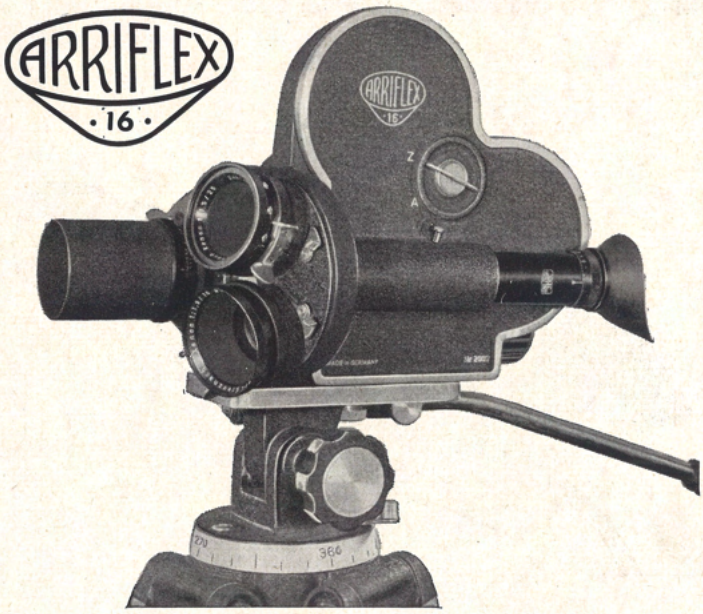


Mirror Reflex Motion Picture Camera

for 16 mm Films

The ARRIFLEX 16 is the most advanced universal 16 mm motion picture camera with mirror reflex system. Whether used for handheld filming, or on a tripod, it is ideally suited for all types of professional requirements, as well as for the discriminating amateur.

A product of

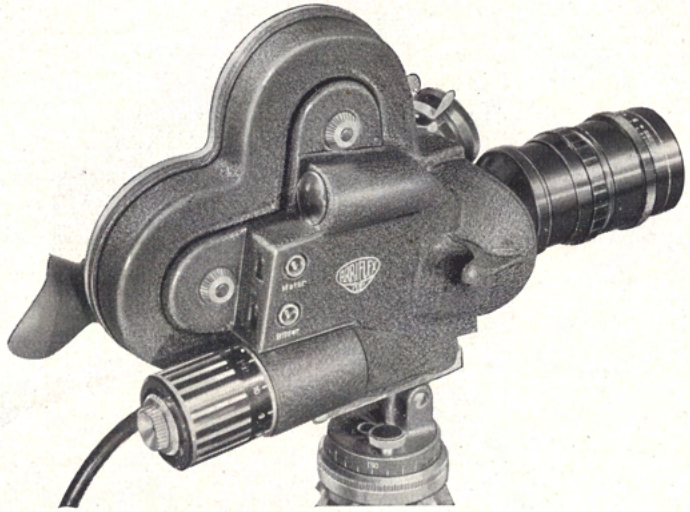
ARNOLD & RICHTER K.G.

Manufacturers of Motion Picture Equipment

Muenchen 13, Tuerkenstr. 89

West Germany Cables: Arrifilm

The ARRIFLEX 16 incorporates all the advantages which gained a worldwide reputation for the famous ARRIFLEX 35. In addition it shows a number of outstanding improvements and refinements, which further enhance its all around application.



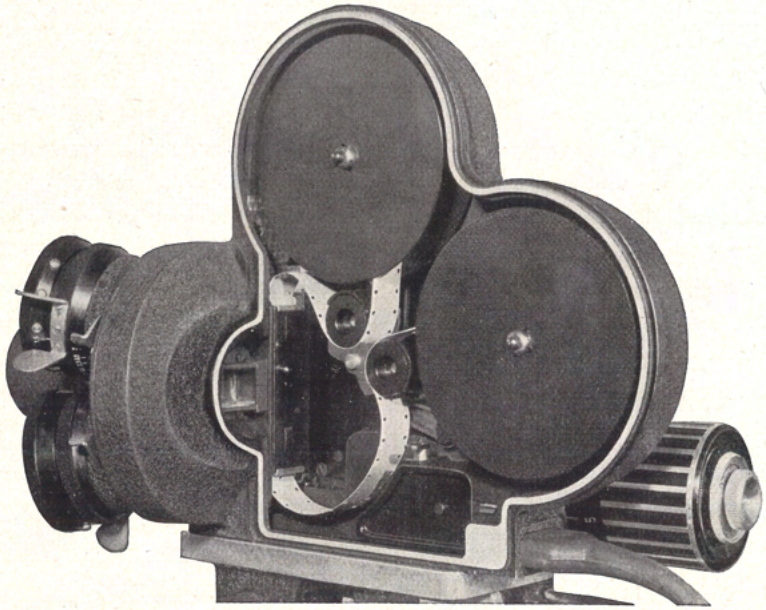
The ARRIFLEX 16 features a mirror reflex system, which permits viewing and focusing through the taking lens even while the camera is running. An ingenious optical system produces a bright, clear, well-defined finder image, showing every detail of the picture without any parallax whatever, uninverted and right side up. The finder image appears very large, because the eyepiece incorporates a 10 power magnifier.

The ARRIFLEX 16, like the ARRIFLEX 35, is equipped with a 3-lens turret, permitting instant change from one lens to another. The ARRIFLEX 16 uses standard 100 foot daylight loading spools and loading is extremely easy. 200 foot and 400 foot capacity film magazines will be available as accessory.

The ARRIFLEX, complete with 3 standard lenses, weighs only 6½ lbs.

Behind the ARRIFLEX 16 are many years of arduous planning, experimenting and testing. Fourteen years experience gained in the manufacture of the ARRIFLEX 35 are naturally reflected in the matured construction and perfection of the ARRIFLEX 16.

Because of its extremely compact, handy design, lightweight, sturdy construction, and constant readiness, the ARRIFLEX 16 is the ideal professional camera. It can be used for any job. Be it for newsreel work, for documentary or educational film production, for scientific or research pictures or for recording an expedition. It can



be used in the studio, or on location, in the car, airplane, or boat, in the home and on the road. The small, lightweigth, tropic proof ARRIFLEX 16 can always be relied-upon.

The ARRIFLEX 16 serves equally well for handheld filming or as a tripod camera. The professional cinematographer will find his task easier because of the reflex mirror finder, and the serious amateur will appreciate this advantage just as much. Even the inexperienced photographer can make better movies with the ARRIFLEX, because proper composition and focusing, as well as subject observation, are automatically assured.

After years of intensive development work, we proudly present the ARRIFLEX 16, perfected in construction and proved by actual test.

DISTINCTIVE ARRIFLEX FEATURES

Mirror Reflex Device (Patented in all contries).

The ARRIFLEX 35 was the first motion picture camera offering this sensational invention. It functions with equal perfection in the ARRIFLEX 16. Because of the smaller dimensions, the mirror reflex mechanism had to be constructed on an entirely new basis and many improvements were added at the same time. Just to mention one: the shutter opening was increased to an angle of 180°.

The mirror reflex assembly of the ARRIFLEX 16 is installed and adjusted by means of the most modern precision instruments. It assures an absolutely exact groundglass image, uninverted and without parallax. It does not matter whether the lens is wide open or stopped down, or whether the camera is running or standing still.

Film and groundglass images have identical focal planes and are critically adjusted for each other. As the groundglass image is etremely bright and magnified 10 times the photographer can even keep moving subjects easily in continuous sharp focus. ("follow focus").

Sighting and Focusing

The groundglass image is viewed through a 10 power adjustable magnifier. The finder tube is constructed in such a manner that it is impossible for light to strike the film, even when the eye is removed from the rubber eyecup.

The greatly enlarged and bright finder image permits not only easy focusing, but makes it equally easy to compose the picture and to judge lighting and color valeus. This is, of course, also true with wide angle lenses. The magnifying eyepiece is intended for sighting with the right eye. An extension piece for left eye sighting can be supplied as an accessory.

Lens Turret

The lens turret accommodates 3 lenses and permits instant change-over from lens to lens. Lenses can easily be removed and inserted by means of the convenient special lock, used also on the ARRIFLEX 35. The shortest focal length acceptable is 12½ mm. Long focus and telephoto lenses can be used practically without limitation as to size.

The turret is so constructed that the optical axes of the three lenses diverge from each other, which permits wide angle lenses to be mounted next to telephoto lenses without having the latter cut into the field of view of the former. Under this arrangement, only the taking lens points at the subject ("offset turret").

This novel lens turret has another advantage: It is designed in such a way that light cannot reach the film through the two lenses which are not in taking position. It is therefore not necessary to use lenscaps while the camera is in operation. It is also impossible for light to be reflected from the barrels of the "idle" lenses into the taking lens. The tolerances of the turret and of the lens mounts are so closely controlled that all lenses in ARRIFLEX mount can be used with the assurance that they will be in perfect focus.

Lenses

The choice of lenses for the ARRIFLEX 16 is up to the individual photographer. We refer to our price list which shows the latest products of the various lens manufacturers, in ARRIFLEX mounts. For the ARRIFLEX 16 special lenses of 10, 11,5, 16, 20 and 25 mm focal length are required. Longer focus lenses, from 28 to 125 mm focal lengths are the same as used for ARRIFLEX 35. Extreme telephoto lenses of 200 to 600 mm focal length can also be mounted.

Lens shade

To facilitate specialized filming, such as trick double exposures, a special matte box and filter holder were constructed for the ARRIFLEX 16, as accessory. Easy accessibility and operation of the lens turret and lenses (for focusing) are not disturbed by its use. However, for most purposes, the lens shade built into each lens will be sufficient.

Daylight Loading Spools

The ARRIFLEX 16 accepts standard 100 feet and 50 feet 16 mm spools. With accessory magazines 200 feet reels and 400 feet darkroom loads can also be used. The reels fit over standardized square spindles, which hold the reels in place automatically, yet permit easy reel change.

Film Transport

Two separate octagonal sprocket spindles control the movement of the film. The film is held against both the feed and take-up sprocket spindle by means of lock guides, which can be held open in order to facilitate threading.

The film gate is extra long and finished with utmost precision. It incorporates a stainless steel pressure plate and spring cushioned side pressure rails. The film gate can be opened all the way for treading and cleaning — a great advantage for easy maintenance.

Claws

The pulldown claw of the ARRIFLEX 16 is so constructed that it engages the film perforations from the front, i. e. from the lens side. This facilitates loading considerably. The claw is positioned in such a way that it permits a shutter opening of 180°.

A registration pin, operating in conjunction with the pulldown claw assures rock steady film placement during exposure and exact registration for double exposure. The tips of both claws are made of hardened steel.

Motor

The motor of the ARRIFLEX is interchangeable and slides from the rear into the housing. It forms a unit wits the rheostat and can thus easily be regulated from outside. This position was chosen to permit the use of the ARRIFLEX 16 on ordinary tripods or other flat supports. We can supply a special handle, complete with release, for those photographers who desire a grip handle on the base of the camera f handheld filming. The motor actuates the film transport through a coupling. It is thus easily interchangeable. An 8 Volt DC motor is standard equipment. It has forward and reverse switch. Its capacity at 24 pictures per second is approximately 20 Watt. Speeds from 8 frames per second to 48 frames per second can be obtained by adjusting the rheostat.

Rewind

An important new feature ist the forward or reverse run movement which permits any length of film to be wound back by motor. It is controlled by a knurled disc switch, located behind the rheostat. A knurled knop extending beyond the centre of this switch permits operating the camera by hand. (to open finder.)

The ARRIFLEX 16 permits, without further accessories, exposure at the rate of 8 frames per second, at which speed the motion appears 3 times faster than at the normal sound film speed of 24 frames, or at 48 frames per second (slow motion).

Synchronous motor

For synchronized picture and sound recording, irrespective of sound system to be used — magnetic, optical, or disc — a synchronous motor can be used in place of the 8 volt DC motor.

Tachometer

The tachometer, an integral part of the camera, shows exposure speeds from 0 to 50 frames per second and permits accurate control of the rheostat speed adjustment. The normal speed of 24 frames per second is indicated in red on the scale. The tachometer's scale in protected by a plexiglass window.

Frame and Footage counter

The ARRIFLEX 16 also features a footage counter and a frame counter, which register the film footage and the amount of frames used up. An easily accessible knob permits these controls to be set to zero.



With the aid of these counters and with the motorized reverse, it is easy to rewind film to any desired position. Thus double exposure and trick effects are made easily and with great accuracy.

Power Sources

The motor normally supplied is an 8 volt DC model which is powered by a glass-wool lead battery (5 Ah). Weight about 4½ lbs. Needless to say the popular steel batteries Ah), weighing about 2,5 kg can also be supplied.

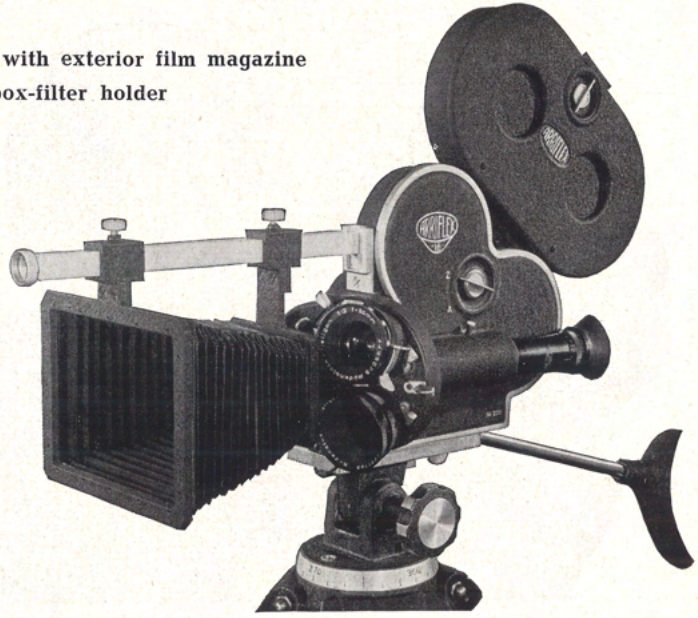
The ARRIFLEX 16 can also be run on any 6 volt battery; 6 volt batteries permit exposure speeds up to 24 frames per second.

With a synchronous motor the power is supplied by an appropriate AC source.

Arriflex Carrying Case

The ARRIFLEX carrying case is the ideal place for storage and transportation of the ARRIFLEX 16. It ist tropic proof and of sturdy construction, covered with hammered aluminium. Functionally designed, it accommodates the camera, extra lenses, extra film, filters and other small accessories.

Arriflex 16 with exterior film magazine and matte-box-filter holder



The other illustrations in this booklet do not show that the camera was designed to accept these accessories.

The matte-box is easily attached to the front of the camera. It takes 2" square and or series VI Kodak filters.

The magazine attaches by means of a gib lock tothe top of the camera. In order to assure faultless tape-up, it features a small auxiliary motor. It accepts either 200 ft daylight spools or 400 ft darkroom loads on standard cores.

— Subject to alteration —