

The New Beaulieu 7008 Series Cameras



The introduction of the new Beaulieu 7008 cameras, the 7008S & 7008 PRO, firmly establish Super 8 as a professional production format. Similar in design to 16mm cameras, with such features as mirror shutters, ground glass focusing, interchangeable C-mount lens, and a crystal sync camera control, the new Beaulieu 7008 cameras further advance the professional production capability of the Super 8 format. In addition, Beaulieu has engineered into the new 7008 cameras a digital frame counter for the precise placement of multiple exposure effects.

ANGÉNIEUX OPTICS

The new Beaulieu 7008 cameras come with an f1.4/6-90mm Angénieux lens, with multi-coating for excellent color rendition, and a unique macro focusing capability that enables you to focus down to two feet at any focal point in the lens's normal range (6mm to 90mm). The wide range of focal lengths in the Angénieux's 15:1 zoom ratio — the greatest of any Super 8 camera — is the equivalent of having a wide range of interchangeable fixed focal point prime lenses to choose from.

The 7008 cameras feature a variable

speed motorized zoom that will travel the 15:1 range in from 4 to 10 seconds, and a quick zoom button for dramatic zoom effects. Because it is almost impossible to get steady hand held shots beyond 40mm, the Angénieux engineers have built into this lens a manual lock to prevent it from accidentally zooming out past 40mm.

INTERCHANGEABLE LENS

For filmmakers who require still greater telephoto or wide-angle capability, the 7008 cameras feature a C mount that offers the option of using a full complement of interchangeable fixed focal point prime lenses. For instance, you can use any 16mm C-mount prime lens for exceptionally sharp results; or, with adapter rings, you can use the 200mm telephoto lens of a 35mm still camera to get an incredible 1200mm effect with the 7008. Though the capabilities of the Angénieux are such that you would hardly ever have reason to use this interchangeable feature, the lens potential of the new Beaulieu 7008 cameras leave nothing to be desired.

The C-mount also makes the 7008 cameras ideal for scientific research. They can be mounted on microscopes, telescopes, or anywhere a 35mm SLR camera

can be mounted for research applications.

DIGITAL FRAME COUNTER

The digital frame counter of the 7008 cameras counts frames, forward and backwards from 0000 to 9999, i.e. over a period of seven minutes at 24 fps. Such precise backwinding control enables you to do a number of lab effects in camera. Not only will you be able to place lap-dissolves precisely on a designated frame, but you will also be able to adapt the rhythm of the lap-dissolve to the particular sequence. Such control will also enable you to superimpose a title with a gradual fade-in at the right moment and for the required time, before fading out again.

The backwinding capability and digital frame counter of the 7008 cameras also give you the control required to create matte effects such as split screen images. By using a matte box and mattes to first limit the effective area of exposure to one part of the picture frame, and then backwinding the film to the exact beginning to expose the other part, the 7008 cameras enable you to film lab effects like split screen images in camera.

When doing such special effects, a 50-foot cartridge allows you to backwind the film for a full 10 seconds of double exposure. But to give you even greater creative control the 7008 cameras accept the 200' of cartridge which allows you to backwind over the entire length of the twelve minute cartridge.

MIRROR SHUTTER

Designed more like 16mm cameras than Super 8 cameras, the Beaulieu 7008 cameras employ a mirror shutter. Set at a 45 degree angle with a guillotine action that allows all incoming light to go to the film when the shutter is opened, and to the viewfinder when it is closed, the mirror shutter of the 7008 cameras give them the professional capabilities of 16mm cameras. It enables you to see through the viewfinder the effect of the selected aperture on the depth of field in a particular scene. In executing fades the guillotine principle of the variable shutter enables you to hold the aperture while closing the shutter, as opposed to closing the aperture (the method by which fades are executed in most other Super 8 cameras). Shutter fades give a much better picture quality with fade-ins and fade-outs.

There are two settings for the shutter

— normal and low light. The respective speeds are 1/72 and 1/40 second at 18 fps, and 1/96 and 1/60 second at 24 fps.

SOUND SYSTEM

The 7008S features Beaulieu's patented "Hall Sensor System" — an electronic design that incorporates a captor and magnet to keep a perfect loop between the picture gate and the sound head. This innovation keeps "wow" down to an incredible and inaudible 0.3 percent. The frequency response is from 50 to 12,000 Hz at 24 fps with a signal to noise ratio of 60 dB. The quality of sound is then better than that of the average tape recorder or projector.

DOUBLE SYSTEM SOUND

A flash/sync contact on the 7008S enables you to record double-system sound in lieu of, or along with, the built in sound system. Double system filmmaking is accomplished by using two pieces of equipment — a camera and a Super8 Sound Magnetic Fullcoat Recorder. In this sync set-up, called "cable sync", a cable connects the camera's flash/sync output to the sync input of the Super8 Sound Recorder, and the recorder maintains sync against the sync reference pulse generated by the camera's flash/sync contact.

Finally, the 7008S enables you to control the speed of action by shooting at 4, 9, 18, 25, 36, or 56 fps (sound film can only be shot at 18 or 24 fps). It will accept the Kodak 200' sound cartridge for twelve minutes of uninterrupted shooting. The 7008S also features single-frame capability and built in interval times that will expose 1 frame per second, 1 frame per 10 seconds, or 1 frame per 30 seconds. The 7008 will run on rechargeable nicad batteries or alkaline batteries, and can be remotely powered by a 9v battery pack.

BEAULIEU 7008 PRO

For complete freedom and mobility in shooting double system, Beaulieu has built a crystal sync control into a professional model of the 7008, the 7008 PRO. Crystal sync, preferred by professionals for its added flexibility, requires a crystal motor control in the camera and a crystal oscillator in the recorder — but no cable to trip over or pull loose.

With crystal sync, the cameraman is free to shoot from the best vantage point

with no thought to the sound. The sound person can likewise pick the most desirable spot to record from, independent of the camera. There is no cable or other physical connection between the two. Great angles, tight miking, no umbilical cord, and yet it is all in exact lip-sync with the accuracy of a quartz watch. The new Beaulieu 7008 PRO further enhances the professionalism of double system Super 8.

The 7008 PRO has the same superlative features as the 7008S with the notable exception that it is a silent camera - it will accept sound cartridges so that you can shoot striped film and transfer your sound for single system projection without having to send your film off to a lab to be striped. The only other difference between the 7008S and the 7008 PRO is slow motion. The 7008S has speeds of 4, 9, 18, 24, 36, and 56 fps; the Pro gives you the additional option of shooting at an incredible 80 fps, instead of 56 fps.

TECHNICAL SPECIFICATIONS

FORMAT: Super 8

LENS: Angénieux 6-90 f/1.4 macro zoom Interchangeable (fitted with Beaulieu mount)

DIAPHRAGM: Fully automatic settings provided by a servomotor. Automatism can be uncoupled for manual setting. Exposure check by LED in the viewfinder. Memory lock provided.

ZOOMING: Electric and manual. Zooming speed control. Instant start/stop.

FOCUSING AID: Automatic control rapidly sets the lens to minimum depth of field (maximum focal length with diaphragm to full aperture).

VIEWFINDER: Reflex. Fine grain focusing screen. Exposure, power and sound recording check by means of LEDs.

FILMING SPEEDS: 4, 9, 18, 24, 36 and 56 fps with silent cartridges. 18 and 24 fps with sound cartridges. Single frame filming capability. Time-lapse filming possible (3 speeds).

SHUTTER: 45° mirror-type. 2 settings: normal speeds and low light, allowing shutter speeds from 1/10 to 1/210 sec.

EXPOSURE METER: CdS cell. Center-weighted, TTL metering. Film speed range: ISO 12-400.

FRAME/CENTIMETER COUNTER: Digital additive-type counters, automatically set back when loading the camera. Manual set back available for frame counter.

CAMERA LOADING: Instant loading with sound or silent 15m/50ft or 60m/ft cartridges.

CAMERA RELEASE: Electromagnetic trigger. Remote control.

POWER SUPPLY: Six R6 type NiCad. 1.2V batteries with sintered electrodes. Possible supply from "Power Pack". External power supply possible (from a 12V battery). Power supply by switch.

FADES: Fade-ins/fade-outs: picture + sound. Lap dissolves: picture + sound.

INPUT SOCKETS: Microphone/(DIN) line (o 3.5 jack). External power supply. Remote control. Charge.

OUTPUT SOCKETS: Flash synchronization. Earphone.

SOUND: Sound recording on pre-stripped film. Built-in amplifier. Picture/sound gap: 18 frames (standard). Sound modulation LED. Sound over-modulation LED.

DIMENSIONS: 310mm x 157mm x 90mm with Angénieux 6-90.

WEIGHT: Body only: 1.280 kg. Angénieux 6-90 f/1.4 zoom: 1.140 kg.

AMPLIFIER SPECIFICATIONS

INPUTS: 3 sensitivities voltage:

- 1) 0.12 mV to 30 mV.Z. = 5 K;
- 2) 3 mV to 200 mV.Z. = 100 k;
- 3) 40 mV to 1.2 mV.Z. = 500 k.

BIAS: HF signal 60 KHz.

NOISE/SOUND RATIO: "Non attenuated": 60 dB.

DISTORTION: At maximum modulation; manual = 0.3%, auto = 0.4%

OUTPUT LEVEL: Maximum modulation.

DIFFERENTIATING PRO SPECIFICATIONS

FILM SPEEDS: 4, 9, 18 24/25, 36 and 80 frames per second, with silent or sound cartridges. Selection 24-25 fps, via a control on the slide, at the back of the camera. Single-frame filming capability, at any speed. Time-lapse filming possible (3 speeds).

DOUBLE SYSTEM SOUND SYNC: By quartz (optional synchro quartz slide).

NO SINGLE SYSTEM SOUND CAPABILITIES