



TOF.1

Range Finder Module

Quick Start Guide

PHYSICAL PROPERTIES



- A: 9-20V DC Input
- B: NATO rail mount
- C: Sensor
- D: Infrared LEDs
- E: 1/4"-20 mounting hole

COMPATIBLE DEVICES

TOF.1 is compatible with the Teradek RT MDR.X receiver and CTRL.1/3 controllers.



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RANGE FINDER MODULE

TOF.1 is a compact, affordable, and lightweight distance measurement device that is designed to work with Teradek RT devices. TOF.1 can be plugged into an MDR.X unit, which communicates measured distance information to either a Teradek RT CTRL.1 or CTRL.3 controller. The distance information can also be displayed on a compatible SmallHD monitor via a serial connection.

WHAT'S INCLUDED

- 1x TOF.1 Range Finder Module
- 1x 4-pin to 4-pin Teradek RT Motor Cable

POWER AND CONNECT

TOF.1 powers up when connected to an MDR.X.

- 1 Connect power to MDR.X's **PWR** port.
- 2 Attach the TOF.1 Range Finder to the appropriate rod or bracket.
- 3 Connect TOF.1 to MDR.X's middle motor input using a motor cable.
- 4 From the MDR.X, navigate to the **RX CONFIG>RANGE FNDR** menu, then select **MID MOTOR**. The rangefinder will begin communicating with the MDR.X.
- 5 If you haven't done so already, pair your controller with the MDR.X. Ensure that both devices are on the same channel and using the same units of measurement.
- 6 From both the controller (CTRL.3 only) and MDR.X, navigate to the **BUTTONS** menu and assign the Display option (**DISP**) to one of the six buttons.
- 7 Return to the main screen and press the **DISP** button until the range finder information is displayed on both devices.

CALIBRATE TOF.1

- 1** Before beginning the calibration process, ensure that your controller and MDR.X are paired, using the same units of measurement, and the **AUTOFOCUS** feature is disabled on the controller.
- 2** Navigate to **RANGE FNDR> CALIBRATE** from either the controller or MDR.X.
- 3** Point your camera and TOF.1 towards a flat object such as a gray target card or a wall.
- 4** Use a measuring tape to determine the distance between your camera's film plane and the object you're using to calibrate.

NOTE: TOF.1's sensor has a 3° detection radius that determines how big the detection circle is at a given range. As your target moves back and forth, the size of the detection circle increases and decreases. For example, if your target is 16ft (5m) away, the detection circle is approximately 10in (26cm) in diameter.

- 5** After measuring the distance, use the up and down menu buttons to adjust the offset so that the displayed distance matches the distance measured in step 4.

AUTOFOCUS

NOTE: Before enabling the **Auto-Focus** feature, you must create a lens map for the lens you are currently using, then select it for use with your controller. Refer to your controller's quick start guide for instructions on how to configure a lens map.

- 1** Point your camera and TOF.1 towards the measured distance you want in focus.
- 2** From the CTRL.3 controller, navigate to **RANGE FNDR> AUTOFOCUS**.
- 3** Select **YES** to enable Autofocus. The motors will adjust the focus according to the measured distance.

RANGEFINDER OVERLAY

SmallHD monitors include a Rangefinder Overlay feature that displays your TOF.1's measured distance on the monitor. All you need is a SmallHD/Teradek RT interface cable. Below are steps to enable the Rangefinder Overlay.

- 1** Connect a cable from the controller's wired mode connector to one of the monitor's AUX ports.
- 2** Tap the screen and navigate to **ADD NEW TOOL > OVERLAYS > Teradek RT**, then select whether to add the rangefinder overlay to the current custom page or all custom pages.
- 3** To configure the size of the overlay, tap the screen and select **Teradek RT** from the top left corner.



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- 4 Select **Enable**, then scroll down and select **RANGEFINDER SIZE**.
 - 5 Use your finger to move the slider left and right to adjust the size of the overlay.
 - 6 Tap **Teradek RT** on the top left corner to return to the custom page. The Rangefinder overlay will display on the right side of the screen and will adjust according to the measured distance.

Teradek regularly releases new firmware versions to improve performance, add features, or fix vulnerabilities. teradek.com/pages/downloads contains all the latest firmware and software updates. Visit support.teradek.com for tips, information, and to submit help requests to Teradek's support team.

