

FR12 series

Remote Light Source technology projector



- Light source can be located up to 30 meters away
- Available with WUXGA, 1080p or SXGA+ resolution
- Lightweight projector with low noise level

The FR12 series revolutionizes AV integration. With the Remote Light Source technology the projector bulb is removed from the projection head, up to 30 meter (100 feet) away. It takes away all traditional concerns such as noise and heat management, installation orientation, lamp replacement and maintenance scheduling.

FR12 series

The FR12 projector head is based on the successful F12 projector series and offers the same high-performance signal compatibility with high-resolution digital and analog signals including HDMI, DVI and HD15 inputs. The power, control and signal connection panel of the FR12 is the same as the F12. The FR12 is available with three native resolutions: WUXGA, 1080p, and SXGA+ for professional applications, with various color wheel options and professional-grade lens configurations.

Remote Light Source

The FR12 Remote Light Source (RLS) concept relocates the lamps and color wheels from the projector to a rack-mount enclosure that can be placed up to 30 meters 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, rugged, virtually maintenance-free projector with silent operation and simple lamp maintenance. 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 10, 20 and 30 meter in length, which means that the FR12 projection head can be located away from the RLS, isolating the image from the heat and fan noise.

RealColor color management

Like the F12, the FR12 projector head is fully compatible with the RealColor color management system. RealColor provides a unique way to quickly calibrate and set up perfectly matching images for any number of projectors. RealColor can alter imagery by changing simple characteristics such as the color 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 color.

For a broad range of applications

FR12 RLS configuration options make this innovative system an ideal solution for application in which a low noise level is important such as compact control rooms and other 24/7 installations and small postproduction suites. Thanks to its lightweight design, the FR12 is also ideal for motion platforms and other simulators where access with traditional projectors is limited.

Ultra simple maintenance

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

ProNet 2.0 Compatible

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

Product specifications

FR12 SERIES

General specifications

Concept	Light source located separately, and remotely, from projection head
3D capability	INFITEC EX@ 3D
Resolution	SXGA+ (1,400 x 1,050) 1080p (1,920 x 1,080) WUXGA (1,920 x 1,200)
Brightness	Up to 3,300 lumens (With 10m LLG)
Technology	Remote Light Source technology DLP projector
Contrast	Up to 3,000 : 1 (on/off, prism less optical design)
Aspect ratio	4:3 (SXGA+) 16:9 (1080p) 16:10 (WUXGA)
Display colors	30 bit RGB
Latency	~22ms on graphics port
Computer graphics formats	WUXGA, UXGA, SXGA+, SXGA, XGA, SVGA, VGA 1,920 x 1,080 -640 x 480 pixel resolution custom formats available RGBHV, RGBS, RGsB
Horizontal scan frequencies	15 -150 kHz (resolution dependent)
Vertical scan frequencies	48 -190 Hz (resolution dependent)
Video formats	EDTV (576p, 480p) HDTV (1080p, 1080i, 720p) SDTV (576i, 480i) NTSC, PAL, SECAM
Lens operation	Focus and Manual zoom
Lenses	Standard projection lens <ul style="list-style-type: none">▪ Lens number: EN08 / 503-0034-00▪ Focus range: 1.0 - 15.0 m▪ Throw ratio<ul style="list-style-type: none">• 1.73 - 2.17 : 1 (SXGA+)• 1.60 - 2.00 : 1 (1080p)• 1.60 - 2.00 : 1 (WUXGA) Wide Angle <ul style="list-style-type: none">▪ Lens number: EN10 / 503-0035-00▪ Focus range: 1.5 - 20.0 m▪ Throw ratio<ul style="list-style-type: none">• 1.03 : 1 (SXGA+)• 0.95 : 1 (1080p)• 0.95 : 1 (WUXGA)
Image width	1 -3.5 m
Light source	330W UHP
Lamp lifetime	Up to 2,000 hours (Full power) Up to 2,500 hours (Eco mode)
Computer inputs	1 x HDMI 1.3a 1 x DVI-D 2 x VGA
Video Input	1 x HDMI 1.3a 1 x DVI-D 1 x Composite 1 x S-video 1 x Video
Control possibilities	1 x RJ-45 TCP/IP 1 x 9-pin D-SUB RS232 1 x USB 1 x RLS Comms 1 x 25-pin DSUB
Dimensions	300 x 104 x 278 mm (WxHxD)
Weight	2.5 kg
Shipping Dimensions	440 x 440 x 380 mm (WxHxD)
Shipping Weight from Factory	8.4 kg
Power requirements	RLSP1: 5.0-1.7A, ~100-240V, 50-60Hz RLSSL1: 4.3-1.8A, ~100-240V, 50-60Hz
Conformances	CE, FCC Class A, UL, cUL and cCSAus
Operating temperature	10 -35 °C
Storage temperature	-20 -60 °C
Operating humidity	20 -80% RH
Storage humidity	10 -90% RH
Color	Black metallic
Warranty	24/7, 3 years, 500 hours or 90 days on lamp (whichever comes first) up to 5 years total warranty available. conditions apply.
24-7 documentation	This projector is designed and warranted for heavy duty 24/7 operation. Specific measures and design considerations have been made in order for it to comply with stringent requirements in challenging applications.
MTBF	25,692 hours
BTU per hour	less than 1,650

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