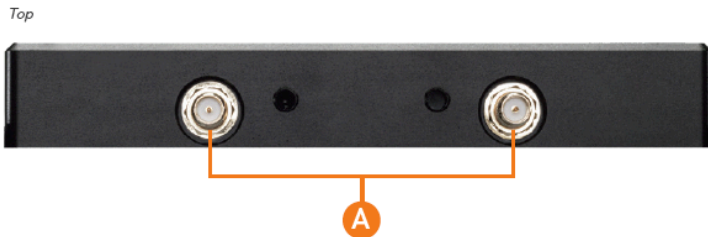# Bolt 4K Monitor Module TX Quick Start Guide

Transmit lossless 4K video from up to 750 line-of-sight with the Bolt 4K Monitor Module TX. The module mounts onto the back of a SmallHD Cine 7 or 702 Touch monitor and can wirelessly transmit up to 4K30 video with 10-bit 4:2:2 HDR support to any Bolt 4K receiver.
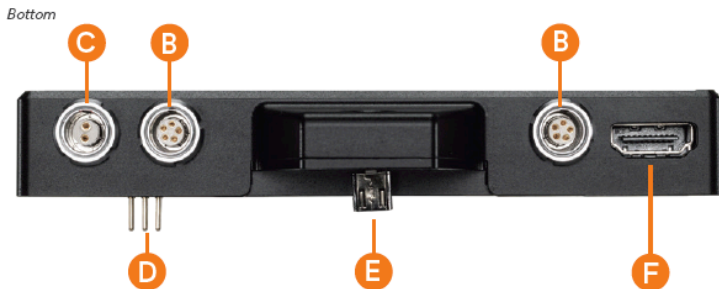
The Bolt 4K Monitor Module TX features improved metadata, range, and compatibility over its predecessors, and includes built-in AES-256 encryption with RSA 1024 key pairing to protect your video.

## PHYSICAL PROPERTIES



Top

Bottom

A: RP-SMA connectors
B: AUX input
C: 6-18V DC power input
D: Compression pins
E: Micro USB
F: HDMI output

**COMPATIBLE DEVICES**

The Bolt 4K Monitor Module TX is compatible with SmallHD **Smart 7 Series** monitors (Indie 7, Cine 7, and 702 Touch).

# CONNECT AND POWER

> ℹ **NOTE: Attaching a Monitor module to any wireless version of the Smart 7 monitor will automatically disable your monitor's internal wireless and instead use the module's wireless capabilities. To use the monitor's wireless capabilities, simply connect power to the monitor instead of the module, then navigate to the WIRELESS SETTINGS and enable WIRELESS.**

1. Remove the battery plate from the back of the Smart 7 monitor.
2. Detach the cover plate from the back of the Bolt 4K Monitor Module to expose the JST connector. **NOTE: There is no need to disconnect the JST connector.**
3. Place the monitor module firmly against the back of the Smart 7 monitor. Ensure that the two top mounting holes, connector pins, and micro USB align with their corresponding terminals.
4. Insert two M3 socket-head screws through the two top mounting holes on the monitor module and into the back of the monitor. **DO NOT OVER-TIGHTEN.**
5. *Optional:* Attach a V-mount or Gold-mount battery plate to the monitor module, then tighten the four Phillips screws. **NOTE: Before attaching the battery plate to the monitor module, ensure the wires are tucked into the plate so that they do not obstruct the release button's operation.**
6. Insert, then tighten the 1/4"-20 hex screw to secure the monitor module assembly against the back of
   the monitor. **DO NOT OVER-TIGHTEN.**
7. Attach a compatible battery to the battery plate (optional), or connect power to the module's 6-18V DC input using the included A/C adapter. **NOTE: Ensure the A/C adapter is connected to the module and NOT the monitor.**
8. Attach antennas to the monitor module via the threaded RP-SMA connectors (A), then connect an HDMI cable from the module to the monitor.
9. Turn the system on by pressing and holding down the monitor's power button.

# BOLT APP

> Use the Bolt App to remotely manage and monitor every parameter of the Bolt 4K Monitor Module including pairing, wireless settings, and video quality.
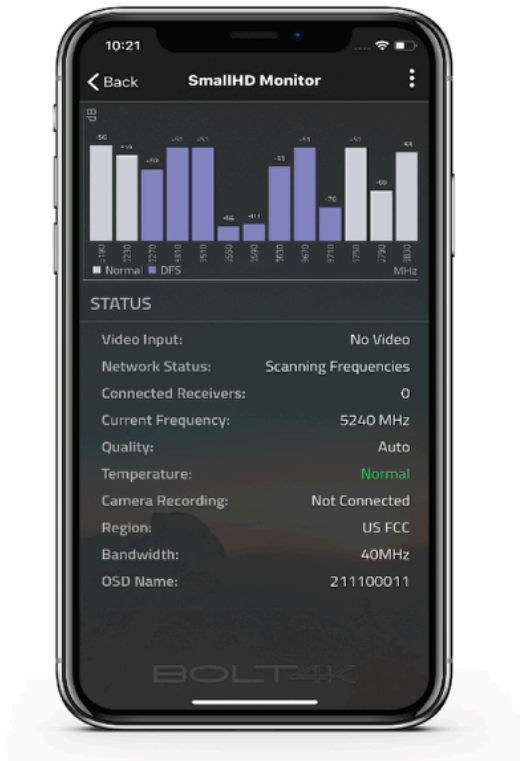
**CONNECT TO BOLT VIA BLUETOOTH**

1. Download the Bolt App.
2. Enable Bluetooth on your iOS or Android device.

3. Open the Bolt App and tap **Status/Configuration**.
4. Select the device you want to monitor.



**TRANSMITTER DISPLAY STATUS**

**Status:** Displays the current Video Input, Network Status, Connected Receivers, Current Frequency, Quality, Temperature, Camera Recording, Region, Bandwidth, and Device Name.

**Settings:** Tap the settings button (3 dots) at the top of the screen to customize the transmitter's various settings.
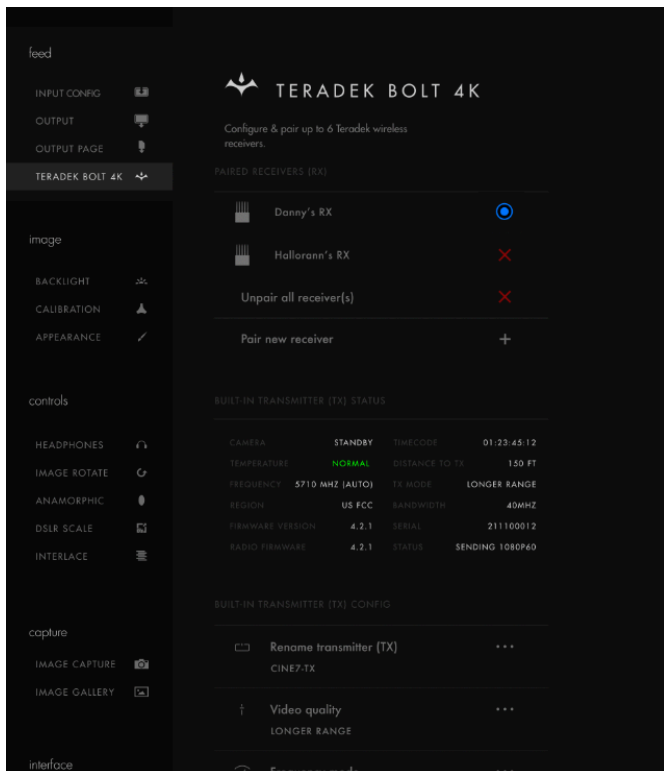
- Wireless Settings - Adjust your Region, Bandwidth, And Frequency settings
- Pairing - View which devices are paired with the TX
- TX OSD Name - Change the name of the TX
- Video Quality Mode - Adjust the balance between your signal's maximum range and quality
- System Info - View the TX device info, firmware versions, perform firmware upgrades, or restart your device
- Device Registration - Register your device

# MODULE TX/SMART 7 CONFIGURATION MENU

Once you've attached the Monitor Module TX to your Smart 7 monitor, you will be able to configure the Module TX using the configuration menu found in the Smart 7 Monitor Settings.

**To access the configuration menu:**

1. Swipe right on the monitor's touchscreen until **Monitor Settings** is displayed, then scroll down the left column and navigate to **Accessories>App Connection**, then select **Enable Device Discovery**.
2. Scroll back up and tap to select the **TERADEK BOLT 4K** option.



**TERADEK BOLT 4K MENU**

**Paired Receivers** - This screen displays all paired receivers(if any), and allows you to pair or unpair additional receivers with the TX module.

**Built-In Transmitter (TX) Status** - This screen displays the following information:

- CAMERA

- TEMPERATURE
- FREQUENCY
- REGION
- CONTROLLER VERSION
- RADIO VERSION
- TIMECODE
- DISTANCE TO RX
- TX MODE
- BANDWIDTH
- SERIAL
- STATUS

**Built-In Transmitter (TX) Configuration**

- Rename transmitter (TX) - Rename the transmitter so it's easier to identify among other Bolt systems that are present.
- Video quality - Select a video quality setting to modify or balance the range and reliability of the signal.
- Frequency mode - Select either AUTO or FIXED mode.
- • Available frequencies - Specify which frequency to use whenever Fixed Frequency Mode is enabled.
- Bandwidth - Select either 20MHZ or 40MHZ.
- Fan speed - Turn the internal fan OFF/ON or enable the fan to remain OFF DURING RECORDING.
- Region - Select an available region. NOTE: Pairing the TX and RX is required every time a different region is selected.

# PAIRING

Before use, your Bolt 4K Monitor Module TX needs to be paired with a Bolt 4K receiver using SmallHD
Smart 7's user interface or the Bolt App. **NOTE: Before starting either pairing process, ensure that the transmitter, receiver, and monitor have the latest firmware version and have Bluetooth enabled.**

**PAIRING VIA SMART 7 MONITOR**

1. Swipe right on the monitor's touchscreen until Monitor Settings is displayed, then scroll down the left column and navigate to **Accessories>App Connection**, then select **Enable Device Discovery**.
2. Scroll back up and tap to select the **TERADEK BOLT 4K** option, then tap **Pair new receiver**.
3. Enable Pairing on the Bolt 4K receiver by selecting **Pair** on the front panel menu. The module will begin scanning for receivers to automatically pair with.
4. Once the devices are paired successfully, tap **Accept** to dismiss the menu. If pairing fails, try again.

**PAIRING VIA BOLT APP**

1. Open the Bolt App from your iOS or Android device, then tap **Pairing**.
2. Select **SmallHD Monitor**, then tap the **Next** button.
3. Select the receiver(s) you wish to pair with, then tap the **Pair!** button. The Bolt App will indicate when the pairing process is completed.

# LENS DATA OVERLAY

Your Bolt 4K Monitor Module TX has two AUX ports that allow you to connect and communicate with a compatible Teradek RT controller and enables additional features such as Lens Data Overlay. This feature displays your controller's lens map position on the monitor.

You will need the following:

- Lens Mapping License
- SmallHD/Teradek RT Interface Cable

1. Connect a cable from the controller's wired mode connector to one of the monitor's AUX ports.
2. Tap the screen on the monitor and navigate to **ADD NEW TOOL>ADD ONS**.
3. Select **TERADEK RT**.
4. The Lens Map Overlay will appear on the right and move according to controller's knob movements.