FASTEC TS-Quick-Start

Need additional help? Email: <u>Support@fastecimaging.com</u> Register for Tutorials, Tools, Updates, etc.

Equipment

TS Cameras ship from Fastec with:

- 1. CAT 6 Ethernet cable (6')
- 2. 12v Power Supply with Lemo camera connector
- 3. USB Flash Drive with Software and Manuals
- 4. 16GB SDHC SD card
- 5. Lemo to 3 x BNC I/O cable (Trigger-in, Sync-in, Sync-out)
- 6. C-mount body cap
- 7. 3/32 Allen wrench for C-mount back-focus adjustment

IL Options and Accessories:

- F-mount or PL-mount (mounted on camera) If present, C-mount, adjustment shims and, 5/32 wrench will be included.
- 2. WiFi USB adapter
- 3. Lemo to 6 x BNC I/O cable (Trigger-in, Trigger-out, Syncin, Sync-out, Arm-in, Arm-out)
- 4. Battery charger + extra battery
- 5. External battery clip or belt
- 6. Trigger Switch
- 7. Additional 16GB or 32GB SDHC SD card
- 8. Lenses
- 9. Tripod and/or Magic arm
- 10. Lights and light stands

Control PC Requirements:

- 1. Windows PC (running Win7, 8, or 10), or Mac PC (Mountain Lion or higher)
- 2. 6 GB of memory for 1-camera systems, 2GB additional memory recommended for each additional camera
- 3. Gigabit Ethernet controller. Support for 9K Jumbo packets is recommended. (qualifying Thunderbolt-2 and USB-C to Gig-E adapters are available)
- 4. PC storage for image files: SSD recommended



TS Quick-Start

Camera LEDs, Buttons, I/O

- 1. Power LED
- 2. Network activity LED
- 3. Storage activity LED
- 4. Camera status LED
- 5. Sync activity LED
- 6. Battery status LED 7. Power ON/OFF
- button
- 8. Arm button
- 9. Display button
- 10. Menu button
- 11. D-Pad



- 12 12. USB OTG (Micro A/B) 13 13. SDHC (SD-Card slot) JSB JTG 14. GigE Port (RJ45) 14 15. Sync I/O, Trigger (Lemo)* 16. HDMI Port (Type A) 15
- 17. DC Power In (Lemo)**



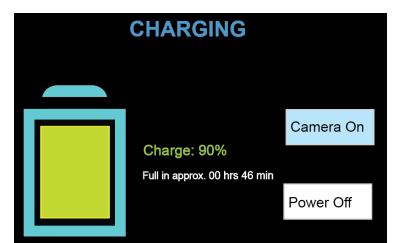
*Warning: LVTTL 3.3v max **10vdc to 26vdc

TS Quick-Start



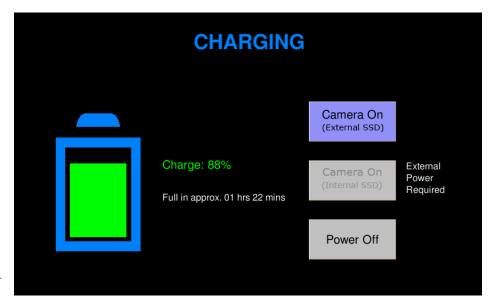
Power On

- Turn the camera on by pressing the Power button. The camera will also power up whenever the battery is installed or when external power is applied.
- If external power is applied and the battery is installed at power up, the battery charge dialog will appear on the screen. By default, the camera will begin charging the battery if it is not already fully charged.
- From the charging dialog, the user must select "Camera On" to boot the camera. Dual Mode models offer a choice of SSD speed. Choose "Fast SSD" only if the camera will be operated with external power.



Charging

- The camera battery does not charge while the camera is in use.
- With the camera powered on and attached to the DC power adapter, press the Power Button once to open the Charging dialog.
- While the camera is charging the Battery LED will blink. When the battery is completely charged the camera will fully power down. This may take up to 5 hours.



Power Off

- The camera may be powered off from the Charging Menu by clicking on the Power Off button.
- The camera may also be powered down from external software--FasMotion or the Web-Application
- "Panic" power down may be done by pressing and holding the power on/off button for a few seconds.

Note: If the camera powers down because of panic power down, or it runs out of battery power, there may be negative consequences:

- 1. Any setup changes may be lost
- 2. Any recording in memory is lost
- 3. The file system on any internal storage device may become corrupted--including the SSD

TS Quick-Start

Controls and Buttons

- **On/Off** button powers the camera on and off. If the battery is installed and the power adapter is attached, the battery charging dialog will appear (see the section on Power).
- **Trigger** button function is dependent on the camera state and recording mode. If the camera is not armed (in any mode) pressing the Trigger will capture one still image. In Basic mode the Trigger will initiate a record cycle on an Armed camera, which will end with the camera saving or playing back the recording. On Dual Mode cameras ("D" option), in Long Record ROC mode, the Trigger will toggle the camera between Recording and Armed. In Long Record BROC mode, the Trigger will capture a specified number of frames then return to Armed.





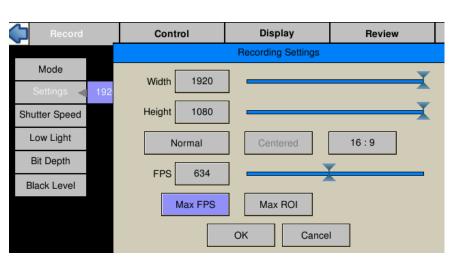
- **DISP** button toggles the Display through several modes: Display on, Display on with Histogram, and Display off. When reviewing clips, it also turns playback controls and per frame metadata on and off.
- **Menu** button toggles the on screen menus on and off. While navigating menus, the Menu Button is used to go backward through levels of the menu. (When touch-enabled the icon in the upper left of the screen has the same function.)
- **Directional Pad (D-Pad)** for navigating and selecting items on the camera menu.
- Arm button begins or cancels recording.
- **Touch Control**. With touch enabled you can navigate through the menus and dialog boxes simply by touching the display. If Touch is not enabled, navigate to the System menu and down to "Touchscreen" using the D-Pad. Click on the "Disabled" button. The display will go blank except for a small icon in the upper left corner. Touch that icon to display the menus.

Record Setup

- 1. In the Record Menu Select Mode Setup. The choices available will depend on the camera model. The Dual Mode cameras will have both Standard and Long Record options available. (Dual Mode cameras will reboot when going back and forth from Standard to Long Record.)
- 2. Select the desired options using the Mode Options dialog. These will vary depending on the selected mode:
 - In Standard modes and Long Record Basic, one of the settings is Trigger Position. Setting the trigger point divides the internal memory into two sections: 1) a circular buffer reserved for pre-trigger

Record	Co	ontrol	Disp	lay	Revie
Mode ┥	Setup	Options			
Settings					
Shutter Speed					
Low Light			Operatio	on Mode	
Bit Depth		Stan	dard	Long	Record
Black Level		Ba	sic	LR	Basic
		Fasl	Fire	LR Fas	sCorder

frames; 2) a second buffer for post-trigger frames. The images recorded before the trigger are given negative frame numbers (oldest is most negative, the newest is -1), the image taken at the time of the trigger is "frame 0," and all frames taken after the trigger are given positive numbers.



Note that while a recording is in progress it will not be possible to change resolution or frame rate. It is possible, however, to change the shutter speed in order to accommodate changes in lighting.

6. Trigger the camera via the Trigger Button or a Trigger Signal to the Sync I/O port to W

Note that with an "End" trigger, all frames will have negative numbers except for frame 0, which will be the last frame. With a "Start Trigger" the recording will begin at frame "0" and all subsequent frames will have positive numbers.

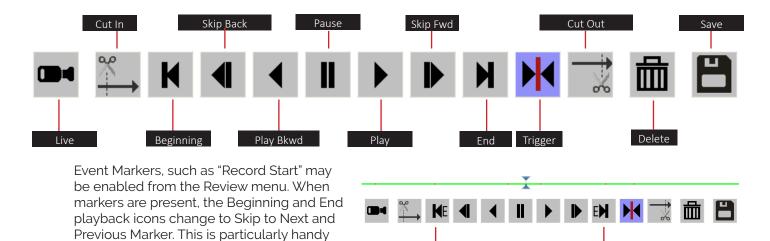
- LR FasCorder modes (ROC and BROC) the trigger position is always "Start."
- 3. Select Settings to change Frame Rate or Resolution.
- 4. Set the Shutter Speed using the presets or select Advanced on the Shutter Speed menu to use the Exposure Setting Slider.
- 5. Press the Arm Button to begin recording.

Record		c	Control	Display		Re	view	
Mode								
Settings								
Shutter Speed	X (4.	000 ms)	2X (2.000 ms)	4X (1.000 ms)	8X (0	.500 ms)	Advanced	
Low Light								

initiate the record cycle. If you are using Standard Basic or Long Record Basic, the camera will enter Playback when the recording is finished. If you are using FasFire or Autosave, the camera will save the recording to storage media and re-Arm. If you are using LR FasCorder ROC mode, the camera will toggle between Armed and Recording each time you trigger. If you are using LR FasCorder BROC mode, the camera will record a specified number of frames with each trigger, then return to the Armed state.

Playback

Use the playback icons to play forward, backward, or jump to points of interest in the movie. Use the Cut In and Cut Out icons to select a portion of the movie to review or save.



- when using the LR ROC or BROC feature: 1. Select Events in the Review Menu.
- 2. Select the Enable markers check box.
- 3. Click on the Record Start button and change the value to "1."
- 4. Click on "OK."

	Save Session
t	s3_000000.cap
Start	-715
Stop	716
Destination	SSD
Format	Partition Capture
Use Name	FASTEC-TS3-A3
Use Tag	2013-08-01
Save XML N	Netadata
	Save

1. Select the Save Icon from the playback controls. This will bring up a dialog that allows selection of the following:

Previous Marker

 Start and Stop points of the clip (these points can also be changed using Cut In/Out buttons on the playback controls).

Next Marker

- Destination—where the movie clip is to be saved. Choices include the built-in SSD, (an option), an SD card or a USB drive.
- The file Format desired—Partition Capture (CAP), AVI, BMP Stack, JPEG Stack or TIFF Stack. (CAP files may only be saved to an SSD. They are raw, uncompressed images. CAP files are the only format that may be reloaded and played back on the camera.)
- File name prefix, which may optionally include the camera name or user-defined tag..
- Use the default file name tag or change it.
- Write a comment that will be displayed in the metadata for the clip.
- Save XML Metadata. Select this if you would like an XML containing setup information, timestamps, and marker data.
- 2. When the movie clip is set up as desired, press the Save button.

Note: Autosave and FasFire are automatically disabled if recording is canceled.

Save Images to a Host PC

- Load FasMotion software on a computer (PC or MAC) and transfer image data via a Gig-E cable to PC. This is the fastest method of operation and is highly recommended.
- (Or) Download images from the image memory to any on-board storage (SD card, USB, or SSD). Then, in the case of the SD card or USB drive, you may physically move those devices and connect them directly to the PC, or, for any on-board mass storage: connect the OTG cable from the camera's micro USB connector to a PC. While connected, the camera's on-board storage devices will now act as though they are directly connected to the PC. Camera functions are not available while the camera is connected via OTG cable.

Saving captured video in FasMotion:

The Save Video dialog box opens by selecting "Save Video File..." from the File menu or the image window context menu, or by simply typing Ctrl+S.

- 1. Set the target location from the radio buttons to "Path" then browse to a download destination.
- 2. Adjust start and end frames (this can also be done using the bumpers in the playback controls).
- 3. Select the "Save Type"--this may be AVI, DNG, BMP, JPEG, TIFF, Click on "Save" to begin the transfer.

Some Save options depend on file types chosen:

- If an AVI file is saved to the computer (Path), the Image format choices are JPG (compressed MJPEG images) or BMP (un-compressed bitmaps).
- If a JPG Stack or and AVI/JPG is saved, the JPEG Quality slider becomes active, allowing adjustment of the compression/ quality.
- If a TIF Stack is saved, the Raw (unprocessed) check box becomes active. Note that the TIF(raw) format is a mono (not colorized) image.
- TIF-Raw, DNG, and CAP files are the only file types not subject to processing on the camera. They are also the only file types in which the full bit depth is maintained. (All other file types are saved in 8 bits.)

Contact Us!

We want your experience with FASTEC cameras to be as pleasant and productive as possible!

We are also very interested to know how your camera is working for you and if there is anything we can do to improve your results, whether that is helping you find the best lens, or helping with camera setup.

Do not hesitate to reach out to us:

Fastec Imaging Corporation 17150 Via Del Campo, Ste. 301, San Diego, CA 92127 +1-858-592-2342 support@fastecimaging.com

🐼 Save Vid	eo	8 23
Save To:		
SSD	SDCard	🔘 USB
🔘 Path	E:\midway\	
	nera Name Create	XML
Start: -200	3 🔺	End: 0
	3 💭	End: 0 -
	CAP (Partition)	End: 0 🔹
Save Type: Save Opti	CAP (Partition)	
Save Type: Save Opti	CAP (Partition) ons rmat:	
Save Type: Save Opti Image For JPEG Qua	CAP (Partition) ons rmat:	· · · · · · · · · · · · · · · · · · ·