Ultra 7 Quick Start Guide

Rugged, powerful, and feature-rich, the Ultra 7 offers 2300 nits of brightness, 6G SDI that allows you to ingest 4K signal, a 2-pin power passthrough for cleaner builds, an Ethernet port for camera control, plus a joystick and tactile physical buttons for control in any conditions. Utilize all your favorite PageOS tools, functions, and settings pages on a fully loaded 7-inch touchscreen monitor.

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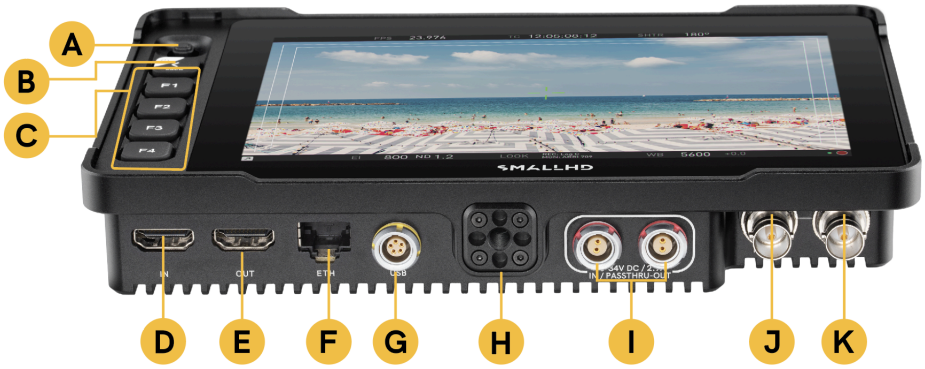
ACTIVATE WARRANTY

To activate your monitor's warranty, please go to https://activate.smallhd.com/. You will need the serial number, which is located on the sticker where the battery goes (you may need to remove your battery to see it). You will also want to have a copy of your invoice from your purchase to confirm the purchase date.

PHYSICAL PROPERTIES

ULTRA 7 MONITOR



A: Joystick

B: Back Button

C: Custom Function Buttons

D: HDMI Input

E: HDMI Output

F: Ethernet

G: 5-Pin Locking USB

H: ¼"-20 Mounting Points

I: 2-pin Locking Power Input/ Pass-Thru Power Output

J: 6G-SDI Input/Output

K: 6G-SDI Input

L: SD Card Slot

M: UI Lock Switch

N: Headphone Output

O: Internal V Antenna

POWER AND CONNECT

POWER

1. Connect power to the monitor using a 2-pin Locking Connector to D-Tap or Wooden Camera Micro Battery Plate.
2. Press the power button.

SIGNAL

- Video signals via HDMI up to 4Kp30
- 6G SDI In/Out up to 4Kp30 for 4K workflows
- Screen resolution at 1920x1200

MOUNTING OPTIONS

¼"-20 MOUNTING POINTS
There are 3x ¼"-20 mounting points to secure the monitor to a camera or rig (top & side) with 9x ¼"-20 on top of the monitor

PAIRING ULTRA 7 TX/RX

Ultra 7 transmitters and receivers can be paired with each other, or with Teradek's Bolt 6 Monitor TX and RX Modules using either the Ultra 7's UI or Bolt App.

Pairing/Unpairing via Ultra 7 Monitor

TO PAIR:

1. Swipe right on the monitor's touchscreen, then tap on the **Settings** option once it appears.
2. Tap to select the **TERADEK BOLT** option, then tap **Pair new transmitter/receiver**.
3. Enable Pairing on the Bolt 6 transmitter(s) and/or receiver(s) by selecting **Pair** on the transmitter's front panel menu. The RX module will begin scanning for transmitters to automatically pair with. **Note: You can pair the receiver with up to six transmitters at one time.**
4. Once the devices are paired successfully, tap **Accept** to dismiss the menu. If pairing fails, try again.

TO UNPAIR:

1. Swipe right on the monitor's touchscreen, then tap on the **Monitor Settings** option once it appears.
2. Tap to select the **TERADEK BOLT** option, then tap **Unpair transmitter/receiver**.

Pairing/Unpairing via Bolt App

TO PAIR:

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

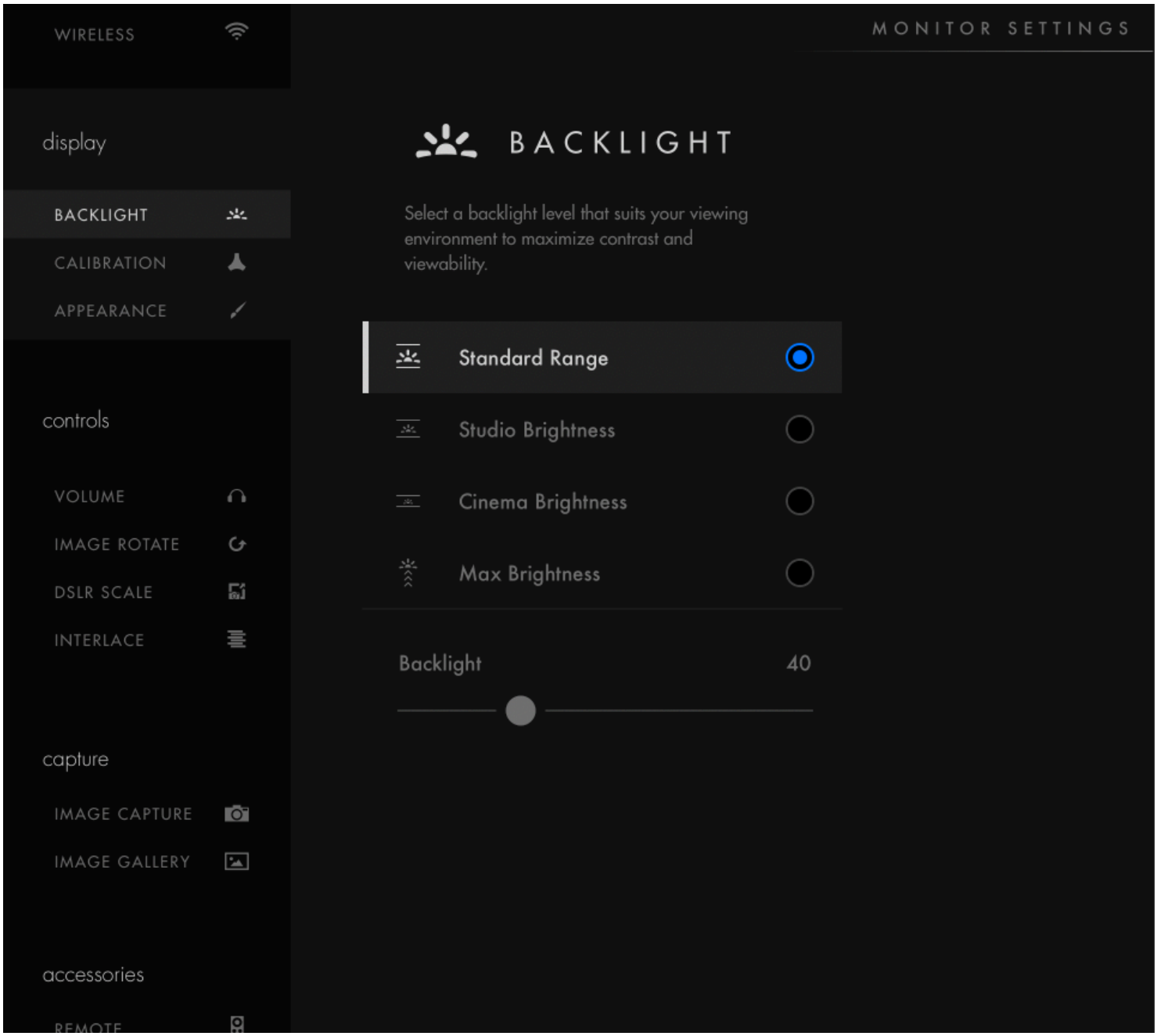
TO UNPAIR:

1. Open the Bolt App from your iOS or Android device, then tap the settings button (3 dots) on the top right corner of the screen.
2. Enter the **Pairing** menu, select the receiver(s) you wish to unpair, then tap the **Unpair** button.

PAGEOS OVERVIEW

The PageOS interface allows users to configure and assign specific image-analyzing tools and/or features to up to eight customizable pages. Users can access those tools by navigating to the corresponding page on the monitor, instead of enabling or disabling features individually.

General Layout



Pages View
The 'Pages View' offers a zoomed-out perspective of all configured pages, allowing organization and naming to ensure the most efficient overall setup.

Settings
The settings page will allow you to adjust a wide range of global monitor settings.

Dashboard
The Dashboard provides access to the most commonly used settings such as Input, Volume, and Backlight. The Dashboard can be disabled via **Full Settings > Dashboard**.

Basic Navigation

Touch Screen
PageOS has an easy-to-navigate touchscreen that works just like your smartphone.

Touch Control

- Pinch to zoom
- Swipe left and right between custom pages
- Slide your finger down for a view of all your preset pages
- Swipe all the way left to access your deep settings menu (Calibration, Profiles, etc)

Hardware Control

- **Joystick**- Use the joystick to navigate the Pages menu:
  - LEFT or RIGHT -- change Pages
  - DOWN -- Enter Page View mode
  - UP -- Zoom or Exit Page View mode
  - Button press or depress selects highlighted items
- **Back Button/Power** - Click to close, navigate back/exit, or hold to power off.
- **Function Buttons** - Press and hold to program these custom function buttons as shortcuts.

Adding and Deleting Pages

Add

To create a new page from either a fresh workspace, a premade template, or a specific utility, navigate to the right-hand side of the Pages View. Select the New Blank Page option and choose which type of page you want to add or create a custom one from scratch.

Delete

Zoom out and navigate to the page you would like to delete, push down with your joystick to select the delete option, or if using touch just press the delete button and then confirm.

EL Zone

EL Zone is a stop-based exposure map tool—developed in collaboration with legendary cinematographer Ed Lachman, ASC that works like a virtual spot meter, replacing IRE exposure values with stops. Sensor data from the camera provides a reference point, and a false color represents each stop above and below 18% gray, allowing for easier, more intuitive on-set communication.

EL Zone is only possible to use if you are feeding your SmallHD monitor a Log signal. It doesn't work if you are inputting a signal with a LUT enabled.

To enable EL Zone, make sure you create a color pipe in your monitor's settings menu. You will need to send the monitor a LOG signal and select the log signal that you will be sending it. **NOTE: Make sure you select "Do Not Convert" in the Color pipe options**.

Add New Tool to a Page

Tap your screen while on any page to reveal the toolbar. Press the plus sign that appears on the left side of the page. Select the tool you want to add to that page.

You will be presented with an option to add to that specific page or to add the tool to all pages, if you choose to add it to all pages that tool will be present on every single page, whereas if you just select a single page it will be confined to the page you are currently on

Adjusting Tools
Tap your screen while on any page to reveal the toolbar. Then select the tool you want to activate. To adjust the custom settings of that tool press the arrow that appears next to the name of the tool, this will take you to a submenu that will show your adjustment options for that specific tool.

Interactive Overlays
EI, **ND**, **FPS**, **WB**, and **SHUTTER** can be changed by interacting with the corresponding overlay from the camera. If you tap one of these fields, the monitor will display a drop-down list to change it to a different value

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Triggering Video Playback
Playback is triggered through a button in the Pages menu.

Settings: Feed

Input Config
Select an input to display its image -- configure a source to unlock log conversions into HDR and SDR color spaces.

Color Pipe
Follow the Wizard instructions to assign and configure color space and curve transformations, to enable HDR and SDR from incoming log-based sources.

Settings: Display

Backlight
Select a backlight level that suits your viewing environment to maximize contrast and viewability.

Calibration
Calibration ensures chrominance and luminance accuracy that can be relied upon for critical color decisions.

Appearance
Apply sharpening to the video data, if desired

Settings: Controls

Volume
Adjust the audio output level for the headphone jack and/or monitor speaker.

Image Rotate
Image Rotate options enable upside-down mounting - or enable Mirroring for when the monitor must face the subject.

Interlace
These options control how interlaced footage is displayed.

Settings: Capture

Image Capture
Configure the Image Capture tool to help facilitate shot matching or for automatic thumbnail creation upon pressing Record. (Note: SD card must be inserted into the monitor to perform an image capture).

Image Gallery
Browse the Image Gallery to review the images on your removable media.

Settings: Interface

Pixel Zoom
Configure the default zoom levels for Pixel Zoom to ‘punch in’ to a desired amount when spot checking a particular shot.

Status Display
Enable and configure the Status Display to get info on various monitoring-related data such as battery life and frames per second.

UI Lock
Once enabled, pressing and holding on the touchscreen for five seconds will lock the UI. Repeating the process will unlock the UI.

Language
Change the language of the internal menu system.

Settings: User

Backdrop
Enable a customizable backdrop for when the monitor is not displaying a signal.

Power
Power-related options such as auto recovery.

Date Time
Setting the correct Date & Time will ensure that captured images get an accurate timestamp.

Monitor ID
Set a custom name for your monitor, to make it more easily recognizable.

Profiles
Save or load the entire monitor's configuration to an SD card, great for keeping consistent settings across several monitors.

Settings: System

Firmware
Firmware can be updated by inserting an SD card with a compatible update file. For the latest firmware download visit: **https://downloads.smallhd.com**

Factory Reset
Reset the monitor settings to their original factory settings, with the option to clear registration and calibration.

Licenses
Follow the on-screen prompts to install your purchased license keys (for example, Control for KOMODO).

Compliance
CE, FCC, UKCA

ADDITIONAL RESOURCES AND FCC RULES/REGULATIONS

Additional Resources
guide.smallhd.com

Social Media
@smallhd

Get Camera Control

Certifications

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: this device may not cause harmful interference, and this device must accept any interference received, including interference that may cause undesired operation.