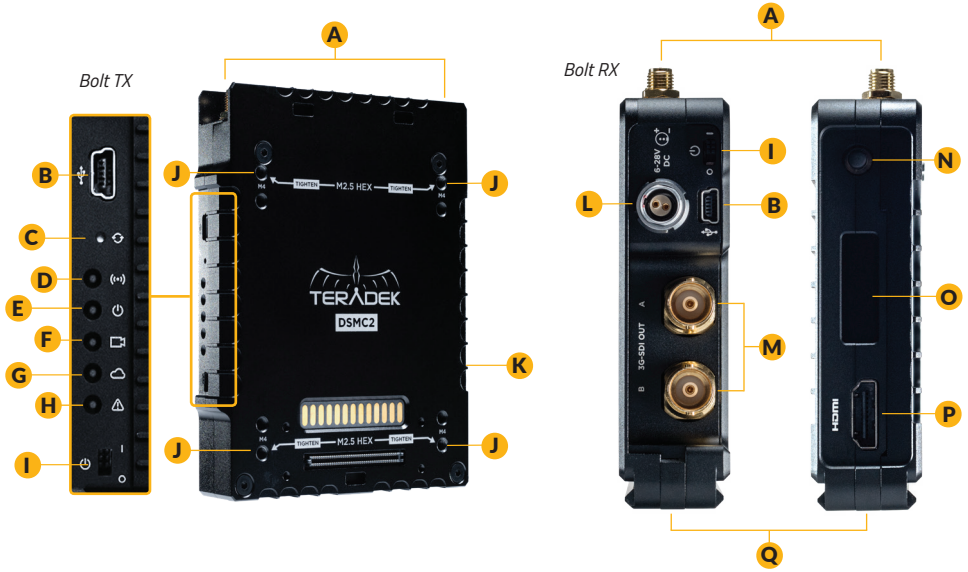
TERADEK

BOLT

ZERO DELAY WIRELESS HD VIDEO FOR DSMC2

Bolt DSMC2 is a zero delay wireless video transmission system designed to fit seamlessly onto the back of **RED DSMC2** cameras. Bolt transmits 1080p60 4:2:2 video at up to 500/1000/3000 ft line of sight over the unlicensed 5GHz band with less than 1ms latency.

Bolt DSMC2 - TX *Bolt 3000 XT -RX*



- A: RP-SMA connectors
- B: Mini USB port
- C: Reset/Pairing button
- D: Wireless On/Off LED
- E: Power status LED
- F: Video status LED
- G: Network status LED
- H: Fault/Error
- I: Power switch
- J: Captive screws
- K: HDMI output *(opposite side)*
- L: Power input
- M: 3G-SDI output
- N: Menu joystick
- O: OLED display
- P: HDMI output
- Q: NATO rail mount

CONNECT AND POWER

1. Remove the protective MOD GUARD plate from the front of the Bolt DSMC2 by unscrewing the four captive screws from the back (J).
2. Place Bolt firmly against the back of the DSMC2 camera.
3. Tighten the four captive screws in a cross pattern ("X" pattern) using a 2.5mm hex wrench. **DO NOT OVER-TIGHTEN.**
4. If using a DSMC2 Battery Module, place it firmly against the back of Bolt. Make sure the connector in the front of the battery module aligns with the connector on the back of Bolt.
5. The **Power status LED** (E) will indicate power is present if a battery is connected to the DSMC2 Battery Module or if power is provided via the DSMC2 camera. The camera will boot when the camera's power button is pressed. While the camera is booting, Bolt will also boot.

   NOTE: If the Power status LED is on, but the camera does not boot, remove Bolt then re-attach, making sure it's properly seated. Always use an X pattern when tightening the M4 screws.
6. Move the power switch (I) to the **ON** position.
7. To remove Bolt, loosen the four captive screws and pull it off the back of the camera.

PAIRING INSTRUCTIONS

1. Turn on the Bolt transmitter and receiver. If the Bolt receiver does not have an OLED display, connect a monitor to the receiver's video output.
2. Using the **Menu joystick** (N) on the receiver, navigate through the menus and select **Pairing**.
3. Confirm that **PLEASE ACTIVATE PAIRING ON TX** is displayed on receiver's OLED display (O) or the monitor.
4. On the transmitter, use a **paper clip (or similar)** to press the **Reset/Pairing button** (C). After a few seconds, **Pairing: XXXXX...** should be displayed on the receiver's OLED display or the monitor. If not, power cycle the receiver and the transmitter, then try again.
5. Using the **Menu joystick**, select **OK** to finish pairing. This process takes up to a minute. If pairing fails, power cycle the receiver and the transmitter and try again.

Bolt TX

DEVICE OPERATION

GENERAL

- Keep the transmitter and the receiver at close range for 60 seconds after powering on the devices. This allows them to scan for and select the best wireless channel.
- For best results when using multiple Bolt systems in the same area, place the transmitters and receivers a few feet apart from each other.
- Operation of other wireless equipment may interfere with Bolt. For best results, separate other wireless transmitters and receivers as much as possible.

Teradek regularly releases new firmware versions to improve performance, add new features, or to fix vulnerabilities.
Visit https://www.teradek.com to update your device with the latest firmware.

NEED MORE HELP?
Support: http://support.teradek.com → Contains tips, information and all the latest firmware & software updates.
TERADEK SUPPORT STAFF: support@teradek.com or call 888-941-2111 ext2 (Mon-Fri 7am to 6pm PST)

DEVICE OPERATION (CONT.)

RECEIVER OSD/DISPLAY OPERATION

Status Screens - The status screens display useful information such as the current video resolution, frequency, temperature, timecode, and the transmitter's name and voltage. For receivers with an OLED display, use the **Menu Joystick** to cycle through the status screens. For receivers without an OLED display, connect it to a monitor and activate the OSD by depressing the **Menu Joystick**, then cycle through screens by pressing the button up or down. Hide the status screen by pressing left.

Menu Operation - Bolt's menu options allow you to customize and configure the device's operation and settings parameters. For receivers with an OLED display, launch then navigate through the menu using the **Menu Joystick**. For receivers without an OLED display, press right on the **Menu Joystick** while the OSD is active. Exit from the menu by pressing left.

- **HDMI/SDI Out Format** - Match the video source resolution by selecting **Same as Input**, or choose from the resolutions listed.
- **3D LUT Settings (XT Only) -** Select and apply a specific look.
- **Spectrum Analyzer (XT Only) -** Determine which frequencies are available to use.
- **Test Pattern -** Select a video format to output a test pattern. Remove the test pattern by pressing left on the Menu Joystick.
- **Pairing -** Pair your receiver and transmitter. Once **Pairing** is selected, turn on the transmitter and use a paper clip to hold the reset button (C) for one second and release. The warning and link LEDs will blink to indicate that pairing is active.
- **Video OSD Settings -** By default, the OSD is displayed when the link is down. **Hidden by default** hides the OSD until it is activated by the joystick, while **Always show** displays the OSD unless deactivated by the joystick.
- **Display Settings (XT Only) -** Configure the OLED display settings. Set the display to invert every 30 minutes (lengthens the display life), or to dim or turn off after 10 seconds or 10 minutes.
- **Keys/Unit Orientation (XT only) -** Adjust the orientation of the device and joystick according to how the receiver is mounted.
- **Reset All Settings -** Reset all configurable options to their factory defaults.
- **Device Info -** Displays the model and serial number.

BOLT MANAGER

Bolt Manager allows you to configure, pair, and upgrade the Bolt system. Bolt Manager is available as software for Mac and Windows at **www.teradek.com/pages/downloads**, or for purchase as a standalone device.

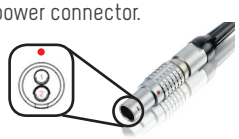
The following configuration settings are available:

- **Select Region** - Configure Bolt to comply with your region's regulations governing use of the 5GHz spectrum.
- **Select Frequencies -** Configure the transmitter and receiver to use the same frequencies.
- **Select TX Name-** Modify the transmitter's name to make it easily identifiable among other Bolt systems.
- **Select Quality -** Modify or balance the range and reliability of your signal. Select **Maximum Range** when other sources of interference might be present, or **Maximum Quality** for complex, high contrast situations.
- **Select Broadcast Mode -** Increase transmission range and prevent multiple receivers from interfering with each other when placed close to one another.

BOLT CONNECTOR / PIN-OUT

Bolt receivers use a 2-pin power connector.

Pin	Description
1*	GND
2	+DC



* Pin 1 is closest to the red dot on the connector

CUSTOM / 3RD PARTY CABLES

- Test the power cable polarity with **ONLY** the power cable connected to Bolt. Do not connect video cables.
- Check the power cable for shorts and proper grounding.

CAUTION: Using a reverse polarity or improperly-constructed power cable can damage the product and is not covered under warranty.

MOUNTING

- Mount the Bolt transmitter onto the back of a camera, keeping the antennas clear of DSMC2 any obstructions.
- Orient the transmitter and receiver antennas so they are parallel to each other.
- For best results, orient the transmitter antennas so each one has clear line-of-sight to the receiver.

Bolt DSMC2 transmitter mounted on the back of a camera

Bolt XT receiver mounted vertically on a light stand or monitor

Teradek regularly releases new firmware versions to improve performance, add new features, or to fix vulnerabilities.
Visit https://www.teradek.com to update your device with the latest firmware.

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