management System (EMS) is not running the firmware version 1.1.5.0 or greater, you will require a new EMS as part of your retrofit kit.

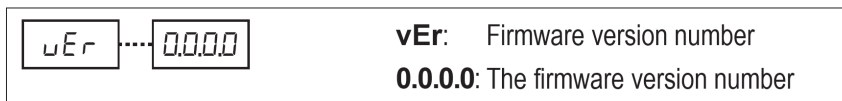
Refer to the appropriate installation section based on your existing system model and pushbutton configuration.

Model iNX is equivalent to iDX in all aspects. Anywhere iNX is used in this manual, will apply to iDX also. Refer to the respective full user manuals for additional user settings that may apply.

4.2 Onboard User Interface – Key Menu Items

Firmware Version:

Use the up/down arrows to navigate to the indicated menu item.



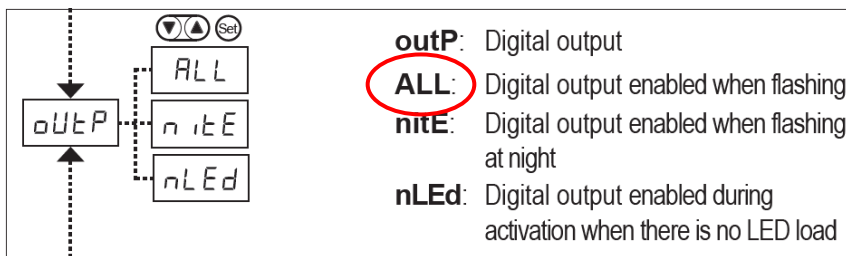
The Firmware Version menu item provides the current version of firmware in the EMS.

NOTE

Firmware versions cannot be updated in the field.

Digital Output:

Use the up/down arrows to navigate to the indicated menu item. Hold Set to edit.



NOTE

The Digital Output on the Energy Management System (EMS) must be set to ALL when used with the iNX pushbutton on standard systems.

NOTE

For systems with no installed fixture, the Digital Output must be set to nLED. This function requires the EMS to have firmware version 1.1.5.0 or newer. Check [4.0 Supported Systems](#) for instructions on how to check the EMS [Firmware Version](#).

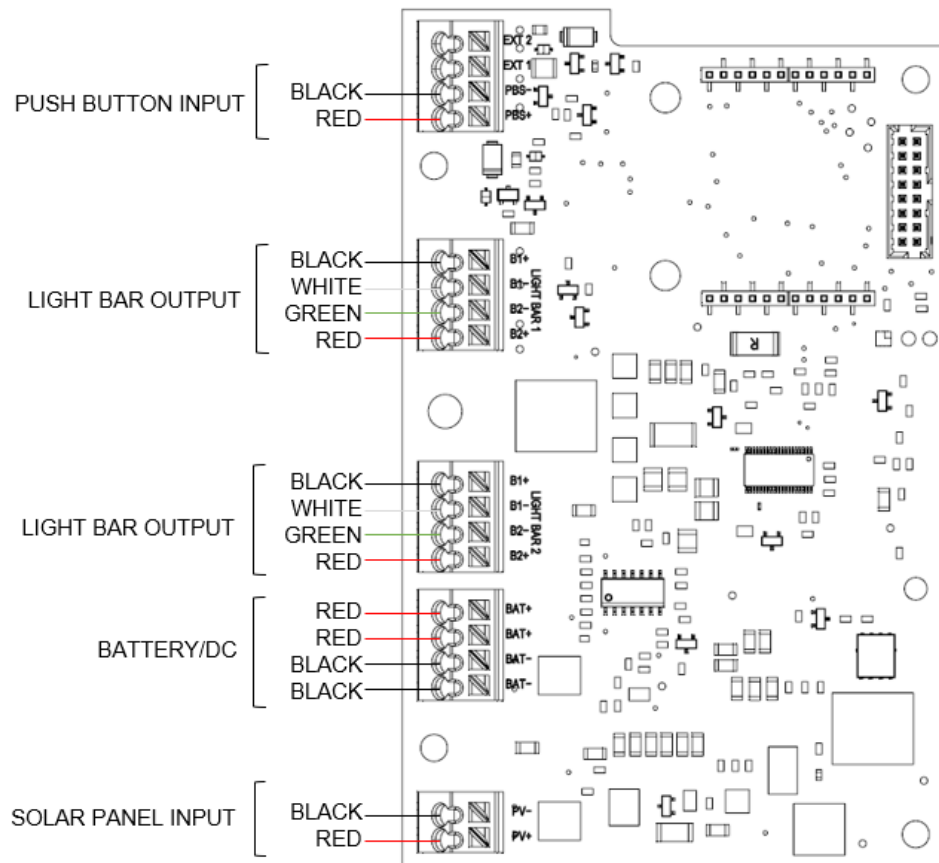
5.0 System Connectivity

1. Connectivity Overview – Standard Pushbutton:

The following diagram illustrates standard connectivity for an RRFB product configuration using a standard (non-APS) 2-conductor pushbutton.

NOTE

For AC configurations or single battery systems, only a single RED/BLACK DC power connection will be present.



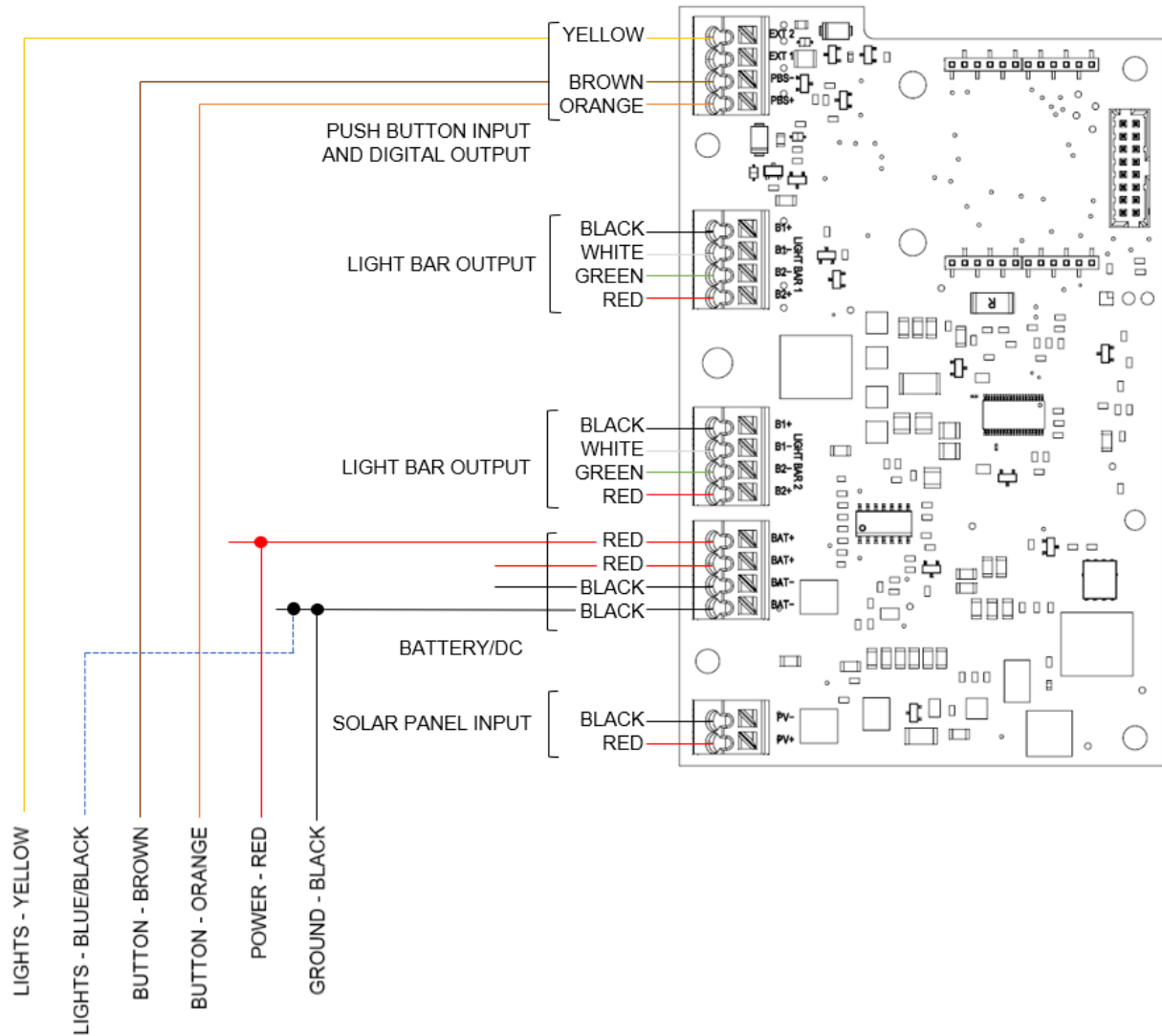
Energy Management System (EMS) PCBA

2. Connectivity Overview – iNX or iDX Configuration:

The following diagram illustrates connectivity for an RRFB product configuration using an iNX or iDX 6-conductor APS.

NOTE

For AC configurations or single battery systems, only a single RED/BLACK DC power connection will be present.



Energy Management System (EMS) PCBA

6.0 Installation Procedure – Legacy Systems

6.1 Legacy R920 – Replacing Polara Bulldog Button

1. De-energize system by disconnecting both system fuses.
2. Remove 4 screws securing EMS cover.
3. Rotate EMS cover to expose EMS PCBA and wiring. Remove cable ties as required.
4. Remove the RF connector at the SMA connector on the radio module. A 5/16" open end wrench may be required.
5. Disconnect existing pushbutton, light bar(s), beacons, or LED signs, batteries and solar panel.

NOTE

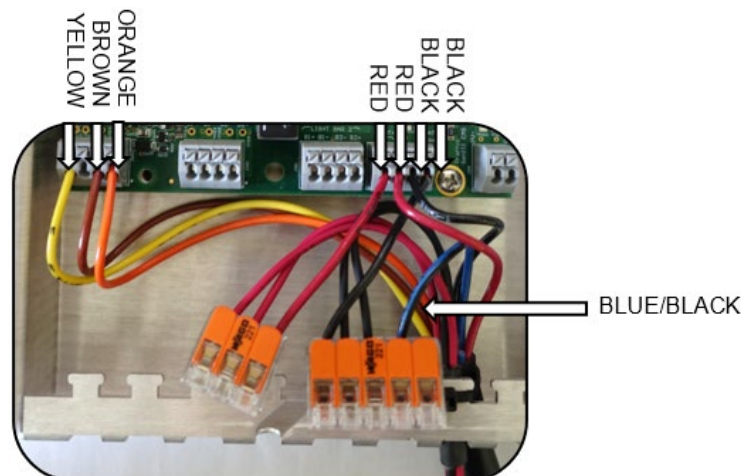
Photograph or take careful note of all existing connections on EMS.

6. Remove existing EMS PCBA.

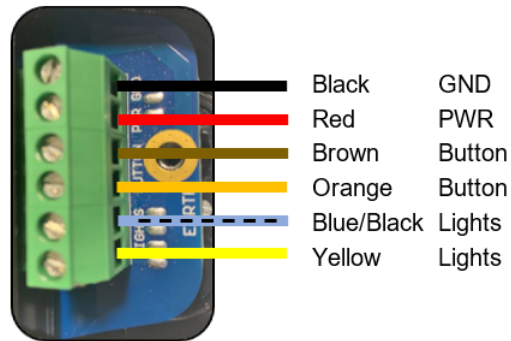


The light pipe at the top off the PCB assembly can be damaged during the removal of the EMS. Lift the EMS gently from the bottom edge and slide down before lifting up and out of enclosure.

7. Install replacement EMS PCBA with aluminum cover provided with retrofit kit.
8. Reconnect antenna lead.
9. Route iNX cable through the large opening on the lower front edge of the EMS cover.
10. Splice Battery (+) and Battery (-) along with the BLUE/BLACK conductor into the connectors on the iNX harness.
11. Insert the ORANGE, BROWN and YELLOW conductors as shown below:



12. Reconnect light bar(s) or other LED fixtures, and solar panel.
13. Reinstall EMS cover.
14. Land iNX conductors in the appropriate locations on the pushbutton.



15. Re-energize the system.
16. Configure the pushbutton.

NOTE

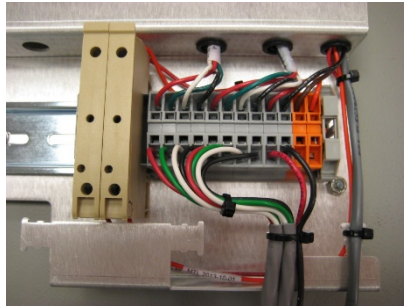
Pushbutton configuration can only be performed using the Polara Field Service App.

The Polara Field Service App is available for Android™ and iOS® and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

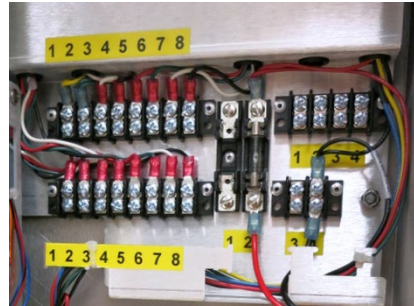
*See appendix for information on pushbutton configuration.

6.2 Legacy SC315 – Replacing Polara Bulldog Button

The following section applies to legacy SC315 systems with either DIN rail mounted terminal blocks, or screw-type terminal blocks and equipped with a pre-existing Polar Bulldog pushbutton.



DIN rail version



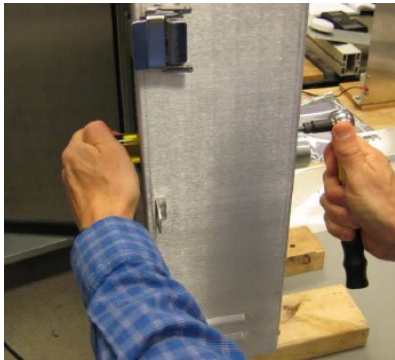
Screw-type terminal blocks

1. Confirm power is removed from the system. Remove fuses or turn AC breaker off. Shield solar panel with an opaque covering to effectively de-energize the panel.
2. Remove four screws with included pin-in-hex adapter from the back of the cabinet that secure the EMS mounting plate.



The screws can start to spin easily. Apply pressure to the front of the EMS opposite the screw being removed. This will help prevent the stand-off part inside the cabinet from spinning.

A nut driver can be used for lower screws. Apply pressure on the front of the EMS for upper screws.

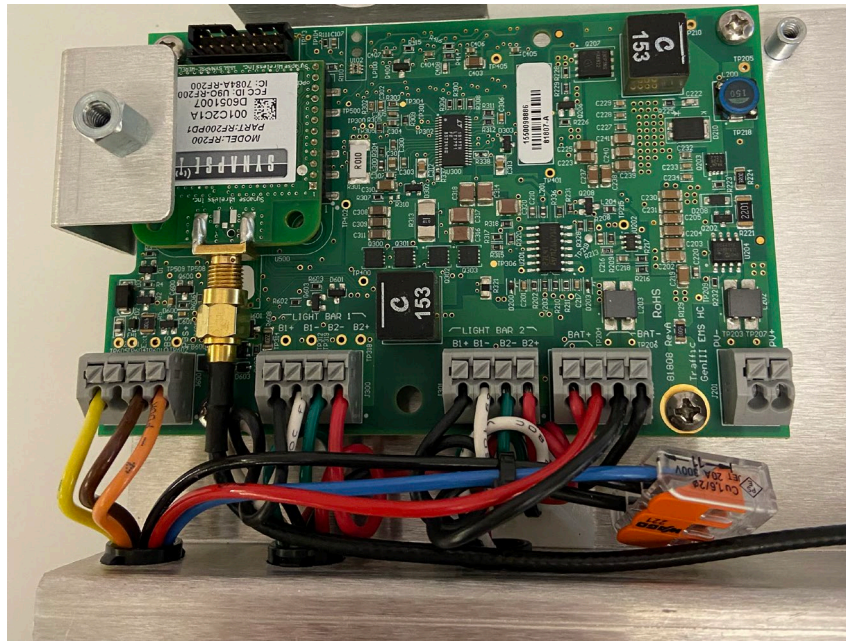


3. Carefully flip the EMS mounting plate around, cutting cable ties securing the radio module in place.
4. Remove the RF connector at the SMA connector on the radio module. A 5/16" open end wrench may be required.
5. Disconnect existing pushbutton, light bar(s), beacons, or LED signs, batteries and solar panel (if applicable).

NOTE

Photograph or take careful note of all existing connections on EMS.

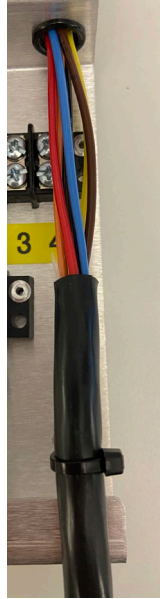
6. Install replacement EMS PCBA provided with retrofit kit.
7. Reconnect antenna lead.
8. Route iNX conductors through the large opening on the lower front edge of the EMS cover.
9. Insert the RED wire from the iNX harness into the 4-position terminal block (see image below).
10. Using the WAGO connector provided, splice the iNX BLACK wire and BLUE/BLACK wires.
11. Use a short length of BLACK wire to make the connection between the WAGO connector and the 4-position terminal block on the circuit board (see image below).
12. Insert the ORANGE, BROWN and YELLOW conductors as shown below.
13. Reconnect the light bar(s) or other LED fixtures and solar panel (if applicable).



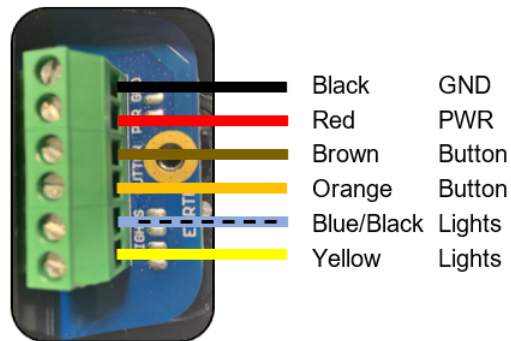
Completed internal iNX connections (solar panel connection not shown)

14. Reinstall the EMS chassis into the cabinet.

15. Use a cable tie to secure the iNX cable jacket to the EMS cover.



16. Land iNX conductors in the appropriate locations on the pushbutton.



17. Re-energize the system.

18. Configure the pushbutton.

NOTE Pushbutton configuration can only be performed using the Polara Field Service App.

The Polara Field Service App is available for Android and iOS and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

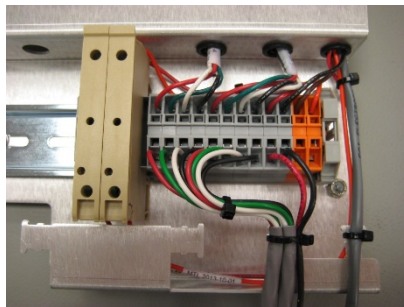
*See appendix for information on pushbutton configuration.

6.3 Legacy SC315 – Replacing Polara Model-X Button

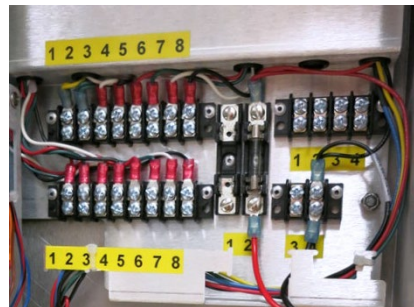
Overview

For systems using the Polara Model-X pushbuttons and the separate XAV control board, the control signal for activating the voice message is provided by a voltage on the RRFB light bar circuit. For systems using the iNX/iDX, this control signal now is produced by a digital output on the Carmanah EMS, labelled “EXT 2” on the EMS circuit board (see schematic in [Section 5.0](#)).

The following section applies to legacy SC315 systems with either DIN rail mounted terminal blocks, or screw-type terminal blocks and equipped with a pre-existing Polara Model X pushbutton and XAV pushbutton control board.



Model X with DIN rail terminal blocks



Model X with screw-type terminal blocks

1. Confirm power is removed from the system. Remove fuses or turn AC breaker off. Shield solar panel with an opaque covering to effectively de-energize the panel.

NOTE

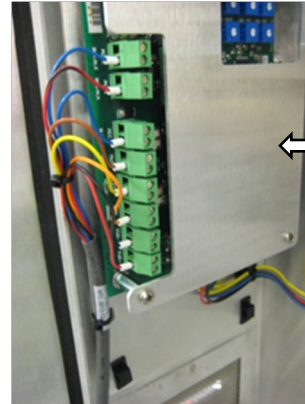
Removal of existing XAV control board is optional; however, all connections to the XAV control board to the system should be removed, including DC power.

2. Remove the 4 screws securing the XAV controller from the outside left of the cabinet. Use included pin-in-hex bit and save the screws to be re-installed.

NOTE

Ensure the O-ring washers stay in place on the 4 sealing screws.

3. Remove the XAV controller from the inside left of cabinet. Remove cable ties to remove harness.



4. Re-install 4 screws that held the XAV controller in place on the side of the cabinet. Use four 8-32 lock nuts provided. Nuts should be installed inside cabinet.
5. Remove four screws with included pin-in-hex adapter from the back of the cabinet that secure the EMS mounting plate.



The screws can start to spin easily. Apply pressure to the front of the EMS opposite the screw being removed. This will help prevent the stand-off part inside the cabinet from spinning.

A nut driver can be used for lower screws. Apply pressure on the front of the EMS for upper screws.



6. Carefully flip the EMS mounting plate around, cutting cable ties securing the radio module in place.
7. Remove the RF connector at the SMA connector on the radio module. A 5/16" open end wrench may be required.
8. Disconnect existing pushbutton, light bar(s), beacons, or LED signs, batteries and solar panel (if applicable).

NOTE

Leave existing connections at the terminal blocks on the outside of the EMS cover. This applies to both DIN rail and screw-type terminal block configurations.

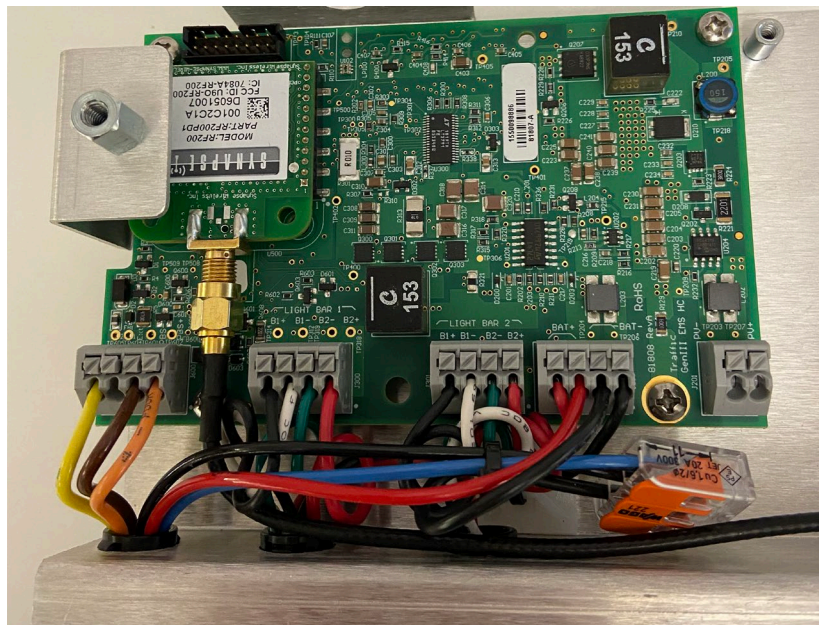
NOTE

Photograph or take careful note of all existing connections on EMS.

NOTE

For this product configuration, the pre-existing connection that uses the YELLOW wire to connect the light bar output to the XAV control board will not be reused. This applies to both DIN rail and screw-type terminal block configurations.

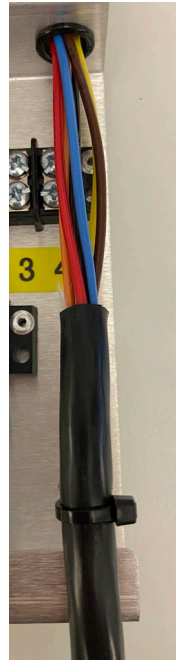
9. Install replacement EMS PCBA provided with retrofit kit.
10. Reconnect antenna lead.
11. Route iNX conductors through the large opening on the lower front edge of the EMS cover.
12. Insert the RED wire from the iNX harness into the 4-position terminal block (see image below).
13. Using the WAGO connector provided, splice the iNX BLACK wire and BLUE/BLACK wires.
14. Use a short length of BLACK wire to make the connection between the WAGO connector and the 4-position terminal block on the circuit board (see image below).
15. Insert the ORANGE, BROWN and YELLOW conductors as shown below.
16. Use a short length of RED wire to replace the missing light bar conductor (previously YELLOW).
17. Reconnect the light bars or other LED fixtures and solar panel (if applicable).



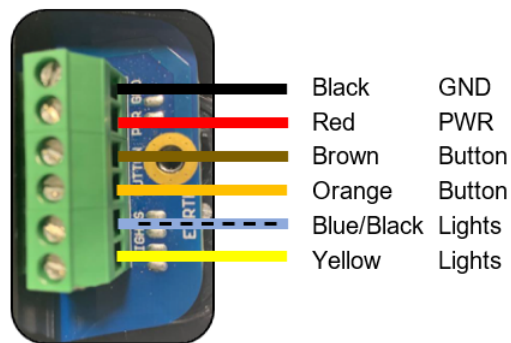
Completed internal iNX connections (solar panel connection not shown)

18. Reinstall the EMS chassis into the cabinet.

19. Use a cable tie to secure the iNX cable jacket to the EMS cover.



20. Land iNX conductors in the appropriate locations on the pushbutton.



21. Re-energize the system.

22. Configure the pushbutton.

NOTE

Pushbutton configuration can only be performed using the Polara Field Service App.

The Polara Field Service App is available for Android and iOS and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

*See appendix for information on pushbutton configuration.

7.0 Installation Procedure – R920-E Series

1. De-energize system by disconnecting both system fuses.
2. Remove 4 screws securing EMS cover.
3. Rotate EMS cover to expose EMS PCBA and wiring. Remove cable ties as required.

NOTE

For systems that have firmware version 1.1.5.0 already installed, replacement of the PCBA is not required. Skip to step number 9 in this section.

4. Remove the RF connector at the SMA connector on the radio module. A 5/16" open end wrench may be required.
5. Disconnect existing pushbutton, light bar(s), beacons, or LED signs, batteries and solar panel.

NOTE

Photograph or take careful note of all existing connections on EMS

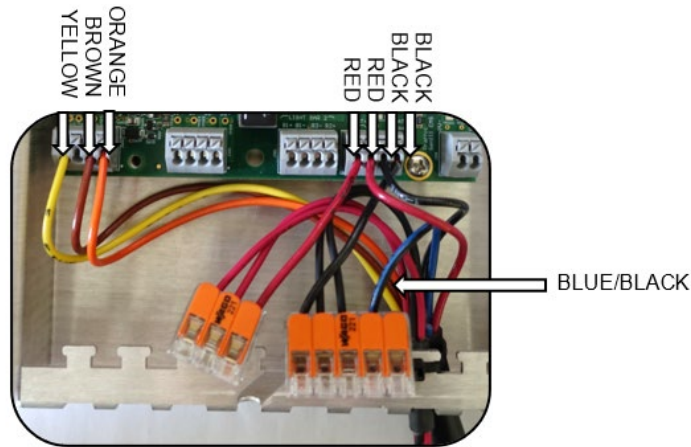
6. Remove existing EMS PCBA.

WARNING

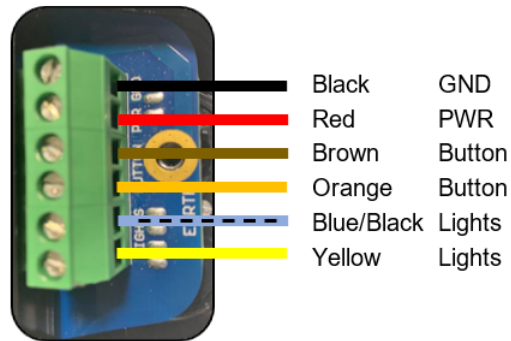
The light pipe at the top off the PCB assembly can be damaged during the removal of the EMS. Lift the EMS gently from the bottom edge and slide down before lifting up and out of enclosure.

7. Install replacement EMS PCBA provided with retrofit kit.
8. Reconnect antenna lead.
9. Route iNX cable through the large opening on the lower front edge of the EMS cover.
10. Splice Battery (+) and Battery (-) along with the BLUE/BLACK conductor into the connectors on the iNX harness.

11. Insert the ORANGE, BROWN and YELLOW conductors as shown below:



- 12. Reconnect light bar(s) or other LED fixtures, and solar panel.
- 13. Reinstall EMS cover.
- 14. Land iNX conductors in the appropriate locations on the pushbutton.



- 15. Re-energize the system.
- 16. Configure the pushbutton.

NOTE

Pushbutton configuration can only be performed using the Polara Field Service App.

The Polara Field Service App is available for Android and iOS and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

*See appendix for information on pushbutton configuration.

8.0 Installation Procedure – R920-F Series

1. De-energize system by disconnecting both system fuses.
2. Remove 4 screws securing EMS cover.
3. Rotate EMS cover to expose EMS PCBA and wiring. Remove cable ties as required.

NOTE

For systems that have firmware version 1.1.5.0 already installed, replacement of the PCBA is not required. Skip to step number 9 in this section.

4. Remove the RF connector at the SMA connector on the radio module. A 5/16" open end wrench may be required.
5. Disconnect existing pushbutton, light bar(s), beacons, or LED signs, batteries and solar panel.

NOTE

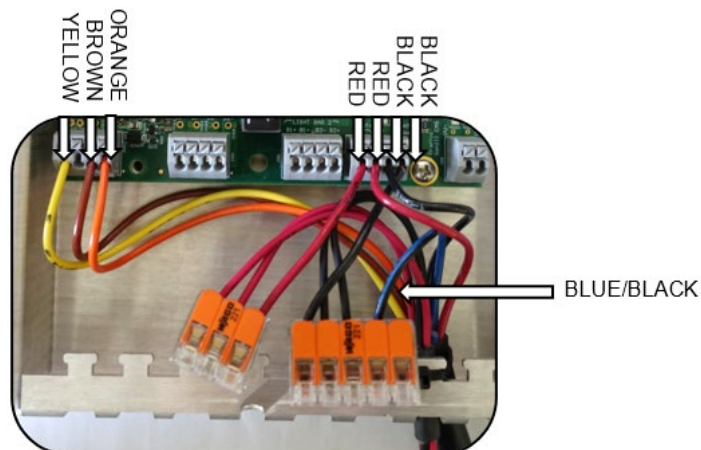
Photograph or take careful note of all existing connections on EMS.

6. Remove existing EMS PCBA.

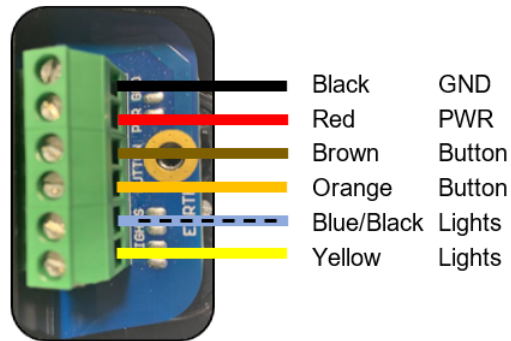
WARNING

The light pipe at the top off the PCB assembly can be damaged during the removal of the EMS. Lift the EMS gently from the bottom edge and slide down before lifting up and out of enclosure.

7. Install replacement EMS PCBA provided with retrofit kit.
8. Reconnect antenna lead.
9. Route iNX cable through the large opening on the lower front edge of the EMS cover.
10. Splice Battery (+) and Battery (-) along with the BLUE/BLACK conductor into the connectors on the iNX harness.
11. Insert the ORANGE, BROWN, and YELLOW conductors as shown below:



12. Reconnect light bar(s) or other LED fixtures, and solar panel.
13. Reinstall EMS cover.
14. Land iNX conductors in the appropriate locations on the pushbutton.



15. Re-energize the system.
16. Configure the pushbutton.

NOTE

Pushbutton configuration can only be performed using the Polara Field Service App.

The Polara Field Service App is available for Android and iOS and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

*See appendix for information on pushbutton configuration.

9.0 R920-F – Replacing Polara Model-X Button

Overview:

For systems using the Polara Model-X pushbuttons and the separate XAV control board, the control signal for activating the voice message is provided by a voltage on the RRFB light bar circuit. For systems using the iNX/iDX, this control signal now is produced by a digital output on the Carmanah EMS, labelled “EXT 2” on the EMS circuit board (see schematic in [Section 5.0](#)).

The following section applies to R920-F systems with a pre-existing Polara Model-X pushbutton and XAV pushbutton control board.

1. De-energize system by disconnecting both system fuses.
2. Remove 4 screws securing EMS cover.
3. Rotate EMS cover to expose EMS PCBA and wiring. Remove cable ties as required.
4. Remove the RF connector at the SMA connector on the radio module. A 5/16" open end wrench may be required.
5. Disconnect existing pushbutton, light bar(s), beacons, or LED signs, batteries and solar panel.

NOTE

Removal of the existing XAV control board is optional, however; all connections from the XAV control board to the system should be removed, including DC power.

NOTE

Photograph or take careful note of all existing connections on EMS.

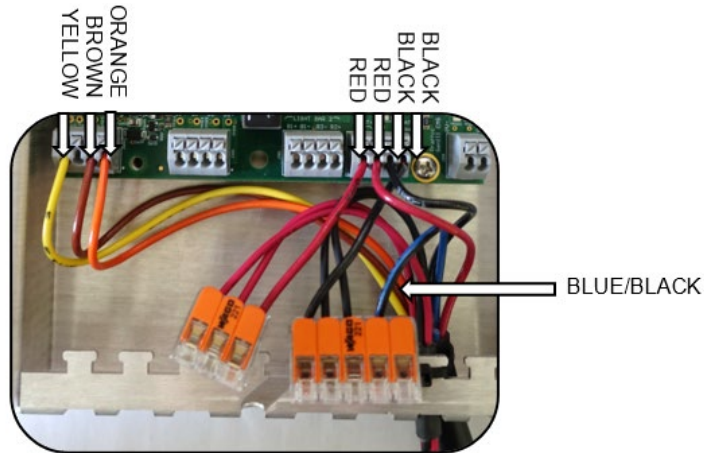
6. Remove existing EMS PCBA.



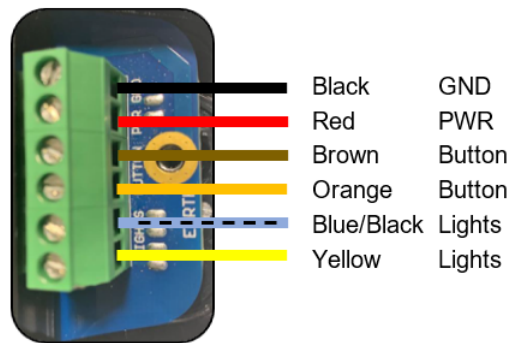
The light pipe at the top off the PCB assembly can be damaged during the removal of the EMS. Lift the EMS gently from the bottom edge and slide down before lifting up and out of enclosure.

7. Install replacement EMS PCBA provided with retrofit kit.
8. Reconnect antenna lead.
9. Route iNX cable through the large opening on the lower front edge of the EMS cover.
10. Splice Battery (+) and Battery (-) along with the BLUE/BLACK conductor into the connectors on the iNX harness.

11. Insert the ORANGE, BROWN, and YELLOW conductors as shown below:



12. Reconnect light bar(s) or other LED fixtures, and solar panel.
13. Reinstall EMS cover.
14. Land iNX conductors in the appropriate locations on the pushbutton.



15. Re-energize the system.
16. Configure the pushbutton.

NOTE Pushbutton configuration can only be performed using the Polara Field Service App.

The Polara Field Service App is available for Android and iOS and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

*See appendix for information on pushbutton configuration.

10.0 Installation Procedure – G Series

NOTE

For systems that have firmware version 1.1.5.0 already installed, replacement of the PCBA is not required. All process steps for replacing the Carmanah EMS, PCBA, can be omitted.

NOTE

The Digital Output on the Energy Management System (EMS) must be set to ALL when used with the iNX pushbutton on standard systems. Check [3.0 Supported Systems](#) for instructions on how to check and edit the [Digital Output](#).

WARNING

The light pipe at the top off the PCBA can be damaged when handling the EMS chassis assembly. Handle the EMS chassis carefully.

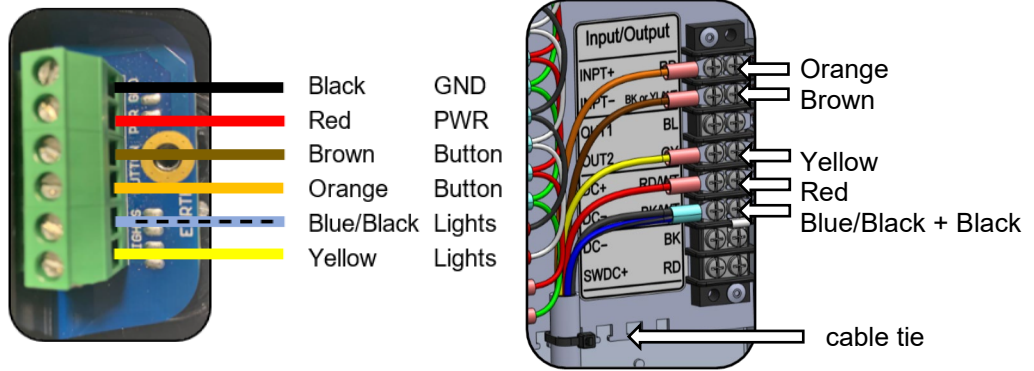
10.1 SC315-G – Replacing Polara Bulldog Button

1. De-energize system: For solar powered systems, disconnect the battery and solar fuses to ensure power is no longer feeding the system. For AC-powered systems, de-energize the system via the breaker in the cabinet.
2. Remove the existing Polara Bulldog pushbutton connections from INPT+ / INPT- on the terminal strips of the EMS cover. Remove pushbutton.
3. Remove the four screws/washers securing the Energy Management System (EMS) enclosure and set aside.
4. Carefully rotate the EMS chassis to expose PCBA and wiring on back side.
5. Remove the RF connector at the SMA connector on the radio module. A 5/16" open end wrench may be required.

NOTE

Photograph or take careful note of all existing connections on EMS.

6. Remove existing connections to the EMS PCBA.
7. Remove and retain 4 Phillips head screws securing the circuit board.
8. Remove the circuit board and replace with the Unified EMS circuit board.
9. Install 4 Phillips head screws to secure the circuit board in place.
10. Reconnect all previously removed connections including antenna lead.
11. Reinstall the EMS chassis into the cabinet.
12. Connect the iNX harness to the EMS and pushbutton terminals as detailed below.



iNX Terminal	Wire Color	EMS Terminal	Function
GND	Black	DC-	Battery Negative
PWR	Red	DC+	+12V Battery Positive
BUTTON (Non-Polarized)	Orange	INPT+	Triggers EMS to activate beacons
	Brown	INPT-	Triggers EMS to activate beacons
LIGHTS (Non-Polarized)	Blue/Black	DC-	Battery Negative
	Yellow	OUT2	Provides confirmation signal that beacons are flashing to iNX, triggering audible message

13. Secure iNX cable to EMS chassis with a cable tie.
14. Configure pushbutton.

NOTE

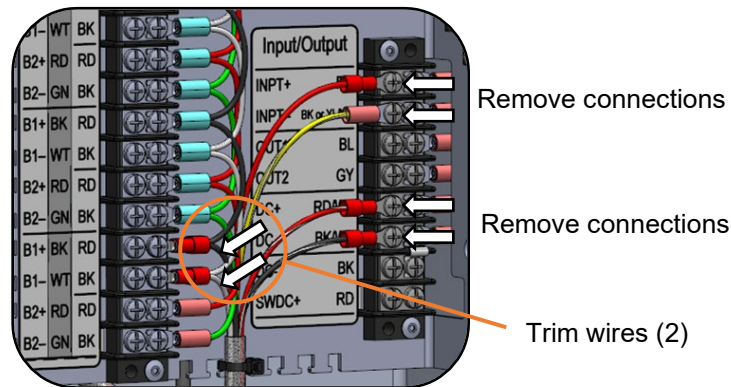
Pushbutton configuration can only be performed using the Polara Field Service App.

The Polara Field Service App is available for Android and iOS and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

*See appendix for information on pushbutton configuration.

10.2 SC315-G – Replacing Polara Model-X Button

1. De-energize system: For solar powered systems, disconnect the battery and solar fuses to ensure power is no longer feeding the system. For AC-powered systems, de-energize the system via the breaker in the cabinet.
2. Remove the existing Polara XAV pushbutton connections from INPT+, INPT-, DC+ and DC- as indicated below.
3. Trim and cap white and black wires from the existing cable attached to B1+ and B1-.


NOTE

Only trim the black and white wires that connect to the harness leading to the XAV. Do not trim the wires that lead to the other outputs from the EMS.

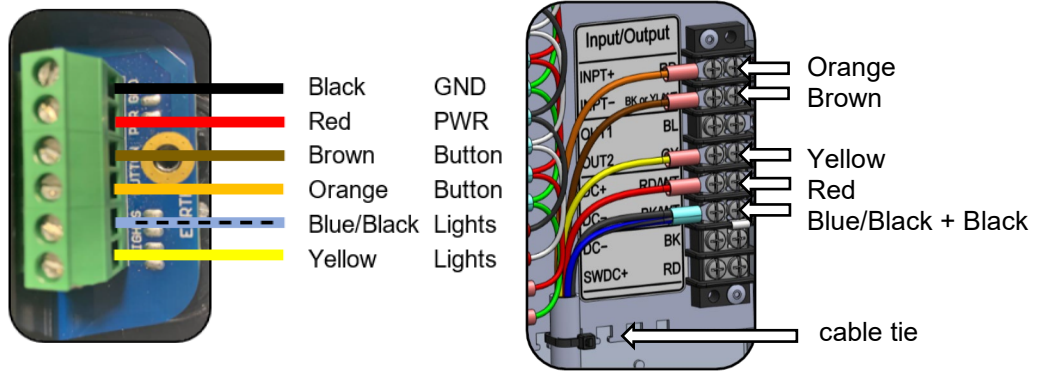
4. Remove pushbutton assembly and XAV controller.
5. Note the colors and positions of the remaining wires and then remove from EMS circuit board.
6. Remove and retain 4 Phillips head screws securing the circuit board.
7. Remove the circuit board and replace with the replacement EMS circuit board.

WARNING

The light pipe at the top off the PCB assembly can be damaged during the assembly of the EMS. Slide the EMS down to remove and up to install before removing/installing screws.

8. Install 4 Phillips head screws to secure the circuit board in place.
9. Reconnect all previously removed connections including antenna lead.

10. Connect the iNX harness to the EMS and pushbutton terminals as detailed below. Torque EMS terminal block screws to 12 in.lb. Please consult Polara’s installation documentation for more information.



iNX Terminal	Wire Color	EMS Terminal	Function
GND	Black	DC-	Battery Negative
PWR	Red	DC+	+12V Battery Positive
BUTTON (Non-Polarized)	Orange	INPT+	Triggers EMS to activate beacons
	Brown	INPT-	Triggers EMS to activate beacons
LIGHTS (Non-Polarized)	Blue/Black	DC-	Battery Negative
	Yellow	OUT2	Provides confirmation signal that beacons are flashing to iNX, triggering audible message

11. Secure cable to EMS near terminal block using cable tie.
12. Check that the button is configured correctly.
13. Configure pushbutton.

NOTE Pushbutton configuration can only be performed using the Polara Field Service Apps.

The Polara Field Service App is available for Android and iOS and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

*See appendix for information on pushbutton configuration.

Appendix – Basic Pushbutton Configuration

Changing the Default Password – Overview

After installing and powering up the Polara iNX/iDX pushbutton, the button will automatically warn the user to change the default Bluetooth password for the button at one-minute intervals. The default password is used to connect to the button and make various adjustments to the configuration and performance. This is done through the Polara Field Service App. The Polara Field Service App is available for Android and iOS and can be downloaded free-of-charge from the Google Play Store or Apple App Store.

Procedure

After connecting to the button, you will use the default passcode of "1234" and then proceed to press on the **Password menu** to enter a new password. Once the new password has been entered, tap on the **Save** button in the upper right corner of the screen.

Note

A firmware update prompt will appear upon connection if there is an update available. Press the **Firmware Update** button and select **Apply Latest Firmware**.

Once the firmware update process has been completed, the app will disconnect, and the button will reboot and load the new firmware. The device will be unresponsive for up to 30 seconds. **Do not power off the button/beacon system or navigate away from the screen during this time.** Upon completion, the double-beep startup sound will be heard, and the button will be ready to use.

If you are experiencing any difficulties either installing or configuring the pushbutton system, please visit support.carmanah.com or contact Carmanah Technical Support.

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