

Owner Handbook
500-RGB-3D™

USE & MAINTENANCE

YOU MUST READ THESE WARNINGS carefully because they include important safety information about the installation, operation and maintenance of this product. Follow all instructions to maintain Manufacturer Warranty and for your own safety.

- Read all instructions in this User Manual and on the product carefully **BEFORE** operating this device.
- The latest version of this handbook can be found at www.lantalighting.com
- All Lanta products can be used for indoor use. Under no circumstances must these products be used outdoors unless stated otherwise.
- To prevent risk of fire or shock, do not expose products to rain or moisture.
- Make sure there are no flammable materials close to the unit during operation.
- Clean the product with a clean and dry, non-abrasive cloth. Do not use solvents or liquids to clean the product.
- There are no user replacement parts inside the product. Do not open the product for any reason. This will invalidate your Manufacturer Warranty and may impair the safety features of the product.
- Do not use if the product if you suspect it has been damaged in any way, including being dropped, is malfunctioning, or has been exposed to liquids or moisture. The unit must be repaired by an authorised service centre only. Manufacturer Warranty is void if unit is opened or adapted in any way. Operator safety may be compromised if this product is not operated and maintained in accordance with the details contained in this Owner Handbook.
- This appliance must be earthed. Do not remove the earth connection in the plug or any other location - it is essential for user safety.
- Power connection to the product is via a UK 240 Volt AC three-pin mains plug. Do not remove or adapt this plug. If necessary, only replace the plug top fuse with one of the same type, size and value.
- Be aware that products are mains powered and may be capable of producing high voltages from its outputs and has mains voltages inside the cabinet.

MAINS WARNINGS

- Always make sure that the mains voltage you intend to use is within the operating range of the product.
- Always unplug product from the mains supply before moving, cleaning etc.
- Make sure you replace the fuse with another of the same type and rating.
- This product will be irrevocably damaged and the warranty invalidated if connected to a power pack or other dimmer.
- Make sure the mains cable is not crushed or damaged.
- Never disconnect the mains lead by pulling or tugging on the cable.
- This appliance must be earthed. Do not remove the earth connection in the plug or any other location - it is essential for user safety.
- Unplug the product from the mains during lightning storms or periods of mains fluctuations. If the product is going to be unused for long periods, unplug from the mains.

PHYSICAL WARNINGS

- Always secure the product to a fastening device using a safety chain.
- If the product appears to be malfunctioning or operating in an unexpected manner, stop using the unit immediately and contact your supplier.
- Never lift, move or carry the product by any other means other than the case as a whole or handle if provided.

LASER WARNINGS

- Lasers are hazardous devices. Permanent eye injury and blindness is possible if lasers are used incorrectly.
- Avoid direct eye contact with laser light.
- Never intentionally expose your eyes or others to direct laser light.
- This laser product can potentially cause instant eye injury or blindness if laser light directly strikes the eyes.

- It is illegal and dangerous to shine a laser into audience areas, where the audience or other personnel could get direct laser beams or bright reflections into their eyes.
- It is illegal to shine any laser at aircraft.
- Never leave this device running unattended.

NON INTERLOCKING HOUSING WARNINGS

- This unit contains hazardous voltages, moving parts and high power laser emitters.
- Do not open the laser housing to avoid potential exposure to unsafe levels of laser radiation.
- The laser power levels, accessible if the unit is opened, can cause instant blindness, skin burns, and fires.

LASER SAFETY NOTES

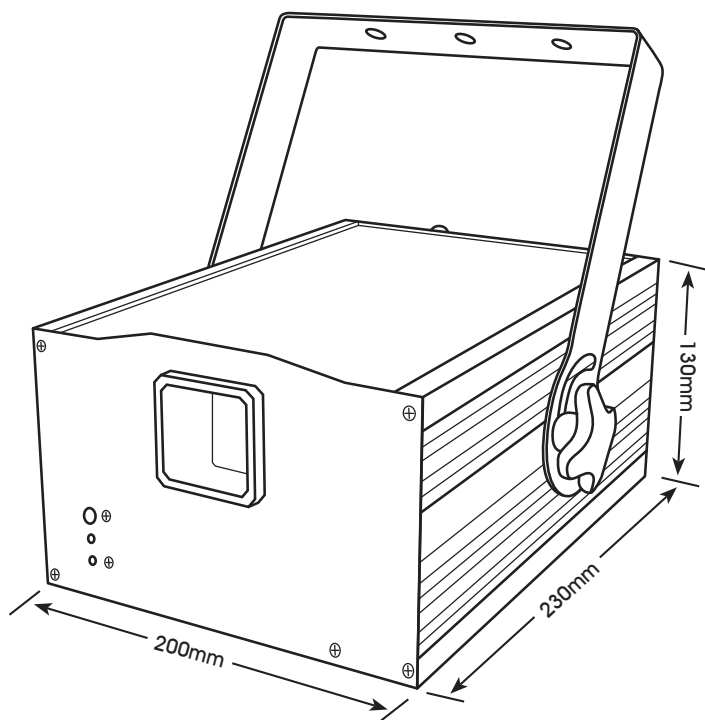
YOU MUST READ THIS LASER SAFETY INFORMATION

Laser light is many thousands of times more concentrated than light from any other kind of light source and as so it poses a real danger to the sight. This concentration of light can cause instant eye injuries, primarily by burning the light sensitive portion at the back of the eye called the retina. Even if you cannot feel "heat" from a laser beam, it can still potentially injure or blind you or your audience. Even very small amounts of laser light are potentially hazardous even at long distances.

Laser eye injuries can happen quicker than you can blink.

- Entertainment products split the laser beam into hundreds of smaller laser beams that are radiated out at high speed. There is a misconception that an individual laser beam is safe for eye exposure. This is not the case. This product produces high levels of laser power - classified as Class 3B - before it splits into multiple beams - defined as Class 3R levels. Many of the individual beams are potentially hazardous to the eyes and should never be directed into an audience at any time.
- Do not assume that because the laser light is moving, it is safe. It isn't, and because these beams are being moved by a mechanical device, it is possible for that device to stop moving and then direct the laser beam constantly at an individual. Since eye injuries can occur instantly, it is critical to prevent the possibility of any direct eye exposure.
- It is illegal to aim a Class 3R laser into an area where people could be exposed, even below people's eye level.
- Always install a laser effect to ensure that the entire laser light radiation is at least 3 meters above the floor on which people can stand. It is very important to test the laser before any public use.
- Do not use if any defect is detected such as if the product emits only one or two laser beams rather than the expected quantities as this could indicate damage to the product and could allow emission of higher laser levels above Class 3R.
- Do not point lasers at any reflective surfaces such as windows, mirrors and metal truss or other reflective fixtures as even laser reflections can be hazardous.
- The operation of a class 3R laser show is only allowed if the show is controlled by a skilled and well-trained operator, familiar with the data included in this manual.
- The law is updated from time to time and it is the users sole responsibility to understand the legal obligations and responsibilities in force at the time and location of use.

We recommend visiting the Government Health & Safety website <http://www.hse.gov.uk> or search for "**Controlling the radiation safety of display laser installations**" for further information.



INTRODUCTION

Congratulations on your purchase of a Lanta Lighting Product. Based in the UK, Lanta are committed to providing high quality products at cost-effective prices to the professional lighting market. Since the first product was launched in 2006, Lanta has established a reputation for reliability, common sense design and customer support that has become the envy of others.

Other Lanta Lighting range include:

Professional Lighting:

From washes to floods, spots to projectors, LED technology now outperforms traditional lights while at the same time requiring significantly lower power and generating far less unwanted heat.

Performance Lasers:

Recent advances have reduced the costs of Lasers, made them more portable and brought improved performance and reliability. With step and animation lasers in multi and single colour formats for mobile DJs and static installs, Lanta promise Lasers that won't burn a hole in your pocket.

Atmospheric Effects:

When you need special atmospheric effects, Lanta have everything from bubble machines to fake snow, hazers and foggers. There's also a range of fluids and consumables specially designed to get the best from the range.

Control Gear:

Lightweight and portable, Lanta Control Gear is robust enough to survive life on the road and smart enough to control DMX kit whatever the venue.

Our website can be found at www.lantalighting.com and is available for the benefit of customers worldwide. Please consult for information, advice and support on this and other high quality products from Lanta

INSIDE THE BOX

- 500-RGB-3D Laser™
- 1 x IEC Power Cable
- 1 x DMX Cable
- 2 x Safety Keys
- 1 x Interlock

SPECIFICATIONS

Stock Code	L16868
Laser Diode	100mW Red (635nm) 100mW Green (532nm) 400mW Blue (450nm) Mixed 500mW White
Laser Class	3b
Scanner	25k High Speed Optical
Defl. Angle	± 30°
Connections	3 Pin Male & Female XLR, ILDA IN & OUT Control Key lock, Interlock
Run Modes	Sound Active, Auto Beam & Animation, DMX512 13 channel, ILDA Control
Effects	Animation, Multi Pattern, 3D Twinkle & Animation
Dimensions	200 x 235 x 130mm
Weight	4.5kg

UNPACKING & INSPECTION

It is important that you carefully examine the packaging to ensure the product has not been damaged during shipping. If you are satisfied the packaging appears undamaged, carefully unpack the product. Please keep all of the packing materials in case you need to transport the device, pass it on to a new owner in the future or return it for some reason. Please examine the product and accessories to ensure they have arrived with you in good condition and show no sign of damage. If you suspect the product may be damaged, **DO NOT USE IT.** Please notify the sender immediately for advice – not the manufacturer.

SAFETY INFORMATION

All information regarding important safety information about the installation, operation and maintenance of this product can be found at the back of this handbook. Products from Lanta Lighting meet all required safety standards in force at the time of manufacture and are fully compliant with them.

MANUFACTURER WARRANTY

- This Manufacturer Warranty is valid in the UK only.
- Lanta Lighting warrants that this product is free from workmanship defects and material failure during normal use and operation for a period of 12 months from first use or from original date of sale (whichever is the earliest) providing all of the terms indicated in the warranty section have been fully complied with.
- Expressly excluded is our liability for any directly connected or indirectly connected item or items or any consequential loss associated with the failure of the product howsoever caused.
- If the product has been opened, modified, tampered with, incorrectly connected, used inappropriately or in conflict with the instructions herein, or the product model or serial number has been damaged, removed, tampered with, obliterated or made partly unreadable by any person or persons, the Manufacturer Warranty is irrevocably null and void.
- No extension, adaption, alteration or modification to the terms of this Manufacturer Warranty will be permitted, unless expressly authorised in writing (excluding email and fax) by a Director of Lanta Lighting. Warranty is transferrable during the Warranty period.

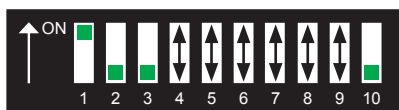
OPERATING MODES

All operating modes can be selected via the Dip Switches located on the rear of the unit.



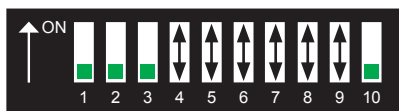
AUTO MODE

Use the "PATTERN SIZE" dial to vary the size of the Laser Pattern. Rotate the dial anti-clockwise to reduce and clockwise to increase pattern size.



SOUND ACTIVE MODE

Use the "SENSITIVITY" dial to vary the sound sensitivity of the Laser Effect. Rotate the dial anti-clockwise to reduce and clockwise to increase sensitivity.



EFFECTS CHART (CH 5 - 8)

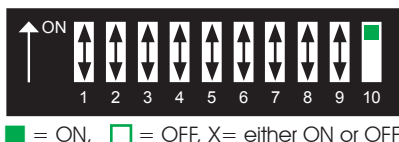
Dip Switch Status										FUNCTION
1	2	3	4	5	6	7	8	9	10	Dip switch numbers
-	-	-	-	X	X	X	X	-	-	MULTI - EFFECT
-	-	-	-	■	X	X	X	-	-	NORMAL ANIMATIONS
-	-	-	-	X	■	X	X	-	-	MULTI-PATTERN
-	-	-	-	X	X	■	X	-	-	3D SPIRO EFFECT
-	-	-	-	X	X	X	■	-	-	3D EFFECT

SELF PROTECTION

During long spells of operation on full power, the fixture will adjust the power consumption to increase the dissipation of heat. Please ensure the fixture is well ventilated when in use on full power for long spells.

DMX MODE

Green LED indicator will flash with DMX signal input, LED will be static when no input.



13 CHANNEL DMX

CHANNEL	FUNCTION	VALUE	DESCRIPTION
CH1	MODE	0 - 63	Sound Active
		64 - 127	Auto Mode
		128 - 255	Manual Mode to Auto
CH2	EFFECT MODE	0 - 49	Normal Animation Effect
		50 - 99	Multi-Pattern Effect
		100 - 149	3D Spiro Effect
		150 - 199	3D Effect
		200 - 255	Normal Animation Effect
CH3	DIMMER / COLOUR	0 - 255	Cosed - white - red - yellow - green - blue - purple - fixed colour - random single colour - random seven colour - moving seven colour - fixed colour
CH4	PATTERN SELECT	0 - 255	128 Patterns
CH5	MOVING Y	0 - 127	Manual to Up or Down moving
		128 - 191	Auto to Up moving
		192 - 255	Auto to Down moving
CH6	MOVING X	0 - 127	Manual to Left to Right moving
		128 - 191	Auto to Right moving
		192 - 255	Auto to Left moving
CH7	ROLLING X	0 - 127	Manual Rolling
		128 - 255	Auto Rolling
CH8	ROLLING Y	0 - 127	Manual Rolling
		128 - 255	Auto Rolling
CH9	ROTATION	0 - 127	Manual Rotation
		128 - 191	Auto Clockwise rotation
		192 - 255	Auto Counter Clockwise rotation
CH10	ZOOM (+/-)	0 - 85	Manual Zoom (+/-)
		86 - 170	Auto Zoom (+)
		171 - 255	Auto Zoom (-)
CH11	PATTERN SIZE	0 - 255	0 = Moderate, 1 = Small, 255 = Large
CH12	DISPLAY DOT	0 - 255	0 = Display Dot, 255 = Best Brightness
CH13	DRAWING	0 - 127	Auto Drawing Mode 1
		128 - 255	Auto Drawing Mode 2

For DMX mode, DMX address from #1 to 9# dipswitches must be set, the address is set from 1 to 511. Each dipswitch represents a binary value.

1	2	3	4	5	6	7	8	9	10	Dip switch numbers
1	2	4	8	16	32	64	128	256	■	VALUE

Dmx Switch Set ■=ON □=OFF X=Not Use					#9	□	□	□	□	□	□	□	□	■	■	■	■	■	■	■		
					#8	□	□	□	□	■	■	■	■	□	□	□	□	■	■	■	■	■
					#7	□	□	■	■	□	□	■	■	□	□	■	■	□	□	■	■	■
					#6	□	■	□	■	□	■	□	■	□	■	□	■	□	■	□	■	■
#1	#2	#3	#4	#5	×	32	64	96	128	160	192	224	256	288	320	352	384	416	448	480		
□	□	□	□	□	1	33	65	97	129	161	193	225	257	289	321	353	385	417	449	481		
■	□	□	□	□	2	34	66	98	130	162	194	226	258	290	322	354	386	418	450	482		
□	■	□	□	□	3	35	67	99	131	163	195	227	259	291	323	355	387	419	451	483		
■	■	□	□	□	4	36	68	100	132	164	196	228	260	292	324	356	388	420	452	484		
□	□	■	□	□	5	37	69	101	133	165	197	229	261	293	325	357	389	421	453	485		
■	□	■	□	□	6	38	70	102	134	166	198	230	262	294	326	358	390	422	454	486		
□	■	■	□	□	7	39	71	103	135	167	199	231	263	295	327	359	391	423	455	487		
■	■	■	□	□	8	40	72	104	136	168	200	232	264	296	328	360	392	424	456	488		
□	□	□	■	□	9	41	73	105	137	169	201	233	265	297	329	361	393	425	457	489		
■	□	□	■	□	10	42	74	106	138	170	202	234	266	298	330	362	394	426	458	490		
□	■	□	■	□	11	43	75	107	139	171	203	235	267	299	331	363	395	427	459	491		
■	■	□	■	□	12	44	76	108	140	172	204	236	268	300	332	364	396	428	460	492		
□	□	■	■	□	13	45	77	109	141	173	205	237	269	301	333	365	397	429	461	493		
■	□	■	■	□	14	46	78	110	142	174	206	238	270	302	334	366	398	430	462	494		
□	■	■	■	□	15	47	79	111	143	175	207	239	271	303	335	367	399	431	463	495		
■	■	■	■	□	16	48	80	112	144	176	208	240	272	304	336	368	400	432	464	496		
□	□	□	□	■	17	49	81	113	145	177	209	241	273	305	337	369	401	433	465	497		
■	□	□	□	■	18	50	82	114	146	178	210	242	274	306	338	370	402	434	466	498		
□	■	□	□	■	19	51	83	115	147	179	211	243	275	307	339	371	403	435	467	499		
■	■	□	□	■	20	52	84	116	148	180	212	244	276	308	340	372	404	436	468	500		
□	□	■	□	■	21	53	85	117	149	181	213	245	277	309	341	373	405	437	469	501		
■	□	■	□	■	22	54	86	118	150	182	214	246	278	310	342	374	406	438	470	502		
□	■	■	□	■	23	55	87	119	151	183	215	247	279	311	343	375	407	439	471	503		
■	■	■	□	■	24	56	88	120	152	184	216	248	280	312	344	376	408	440	472	504		
□	□	□	■	■	25	57	89	121	153	185	217	249	281	313	345	377	409	441	473	505		
■	□	□	■	■	26	58	90	122	154	186	218	250	282	314	346	378	410	442	474	506		
□	■	□	■	■	27	59	91	123	155	187	219	251	283	315	347	379	411	443	475	507		
■	■	□	■	■	28	60	92	124	156	188	220	252	284	316	348	380	412	444	476	508		
□	□	■	■	■	29	61	93	125	157	189	221	253	285	317	349	381	413	445	477	509		
■	□	■	■	■	30	62	94	126	158	190	222	254	286	318	350	382	414	446	478	510		
□	■	■	■	■	31	63	95	127	159	191	223	255	287	319	351	383	415	447	479	511		

Lanta lighting is very focussed on saving the planet. Our products are low energy and our packaging is reduced to the minimum possible. We include our handbooks and specification sheets as part of our paper reduction programme. All our product handbooks and spec sheets are available on-line.

In this way you always get the latest version, available on any internet enabled device, at any time of the day or night, anywhere on the planet!



www.lantalighting.com