

BLOODHOUND

Installation Instructions



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* Conditions apply

Antenna Versions

The Bloodhound case antenna comes in two versions – G and L – with different features, listed below.

Bloodhound G	Bloodhound G1	Bloodhound L
• 4x RJ-45 Ports • USB-A Port • Battery Operated -54KmAh battery (battery not included) • 60mm Fan	• 4x RJ-45 Ports • USB-A Port • Battery Operated- 27KmAh Battery (battery not included) • 60mm Fan	• AC Power Port • 4x RJ-45 Ports • 40mm Fan

Required Tools & Accessories

The following tools (not provided) are required in for the installation of the Bloodhound case antenna:

- Philips Screwdriver
- 11/32" Wrench

The tables below list the required accessories for the G, G1, and L versions of the Bloodhound case antenna.

	Bloodhound G	Bloodhound G1	Bloodhound L
Provided with Antenna	• PTA0395B Router Mount Brackets, 4 pcs • PTA0351 Black Oval Head Screws with Washers, 21 pcs • PTA0368-B Black Flat Head Screws, 9 pcs • PTA0399-TL Pan Head Screws, 8 pcs • PTA0679 Pan Head Screws, 4 pcs • PTA0140 Washers, 4 pcs • PTA0844 Lock Washers, 4 pcs • PTA0408 Nuts, 4 pcs • Ethernet Cords, 4 pcs * • USB-A Cord * • Surge Protector • Battery Tray for ChargeTech 54K Battery Pack • DC Charging Extension Cable • LED Display Cover • Cable Ties	• PTA0395B Router Mount Brackets, 4 pcs • PTA0351 Black Oval Head Screws with Washers, 21 pcs • PTA0368-B Black Flat Head Screws, 9 pcs • PTA0399-TL Pan Head Screws, 8 pcs • PTA0679 Pan Head Screws, 4 pcs • PTA0140 Washers, 4 pcs • PTA0844 Lock Washers, 4 pcs • PTA0408 Nuts, 4 pcs • Ethernet Cords, 4 pcs * • USB-A Cord * • Surge Protector • Battery Tray for ChargeTech 27K Battery Pack • DC Charging Extension Cable • LED Display Cover • Cable Ties	• PTA0395B Router Mount Brackets, 4 pcs • PTA0351 Black Oval Head Screws with Washers, 21 pcs • PTA0399-TL Pan Head Screws, 8 pcs • PTA0679 Pan Head Screws, 4 pcs • PTA0140 Washers, 4 pcs • PTA0844 Lock Washers, 4 pcs • PTA0408 Nuts, 4 pcs • Ethernet Cords, 4 pcs * • USB-A Cord * • Surge Protector • LED Display Cover • Cable Ties

	Bloodhound G	Bloodhound G1	Bloodhound L
To be Purchased By Customer	• 54K AC Battery Pack (ChargeTech #CT-600062) • USB-A Cord ** • Ethernet Cords, 4 pcs **	• 27K AC Battery Pack (ChargeTech #CT-600061) • USB-A Cord ** • Ethernet Cords, 4 pcs **	• Ethernet Cords, 4 pcs ** • Extension Cord (i.e. McMaster #9581T22) ***
	• Router Options (for other routers, contact customer service at support@parsec-t.com) ○ Cradlepoint AER2200 (requires eight M4 x 0.7mm thread x 6mm long screws) ○ Cradlepoint IBR1700 ○ Cradlepoint R1900 ○ Peplink MAX BR2 Pro 5G • Router Power Supplies ○ For IBR1700 and R1900 Routers, 12V 2x2 Power Supply (Cradlepoint #170869-000) with C7 Line Cord (Cradlepoint #170623-001) ○ For AER2200 Router, 54V 2x2 Power Supply (Cradlepoint #170751-000) with C13 Line Cord (Cradlepoint #170671-001) ○ For RX30 Managed Accessory, 12V 2x3 Power Supply (Cradlepoint #170870-000) with C13 Line Cord (Cradlepoint #170671-001) ○ For Peplink MAX BR2 Pro 5G, 12V 3A 4-Pin Power Supply (Peplink #ACW-663) • Cradlepoint MC400 Modular Modem (required for more than 4 CELL) • Cradlepoint Managed Accessory (Cradlepoint #MB-RX30-MC or #MB-RX30-POE) (required for more than 4 CELL with R1900 router)		

* For connecting the router to the ports on the case

** Optional, for connecting external devices to the case, length as required by customer

*** For powering the antenna, length as required by customer, NEMA 5-15P outlet on case

Battery and Router Installation

Step 1: Mount the ChargeTech 54K or 27K battery pack to the cover plate (Bloodhound G & G1 only).

- A. This step only applies to the Bloodhound G and G1.
- B. Remove the cover plate from the enclosure.
- C. For the Bloodhound G, remove the pads from the side of the battery pack, shown in Figure 1.
- D. Insert the battery pack into the battery tray, as shown in Figures 2 & 3. **Ensure that the battery pack ports are at the open end of the battery tray, as shown below.**
- E. Place the cover plate onto the battery tray and fasten with the PTA0368-B black flat head machine screws provided in the kit, as shown in Figure 3. **If the battery tray does not align perfectly with the cover plate, partially tighten the screws at opposite diagonal positions first, then install all other screws before fully tightening. It may help to install the screws in the order shown in Figures 4 & 5.**



Figure 1: For the 54K battery, remove the pads from the bottom and side of the battery pack.



Figure 2: Place the ChargeTech battery pack into the battery tray. (Bloodhound G)



Figure 3: Place the ChargeTech battery pack into the battery tray. (Bloodhound G1)

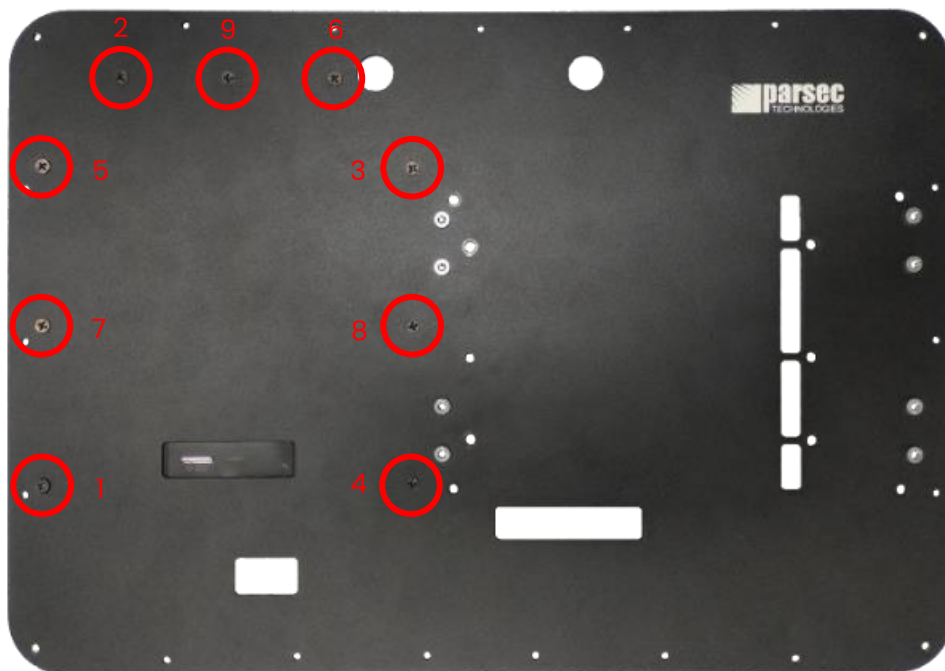


Figure 4: Fasten the battery tray with battery pack to the cover plate using PTA0368-B screws.
(Bloodhound G)

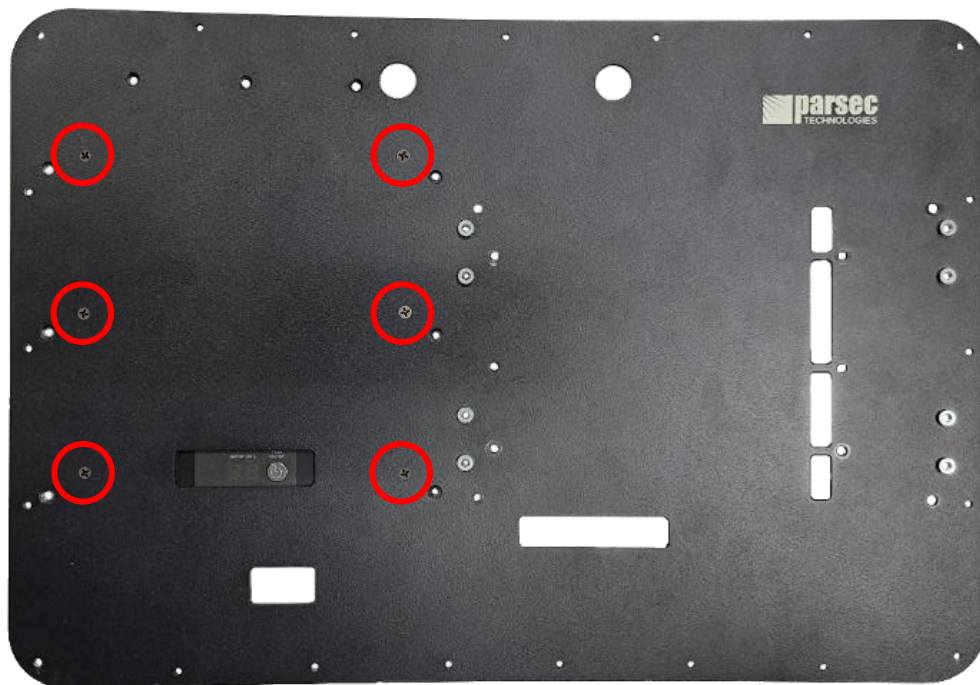


Figure 5: Fasten the battery tray with battery pack to the cover plate using PTA0368-B screws.
(Bloodhound G1)

Step 2: Mount the router to the cover plate.

- A. If not already done, remove the cover plate from the enclosure.
- B. Remove the film from the display cover(s) and apply to the cover plate.
- C. For AER2200 router, mount the provided router mount brackets to the sides of the router using eight M4 x 0.7mm thread x 6mm long screws (not provided), as shown in Figure 6. The brackets should be towards the center. Fasten the screws at opposite diagonal positions. Align the router with the holes on the cover plate. Mount the router using the four PTA0399-TL pan head screws provided in the kit, as shown in Figure 7.
- D. For IBR1700 router, align the router with the holes on the cover plate. Mount the router using the four PTA0579 pan head screws and four PTA0604 lock nuts provided in the kit, as shown in Figure 8. The nuts should be on the router side.
- E. For R1900 router, install the router onto the Managed Accessory (not provided) if necessary. Align the router with the holes on the cover plate. Mount the router using the four PTA0579 pan head screws, four PTA0140 Washers, four PTA0844 Lock Washers, and four PTA0408 Nuts provided in the kit, as shown in Figure 9. The nuts and washers should be on the router side.
- F. For the Peplink MAX BR2 Pro 5G Router, align the router with the holes on the cover plate. Mount the router using the four PTA0399-TL pan head screws provided in the kit, as shown in Figure 10.
- G. **Ensure the router orientation is correct as shown in the images below. The router display should be visible through the slot(s) in the cover plate.**
- H. Guide the cable bundles back through the holes in the cover plate.



Figure 6: For AER2200 router, fasten the router mount brackets to the sides of the router using eight M4 screws.

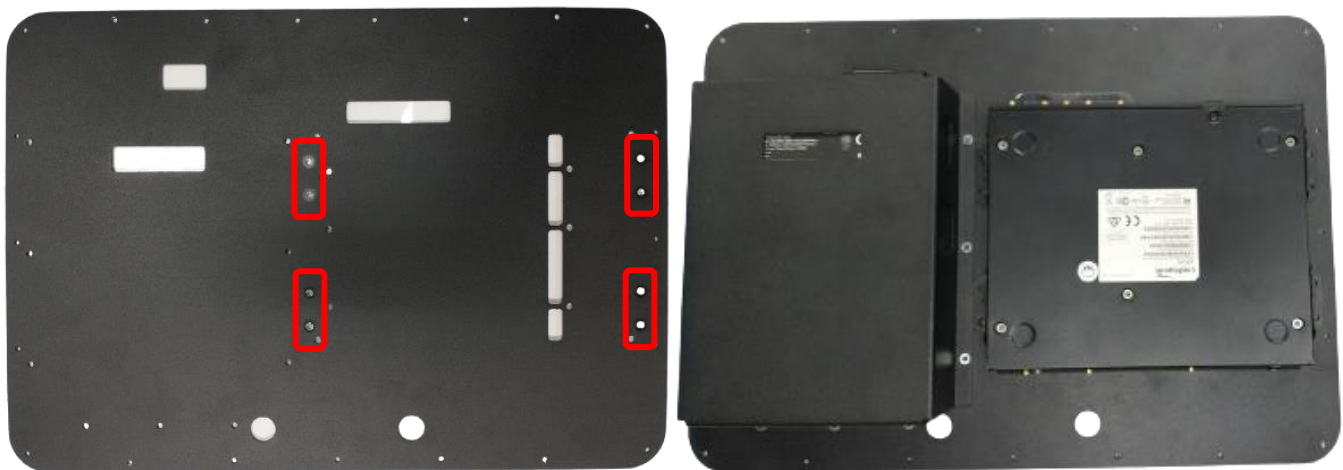


Figure 7: For AER2200 router, fasten the router to the cover plate using PTA0399-TL screws.

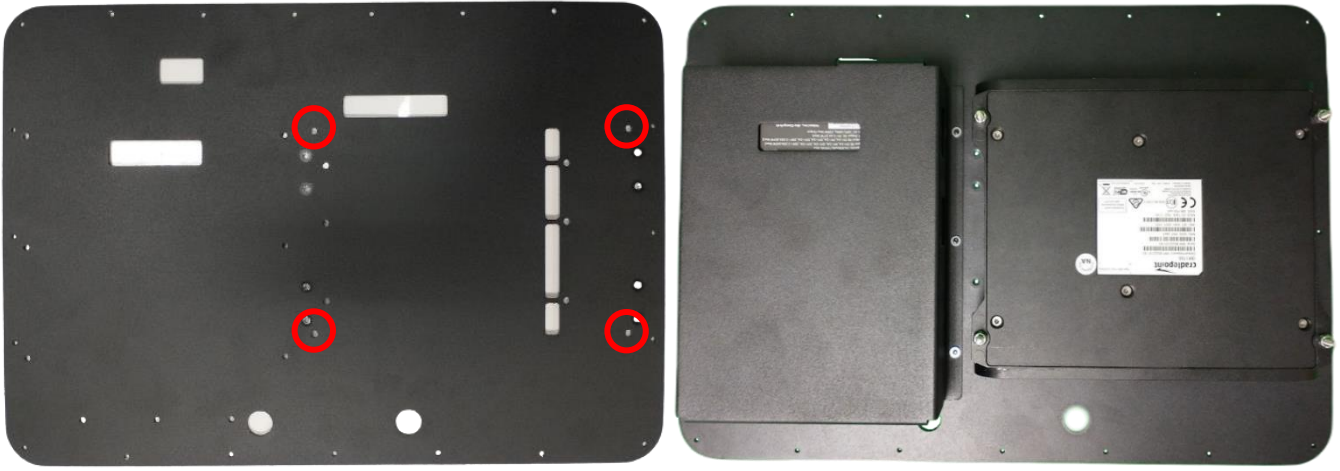


Figure 8: For IBR1700 router, fasten the router to the cover plate using PTA0579 screws, PTA0140 washers, PTA0844 lock washers, and PTA0408 nuts.



Figure 9: For R1900 router, fasten the router to the cover plate using PTA0579 screws, PTA0140 washers, PTA0844 lock washers, and PTA0408 nuts.

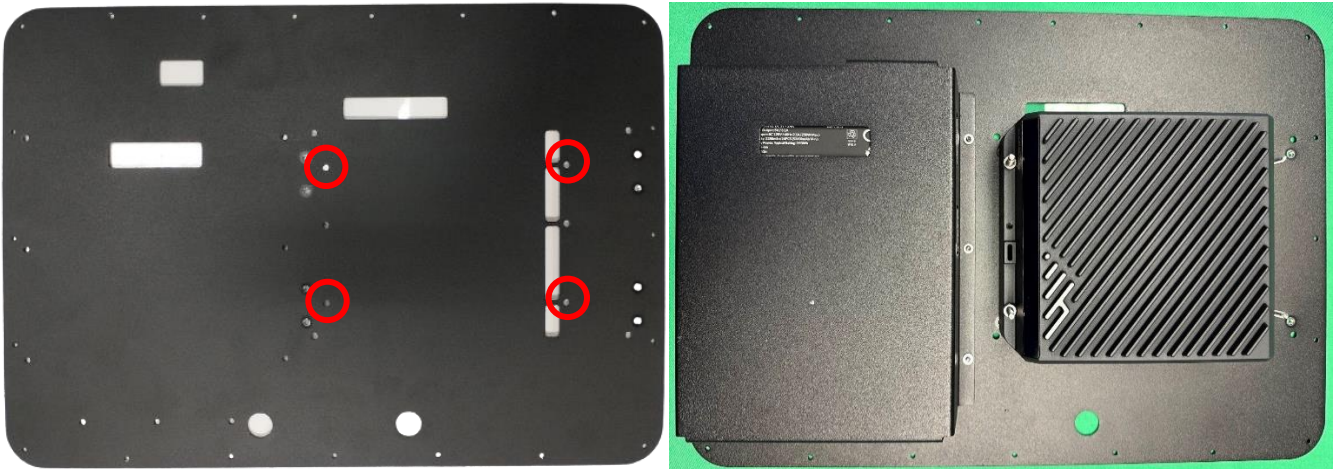


Figure 10: For R1900 router and MX-30 Managed Accessory, fasten the router to the cover plate using PTA0579 screws, PTA0140 washers, PTA0844 lock washers, and PTA0408 nuts.

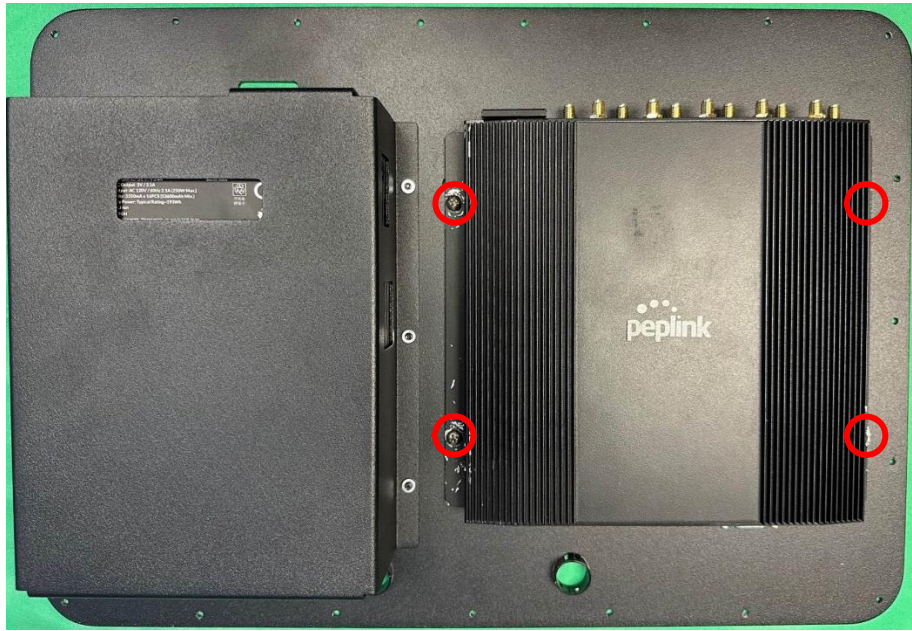


Figure 11: For Peplink MAX BR2 Pro 5G router, fasten the router to the cover plate using PTA0399-TL screws.

Connection – Router can vary

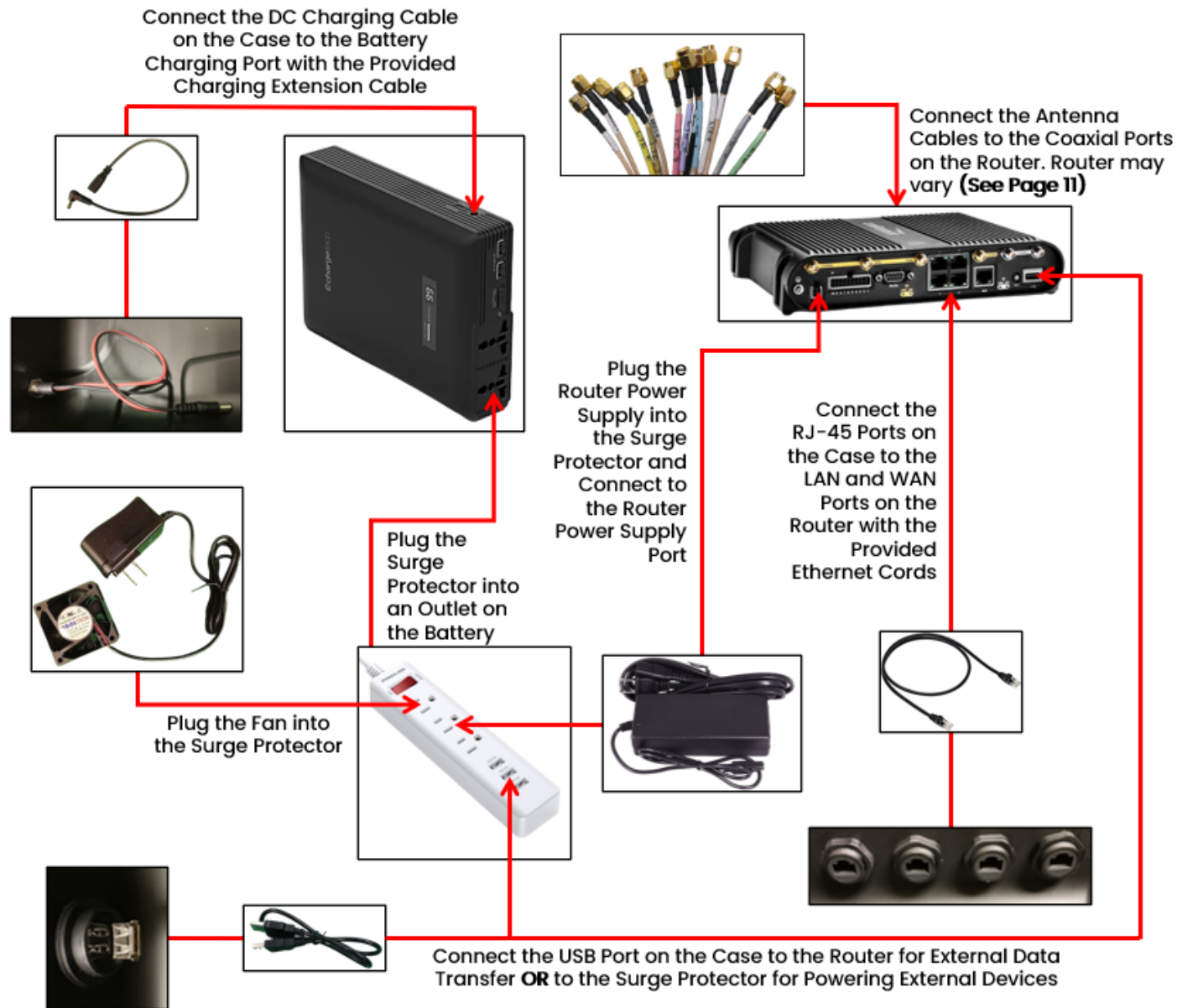


Figure 12: Connection Diagram for Bloodhound G & G1

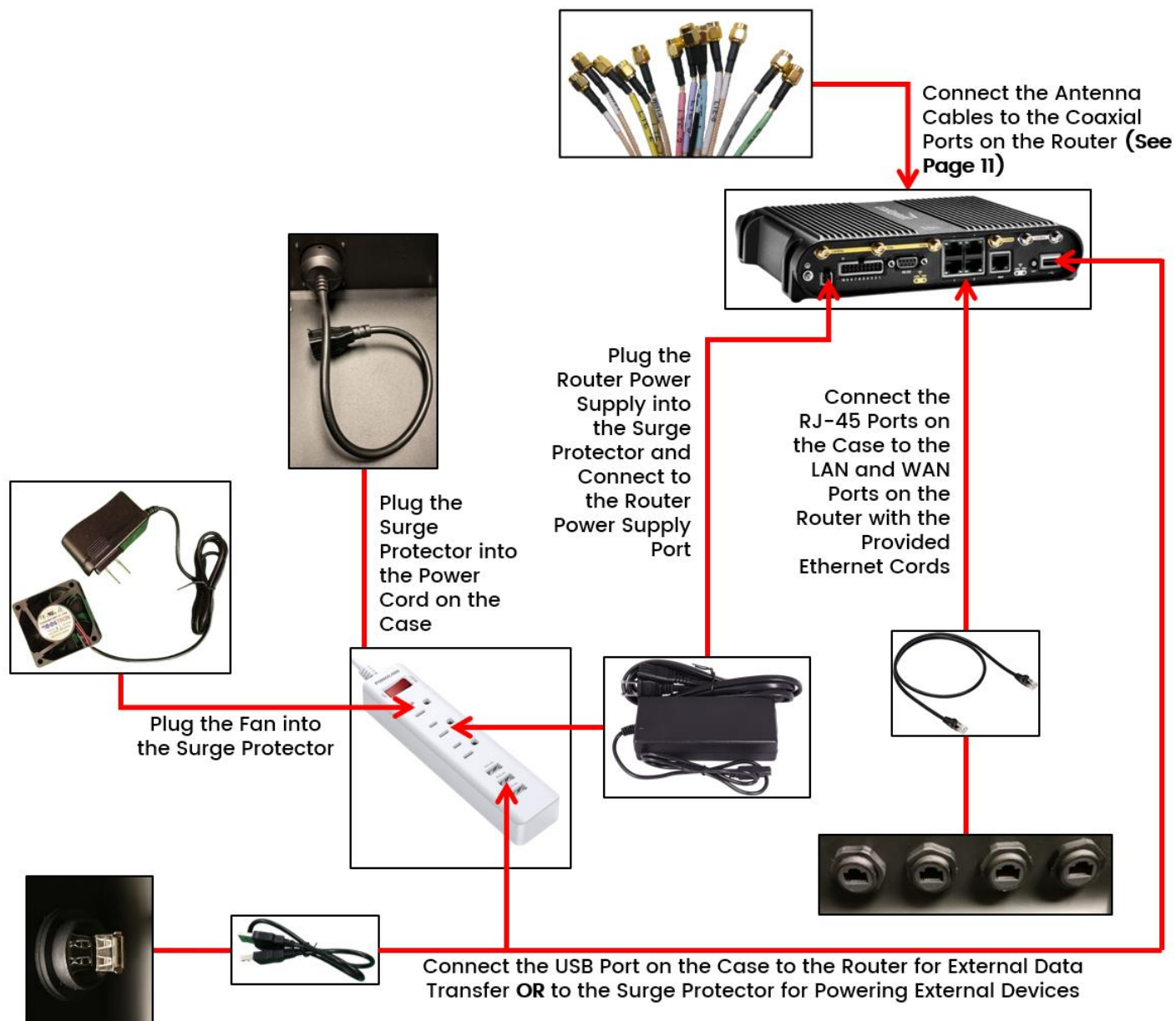


Figure 13: Connection Diagram for Bloodhound L

Step 1: Connect the antenna cables to the router.

- A. Use canned air or isopropyl alcohol to clean all the connectors to ensure that there is no dust in the terminals.
- B. Connect the antenna cables to the designated terminals on the router, as shown in the tables and images below.

Cradlepoint AER2200 and IBR1700	
Antenna Cable	Router Terminal
CELL 1	MAIN 0
CELL 2	AUX 0
CELL 3	MAIN 1
CELL 4	AUX 1
CELL 5	MAIN 0 on modem
CELL 6	AUX 0 on modem
CELL 7	MAIN 1 on modem
CELL 8	AUX 1 on modem
GPS	GPS
Wi-Fi 1	2.4/5GHz gold, left
Wi-Fi 2	2.5/5GHz gold, right
Wi-Fi 3	5GHz, left
Wi-Fi 4	5GHz, right

Cradlepoint R1900	
Antenna Cable	Router Terminal
CELL 1	MAIN
CELL 2	DIV
CELL 3	MIMO1
CELL 4	MIMO2
CELL 5	MAIN 0 on modem
CELL 6	AUX 0 on modem
CELL 7	MAIN 1 on modem
CELL 8	AUX 1 on modem
GPS	GNSS
Wi-Fi 1	2.4/5GHz WIFI 1
Wi-Fi 2	2.4/5GHz WIFI 2
Bluetooth	BT

Peplink MAX BR2 Pro 5G	
Antenna Cable	Router Terminal
CELL 1	Cellular 1A
CELL 2	Cellular 1B
CELL 3	Cellular 1C
CELL 4	Cellular 1D
CELL 5	Cellular 2A
CELL 6	Cellular 2B
CELL 7	Cellular 2C
CELL 8	Cellular 2D
GPS	GPS
Wi-Fi 1	Wi-Fi A
Wi-Fi 2	Wi-Fi B

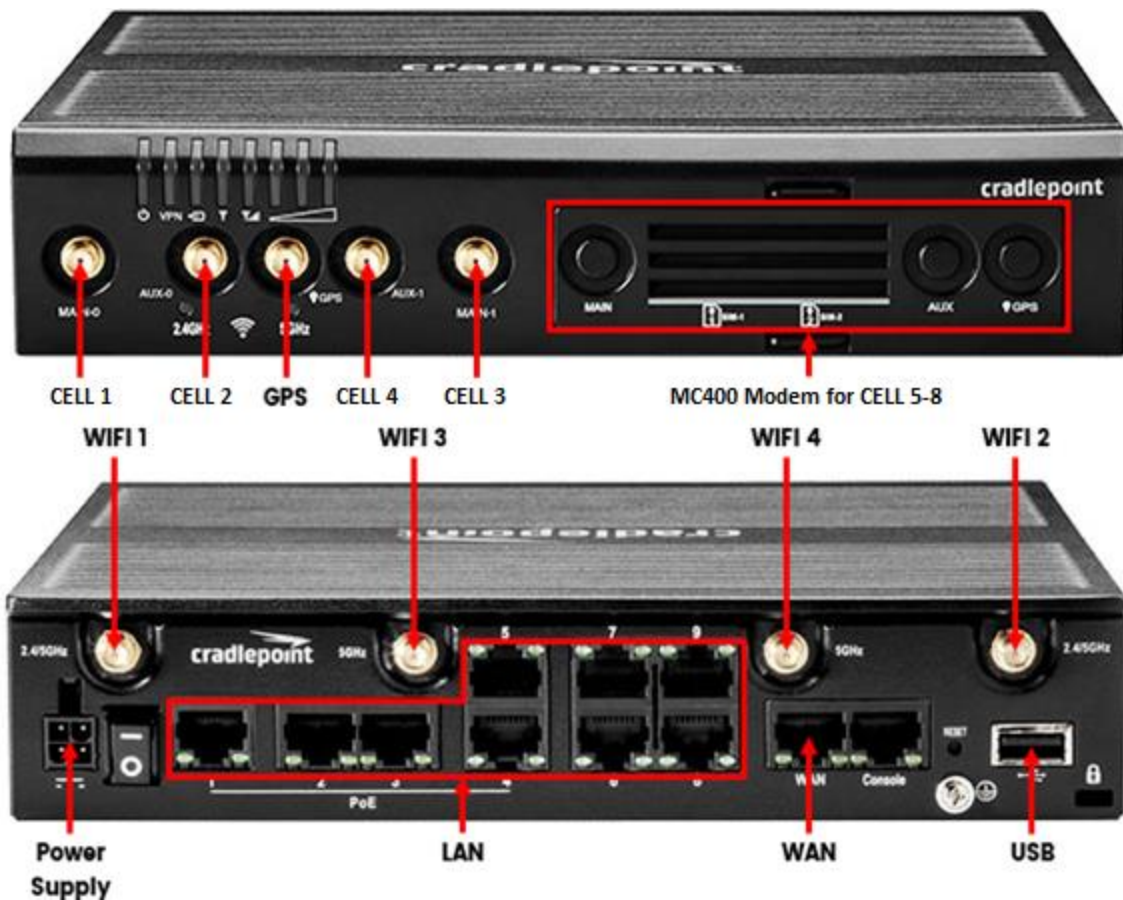


Figure 14: Cradlepoint AER2200 Connections

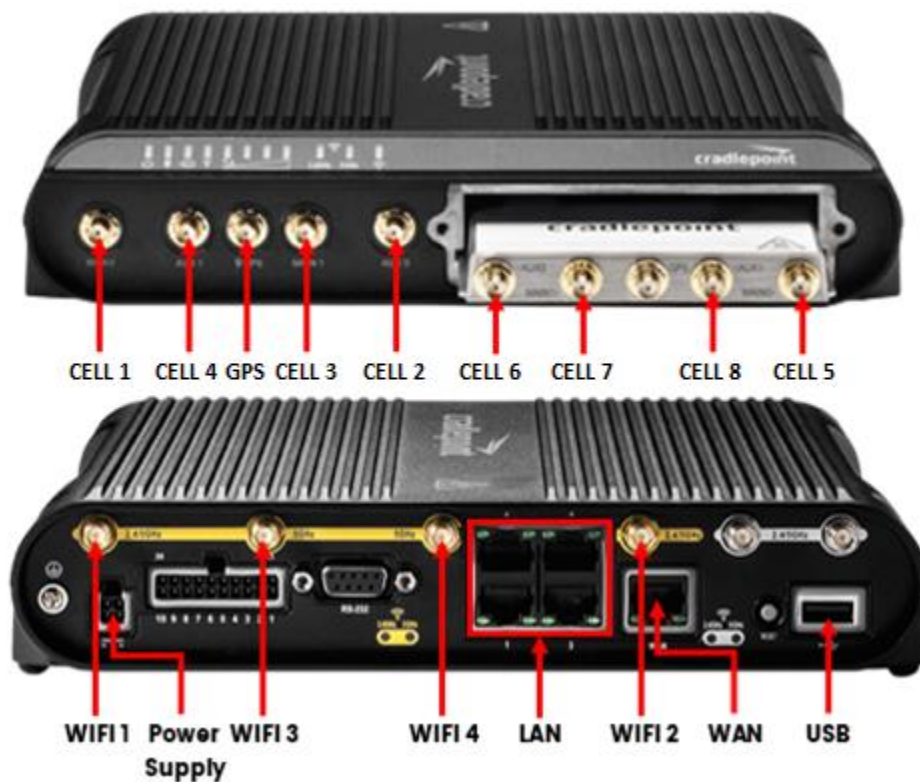


Figure 15: Cradlepoint IBR1700 Connections

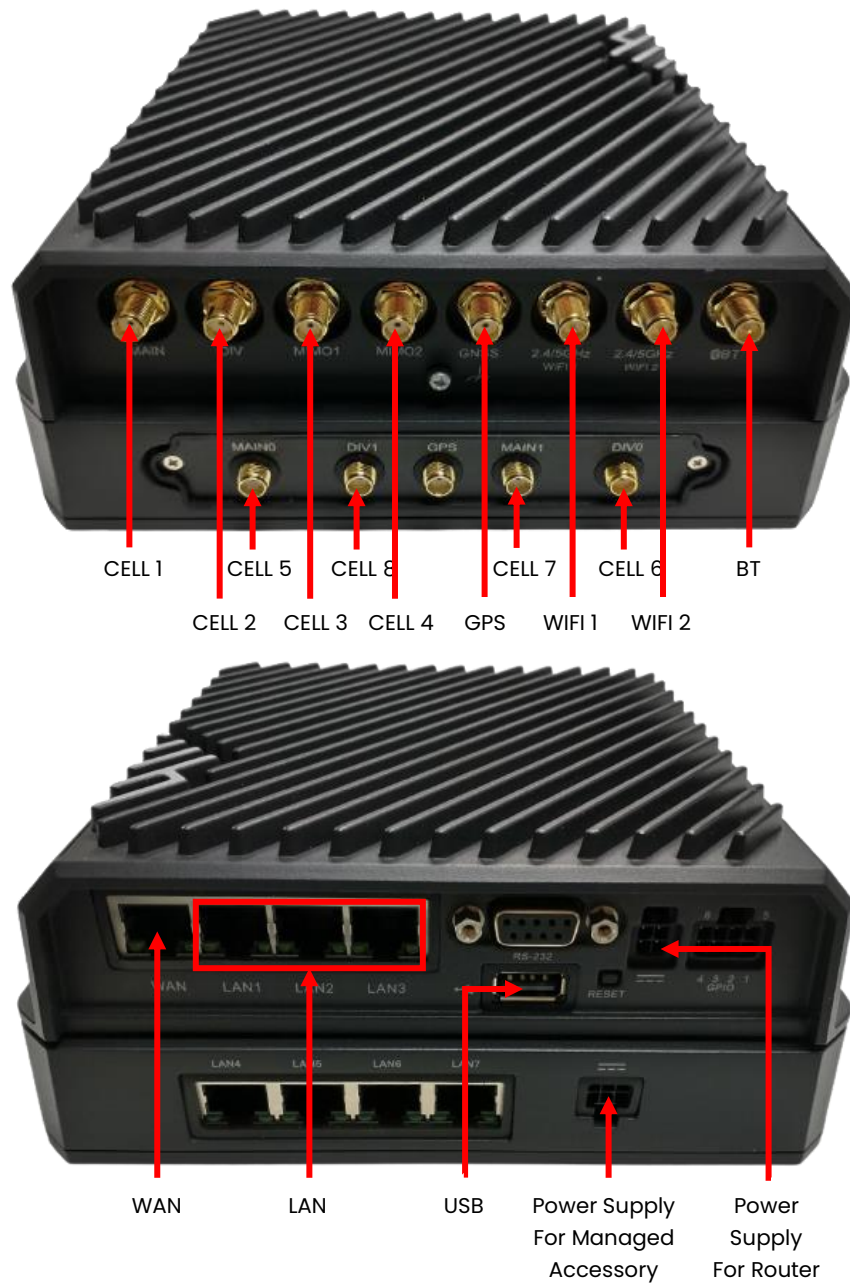


Figure 16: Cradlepoint R1900 Connections

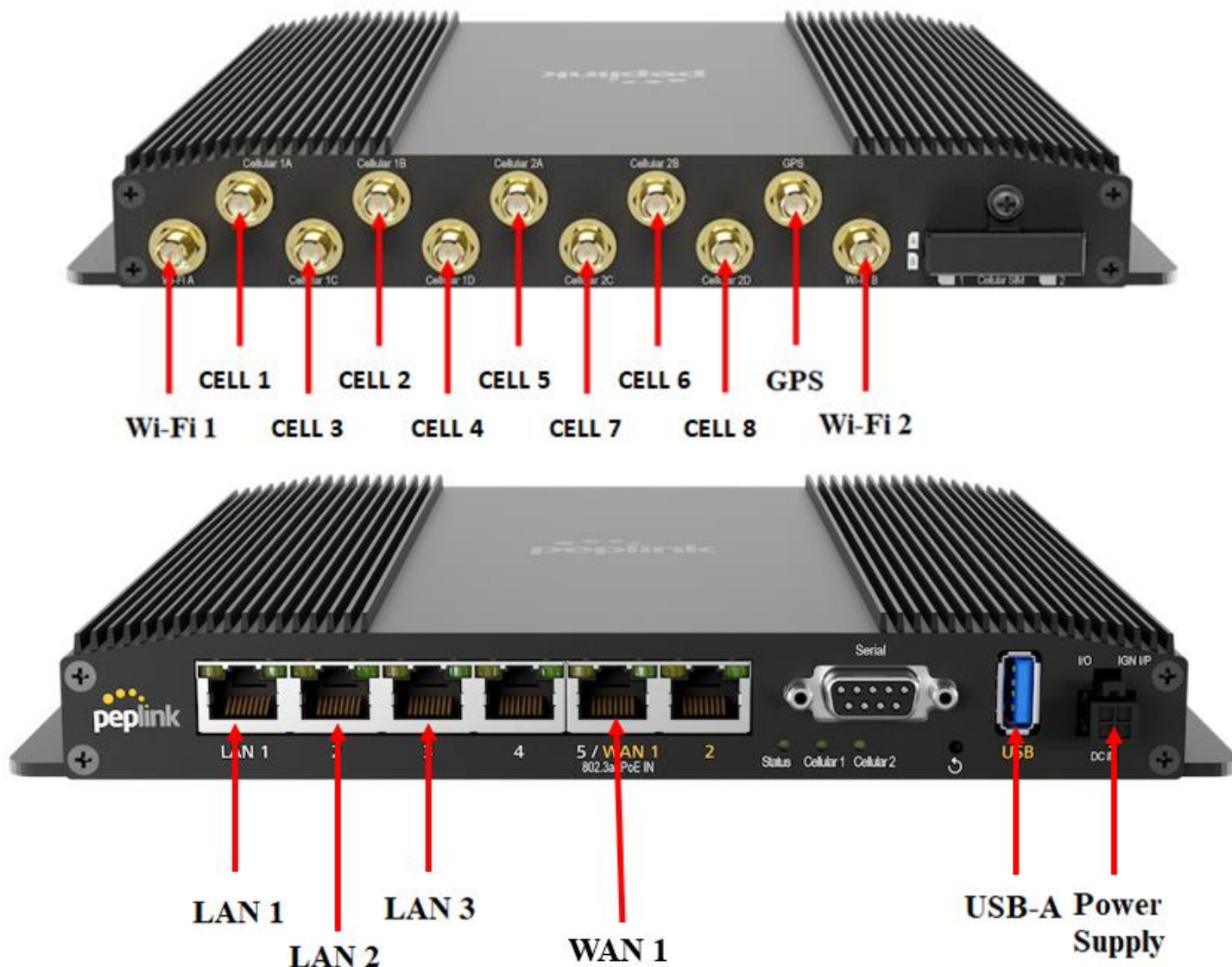


Figure 17: Peplink MAX BR2 Pro 5G Connections – 3 LAN, 1 WAN

Step 2: Connect the power supply to the router.

- For AER2200, IBR1700, and R1900 without the managed accessory, connect the router power supply to the power supply port on the router, shown in Figures 12, 13 & 14.
- For R1900 with the managed accessory, connect the router power supply to the power supply port on the managed accessory, shown in Figure 14.
- For the Peplink MAX BR2 Pro 5G, connect the router power supply to the power supply port on the router, shown in Figure 15.
- Plug the router power supply into the surge protector provided in the kit.
- Use cable ties or hook-and-loop straps to secure the router power supply to the surge protector.

Step 3: Connect the fan to the surge protector.

- A. For the Bloodhound G, plug the fan power supply into the surge protector. Use cable ties or hook-and-loop straps to secure the fan power supply to the surge protector.
- B. For Bloodhound L, plug the fan power cord into one of the USB-A ports on the surge protector.
- C. Turn the surge protector ON.

Step 4: Connect the router to the RJ-45 ports on the case using ethernet cords.

- A. Connect the provided ethernet cords to the LAN and WAN ports on the router, shown in Figures 12, 13, 14, & 15.
- B. Connect the other ends of the ethernet cords from the router to the RJ-45 ports on the case. Keep track of which cord is connected to the WAN port on the router. Consider connecting the WAN port on the router to the front RJ-45 port and the LAN ports on the router to the back three RJ-45 ports, as shown in Figure 16.



Figure 18: Connect the router to the RJ-45 ports on the case using ethernet cords.

Step 5: Connect the USB-A port on the case to the battery pack.

- A. Connect one end of the provided USB-A cord into the USB-A port on the case.
- B. For powering external electrical devices, plug the other end of the USB-A cord into one of the USB-A ports on the surge protector.
- C. For transferring data to external devices, connect the other end of the USB-A cord into the USB-A port on the router, shown in Figures 12, 13, 14, & 15.

Step 6: Connect the surge protector to the battery pack or AC power port.

- A. For Bloodhound G, plug the surge protector into one of the AC outlets on the battery pack, shown in Figures 17 & 18. **Ensure the battery pack is turned OFF.**
- B. For Bloodhound L, plug the surge protector into the AC power port at the back of the case.

Step 7: Connect the battery pack to the DC charging port on the case (Bloodhound G only).

- A. This step only applies to the Bloodhound G.
- B. Connect the DC charging port cable from the case to the provided DC charging extension cable.
- C. Connect the DC charging extension cable to the charging port on the side of the battery pack, shown in Figures 17 & 18.

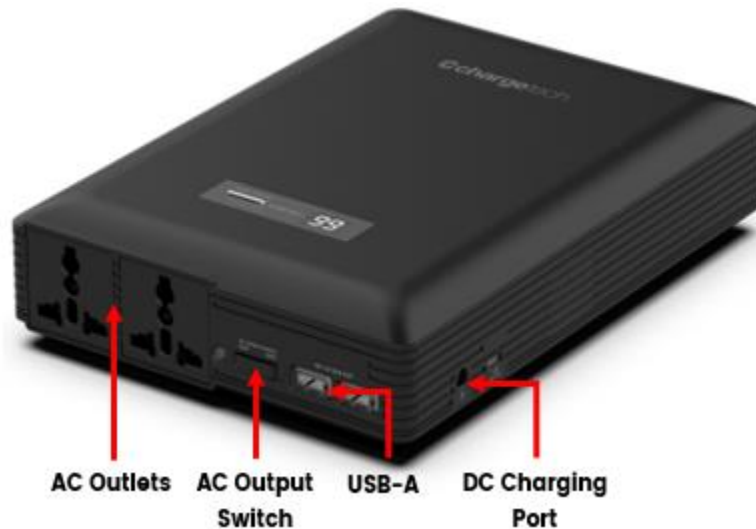


Figure 19: ChargeTech 54K Battery Pack Connections. (Bloodhound G)

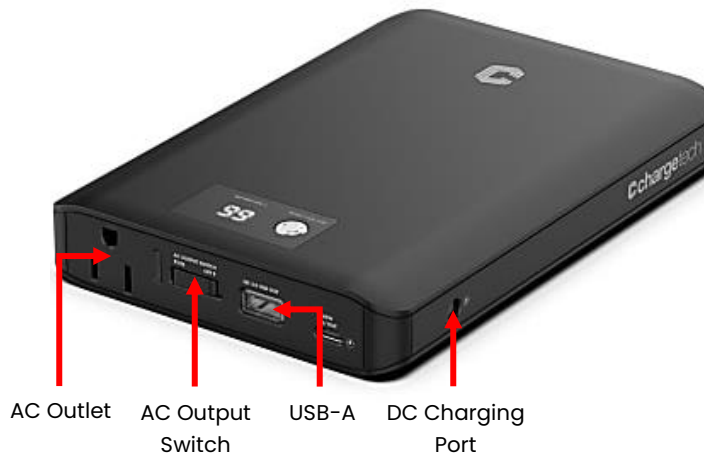


Figure 20: ChargeTech 27K Battery Pack Connections. (Bloodhound G1)

Final Assembly

Step 1: Make sure all the cables and devices are properly connected.

- A. Inspect every cable connection and ensure that no connections are loose.
- B. Use cable ties or other wire management to neatly bundle the cables. Pack the cables neatly inside the bottom half of the case. **Ensure that the antenna cables are not excessively bent ($1/2$ " minimum bend radius).**



Figure 21: Fully Connected 13in1 Bloodhound G with Cradlepoint IBR1700 Router



Figure 22: Fully Connected 13in1 Bloodhound G with Peplink MAX BR2 Pro 5G Router



Figure 23: Fully Connected 13in1 Bloodhound L with Cradlepoint IBR1700 Router

Step 2: Fasten the cover plate to the case.

- A. Place the cover plate onto the bottom half of the case. **Ensure that no cables are pinched between the cover plate and the case.**
- B. Fasten the cover plate to the case using the twenty-one PTA0351 black oval head screws with washers provided in the kit, as shown in Figure 22.



Figure 24: Fasten the cover plate to the case using PTA0351 screws.

Operational Setup

Step 1: Open the fan and vent caps

- A. Before turning the antenna ON, always open the fan and vent caps. The type of cap may vary.
- B. **Ensure that the antenna is away from any liquids when the caps are open.**



Figure 25: Open the fan and vent caps.

Step 2: Power on the antenna.

- A. For Bloodhound L, connect a power cord to the AC outlet on the outside of the case.
- B. For Bloodhound G, follow steps 2C–2G below.
- C. Turn the battery pack ON by pressing and holding the power button for 3 seconds. The display on the battery pack will indicate the battery pack's current battery life (%). **Do not hold the button for longer than 3 seconds; this will cause the battery pack to enter programming mode. To exit programming mode, turn the battery pack OFF then ON again.**
- D. Set the AC output switch on the battery pack to ON. The switch can be accessed through the slot in the cover plate.
- E. Shortly after turning on the battery pack, the fan will start.
- F. To charge the battery pack, connect the battery pack charger to the DC charging port on the outside of the case.
- G. See Page 24 for Battery Operation and Safety Guidelines.

Step 3: Connect the antenna to a computer.

- A. Use an ethernet cable to connect a computer to one of the RJ-45 ports on the case that are connected to the LAN ports on the router.

Step 4: Login to Cradlepoint NetCloud.

- A. This step only applied for Cradlepoint Routers. **For Peplink Routers, please see Step 6.**
- B. Open a web browser on the computer and type 192.168.0.1 into the address bar. This will bring up the Cradlepoint NetCloud login, shown in Figure 26.
- C. Login to Cradlepoint NetCloud. The username is “admin”, and the password is found on the router, shown in Figure 27.

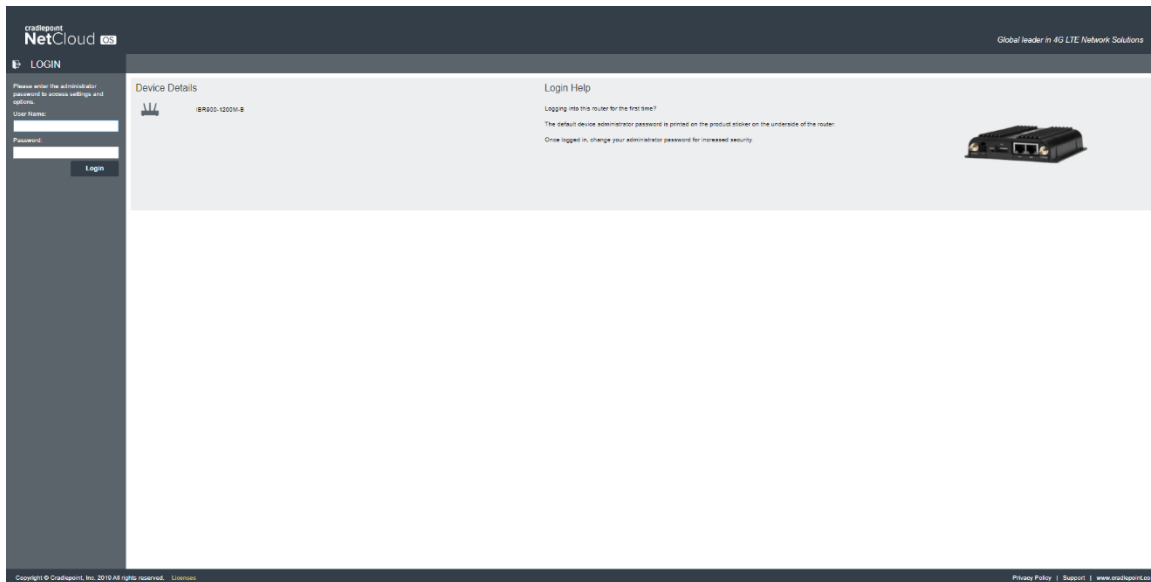


Figure 26: Access Cradlepoint NetCloud.



Figure 27: Cradlepoint NetCloud Login Password

Step 5: Select the antenna in the device list on Cradlepoint NetCloud.

- A. On the left side of the page, select STATUS. From the dropdown menu, select INTERNET and then CONNECTIONS.
- B. In the Device List table, select the option with a cellular SIM, as shown in Figure 28.

The screenshot shows the Cradlepoint NetCloud OS interface. On the left is a navigation menu with sections: QUICK LINKS, DASHBOARD, CONNECTION MANAGER, STATUS (selected), and IDENTITIES. The STATUS section is expanded to show Internet > Connections. The main area displays the 'Device List' table with three rows: Ethernet WAN (VID: 1), Internal 1200M-B (SIM1 - NO SIM), and Internal 1200M-B (SIM2 - Verizon) (selected). Below the table, the 'Device Information: Internal 1200M-B (SIM2 - Verizon)' is shown in a table format.

Property	Value
Summary	
State	connected
Manufacturer	Cradlepoint Inc.
Model	Internal 1200M-B (SIM2)
Modem Firmware Version	32.00.123
Service Display	LTE
Registered Carrier	Verizon
Home Carrier	Verizon
Roaming Status	Home
Signal Strength	02
RSSI	-79 dBm
SINR	7.4 dB
RSRP	-111 dB
RSRQ	-15 dB

Figure 28: Select the device with a cellular SIM in Cradlepoint NetCloud.

Step 6: Login to PEPWAVE.

- A. Open a web browser on the computer and type 192.168.50.1 into the address bar. This will bring up the PEPWAVE, shown in Figure 29.
- B. Login to PEPWAVE. The username is "admin", and the password is "admin".

The screenshot shows the PEPWAVE login page. It has a black header with the 'PEPWAVE' logo in yellow. Below the header is a white login form with the title 'Login'. The form contains two input fields: 'Username:' and 'Password:'. Below the password field is a 'Login' button. At the bottom of the page, there is a copyright notice: 'Copyright © Pepwave. All rights reserved.'

Figure 29: Access PEPWAVE.

Antenna setup is complete!

For best antenna performance, operate the antenna with the lid closed and the case oriented with the lip on top.

Make sure the fan and vent caps are open while using the antenna.

Battery Operation and Safety Guidelines

- A. To manually power ON/OFF, press and hold the power button (located on the top of the unit) for 3 seconds. All LED lights/display should turn ON/OFF.
- B. Holding the power button for longer than 3 seconds will cause the battery pack to enter programming mode. To exit programming mode, turn the battery pack OFF and then ON again.
- C. Recharging the battery pack can be done with the included 48W Charging Adapter or with a Type-C PD Charger with at least 45W of power and up to 65W maximum.
- D. To use the AC outlet, slide the AC power switch to the ON position and press the power button. The solid red LED light will come on, which indicates that the AC outlet is on. A device plugged into the AC outlet must be 15–250W for the AC outlet to work. Otherwise, the AC outlet will automatically shut off.
- E. If no power draw is detected after 90 seconds, the battery pack will shut OFF to conserve energy. While the unit is OFF, press and hold the power button until the display begins flashing. This activates continuous mode, and the entire unit will stay ON until manually turned OFF.
- F. While plugged in and charging, the battery pack will allow pass-through charging to continue powering any devices that are plugged in to the battery pack. To disable this function, press and hold the power button for 2 seconds while the battery pack is charging. Repeat to re-enable pass-through charging for all ports.
- G. Warning: if the battery pack exceeds a safe operating temperature due to insufficient ventilation or a high-temperature environment, the unit will automatically shut OFF.
- H. **Keep out of reach of children.**
- I. **The product may become uncomfortably warm, reaching 140°F (60°C) under extended, high-power usage. While using the product, make sure to keep it away from materials that may be affected by high temperatures.**
- J. **Hold on carefully when inserting or removing a cable. Make sure not to force or bend cables when inserting them into the charging ports.**
- K. **Avoid inserting any foreign objects into the ports.**
- L. **Do not attempt to open, alter, or modify the unit.**
- M. **Do not use in temperatures over 100°F (40°C).**
- N. **Do not expose the product to wet conditions such as water, rain, or snow.**
- O. **Failure to follow these safety guidelines may cause personal injury and/or property damage to the product. It may also void the product warranty.**



CAUTION

To comply with FOC RF Exposure requirements in section 1.1310 of the FCC Rules, antennas used with this device must be installed to provide a separation distance of at least 20 cm from all persons to satisfy RF exposure compliance.



DO NOT

- Operate the transmitter when someone is within 24 inches of the antenna
- Install the antenna or mast assembly on a windy day
- Install the mast close to power lines as it can cause serious injuries or death



WARNING

This document gives the detailed instructions to install an antenna to the best of our knowledge. This document is for general information only. It cannot be used as a warranty. Parsec Technologies Inc. will not accept any liability for any damage caused by an antenna due to unknown variables.



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