

SL-35 MARK III INSTRUCTION MANUAL

INTRODUCTION

The SL-35 Mark III camera is built specifically as a lightweight 35mm Motion Picture Camera. Weighing less than 2.4 kg this new camera is ideal for Steadicam, mounts, and remote uses. Lightweight materials such as magnesium and Delrin Plastics are used to one of lightest crystal controlled 35mm cameras made.

This advanced camera system features a specially modified Arriflex 35mm camera, remanufactured Arriflex 2C High Speed movement, and proprietary camera electronics. The system comes with a video door, or may be used with Arriflex or Jurgens doors.

The SL-35 Mark III can be used with a variety of magazine configurations. PL, Super PL, Panavision, and Panavision Super 35 lens mounts are also available.

HISTORY

The SL-35 Mark III camera is actually a new concept from on an old idea. Each SL-35 Mark III is based on a special Arriflex camera similar to an Arriflex 2c that was used in the medical industry. These cameras were used in medical angio and cath labs, where they were used for fluorography. Now, after 8 years of research and development, and new advances in plastics and electronics, an old camera has be re-born.

PACKING AND SHIPPING

When transporting the camera always do so without a lens, magazine or additional accessories attached to the camera. The lens port and Magazine port covers should always be used. Also when Shipping, use a case suitable for the camera's size and weight. Such cases are available from a variety of manufacturers or from SL Cine.

PARTS IDENTIFICATION

MOUNTING THE CAMERA

When mounting the use caution when using the center hole. Only a screw that protrudes less than 4mm can be used. The film transport tray inside the camera can be permanently damaged if the screw is longer than 4mm.

CAMERA POWER

The SL-35 Mark III is designed to work with 24 – 30V DC batteries. Check with SL Cine to see if your batteries are compatible with the camera.

CAUTION! Make sure that the polarity of the battery is congruent with the polarity needs of the camera body, as failure to do so can result in permanent damage to the camera's electronics.

ACCESSORY POWER SUPPLY

12 V accessories can be attached to either of the two 11 pin accessory sockets. These sockets each provide 4.25A of power.

24 V accessories can be attached to either of the two lemo pin accessory sockets on the front of the camera. Each Socket provides the same voltage as battery.

MOUNTING LENSES

When mounting a lens, be sure that the lens and the mount are free from debris. Rotate the lens mount lever counter clockwise until the mount hits the stopper. Remove the lens port cover and insert the lens. Once the lens is properly seated, rotate the lens mount clockwise until the lens is seated snugly. It is good practice to slowly advance the inching knob to assure that the mirror shutter is not being hit by the back of the lens before starting the camera.

As mentioned earlier, PL, Super PL, Panavision, and Super 35 Panavision mounts are available for the SL-35 Mark III. Also keep in mind that the SL-35 Mark III has a full gate and allows for full frame exposure no matter which format you are shooting.

REMOVING THE DOOR

Each SL-35 Mark III comes with a completely redesigned video door. To remove the door, remove the video camera power cable. Then slide the door latch to the left. The door can now be removed for film loading. To replace the door, reseal it so all edges are snug against the camera body and move the door latch to the right. Pull lightly on the door to assure yourself that the door is locked into position. Replace the video camera power cable.

NOTE: It is a common practice among camera assistants to tape around the edges of the door to add peace of mind and guard against light leaks.

ATTACHING MAGAZINES

To attach a magazine, turn the magazine release knob counter clockwise until it “pops” away from the camera body. Remove the magazine port cover. Remove the Video Door and open the gate. Insert a magazine into the magazine port while carefully guiding the film through the magazine port and into the open gate (see THREADING THE FILM). Turn the magazine release knob clockwise until the magazine is securely attached.

NOTE: Some SL-35 Mark III's have a magazine release knob on the side of the camera. To release the magazine port cover, pull the knob out and then turn it counter clockwise until the cover can be removed. Follow the procedure as outlined above. Once the magazine is seated, rotate the knob clockwise until it secures the magazine.

THREADING THE FILM

Remove the Video Door and open the gate door and attach the magazine as previously explained. The magazine loop should have 54 perforations. Insert the loop into the gate. You may have to use the inching knob to move the pulldown pin away from the gate to allow the film to seat. Inch the pin to the top insertion point. Adjust the pin / perforation relationship so the top loop is in line with the loop marking printed inside the camera. When this is achieved, close the gate door. Inch the movement to make sure all is seated and running properly. Test the camera by turning it on and by watching and listening for any problems.

ELECTRONICS

One of the most exciting features of the SL-35 Mark III is the advanced electronics designed specifically for the camera. Years of research and development have led to a crystal controlled drive mechanism that can run the camera from .01 – 80 frames per second. Also compatibility with external speed controllers and other accessories has been maintained.

SPEED CONTROL

Desired camera speed can be programmed in two different ways:

1. Mode Selector. Preset camera speeds are engraved on the electronics face plate and are adjustable by rotating the mode selector. The selected mode is displayed on the left side of the LED screen. All speeds are crystal controlled. The mode selector was designed to be used with SL Cine's underwater housing. Camera speed can be adjusted from outside of the housing easily by a knob that connects to the mode selector.

NOTE: The mode selector has priority and preempts any speed indicated by the Digi Switch

2. Digi Switch (Push Pin Switch). Any speed from 00.01 to 80.00 Fps can be selected. All speeds are crystal controlled. Settings on the Digi Switch are only recognized when the mode selector is set to "A".

The camera is started and stopped by use of the Run / Stop toggle Switch.

REVERSE OPERATION

The camera can be operated in both forward and reverse. To select reverse, use a small flathead screwdriver and turn the selector until the reverse LED lights red. All camera speeds are respected in both forward and reverse.

LED DISPLAY

At rest, the LED display shows the footage shot in feet and frames. At run, the frames indicator is replaced by camera speed (i.e. 24 FPS)

FOOTAGE RESET

The footage counter can be reset at magazine changes simply by depressing the Footage Counter Reset Button. The footage counter is also fully functional in reverse.

CAMERA ACCESSORIES

External speed controllers and remote switches can be used by connecting them through one of the two Fischer 11 connectors on the back of the camera. Each of the connectors can provide up to 12V and 4.25 amps of supporting power.

24 Volt accessories can be powered by one of the two power connectors on the front face of the camera. These ports reflect the voltage of the main power battery.

CHANGING LENS MOUNTS

Lens mounts should be performed and checked by qualified individuals. Not doing so can result in unacceptable images.

When changing from a standard mount to a Super 35 mount, a new ground glass holder, ground glass and reducing lens must be installed. These parts and specific instructions are available directly from SL Cine

Maintenance

Lubrication:

Approximately every 40,000 – 50,000 feet, or about once a year, the camera should be sent in for general lubrication maintenance.

The camera has been designed to be relatively maintenance-free. Regular maintenance is the best protection against camera problems

OPTIONAL EQUIPMENT

SL Cine designs and manufactures additional equipment for the

Handheld rig

Arriflex-Style Spacer

Steadicam mount

Magazines

Lens Mounts

Impact guard

Mounting plates

Low tilt plate

Depth Gauges

Ground glass holders

Custom Cables

SPECIFICATIONS

Size:	6" L x 5.5" H x 6" W
Weight:	2.4 kg (84 oz.)
Film Gate and Movement:	Full Aperture - High Speed Arriflex 2c Movement
Shutter:	165 Degree
Crystal Speeds:	.01 - 80 FPS
Extra 50 Hz Speeds :	33.333 and 16.666
Reverse Running:	All Speeds
Crystal Accuracy:	0.002%
Digital Tachometer:	Red LED
Digital Footage:	Red LED / reset & Memory
Accessory Jacks:	Two 11 pin Fischer Connectors, Two 24 V plugs
Parking:	Stops with mirror in place
Inching:	Manual
Camera ON/OFF:	Toggle & Remote
Power Requirements:	24-32 V
Viewfinder:	Video door, Can be used with Arriflex and Jurgens doors.
Available Lens Mounts:	PL, Super PL, Panavision, and Panavision Super 35
Camera Fuse:	7A

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