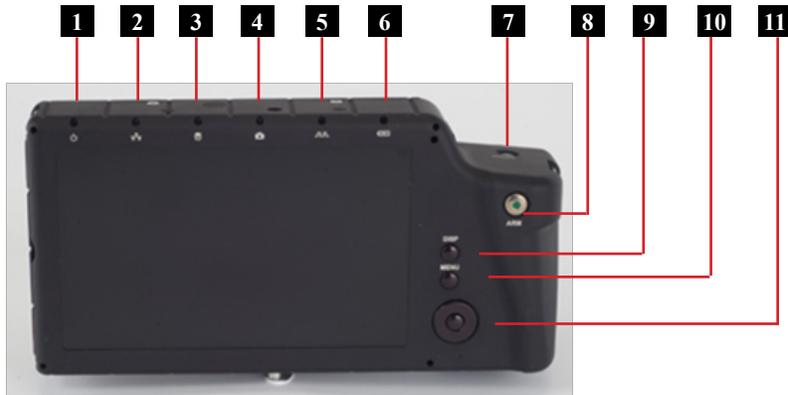## Equipment

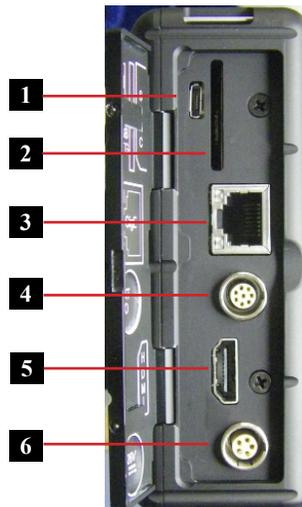Unpack the camera and assemble the following equipment:
1. TS3 camera
2. Camera power adapter with AC power cord, or charged battery inserted in the camera. (Battery is fully charged when the TS3 is shipped from the factory.)
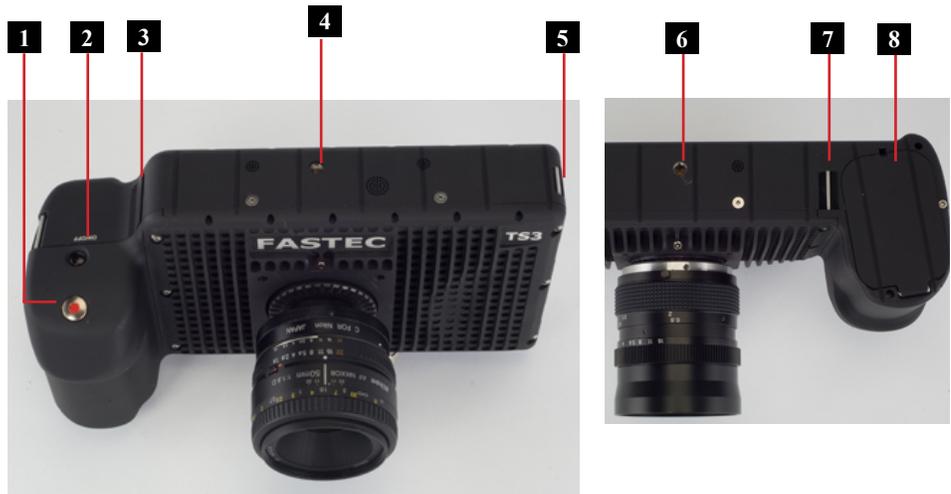3. Lens

Figure 1: Camera Views

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

1. USB OTG (Micro A/B connector)
2. SD Card (SDHC)
3. GigE Port (RJ45 connector)
4. Sync I/O, Trigger (LEMO connector)
5. HDMI Port (Type A connector)
6. DC Power In (LEMO connector)

1. Trigger Button
2. Power Button
3. USB port
4. Top Mount 1/4 -20
5. Camera Strap Attachment

6. 1/4-20 Tripod Mount
7. Hand Strap Attachment Point
8. Battery Door

Control Buttons

1. **On/Off Button**. This button powers the camera on and off. If the battery is installed and the power adapter is attached, it toggles the camera between three states: On/Operating, Charging, and Off. When the TS3 powers up it defaults to its last settings.
2. **Display Button**. The Display Button controls the LCD display on the back of the camera. Pressing the button toggles the Display between three modes: Display on, Display on with Histogram, and Display off.
3. **Menu Button**. The 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.
4. **Directional Pad (D-Pad)** . The D-Pad has 5 actuation points consisting of 4 arrows for navigating the menu and an OK Button in the center to select.
5. **Arm Button**. When the Arm Button is pressed the camera locks in its configuration settings and begins to store pre-trigger images in internal memory. (If Low Light has been selected for live viewing, the camera will now revert to its selected shutter speed.)
6. **Trigger Button**. When the camera has been armed and is recording, pushing the Trigger Button prompts the camera to record the Trigger frame (frame 0) and any post-trigger frames to complete the recording and stop.

Power on the TS3 Camera

Turn the camera on by pressing the Power Button. The camera will power on in Live Mode using the same settings as when it powered down, or if this is the first time you are using the camera it will power on to the factory default settings. The camera power on default is a live image with no menu displayed.
Press the Menu Button. The on screen menus will appear with the Menu Bar at the top and the System Menu arranged to the left.

Battery

The camera battery does not charge while the camera is in use. To begin charging the battery, attach the DC power adapter to the camera and press the Power Button. While the camera is charging the Battery LED will blink. When the battery is completely charged the camera will fully power down, turning off all LEDs. This may take up to 5 hours if the battery was fully drained.

Record

1. Navigate to the Record Settings Sub-Menu and set the resolution and speed desired.
2. Navigate to the Record Shutter Speed Sub-Menu and set the desired exposure.

Select Framerate and Resolution

Select Speed (Frames/Sec) — ☐ Autoselect Speed   ☐ Autoselect ROI

60	125	250	500	1000	1250	2000	4000	5600

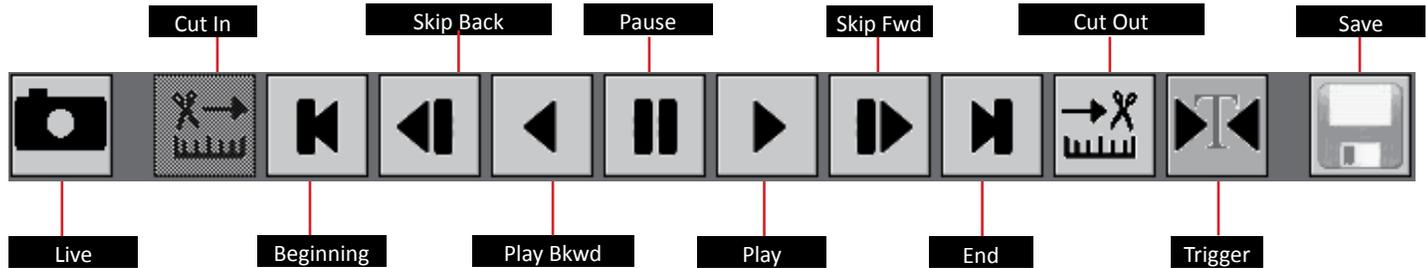| 320 x 240 | 320 x 200 | 256 x 256 |
640 x 480	800 x 480	512 x 512
800 x 600	1024 x 600	1024 x 1024
1280 x 1024	1280 x 720	1280 x 256

Record Time and Space
Before + T + After = Total
13,056 + 0.004 + 13.056 = 26.116 secs
3264 + 1 + 3264 = 6529 frames

Advanced

3. Navigate to the Control Menu, Trigger Position Sub-Menu and set the desired Trigger point. Setting the trigger point divides the internal memory into two sections: 1) a circular buffer reserved for pre-trigger 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 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.
4. Frame and focus the scene.
5. Press the Arm Button to begin recording pre-trigger frames. The camera settings will be locked in. If you wish to abort the recording to change settings, press the Arm Button again. Note the camera may remain Armed for an indefinite period of time because it is overwriting its circular buffer, it never runs out of space, but only retains the newest images.
6. Trigger the camera via the Trigger Button or a Trigger Signal to the Sync I/O port to complete the recording. The TS3 will enter Review mode when finished recording unless it is set to Autosave, in which case the camera will download the recording, then revert to Armed Mode.

Review a Video in Image Memory

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.

Cut In		Skip Back	Pause		Skip Fwd		Cut Out		Save

| Live | | Beginning | Play Bkwd | | Play | | End | | Trigger |

Saving Video from Image Memory

1. Select the Save Icon from the playback controls. This will bring up a dialog that allows selection of the following:
    *   Start and Stop points of the clip (these points can also be changed using Cut In/Out buttons on the playback controls).
    *   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—AVI, BMP Stack, JPEG Stack or TIFF Stack.
    *   File name prefix, which may optionally include the camera name or user-defined tag..
    *   Use the default file name tag or change it.
2. When the movie clip is set up as desired, press the Save icon on the Save dialog. A new dialog will open with the heading Copy in Progress. This dialog indicates the status of the file save operation.
3. When the file save is complete, the dialog will display a message indicating Copy completed successfully. Press the OK icon to set the camera back into Review Mode. Click on the Live button to put the camera back into Live Mode. From here a new recording can be made or the camera's configuration can be changed.

Autosave a Video

1. Navigate to the Record Menu, and select the Autosave Sub Menu.
2. Highlight "Disabled" and click the OK button. "Disabled will change to "Enabled" and turn green. A Dialog will appear with the header Save Partition 0. This is the same dialog used in the section above.
3. Make your selections from this dialog and Click on OK to accept.
4. Arm and Trigger the camera.
5. As soon as the recording is complete, the camera will download the imagery then re-Arm itself and await the next trigger.

Save Images to a Host PC

There a several methods available to permanently save images:

*   Download images from the image memory to an SD card installed in the SD port in the camera. View the images using an SD card reader or by inserting the SD card into a built-in SD port in the desired PC.
*   Download images to a USB thumb drive installed in the USB port in the camera. View the images by installing the USB thumb drive in the USB port of the desired PC.
*   Connect the camera to a PC using a USB cable connected to the USB OTG port in the camera. Each of the camera's mass storage devices will become accessible.
*   Connect the camera to a PC using an Ethernet cable. In Explorer, type in two back-slashes, then the camera's IP address: \\xxx. xxx.xxx.xxx. A media directory will appear that contains all the camera's mass storage devices. *Important Note:* The TS3 image memory is volatile memory and images will be lost if a new recording is initiated or the camera is powered off. Be sure to save important videos before initiating a new recording or turning off the camera.

Contact Information

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