

ASSISTANT CAMERA'S HANDBOOK

rev 0.1

THE CAMERA ASSISTANT

The position of camera assistant requires a wide range of skills. The assistant must have a technical knowledge of the camera, lenses, and a myriad of support equipment. He or she must be physically fit, capable of total concentration, and be able to retain a sense of humor under stressful conditions.

It is the responsibility of the camera assistant to make absolutely sure that all equipment and supplies needed and/or requested by the DP (director of photography) are present and in working order at the start of each production day.

Inventory of all the camera department's gear should be taken before production begins, as well as at the start of each production day.

Basic equipment, from the ground up

- spreader
- hi-hat
- tripod legs (sticks)
- tripod head
- camera body
- batteries
- necessary cables
- magazines
- lenses & housings (blimps)
- matte box
- filters and filter trays
- changing bag

Additional equipment

- adapter plates
- speed control
- french flag
- shoulder pad/brace
- 'assistant' light

Items to be supplied by the production company

- raw stock
- camera reports
- film cores
- empty film cans
- black labpack bags
- labels
- camera tape
- lens tissue
- lens cleaning solvent
- cleaning swabs
- orangewood sticks
- slate
- rags

Items to be supplied by the production company (continued)

canned air
felt markers
grease pencils
pens and pencils
eyecup chamois

The camera assistant's daily preparation for shooting should consist of the following:

Clean the aperture

With the lens removed, blow air through the lens port with a blower bulb. Remove hairs and dust from the gate with an orangewood stick.

Warm up the camera

Run the camera for several minutes without film. In very cold situations, run the camera the amount it would take to shoot and entire magazine and 24fps - about 11 minutes for 400' of 16mm.

Load proper film stock in magazines

Make sure to properly label magazines with camera tape, noting film stock, roll number, emulsion number, date, magazine number, and loader's initials.

Prepare slate(s) and camera reports

Date, director, camera, and production title should be written on white camera tape to prevent smudging.

EQUIPMENT TESTING

The following list suggests standards by which to judge equipment. If the equipment is rented, notify the rental house; if the equipment is EMRL property, notify staff and the offending unit will be repaired or replaced.

Tripods

1. Each leg extends smoothly and locks securely.
2. Top casting accommodates the base of the tripod head.
3. Hinge bolts that attach each leg are adjusted to proper tension - legs swing easily away from top casting yet remains in place.
4. Wooden hase no splits or breaks.

Tripod Head

1. Base fits and locks into tripod top casting.
2. Ball base adjusts smoothly and locks in any position.
3. Pan and tilt movement is smooth.
4. Drag knobs easily adjust the tension of movement.

Camera Body

1. Locks securely to the tripod head.
2. Interior is clean - no emulsion buildup or film chips.
3. Oil/grease applied to lubrication points as recommended by the manufacturer. Any excess should be cleaned.
4. Movement of shutter, pull-down claw, and registration pins is synchronized.

Batteries and Cables

1. All batteries are compatible - male pairs with female, the number of pins in connectors match.
2. Batteries hold full charges and cables all conduct properly and reliably.
3. Camera runs steady at desired speed.

Viewfinder

1. Ground glass is properly seated, and within manufacturer's specifications.
2. The image is clear and clean.
3. Eyepiece focuses easily, and locks securely.

Lenses

1. Each lens and housing is compatible with camera body and seats securely.
2. Front and rear elements are clear and clean, free of scratches, fingerprints, and dirt. Blow off loose material with a blower bulb, clean off grease with lint-free tissue and proper lens cleaning fluid.
3. Iris leaves are flat and move properly throughout the T stops.
4. Lens focus markings are accurate.

Zoom Lens

1. Mechanism is aligned and tracks smoothly.
2. The cross hairs in the ground glass remain centered throughout the xzoom.
3. Lens focus marking are accurate.

Filters

1. Both surfaces of the filters are clear, clean, and free of major flaws.

Matte Box

1. Mounts securely to the camera and extends smoothly along the support rod(s).
2. No light passes between the matte box and the lens.

Magazine

1. Fits snugly on the camera body.
2. Doors close and lock securely.
3. Throat, film channels, and interior are clean, clear of dust and film chips.
4. Timing is working properly - film runs smoothly and quietly through the magazine.

THE JIB

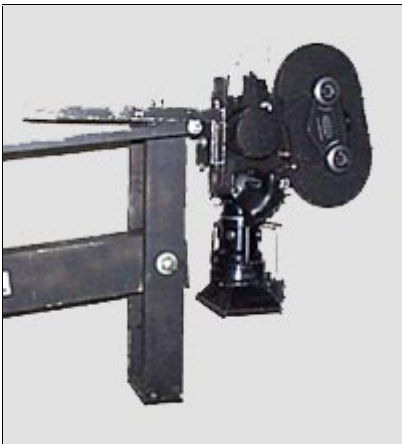
Setting up and using the Jib Arm requires utmost care - as misuse can result in serious camera damage.



Make sure to become familiar with all the jib's pieces and accessories. There are a myriad wing nuts, threaded rods, etc. that are required to make full use of the jib's potential.

The picture at left demonstrates the jib in it's standard configuration, with MILLER fluid head/hihat combo mounted atop the jib's head.

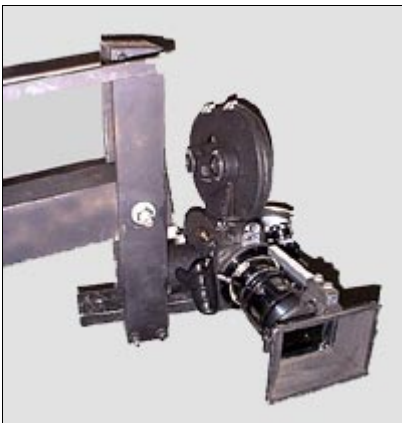
This configuration is quite forward-heavy, and requires about 115lbs to be balanced with the ARRI 16BL.



This is the jib set up for vertical shots. An L-mount attaches to the top or bottom of the jib head. Make sure to have an assistant help you mount the camera, as it can be quite tricky with this setup.

Note that wider lenses require the L bracket mounted further out from the jib head.

This configuration requires about 85lbs to be balanced with the ARRI 16BL.



Here's the low-mount configuration. This is used mainly for shots that require starting the jib motion as low to the ground as possible.

Make sure to design jib location and accessory placement so that the eyepiece is away from the jib head.

This configuration requires about 85lbs to be balanced with the ARRI 16BL.