

ARRIFLEX D-21

Main Features:

- Optical viewfinder
- ARRI Imaging Technology
- Cinematic image quality
- ARRIRAW or Mscope anamorphic
- 4:3 format sensor
- 35 format film lenses & depth of field
- 35 format film accessories
- Variable speed
- Simple operation
- Data and/or HD output
- Modular architecture

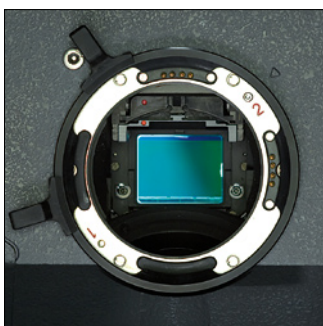


The ARRIFLEX D-21 is a film style digital camera that combines familiar high-end film style functionality, handling and creative options with the immediacy and economy of digital acquisition. As the top of the line digital camera from ARRI, the market leader in professional imaging, it is equipped with a number of unique features: an optical viewfinder, the Mscope anamorphic output, a 4:3 format sensor, simultaneous output of HD and raw data, simple operation and an unequalled film-like image quality.

The D-21's bright optical viewfinder has zero delay, works without power and shows an image area outside the primary image. Through ARRI Imaging Technology (AIT), the D-21 produces brilliant images with a cinematic look and feel, a high dynamic range, high contrast and the most film-like motion and color reproduction of any digital motion picture camera.

The camera's single, Super 35-sized CMOS sensor exhibits the same cinematic depth of field as 35 mm film. The industry standard PL lens mount accepts the same vast variety of prime, zoom and specialty film lenses used on 35 mm film cameras. Since the D-21 and the D-21 HD are the only digital high-end cameras with a 4:3 aspect ratio sensor, they easily accommodate all image formats, including anamorphic 2.40:1. The anamorphic image can be recorded either in data Mode, or in the new and innovative Mscope mode, utilizing a standard HD workflow.

Further film style features include variable frame rates from 1 to 60 fps, exposure compensated speed ramps, compatibility with ARRI film style accessories, simple to use controls and the robust construction and ergonomic design for which ARRI cameras are famous. In Data Mode, the D-21 outputs an uncompressed raw data signal with 12 bit/pixel, utilizing the full 4:3 sensor for a film-like 2K workflow. HD and Mscope Modes comprise a standard 16:9 uncompressed 10 bit/pixel HD signal. The camera's modular design allows upgrading when advances in sensor, electronics or firmware technology become available.



ARRIFLEX D-21 – Technical Data

Camera type: 35 format film style digital camera with an optical viewfinder.

Frame rate:

Mode	Setting	Camera Fps
HD Mode	HD422 (16:9)	1 - 60
	HD444 (16:9)	1 - 30
Mscope™	Mscope™ HD422 (4:3)	1 - 25
Data Mode	ARRIRAW (16:9)	1 - 30
	ARRIRAW (4:3)	1 - 25

All frame rates are crystal controlled and can be set with 0.001 fps precision.

Frame rates other than the standard HD video frame rates of 23.976 PsF, 24 PsF, 25 PsF, 29.97 PsF, 30 PsF, 48 PsF, 50 PsF, 59.94 PsF and 60 PsF can be achieved with a recorder that can interpret the Variframe Flag.

Exposure compensated speed ramps are supported by the electronic mirror shutter.

Aperture: 23.760 x 13.365 mm/0.9354" x 0.5262" in HD Mode
23.760 x 17.820 mm/0.9354" x 0.7016" max. in Data Mode & Mscope™

Lens mount: 54 mm PL, centered for Super 35, with Lens Data System (LDS) contacts, Flange focal depth 52 mm nominal

Display: Camera display on left side with individual buttons for: camera RUN, PHASE (electronic inching & mirror rotation), NORM-PS/CCU control, LOCK, MODE, SEL and SET. Allows setting programmable fps, beeper volume, beeper at start and/or stop, enable/disable mirror shutter, mirror shutter angle, frame counter.

Video Menu over composite video output for control of operational parameters: HD Mode/Data Mode, standard frame rates, white balance and color matrix, signal output range, contrast characteristic and sensitivity.

Shutter: Spinning, electronically adjustable reflex mirror shutter.
Adjustable to 11.2°, 22.5°, 30°, 45°, 60°, 75°, 90°, 105°, 120°, 135°, 144°, 150°, 172.8° and 180°

Viewfinder: Optical reflex viewfinder with interchangeable ground glass. Spherical or universal (adjustable to spherical and anamorphic) viewfinders available. Viewfinders are adjustable in two axes with automatic or manual image compensation, laterally extendable for left eye operation and show illuminated frame lines (ARRIGLOW, adjustable in brightness). Optional medium or long finder extender including magnifier. Optional heated eyecup.

Video: SD monitoring (PAL/NTSC video downscaled from captured image) with composite video or S-Video outputs

Signal output:

HD Mode – HD-SDI (SMPTE 292M):

- 1920 x 1080 4:2:2 YCbCr 10 bit @ 23.976, 24, 25, 29.97, 30 PsF

HD Mode – dual link HD-SDI (SMPTE 372M):

- 1920 x 1080 4:2:2 YCbCr 10 bit @ 48, 50, 59.94, 60PsF,
- 1920 x 1080 4:4:4 RGB 10 bit @ 23.976, 24, 25, 29.97, 30 PsF

Mscope™ – dual link HD-SDI (SMPTE 372M):

- 1920 x 1080 4:2:2 YCbCr 10 bit @ 23.976, 24, 25 PsF

Data Mode – ARRIRAW T-Link

(ARRIRAW transmission protocol mapped into RGBA dual link HD-SDI stream according to SMPTE 372M):

- 2880 x 2160 RAW 12 bit Bayer data @ 23.976p, 24p, 25p
- 2880 x 1620 RAW 12 bit Bayer data @ 29.97p, 30p

Recording: HD recording devices supporting HD-SDI (SMPTE 292M) or dual link HD-SDI (SMPTE 372M) signals for HD Mode operation. Optional on-board HD recording using solid-state memory recorder Flash Mag. ARRIRAW T-Link compatible recording devices for Data Mode operation.

Connections: 2x dual link HD-SDI out, 2x composite video out (CVBS), 1x S-Video out (Y/C), 1x power in (BAT), 1x 12 V accessory power out (Fisher 11-pin), 1x 24 V accessory power out (RS), 1x lens data display (LDD), 2x lens control system bus (LCS), 1x accessory interface (ACC), 1x camera control unit (CCU), 1 each focus, iris, zoom for lens motors.

Power: 24V DC (acceptable voltage range: 20.5 to 36 V DC)

Power consumption: 2.1 A @ 24 fps, 1.9 A in Standby

Sound: Less than 20 dB(A) @ 24 fps

Dimensions: Length: 39 cm/15.35"
Width (viewfinder left): 27 cm/10.83"
Height with handle: 30 cm/11.81"
Height without handle: 23 cm/9.06"

Weight (without lens): Body only: 8.6 kg/19.0 lbs
Body and viewfinder: 10.9 kg/24.0 lbs

Accessories: Accepts the whole range of ARRI matte boxes, 15 mm or 19 mm rod systems, follow focus and ARRI electronic accessories, Lens Control System (LCS), Lens Data System (LDS), Wireless Remote System (WRS), Wireless Remote Control WRC-2, Iris Control Unit for speed/iris ramps (ICU-1), Remote On/Off Switch (RS-4), External Synchronization Unit (ESU-1). Specifically for ARRIFLEX D-21/D-21 HD: Low mode support set for Steadicam operation or underslung use and top-mounting of accessories without bridge plate, Flash Mag Mounting Adapter (FMA-1), Fibre Unit and Fibre Remote for an optical link to the recorder

Misc.: Extra attachment points for rigging