VARYTEC

Manual

LED Realbeam 4 RGBW

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1. Safety instructions

- This device is suitable for indoor use (not outdoors) only.
- All modifications to the device will void the warranty.
- Repairs are to carry out by skilled personnel only.
- Use only fuses of the same type and original parts as spare parts.
- Protect the unit from rain and humidity to avoid fire and electric shocks.
- Make sure to unplug the power supply before opening the housing.

1.1. For safe and efficient operation

Be careful with heat and extreme temperature
Avoid exposing it to direct rays of the sun or near a heating appliance.
Not put it in a temperature bellow 32°F /0°C, or exceeding 104°F /40°C.

Keep away from humidity, water and dust
Do not place the set in a location with high humidity or lots of dust.
Containers with water should not be placed on the set.

Keep away from sources of hum and noise
Such as transformer motor, tuner, TV set and amplifier.

To avoid placing on un-stable location
Select a level and stable location to avoid vibration.

Do not use chemicals or volatile liquids for cleaning
Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

If out of work, contact sales agency immediately
Any troubles arose, remove the power plug soon, and contact with an engineer for repairing, do not open the cabinet by yourself, it might result a danger of electric shock.

Take care with the power cable
Never pull the power cable to remove the plug from the receptacle, be sure to hold the plug. When not using the device for an extended period of time, be sure to disconnect the plug from the receptacle.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems. Make sure the electrical connection is carried out by qualified personnel. All electrical and mechanical connections have to be carried out according to the European safety standards.

2. Designated use

This device was developed for professional use on stages, in discos, theatres etc. The device is only approved for a connection up to 230V 50/60 Hz AC voltage and only for indoor use.

Regular breaks during operation increase the lifetime of your device.

Avoid convulsions or any form of forceful impact during the installation or the start-up of the device.

Make sure that the device is not exposed excessive heat, humidity or dust at the place of installation. Take care that no cables are lying around. You would endanger your own safety and also the safety of a third party.

It is not allowed to operate or store the device in an environment in which spray water, rain, humidity or fog is expected. Humidity or very high atmospheric humidity could reduce the isolation of the device and could cause deathly electric shocks. If you use fog devices the device has not be exposed to a direct smoke jet. There has to be a safety distance of at least 0,5m between this device and the fog machine. Make sure that the saturation of the fog has to enable a visibility of at least 10m.

The ambient temperature has to be between 0°C and +40°C. Avoid direct sunlight and close proximity to heaters. You have also to attend it during the transport in closed motor vehicles.

Operate the device not during thunderstorms. Surge voltages could destroy the device. Unplug the power supply during thunderstorms.

During the installation the use of the mounting bracket is obligatory.

Surrounding objects or surfaces should not be in contact with the device.

Make sure that during the installation and removal of the device the area below the place of installation is basically cordoned off. This also applies to implementation of service.

The device has basically been protected by a suitable safety.

Make familiar yourself with the functions of the device before start-up. People without the experience should not handle with the device. The most cause of functional disorder is inappropriate handling.

Do not use chemicals or volatile liquids for cleaning. Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

For transport use the original packing or designated accessory to avoid damages during the transport.

For reasons of safety unauthorized changes are forbidden.
A usage of the device which differs from usages which are described in this manual can cause damages of the device. In that case the warranty expires. Additional you should notice that every differed usage is related with dangers and can cause e.g. an electrical short, fire, electric shock or crash.

2.1. Overhead installation

Danger of life!

You have to observe the regulations of BGV C1 (formerly VBG 70) and EN60598-2-17 Installations are to carry out by skilled personnel only.

The suspension devices have to be build and measured so they can withstand for an hour the tenfold of the payload without suffering a permanent detrimental deformation.

Basically installation has to be made by using a second separate suspension. This can be e.g. a suitable net. The second suspension must be designed and attached so no part of the installation can fall down in case of failure.

During construction, reconstruction and deconstruction unnecessary stay in the range of moving areas, on lightning bridges, under elevated work stations or any other danger zones is forbidden.

The operator is obliged to following safety-related and mechanical facilities:

- Before the first start-up or after critical changes before restarting it has to be checked by an expert.
- Review in the frame of the inspection test at least all four years by an expert. .
- Review by a qualified person at least once a year.

How to carry out the overhead installation:
In tidal fall you should install the device out of the lounge area of people

IMPORTANT! Overhead installation requires a high level of experience. This includes knowledge of calculating the payload, used installation material and safety inspections of the used material and the projector whereas the required experience is not limited to this. Do not try to carry out installation yourself under any circumstances if you are not qualified. Contact a professional installer. An inappropriate installation can lead to injuries and/or damaged properties.

It is not allowed to install the device in the grip area of people.

If the device may hang from the ceiling or from high beams, the use of truss systems is mandatory. The device may not be installed so it can swing freely in the room.

Please note: Crashing down items can cause serious injuries! Do not install the projector, if you doubt the safety of a possible installation form!

Before installation make sure that the mounting surface has the ability to carry the tenfold point load of the own weight of the device.

Mount the device with the mounting-bracket to your trussing system using an appropriate clamp.

During overhead installation the device must be always secured by a safety rope which is designed to hold the twelvefold weight of device. Only safety ropes with quick-release safety fastener elements may be used. Hang up the safety rope in the hole of the mounting bracket. Direct the rope over the truss or an appropriate fastening point. Hang up the end in the fastening element and tie up the locking nut. A safety rope once exposed to failing load or damaged may not be used furthermore.
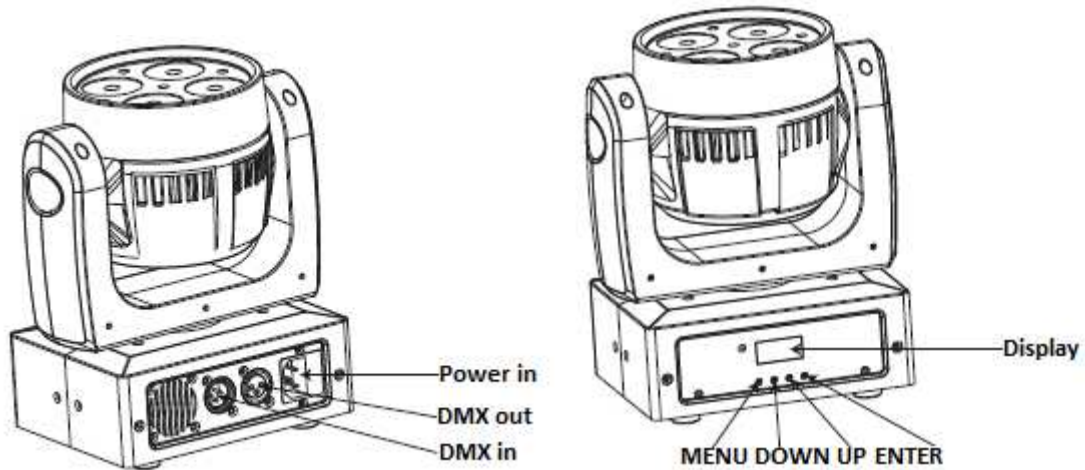
The maximum drop exceed must not exceed 20cm.

A safety rope once exposed to failing load or damaged may not be used furthermore.
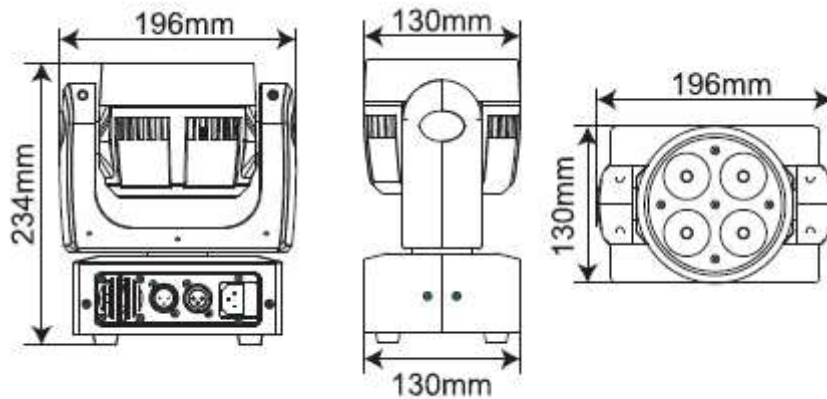Adjust the desired inclination angle via the mounting bracket and tighten the screw.

3. Introduction

Thank you for buying the **LED Realbeam 4 RGBW**. It is a powerful device.
For a successful installation and operation, please read this manual carefully.

3.1. Product overview

- Power in
- DMX out
- DMX in
- Display
- MENU DOWN UP ENTER

3.2. Dimensions

196mm
130mm
234mm
130mm
130mm
196mm

4. Connections

4.1. Electrical connections

If you wish to change the power supply settings, see the chapter Appendix. Connect the fixture to the mains with the enclosed power cable and plug. The earth has to be connected.

Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⊕

4.2. DMX connections

To make a DMX512 connection go ahead like it is described in the picture. Make sure that you use shielded cable. 3pole or 5pole XLR cables are suitable. If you use a controller with a 5 pin DMX output connector, you will need to use a 5pin to 3 pin adapter.

4.3. DMX connection with terminator

Where the DMX cable has to run a long distance or the equipment is operated in an electrically noisy environment like a disco for installations, we recommend using a DMX terminator. This prevents corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR connector with a 120 Ω resistor between pins 2 and 3, which is then plugged into the XLR output socket of the last device in the series. Please look to the bottom drawings.
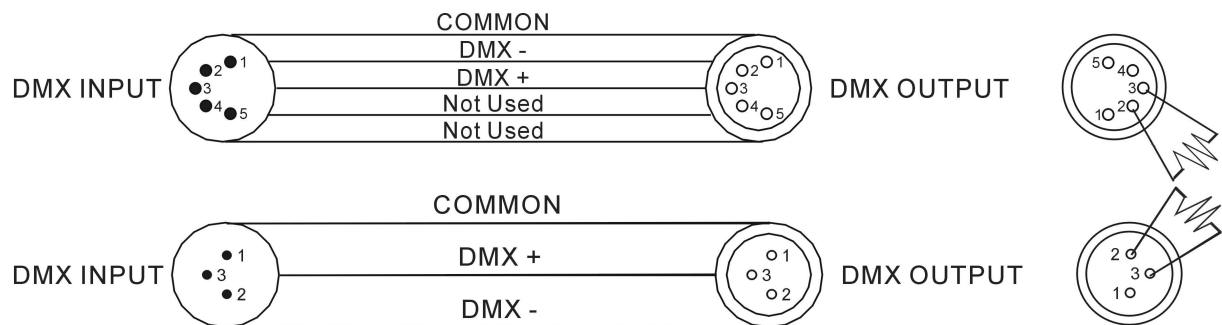
5. Control

Press MENU, to get to the menu. With UP/DOWN you can choose the required submenu. Confirm with ENTER. With UP/DOWN you can make your required settings. Confirm your settings with ENTER. By pressing MENU you get back to the main menu.

5.1. Structure of the menu

Menu	Submenu 1	Submenu 2	Function
Addr	1 -512		Setting the DMX address
Chnd	1Ch		Choose one DMX mode
	9Ch		
	16Ch		
Auto	Ato 1 – 4		Choose one automatic program
	SP 1-2		
SLnd	Mast		The device sends a master signal
	SL 1 -2		The device acts as slave
SoUn	On / Off		(De-)Activates the sound-to-light mode.
SenS	0 – 100		Setting the sensitivity of microphone
bLnd	Yes / No		(De-)Activates the blind function. If you choose Yes the LEDs are off if you restart the device.
Led	Yes / No		If this function is activated the display turns off if there is menu using.
Pan	On / Off		(De-)Activates the invert Pan.
Tilt	On / Off		(De-)Activates the invert Tilt.
dISP	dISP		Display setting for using the device head up.
	dSIP		Display setting for using the device overhead installed.
Stat			With this function you can set fine the white output fine, if you have RGB at 100%.
	red	125 – 255	Dimmer red 0 – 100%
	Gree	125 – 255	Dimmer green 0 – 100
	bLue	125 – 255	Dimmer blue 0 – 100%
Manu			With this function you can control the device manual.
	red	0 – 255	Dimmer red 0 - 100%
	Gree	0 – 255	Dimmer green 0 – 100%
	bLue	0 – 255	Dimmer blue 0 – 100%
	Uhit	0 – 255	Dimmer white 0 – 100%
	Dimm	0 – 255	Dimmer 0 – 100%
	Stro	0 – 255	Strobe
	Pan	0 – 255	Pan
	tilt	0 – 255	Tilt
Test			Test mode.
Info	Fhrs	0 – 255	Shows the current working hours.
	uer		Shows the current software version.
rest			Reset

6. DMX chart

6.1. DMX Mode 1 (1 channel)

Channel	Value from	Value to	Function
	0	3	RGBW
	4	7	Red
	8	11	Green
	12	15	Blue
	16	19	Yellow
	20	23	Cyan
	24	27	Magenta
	28	31	White
	32	35	Orange
	36	39	Pink
	40	43	Violet
	44	47	Aqua
	48	51	Sky blue
	52	55	Full white
	56	59	Cool white
	60	63	Warm white
	64	67	White 3200
	58	71	White 2500
	72	75	Yellow 2 LEE 101
	76	79	Straw LEE 103
1	80	83	Orange LEE 105
	84	87	Light Rose LEE 107
	88	91	Dark pink LEE 111
	92	95	Magenta LEE 113
	96	99	Blue 2 LEE 115
	100	103	Med blue green LEE 116
	104	107	Dark blue LEE 119
	108	111	Bright Pink LEE 128
	112	115	Medium Blue LEE 132
	116	119	Golden amber LEE 134
	120	123	Deep golden amber LEE 135
	124	127	Pale Lavender LEE 136
	128	131	Apricot LEE 147
	132	135	Dark Lavender LEE 180
	136	139	Chocolate LEE 156
	140	143	Just blue LEE 79
	144	147	Surprise pink LEE 194
	148	151	Scarlet LEE 24
	152	155	Surprise Peach LEE 017
	156	159	Fire LEE 19
	160	163	English rose LEE 108

164	167	Mauve LEE 126
168	171	Bright blue LEE 141
172	175	Alice blue ROSCO 378
176	179	Rose indigo ROSCO 358
180	183	Urban blue ROSCO 81
184	187	Cool blue ROSCO 66
188	191	Light salmon ROSCO 30
192	195	Mayan sun ROSCO 318
196	199	Cherry rose ROSCO 332
200	203	Flesh pink ROSCO 34
204	208	Skelton exotic sangria ROSCO 39
209	255	Random color selection

6.2. DMX Mode 2 (9 channels)

Channel	Value from	Value to	Function
1	0	255	Pan
2	0	255	Tilt
3	0	255	0 – 100%
4	0	7	No function
	8	15	Open
	16	131	Strobe slow – fast
	132	139	Open
	140	181	Pulse effect, fast close and slow open
	182	189	Open
	190	231	Pulse effect, slow close and fast open
	232	239	Open
	240	247	Random strobe
	248	255	Open
5	0	255	Dimmer red 0 – 100%
6	0	255	Dimmer green 0 – 100%
7	0	255	Dimmer blue 0 – 100%
8	0	255	Dimmer white 0 – 100%
9	0	69	No function
	70	79	Activates the blackout while Pan/Tilt moving
	80	89	Deactivates the blackout while Pan/Tilt moving
	90	199	No function
	200	209	Reset
	210	239	No function
	240	255	Sound-to-Light

6.3. DMX Mode 3 (16 channels)

Channel	Value from	Value to	Function
1	0	255	Pan
2	0	255	Pan fine
3	0	255	Tilt
4	0	255	Tilt fine
5	0	255	Speed Pan/Tilt fast – slow
6	0	15	No function
	16	35	Macro 1
	36	55	Macro 2
	56	75	Macro 3
	76	95	Macro 3
	96	115	Macro 4
	116	135	Macro 5
	136	155	Macro 6
	156	175	Macro 7
	176	195	Macro 8
	196	215	Macro 9
	216	235	Macro 11
	236	255	Macro12
7	0	255	Speed macros slow – fast
8	0	255	Dimmer 0 – 100%
9	0	7	No function
	8	15	Open
	16	131	Strobe slow – fast
	132	139	Open
	140	181	Pulse effect, fast close and slow open
	182	189	Open
	190	231	Pulse effect, slow close and fast open
	232	239	Open
	240	247	Random strobe
	248	255	Open
10	0	255	Dimmer red 0 – 100%
11	0	255	Dimmer green 0 – 100%
12	0	255	Dimmer blue 0 – 100%
13	0	255	Dimmer white 0 – 100%
14	0	7	No function
	8	127	32 color macros
	128	191	Color change
	192	255	Color change fade
15	0	255	Speed color change slow – fast
16	0	69	No function
	70	79	Activates the blackout while Pan/Tilt moving
	80	89	Deactivates the blackout while Pan/Tilt moving
	90	199	No function

	200	209	Reset
	210	239	No function
	240	255	Sound-to-Light

7. IR remote
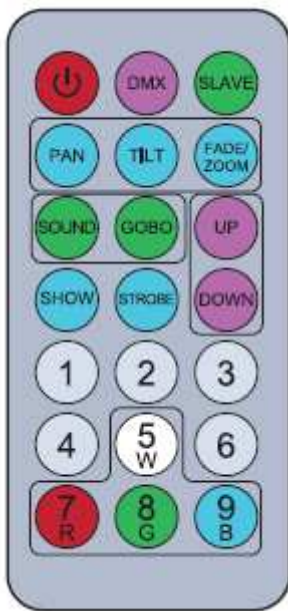
 Power on/off

 Activates DMX

 Activates Master/Slave

 Pan

 Tilt

 Color fade

 Activates Sound-to-Light mode

 No function

 Choose a program or a setting

 Activates the automatic mode

 Strobe

 Choose a program or a setting

 Color selection

8. Technical data

Power supply	
Voltage	110 – 240 V / 50-60 Hz
Power consumption max.	70W
Light source	
LM type	LED 4in1
Color spectrum	RGBW
Power	60 W
Number / Power	4 x 15 W
Optics	
Beam angle	7°
Connections	
Power in	IEC
XLR in/out	3pol
Controlling	
Sound-to-Light	Yes
Automatic	Yes
Master-Slave	Yes
DMX512	Yes
Number of DMX channels	1 / 9 / 16 channels
Hardware	
Protection class	IP20
Suitability	Indoor
Dimensions (L/B/H)	234 x 196 x 130 mm
Weight	2,8 kg

VARYTEC

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