

Spectrum 45 RYGB

PRODUCT SPECIFICATION SHEET



The new 2022 Spectrum series is the ultimate result of our know-how merged with the latest laser technology and the wishes of laser display professionals worldwide.

Beautifully and practically designed Spectrum projectors offer world-class performance, superb beam quality, a wide range of colours, inspiring features to help you succeed, and comprehensive control options for easy integration into existing systems.

The new Spectrum is offered in three versions - **30 Watt ROGB, 33 Watt RYGB, and 45 Watt RYGB fitted with either Orange or Yellow OPSL.**

Due to our latest breakthroughs in beam-shaping techniques, all these models produce an enormous amount of luminosity, meaning they are seriously bright!

In addition, the rigid foam aluminium chassis with cushioned heatsink, advanced thermal management and ergonomics make working with Spectrums stressless, exciting and fun.

With the 2022 Spectrum, you can sit back, relax and focus on your creativity.

This 45 Watt Spectrum is the most powerful laser projector we manufacture. But no worry - visibility-wise, it will easily beat many other more powerful lasers. We can promise you that!

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SPECIFICATIONS

Source Type:	Semiconductor laser diode + OPSL Full-colour RYGB laser projector
Suitability:	Outdoor laser displays [atmospheric, abstract, text, animations]
System control:	FB4-SK [Ethernet, ArtNet, DMX, ILDA PC, Lighting Console or Autoplay]
Compliant with:	EN 60825-1
Ingress Protection rating:	IP20, or IP54 with the optional Rain Cover installed [certification in progress]
Weight [kg]:	31
Size [WxHxD, mm]:	491 x 310 x 396 [Technical Drawings are in the SUPPORT section of this page]
Guaranteed opt. output:	45 Watts
Red Yellow Green Blue [W]:	9 5 13 18 [*note]
Wavelengths [nm, ±5nm]:	637 577 OPSL 525 455
Beam size [mm]:	10 x 10
Beam divergence [mrad]:	0.8 mrad [full angle, **note]
Modulation [kHz] type:	100 analogue
X-Y scanners:	Saturn9 30 Kpps @ 8°, max. scanning angle 40° on both axes
Power requirements [V] Input:	100-240/50-60Hz Neutrik powerCON TRUE1
Max. power consumption [VA]:	1200
Operation temperature [°C]:	10-35, or -20 to 40 when installed in the Monsoon outdoor enclosure
Included in the set:	Heavy-duty flight case, 1.5M power lead, 25M Ethernet rj45 signal cable, E-STOP remote with 30M 3-pin XLR cable, set of 4 safety keys, interlock connector [for the USA only], USB memory stick with the user manual. Pangolin QuickShow laser control and creation software is available for FREE download.
HW features:	All the basic system settings and adjustments such as power output adjustment for each colour, X & Y axes invert, X & Y size and position, etc. are managed via the built-in FB4 control interface. Scanning system overload protection. Colour Balance display mode.
Laser safety features:	Keyed interlock, emission delay, magnetic interlock, scan-fail safety, fast electromechanical shutter [reaction time <20ms], adjustable aperture masking plate, Emergency STOP system with keyed remote and manual RESTART button.
*note	Due to Advanced Optical Correction technology used in Kvant systems, the real power output of each laser module installed within the system may slightly differ from its specification. This doesn't affect the total guaranteed power output of the system.

****note**

The beam divergence total is calculated as an average arithmetic value of all individual colours. The divergence of each colour is calculated as:

1. FWHM of the beam cross-section for round beams, or
2. The arithmetic average of the beam's horizontal and vertical divergence for all rectangular beams.