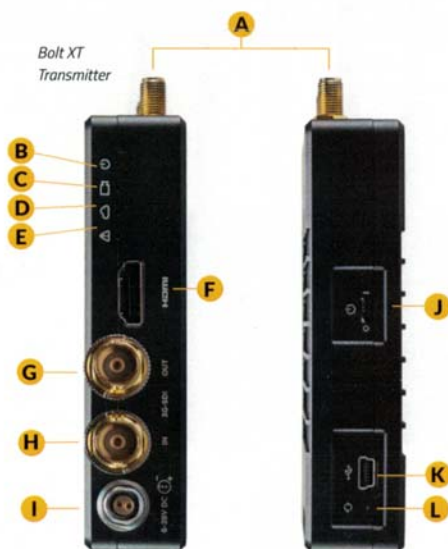# TERADEK

BO/t XT

ZERO DELAY WIRELESS HD VIDEO

Bolt 1000/3000 XT is a zero delay wireless video transmission system designed for the most demanding cinema, broadcast, and UAV applications. Bolt transmits 1080p60 4:2:2 video at up to 1000/3000ft line of sight over the unlicensed 5GHz band with less than 1ms latency.

Bolt XT Transmitter

Bolt XT Receiver

A: RP-SMA connectors	**E:** Fault LED
B: Power status LED	**F:** HDMI input
C: Video status LED	**G:** 3G-SDI output
D: Link status LED	**H:** 3G-SDI input

I: Power input	**M:** Menu joystick
J: Power switch	**N:** OLED display
K: Mini-USB	**O:** NATO rail mount
L: Reset button	

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.

CONNECT AND POWER YOUR DEVICE

1 Connect the output from your video source to either the SDI or HDMI input (H or F) on the Bolt transmitter. Connect either the SDI or HDMI output (G or F) from the Bolt receiver to the video input on your monitor. NOTE: **If mounted upright on a stand above the monitor, use a right-angle SDI adapter to relieve any strain caused by the weight of the cable, and to avoid damaging the SDI output's internal connectors.**

HDMI   SDI

2 Connect power to your Bolt transmitter using the included P-Tap to 2-pin connector cable. Power the Bolt receiver with the included A/C adapter or battery plate accessory. If using the battery plate, connect a compatible battery (Gold mount or V-Lock) to the plate, and connect the short cable from the plate to the receiver's DC input (I).

AC adapter

3 Attach the two TX antennas to the transmitter and the five RX antennas to the receiver via the threaded RP-SMA connectors (A).

P-Tap to 2-pin Connector

4 Move the power switches on both the transmitter and receiver (J) to the **ON** position. Video appears within a few seconds.

DISPLAY OPERATION

Status Screens - Cycle through status screens or return from the menu by pressing the Menu joystick. (M)

- **Main Status Screen** - This screen displays the status of the wireless receiver, along with the current video resolution, frequency, and link quality (if connected).
- **Time Code Screen** - Displays the current time code if received from the transmitter.
- **Temperature Status Screen** - Displays the current internal temperature of the unit.
- **TX Input Voltage Status** - Displays the current voltage of the transmitter.

Menu Operation - Launch, then navigate through the menu with the Menu joystick (M).

- **HDMI/SDI Out Format** - Choose the video output format. You can choose to match the video source resolution by selecting "Same as Input," or choose from the resolutions listed.
- **3D LUT Settings** - Select and apply a specific look.
- **Spectrum Analyzer** - View the entire frequency range to determine which frequencies are available to use.
- **Channel Selection** - Select a bandwidth or frequency option.
- **Test Pattern** - Select a video output format from this menu to output a test pattern over HDMI and SDI. Return to the previous video by pressing left on the Menu joystick.
- **Pairing** - Link your receiver with another transmitter. Once pairing is activated on the receiver, turn on the transmitter and use a paper clip to hold the reset button (L) for one second and release. The red warning LED and link LEDs will blink to indicate that pairing is active.
- **OSD Settings** - Choose when to display the OSD. By default, the OSD is displayed when the link is down. "Hidden by default" hides the OSD until it is activated by the joystick. If "Always show OSD" is selected, the OSD will be displayed unless deactivated by the joystick.
- **Display Settings** - Use these options to control the OLED display operation. You can set the display to invert every 30 minutes (lengthens the display life), or it can dim or turn off after 10 seconds or 10 minutes.
- **Reset All Settings** - Reset all configurable options to their factory defaults.
- **Device Info** - Displays the model and serial number.

BOLT CONNECTOR / PIN-OUT

Bolt uses 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.

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** - Bolt auto-selects between up to 11 different frequencies. Each frequency can be individually enabled or disabled. For best results, configure the transmitter and receiver to use the same frequencies.

• **Select TX Name**- Bolt transmitter's name can be modified or changed, making it easier to identify among other Bolt systems that are present.

• **Select Quality** - Select a High Quality mode setting to modify or balance the range and reliability of your signal. In situations where other sources of interference might be present, select **Maximum Range**. For complex, high contrast situations where artifacts are visible, select **Maximum Quality**.

• **Select Broadcast Mode** - Broadcast Mode can increase transmission range and prevents multiple receivers from interfering with each other when placed close to one another.

DEVICE OPERATION

- Keep the transmitter and 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 the Bolt. Try to separate other wireless transmitters and receivers as much as possible.

MOUNTING

- Mount the Bolt transmitter vertically, keeping the antennas clear of 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 XT receiver can be mounted vertically on a light stand or monitor

Bolt XT transmitter mounted vertically on a camera