



Fastec TroubleShooter

Portable High-Speed Digital Video Camera

Just Point & Shoot.

TroubleShooter is the world's first truly portable high-speed camera that goes where you go.

Portable. Just use standard D-cell batteries and forget about heavy battery belts or power adapters.

Fast. Record up to 16,000 frames per second and stop the action.

Easy. Capture thousands of images with the push of a button, review them on the built-in screen, and then save to a compact flash card.

Connected. Communicate between TroubleShooter and your laptop through the built-in USB-2.0 port.



TroubleShooter solves problems everywhere

In the Factory

- Reduce jams
- Speed up line setup and changeovers
- Lower scrap and rejected material costs
- Reduce downtime and maintenance expenses

In the Lab

- New product design and development
- Human biomechanics research
- Animal behavior analysis
- Flow visualization studies

In the Field

- Weapons testing
- Sports training and analysis
- Locomotion and feeding research
- Crash analysis



See What You've Been Missing.

FASTEC  IMAGING™

Fastec TroubleShooter

Portable High-Speed Digital Video Camera

CAMERA SPECIFICATIONS

MODELS TroubleShooter 1000ME, TroubleShooter HRMS, TroubleShooter HRMM.

SENSOR CMOS array, up to 1280 x 1024 pixels, monochrome or color, 8-bit pixel resolution in monochrome, 24-bit pixel resolution in color.

SHUTTER 1x, 2x, 3x, 4x, 5x, 10x and 20x the recording rate.

RECORDING MODES

Manual

Begins recording when the record button is pushed. Continues to record and store images in memory until the stop button is pushed.

Trigger

Begins recording when the record button is pushed. Continues to record and store images in memory until an external trigger signal is received. The adjustable trigger position determines how many frames are stored before and after the trigger signal is received.

PLAYBACK RATES Single step mode plus auto playback at 1, 2, 3, 4, 5, 10, 15, 25, 30, 50, 60, 125, 250, 500 or 1000 frames per second, forward and reverse.

DISPLAY Built-in 12.7cm LCD color digital display.

OPERATOR CONTROLS Setup, Function Select, Record, Stop, Play Forward, Play Reverse, Download, Power On/Off.

I/O CONNECTORS USB 2.0 Port, Compact Flash, IRIG-B, Trigger, Sync In, Sync Out, DC Power.

TRIGGER INPUT Contact Closure or standard TTL signal, 3 to 7 VDC.

SYNCHRONIZATION Multiple cameras can be synchronized through phase-lock.

MOUNTS Standard C-mount lens mount, 1/4-20 tripod mount.

POWER SUPPLY Four (4) D-cell batteries or 110/220 VAC adapter.

SIZE & WEIGHT 15.3cm W x 12.7cm H x 10.2cm D, 0.99kg without batteries.

SOFTWARE SPECIFICATIONS

CAMERA CONTROL SOFTWARE Includes camera control software for recording, playback and downloading images to a computer. Images are downloaded and saved in .avi, RAW or MPEG format. Additional software is included for image playback and analysis. Quickly and easily calculates metrics such as velocity and distance.

Recording Rate (fps)	Resolution	TroubleShooter TS1000ME 1GB		TroubleShooter TSHRMS 1GB		TroubleShooter TSHRMM 3GB	
		Frames	Time (sec)	Frames	Time (sec)	Frames	Time (sec)
125	1280 x 1024			1,022	8.2	3,066	24.4
250	1280 x 1024			1,022	4.1	3,066	12.3
500	1280 x 1024			1,022	2.0	3,066	6.1
1,000	1280 x 512			2,044	2.0	6,132	6.1
2,000	1280 x 256			4,088	2.0	12,264	6.1
4,000	1280 x 128			8,176	2.0	24,528	6.1
8,000	1280 x 64			16,352	2.0	49,056	6.1
16,000	1280 x 32			32,704	2.0	98,112	6.1
125	640 x 480	4,368	34.9	4,368	34.9	13,104	104.8
250	640 x 480	4,368	17.5	4,368	17.5	13,104	52.4
500	640 x 480	4,368	8.7	4,368	8.7	13,104	26.2
1,000	640 x 480	4,368	4.4	4,368	4.4	13,104	13.1
125	320 x 240	17,472	139.8	17,472	139.8	52,416	419.3
250	320 x 240	17,472	69.9	17,472	69.9	52,416	209.7
500	320 x 240	17,472	34.9	17,472	34.9	52,416	104.8
1,000	320 x 240	17,472	17.5	17,472	17.5	52,416	52.4
2,000	320 x 240			17,472	8.7	52,416	26.2