CRD™ FOR FIRSTNET®

www.thepodrunner.com

24/7 Support: 877-288-9611

Owner's Manual Addendum

Congratulations on owning a CRD™ for FirstNet® Compact Rapid Deployable Cell-On-Wheels (COW). We at Rescue 42 thank you for your support and hope you enjoy our excellent products, documentation, and customer service. If there are questions regarding your CRD or the contents of this manual, please call the Rescue 42 FirstNet Hotline at:

(877) 288-9611

This document is a supplement for the FirstNet version of the CRD only, and must be used in conjunction with the Rescue 42 / PodRunner® SatRunner™ Owner's Manual. The purpose of this Owner's Manual supplement is to provide explanations and procedures for operating, maintaining, and troubleshooting a CRD for FirstNet.

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Revision History

Version	Description	Date	Approved
1.0	Initial Release	2021-05-14	

STOP! STOP

READ THESE WARNINGS BEFORE USING THE CRD

Failure to follow these instructions or heed these warnings may cause damage to the CRD for FirstNet, the carrying vehicle or other property, cause bodily injury or death, and void the warranty.

Warnings & Safety

- You are always responsible for damage to the CRD for FirstNet, other property, injury, or death caused by incorrect use of a CRD for FirstNet. Read and comply with the SatRunner Owner's Manual prior to use.

- **Prop 65 WARNING** – Battery - This product contains chemicals known to the State of California to cause cancer or birth defects or other reproduction harm. For more information visit www.P65Warnings.ca.gov.

- Do not power the SBO until the antennas are connected and the mast extended.

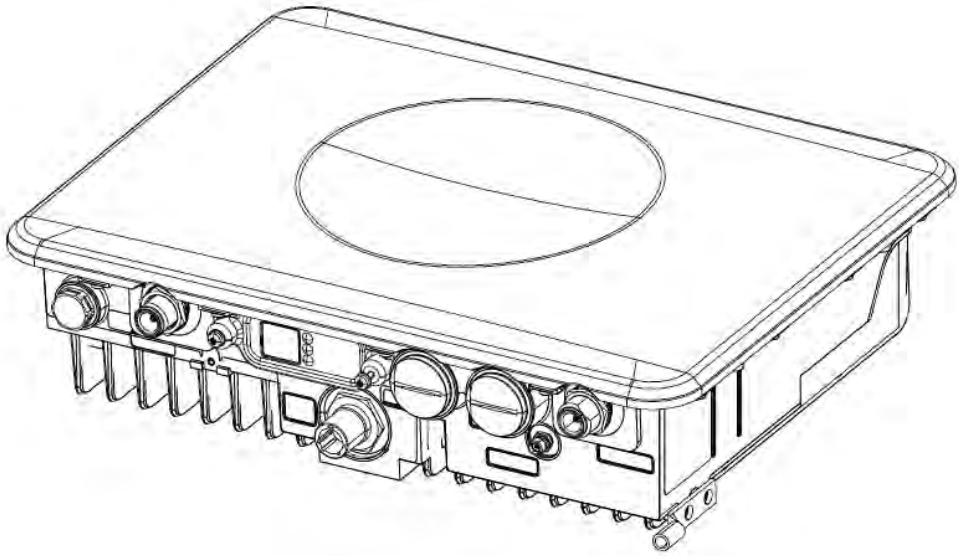
- 911: The CRD for FirstNet will provide 911 connectivity to any FirstNet customer in range with a black FirstNet SIM. However, it will not provide location. Prior to initial delivery, the customer must provide AT&T/Rescue 42 with the home location where the CRD will be stored and the PSAP (Public Safety Access Point) responsible for that location. It is the responsibility of the customer to inform that PSAP when and where they deploy a CRD so that the PSAP can route Emergency Services correctly upon receipt of a 911 call. Since the CRD is a mobile deployable, this could mean routing the call to a different PSAP having jurisdiction over the area where the CRD is deployed. Failure to provide deployment information to the home PSAP may result in Emergency Services being incorrectly routed.

Warning Symbol

⚠ Indicates warnings that must be followed to avoid damage to the CRD, personal injury or death.

Acronyms

- COW – Cell on Wheels
- CRD™ – Compact Rapid Deployable
- IP – Internet Protocol
- PSAP - Public Safety Answering Point
- SBO – Single Band Outdoor



FirstNet Band 14 SBO Radio

Band 14 SBO Information

The Nokia SBO (single band outdoor) eNodeB cellular (LTE) radio comes pre-configured, provisioned, and integrated into the FirstNet network.

You will know that your FirstNet Band-14 phone with a black FirstNet SIM card installed has attached to the CRD when your device reads "FirstNet CRD" in the upper left hand corner of the screen.

Notes to the operator:

- There are no closed user group options available to the SBO. By definition, the FirstNet service is always available to all FirstNet users.
- The CRD's FirstNet cell service is only available to black SIM FirstNet devices.
- Users with AT&T orange SIM cards will not be able to use the FirstNet LTE signal.
- Any device can access the CRD's Wi-Fi signal and place a Wi-Fi call.
- You must send an email to AT&T informing them of a CRD for FirstNet deployment. The email must include the CRD serial number (located on the scissor lift crossbar), deploying agency, nature of the deployment, Lat/Long location of the deployment, start time and duration. Send the email to: DL-FirstNetEmergencyOps@att.com
- In the unlikely event where the CRD for FirstNet failed to operate correctly, AT&T will dispatch an additional FirstNet COW to provide coverage for your incident.

Band 14 SBO Radio Updates

The Nokia SBO requires periodic updates (generally once a year). The SBO will need to be connected to a terrestrial Internet source for the updates. The operator will be notified when an update is available and assisted with the process.

Powering the Band 14 SBO Radio

⚠ Always connect antennas and raise the mast prior to powering the radio. Failure to heed this warning may result in damage to equipment and RF exposure. For instruction on deploying antennas and mast extension refer to SatRunner Owner's Manual.

1. Verify antennas fully connected and mast extended above head height.

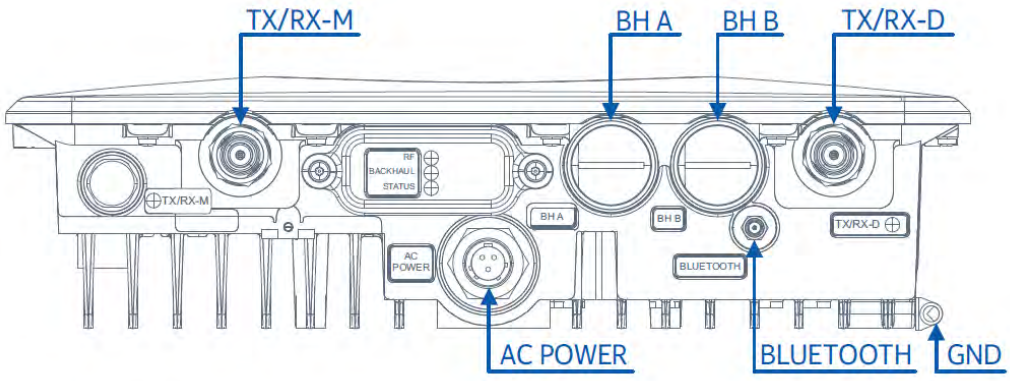
2. Check that the SatRunner is powered on and backhaul (IP) established.
3. Toggle green SBO power switch to ON position.
4. Three solid green LEDs indicate correct radio function.
5. Send an email to AT&T with the deployment details (see above).

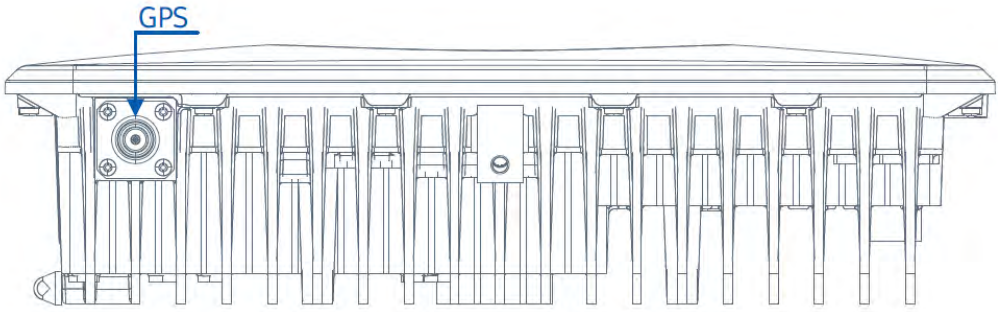
911 Calls Through the SBO

Calls made to 911 when using the SBO will be routed to the PSAP (Public Safety Answering Point) on record for the location used when the CRD was purchased independent of its physical location. See the "Warnings" section for more information. If the CRD will be used for an extended or permanent basis outside of the location supplied, the customer can call FirstNet Cares at (800) 574-7000 to arrange for the SBO to be re-provisioned to a new PSAP.

SBO LED Light Codes

After having turned on the SBO radio and waiting roughly 5 minutes, the 3 LED lights on the SBO should be solid green. If the lights are not solid green, follow the troubleshooting section to check for common setup issues. If problems persist, call FirstNet Cares at (800) 574-7000 for direct support for the SBO and to request that an AT&T FirstNet Deployable be dispatched to your incident.




GPS

Troubleshooting

Three multi-colored LED indicators on the back side of the radio provide a visual indication of RF, Backhaul, and Status.

Symptom	*Possible Cause*	*Solution*
No LED lights are on	No Power to the SBO	Ensure that the SBO is plugged in and its switch is in the on position
SBO RF LED not solid green	Antenna or cable connections are not well seated	De-power the SBO and then disconnect and tightly reconnect the connections at the antenna deck and antennas before re-powering the SBO
SBO Backhaul LED not solid green	No backhaul source	Ensure that a backhaul source is active (Satellite, LTE, WAN, Wi-Fi as Wan)
	Connections are not well seated	Check connections between the SBO and the Router
	Cradlepoint configuration	Adjustments to the supplied Cradlepoint configuration can negatively affect system performance. Verify the Cradlepoint's configuration against the default Cradlepoint programing guide
SBO Status LED not solid green	SBO RF LED not solid green	Attempt SBO RF LED not solid green troubleshooting
	SBO Backhaul LED not solid green	Attempt SBO Backhaul LED not solid green troubleshooting
Any SBO issue	Various	Power cycle the SBO and wait 5 minutes for the system to fully boot

SBO LED Light Codes – Nokia Documentation

LED	Color	Description	Priority* (1 is highest)
RF (Controlled by HW)	*RF Transmission Status*		
	OFF	BTS is booting up, and the Platform SW is starting up. LED is being controlled by HW.	1
	OFF	Platform SW has come up successfully.	1
	Blinking GREEN	FPGA has taken control of the RF LED in the startup sequence.	1
	Blinking GREEN	RF Transmission OFF	1
	Stable GREEN	RF Transmission ON	2

LED	Color	Description	Priority* (1 is highest)
BACKHAUL (Controlled by TRSW) NOTE : This LED depicts the Transport SW States	*Transport / Backhaul Link Status*		
	OFF	BTS is booting up, and the Platform SW is starting up. LED is being controlled by HW.	1
	Stable RED	In the startup sequence, the Platform SW is up and it has taken control of the LED. This state continues until the TRSW becomes operational following Site Power-Up or Site Reset. Includes POST (in case of a power-on scenario).	1
	Stable RED	TRSW has taken control of LED and is Initializing, or a Critical or Major Fault raised on TRSW.	2
	Stable YELLOW	Critical or Major Fault raised on TRSW *and* Bluetooth is ENABLED automatically.	2
	Blinking RED	MINOR or Degraded alarm exists on TRSW.	3
	Stable GREEN	TRSW is ready (fully initialized) - No known Critical/Major/Degraded/Minor Transport faults present.	4

LED	Color	Description	Priority* (1 is highest)
STATUS (Controlled by BTSOM)	*BTS Status*		
	Stable RED	BTS is booting up and STATUS LED is being controlled by HW.	1
	Blinking YELLOW	In startup sequence, Platform SW is up and is now controlling the STATUS LED. Includes POST (in case of a power-on scenario).	1
	Blinking YELLOW	Startup: Indicates BTSOM has taken control of the BTS STATUS LED. BTSOM determines that BTS is uncommissioned and performs autoconnection.	4
	Stable YELLOW	Startup-autoconfiguration, BTS is uncommissioned: BTSOM is performing autoconfiguration (SW download, configuration download).	5
	Stable YELLOW	Startup-autoconfiguration blocked, BTS is uncommissioned: SW download, configuration download via the Network Element Manager.	5
	Stable YELLOW	Startup-BTSOM determines that BTS is commissioned.	10
	Stable YELLOW	Indicates BTS and/or all CELLs are Blocked/Locked.	5
	Stable RED	Indicates BTS is Faulty: It signifies that at least one Critical Fault is currently present on BTS. Note: Includes any type of BTS faults including Transport, U-Plane, and C-Plane faults.	2
	Blinking RED	Indicates BTS is degraded: At least one Major Fault is currently active on BTS (while no Critical Faults are active). Note: Includes any type of BTS faults including Transport, U-Plane, and C-Plane faults.	3
	Blinking GREEN	Indicates a SW download is in-progress during runtime operation (for instance, SW download and configuration download are occurring outside of startup).	9
	Stable RED	Indicates a Critical Failure occurred during Auto Connection (AutoConnectionState is "Disconnected"). If failure is due to an iOMS rejection (unsuccessful AutoConnectionEstablishedReply message was received), condition will persist for 5 min until the Auto-Connection process is automatically retried. Note: If failure is due to iOMS connectivity being down (detected by Supervision on iOMS link), a Critical Fault will be active (SET).	7
	Blinking GREEN	BTS in Test Dedicated State.	10
	Stable GREEN	Indicates the BTS is fully configured and nothing is preventing a CELL from transitioning to onAir (indicated in conjuction with RF LED being Blinking GREEN). This corresponds to the BTS configured, integrated to RAN, and onAir operational state.	10

NOTES:

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