

NEW from **cinema E products**

# GSMO

The "state-of-the-art" 16mm camera system.

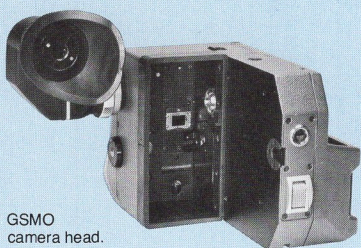
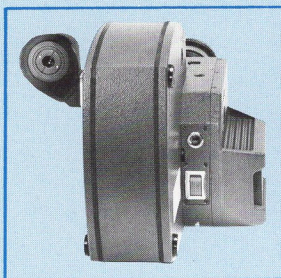
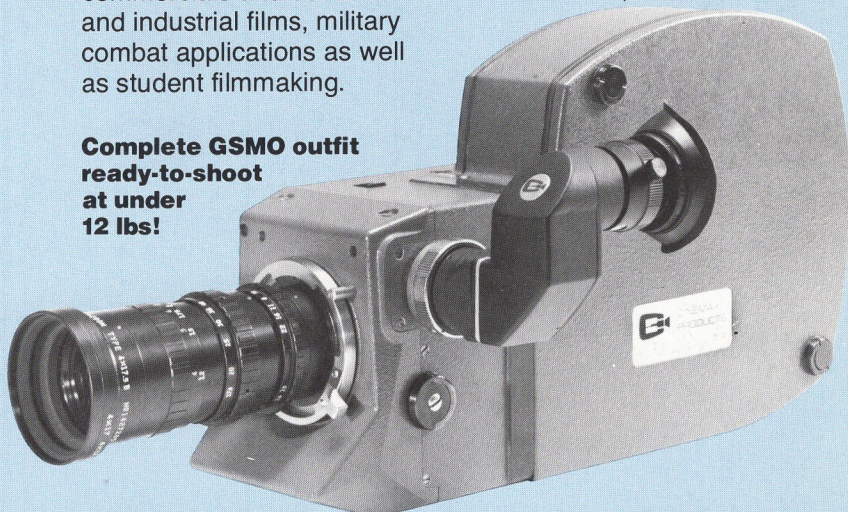
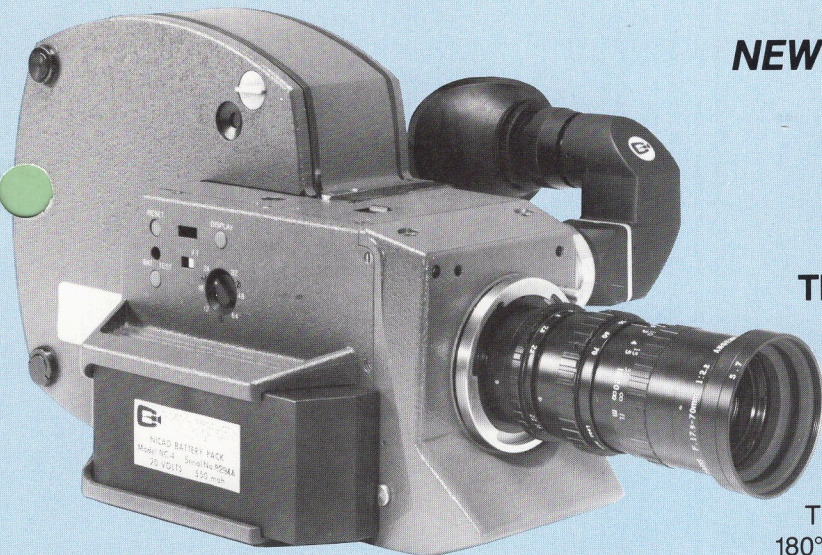
Ultra-silent, ultra-lightweight and extremely compact, the GSMO is a totally new and fully professional 16mm reflex motion picture camera system, incorporating the most advanced and sophisticated design features available through modern technology.

The GSMO is a high-quality camera system featuring a 180° shutter, quick-change cassette-type coaxial magazines, and a full range of options and accessories for utmost versatility.

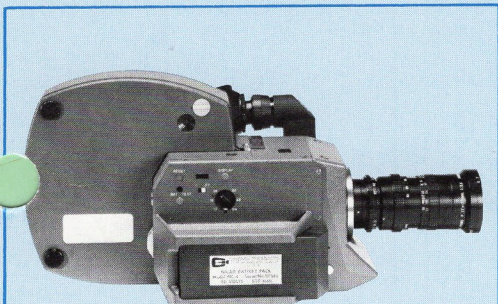
Designed for ease of operation and simple maintenance, the rugged and dependable GSMO is the ideal double system sound production camera for all phases of 16mm cinematography: commercials and documentaries for television, educational and industrial films, military combat applications as well as student filmmaking.

**Complete GSMO outfit  
ready-to-shoot  
at under  
12 lbs!**

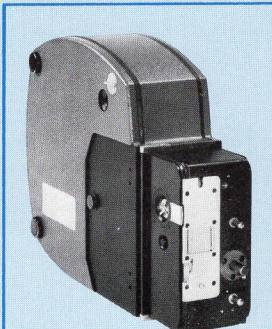
A complete GSMO camera outfit, with NC-4 battery pack, CP standard 12x viewfinder, 120m (400') magazine fully loaded with film, and Angenieux 17.5-70mm T2.5 zoom lens — weighs only 5.4kg (11 lbs. 14 oz.)!



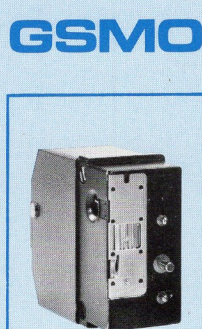
GSMO camera head.



GSMO shown with Angenieux 17.5-70mm zoom lens and 120m (400') cassette-type coaxial magazine.



120m (400') magazine.



30m (100') magazine.



GSMO shown with CP orientable viewfinder (and 7' extender), and Sachtler 1+1 SB fluid head tripod.

**GSMO**

# GSMO

## Description & Specifications

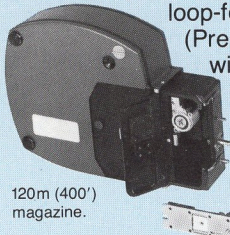
**Camera Drive System:** The GSMO camera drive system is of unique construction, embodying the most recent advances in electronics and mechanical technology. A miniaturized, highly-efficient crystal-controlled motor and gear train are embedded in a solid aluminum block to achieve maximum noise attenuation.

All the electronics are located on an extremely compact circuit board using CMOS logic and hybrid electronic circuits for maximum component density. In addition to crystal-controlled step-variable speeds of 12 to 64 fps, the circuit board also provides auto slating and pilotone outputs, as well as an electronic digital footage counter.

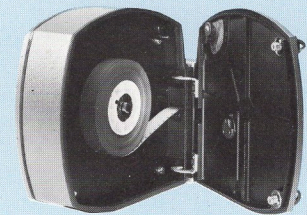
**Film Transport System:** The movement consists of a high-precision, single-claw sinusoidal registration movement, with a curved film gate for minimum pull-down time. The interchangeable film gate assembly with its floating pressure plate and hard-chrome-edge film guides is located in the cassette-type coaxial magazine, which also features automatic loop-forming devices for easy loading.

Frame line accuracy:  
±.05mm (.002")  
Picture steadiness:  
±.0076mm (.0003")

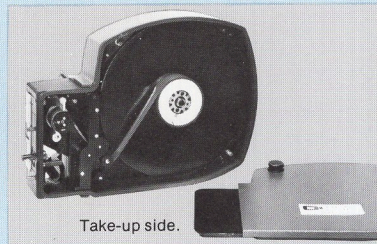
**Magazines:** Specially designed quick-change, cassette-type coaxial magazines, intended for rugged use, feature automatic loop-forming devices for quick and easy loading. (Preloaded magazines can be changed instantly without touching the film.) The interchangeable film gate assembly has a removable pressure plate for easy cleaning. Available in 30m (100'), 60m (200') and 120m (400') capacities. The 120m (400') magazine also features a "film remaining" manual indicator which reads: "E - 1/4 - 1/2 - 3/4 - F"



120m (400') magazine.



Feed side.



Take-up side.

**Digital Footage Counter:** Reads in feet (full feet) or meters (full meters and tenths of meters) as desired.

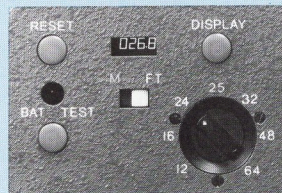
**Sync-sound Speed:** Crystal-controlled 24 fps or 25 fps.

**Camera Speed Range:** Crystal-controlled step-variable speeds of 12, 16, 24, 25, 32, 48 and 64 fps.

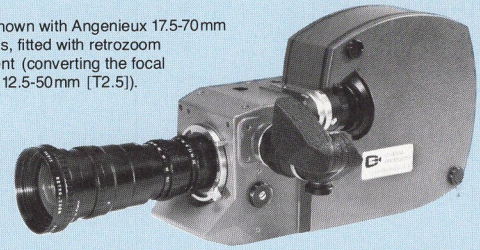
**Speed Accuracy:** ±30 ppm over a temperature range of -18° to 60°C (0-140°F) for all crystal-controlled step-variable speeds from 12 to 64 fps.

**Sound Level:** 30 dB max. measured at 1m (3') from film plane on the weighted "A" scale.

**Film Size:** 16mm single or double perforated, "B" wind, core load or daylight load.



GSMO shown with Angenieux 17.5-70mm zoom lens, fitted with retrozoom attachment (converting the focal length to 12.5-50mm [T2.5]).



**Film Capacity:** Quick-change, cassette-type coaxial magazines designed to accept:

30m (100') — daylight load  
60m (200') — daylight load  
120m (400') — core load or daylight load

**Rotating Mirror Shutter:** Single-blade, full-speed belt driven mirror shutter set at 45° angle; stops automatically in viewing position.

**Shutter Opening:** 180°

**Shutter Speed:** 1/48th second @ 24 fps (1/50th second @ 25 fps)

**Aperture Opening:** 7.46mm × 10.41mm (0.294" × 0.410")

**Viewfinder (standard):** Positive lock, 12× magnification. Provides greater than full-field viewing through fiber optics viewing screen. (Orientable viewfinder system *optional*.)

**Warning Indicators in Viewfinder:** When illuminated, "S" indicates camera speed is not at pre-selected speed level, or "out of sync." "B" indicates low battery.

**Lens Mount:** CP bayonet mount, with a positive locking ring. Accepts any reflex type lens that fits on any of the existing Arriflex and Eclair cameras (with proper CP mount adapter).

### Dimensions:

GSMO camera with 30m (100') magazine: 12.9cm wide × 11.8cm high × 19.3cm long (5.06" × 4.63" × 7.61")  
GSMO camera with 60m (200') magazine: 12.9cm wide × 14.2cm high × 24.3cm long (5.06" × 5.60" × 9.56")  
GSMO camera with 120m (400') magazine: 12.9cm wide × 18.3cm high × 30.8cm long (5.06" × 7.18" × 12.12")

### Weights:

GSMO camera head *only*, with CP standard 12× viewfinder and NC-4 battery pack, *less lens*: 2.4kg (5 lbs. 6 oz.)  
Magazine weights (*fully loaded with film*):  
30m (100') magazine: 1.0kg (2 lbs. 2½ oz.)  
60m (200') magazine: 1.6kg (3 lbs. 10 oz.)  
120m (400') magazine: 2.5kg (5 lbs. 8 oz.)

**Power Supply:** The GSMO is powered by the standard CP NC-4 nicad plug-in battery pack, which can drive 450-500 meters (up to 1600') of film through the camera on one charge. All power supplies compatible with CP-16 and CP-16R cameras may be used to power the GSMO camera.

**Tripod Sockets:** 1/4"-20 and 3/8"-16 tripod mount sockets.

### Options and Accessories:

CP semi-automatic exposure control system (with LED exposure indicators in viewfinder); CP orientable viewfinder system; J-5 zoom control system; remote speed control to provide continuously variable speeds in the range of 12-64 fps; adjustable handgrips, shoulder pods and braces, etc.



GSMO shown with Ultra T 9mm prime lens (T1.35), CP orientable viewfinder and Universal 16FX fluid head tripod.

**cinema products CORPORATION**

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