

LASER TECHNIQUE

PROSCAN+ 5 and 60mW USER INSTRUCTIONS

SAFETY AND USER MAINTENANCE:

- 1. LASER BEAM PROJECTIONS MUST BE ABOVE HEAD HEIGHT, AND EXPOSURE TO REFLECTED OR PROJECTED BEAMS MUST BE AVOIDED.**
- 2. BEFORE OPERATION THE PROSCAN MUST BE CONNECTED TO A SUITABLE MAINS PLUG. THE UNIT MUST BE EARTHED AND PROTECTED BY A 3 AMP FUSE.**
- 3. THE LASER MUST ONLY BE OPENED AND SERVICED BY QUALIFIED PERSONAL.**
- 4. THE LASER CANNOT BE CONNECTED TO A DIMMER SYSTEM, DAMAGE MAY OCCUR IF IT IS.**
- 5. THE LASER CAN ONLY BE USED INSIDE AND MUST NOT BE USED OUTSIDE.**
- 6. THE FRONT LASER OUTPUT WINDOW AND MIRROR MUST BE CLEANED FREQUENTLY TO REMOVE DUST AND SMOKE PARTICLES FROM THE PROJECTION WINDOW WITH A NON ABRASIVE GLASS CLEANER AND COTTON CLOTH.**
- 7. CARE MUST BE EXERCISED WHEN HANDLING THE PROSCAN. IT CONTAINS FRAGILE COMPONENTS WHICH MAY BE DAMAGED BY KNOCKS OR EXCESSIVE FORCE.**
- 8. KEEP THE LASER UNITS AWAY FROM DIRECT SOURCES OF SMOKE AND POSITION IN AREAS WHERE THERE IS A FLOW OF CLEAN AIR TO PREVENT OVERHEATING. DO NOT OBSTRUCT VENTILATION GRILLS, ALLOW A MINIMUM OF 100mm CLEARANCE ALL AROUND THE LASER HEAD.**

The manufacturer Laser Technique holds no liability for the use of this product or of any damage which may result from its use, it is the users responsibility to operate the laser in a safe manner. Specifications may change without notice.

GENERAL OPERATION AND DESCRIPTION:

1. The PROSCAN+ head has the following features:

- projection window and panning mirror, where the laser patterns project out from,
- IEC mains input plug, which must be connected to the respective live, neutral, and earth lines,
- 15 way D socket (control signal output) and plug (control signal input) connectors.

2. The PROSCAN controller has the following features:

- front panel controls,
- 3 core mains lead, which must be connected to the respective live, neutral and earth lines,
- 15 way d socket connector (master control signal output),
- ¼" jack connector (input for audio signals in the range of 0.5vrms - 3.0Vrms).

3. Controller functions and operation:

- KEY : Turns the controller on and off,
- BEAM : Turns the laser output on and off, a red light indicates laser emission,
- RESET : Synchronises all PROSCAN heads to the same starting point and pattern,
- STEP RATE: Controls how quickly the patterns step. a yellow light indicates rate. Can be adjusted continuously,
- AUTO / MANUAL : Selects the mode that the patterns are accessed. A green light indicates auto mode, and no light, manual mode,
- PATTERN AUDIO : Allows patterns to be modulated, with an external signal if present on the jack input, a yellow light indicates audio mode,
- PATTERN : When in manual mode selects the pattern type to be displayed, red light will light to that corresponding pattern. In auto mode light shows pattern in current chase sequence,
- FULL : When a mixed colour laser is used, allows all colours to be displayed at the same time, red light indicates this function,
- BLUE : When a mixed colour laser is used, allows only the blue component to be displayed, blue light indicates this function,
- GREEN : When a mixed colour laser is used, allows only the green component to be displayed, green light indicates this function,
- EFFECT : When a mixed colour laser is used, this cycles the colours, red light indicates this function,
- SERVO AUDIO : Steps the panning mirror in time to the beat of the external audio signal if connected, a yellow light indicates audio mode,
- SWEEP : Steps the panning mirror automatically at a fixed rate determined by the sweep rate, a red light indicates sweep mode,
- SWEEP RATE : Controls how quickly the panning mirror steps, a yellow light indicates rate. can be adjusted continuously,
- STEP : When audio and sweep controls are off, will step the panning mirror one point at a time.

4. Before operation the PROSCAN+ head must be positioned in the required manner and connected to a suitable power point. The 15 way control lead may be connected from the controller to the head. If there is a audio source available this may also be connected into the controller. The system is now ready for operation. The key switch on the controller may be turned to the on position.

PROSCAN+ HEAD 5mW (60mW) SPECIFICATIONS:

OPTICAL:

Laser Source	: Diode pumped ND:YAG, frequency doubled, (Laser Diode), Maximum Optical
Power	: 5mW (60mW),
Classification	: 3A (3B),
Wavelength	: 532nm GREEN, (650nm CHERRY RED),
Beam Divergence	: 1.2mrad, (2.5 mrad) ,
Beam Diameter	: 1.0 mm (2.5 x 7.5mm),
Laser Life	: 3000 Hours (1000 Hours),
Optics	: Front surface enhanced aluminium mirrors with Anti Reflective coated output window,
Shutter	: Solid State Switching ,
Maximum Scan Time	: 25mS exposure every 300mS.

EFFECTS:

- 16 Pre-set Patterns,
- 120° Pan projection,
- 20° Pattern divergence angle,
- 2 Scanners

POWER SUPPLY:

- Linear power supply electronics and lasers,
- 95 - 130 or 190 - 250 VAC operation by internal selection (208 - 240 VAC),
- 25 (20) Watt power consumption.

CONFORMITY / SAFETY FEATURES:

- CE Conformity to : EN 55011:1991 CLASS B (conducted and radiated),
EN 61000-4-2:1995,
EN 61000-4-3:1995,
EN 61000-4-8:1994,
LOW VOLTAGE DIRECTIVE,
- Scanner Failure Protection. If one or both scanners malfunction laser source will be shut down,
- 60mW Pulse Train MPE=0.952 J/m, Energy density at 3.9m in medium density smoke = 0.9407 J/m.

PHYSICAL (packaging size and weight includes controller):

System Dimensions	: 465 x 150 x 100mm,
Weight	: 4.0Kg
Operating Temperature	: 5-40°C
Packaging Size	: 590(l) x 345(w) x 220(h)mm,
Packaged Weight	: 8.0Kg.

PROSCAN CONTROLLER SPECIFICATION:

EFFECTS:

- 16 Preset patterns with auto and manual control including instant access,
- Variable pattern change rate,
- Audio selection for modulation of patterns and horizontal scan,
- Beam ON/OFF,
- Auto and manual positioning of horizontal sweep with variable sweep rates,
- Colour selector for full, green and blue, with colour cycling (available for argon systems only).

CONTROLLER INPUTS / OUTPUTS:

- External audio input with active bass filter (¼" jack, input range 0.5Vrms-3.0Vrms),
- Serial connection of PROSCAN+ heads with 15 way D connectors.

POWER SUPPLY:

- Linear power supply for electronics,
- 95 - 130 or 190 - 250 VAC operation by internal selection,
- 10 Watt power consumption.

CONFORMITY:

- CE Conformity to : EN 55011:1991 CLASS B (conducted and radiated),
EN 61000-4-2:1995,
EN 61000-4-3:1995,
EN 61000-4-8:1994,
LOW VOLTAGE DIRECTIVE,

PHYSICAL :

System Dimensions : 1U rack mounting, with 440 x 110 deep case,
Weight : 2.0Kg,
Operating Temperature : 5-45°C.