The ProViewTM XL50 Head Mounted Display



The XL50 is the newest member to the ProViewTM family of head-mounted displays. Its full-color XGA performance is a welcome addition for demanding tasks that require ultra-high resolution.

The ProViewTM XL50 achieves its unparalleled color performance and high contrast ratio using Kaiser Electro-Optics' (KEO) proprietary technology. Its expanded color gamut takes the XL50's performance far beyond other display systems.

The XL50 utilizes the ProViewTM comfort-fit headband system.

Performance Parameters*

DISPLAY	Type LCD	Full color, active matrix TFT, high speed polysilicon LCDs, XGA Resolution (102 x 768) XGA resolution is 1024 horizontal pixels by 768 vertical lines
	Resolution/Eye	2.34 arcmin/color group
	Brightness	5-50 fL (adjustable)
	Contrast	40:1
OPTICAL	Field of View	50° diagonal, 30° (V) x 40° (H)
	Transmission	Non see-through
	Optics	Color-corrected, aspheric refractive lens - independent optical paths for each eye
	Eye Relief	Eyeglasses compatible
	Exit Pupil	Non pupil forming
	Overlap	100%
	Stereo/Mono	Yes
	Color Coordinates	Red: u' = 0.5099 v' = 0.5228
		Green $u' = 0.1033$ $v' = 0.5774$
		Blue $u' = 0.1314$ $v' = 0.2250$
MECHANICAL	IPD	Independent left/right
	IPD Range	55 – 75 mm
	HMD Weight	33 ounces
	Headtracker	Accommodates magnetic and inertial tracker sensors
CONTROL UNIT	Video Inputs	One or two XGA 1024 x 768, H&V – TTL, Analog 0.7 V P-P, 75 ohms, 60 Hz vic
		inputs Autosense for stereoscopic or monoscopic operation
		Internal and external sync
	Horizontal Scan Rate	48.363 kHz
	Vertical Scan Rate	60.004 kHz
	Genlocked Inputs	Independent phased locked loops for left and right eye
	Cable Length	20 feet
	Video Outputs	2 XGA video loops to display monitor
	Controls	Audio adjust
	Indicators (LED)	Power on/off
	Connectors	Video in
		XGA, 15 pin DA, female, (video in) 2
		XGA, 15 pin DA, female, (video out for monitor) 2
		BNC barrel connectors, RGB H&V, (video in) 2 sets
		RCA connectors, (stereo audio com pass through) 2
		(cables are not provided to either video or audio connectors)
	Power	85 - 264 VAC, 47-440 Hz, 25W (power cable included)

^{*}Specifications are preliminary and subject to change

Kaiser Electro-Optics, Inc.

2752 Loker Avenue West, Carlsbad, CA 92008

Tele: (760) 438-9255 Fax: (760) 438-6875 e-mail: info@keo.com