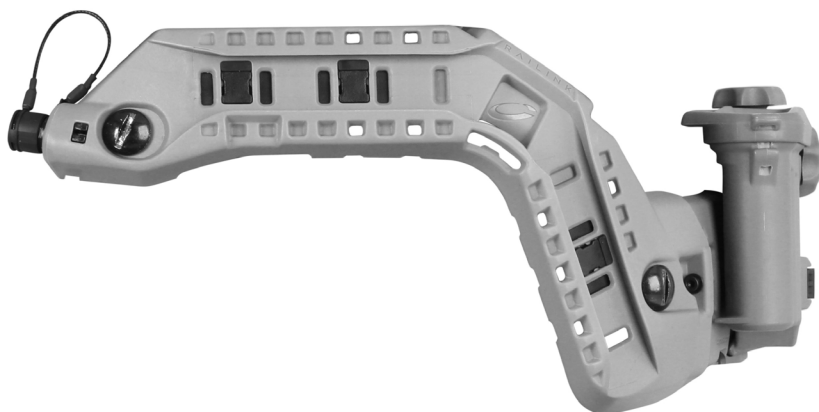




RAILINK®

OPERATOR'S MANUAL



For FAST® Helmet Systems

This product is covered by one or more patents.
For more information visit www.gentexcorp.com/patents

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TABLE OF CONTENTS

Introduction	4
Product Overview	5
Installation & Operation	6
Maintenance & Care	11
Technical Support	12
Specifications	13
Operator Notes	14
Warranty	15

INTRODUCTION

ABOUT RAILINK

RAILINK is a system that integrates mounting, power and data into a scalable headborne platform. It seamlessly integrates compatible, battery-free accessories and VAS systems through a centralized battery pack without the need for cable management.

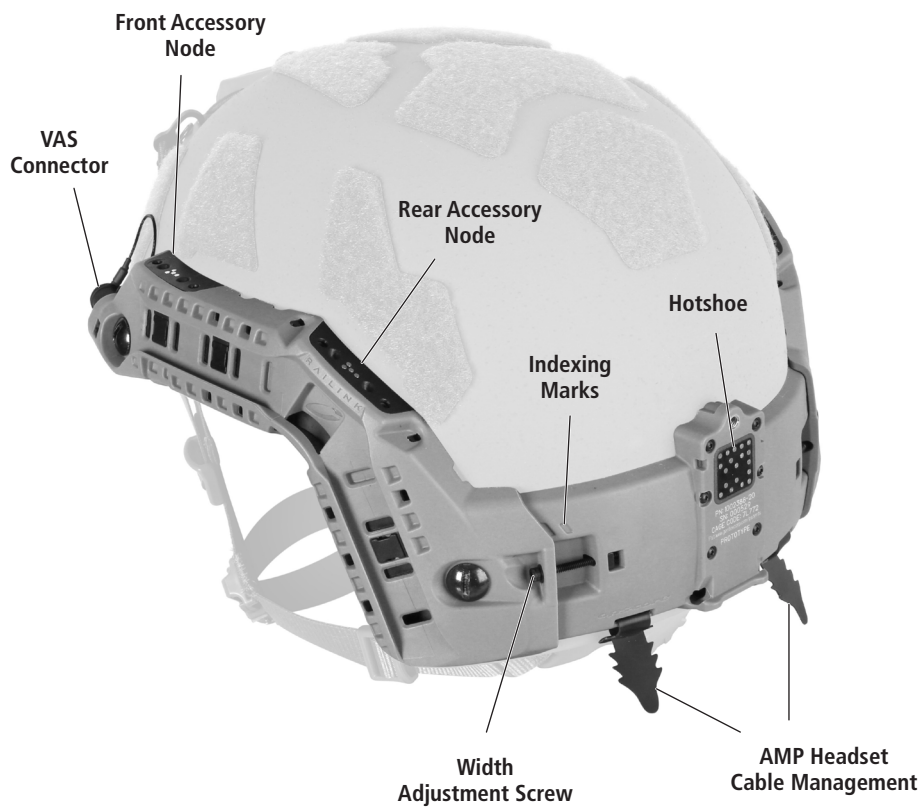


**RAILINK Rail/Hot Shoe
Assembly**



RAILINK Battery Pack
(Battery configuration may vary by application and may not be included)

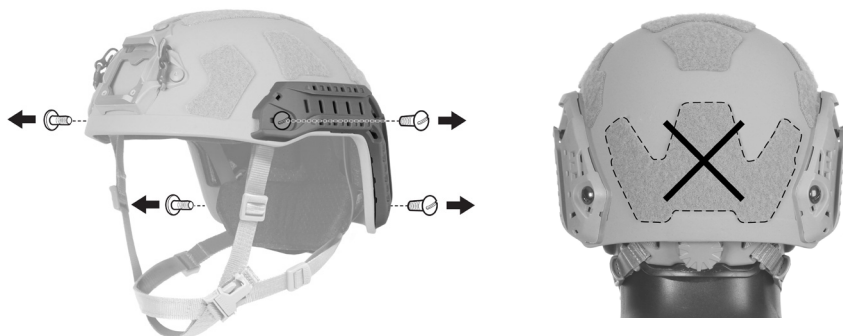
PRODUCT OVERVIEW



INSTALLATION & OPERATION

1

Using a wide blade flat head screwdriver, unscrew and remove all four screws and t-nuts to remove the existing ARC Rails and shims (if present). This will also release the chinstrap anchors and rear fitband tabs. Remove the rear exterior loop from the helmet shell (recommended).



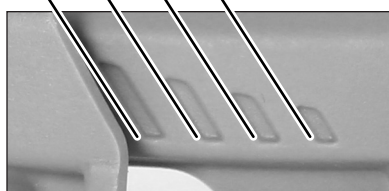
2

Using a 3/32" ball end hex screwdriver, tighten or loosen the adjustment screws to slightly oversize the width of the RAILINK assembly to the size of your helmet using the indexing marks as a reference. (For XL and XXL helmet sizes, use the included longer adjustment screws). The width adjustment may vary for the same helmet size depending on model of FAST helmet. Further adjustment may be needed when assembling RAILINK onto the helmet.



INDEXING MARKS:

XXL XL L M (approximates sizing, for reference only)



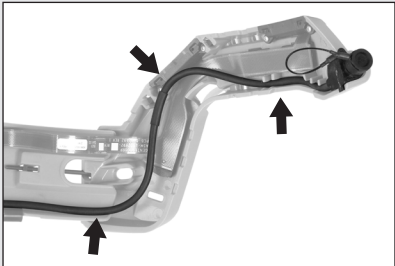
ENSURE PROPER INTERNAL COMPONENT ROUTING

Before assembling RAILINK onto the helmet, gently compress the flat ribbon cable into a "S" shape. DO NOT put a sharp crease into the ribbon. Also, ensure the round cable is routed inside the interior channel of the rail.

RIBBON CABLE



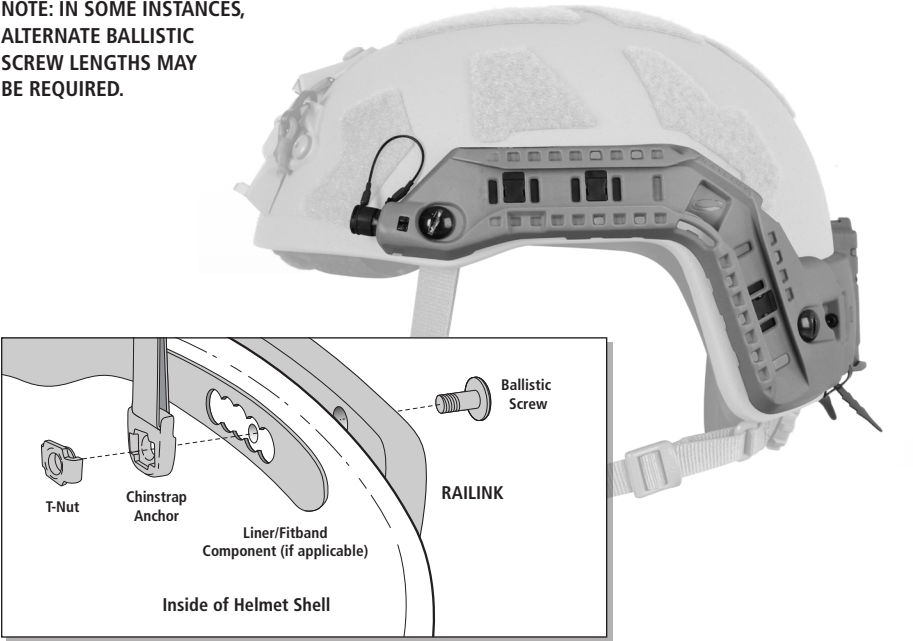
ROUND CABLE



1 LOOSELY ASSEMBLE RAILINK ONTO HELMET

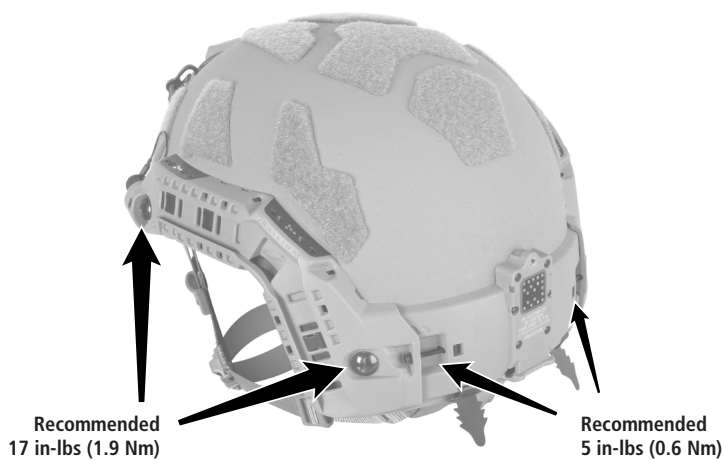
Align RAILINK with the existing chinstrap holes on the exterior of your helmet and loosely assemble the ballistic screws, chinstrap anchors, t-nuts and any liner/fitband components (if applicable) as they were before disassembling. Ensure ballistic screw passes through the opening for the appropriate size helmet on the fitband. Ensure flexible ribbon cable and round cable are not pinched by any part of the RAILINK assembly.

NOTE: IN SOME INSTANCES, ALTERNATE BALLISTIC SCREW LENGTHS MAY BE REQUIRED.



2 TIGHTEN THE RAILINK ONTO THE HELMET

Tighten the front and rear ballistic screws then tighten the RAILINK size adjustment screws alternating sides to ensure that the hotshoe remains centered on the helmet (use the indexing marks as a reference). Recommended torque values below.



3 INSTALL BATTERIES (FOR GENTEX AA BATTERY PACK)

Remove the top cover of the battery pack by loosening the top screw and lifting up on the cover. Install six (6) AA L91 Ultimate Lithium batteries with positive (+) terminals pointing up. Loosely* secure the top cover back onto the battery pack.

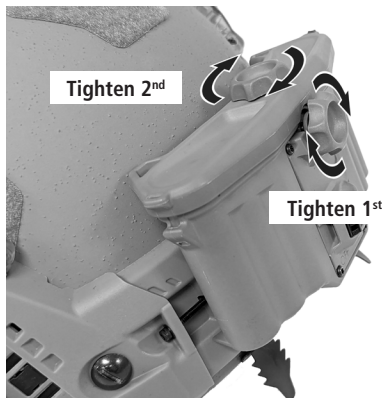
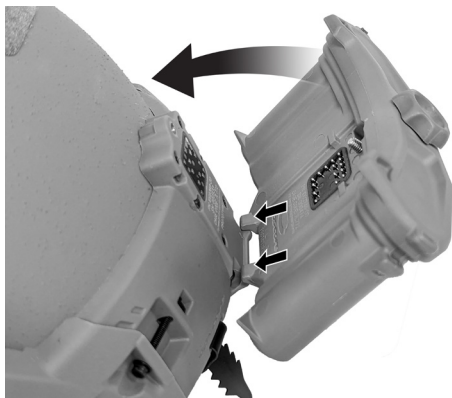
NOTE: TIGHTENING THE TOP COVER COMPLETELY WILL PREVENT THE BATTERY PACK FROM ATTACHING PROPERLY TO THE HOTSHOE. OTHER BATTERY PACKS MAY HAVE DIFFERENT BATTERY INSTALLATION REQUIREMENTS. REFER TO THOSE INSTRUCTIONS SPECIFIC TO THE BATTERY IN USE FOR THIS STEP.



4 ATTACH BATTERY PACK TO RAILINK HOTSHOE

Engage the lower battery pack mounting points into the hotshoe, tilt the battery pack into place and tighten the rear screw to affix the battery pack to the hotshoe. Then tighten the top cover screw to engage the secondary retention mechanism.

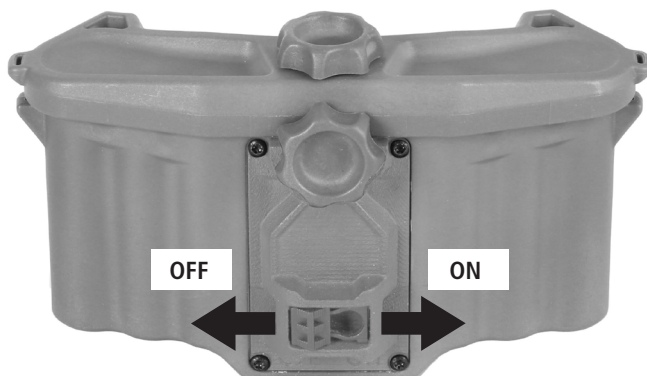
NOTE: FAILURE TO FOLLOW THIS SEQUENCE MAY RESULT IN AN IMPROPER SEAL, NON OPERATION OF THE BATTERY PACK OR DAMAGE TO THE BATTERY PACK AND/ OR HOTSHOE



5 POWER RAILINK ON/OFF

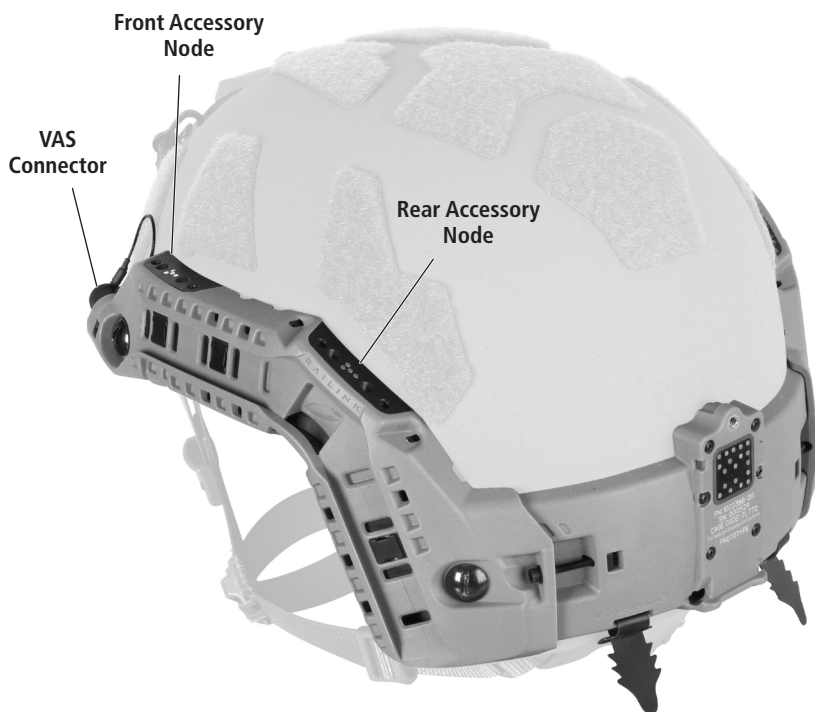
Switch ON/OFF all power to RAILINK using the ON/OFF switch located at the rear of the battery pack.

NOTE: OTHER BATTERIES AND ACCESSORIES MAY HAVE SEPARATE INSTALLATION AND OPERATING INSTRUCTIONS. REFER TO THE INSTRUCTIONS SPECIFIC TO THE DEVICE(S) IN USE.



6 ATTACHING ACCESSORIES TO RAILINK

To attach accessories to the Front or Rear Accessory Nodes, use the indexing cones to align the accessory to the RAILINK node. Mounting screws should be tightened to a recommended torque of 5 in lbs (0.6 Nm). Refer to the instructions of the specific device(s) in use for additional installation instructions.



To attach the power/data cable to the RAILINK VAS Connector, remove the protective cap from the RAILINK VAS Connector. Using the appropriate power/data cable for your VAS, rotate the 9 pin cable connector to orient the white dot with the white dot on the RAILINK VAS Connector. Push the connector to seat the contacts and lock the connector in place.

NOTE: PUSHING ON THE CONNECTOR WITH EXCESSIVE FORCE MAY RESULT IN DAMAGE TO THE RAILINK VAS CONNECTOR AND/OR THE VAS POWER/DATA CABLE. ENSURE PROPER ORIENTATION OF THE CONNECTORS TO PREVENT PERMANENT DAMAGE TO THE RAILINK VAS CONNECTOR AND/OR VAS POWER/DATA CABLE.

MAINTENANCE & CARE

STANDARD RECOMMENDED MAINTENANCE

Perform the following recommended maintenance procedures before and after each use. If any defects are found, the damaged components should be replaced before use.

- ❶ Clean the RAILINK with a mild detergent and water.
- ❷ Check that the chinstrap screws are tight using a flathead screwdriver.
- ❸ Visually check the RAILINK and Battery Pack for signs of breakage.
- ❹ Periodically inspect and tighten all threaded fasteners on RAILINK accessories.
- ❺ Inspect and clean all electrical contacts to insure they are clear of debris and functioning properly. A soft brush or Q-Tip should be used to clear any debris.
- ❻ When storing the RAILINK Battery Pack for short periods of time use the ON/OFF switch on the battery pack to disable the system. When storing for extended periods of time make sure to remove all batteries from the battery pack.

TECHNICAL SUPPORT

Our team of dedicated customer service and support professionals is highly trained on all aspects of our products and is available to assist you with all your needs, including checking the status of your order, billing, warranties and returns, orders, replacement parts, and technical support.

Ops-Core Customer Service

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SPECIFICATIONS

Weight	0.50 lbs (227 g) Rail/Hotshoe Assembly
Salt Water Immersion	IPX7
Environmental	MIL-STD-810H
Operating Temperature	-40°C to +55°C (-40°F to +131°F) with lithium batteries
Storage Temperature	-40°C to +71°C (-40°F to +160°F)
EMI Testing Standards	MIL-STD-461G

OPERATOR NOTES

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

WARRANTY

Unless an individual product is covered by a separately issued warranty, Gentex warrants that all helmet components, accessories, peripherals, and parts will be free from defects in material or workmanship under normal use and service for a period one (1) year from the date of delivery. All repair covered by this warranty shall be performed at Gentex's factory, or other such warranty repair facilities of Gentex as designated by Gentex unless Gentex specifically directs that repair services be performed at another location. Any defect corrected and found to be within this scope of the warranty will be repaired by Gentex and all charges for labor and material will be borne by Gentex. If it is determined that either no fault exists in Gentex, or the damage to be repaired was caused by negligence of the user, its agents, employees or customers, you agree to pay all charges associated with each such repair. No statement, recommendation or assistance made or offered by Gentex through its representatives to the user, its agents, employees, or customers in connection with the purpose or intended use of any Gentex's product shall be or constitute a waiver by Gentex of any of the provisions of this warranty or change Gentex's liability under this warranty.

EXCEPT WHERE PROHIBITED BY LAW, THE WARRANTY DESCRIBED ABOVE CONSTITUTES THE SOLE WARRANTY MADE BY GENTEX EITHER EXPRESSED OR IMPLIED. THERE ARE NO OTHER WARRANTIES EXPRESSED OR IMPLIED THAT EXTEND BEYOND THE FACE HEREOF, HEREIN, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. IN NO EVENT SHALL GENTEX BE LIABLE FOR ANY INCIDENTAL, CONSEQUENTIAL, OR SPECIAL DAMAGES EVEN IF ADVISED OF SUCH DAMAGES, AND THE USER, ITS AGENTS, EMPLOYEES, OR CUSTOMERS REMEDIES SHALL BE LIMITED TO SOLELY TO THE REPAIR OR REPLACEMENT OF NONCONFORMING UNITS OR PARTS, WHICH AMOUNT SHALL NOT EXCEED THE TOTAL PURCHASE PRICE OF THE PRODUCT UNDER WARRANTY.

Any tampering, misuse or negligence in handling or use of the product renders the warranty void. Further, the warranty is void if, at any time, the user, its agents, employees or customers attempts to make any internal changes to any of the components of a product; if at any time the power supplied to any part of the product exceeds the rated tolerance; if any external device attached by the user, its agents, employees or customers creates conditions exceeding the tolerance of the product; or if any time the serial number plate is removed or defaced. OPERATION OF THE PRODUCTS THAT RENDER THIS WARRANTY VOID WILL BE DEFINED TO INCLUDE ALL OF THE POSSIBILITIES DESCRIBED IN THIS SECTION, TOGETHER WITH ANY PRACTICE THAT RESULTS IN CONDITIONS EXCEEDING THE DESIGN TOLERANCE OF THE PRODUCTS.

