

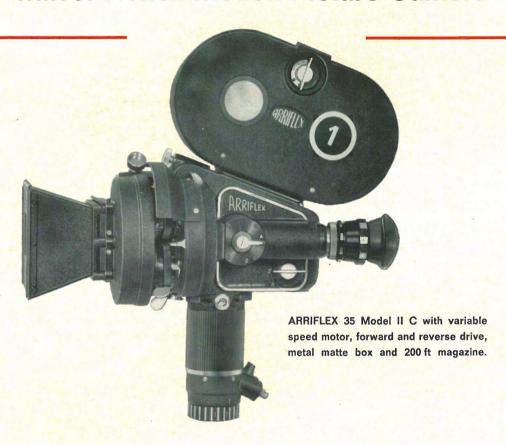


As of 1.8.1964

Cat. No. 2024

ARRIFLEX 35 MODEL II C

Mirror Reflex Motion Picture Camera for 35 mm Film



General Information

Technical Features

EXCLUSIVE CANADIAN DISTRIBUTOR

en Airo

BRAUN ELECTRIC CANADA LTD.

The ARRIFLEX 35 Model II C mirror reflex motion picture camera is an improved version of the dependable model II B and the ideal 35 mm equipment for film production. In conjunction with an ARRI blimp, this hand camera is also ideal for studio filming. The ARRIFLEX 35 Model II C is also used with great success for documentaries and similar on-the-spot shooting, in the scientific field, X-ray cinematography, industry, and for many other assignments. The great variety of accessories for ARRIFLEX 35 mocameras ensures that the new ARRIFLEX 35 Model II C is truly universal. The model II B is out of production but spare parts are, of course, still available.

The ARRIFLEX 35 Model II C is a 35 mm motion picture camera with mirror reflex viewing system, turret for three lenses and an electric drive with interchangeable motors.

The model II C differs from earlier versions of the ARRIFLEX 35 in the following points:

Finder aperture, max. CinemaScope optical sound format.
Interchangeable ground glass (various format markings).
New camera door with finder offers great advantages for numerous purposes.
Interchangeable finder eyepiece, if desired, with automatic closure mechanism.
Periscopic finder attachment as supplied for the ARRIFLEX 16 can be used.

The compact, handy housing has proved its excellent qualities on all former models of the ARRIFLEX 35. The removable camera door gives easy access to the film gate compartment.

The light and handy single-compartment magazines with built-in feed and take-up mechanism can be interchanged rapidly. In contrast to the 200 ft magazine (Cat. No. 2215), the 400 ft magazine (Cat. No. 2229) is equipped for forward and reverse drive and will take up to 500 ft of black-and-white stock. In conjunction with the ARRI Blimp 300 and the 1000 ft magazine adaptation for the ARRIFLEX 35, 1000 ft magazines (Cat. No. 2602) can be used.

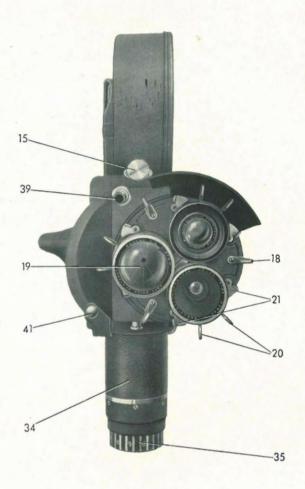
ARNOLD & RICHTER K.G.

Manufacturers of Professional Motion Picture Equipment

89, Türkenstrasse · 8 München 13

Phone: (0811) 38091 - Cables: Arrifilm - Telex: 524317 arri d



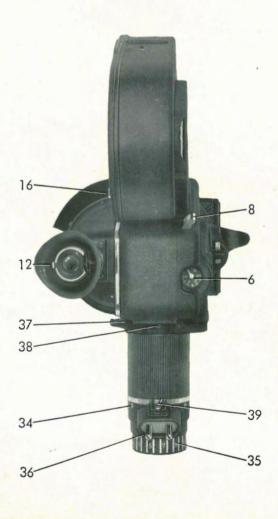


ARRIFLEX 35 MODEL II C

- 15 Gib lock for magazine
 18 One of three levers for turning the lens turret
 19 Lens in taking position
 20 One of three pairs of lens focusing

 - levers
 - 21 One of three pairs of lens release latches
 - 34 Handgrip motor

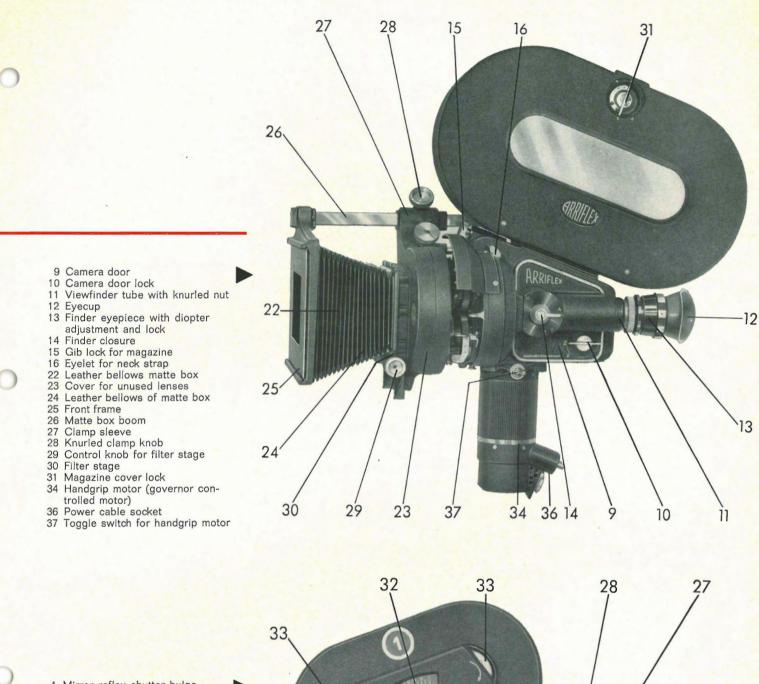
 - 35 Rheostat control cap 39 Matte box locating pin
 - 41 Matte box bracket



- 6 Tachometer
- 8 Eyelet for neck strap 12 Eyecup 16 Eyelet for neck strap

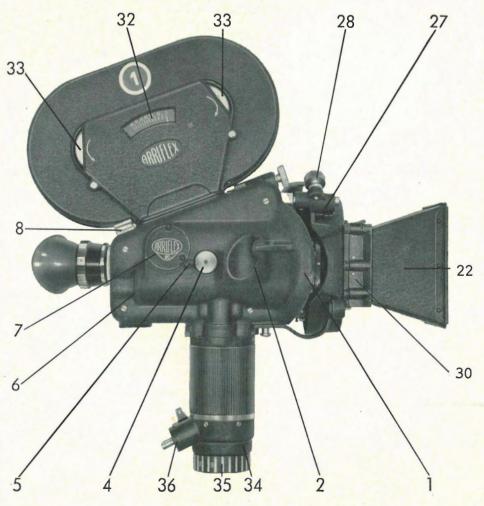
- 34 Handgrip motor 35 Rheostat control cap

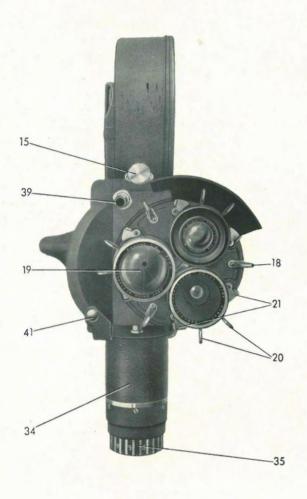
- 36 Power cable socket
 37 Toggle switch with protecting lugs
 38 Press button switch
 39 Toggle switch for forward and reverse drive



- Mirror reflex shutter bulge
- 2 Thumb grip 4 Knurled inching knob for singleframe shaft
- 5 Protecting lug
- 6 Tachometer
- 6 Tachometer
 7 Position of pulse generator for blimp pilot light
 8 Eyelet for neck strap
 22 Metal matte box
 27 Clamp sleeve
 28 Knurled knob for clamp
 30 Filter stage
 32 Footage scale

- 32 Footage scale 33 Spindle knobs for taking up slack film in magazine
- Handgrip motor (variable speed motor)
- 35 Rheostat control cap
- 36 Power cable socket





ARRIFLEX 35 MODEL II C

- 15 Gib lock for magazine18 One of three levers for turning the lens turret
- 19 Lens in taking position
 20 One of three pairs of lens focusing
- levers
 21 One of three pairs of lens release latches
 34 Handgrip motor
 35 Rheostat control cap
 39 Matte box locating pin

- 41 Matte box bracket

- 9 Camera door 10 Camera door lock 11 Viewfinder tube with knurled nut

26

24

30

29

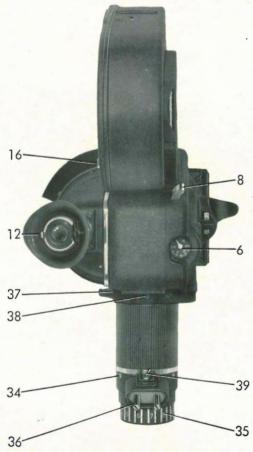
23

37

- 12 Eyecup
 13 Finder eyepiece with diopter adjustment and lock
- 14 Finder closure
- 15 Gib lock for magazine
- 16 Eyelet for neck strap
- 22 Leather bellows matte box
- 23 Cover for unused lenses 24 Leather bellows of matte box
- 25 Front frame
- 26 Matte box boom
- 27 Clamp sleeve
- 28 Knurled clamp knob
- 29 Control knob for filter stage

- 29 Control knob for filter stage
 30 Filter stage
 31 Magazine cover lock
 34 Handgrip motor (governor controlled motor)
 36 Power cable socket
 37 Toggle switch for handgrip motor



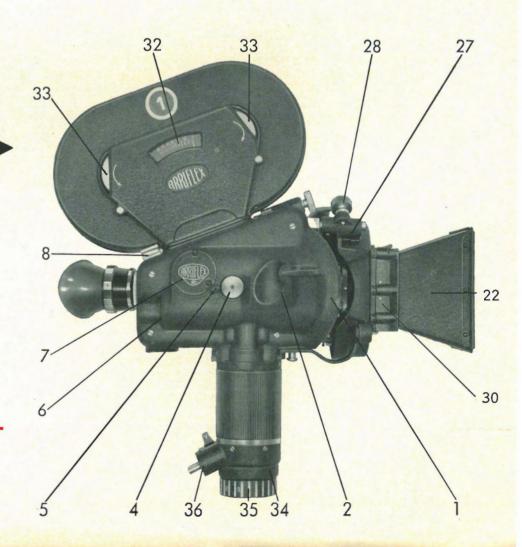


- 6 Tachometer 8 Eyelet for neck strap

 - 12 Eyecup 16 Eyelet for neck strap
- 34 Handgrip motor
- 35 Rheostat control cap 36 Power cable socket
- 37 Toggle switch with protecting lugs
- 38 Press button switch
- 39 Toggle switch for forward and reverse drive

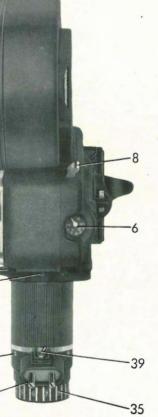
- 1 Mirror reflex shutter bulge
- 2 Thumb grip 4 Knurled inching knob for singleframe shaft
- 5 Protecting lug
- 5 Protecting lug
 6 Tachometer
 7 Position of pulse generator for blimp pilot light
 8 Eyelet for neck strap
 22 Metal matte box
 27 Clamp sleeve
 28 Knurled knob for clamp
 30 Filter stage
 32 Footage scale

- 32 Footage scale 33 Spindle knobs for taking up slack film in magazine
- 34 Handgrip motor (variable speed motor)
- 35 Rheostat control cap
- 36 Power cable socket



36 14

10



TECHNICAL FEATURES

The mirror reflex viewing system with 180° rotating mirror reflex shutter has $6.5 \times 10^{\circ}$ magnification. Whether the camera is running or at a standstill, and with the lens wide open or stopped down, the image presented to the cameraman by the eyepiece is brilliant, parallax-free, accurately framed, vertically and laterally uninverted, and identically as sharply focussed as the focal plane image. The full intensity of the image produced by the lens is received alternately by the film and the ground glass.

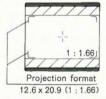
The improved finder system of the modell II C gives a maximum frame area covering the full CinemaScope optical sound format (18.67 x 22 mm) so that for anamorphic filming the former limitation of the finder image to the standard frame size (16 x 22 mm) is now eliminated.

The ground glass can easily be exchanged for another with different format markings by the camera user without special tools.

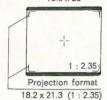
Standard film format 16 x 22 (1:1.375)



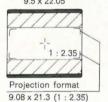
Wide-screen film format



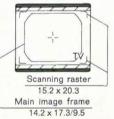
Anamorphic film format for optical sound, factor 2 18.6 x 22



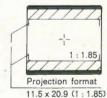
TechniScope film format 9.5 x 22.05



TV safe action format



Wide-screen film format



The interchangeable ground glass can be pulled out of the glass holder with an opened-out paper clip.

We supply ground glasses with the following markings:

Standard format	1:1.375
TV safe action format	3:4
Wide-screen format	1:1.66
Anamorphic optical sound format	1:2.35
TechniScope II format	1:2.35
Wide-screen format	1:1.85

On special request we also supply ground glasses with US Television format marking.



In addition, customers' special wishes with regard to individual markings such as other formats, crossed hairs, grids, etc. can also be met.

For photography with ULTRASCOPE and Cinema-Scope anamorphic lenses (compression factor 2), the **finder closure** in the removable camera door of the model II C can be replaced by an anamorphic lens element. When using the latter, either the unsqueezed Scope or normal image can be viewed by switching over the control lever; this makes it unnecessary to buy a second camera door. This lens element can be installed at the factory only.

The interchangeable finder eyepiece is screwed on to the finder tube of the ARRIFLEX 35 Model II C with a knurled nut union. It is identical with that of the ARRIFLEX 16 (as from Serial No. 5901) and can, therefore, also be used for these cameras if required. Furthermore, this screw-on union offers the additional advantage that the periscopic finder attachment familiar from the ARRIFLEX 16 can also be mounted, although — owing to the larger image format of 35 mm film – a small portion of the finder image is cut off at the corners. The mounting of the periscopic finder attachment and reattachment of the finder eyepiece does not affect the relative adjustment of film and finder images.

The eyepiece can be adapted to the eye by diopter adjustment and, when the image is in sharp focus, locked in position by tightening a knurled ring. The finder closure is constructed as a hinged flap and protects the film against the ingress of undesired light through the finder system. The eyecup rotates in its seat and can be removed from the eyepiece. The eyecup mount is provided with a centering guide to facilitate installation of a correction lens, if necessary. Where the diopter adjustment is inadequate or compensation of astigmatism in the user's eye is necessary, such correction lenses can be prescribed by an oculist and installed by any optician. Diopter calibration markings have been intentionally dispensed with. Moreover, we also supply (though not as part of the standard equipment) a

finder eyepiece with automatic closure mechanism (Cat. No. 2009) which opens automatically when the eye is applied to the rubber eyecup and closes automatically when this pressure is removed. The automatic masking shutter can be locked in the open position. All the above information on eyepieces also applies to this model.

The lens turret is of the rotating type and takes three lenses, permitting rapid switching from one focal length to another. The mechanical back focus is 52 mm. Lenses in ARRIFLEX mounts are available in focal lengths from 18 mm upwards (see price list); there is practically no limitation on the focal length that can be used. For particularly heavy lenses (e. g. zoom or anamorphots) and those with focal lengths of 300 mm and more, and also for tele-lenses in excess of 300 mm focal length, ARRIFLEX lens supports (see TI E 01 150) are available.

The metal matte box (Cat. No. 2003) is extremely robust and designed for use under rugged conditions (e. g. aerial photography from open aircraft). It is provided with a stage for 75×75 mm (3×3 ") filters.

The leather bellows matte box (Cat. No. 2005) is not, in contrast to the metal matte box, included in the standard equipment. The filter stage for $75 \times 75 \, \text{mm}$ (3 x 3") filters is constructed as a sliding stage for use with graduated filters.

The film guide and gate system ensures perfect vertical and horizontal centering of the frame and faultless flattening of the film.

The basic elements of this system are a rigid guide plate with aperture on the lens side, a spring-loaded rear pressure plate and spring-loaded lateral film guides. The film gate can be opened wide.

The material and finish of the film gate contribute towards preventing emulsion deposits and consequent damage to the film.

The claw system of the ARRIFLEX 35 Model II C plays a substantial part in attaining the above-mentioned excellent frame centering in this camera. The frame registering action of the claw prevents any movement of the film which would affect centering while the claw is withdrawn. The angular position of the claw permits an effective shutter opening of 180° so that 25 f. p. s. is equivalent to an exposure time of 1/48 sec.

The tachometer has a measuring range of 0 to 50 f. p. s. and is installed in a clearly visible position at the back of the camera.



ACCESSORIES

Electric power is supplied via a cable connected to a battery or a power supply unit.

The operating voltage is 12 to 16 V DC.

Motors

The following drive motors can be used for the ARRIFLEX 35 Model II C:

Variable speed motor with rapid pick-up and rheostat for forward and reverse drive, adjustable from 8 to 50 f. p. s. (Cat. No. 2199).

Transistorized governor controlled handgrip motor for a single speed of either 24 f. p. s. (Cat. No. 2205) or 25 f. p. s. (Cat. No. 2206), for forward drive only.

Synchronous motor, 220 V/50 c. p. s. for 24 or 25 f. p. s. (Cat. No. 2616) or 110 V/60 c. p. s. for 24 f. p. s. (Cat. No. 2618), both for AC operation with intermediate gearing and base plate, with counter graduated in feet or meters.

For blimp operation we also supply a 24 V DC governor controlled motor for 24 f. p. s. with base plate and intermediate gearing as for the synchronous motor. The camera speed is maintained automatically and cannot be changed (Cat. No. 2208).

For titling, animation, time-lapse photography, opticals and dissolves, the single-frame motor with transmission plate, frame counter and power supply unit is used (Cat. No. 2207). The single-frame motor and the transmission plate – like those of the synchronous motor – are constructed as an integral unit.

This equipment permits exposure of single frames with the ARRIFLEX 35 which is triggered either manually by depressing the pulse press button switch or the remote control release connected in parallel via a cable or automatically by an intervalometer (Cat. No. 1222).

Furthermore, the single-frame motor is also designed for prolonged slow-speed operation at an exposure frequency of about 86 frames per minute. For longer time lapses, the intervalometer can be set for intervals of 4 seconds to 3 hours between individual exposures. 24 V DC power is supplied to the single-frame motor via a power supply unit for 110/220 V AC with built-in rectifier, or if necessary, from a 24 V battery. When using the intervalometer no supplementary power supply is necessary as the required circuitry is built-in.

Batteries

Batteries for the ARRIFLEX 35 Model II C

The $12-16\,V$ DC motor of the ARRIFLEX 35 can be powered from various sources. ARRIFLEX batteries are provided with two connectors for 12 and 16 V. The camera can be operated on both 12 and 16 V but must be connected to a 16 V supply if camera speeds of more than 24 f. p. s. are required.

Special light-weight wet cell lead battery, type Permanent (Cat. No. 2260), in carrying case with strap, 3.5 Ah, 16 V. When not in use, the battery can stand for 6 months – if fully charged beforehand – without suffering any damage. Size: $8 \times 2^{1/2} \times 5^{1/2}$ "; weight: $5^{1/2}$ lbs.

Special wet cell lead battery (Cat. No. 2261). This 16 V battery is spill-proof and has a capacity of 7.5 Ah. At normal temperatures about 4000 ft of film can be shot before recharging is necessary. The normal service life of the battery is about 2–3 years. Each cell has three coloured floats which indicate the charge. This battery must be charged at 4-week intervals when not in use, and also immediately after use.

Size: 8 x 5¹/₄ x 5¹/₂"; weight: 9 lbs.

Protective Case (Cat. No. 2262) for special wet cell lead battery of synthetic leather with foam rubber padding.

STANDARD EQUIPMENT

Special wet cell lead battery 24 V, 7.5 Ah (Cat. No. 2212), in carrying case with strap, weight approx. 11 lbs., for the 24 V DC motor as per Cat. No. 2208.

Battery Charger

ARRI Universal Battery Charger (Cat. No. 2270) for AC only, 110–230 V, 50/60 c. p. s., for charging the listed batteries, with ammeter, voltage selector and cable with plugs. Size: $8 \times 4 \times 5^{1/2}$ ", weight: 4 lb. 10 oz.

Pilot tone and automatic slating mechanism

The pilot tone generator and automatic start and scene slating mechanism (for full-frame exposure) can, if specially requested, be installed at extra cost on the ARRIFLEX 35 Modell II C, using a special gear cover.

Depending on the camera speed, the pilot tone generator produces a weak alternating current of a specific frequency. This alternating current, which is also termed the pilot tone, is fed by a cable to the tape recorder, where a special pilot tone sound head records it on the tape simultaneously with, but transverse to, the sound track proper. Generally, portable tape recorders which are independent of the mains and take unperforated magnetic tapes are used for these purposes. The pilot frequency subsequently serves to control the play-back equipment when transferring the sound to perforated magnetic tape or an optical sound track.

The frequency generally used for the pilot tone system is 50 c.p.s. at 24 or 25 f.p.s. but generators for other similar systems are also available on request. In every case the taking speed of the camera and the desired pilot frequency must be stated when ordering.

The advantage of the pilot tone system lies in the small amount of equipment required when shooting, simple operating procedures, the resultant versatility and manoeuverability, and complete independence of power mains. The pilot tone system has been in use for years in motion picture making and television for a broad range of applications and has been proved to give excellent results in practice.

Standard Equipment

Standard equipment supplied with the ARRIFLEX 35 Model II C (Cat. No. 2024). Hand camera with 180° mirror reflex shutter, with camera door and viewfinder complete, including finder eyepiece, lens turret for three lenses (without lenses). Handgrip motor with rapid pick-up and rheostat, for forward and reverse drive (Cat. No. 2199).

Metal matte box with stage for 75×75 mm (3×3 ") filters. 200 ft light-metal double-compartment magazine, battery cable, neck straps.

Model 35 II C-BV

The ARRIFLEX 35 Model II C-BV (Cat. No. 2006) is of the same design and is supplied with the same equipment as the model IIC but is additionally equipped with a variable shutter which is mounted behind the mirror reflex shutter and can be adjusted in 15° steps from 0 to 165°. After removal of the taking lens, the set shutter opening can be read through the turret hole. The variable shutter is adjusted by depressing a button and then turning the single-frame shaft.

Model 35 II-C-HS

The ARRIFLEX 35 Model II C-HS High Speed (Cat. No. 2007) is equipped for camera speeds from 22 to 80 f. p. s. The tachometer is graduated from 0 to 80 f. p. s. In addition, this model has a 32 V special DC motor, including separate rheostat for continuous speed adjustment from 22 to 80 f. p. s. In the interests of prolonging the service life of the camera, however, the maximum speed of 80 f. p. s. should preferably be used for short periods only.

The camera is powered by a portable 32 V, 7.5 Ah battery in a carrying case (Cat. No. 5802).

Blimps

The ARRIFLEX 35 in conjunction with ARRI Blimps

The model II C can be used in conjunction with the ARRI Blimps 120, 120 S and 300. Further particulars will be found in our Technical Information for ARRI Blimps.



OTHER ACCESSORIES WEIGHTS

For silent shooting with 1000 ft magazines

we supply the ARRI 1000 ft magazine adaptation for the ARRIFLEX 35. For further information see our Technical Information A 28 000.

Possible applications of the ARRIFLEX 35 Model C/T II using the TechniScope II system are dealt with in our Technical Information B 14 501.

Transport and storage cases

Transport and storage cases for the ARRIFLEX 35 and for magazines

The ARRIFLEX case serves for safe storage and transport of the camera. It is tropicalized, dustproof and of extremely rugged construction. It is covered with hammered aluminium to reflect heat and keep the contents cool. All metal fittings are of nickel-plated brass. The inside of the case is lined. The ARRIFLEX camera case is available in two models and two sizes (see price list, Cat. No. 2241, 2242).

Moreover we supply transport and storage cases for three 200 ft magazines and for three 400 ft V-R magazines for the ARRIFLEX 35 Model II C with the same features as described above

Tripods

The special ARRI tripod for the ARRIFLEX 35 (Cat. No. 2302) with ball and socket joint which locks in any position is extremely versatile. Regardless of the extension of the tripod legs (63 to 88"), the camera can always be levelled with the built-in spirit level. Precision machining of all metal parts ensures smooth, jerk-free pan and tilt movements, for which separate locks are provided.

Other features: Extendable wooden legs with graduated scales, safety chain, twin spikes for every position, additional tie-down eyelets.

The ARRI shorty tripod (Cat. No. 2305) for ARRIFLEX 35 incorporates all the same features as the regular tripod but can be adjusted from 24 to 40 inches only.

The ARRI shoulder pod (Cat. No. 2300) can be adjusted to the cameraman's personal requirements. It is a great convenience for handheld shooting.

The ARRI Hi-Hat (Cat. No. 2311) with 3/8" thread can be mounted on any standard tripod with a flat head. For special shots it can also be mounted or screwed on any suitable surface.

Weights

1	ARRIFLEX 35 Model II C with variable speed motor for forward and r				
	drive (Cat. No. 2199), without lenses, matte box and magazine				7 lb. 4 oz.
1	set of standard lenses				1 lb. 9 oz.
1	metal matte box				14 oz.
1	leather bellows matte box				2 lb.
1	200 ft magazine, empty, without loop guard	Ĺ			2 lb. 10 oz.
1	400 ft magazine, empty, without loop guard	Ť		Ť	4 lb. 14 oz.
1	special light-weight wet cell lead battery, 16 V, 3.5 Ah, type Permament		Ċ	·	. 10. 1102.
'	(Cat. No. 2260)				5 lb. 8 oz.
4					
	special wet cell lead battery, 16 V, 7.5 Ah, (Cat. No. 2261)				8 lb. 12 oz.
1	special wet cell lead battery, 24 V, 7.5 Ah, (Cat. No. 2212)				11 lb.
1	special tripod with interchangeable ball pan tilt head, complete				18 lb. 2 oz.
	shorty tripod, complete				6 lb. 10 oz.
1	shoulder pod				1 lb. 9 oz.
1	Hi-Hat				2 lb. 4 oz.
	small camera case, empty				
	large camera case, empty				20 lb. 5 oz.
1	large carried case, empty	•	•	•	
1	magazine case for three 200 ft magazines, empty			٠	7 lb. 8 oz.
1	magazine case for three 400 ft magazines, empty				11 lb. 8 oz.

ARNOLD & RICHTER K.G. MÜNCHEN · Advertising department · Technical information and specifications are without obligation. Modifications reserved. The information covered herein may be reproduced with our written authorization only.