Teradek 10-2240

Teradek Ace 750 4K Wireless HDMI Transmitter and Receiver Set User Manual

Model: **10-2240** | Brand: **Teradek**

INTRODUCTION

The Teradek Ace 750 is a high-performance wireless video transmission system designed for professional video workflows. It provides true zero-delay wireless transmission of 4K video signals up to 750 feet (230 meters) with 10-bit HDR support. This manual provides detailed instructions for setting up, operating, and maintaining your Ace 750 system.

Key Features:

- **4K Wireless Transmission:** Supports up to 4Kp30 10-bit HDR image quality via HDMI.

- **Zero-Delay Performance:** Utilizes Teradek's patented BB3 silicon chip for less than 0.01s of latency, ensuring real-time monitoring.

- **Extended Range:** Offers a wireless range of up to 750 feet (230 meters).

- **6GHz Frequency:** Operates on the 6GHz band, providing access to 12 new frequency options with auto channel selection for optimal signal strength.

- **Plug and Play:** Pre-paired out of the box for immediate use, with simplified Bluetooth control via the Bolt Manager mobile app.

- **Broad Compatibility:** Designed for mirrorless cameras, camcorders, action cameras, and various A/V workflows.

- **Government Certified:** Meets FCC and CE compliance for frequency usage and power output guidelines.

WHAT'S IN THE BOX

Upon unboxing your Teradek Ace 750 system, please verify that all the following components are included:
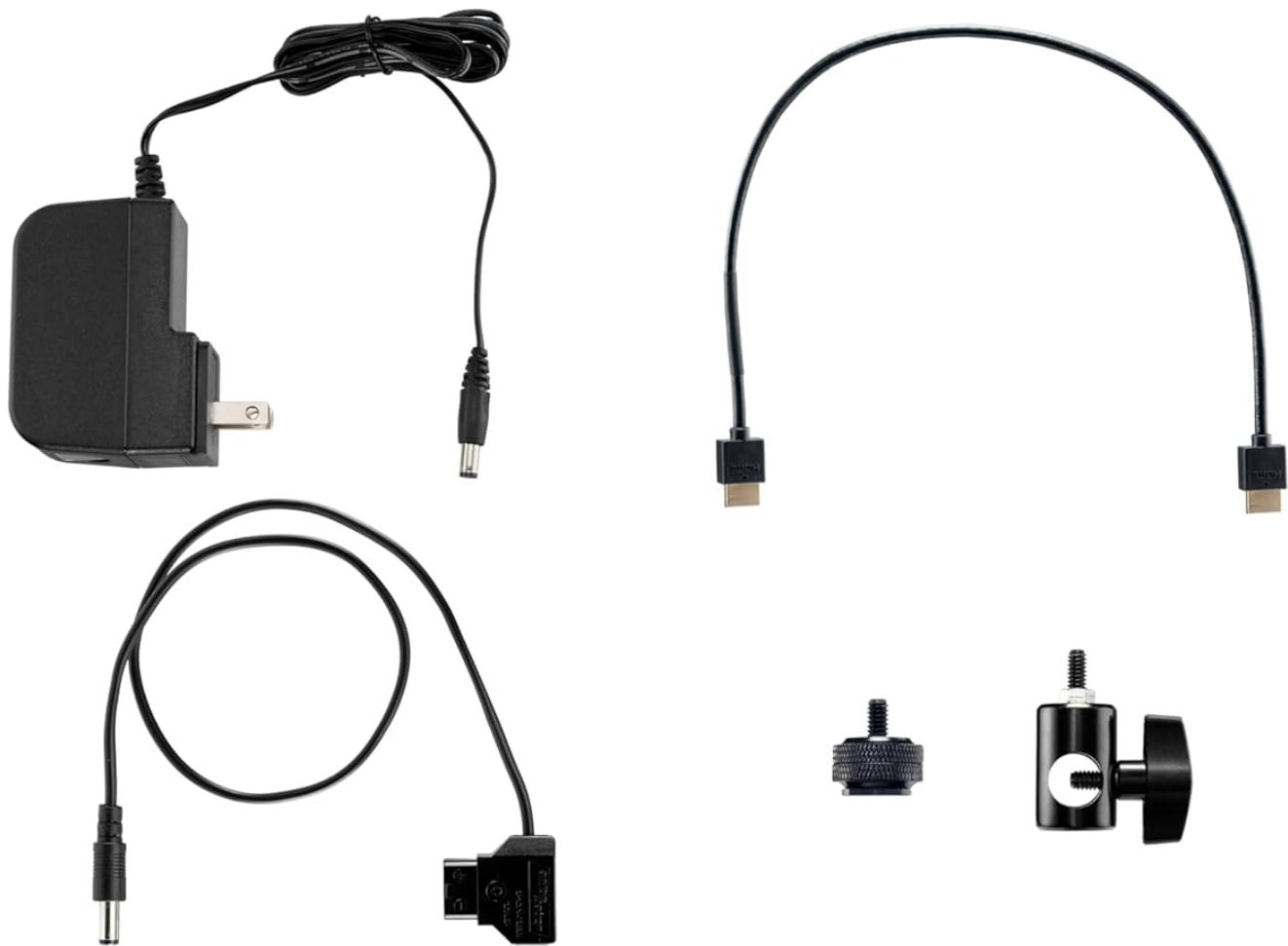
Image: All components included with the Teradek Ace 750 system, laid out for inspection.

- 1 x Ace 750 Transmitter

- 1 x Ace 750 Receiver

- 1 x Lightstand Adapter 1/4-20in

- 1 x Hot Shoe Adaptor

- 2 x Ultra Thin HDMI Male Type A - HDMI Male Type A - 18in Cable

- 1 x PSU 18W AC Adapter 12VDC - 6ft Cable

- 1 x PTap to r/a barrel - 18in Cable

PRODUCT OVERVIEW

Familiarize yourself with the various ports, indicators, and mounting options of the Ace 750 units.

Image: Front view of the Ace 750 units highlighting the OLED display for system status and the location of internal antennas.
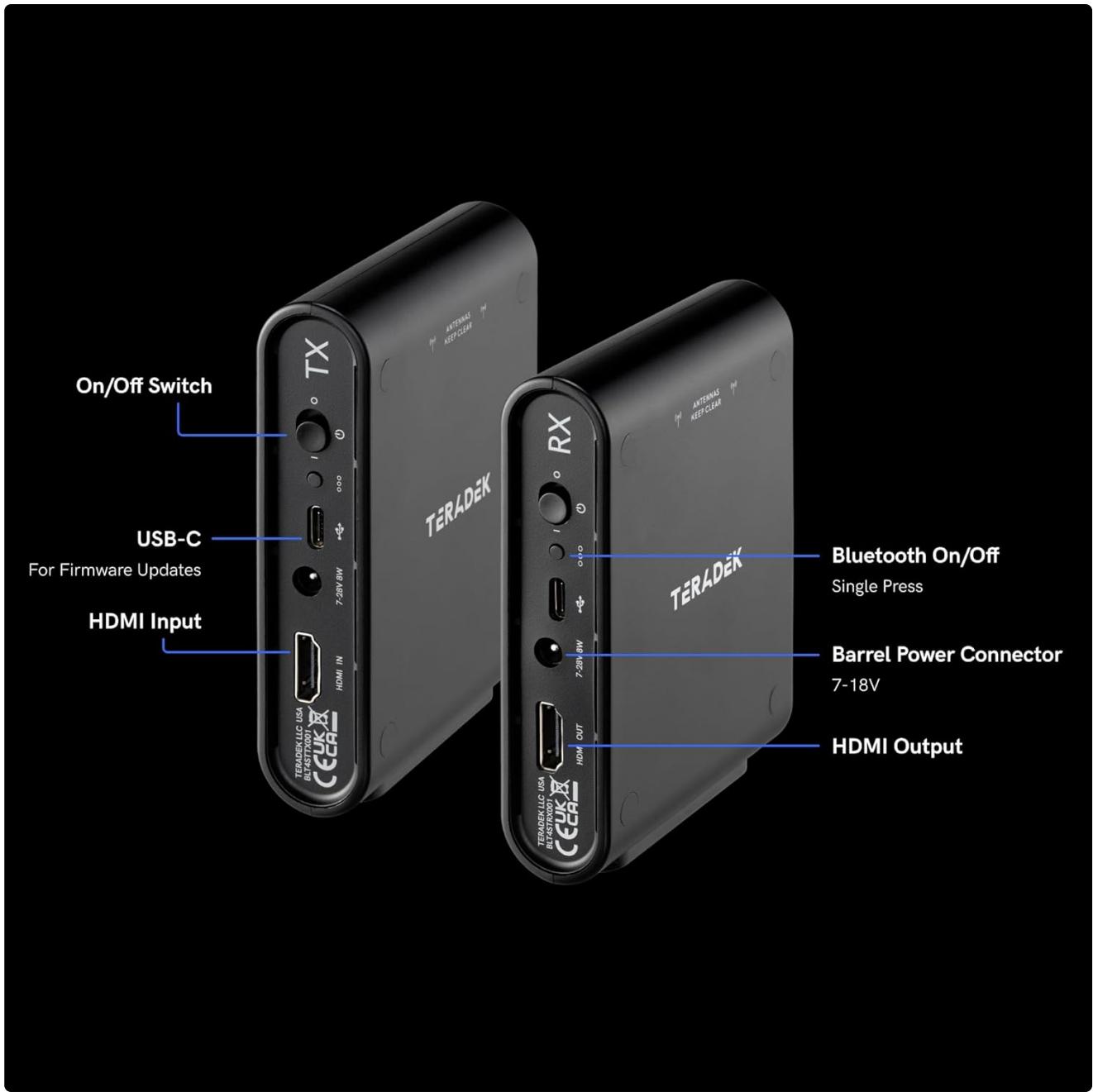
Image: Side view of the Ace 750 Transmitter (TX) and Receiver (RX) units, detailing the power switch, USB-C port, HDMI input/output, Bluetooth button, and barrel power connector.

On/Off Switch: Powers the unit on or off.

USB-C Port: Used for firmware updates.

HDMI Input (TX): Connects to the HDMI output of your camera or video source.

HDMI Output (RX): Connects to the HDMI input of your monitor or display.

Bluetooth On/Off: Single press to toggle Bluetooth for app control.

Barrel Power Connector (7-18V): For external power input.

OLED Display: Shows system status, signal strength, and other important information.

Internal Antennas: Pointed upwards for optimal signal clarity.

Image: Bottom view of the Ace 750 units, showing the M3 and 1/4-20 inch mounting points for versatile attachment to camera rigs or stands.

Setup Guide

Follow these steps to set up your Teradek Ace 750 system for operation.

1. **Mount the Transmitter (TX):** Attach the Ace 750 Transmitter to your camera rig using the provided hot shoe adapter or lightstand adapter, or utilize the 1/4-20 inch mounting points. Ensure the unit is securely fastened and the internal antennas have a clear path.

Image: The Ace 750 Transmitter integrated into a camera setup, demonstrating a typical mounting configuration.

2. **Connect HDMI to Transmitter:** Use one of the supplied 18-inch ultra-thin HDMI cables to connect the HDMI output of your camera or video source to the HDMI Input port on the Ace 750 Transmitter.

3. **Power the Transmitter:** Connect the provided PSU 18W AC Adapter or the PTap to r/a barrel cable to the barrel power connector on the Transmitter. Ensure the power source is within the 7-18V DC range.

4. **Mount the Receiver (RX):** Position the Ace 750 Receiver near your monitor or display. Use appropriate mounting accessories to secure it.

5. **Connect HDMI to Receiver:** Use the second supplied 18-inch ultra-thin HDMI cable to connect the HDMI Output port on the Ace 750 Receiver to the HDMI Input port on your monitor or display.

6. **Power the Receiver:** Connect the provided PSU 18W AC Adapter or a compatible power source to the barrel power connector on the Receiver.

7. **Power On Units:** Flip the On/Off switch on both the Transmitter and Receiver units. The OLED displays will illuminate, indicating system status.

8. **Verify Connection:** The units are pre-paired from the factory. Once powered on, they should automatically establish a connection. The OLED display on both units will show connection status and signal strength.

9. **Optional: Bolt Manager App:** For advanced control and monitoring, download the Bolt Manager app (available for Android and iOS). Single press the Bluetooth button on either unit to enable Bluetooth, then connect via the app.

OPERATING INSTRUCTIONS

Wireless Video Transmission

The Ace 750 system is designed for seamless, zero-delay video transmission. Once powered on and connected, the units will automatically establish a link and begin transmitting video.

True Zero-Delay for All

Unlike WiFi-based systems, the patented Teradek BB3 silicon chip inside Ace 750 ensures wireless HDMI video transmission with less than 0.01 seconds of latency, sending true zero-delay video to up to six receivers up to 750 feet away.
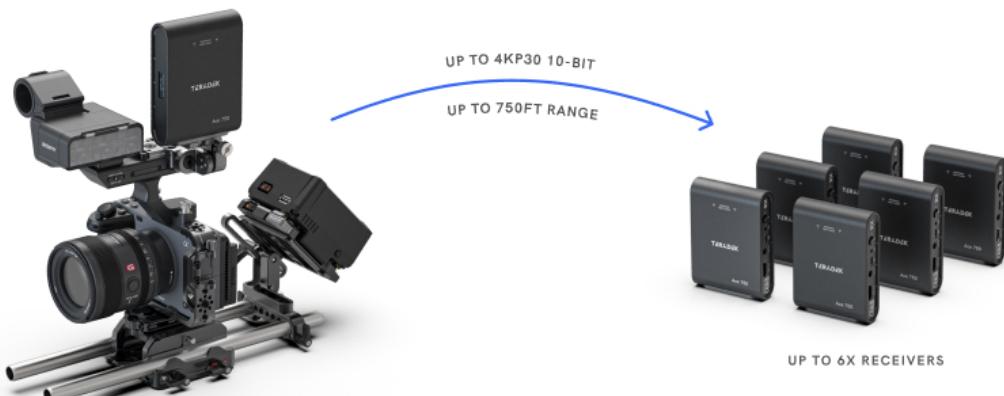

Image: Visual representation of the Ace 750's true zero-delay transmission capability, showing a camera connected to a transmitter sending video to up to six receivers within a 750ft range.

- **Signal Range:** Maintain line-of-sight between the transmitter and receiver for optimal performance up to 750 feet (230 meters). Obstructions can reduce range and signal quality.

- **Frequency Selection:** The Ace 750 utilizes the 6GHz frequency band and features automatic channel selection to find the clearest available channel, minimizing interference.

- **Multi-Receiver Support:** A single Ace 750 Transmitter can send video to up to six Ace 750, Bolt 6, or Bolt 4K Receivers simultaneously.

Send Signal to up to 6x
## Ace 750, Bolt 6, or Bolt 4K Receivers
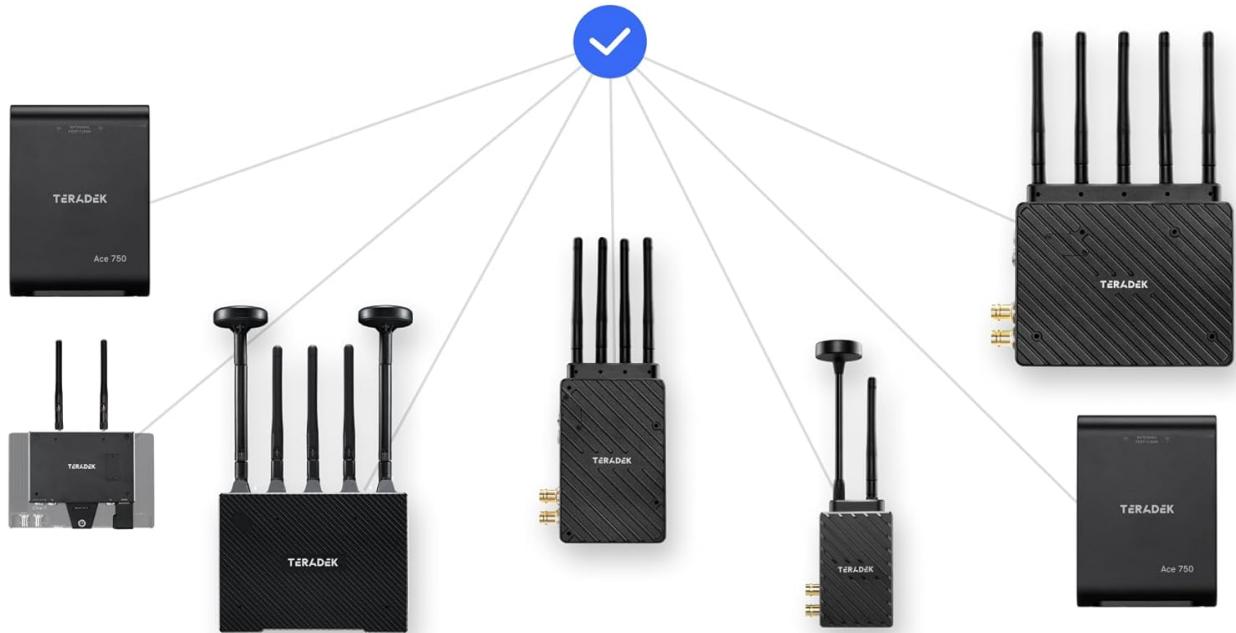
Image: An illustration demonstrating the ability of the Ace 750 Transmitter to send video signals to multiple Ace 750, Bolt 6, or Bolt 4K receivers.

Using the Bolt Manager App

The Bolt Manager app provides enhanced control and monitoring capabilities for your Ace 750 system.

- **Connect via Bluetooth:** Ensure Bluetooth is enabled on your mobile device. Single press the Bluetooth button on your Ace 750 unit. Open the Bolt Manager app and select your device from the list.
- **Monitor Status:** View real-time signal strength, battery status (if applicable), and video format information.
- **Channel Selection:** Manually select or view the automatically selected wireless channel.
- **Firmware Updates:** The app can facilitate over-the-air firmware updates for your units.

MAINTENANCE

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the units. Do not use liquid cleaners or solvents.
- **Storage:** When not in use, store the Ace 750 units in a cool, dry place, preferably in their original packaging or a protective case.
- **Firmware Updates:** Periodically check for firmware updates via the Teradek website or the Bolt Manager app. Firmware updates can improve performance, add features, and resolve issues. Connect the unit to a computer via the USB-C port for manual updates, or use the app for over-the-air updates.
- **Antenna Clearance:** Ensure the areas marked "ANTENNAS KEEP CLEAR" on the units are not obstructed during operation to maintain optimal signal integrity.

TROUBLESHOOTING

Problem	Possible Cause	Solution
No image on monitor	- Units not powered on. - HDMI cables not connected properly. - Incorrect HDMI input selected on monitor. - Out of range or signal interference. - TX/RX not paired (unlikely if new).	- Ensure both TX and RX units are powered on. - Check all HDMI cable connections. - Verify monitor is set to the correct HDMI input. - Move units closer together or clear obstructions. - If units were unpaired, refer to the Bolt Manager app for re-pairing instructions.
Intermittent signal / Poor image quality	- Obstructions between TX and RX. - Excessive distance. - Strong wireless interference. - Antennas obstructed.	- Ensure clear line-of-sight. - Reduce distance between units. - Use the Bolt Manager app to check for clearer channels or move to a less congested area. - Ensure "ANTENNAS KEEP CLEAR" areas are unobstructed.
Unit not powering on	- Power cable not connected. - Faulty power adapter/cable. - Power source issue.	- Verify power cable is securely connected to the unit and power source. - Test with a different power adapter or cable if available. - Ensure the power outlet or battery is functioning correctly.
Cannot connect to Bolt Manager app	- Bluetooth not enabled on unit. - Bluetooth not enabled on mobile device. - App permissions.	- Single press the Bluetooth button on the Ace 750 unit. - Enable Bluetooth on your smartphone/tablet. - Check app permissions in your device settings to ensure Bluetooth access.

SPECIFICATIONS

Model Number	10-2240
Product Dimensions	8 x 8 x 8 inches
Item Weight	1 pounds
Connectivity Technology	HDMI
Total HDMI Ports	2 (1 Input on TX, 1 Output on RX)
Video Resolution	Up to 4Kp30 10-bit HDR
Wireless Frequency	6GHz
Range	750 feet (230 meters) line-of-sight
Latency	Less than 0.01 seconds
Controller Type	Android, iOS (via Bolt Manager app)
Special Features	6GHz Diversity, APP Control, Auto Channel Selection, Government Certified
Compatible Devices	Any camera with an HDMI output
Audio Output Mode	Surround
Surround Sound Channel Configuration	2.0
Video Encoding	H.265/HEVC

WARRANTY AND SUPPORT

Teradek products are manufactured to high-quality standards. For specific warranty information, please refer to the warranty card included with your product or visit the official Teradek website. Typically, Teradek offers a limited warranty covering manufacturing defects.

Customer Support:
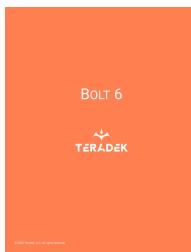
For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact Teradek customer support through their official channels:

- **Online Support:** Visit the Teradek support page on their official website for FAQs, knowledge base articles, and support tickets.

- **Contact Information:** Refer to the Teradek website for current contact details, including phone numbers and email addresses for technical support.
- **Firmware & Software:** Ensure you have the latest firmware installed on your Ace 750 units and the most recent version of the Bolt Manager app for optimal performance and compatibility.

Note: Protection plans may be available for purchase separately. Please check with your retailer for details.

Related Documents

	[Teradek Bolt 6 XT Quick Start Guide - Wireless Video Transmission System](#) A comprehensive guide to setting up and using the Teradek Bolt 6 XT, a real-time 4K wireless video transmission system featuring Zero-Delay technology and 6GHz frequency.
	[Teradek Bolt 4K LT Series: Quick Start Guide for Wireless Video Transmission](#) Quick start guide for the Teradek Bolt 4K LT series, covering setup, physical properties, connection, mounting, and basic operation of the zero-delay wireless video transmitter and receiver system.
	[Teradek Bolt 6 Series User Manual: Wireless Video Transmission Systems](#) Comprehensive user manual for the Teradek Bolt 6 series of wireless video transmission systems, covering setup, configuration, technical specifications, and best practices for 4K HDR video transmission.
	[Teradek Bolt Sidekick II Quick Start Guide: Wireless HD Video System](#) Learn how to connect, power, and pair the Teradek Bolt Sidekick II, a zero-delay long-range wireless HD video receiver. Includes device operation, OSD, and support information.