# ignition

Manual



Cobalt X-3 Coupé



# Table of contents

1.	Safe	ty instructions	. 3
1	l.1.	For safe and efficient operation	. 3
2.	Desig	gnated use	. 4
2	2.1.	Overhead installation	. 5
3.	Intro	duction	. 7
3	3.1.	Product overview	. 7
3	3.2.	Dimensions	. 7
4.	Conr	nections	. 8
4	1.1.	Electrical connections	. 8
4	1.2.	DMX connections	. 8
4	1.3.	DMX connection with terminator	. 8
5.	Cont	rol	. 9
5	5.1.	Display	. 9
5	5.2.	Structure of the menu	10
6.	DMX	chart	12
6	3.1.	DMX mode 1 (24 channels)	12
6	5.2.	DMX mode 2 (24 channels)	17
6	3.3.	DMX Mode 3 (16 channels)	22
7.	Tech	nical data	27
7	<sup>7</sup> .1.	Photometrical data	27
7	7.2.	Color wheel	27
7	7.3.	Gobo wheel 1	28
7	7.4.	Gobo wheel 2	28
7	7.5.	Technical data	29



# 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.

Please make sure that you keep a minimum distance of 12 m from flammable materials.

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.

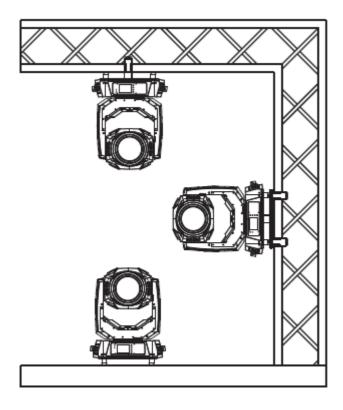


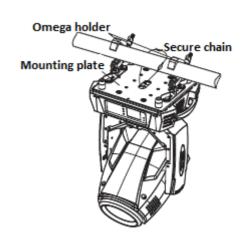
#### 2.1. Overhead installation



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.

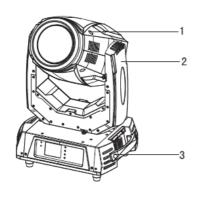


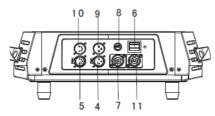
# 3. Introduction

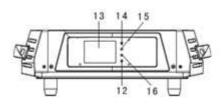
Thank you for buying the **Cobalt X-3 Coupé**. It is a powerful device.

For a successful installation and operation, please read this manual carefully.

## 3.1. Product overview



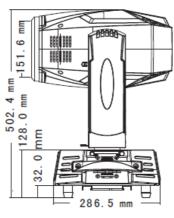


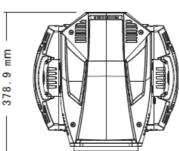


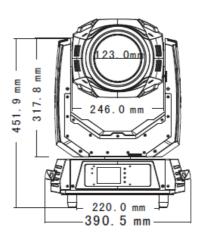
- 1. Head
- 2. Arm
- 3. Base
- 4. 3-pin XLR female
- 5. 5-pin XLR female
- 6. Power On/Off
- 7. Power in
- 8. Insurance seat

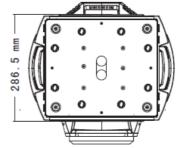
- 9. 3-pin XLR male
- 10. 5-pin XLR male
- 11. Power out
- 12. ENTER button
- 13. Touch screen (LCD)
- 14. MODE button
- 15. UP button
- 16. DOWN button

# 3.2. Dimensions











## 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.

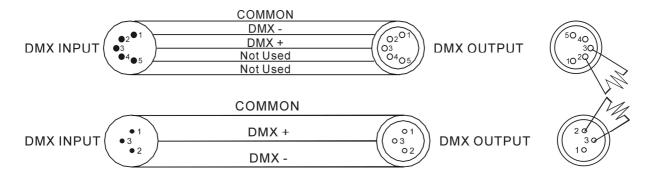
Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	•

#### 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  $\Omega$  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.

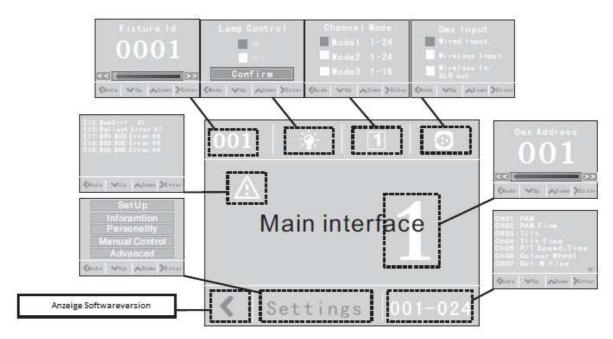




## 5. Control

You can control the device both with touch screen and with the buttons right beside the display. Somme settings you can reach directly from the display.

## 5.1. Display



1. Fixture ID

Set the ID for the device. For this you have to enter a password (1702).

2. Lamp Control

Power on or off the lamp.

3. Channel Mode

Here you can choose the DMX mode.

4. DMX Input

Please choose "Wired Input".

5. DMX Address

Here you can set the DMX address.

6. 001-024

The current values for the DMX channels will be shown.

7. Settings

Please read chapter 5.2. Structure of the menu.

- 8. Shows the software version
- 9. Error message

If an error occurs this symbol lights up. Please read chapter X.X Error message



# 5.2. Structure of the menu

Menu	Submenu 1	Submenu 2	Submenu 3	Function
	DMX Address	001 – 497		Set the DMX address.
		Mode 1 1 - 24		
Set Up	Channel Mode	Mode 2 1 - 24		Choose a DMX mode.
		Mode 3 1 – 16		
	Fixture ID	0001 – xxxx		Set the ID for the device. For this you have to enter a password (1702).
	Fixture Times	xxxxh xxm		Shows the fixture hours.
	Lamp Times	Lamp on Times	xxxxh xxm	Shows the lamp hours.
	Lamp Strike	XXXX		Shows the lamp strikes.
	Reset Lamp Time			Reset the lamp hours.
	Error List			If an error occurs the error message is shown here.
	Diagnosis	BOARD 1: xx.xx % BOARD 2:		
Information		xx.xx % BOARD 3:		Shows the capacity.
		XX.XX %		
	Fans Monitor	HFan1 Spd: xxxx (r/m)		
		HFan2 Spd: xxxx (r/m)		
		LFan1 Spd: xxxx (r/m)		Shows the speed of the fans.
		LFan2 Spd: xxxx (r/m)		
	DMX Values	Ch1 – Chxx	000 – 255	Shows the current DMX values for the channels.
		Power ON Light	On/Off	If you turn on the device the device the lamp is directly powered on.
	Lamp	Light by DMX	On/Off	Power on the lamp by DMX.
		Lamp ON Delay	0 – 60m	The lamp is powered on with the corresponding delay.
Personality		Pan Reverse	On/Off	(De-)Activates the invert Pan.
	Pan/Tilt	Tilt Reverse	On/Off	(De-)Activates the invert Tilt.
		Feedback	On/Off	(De-)Activates the Feedbacks.
	DMX Input	Wired Input		Please choose Wired Input. For this
		Wireless		device is no wireless DMX



		Input Wireless In/XLR out		available.
		P/T Moving	On/Off	(De-)Activates the Blackout while Pan-/Tilt moving.
	BlackOut	Color Moving	On/Off	(De-)Activates Blackout while moving the color wheel.
		Gobo Moving	On/Off	(De-)Activates the Blackouts while moving the gobo wheel.
		Brightness		Set the brightness of the display.
		Screen Time	0 – 10m	Set the Standby-time for display.
	Screen	Touchscreen	On/Off	(De-)Activates the touch screen. NOTE! With On you deactivate the touch screen.
		Auto Screen	On/Off	(De-)Activates the auto screen.
	Lamp	Lamp control	On/Off	Power on the lamp. Please press "Confirm".
	Reset	Reset All		Reset.
		Reset Pan/Tilt		Reset Pan/Tilt.
Manual		Reset Color		Reset the color wheel.
Control		Reset Gobo		Reset the gobo wheel.
		Reset Other		Reset other components.
	Channel	Ch01-Chxx		Manual control of the DMX channels. The number of channels and the allocation is corresponding to the DMX mode you have chosen.
	Calibration			For calibration you need a password (0088).
Advanced	Factory Default	Yes/No		Reset the device to factory defaults.
	Touch Calibration			Calibrate the touch screen.



# 6. DMX chart

# 6.1. DMX mode 1 (24 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	Pan/Tilt speed
			The color wheel can be positioned continuously. If you reach the specified value the color wheel is exactly on this color.
	0		Open / White
	9		Deep red
	18		Deep blue
	27		Yellow
	37		Magenta
	46		Azure
	55		Red
	64		Dark green
	73		Amber
	82		Blue
	91		Orange
	101		СТО
	110		UV Filter
	119		White
6			You can only choose exact colors.
	130	134	Deep red
	135	138	Deep blue
	139	143	Yellow
	144	147	Green
	148	152	Magenta
	153	157	Azure
	158	161	Red
	162	166	Dark green
	167	171	Amber
	172	176	Blue
	177	180	Orange
	186	189	СТО
	190	215	Color change clockwise fast – slow
	216	217	No function
	218	243	Color change counterclockwise slow – fast
	244	249	No function
	250	255	Random color selection.
7	0	255	Fine positioning of the color wheel.



			0.1. 114
		-	Gobo wheel 1
	0	3	Open
	4	9	Gobo 1
	10	15	Gobo 2
	16	21	Gobo 3
	22	27	Gobo 4
	28	33	Gobo 5
	34	39	Gobo 6
	40	45	Gobo 7
	46	51	Gobo 8
	52	57	Gobo 9
	58	63	Gobo 10
	64	69	Beam size 1
	70	75	Beam size 2
	76	81	Beam size 3
	82	87	Beam size 4
	88	95	Gobo 1 Shake slow – fast
0	96	103	Gobo 2 Shake slow – fast
8	104	111	Gobo 3 Shake slow – fast
	112	119	Gobo 4 Shake slow – fast
	120	127	Gobo 5 Shake slow – fast
	128	135	Gobo 6 Shake slow – fast
	136	143	Gobo 7 Shake slow – fast
	144	151	Gobo 8 Shake slow – fast
	152	159	Gobo 9 Shake slow – fast
	160	167	Gobo 10 Shake slow - fast
	168	175	Beam size 1 Shake
	176	183	Beam size 2 Shake
	184	191	Beam size 3 Shake
	192	199	Beam size 4 Shake
	200	201	Open
	202	221	Gobo rotation clockwise fast – slow
	222	223	Stop
	224	243	Gobo rotation counterclockwise slow – fast
	244	249	Open
	250	255	Random gobo selection fast – slow
			Gobo wheel 2
			For DMX values 0 – 59 you can set the speed of
			gobo selection with channel 24.
	0		Open
	1	4	Flat Field
9			For DMX values 5 – 31 you can position the gobo
			with channel 10.
	5	7	Gobo 1
	8	10	Gobo 2
	11	13	Gobo 3



	14	16	Gobo 4
	17	19	Gobo 5
	20	22	Gobo 6
	23	25	Gobo 7
	26	28	Gobo 8
	29	31	Gobo 9
			For DMX values 32 – 59 you can rotate the gobo with channel 10.
	32	34	Gobo 1
	35	37	Gobo 2
	38	40	Gobo 3
	41	43	Gobo 4
	44	46	Gobo 5
	47	49	Gobo 6
	50	52	Gobo 7
	53	55	Gobo 8
	56	59	Gobo 9
			For DMX values 60 – 129 you can position the gobo with channel 10.
	60	67	Gobo 1 Shake slow – fast
	68	75	Gobo 2 Shake slow – fast
	76	83	Gobo 3 Shake slow – fast
	84	91	Gobo 4 Shake slow – fast
	92	99	Gobo 5 Shake slow – fast
	100	107	Gobo 6 Shake slow – fast
	108	115	Gobo 7 Shake slow – fast
	116	123	Gobo 8 Shake slow – fast
	124	129	Gobo 9 Shake slow – fast
		120	For DMX values 130 – 199 you can rotate the gobo with channel 10.
	130	137	Gobo 1 Shake slow – fast
	138	145	Gobo 2 Shake slow – fast
	146	153	Gobo 3 Shake slow – fast
	154	161	Gobo 4 Shake slow – fast
	162	169	Gobo 5 Shake slow – fast
	170	177	Gobo 6 Shake slow – fast
	178	185	Gobo 7 Shake slow – fast
	186	193	Gobo 8 Shake slow – fast
	194	199	Gobo 9 Shake slow – fast
	200	201	Open
	202	221	Gobo rotation clockwise fast – slow
	222	223	Stop
	224	243	Gobo rotation counterclockwise slow – fast
	244	249	Open
	250	255	Random gobo selection fast – slow
0	0	255	Choose the exact position for the gobos of channel
	0	200	Choose the exact position for the godos of challlet



			9 for the DMX values 5 – 31 and 60 – 129
			Choose the rotation for the gobos of channel 9 for the DMX values 32 – 59 and 130 – 199
	0		No function
	1	127	Gobo rotation clockwise fast – slow
	128	129	Stop
	130	255	Gobo rotation counterclockwise slow – fast
11			Fine positioning of the gobo wheel.
	0	19	Open
	20	49	Positioning of the 6-way prism with channel 13.
	50	75	Rotation of the 6- way prism with channel 13.
	76	105	Positioning of the 8- way prism with channel 13.
	106	127	Rotation of the 8- way prism with channel 13
	128	135	Macro 1
	136	143	Macro 2
	144	151	Macro3
	152	159	Macro 4
	160	167	Macro 5
12	168	175	Macro 6
12		-	Macro 7
	176	183	
	184	191	Macro 8
	192	199	Macro 9
	200	207	Macro 10
	208	215	Macro 11
	216	223	Macro 12
	224	231	Macro 13
	232	239	Macro 14
	240	247	Macro 15
	248	255	Macro 16
	0	255	Choose the exact position for the prism of channel 12 for the DMX values 20 – 49 and 76 – 105.
			Choose the rotation for the prism of channel 12 for the DMX values $50 - 75$ and $106 - 127$ .
13	0		No function
	1	127	Prism rotation clockwise fast – slow
	128	129	Stop
	130	255	Prism rotation counter clockwise slow – fast
14	0	255	Frost
15	0	255	Zoom
16	0	255	Zoom fine
17	0	255	Focus
18	0	255	Focus fine
19	0	255	Auto focus
20	0	31	Shutter closed (Lamp power reduced to 230W, if the Shutter is open it would not be reduced
			anymore time.)



	32	63	Shutter open
	64	95	Strobe slow – fast
	96	127	Shutter open
	128	143	Opening pulse slow – fast
	144	159	Closing pulse fast – slow
	160	191	Shutter open
	192	223	Strobe random slow – fast
	224	255	Shutter open
21	0	255	Dimmer 0 – 100%
22	0	255	Dimmer fine
			To activate these functions, the value has to be set for at least 3 seconds and channel 20 has to be set to a value between $0-31$ . The corresponding menu items are temporarily overridden.
	0	9	No function
	10	14	DMX input wired (function is active only 10 seconds after switching fixture).
	15	19	No function
	20	24	Eco mode (Lamp power reduced to 230W)
	25	29	Standard mode (Lamp power is 280W)
	30	49	No function
	50	59	Speed Pan / Tilt
	60	69	Time Pan / Tilt
	70	79	Blackout for Pan- / Tilt movements
	80	89	Deactivates the Blackout for Pan- / Tilt movements.
23	90	99	Blackout for movements of the color wheel.
23	100	109	Deactivates the Blackout for movements of the color wheel.
	110	119	Blackout for movements of the gobo wheel.
	120	129	Deactivates the Blackout for movements of the gobo wheel.
	130	139	Lamp on
	140	149	Reset Pan / Tilt
	150	159	Reset color wheel
	160	169	Reset gobo wheel
	170	179	Reset Dimmer / Shutter
	180	189	Reset Zoom / Focus / Prism
	190	199	No function
	200	209	Reset
	210	229	No function
	230	239	Lamp off
	240	255	No function
24	0	255	Speed for gobo selection fast – slow



# 6.2. DMX mode 2 (24 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	Pan/Tilt speed
			To activate these functions, the value has to be set for at least 3 seconds and channel 20 has to be set to a value between 0 – 31. The corresponding menu items are temporarily overridden.
	0	9	No function
	10	14	DMX input wired (function is active only 10 seconds after switching fixture).
	15	19	No function
	20	24	Eco mode (Lamp power reduced to 230W)
	25	29	Standard mode (Lamp power is 280W)
	30	49	No function
	50	59	Speed Pan / Tilt
	60	69	Time Pan / Tilt
	70	79	Blackout for Pan- / Tilt movements
	80	89	Deactivates the Blackout for Pan- / Tilt movements.
0	90	99	Blackout for movements of the color wheel.
6	100	109	Deactivates the Blackout for movements of the color wheel.
	110	119	Blackout for movements of the gobo wheel.
	120	129	Deactivates the Blackout for movements of the gobo wheel.
	130	139	Lamp on
	140	149	Reset Pan / Tilt
	150	159	Reset color wheel
	160	169	Reset gobo wheel
	170	179	Reset Dimmer / Shutter
	180	189	Reset Zoom / Focus / Prism
	190	199	No function
	200	209	Reset
	210	229	No function
	230	239	Lamp off
	240	255	No function
			The color wheel can be positioned continuously. If you reach the specified value the color wheel is exactly on this color.
7	0		Open / White
	9		Deep red
	18		Deep blue
	27		Yellow



	37		Magenta
	46		Azure
	55		Red
	64		Dark green
	73		Amber
	82		Blue
	91		Orange
	101		СТО
	110		UV Filter
	119		White
			You can only choose exact colors.
	130	134	Deep red
	135	138	Deep blue
	139	143	Yellow
	144	147	Green
	148	152	Magenta
	153	157	Azure
	158	161	Red
	162	166	Dark green
	167	171	Amber
	172	176	Blue
	177	180	Orange
	186	189	СТО
	190	215	Color change clockwise fast – slow
	216	217	No function
	218	243	Color change counterclockwise slow – fast
	244	249	No function
	250	255	Random color selection.
8	0	255	Fine positioning of the color wheel.
9	0	255	Speed for gobo selection fast – slow
			Gobo wheel 1
	0	3	Open
	4	9	Gobo 1
	10	15	Gobo 2
	16	21	Gobo 3
	22	27	Gobo 4
	28	33	Gobo 5
10	34	39	Gobo 6
	40	45	Gobo 7
	46	51	Gobo 8
	52	57	Gobo 9
	58	63	Gobo 10
	64	69	Beam size 1
	70	75	Beam size 2
	76	81	Beam size 3



	82	87	Beam size 4
	88	95	Gobo 1 Shake slow – fast
	96	103	Gobo 2 Shake slow – fast
	104	111	Gobo 3 Shake slow – fast
	112	119	Gobo 4 Shake slow – fast
	120	127	Gobo 5 Shake slow – fast
	128	135	Gobo 6 Shake slow – fast
	136	143	Gobo 7 Shake slow – fast
	144	151	Gobo 8 Shake slow – fast
	152	159	Gobo 9 Shake slow – fast
	160	167	Gobo 10 Shake slow - fast
	168	175	Beam size 1 Shake
	176	183	Beam size 2 Shake
	184	191	Beam size 3 Shake
	192	199	Beam size 4 Shake
	200	201	Open
	202	221	Gobo rotation clockwise fast – slow
	222	223	Stop
	224	243	Gobo rotation counterclockwise slow – fast
	244	249	Open
	250	255	Random gobo selection fast – slow
	200	200	Gobo wheel 2
			For DMX values 0 – 59 you can set the speed of
			gobo selection with channel 9.
	0		Open
	1	4	Flat Field
			For DMX values 5 – 31 you can position the gobo
			with channel 12.
	5	7	Gobo 1
	8	10	Gobo 2
	11	13	Gobo 3
	14	16	Gobo 4
	17	19	Gobo 5
11	20	22	Gobo 6
	23	25	Gobo 7
	26	28	Gobo 8
	29	31	Gobo 9
			For DMX values 32 – 59 you can rotate the gobo
			with channel 12.
	32	34	Gobo 1
	35	37	Gobo 2
	38	40	Gobo 3
	41	43	Gobo 4
	44	46	Gobo 5
	47	49	Gobo 6
	50	52	Gobo 7



	53	55	Gobo 8
	56	59	Gobo 9
			For DMX values 60 – 129 you can position the gobo with channel 12.
	60	67	Gobo 1 Shake slow – fast
	68	75	Gobo 2 Shake slow – fast
	76	83	Gobo 3 Shake slow – fast
	84	91	Gobo 4 Shake slow – fast
	92	99	Gobo 5 Shake slow – fast
	100	107	Gobo 6 Shake slow – fast
	108	115	Gobo 7 Shake slow – fast
	116	123	Gobo 8 Shake slow – fast
	124	129	Gobo 9 Shake slow – fast
			For DMX values 130 – 199 you can rotate the gobo with channel 12.
	130	137	Gobo 1 Shake slow – fast
	138	145	Gobo 2 Shake slow – fast
	146	153	Gobo 3 Shake slow – fast
	154	161	Gobo 4 Shake slow – fast
	162	169	Gobo 5 Shake slow – fast
	170	177	Gobo 6 Shake slow – fast
	178	185	Gobo 7 Shake slow – fast
	186	193	Gobo 8 Shake slow – fast
	194	199	Gobo 9 Shake slow – fast
	200	201	Open
	202	221	Gobo rotation clockwise fast – slow
	222	223	Stop
	224	243	Gobo rotation counterclockwise slow – fast
	244	249	Open
	250	255	Random gobo slection fast – slow
	0	255	Choose the exact position for the gobos of channel 11 for the DMX values 5 – 31 and 60 – 129
12			Choose the rotation for the gobos of channel 11 for the DMX values 32 – 59 and 130 – 199.
12	0		No function
	1	127	Gobo rotation clockwise fast – slow
	128	129	Stop
	130	255	Gobo rotation counterclockwise slow – fast
13			Fine positioning of the gobo wheel.
	0	19	Open
	20	49	Positioning of the 6-way prism with channel 15.
	50	75	Rotation of the 6- way prism with channel 15.
14	76	105	Positioning of the 8- way prism with channel 15.
	106	127	Rotation of the 8- way prism with channel 15.
	128	135	Macro 1
	136	143	Macro 2



	144	151	Macro3
	152	159	Macro 4
	160	167	Macro 5
	168	175	Macro 6
	176	183	Macro 7
	184	191	Macro 8
	192	199	Macro 9
	200	207	Macro 10
	208	215	Macro 11
	216	223	Macro 12
	224	231	Macro 13
	232	239	Macro 14
	240	247	Macro 15
	248	255	Macro 16
	0	255	Choose the exact position for the prism of channel 14 for the DMX values 20 – 49 and 76 – 105.
			Choose the rotation for the prism of channel 14 for the DMX values 50 – 75 and 106 – 127.
15	0		No function.
	1	127	Prism rotation clockwise fast – slow
	128	129	Stop
	130	255	Prism rotation counterclockwise slow – fast
16	0	255	Frost
17	0	255	Zoom
18	0	255	Zoom fine
19	0	255	Focus
20	0	255	Focus fine
21	0	255	Auto focus
	0	31	Shutter closed (Lamp power reduced to 230W, if the Shutter is open it would not be reduced anymore time.)
	32	63	Shutter open
	64	95	Strobe slow – fast
22	96	127	Shutter open
	128	143	Opening pulse slow – fast
	144	159	Closing pulse fast – slow
	160	191	Shutter open
	192	223	Strobe random slow – fast
	224	255	Shutter open
23	0	255	Dimmer 0 – 100%
24	0	255	Dimmer fine



# 6.3. DMX Mode 3 (16 channels)

Channel	Value from	Value to	Function
1	0	255	Pan
2	0	255	Tilt
3	0	255	Pan/Tilt speed
			The color wheel can be positioned continuously. If you reach the specified value the color wheel is exactly on this color.
	0		Open / White
	9		Deep red
	18		Deep blue
	27		Yellow
	37		Magenta
	46		Azure
	55		Red
	64		Dark green
	73		Amber
	82		Blue
	91		Orange
	101		СТО
	110		UV Filter
	119		White
4			You can only choose exact colors.
	130	134	Deep red
	135	138	Deep blue
	139	143	Yellow
	144	147	Green
	148	152	Magenta
	153	157	Azure
	158	161	Red
	162	166	Dark green
	167	171	Amber
	172	176	Blue
	177	180	Orange
	186	189	СТО
	190	215	Color change clockwise fast – slow
	216	217	No function
	218	243	Color change counterclockwise slow – fast
	244	249	No function
	250	255	Random color selection.
			Gobo wheel 1
	0	3	Open
5	4	9	Gobo 1
	10	15	Gobo 2
	16	21	Gobo 3



	22	27	Gobo 4
	28	33	Gobo 5
	34	39	Gobo 6
	40	45	Gobo 7
	46	51	Gobo 8
	52	57	Gobo 9
	58	63	Gobo 10
	64	69	Beam size 1
	70	75	Beam size 2
	76	81	Beam size 3
	82	87	Beam size 4
	88	95	Gobo 1 Shake slow – fast
	96	103	Gobo 2 Shake slow – fast
	104	111	Gobo 3 Shake slow – fast
	112	119	Gobo 4 Shake slow – fast
	120	127	Gobo 5 Shake slow – fast
	128	135	Gobo 6 Shake slow – fast
	136	143	Gobo 7 Shake slow – fast
	144	151	Gobo 8 Shake slow – fast
	152	159	Gobo 9 Shake slow – fast
	160	167	Gobo 10 Shake slow - fast
	168	175	Beam size 1 Shake
	176	183	Beam size 2 Shake
	184	191	Beam size 3 Shake
	192	199	Beam size 4 Shake
	200	201	Open
	202	221	Gobo rotation clockwise fast – slow
	222	223	Stop
	224	243	Gobo rotation counterclockwise slow – fast
	244	249	Open
	250	255	Random Gobo selection fast – slow
			Goborad 2
	0		Open
	1	4	Flat Field
			For DMX values 5 – 31 you can position the gobo with channel 7.
	5	7	Gobo 1
	8	10	Gobo 2
6	11	13	Gobo 3
	14	16	Gobo 4
	17	19	Gobo 5
	20	22	Gobo 6
	23	25	Gobo 7
	26	28	Gobo 8
	29	31	Gobo 9



For DMX values 32 – 59 you can rotate the gobo with channel 7.   32				
35 37 Gobo 2 38 40 Gobo 3 41 43 Gobo 4 44 46 Gobo 5 47 49 Gobo 6 50 52 Gobo 7 53 55 Gobo 8 56 59 Gobo 9 For DMX values 60 – 129 you can position the gobo with channel 7. 60 67 Gobo 1 Shake slow – fast 68 75 Gobo 2 Shake slow – fast 68 75 Gobo 5 Shake slow – fast 92 99 Gobo 6 Shake slow – fast 100 107 Gobo 6 Shake slow – fast 116 123 Gobo 8 Shake slow – fast 116 123 Gobo 9 Shake slow – fast 124 129 Gobo 9 Shake slow – fast 138 145 Gobo 9 Shake slow – fast 146 153 Gobo 3 Shake slow – fast 154 161 Gobo 6 Shake slow – fast 162 Gobo 8 Shake slow – fast 170 Gobo 6 Shake slow – fast 181 Gobo 8 Shake slow – fast 182 Gobo 8 Shake slow – fast 183 Shake slow – fast 184 Gobo 9 Shake slow – fast 185 Gobo 9 Shake slow – fast 186 Gobo 8 Shake slow – fast 187 Gobo 8 Shake slow – fast 188 Gobo 8 Shake slow – fast 189 Gobo 8 Shake slow – fast 190 Gobo 8 Shake slow – fast 191 Gobo 8 Shake slow – fast 192 Gobo 9 Shake slow – fast 193 Gobo 8 Shake slow – fast 194 Gobo 9 Shake slow – fast 195 Gobo 9 Shake slow – fast 196 Gobo 9 Shake slow – fast 197 Gobo 6 Shake slow – fast 198 Gobo 9 Shake slow – fast 199 Gobo 9 Shake slow – fast 190 Gobo 9 Shake slow – fast 190 Gobo 9 Shake slow – fast 190 Gobo 9 Shake slow – fast 194 Gobo 9 Shake slow – fast 195 Gobo 9 Shake slow – fast 196 Gobo 9 Shake slow – fast 197 Gobo 1 Shake slow – fast 198 Gobo 9 Shake slow – fast 199 Gobo 9 Shake slow – fast 190 Cobo 9 Shake slo				
38		32	34	Gobo 1
41		35	37	Gobo 2
44 46 Gobo 5 47 49 Gobo 6 50 52 Gobo 7 53 55 Gobo 8 56 59 Gobo 9 For DMX values 60 – 129 you can position the gobo with channel 7. 60 67 Gobo 1 Shake slow – fast 68 75 Gobo 2 Shake slow – fast 76 83 Gobo 3 Shake slow – fast 84 91 Gobo 4 Shake slow – fast 92 99 Gobo 5 Shake slow – fast 100 107 Gobo 6 Shake slow – fast 116 123 Gobo 8 Shake slow – fast 116 123 Gobo 8 Shake slow – fast 124 129 Gobo 9 Shake slow – fast 130 137 Gobo 1 Shake slow – fast 146 153 Gobo 2 Shake slow – fast 154 161 Gobo 4 Shake slow – fast 162 169 Gobo 5 Shake slow – fast 178 Gobo 1 Shake slow – fast 186 193 Gobo 8 Shake slow – fast 186 193 Gobo 5 Shake slow – fast 186 193 Gobo 7 Shake slow – fast 186 193 Gobo 8 Shake slow – fast 186 193 Gobo 9		38	40	Gobo 3
47		41	43	Gobo 4
50   52   Gobo 7		44	46	Gobo 5
53   55   Gobo 8		47	49	Gobo 6
For DMX values 60 – 129 you can position the gobo with channel 7.		50	52	Gobo 7
For DMX values 60 – 129 you can position the gobo with channel 7.		53	55	Gobo 8
with channel 7.		56	59	Gobo 9
68				, , , , ,
76		60	67	Gobo 1 Shake slow – fast
Section		68	75	Gobo 2 Shake slow – fast
92 99 Gobo 5 Shake slow – fast 100 107 Gobo 6 Shake slow – fast 108 115 Gobo 7 Shake slow – fast 116 123 Gobo 8 Shake slow – fast 116 129 Gobo 9 Shake slow – fast 124 129 Gobo 9 Shake slow – fast 130 137 Gobo 1 Shake slow – fast 138 145 Gobo 2 Shake slow – fast 146 153 Gobo 3 Shake slow – fast 154 161 Gobo 4 Shake slow – fast 162 169 Gobo 5 Shake slow – fast 170 177 Gobo 6 Shake slow – fast 186 193 Gobo 7 Shake slow – fast 186 193 Gobo 8 Shake slow – fast 194 199 Gobo 9 Shake slow – fast 194 199 Gobo 9 Shake slow – fast 200 201 Open 202 221 Gobo rotation clockwise fast – slow 222 223 Stop 224 243 Gobo rotation counterclockwise slow – fast 244 249 Open 250 255 Random gobo selection fast – slow Choose the exact position for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.  No function 1 127 Gobo rotation clockwise fast – slow		76	83	Gobo 3 Shake slow – fast
100		84	91	Gobo 4 Shake slow – fast
108		92	99	Gobo 5 Shake slow – fast
116		100	107	Gobo 6 Shake slow – fast
124		108	115	Gobo 7 Shake slow – fast
For DMX values 130 – 199 you can rotate the gobo with channel 7.  130		116	123	Gobo 8 Shake slow – fast
With channel 7.		124	129	Gobo 9 Shake slow – fast
138       145       Gobo 2 Shake slow – fast         146       153       Gobo 3 Shake slow – fast         154       161       Gobo 4 Shake slow – fast         162       169       Gobo 5 Shake slow – fast         170       177       Gobo 6 Shake slow – fast         178       185       Gobo 7 Shake slow – fast         186       193       Gobo 8 Shake slow – fast         194       199       Gobo 9 Shake slow – fast         200       201       Open         202       221       Gobo rotation clockwise fast – slow         222       223       Stop         224       243       Gobo rotation counterclockwise slow – fast         244       249       Open         250       255       Random gobo selection fast – slow         0       255       Choose the exact position for the gobos of channel 6 for the DMX values 5 – 31 and 60 – 129         Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.       No function         1       127       Gobo rotation clockwise fast – slow				
146		130	137	Gobo 1 Shake slow – fast
154		138	145	Gobo 2 Shake slow – fast
162		146	153	Gobo 3 Shake slow – fast
170		154	161	Gobo 4 Shake slow – fast
178       185       Gobo 7 Shake slow – fast         186       193       Gobo 8 Shake slow – fast         194       199       Gobo 9 Shake slow – fast         200       201       Open         202       221       Gobo rotation clockwise fast – slow         222       223       Stop         224       243       Gobo rotation counterclockwise slow – fast         244       249       Open         250       255       Random gobo selection fast – slow         Choose the exact position for the gobos of channel 6 for the DMX values 5 – 31 and 60 – 129       Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.         7       No function         1       127       Gobo rotation clockwise fast – slow		162	169	Gobo 5 Shake slow – fast
186		170	177	Gobo 6 Shake slow – fast
194   199   Gobo 9 Shake slow – fast		178	185	Gobo 7 Shake slow – fast
200   201   Open		186	193	Gobo 8 Shake slow – fast
202 221 Gobo rotation clockwise fast – slow 222 223 Stop 224 243 Gobo rotation counterclockwise slow – fast 244 249 Open 250 255 Random gobo selection fast – slow  Choose the exact position for the gobos of channel 6 for the DMX values 5 – 31 and 60 – 129  Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.  No function  1 127 Gobo rotation clockwise fast – slow		194	199	Gobo 9 Shake slow – fast
222 223 Stop  224 243 Gobo rotation counterclockwise slow – fast  244 249 Open  250 255 Random gobo selection fast – slow  Choose the exact position for the gobos of channel 6 for the DMX values 5 – 31 and 60 – 129  Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.  No function  1 127 Gobo rotation clockwise fast – slow		200	201	Open
Gobo rotation counterclockwise slow – fast  244 249 Open 250 255 Random gobo selection fast – slow  Choose the exact position for the gobos of channel 6 for the DMX values 5 – 31 and 60 – 129  Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.  No function  1 127 Gobo rotation clockwise fast – slow		202	221	Gobo rotation clockwise fast – slow
244 249 Open 250 255 Random gobo selection fast – slow  Choose the exact position for the gobos of channel 6 for the DMX values 5 – 31 and 60 – 129  Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.  No function  1 127 Gobo rotation clockwise fast – slow		222	223	Stop
250  255  Random gobo selection fast – slow  Choose the exact position for the gobos of channel 6 for the DMX values 5 – 31 and 60 – 129  Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.  No function  1 127  Gobo rotation clockwise fast – slow		224	243	Gobo rotation counterclockwise slow – fast
Choose the exact position for the gobos of channel 6 for the DMX values 5 – 31 and 60 – 129  Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.  No function  1 127 Gobo rotation clockwise fast – slow		244	249	Open
6 for the DMX values 5 – 31 and 60 – 129  Choose the rotation for the gobos of channel 6 for the DMX values 32 – 59 und 130 – 199.  No function  1 127 Gobo rotation clockwise fast – slow		250	255	Random gobo selection fast – slow
the DMX values 32 – 59 und 130 – 199.  No function  1 127 Gobo rotation clockwise fast – slow		0	255	
1 Gobo rotation clockwise fast – slow	7			the DMX values 32 – 59 und 130 – 199.
		0		
128 Stop				Gobo rotation clockwise fast – slow
		128	129	Stop



			,
	130	255	Gobo rotation counterclockwise slow – fast
	0	19	Open
	20	49	Positioning of the 6-way prism with channel 9.
	50	75	Rotation of the 6- way prism with channel 9.
	76	105	Positioning of the 8- way prism with channel 9.
	106	127	Rotation of the 8- way prism with channel 9.
	128	135	Macro 1
	136	143	Macro 2
	144	151	Macro3
	152	159	Macro 4
	160	167	Macro 5
8	168	175	Macro 6
	176	183	Macro 7
	184	191	Macro 8
	192	199	Macro 9
	200	207	Macro 10
	208	215	Macro 11
	216	223	Macro 12
	224	231	Macro 13
	232	239	Macro 14
	240	247	Macro 15
	248	255	Macro 16
	0	255	Choose the exact position for the prism of channel 8 for the DMX values 20 – 49 and 76 – 105.
			Choose the rotation for the prism of channel 8 for the DMX values 50 – 75 and 106 – 127.
9	0		No function.
	1	127	Prism rotation clockwise fast – slow
	128	129	Stop
	130	255	Prism rotation counterclockwise slow – fast
10	0	255	Frost
11	0	255	Zoom
12	0	255	Focus
13	0	255	Auto focus
	0	31	Shutter closed (Lamp power reduced to 230W, if the Shutter is open it would not be reduced anymore time.)
	32	63	Shutter open
	64	95	Strobe slow – fast
14	96	127	Shutter open
	128	143	Opening pulse slow – fast
	144	159	Closing pulse fast – slow
	160	191	Shutter open
	192	223	Strobe random slow – fast
	224	255	Shutter open
15	0	255	Dimmer 0 – 100%

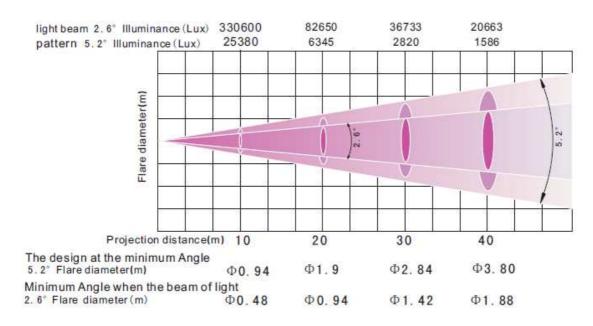


			To activate these functions, the value has to be set for at least 3 seconds and channel 20 has to be set to a value between 0 – 31. The corresponding menu items are temporarily overridden.
	0	9	No function
	10	14	DMX input wired (function is active only 10 seconds after switching fixture).
	15	19	No function
	20	24	Eco mode (Lamp power reduced to 230W)
	25	29	Standard mode (Lamp power is 280W)
	30	49	No function
	50	59	Speed Pan / Tilt
	60	69	Time Pan / Tilt
	70	79	Blackout for Pan- / Tilt movements
	80	89	Deactivates the Blackout for Pan- / Tilt movements.
40	90	99	Blackout for movements of the color wheel.
16	100	109	Deactivates the Blackout for movements of the color wheel.
	110	119	Blackout for movements of the gobo wheel.
	120	129	Deactivates the Blackout for movements of the gobo wheel.
	130	139	Lamp on
	140	149	Reset Pan / Tilt
	150	159	Reset color wheel
	160	169	Reset gobo wheel
	170	179	Reset Dimmer / Shutter
	180	189	Reset Zoom / Focus / Prism
	190	199	No function
	200	209	Reset
	210	229	No function
	230	239	Lamp off
	240	255	No function

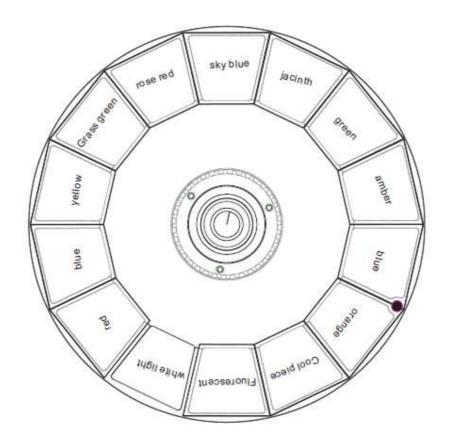


# 7. Technical data

## 7.1. Photometrical data

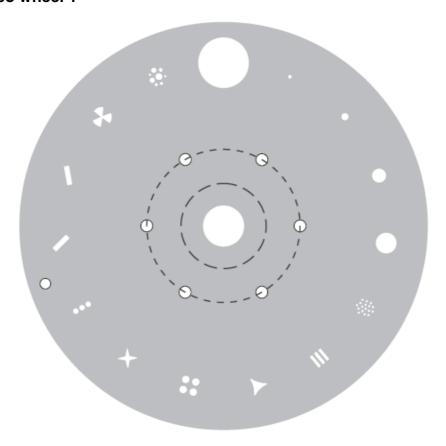


## 7.2. Color wheel

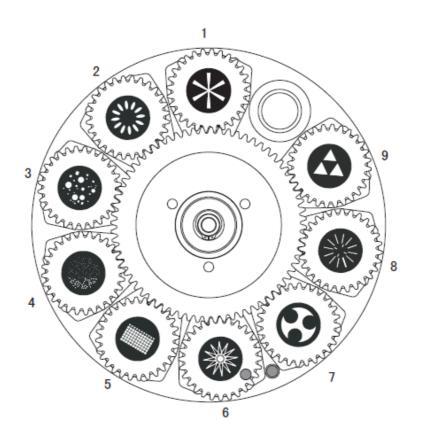




# 7.3. Gobo wheel 1



# 7.4. Gobo wheel 2





# 7.5. Technical data

Power supply	
Voltage	100-240 V / 50-60 Hz
Power consumption max.	400 W
Light source	
LM type	Discharge lamp
Wavelength/Color temperature	7800 °K
Power	280 W
Connections	
Strom in	P-Con
Strom out	P Con
XLR in / out	3pol / 5pol
Functions	
Pan	540°
Tilt	260°
Gobowheel 1	14 Gobos static
Gobowheel 2	9 Gobos rotatable
Controlling	
Sound-to-Light	Yes
Automatic	Yes
Master-Slave	Yes
DMX512	16 / 24 channels
Hardware	
Protection class	IP20
Dimensions	287 x 390x 583 mm
Weight	15,00 kg







# Importer:

B & K Braun GmbH Industriestraße 2 D-76307 Karlsbad

www.bkbraun.com info@bkbraun.com





