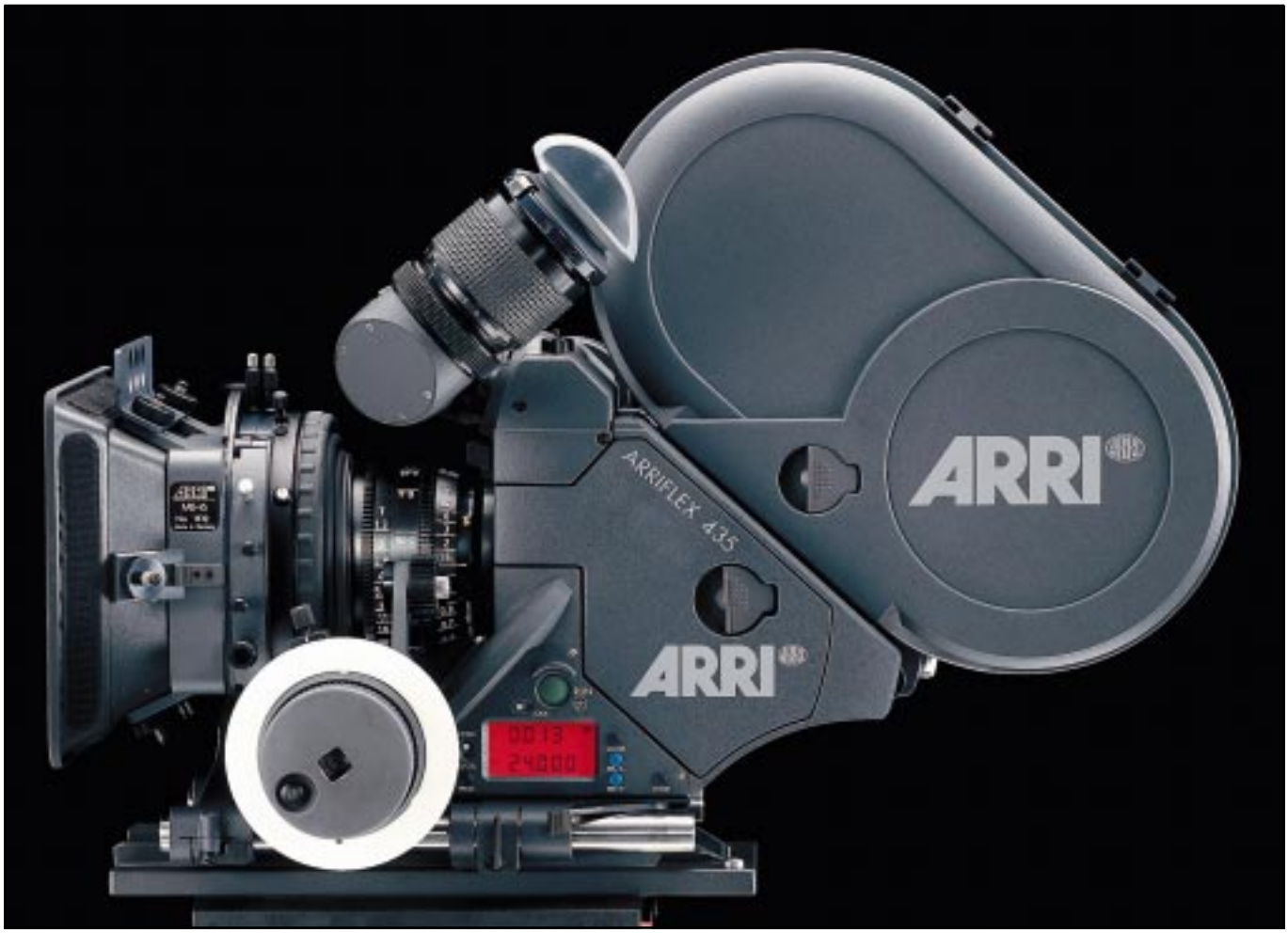
ARRI

ARRIFLEX 435



ARRIFLEX 435
The Modular Camera System

The arrival of the ARRIFLEX 435 heralds a new era in high-speed and MOS filming. Developed using the latest, state-of-the-art technology, the ARRIFLEX 435 modular camera system has an impressive array of features and options. Particularly compact, lightweight and easy to use, the 435 is also very much part of the 535 family, benefitting from largely compatible accessories.



ARRIFLEX 435 Standard Version

In standard version, the ARRIFLEX 435 encompasses all the necessary functions of a contemporary production camera. Its range of functions can easily be extended with the addition of modules or with individual accessories.

The standard version has a mirror shutter which can be mechanically adjusted from 11.2° to 180°. The viewfinder can be pivoted in two axes for comfortable viewing in any situation. A dual-pin registration and multi pull-down claw movement guarantees precise image steadiness from 1 - 150 fps, both forward and reverse. Equipped with additional modules, the camera is capable of time code recording.

ARRIFLEX 435 "ES" Version

With an electronic mirror shutter that can be continuously adjusted from 11.2° to 180° while the camera is running, the ARRIFLEX 435ES offers complete control of exposure compensation via easily accessible programmes. The integrated functional expansion module is equipped with interfaces that enable full remote control of the camera thus enabling applications in advanced production methods such as motion control. In addition, the module enables time code recording.

The Finder System

Benefitting from the most technically advanced modular system available today, the ARRIFLEX 435 viewfinder system was first introduced with the ARRIFLEX 535 and has since been further developed to give unsurpassed image quality, flexibility and ergonomic ease of use.

The standard finder, which covers the full Super 35 format, pivots in two axes enabling use on either side of the camera, giving an upright image in all positions. The incorporated telescopic extender allows easy adjustment for both left and right eye viewing. The bright viewfinder image can thus be viewed comfortably from almost any conceivable operating position. Furthermore, the compact dimensions of the ARRIFLEX 435 allow for viewing in extremely tight situations e.g. directly next to a wall or in vehicles. Also incorporated is an ND6 contrast filter which can easily be swung into position.

An optical tap with interchangeable beamsplitter-ratio is integrated into the standard viewfinder, enabling the adaptation of the $^{1}/_{2}$" video camera CCD-2.

In addition the entire viewfinder module can be removed and replaced with a lightweight 100% video-top. In this configuration the camera body weighs only 5.9 kg - ideal for motion control, Steadicam, helicopter mounts and all other applications where compact dimensions and low weight are essential.

Due to its comprehensive system compatibility with the 535 range, the ARRIFLEX 435 can not only utilise the 535 range of extension viewfinders but also ground glasses, field lenses and gate masks as well as all eyepieces of the ARRIFLEX 535 system. Both the telescopic viewfinder-extender of the 535 and the 300 mm extender with integrated magnifier of the 535B can be used on the ARRIFLEX 435. An optional anamorphic viewfinder is also available for de-squeezing anamorphic lenses.





The Drive Train

The ARRIFLEX 435 employs separately controlled DC-motors for film transport and mirror shutter, which sets new standards in functional flexibility.

The complex mechanics of a high-speed camera, which typically require multiple transmission stages, were reduced to simple, dedicated drives in this design. The improved efficiency of the individual drive trains translates into advantages that are reflected in the compact and ergonomic design of the ARRIFLEX 435.

The separately controlled drive systems feature superior dynamics over conventional systems and are less susceptible to accidental damage in the event of a film jam.

The Movement

The main feature of the ARRIFLEX 435 is the virtually maintenance-free 5-link movement with dual registration pins which operate in the standard position of optical printers. Extremely precise image steadiness is given throughout the entire frame rate from 1 to 150 fps both forward and reverse.

The gate aperture is changed by means of gate masks, so that only one aperture plate is needed.

Compatible Magazines

A new generation of ergonomically improved magazines was developed for the ARRIFLEX 435. A robust, light weight design was achieved through the use of modern carbon-fibre technology. The range of magazines includes the standard mechanical 400ft magazine and a motorized 1000ft magazine, both of which are capable of being used over the entire speed range of 1 to 150 fps both forward or reverse. A lightweight 400ft shoulder magzine, suitable for Steadicam use, is also available.

Comprehensive compatibility also means that ARRIFLEX 35 III and older magazines can be used (without TC recording and with a maximum speed restricted to 130 fps). Even the loop length is compatible, a fact that greatly simplifies handling when an ARRIFLEX 435 is used together with an ARRIFLEX 35 III.



Liquid Crystal Display and Control Panel

A large LCD on the left side of the camera clearly shows all chosen settings. The control panel next to the display offers easy and precise access to all camera functions. The display can be locked mechanically to protect chosen settings.

The following can be read and/or set:
- frame rate
- camera forward or reverse run
- film counter (switchable from m to ft)
- shutter angle
- time code, user bits, time code sensitivity
- battery voltage, with warning for low battery voltage
- film end and async camera running

As an option, most functions can be controlled via the remote control unit (RCU-1).

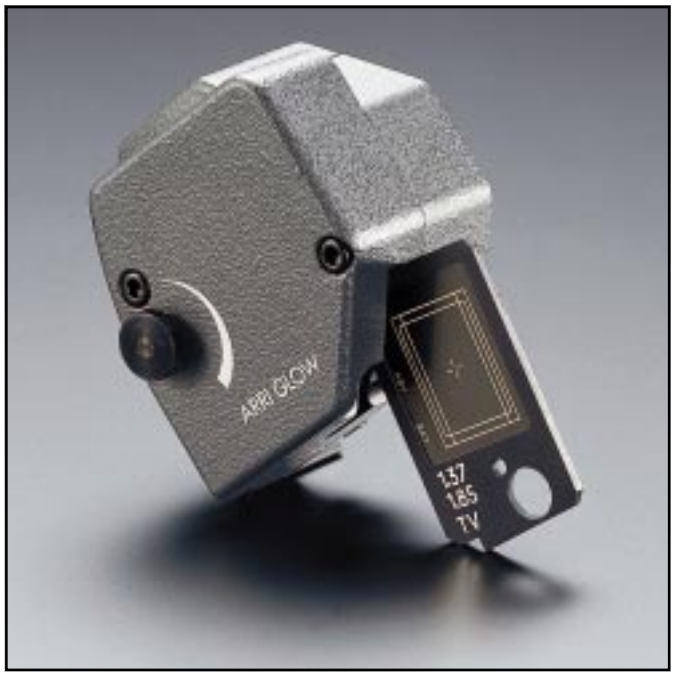
Ergonomic Design

Despite the comprehensive range of functions that are already available in the standard configuration, the ARRIFLEX 435 body weighs in at only 6.5 kg. The lightweight and ergonomic design represents a new standard in operating comfort. The camera can easily be hand-held with the standard 400ft magazine. A special shoulder magazine is also in preparation.

ARRIGLOW

For both camera models an ARRIGLOW-module is available, utilising the same slide-in masks as the ARRIFLEX 535B camera. The framing format is superimposed over the ground glass, the brightness of which is continuously adjustable. Furthermore, warnings for asynchronous running, low battery and film end are displayed in the viewfinder.





ARRIFLEX 435

Technical Data

Film format:	35 mm DIN 15 501
Lens mount:	54 mm PL-mount adjustable for filming in Super 35 format
Flange focal distance:	51.98 - 0.01 mm
Standard model reflex mirror shutter:	mechanically adjustable from 11,2°- 180° and locks in the following position: 11.2°, 22.5°, 30°, 45°, 60°, 75°, 90°, 105°, 120°, 135°, 144°, 172,8° und 180°
ES-model reflex mirror shutter:	can be locked mechanically or electronically and adjusted continuously from 11.2°-180° while the camera is running
Frame rate:	1 - 150 fps, forward and reverse (quartz-accurate to 0.001 fps)
Viewfinder indicator:	asynchronous film running, low battery voltage, film end
Contrast filter:	selectable, ND 0.6
Phase shifter:	integrated into the camera by pressing the PHASE key while camera is running
Sensors:	shown on the camera display are: film end, incorrect movement position. If the camera is not ready for operation , the control lamp illuminates red
Temperature range:	-20°C to +50°C
Video-assist:	C-mount for $^1/_2$"-CCD camera
Beamsplitter:	interchangeable with ratios of 80/20% and 50/50%
Magazines:	400 ft and 1000 ft displacement magazines
Steadicam magazine:	400 ft
Movement system:	5-link movement with dual pull down claws and registration pins for 35 mm-negative-film DIN 15501
Drive system:	quartz-controlled DC motors
Power supply:	24 V DC - 35 V DC
Accessory:	24 V, 3/5 A and 12 V, 3/5 A
Battery:	NC 24/7R
Weight:	6.5 kg (14.3 lbs) without magazine
Dimensions:	with 400 ft magazine, without lens, length: 400 mm (101.6 in) width: 250 mm (63.5 in) height: 331 mm (83.8 in)
Time Code:	format SMPTE RP 136, form C 80 bit. TC-quartz accuracy ± 1ppm (0-50°C)

Technical data are subject to change without notice – Ident-No. 09.91922.0

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