

# Beam Brush 10

## PRODUCT SPECIFICATION SHEET

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The Beam Brush 10 projector is a professional full-colour RGB laser display system that, apart from all conventional laser effects, **can also change the size of the projected beam in real-time.** This unique feature makes it capable of projecting laser graphics, animations and abstracts at a whole new level. Furthermore, this enables replicating **the effects of moving heads and wash lights** - making the Beam Brush laser projector suitable and effective for a much larger variety of lighting applications and with an unlimited number of gobos, as those can be programmed in the software.

Finally, the ability to change the size of the projected beam (which also changes the beam's intensity) can be, **under certain circumstances**, beneficial for safety during audience scanning shows.

*This does not mean that the Beam Brush system can be safely and legally used for audience scanning without further measures (such as PASS, Safety scan lens, and variance (US)).*

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### SPECIFICATIONS

<b>Source   Type:</b>	Semiconductor laser diode   Full-colour RGB laser projector
<b>Suitability:</b>	Laser graphics displays   Indoor aerial beam shows   Audience scanning shows [the variable beam size may help to fulfil safety criteria]
<b>System control:</b>	FB4-SK [Ethernet, ArtNet, DMX, ILDA   PC, Lighting Console or Autoplay]
<b>Compliant with:</b>	EN 60825-1, FDA, TUV Laser Safety
<b>Weight [kg]:</b>	13
<b>Size [WxHxD, mm]:</b>	339 x 168 x 382
<b>Guaranteed opt. output:</b>	9.15 watts
<b>Installed modules R   G   B [W]:</b>	2.2   3.5   4.5 *note
<b>Wavelengths [nm, ±5nm]:</b>	637   525   445
<b>Beam size [mm]:</b>	5 x 5
<b>Beam divergence [mrad]:</b>	0.8 mrad **note   applies when Beam Brush is not active
<b>Analogue modulation [kHz]:</b>	100
<b>X-Y scanners:</b>	ScannerMAX 506 Compact, 35 kpps@8°, max. scanning angle 50° on both axes [More options in the UPGRADES section of this page]
<b>Power requirements [V]   Input:</b>	100-240/50-60Hz   Neutrik powerCON TRUE1
<b>Max. power consumption [VA]:</b>	340
<b>Operation temperature [°C]:</b>	5-35 [-20 to +35 when installed in Monsoon protection enclosure with AC unit]
<b>Included in the set:</b>	Heavy-duty flight case, 1.5M AC power cable, 10M Ethernet rj45 signal cable, E-STOP Remote with 10M 3-pin XLR cable, Set of 4 safety keys, Interlock bypass dongle [supplied for the USA only], USB memory stick with the user manual, QC certificate. Pangolin QuickShow laser control and creation software is available for FREE download.
<b>HW features:</b>	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.
<b>Laser safety features:</b>	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.
<b>note A:</b>	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.
<b>note B:</b>	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.