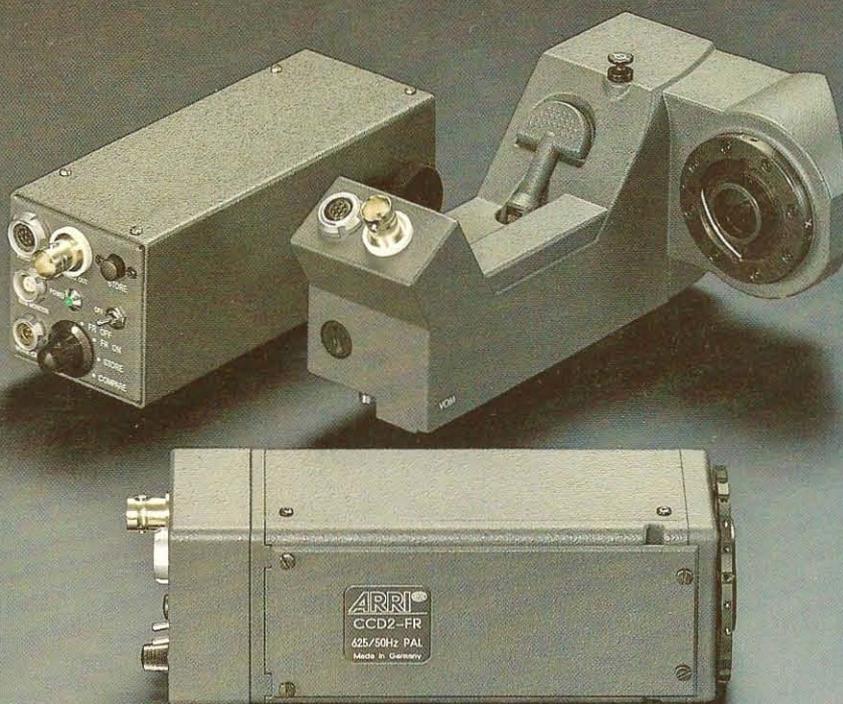


ARRI



VIDEO-ASSIST-SYSTEM

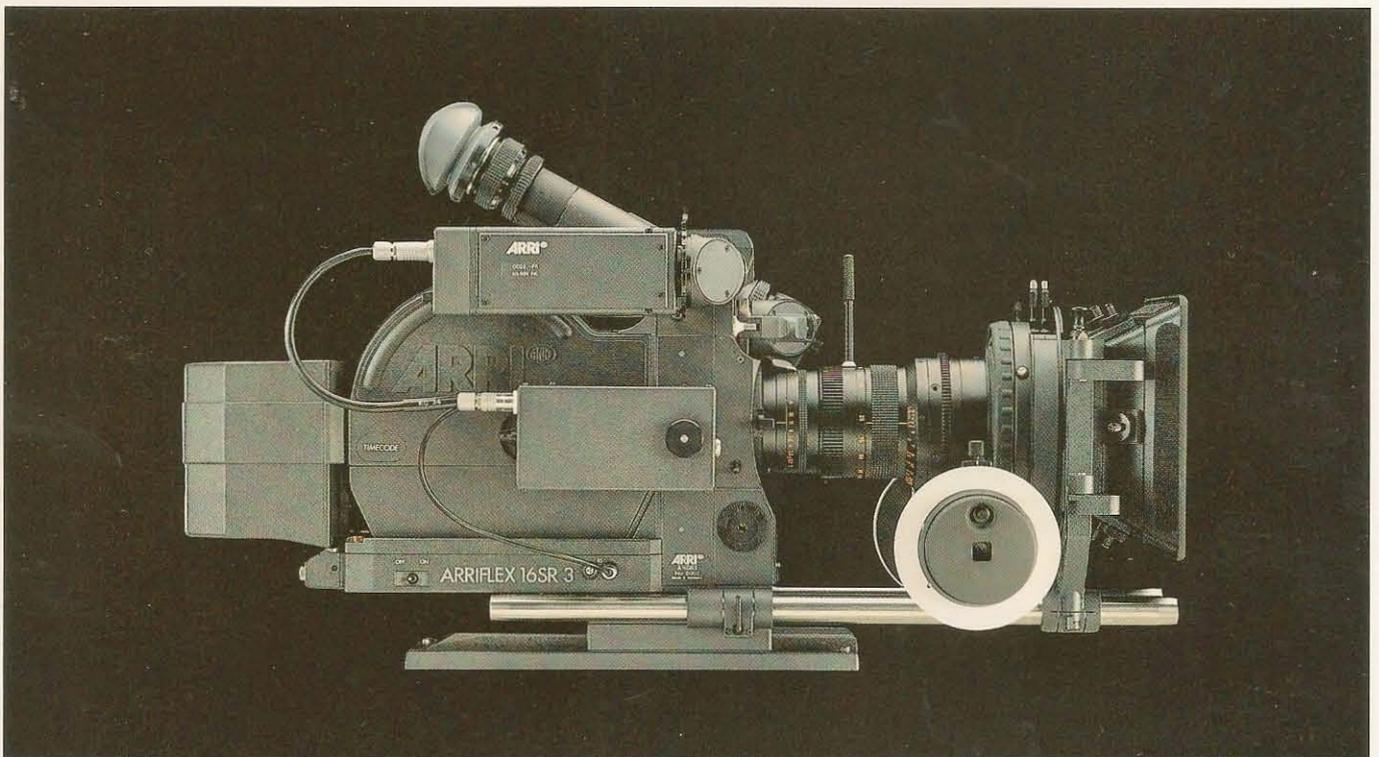




VIDEO-ASSIST-SYSTEM

The new video assist system utilises the high speed 1/2" (inch) colour video camera CCD 2-FR, the video optic module VOM-2 for the ARRIFLEX 535, or the AFP-2 for the ARRIFLEX 16 SR3, and ARRIFLEX 35 III. The system provides bright, flicker reduced video pictures which meet high standards.

With its excellent image quality, this video assist system offers totally new possibilities. The film camera's image is recorded on a video tape while shooting, and is immediately available, to provide an OFF-line rough cut. If the ARRI time code is recorded in addition to the video picture, a clear and distinctive correlation between the video image and negative-frames can be obtained.



CCD 2-FR — high image quality, even in low lighting conditions

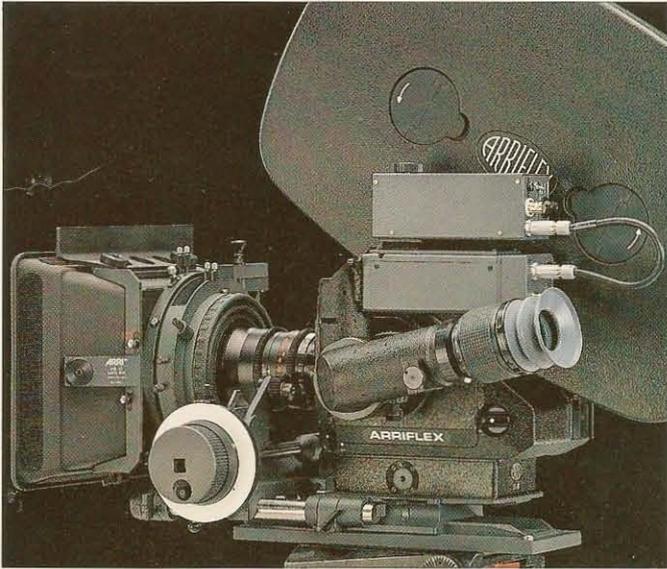
The CCD 2-FR reproduces the whole camera picture in the most format-filling way, without disturbing black edges on the monitor, up to the silent image. Using a CCD pick-up device eliminates distortions or defects which mainly occur when operating tube video cameras. A high contrast range and the light sensitivity of the camera (up to 1200 ASA) provides editable images even under critical lighting conditions.

The brightness of the video image is automatically adjusted to the current lighting conditions. For best rating of varying lighting conditions, it is also possible to control the gain manually. The difference in brightness between the film camera in ON or OFF-position is electronically compensated. For the white balance, there are two fixed standard values available, 3200°K and 5600°K for indoor- or outdoor shooting, and an automatic adjustment.

Using a GEN-Lock input with a BNC-adaptor makes it also possible to sync the CCD-camera with remote video signals (i. e. when several cameras are operated).

The camera module is available in NTSC or PAL, and is connected to the video optic module with a C-mount adapter. To guarantee optimum adjustments for the various image formats, the camera can be moved horizontally or vertically to center the image on the video monitor. Iris and focus can also be set mechanically.

Together with the AFP-2 and the correct optical adapter the CCD 2-FR provides unrestricted operation with the ARRIFLEX 35 III and ARRIFLEX 16 SR3.



Functions of the CCD 2-FR:

White balance	fixed adjustments for indoor shooting: 3200°K for outdoor shooting: 5600°K
AWB	Auto White Balance
AGC	Auto Gain Control
MGC	Manual Gain Control
Camera No.	3-digit display (0...9, A...D), which is inserted into the video image
Run indication	Blinking bar on the video image with flicker reduction ON and camera in RUN-position



VOM-2 / AFP-2 — flicker reduced images for PAL or NTSC standard

The asynchronism between the frame rate of the film camera and the video signal causes disturbing variations in brightness on the video image, the so-called flicker. The electronics of the VOM-2 or AFP-2 checks the current filming speed and reduces flicker to a minimum, using an image memory. Even with frame rates of 24 fps and a video frequency of 60 one-field-pictures (NTSC) the flicker no longer appears disturbing. Unrestricted rating of the video image is now possible. The flicker reduction works from 15 fps (PAL) or 17 fps (NTSC) on, and can be switched off at any time. When flicker reduction is ON, a small blinking bar indicates on the monitor that the ARRIFLEX camera is operating.

In addition, the integrated image memory offers the possibility to freeze an image and, at a later point of time, to compare it with a new camera set up. This function is especially useful with stop-trick shots.

Functions of VOM-2 / AFP-2

FR OFF	Flicker reduction in OFF-position: unrestricted screening of the camera's image.
FR ON	Flicker reduction in ON-position: display of the video camera's image when film camera is OFF. When film camera is in ON-position, screening of sub-image of the video camera (one-field-image of the video camera, one-field-image from the memory). Blinking bar indicates operation of flicker reduction on the monitor. Flicker reduction is automatically switched off at frame rates below 15 fps (PAL) or 17 fps (NTSC).
STORE	Memory mode: Screening of a stored one-field-image from the memory (limited colour use only).
COMPARE	Compare mode: one image from the memory and one real picture of the video camera are screened alternatively at a frequency of 50 Hz for PAL-signals (60 Hz for NTSC)



VIDEO-ASSIST-SYSTEM

Technical data

Colour video camera CCD 2-FR (NTSC/PAL)

Pick-up device:	1/2" (inch) Inter-Line Transfer CCD
Picture elements:	NTSC (525 lines, 60Hz) 768 (H) x 494 (V); 380 000 Pixel PAL (625 lines, 50 Hz) 752 (H) x 582 (V); 440 000 Pixel
Horizontal resolution:	NTSC 470 TV lines PAL 460 TV lines
Video-signal-to-noise ratio:	46 dB
Video output:	Composite signal 1V _{ss} , 75 ohms, sync neg.
Optical adapter:	C-mount
Temperature range:	0° to 40°C
Power supply:	DC +12 V
Power consumption:	approx. 3 W
Weight:	450 g

Video Optic Module VOM-2 (NTSC/PAL) Anti Flicker Processor AFP-2 (NTSC/PAL)

Video input:	Composite signal (from CCD 2)
Signal output:	Composite signal, PAL or NTSC (according to input signal) 1 V _{ss} , 75 ohms, (BNC bushing)
Horizontal resolution:	790 pixel/line
Vertical resolution:	PAL 603 lines (FR OFF) 301.5 lines (FR ON) NTSC 513 lines (FR OFF) 256.5 lines (FR ON)
Horizontal jitter:	max. +/- 2 ns
Voltage supply:	DC +12 V
Power consumption:	app. 4.2 W VOM-2 app. 5.6 W AFP-2
Weight:	950 g VOM-2 420 g AFP-2



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