

### professional projector series

The projectiondesign professional series of projectors include high resolution, high performance products made and conceived especially for graphically challenging appllications such as scientific visualisation, motion platform simulation, medical imaging, and public displays.

As our utmost concern is image quality and operational reliability, all professional series projectors are available with 24/7 operation warranties, and a wide range of configuration options to ensure the best possible application fit and customer satisfaction.

## preliminary FL32 series

The FL32 is the first completely customisable professional front projector based on LED lighting technology. projectiondesign's ReaLED™ technology provides unmatched predictability. With an incredible 100,000 hours uninterrupted light output\*, extremely low power consumption, no required recalibration or adjustments, and no lamp changes – it is the ultimate in reliability, and Total Cost of Ownership

#### What is ReaLED™

LED (Light Emitting Diode) lighting technolgy is nothing new and exciting, having been around for many years, in all sorts of electronics and appliances. The main reason for this is its unique combination of reliability, low power consumption, and application adaptability. ReaLED is projectiondesign's implementation of high power LED lights; one per Red, Green, and Blue colour, and paired with our unique, patented optical design. This combination results in a large range of features that benefits the user in every possible way.

#### Predictable Total Cost of Ownership

Mission critical installations and applications are everywhere. From process control and infrastructure and utilities monitoring, through safety and defence applications, projectors are expected to run 24/7 year after year. The FL32 series can do this. Unlike traditional dicharge lamp based projectors, the FL32 does not require any periodical lamp replacements, and only very low frequency maintenance. Additionally, with its low power consumption\*\*, operating and owning costs become extremely low, and totally predictable.

#### Real benefits from ReaLED technology

ReaLED technology addresses numerous performance aspects with traditional lamp based systems. Lamps change performance characteristics as they go through their usable lamp life by changing colour temperature, reducing their light output, and becoming more likely to experience premature shut off. ReaLED counteracts all this. It stays completely stable over its entire life time. It does not drop significantly in light output. Colours stay consistent. And, importantly, it is very unlikely to experience any premature shut down, and if it does, it will not damage itself, or any other part of the projector.

#### Greatly enhanced image quality

Using ReaLED technology improves on image quality in many ways. Paired with single chip DLP® technology - sequential in nature - LED increases the active colour cycle to 24 times per frame, or even up to 48 times per frame. There is no colour wheel. The result is no more sequential colour artefact, and no disturbing colour level processing artefacts, otherwise known as PWM (Pulse With Modulation) artefacting, reducing colour smear, or blur, with fast moving images. But one of the greatest features of LED lighting is its ability to reproduce colour. Using three independent LED source, colours are pin sharp, with the accuracy of a laser system. Primary colours are extremely precise, and LED provides a much larger, and more accurate colur gamut than any other lighting technology - perfect for anyone looking to calibrate to accurate, natural colours.



# projection design® preliminary

#### Technical specifications

projector		LED based DLP® digital projector	
display	technology	single chip DMD™ with ReaLED technology	
	concept	all-glass optical design with lens shift	
	available resolutions	1920 x 1200, 1920 x 1080	
	brightness	about 600 ansi lumens	
	contrast ratio	infinite (not measureable) (on/off)	
		> 2000 : 1 system contrast	
		up to 7500 : 1 adjusted	
	colours	30-bit	
	colour management accuracy	$\pm0.002$ on x, y, z axis with VizSim colour wheel	
input signal compatibility	image processing latency computer	~ 22 ms on graphics port up to 1920 x 1200 pixels	
		RGBHV, RGBS, RGsB	
	horizontal scan frequency	15 - 150 kHz	
	vertical scan frequency	48 - 190 Hz	
	video	HDTV (1080i, 720p, 576i/p, 480i/p)	
		NTSC 3.56/4.43, PAL BGHI, M, N, SECAM	
	bandwidth	205 MHz analog RGB	
optics	available lenses	165 MHz digital RGB (DVI or HDMI)  0. 79 : 1 ultra wide angle	
		1.16 : 1 wide angle	
		1.24 - 1.60 : 1 wide angle zoom	
		1.60 - 2.32 : 1 standard zoom	
		2.37 - 3.79 : 1 short tele zoom	
		3.80 - 6.50 : 1 long tele zoom	
	focusing distance	0.5 - 40m (see separate lens specifications)	
	optical lens shift	vertical/horisontal	
	illumination	ReaLED™ technology	
	lamp life (typical expected)	>100,000 hours	
		up to 24x (to be confirmed)	

connectivity	computer	1x HDMI (1.3)
		1x DVI-D
		1x 15-pin DSUB
		1x BNC x5
	video	1x HDMI (v1.3) (HDCP)
		1x DVI-D (HDCP)
		1x RCA x3 YUV
		1x 4-pin mini DIN Y/C
		1x RCA composite video
	control and communication	1x RJ45 TCP/IP network port
		2x RS232 9-pin DSUB (in / out)
		1x USB - mouse control & firmware upgrade
		2x 12V (60mA) triggers (screen drop / aspect)
		1x RC repeater, 3.5mm mini jack
	other	2x configurable XPort™ (front- / back end)
supplied accessories	cables	4m power cord (country dependant)
	other	backlit IR remote control, ceiling mount cable cover
		product documentation
general	dimensions (dwh)	376 x 510 x 223 mm (ex. lens)
	weight	about 12.6 kg (ex. lens)
	environmental	RoHS, WEEE
	security	4-digit PIN code, Kensington lock
	power requirements	100 - 240 VAC, 50/60 Hz, +/- 10%
		<1050W power consumption
	BTU/hr	<2900
	conformances	CE, CSA "C/US", FCC Class A, CCC
	operating temperature	0 - 40°C / 32 - 104°F, 0 - 1500 m
		0 - 35°C / 32 - 95°F, 1500 - 3000 m
	operating and storage	20 - 90% RH
	available colours	black metallic, silver metallic
	warranties	2 years, 24/7, 500 hours or 90 days on lamp
		Up to 5 years total extended warranty available.



#### Available versions

resolution	1920 x 1200	1920 x 1080		
part number	101-1452-08	101-1451-08		
Available colour: black metallic.				























