











# projection design®

# FR12 series - Remote Light Source™ projectors

The projectiondesign FR12 RLS™ series of projectors is truly revolutionary. Building upon the successful F12 series projectors, the FR12 RLS employs the new Remote Light Source technology to remove the lamp from the projector, creating a near-silent projection head that can be used in a range of applications with noise-free operation and simplified maintenance.



The Remote Light Source is rack mountable, and can be installed in a standard rack up to 30 metres away from the projection head.

#### FR12 series

The FR12 projector head is based on the successful F12 projector series and includes the same high performance signal compatibility, with high resolution digital and analog signals including HDMI, DVI and HD15 inputs. Power, control and signal connection panel on the FR12 is the same layout used on the F12. The FR12 is available in three native resolutions: WUXGA, 1080p, and SXGA+ for professional applications, with options for colorwheel and professional-grade lens configurations.

#### The Remote Light Source™

The patent pending FR12 Remote Light Source (RLS™) concept relocates the lamps and colour wheels from the projector to a rack-mount enclosure positioned up to 30m away from the

projector head. Light from the RLS illuminates the imaging head via the innovative Liquid Light Guide (LLG). The result is a compact, ruggedised, virtually maintenance-free projector with near-silent operation and simplified maintenance for the lamp. Since there's no lamp in the projection head, the FR12 is capable of installation without restriction on projector orientation, including portrait mode and other extreme projector angles – vastly improving the range of applications for the FR12.

#### The Liquid Light Guide

The Liquid Light Guide (LLG) connects the FR12 to the Remote Light Source. The LLG is filled with a pure water-based liquid which efficiently transmit light from the RLS to the FR12. The LLG is available in three installation-ready configurations at 10, 20 and 30 metres in length, which means that the FR12 projection



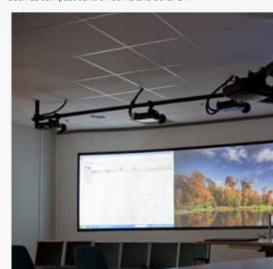
The Liquid Light Guide con the Remote Light Source L

head can be located well away from the RLS, isolating the image from heat and fan noise.

#### RealColor™ colour management

Like the F12, the FR12 projector head employs the exclusive projectiondesign RealColor colour management system. RealColor provides a unique method to quickly calibrating and setting up perfectly matched images for any number of projectors. RealColor can alter imagery by changing simple characteristics such as the colour temperature of the image – to adjust perfectly along the black body curve, or very complex attributes such as relative saturation and x/y coordinates for each colour.

#### For a broad range of applications FR12 RLS configuration options make this innovative system an ideal solution for noise-sensitive installations such as compact control rooms and other 24/7





p to 30 metres away.

installations, or even small post production suites, and its light weight design makes the FR12 ideal for motion platforms and other simulators where access to traditional projectors is limited.

# Ultra simple maintenance

The FR12 projector head and Liquid Light Guide necessitate extremely low maintenance. The main maintenance activities are performed at the rack-mounted RLS, making periodic lamp replacement easy with quick access to the lamp holder.

#### ProNET 2.0 Compatible

Network-based projector asset management and control is available through the acclaimed ProNET 2.0 control software included with each projectiondesign projector.



# **Technical Specifications**

# projection head

1 /		
projection head	technology	single chip DLP® technology
	concept	Remote Light Source installation projector
	resolutions options, native	1400 x 1050 / 1920 x 1200 / 1920 x 1080
	Input resolution, max	1920 x 1200
optics and lenses	wide angle lens	1,03 : 1 / 0,95 : 1 / 0,95 : 1
	standard zoom lens	1.70 - 2.20 : 1 / 1.6 - 2.0 / 1.6 - 2.0
	lens operation	manual zoom and focus
	lens shift / offset, wide angle lenses	109% / 110% / 100%
	brightness	sx+: up to 3300 / 2200 / 1700 <sup>1)</sup>
		wuxga: up to 3000 / 2000 / 1500 $^{1)}$
		1080p: up to 3000 / 2000 / 1500 <sup>1)</sup>
	contrast	up to 4000 : 1
Inputs and outputs	computer connectivity	HDMI, DVI-D, 2 x VGA
	video connectivity	HDMI 1.3, component, S-video, composite
	control	TCP/IP , RS232, 1x 12V trigger, RC
	ProNet compatible	yes
general	weight	about 2.5 kg
	operating noise level	<24 dB(A)
	dimensions in mm (d w h)	268 x 300 x 104
	standard limited warranty	2 years
	optional extended warranty (conditions apply)	up to 3 years (total warranty period 5 years)
		1) 10m Liquid Light Guide

# remote light source

Remote Light Source	lamp options	330W VIDI UHP™
	lamp life full power / eco (typical)	2000 / 2500 hrs
	colour wheel options	VizSim/Graphics/High Brightness
general	weight	7 kg
	dimensions in mm (d w h)	309 x 482.6 x 132.6 (3U)
	standard limited warranty	2 years
	optional extended warranty (conditions apply)	up to 3 years (total warranty period 5 years)
	lamp warranty	500 hours or 90 days, whichever comes first



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