

TECHNICAL SPECIFICATIONS

December 2007

High Definition Aerial Filming Services

CINEFLEX V14 HDTV GYRO STABILISED CAMERA SYSTEM

Aeroptics in-house developments include;

- 1/ GPS, 6 axis inertial, and gimbal positional data to deliver seamless integration, in real-time, with 3D CGI elements
- 2/ Industry exclusive remote controlled Circular polariser filter.
- 3/ Multiple battery & power supply options.
- 4/ Enhanced camera image quality and 3DGamma curve software
- 5/ Camera Operators colour HD viewfinder option
- 6/ Proven cold temperature operations minus 40 deg C to 20,000 ft

CAMERA SPECIFICATIONS

Sony HDC 1500L444 Digital 4:4:4 HDTV camera with Sony HKC-T1500 CCD block adapter
Sony HDC-1500L444 operating firmware V1.20
User Gamma software HZC-UG444
Camera Operators custom colour HD viewfinder.
RS422 port for e-mailing custom software and remote control.
RS232 port for inertial positional data applications

HDTV FORMATS;

1080HD
4:4:4 23.98P to 29.97P
4:2:2 23.98P to 59.94P (slow motion)
Includes 59.94P, 50P, 50i, 59.94i, 29.97P, 25P, 24P, 23.98P

720HD 50P and 60P

SDTV Formats:

PAL & NTSC 4:3 or 16:9

LENSES;

Interchangeable Fujinon HD lenses;

1/
Fujinon's highest performance Hodef lens HA 22 x 7.3 BERD
Zoom range; 22x (or 44x with 2x motorised extender)
88x for SDTV outputs
Focal length range; 7.3 mm to 321mm
Optional servo controlled Polarizing filter Fujinon EFL-127PL
Internal and external fixed lens flare mask options
Interchangeable / removable glass window

2/
Fujinon HA 42 x 9.7 BERD
Zoom range: 42x (or 84x with 2x motorised optical extender,
or 168x with electronic extender.)

RECORDING OPTIONS;

HDTV; Sony SRW-1 / SRPC-1 HD Portable Digital Recorder V 2.0 operating firmware
HDCAMSR format, 4:4:4 HQ or SQ, 4:2:2 HQ or SQ

SDTV; (PAL or NTSC / 16:9 or 4:3) including DVCAM, XDCAM, SD Betacam formats.

AJA HD10MD3 Downconverter
AJA HD10A HD component to HDSDI converter
Blackmagic HDLink HDSDI to DVI-D & HDMI with log gamma decoding.
Sony RMB-750 CCU camera remote control
Sony BVR-3 vtr remote control

MONITORS;

Apple 23" LCD HD Cinema display with helicopter power supply and floor rack mount.
Marshall 17" HDTV LCD operators monitor
Tektronic WFM-91 waveform monitor
Panasonic 7" SDTV pilots LCD (x 3)
Panasonic BT-LH1700W 17" HDTV LCD operators monitor
Sony LMD 9050 HDTV LCD operators monitor
Panasonic BT-LH80W HDTV monitor
Sony Bravia 40" LCD TV hdmi HDTV monitor

GIMBAL SPECIFICATIONS;

Gyro Stabilised resolution	5 axis to 0.001 degrees High performance digital servo and control
Outer Azimuth axis	360 degrees continuous slipping
Outer Elevation axis	+ 32 / - 140 degrees
Maximum slew rate	50 degrees / second
Roll / Horizon	Steerable vertical referenced or Steerable up to + / - 45 degrees
Maximum slew acceleration	200 degrees / second / second
Standard electrical input voltage	18 to 36 VDC at 16 amps
Alternate power options	12 VDC, 24 VDC or 110 - 230 VAC 50 / 60Hz
Self contained Battery option	Sony standard V-mount Lithium batteries
Continuous power	280 watts including SRW-1 VTR
Operating temperature	-34 deg C to + 45 deg C
Gimbal	25.1 kg x 370mm diameter hermetically sealed Variable speed steerable in Az, El, and Roll. Fog-Free window system Custom software for proven low temperature operation Custom 6 axis Positional and Inertial data for CGI and GIS over Live
Shipping weight	from 160kg - 5 pieces
System weight on AS350/AS355 Helicopter	Typically 82 kg including VTR

HELICOPTER MOUNTING OPTIONS;

Eurocopter AS350 / AS3550 series helicopter EASA STC (EU Countries type approval)
AS350 / AS3550 series helicopter UKCAA Major Mod STC type approval
AS350 D / B / BA / B2 series helicopter NZCAA Form 337 type approval
AS350 B3 and AS355N Fadec approval
- V.N.E. 130 knots (High skid and Low skid aircraft, LHS or RHS installation)
Pre-approved for all Australian, New Zealand and EU Registered helicopters; Gimbal orientated on aircraft for forward flight.
Modified AS350 Front Belly pan with centreline joint for portable shipping modification included in the above Approvals.
(110 available AS350 series New Zealand registered aircraft)

Robinson R44 & R44 11 series helicopter FAA STC (USA type approval) and EASA STC (EU Countries approval)
Pre-approved for all Australian, New Zealand, USA, and EU Registered helicopters - V.N.E. 115 knots
(100 available New Zealand registered aircraft)
(110 available Australian registered aircraft)

Both the R44 and AS350 series mounts above are "bolt-on" designs.
They can be rigged in one hour on any unmodified aircraft.

Other Aircraft mounts available

Mil-8, Bell 212, AS365, Hughes 500 C, D, E high and low skid, Bell 206/L, EC120, Cessna 185, Lockheed C130.

Vehicle mounts;

Quad Bike, Toyota 4WD, Snowmobile, Wheelbarrow, Boats, River Jet Boat, Camera Crane
& other applications from any 12 vdc, 24 vdc, or 110 - 230 VAC 50/60hz power supply.