

IsoluX[®] Medical A Brilliant Choice in Medical Fiber Optic Illumination

VIDEO SYSTEMS

Video Imaging System



Video Imaging System

IsoluX's video imaging system is comprised of three video camera options and one TriLux video signal processor. The TriLux will accept input from any the three IsoLux cameras and provides a signal for recording and/or displaying. All video systems are available in PAL or NSTC standards.

The IsoVu Headlight Video Camera is lightweight (1oz) with optional depth of fields.

Couple the TriLux Video Controller with a Video Headlight camera and illuminator. Display, transmit or record all your procedures for training or recording. Just remove the video camera and you can continue to use your headlight for all your other surgical needs not requiring video.

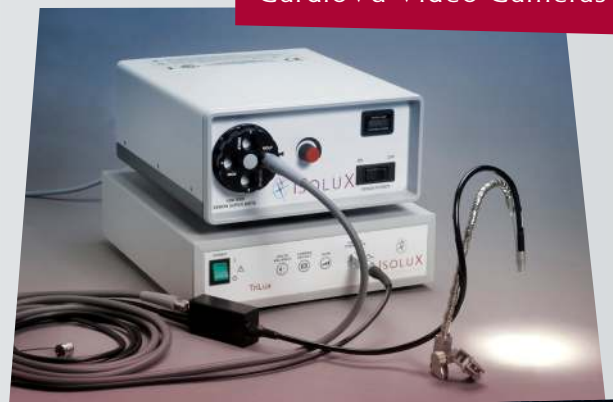
The EndoVu Endoscopic Video Camera is designed to be attached to a rigid endoscope.

The CardioVu Stationary Video Unit is a camera encapsulated within a fiber optic sheath and attached to a retractor clamp at the surgical site. This position allows the field to be illuminated and video taped from the same perspective with no parallax. The stationary setup allows everyone in the OR to see the surgical site, eliminating all interfering head movements and shadowing.

IsoVu Video Cameras



CardioVu Video Cameras



TriLux Controller

- Accepts all three IsoluX camera options
- Automatic White Balance
- Automatic Gain Control
- FDA approved, UL and CSA listed

Dimensions W x H x D:	12.60" x 3.98" x 14.32" (320 x 101 x 364 mm)
Weight:	8.0 Lbs. (3.63 Kg)
Power	100-240 V~, 50/60 Hz, 35 VA
TV system	NTSC: 525 lines, 30 frames, 2:1 Interlace
Horizontal resolution	> 480 TV lines at center (luminance channel)
Signal-to-noise ratio	> 44 dB @ luminance channel
Electromagnetic Compatibility (EMC) in acc. With	EN / IEC 60601-1-2
High Frequency Surgical Equipment	90 kHz 9000V p-p maximum
Type of Applied part	CF
Protection class in accordance with EN / IEC 60601-1; (UL 60601-1 / CSA C22.2 No. 601.1 – for USA / Canada)	Class I
Degree of protection against foreign solids	IP20 \geq 0.49" (\geq 12.5 mm) diameter
Mode of operation / duty factor	Continuous operation
Degree of protection when flammable gases are present	Not Category AP or Category APG Equipment

Controller Interfaces

Video Outputs	NTSC Output Level	PAL Output Level
S Video (Mini DIN 4-pin)	2x Y: 1.0 Vp-p / 75 Ohm 2x C: 0.286 Vp-p / 75 Ohm	2x Y: 1.0 Vp-p / 75 Ohm 2x C: 0.3 Vp-p / 75 Ohm
Video (BNC)	2x 1.0 Vp-p / 75 Ohm composite	
Remote Outputs	RCA Phono Jack <10 Ω between tip and ring at closure, + polarity on tip; <50V, <50mA	

Cameras

EndoVu	CardioVu	PAL Output Level
<ul style="list-style-type: none"> • Mounts to standard V-Mount lens assembly • Push button remote for stop photo or other output via the camera controller • Sensitivity: 3 Lux @ F/1.4, +6dB 	<ul style="list-style-type: none"> • Camera centered in semi-rigid fiber bundle • Mounts directly to retractor at surgical site via adjustable gooseneck • Depth of Field: 45 to 75mm • Width of Field: 55mm @ 60mm distance • Viewing Angle: 0 degrees 	<ul style="list-style-type: none"> • Attaches to Surgical Fiber Optic Headlight • Common field of view for all in the OR • Weighs less than 1 oz. • Depth of Field: 356 to 914mm • Width of Field: 152mm • Viewing Angle: 0 Degrees • Magnification: 1.5X

PARAMETER	EndoVu	CardioVu	IsoVu
Degree of Protection against the ingress of liquids	IPX7 (watertight)	IPX7 (watertight)	IP60 (dust-tight)
Type of Applied part	CF	CF	CF
Weight	9 oz. (255g)	9 oz. (255g)	3.5 oz. (100g)
Dimensions Camera Head	\varnothing 0.90" x 1.15" x 2.05" (22.9 x 29.2 x 52.1 mm)	\varnothing 0.32" x 1.38" (8.1 x 35.1 mm)	\varnothing 0.31" x 2.23" (7.9 x 56.6 mm)
Camera Cable Length Remote Outputs	10' (3.0m)	22" (0.6m) to intermediate box, 10' (3.0m) to connector	12' (3.7m)
Image Sensor	1/2" format color CCD	1/4" format color CCD	1/4" format color CCD
Pixels, effective	NTSC: 768(H) x 494(V) PAL: 752(H) x 582(V)		
Lens Mount	Standard V-Mount	Built in lens	Built in lens

ORDERING INFORMATION

05-001 TriLux Video Controller, NTSC

05-001P TriLux Video Controller, PAL

05-002 CardioVu Camera Head, NTSC

05-002P CardioVu Camera Head, PAL

05-003 EndoVu Camera Head, V-Mount, NTSC

05-003P EndoVu Camera Head, V-Mount, PAL

05-004 TriLux Camera, NTSC

05-004P TriLux Camera, PAL