

# **Bolt 4K Monitor Module RX Quick Start Guide**

Receive lossless 4K video from up to 750/1500 ft line-of-sight with the Bolt 4K Monitor Module RX. 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 transmitter.

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.

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# **PHYSICAL PROPERTIES**



## **CONNECT AND POWER**

- 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.

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- 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 RX including pairing, channel selection, and 3D LUTs.

#### 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.





#### **RECEIVER STATUS DISPLAY**

**Settings:** Tap the settings button (3 dots) at the top of the screen to customize the transmitter's various settings.

- Wireless Settings View the current Region, adjust the Bandwidth, or enable Fixed Frequency Mode
- Pairing View which devices are paired with the RX
- RX OSD Name Change the name of the RX as it is displayed on OSD
- System Info View the RX device info, firmware versions, perform firmware upgrades, or restart your device
- · Device Registration Register your device

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Signal Quality: Determine the quality and reliability of the signal being received.

**SNR (Signal to Noise Ratio)**: Compare the signal power level to the noise power level from the attached antennas.

Range (Quality/Range Analyzer): Displays the transmission distance

**Status:** Displays the name of the synced TX, Network Status, Link Status, Video Input, Current Frequency, Range, Quality, Temperature, Camera Recording, Bandwidth, Video and OSD Name.

# **MODULE RX/SMART 7 CONFIGURATION MENU**

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

#### To access the configuration menu:

- 1. Swipe right on the monitor's touchscreen, then tap the **Full Settings** option once it appears.
- 2. Tap to select the **TERADEK BOLT 4K** option.



		MONITO
feed		
INPUT CONFIG	6.0	✤ TERADEK BOLT 4K
OUTPUT		Detector & conference or Translition Section
OUTPUT PAGE		transmitter to view its feed.
TERADEK BOLT 4K	*	
		Descrife TX
imaga		Danny's IX
linoge		UNK / QUAL EXCELLENT / 92% INPUT 2160p24
BACKLIGHT		TEMPERATURE NORMAL TIMECODE 01:23:45:12
CALIBRATION	*	FREQUENCY 5710 MHZ (AUTO) DISTANCE TO TX 150 FT
APPEARANCE		
controls		
controls.		
HEADPHONES	♠	Pair new transmitter (TX) +
IMAGE ROTATE	G	
ANAMORPHIC	•	Unpair transmitter(s)
DSLR SCALE	51	
INTERLACE		
		Rename receiver (RX) ···
		CINE7
capture		
IMAGE CAPTURE	Ő.	AUTO
IMAGE GALLERY		
		기 🖉 Bandwidth ••••
		40MHZ
interface		Sn Fan speed
PIXEL ZOOM	Ŷ	OFF DURING RECORDING
SCOPES BUTTON	14	
STATUS DISPLAY	_	
UI LOCK	A	Update Firmware •••
LANGUAGE	0	Controller Version: 2,15
		Radio Version: 7.3.17
		Download new firmware here:
Jser		teradek.com/pages/downloads#bolt4k
DACKDDOD	-	

#### **TERADEK BOLT 4K MENU**

**Linked Transmitter (TX)** - This screen displays the name of the paired transmitter along with the following information:

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- LINK/QUALITY STATUS
- CURRENT TEMPERATURE
- FREQUENCY
- REGION
- INPUT RESOLUTION
- TIMECODE
- DISTANCE TO TX
- TX QUALITY

#### **Built-In Receiver (RX) Configuration**

- Rename receiver (RX) Rename the receiver so it's easier to identify among other Bolt systems that are present.
- Frequency mode Select either AUTO or FIXED mode.
- Selected Frequency Specify which frequency to use whenever Fixed Frequency Mode is enabled.
- Bandwidth Select either 20MHZ or 40MHZ.
- Fan Mode Turn the internal fan OFF/ON or enable the fan to remain OFF DURING RECORDING.

### PAIRING

Before use, your Bolt 4K Monitor Module RX needs to be paired with a Bolt 4K transmitter 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, then tap on the **Full Settings** option once it appears.
- 2. Scroll back up and tap to select the TERADEK BOLT 4K option, then tap Pair new transmitter (TX).
- 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 SmallHD Monitor, 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.