Shadow[™] Sled





p/n LIT-257010-A



A Guide to the Manual

Thank you for purchasing the Steadicam[®] Shadow[™] stabilizer, a heavy-duty, versatile rig that will serve you well for years to come.

This manual is written for experienced operators. If you are unfamiliar with Steadicam[®] stabilizers, or if you have never taken a Steadicam[®] workshop, we strongly urge you to take one of our professional workshops.

For more information on workshops worldwide, contact The Tiffen Company.

Included with this Shadow[™] Overview Manual are other "modular" manuals specific to the equipment your purchase. Additional or replacement manuals may be downloaded from www.steadicam.com.

Tiffen, Steadicam[®], UltraBrite[™], Ultra^{2®}, Shadow[™], Clipper[™], Zephyr[™], Tango[™], Archer[™], Flyer[™], Pilot[™], G-70[™], G-50[™], and Merlin[™] are trademarks of the Tiffen Company, LLC.

Note: For an in-depth tutorial on the equipment and Steadicam[®] operating, please refer to "The Steadicam[®] Operator's Handbook" included with your sled. The book can also be purchased separately.



The Tiffen Company, 90 Oser Avenue, Hauppauge, NY 11788 • 631-273-2500 • 1-800-645-2522 • www.tiffen.com Tiffen Steadicam Operations, 6933 San Fernando Road, Glendale, CA 91201 • 818-843-4600 • 1-800-593-3331 © The Tiffen Company, LLC, manual version 7/1/2010 The Tiffen Company takes great pride in producing the best inertial stabilizers in the world.

The



stabilizer continues our tradition of excellence and innovation, filling the need for a heavy duty, high performance, and low-cost rig. The Shadow[™] is a system that can evolve with you, with upgrades and accessories to expand its reach.

Like all our models, the Shadow[™] stabilizer is designed to be user-friendly, field-serviceable, toolfree, straightforward, and versatile so the operator can quickly and easily configure the sled, arm, and vest to the best advantage for each shot. Change the sled length, balance, inertia, and go to low mode in a heartbeat, all without tools, extra parts, or fuss and bother. Solid, versatile, and fast – with the Shadow[™], stabilizer system it all happens on the set like magic.

Overview

The base Shadow[™] stabilizer system starts with a sturdy, 2 section, telescoping carbon fiber post coupled to the Ultra² stage – with our patented +/– 20° tilt head – and terminates in a new solid base. It comes standard with the Ultra² Gimbal, SD LCD Color 700 nit monitor, dual monitor mounts, frameline generator, on-screen artificial horizon, and a dual battery mount for 12 and 24 volts (either V-Lock or Anton Bauer). Included in the base package is the G-70 Iso-Elastic Stabilizer Arm, Ultra² Vest, Docking and Balancing bracket.

Options for the Shadow[™] stabilizer include our patented *"go-to" motorized stage* (plug and play) and a variety of monitor choices, plus batteries, chargers, cases, cables, vehicle mounts, and other professional accessories. Visit www.steadicam.com for more details.

The two section, carbon fiber *Telescoping Post* extends the sled from 29 to 49in (74-125mm), for short to long mode shooting. Inside the post is the patented curly-cable system – with discrete, 14 and 28 volt lines for sustained high-amp capacity (14 gauge wires!), plus separate, dedicated and un-interrupted HDSDI and HD component coax cables, plus composite video in and out.

On the stage, the *Wide Dovetail Lock* has a broad grip on the dovetail plate, and the handle has a safety stop to prevent accidental release.

The *Integral Tilt Head* preserves dynamic balance with the lens angled $+/-20^{\circ}$ – perfect for long mode or whip pans. The tilt head also maintains high or low lens heights, and helps with clearance, reach, or viewing problems.

The heart of the system is the *Ultra² Gimbal* - the smoothest, most precise gimbal ever made, with heavy duty, high precision bearings and an ergonomic yoke. Operators can use "The Blue Whale" tool to precisely center the gimbal in the field, even after years of hard knocks.

The post, monitor, and gimbal's *Low-Profile Clamps* are either open and free for easy adjustment, or positively locked, with a snap-overcenters clamping action. The clamp lever is ergonomically recessed into the clamp bodies, so nothing sticks out to snag on a cable or interfere with your grip.

The Shadow[™] stabilizer's smaller electronics box continues our exclusive narrow sled base design and adds a user-freindly front connector panel, a one button artificial horizon, and electronic frame line generator.

The *Structural Dovetail Base* solidly mounts gyros, Antlers[™], or other accessories. There are two positive clamps for the battery rods and a pull out mounting plate for accessories.

The monitor and the battery pack are adjustable in, out, and vertically over a wide range, giving the operators great choices for viewing, balance, and inertial control. The *Tilting Battery Mount* can be angled over 180 degrees for maximum flexibility. Pan inertia can be adjusted from a super-whippy 130 pounds per inch² to an amazingly stiff 2,564 pounds per inch² (0.9Mpa - 17.7Mpa) – or even more if the weights are added to the monitor or battery rods.

The great fitting *Ultra^{2®} Vest* is a perfect complement to the Shadow[™] stabilizer sled. The super-stiff adjustable spar, "Double Vee" shoulder clips, improved padding, and over-center ratcheting buckles make the vest superbly ergonomic, lightweight, and unobtrusive. And the Ultra^{2®} Vest still has the world's best quick-release system for safety.

The tool-free, super smooth $G-70x^{TM}$ Arm lifts from 12 to 70 lbs (5.4-32 kg), yet is lightweight - only 11 lbs (5kg). The patented "Geo" feature alters spring geometry as it booms up and down to make the G-70TM the smoothest, most well behaved arm ever, throughout its astounding vertical range of 29in (74cm)! The "Ride"

knob alters iso-elasticity, so for the first time, users can precisely set how the arm behaves, regardless of the weight carried. The new tool-free arm post holder is quick and positive, and its independent drag control delivers the precise rotation resistance desired – from completely free to totally locked, even when changing posts. At the other end of the arm, the new "kick-back" link reduces clearances and keeps the arm from banging against the operator on the run.

All of the above features are integral to the Shadow[™] stabilizer design, ready to be used when needed. The Shadow[™] stabilizer continues the Ultra[™] tradition – as the most versatile and user-friendly Steadicam[®] model ever made. It lets one operate with minimum effort and maximum precision for every part of every shot. The sled is configured as desired: short, long, whippy or slow. The Shadow[™] stabilizer is a cost-effective, heavy-duty "big rig" – the key to high-performance operating.



The Shadow[™] Sled

The Shadow[™] Sled

Post #1 - connected to the electronics Post #2 - connected to tilt head & carries the gimbal





The ShadowTM standard package includes the sled, with a non-motorized Ultra^{2®} stage, V-lock battery mount, 7in monitor, and an accessory package, lightweight Ultra^{2®} vest and the G-70xTM arm.

Accessories

Supplied Accessories*

Supplied Accessories	
Camera mounting dovetail Blue Whale gimbal tool Hard Case for sled	part number 252-7410 800-7114 011-0355
Ultra ^{2®} vest Soft vest bag	800-7800-02 078-5237
G-70 [™] arm Soft arm bag G-70 [™] anti-backlash tool T-handle 1/4" Allen wrench	800-7200-05 078-5236 802-7265 MSC-093260
Docking bracket Stabilizing system:	250-7910
3 ft video cable 12v accessory cable 24v Power cable,	078-4122-01 250-0045
open end Pot adjust tool Camera mounting screws	250-0046 MSC-104216
1/4-20 and 3/8 - 16 EFP instructional video Warranty form Steadicam [®] Operator's Han	078-1121/078-1122 DVD-200504 LIT-077200 dbook LIT-900000

••







*Supplied Accessories are subject to change without notice.

Recommended Accessories & Upgrades

Motorized stage Gimbal transmitter Gimbal battery recharging cable 1 lb. weights (6)	800-7150 800-0101 800-7970
Spare 3 ft video cable	078-4122-01
2 spare 12 ft video cables	
Spare 12v accessory cable	250-0045
2 each of all camera	
power cables you will use	various
2 HD component cables: camera to sled	
2 HD component cables: sled to monitor	

Hard case (vest and arm)	011-0330
PowerCube [™] Batteries FF	R-000053
IDX VL-4S battery charger FF	R-00008
Battery hard case	011-0368
	R-000013
÷	SC-150890
Screwdriver MS	SC-191115
Saddle bag/sand bag FF	R-000014
	R-00021
Spare ratchets with hardware	
Slanted F-bracket & safety pin	252-7906
	8-7393-02
	0-7204-01
6inlong arm post	800-7204
Camera mounting dovetail	252-7410
Ultra ^{2®} rod weight (requires 2)	800-7617
Follow focus rod mounting	
hardware and rods	250-7915 STEADICAM
	SISKANA,
Tape measure	and the second
Many spare 1/4-20 and 3/-16	
	/078-1122
Mitchell mount adaptor	800-7902
·	UltraBrite 2 **

More stuff you might need

Wireless follow focus system and brackets Video transmitting and receiving system Wired zoom control system Camera specific low mode brackets Inertial augmentation (Antlers[™] or Gyros) Video recording system



See www.steadicam.com for a complete list of all available accessories.

.

Cases & packing

When repacking the sled into the case, Insert the monitor first, with the rods angled up. Be sure that the sled length and gimbal position are properly set so that the sled drops freely into place, then rotate the monitor rods down into their final position.

Many operators cut the foam to accommodate accessories kept on the sled - such as a focus motor receiver or a small VCR. A long, thin razor blade works fairly well to cut the foam, as does a serrated knife.

The hard sled and vest cases have wheels and a retractable handle.

Soft bags are provided for the arm and for the vest, but you should also use the hard case when shipping your gear. Many other accessories are shipped in the battery case. Most operators have several other cases for their accessories, tools, low mode brackets, video recorders, video transmitters, diversity receivers, remote focus equipment, etc.







Cases & Packing

The Tiffen Company, 90 Oser Avenue, Hauppauge, NY 11788 631-273-2500 • 1-800-645-2522 • www.tiffen.com
Tiffen Steadicam Operations, 2815 Winona Avenue, Burbank, CA 91504 Phone: 818-843-4600 • 818-843-8321
© The Tiffen Company, LLC, manual version 7/1/2010