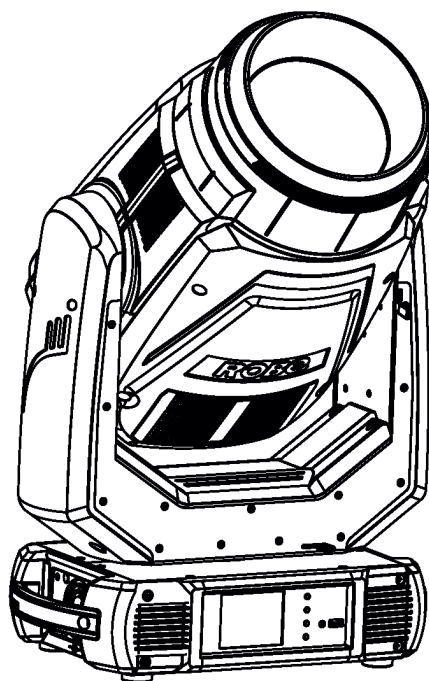




ROBIN[®] MegaPointe

ROBIN[®] MegaPointe Wireless DMX

CRMX[™]



USER MANUAL

Version 2.0

Robin MegaPointe

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**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE YOU INITIAL START - UP**

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warnings in this manual.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

The Robin MegaPointe was designed for indoor use and it is intended for professional application only. It is not for household use.

1. Safety instructions

CAUTION!

Disconnect the fixture from mains before you remove any cover of the fixture. With a high voltage you can suffer a dangerous electric shock when touching alive wires and electrical parts under covers!

Make sure that the available voltage is not higher than stated on the rear panel of the fixture.

This fixture should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized distributor or local power company.

Always disconnect the fixture from AC power before cleaning, removing or servicing any part of the fixture.

The power plug has to be accessible after installing the fixture. Do not overload wall outlets and extension cords as this can result in fire or electric shock.

Do not allow anything to rest on the power cord. Do not locate this fixture where the cord may be damaged by persons walking on it.

Make sure that the power cord is never crimped or damaged by sharp edges. Check the fixture and the power cord from time to time.

Refer servicing to qualified service personnel.

This fixture falls under protection class I. Therefore this fixture has to be connected to a mains socket outlet with a protective earthing connection.

Do not connect this fixture to a dimmer pack.

During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

The housing of the fixture becomes hot during its operation.

For replacement use lamps and fuses of same type and rating only.

***Risk group 2, RG-2: CAUTION.
Do not stare at exposed lamp in operation. May be harmful to the eyes.
Avoid looking directly into the light source.***

If the fixture has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Before switching the fixture off, turn its lamp off and allow the fixture to cool for a while.

WARNING! This unit does not contain an ON/OFF switch. Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the unit.

This fixture was designed for indoor use only, do not expose this unit to rain or use near water.

When choosing the installation spot, please make sure that the fixture is not exposed to extreme heat, moisture or dust.

Air vents and slots in the fixture's head and base are provided for ventilation, to ensure reliable operation of the device and to protect it from overheating, they never must be covered with cloth or other materials.

Do not block the front objective lens with any object when the fixture is under operation.

The fixture becomes very hot during operation. Allow the fixture to cool approximately 20 minutes prior to manipulate with it.

Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.

Always use a safety wire for overhead installation.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

Warning
Minimum distance between the moving head and a surface of illuminated object must be 18 meters or more (lamp in Standard Mode).

The maximum ambient temperature 45°C must never be exceeded.

CAUTION!
The lens has to be replaced when it is obviously damaged, so that its function is impaired, e. g. due to cracks or deep scratches!

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device. Most damages are the result of unprofessional operation!

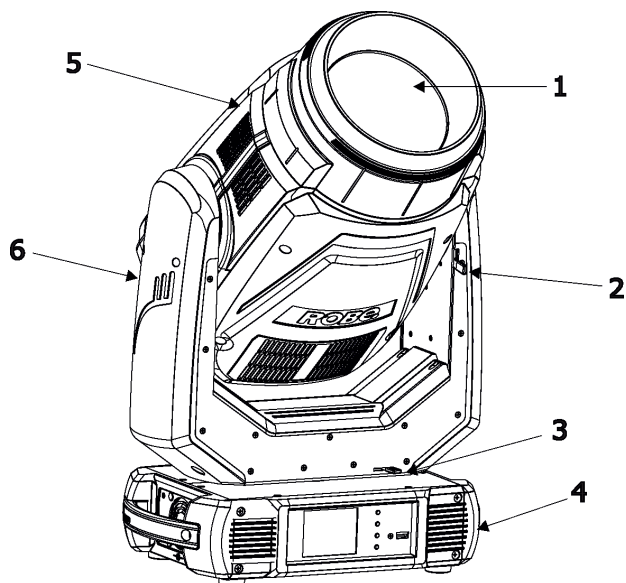
CAUTION!
The lamp has to be replaced when it is damaged or deformed due to the heat!

CAUTION!
Fast on-off-cycles (e.g. 10 min. on / 10 min. off) will reduce lamp life.

CAUTION!
To avoid damage of the internal parts of the fixture head, never let the sunlight (or other light source) lights directly to the front lens, even when the fixture is not in operation !

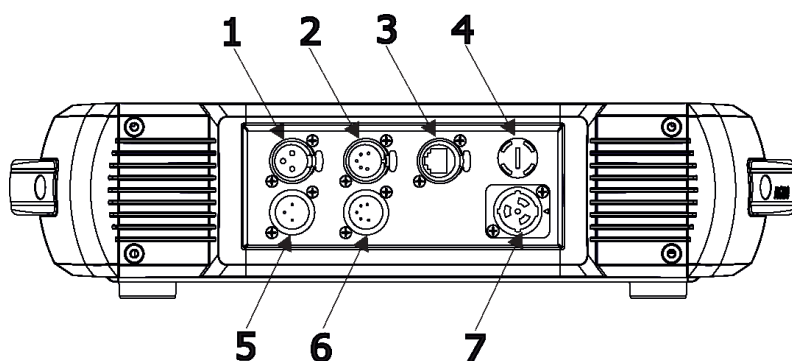
Please use the original packaging if the device is to be transported.

2. Fixture exterior view



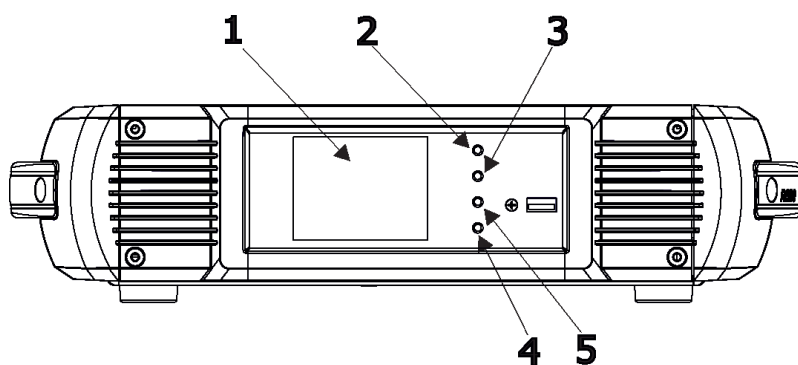
- 1 - Front lens
- 2 - Tilt lock
- 3 - Pan lock
- 4 - Base
- 5 - Moving head
- 6 - Arm

The head should be locked for transportation - both tilt lock latch (2) and pan lock latch (3) have to be in locked positions. Move these latches to unlock positions before operating the fixture.



Rear panel of the base:

- 1 - 3-pin DMX Out
- 2 - 5-pin DMX Out
- 3 - Ethernet
- 4 - Fuse holder
- 5 - 3-pin DMX In
- 6 - 5-pin DMX In
- 7 - Power



Front panel of the base:

- 1 - QVGA touch screen
- 2 - ESCAPE button
- 3 - NEXT button
- 4 - ENTER/DISPLAY ON button
- 5 - PREV button

The ENTER/DISPLAY ON button also serves for switching the display on when the fixture is disconnected from the mains.

3. Installation



Fixtures must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.

3.1 Connection to the mains

For protection from electric shock, the fixture must be earthed!

The Robin MegaPointe is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts.

Power cable is enclosed to the fixture. If you need to install a power plug on the power cable to allow connection to power outlets, install a grounding-type (earthed) plug, following the plug manufacturer's instructions. If you have any doubts about proper installation, consult a qualified electrician.

Core (EU)	Core (US)	Connection	Plug Terminal Marking
Brown	Black	Live	L
Light blue	White	Neutral	N
Green /Yellow	Green	Earth	

This device falls under class one and must be earthed (grounded).

To apply power, first check that the head pan and tilt locks are released.

Wiring and connection work must be carried out by qualified staff.

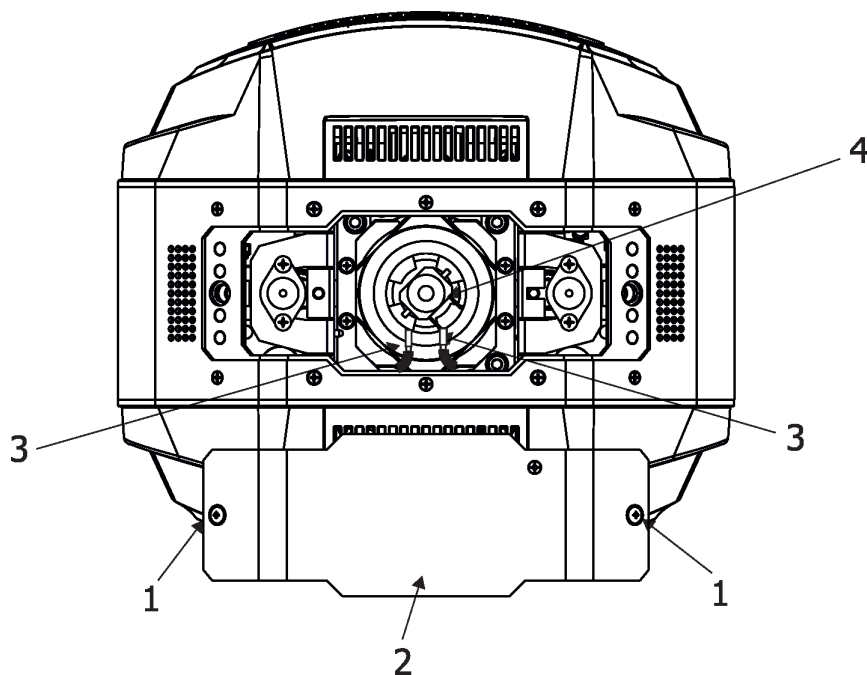
3.2 Changing the lamp

DANGER !
Install the lamp with the fixture unplug from mains !

To change the lamp

1. Disconnect the fixture from mains and allow it to cool at least 20 minutes.
2. Loosen the two quarter-turn fasteners (1) on a lamp cover and remove the lamp cover (2) to get into lamp compartment.
3. Remove both fastons (3) from flat terminals of the lamp.
4. Holding the lamp by its ceramic base (4), carefully turn the lamp counter-clockwise by a quarter turn to release the lamp from a lamp holder.
- 5 Holding the new lamp by its ceramics base (4), carefully insert the lamp into the lamp holder and turn it clockwise by a quarter turn until you it reach a stop. Do not touch the lamp with bare hands. If necessary, lamp can be cleaned with lint free towel before operation
Do not install a lamp with a higher wattage! A lamp like this generates temperatures the device is not designed for. Please follow the lamp manufacturer's notes!
6. Slide both fastons (3) on the lamp terminals and check that fastons are fastened properly.
7. Re-insert the lamp cover (2) and tighten the two quarter-turn fasteners (1) .
8. Connect the fixture to the mains.
9. Reset the "Lamp On Time" and "Lamp Strikes" counters in the menu "Information".

This lamp emits ultra violet (UV) radiation and operates at high pressure!
Do not operate this fixture without properly fastened the lamp cover !

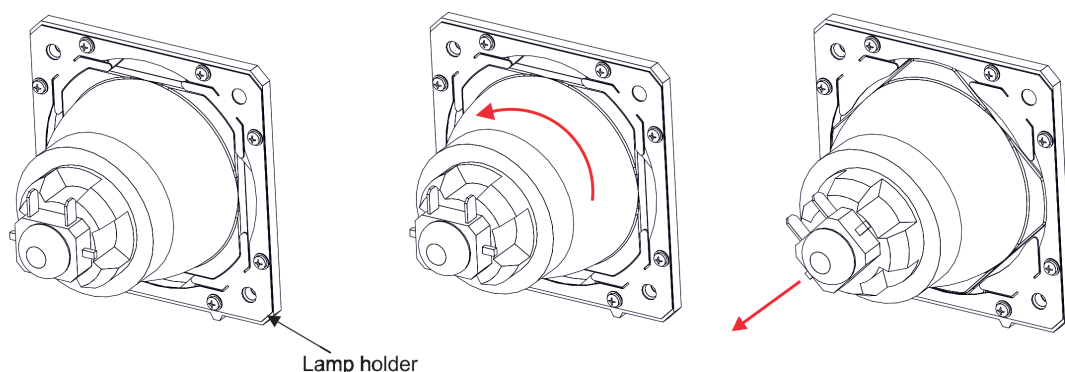


Unlock and remove the lamp

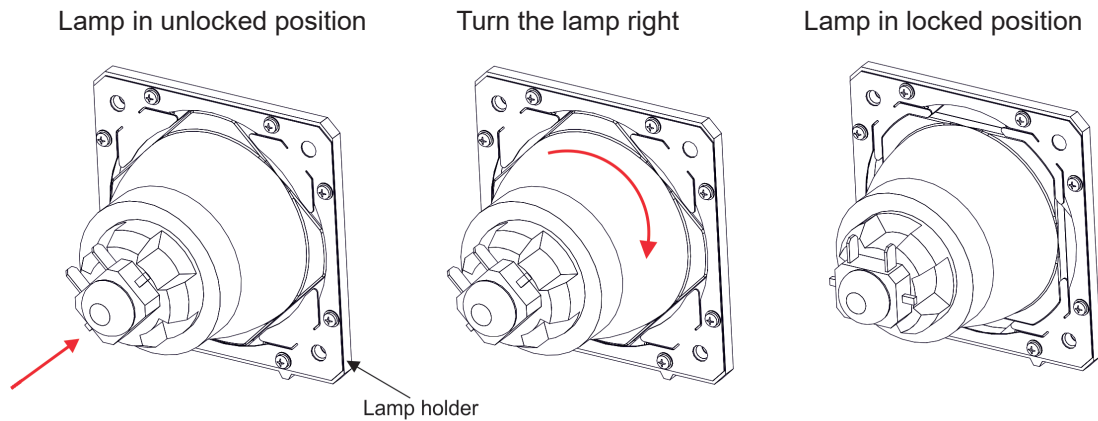
Lamp in locked position

Turn the lamp left

Lamp in unlocked position



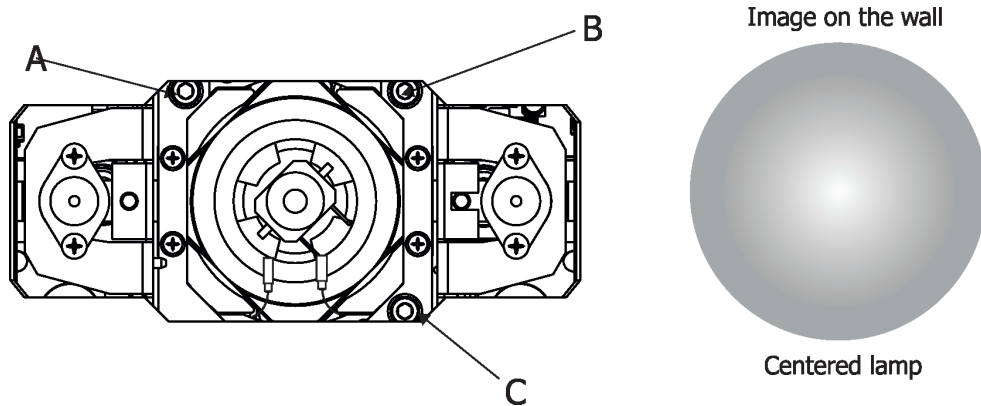
Insert and lock the lamp



3.3 Aligning the lamp

The lamp holder is aligned at the factory. Due to differences between lamps, a fine adjustment of the lamp holder may improve light performance of the fixture.

The three screws (A,B, C) serve for fine aligning of the lamp's hot spot in a light image



To adjust the lamp in the fixture.

1. Connect the fixture to mains, switch on the lamp, open shutter and dimmer, set zoom on suitable size and focus the image on the wall (both static gobo wheel a rotating gobo wheel have to be set at 0 DMX).
2. Loosen two quarter-turn fasteners (1) on a lamp cover and remove the lamp cover (2) to get into lamp compartment.
3. Adjust the lamp holder into desired position by using the three screws A,B,C (by means of an Allen key 4).
4. Re-insert the lamp cover (2) and tighten the two quarter-turn fasteners (1).

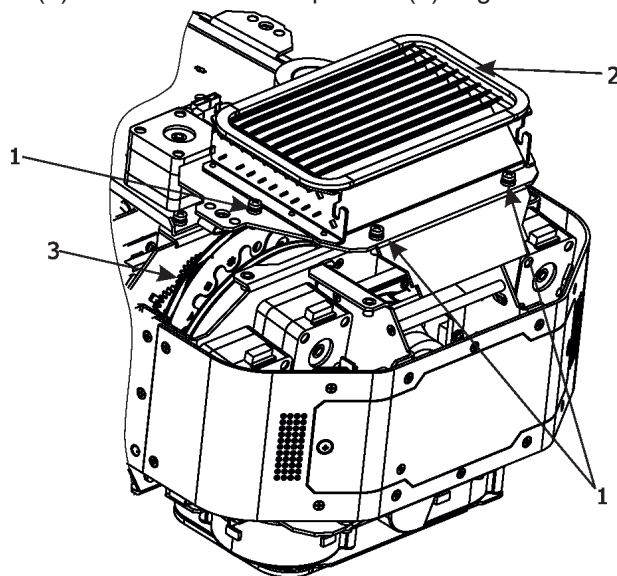
Wear proper eye and skin protection prior to remove the lamp cover.

3.4 Replacing rotating gobos

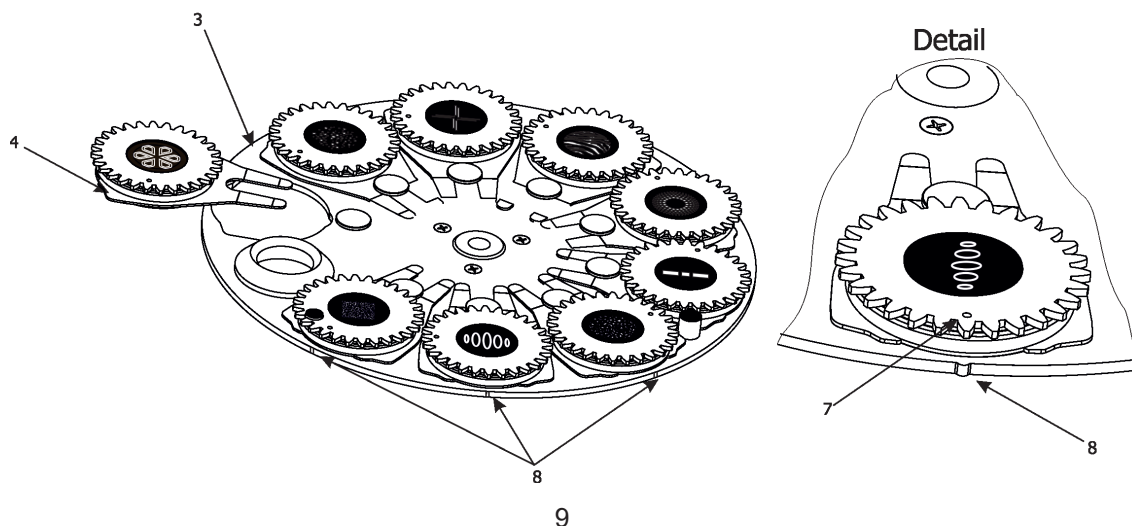
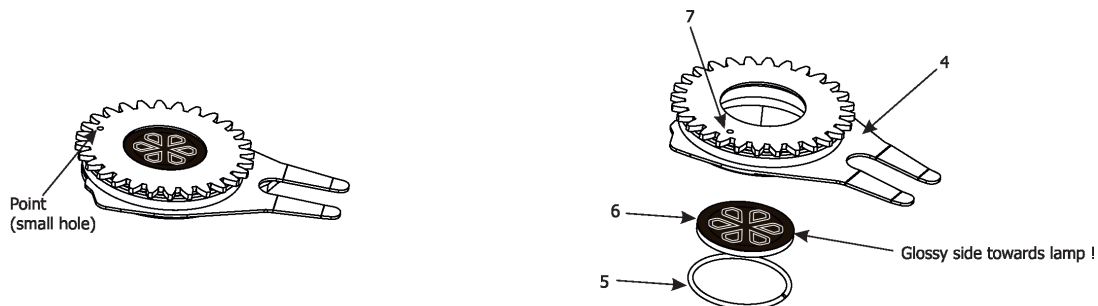
DANGER!

**Replace gobos with the device switched off only.
Unplug from mains before!**

1. Disconnect the fixture from mains and allow it to cool.
2. Remove the bottom plastic cover of the fixture head by loosening the 4 quarter-turn fasteners on the cover.
3. Loosen the fourth screws (1) and remove the lamp cover (2) to get access to the rotation gobo wheel (3).



3. Gently pull the gobo holder (4) up from the rotation gobo wheel (3).
4. Carefully remove the spring lock (5) and the gobo (6) from the gobo holder by pushing to the gobo from side of toothed wheel. Do not touch the glass gobo bare fingers - use a suitable gloves.
5. Insert the new gobo (glossy side towards the lamp). Orientation of gobos shows a picture below. Gobo has to be oriented according to axis of the gobo holder and the position point (7).
6. Insert the spring lock (5) to secure the gobo (6) in the gobo holder (4).



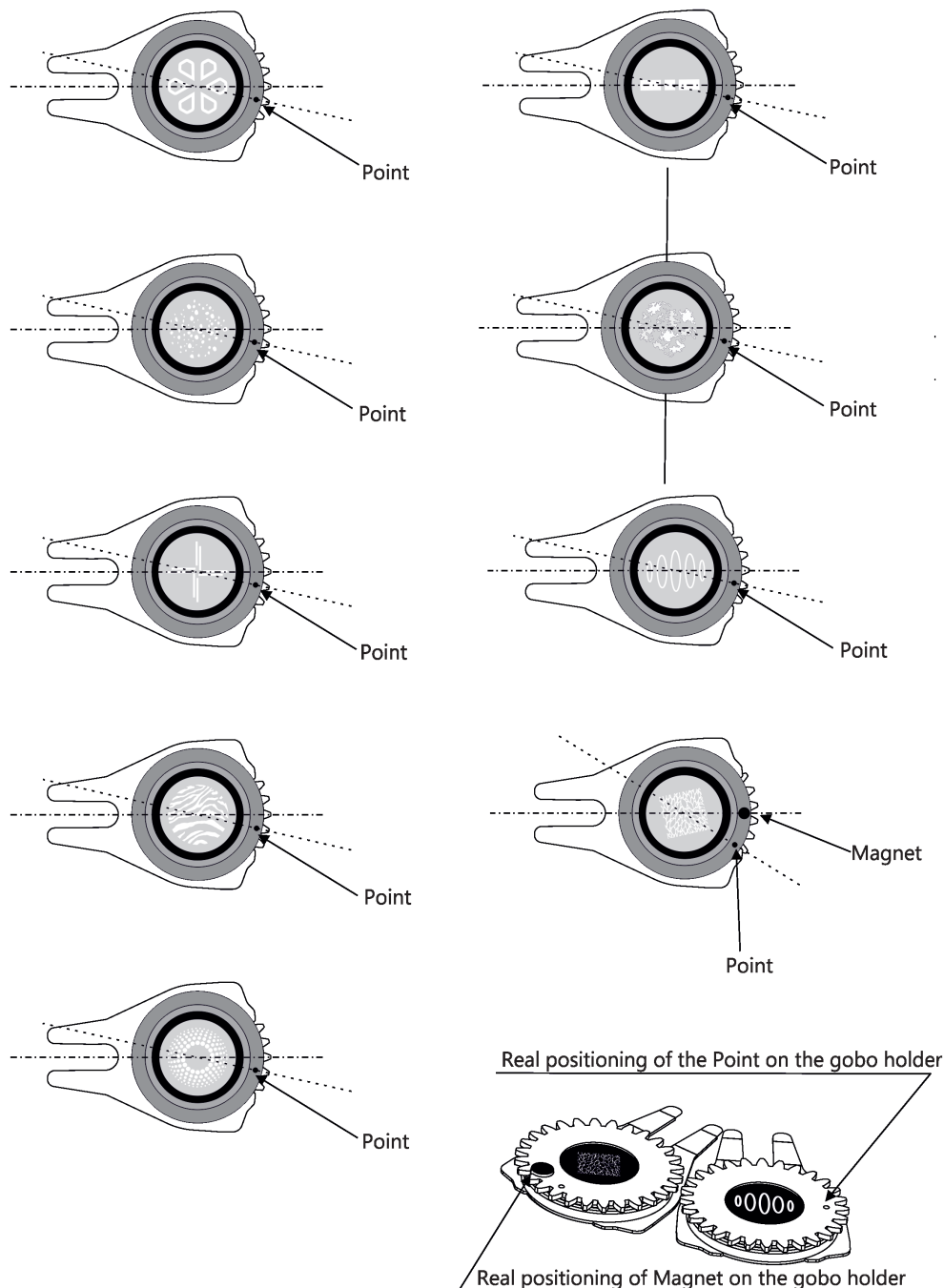
7. Insert the gobo holder (4) back into rotating gobo wheel (3) in this way, that its position point (7) has to aimed at a small toothlike projection (8) on the edge of the rotating gobo wheel.
- Important!** When inserting the gobo holder back to the rotating gobo wheel, one of the adjacent gobo holder has to be oriented according to the same rule, it means that its position point (7) has to aimed at the toothlike projection (8) on the edge of the rotating gobo wheel.
8. Screw the lamp cover (2) back to the fixture.
9. Replace the plastic cover before applying power.
10. Connect the fixture to the mains.
11. Use the menu Service to calibrate replaced gobo (Service -> Calibration -> Calibrate effects -> R. Gobo Index 1....9).

Warning!
Use only gobos intended for the Robin MegaPointe.
Do not try to use gobos from the Robin Pointe.
(The Robin MegaPointe generates heat the gobos of the Robin Pointe are not designed for).

Orientation of gobos in the gobo holders:

View from side of gobo inserting

(Points and magnet showed for orientation only,
in fact they are on the opposite side of the gobo holder)



3.5 Rigging the fixture

A structure intended for installation of the fixture (s) must safely hold weight of the fixture(s) placed on it. The structure has to be certificated to the purpose.

The fixture (fixtures) must be installed in accordance with national and local electrical and construction codes and regulation.

For overhead installation, the fixture must be always secured with a safety wire

When rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

Allow the fixture to cool for ten minutes before handling.

The projector should be installed outside areas where persons may walk by or be seated.

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but use a help of professional companies.

CAUTION: Fixtures may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the fixture!

The fixture has to be installed out of the reach of public.

The fixture must never be fixed swinging freely in the room.

Danger of fire !

When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 1 m.

Minimum distance of 18 m between the moving head and illuminated objects must be kept!

(If the fixture is operated in Eco mode, this distance can be reduced to 15 m).

CAUTION!

Use 2 appropriate clamps to rig the fixture on the truss.

Follow the instructions mentioned at the bottom of the base.

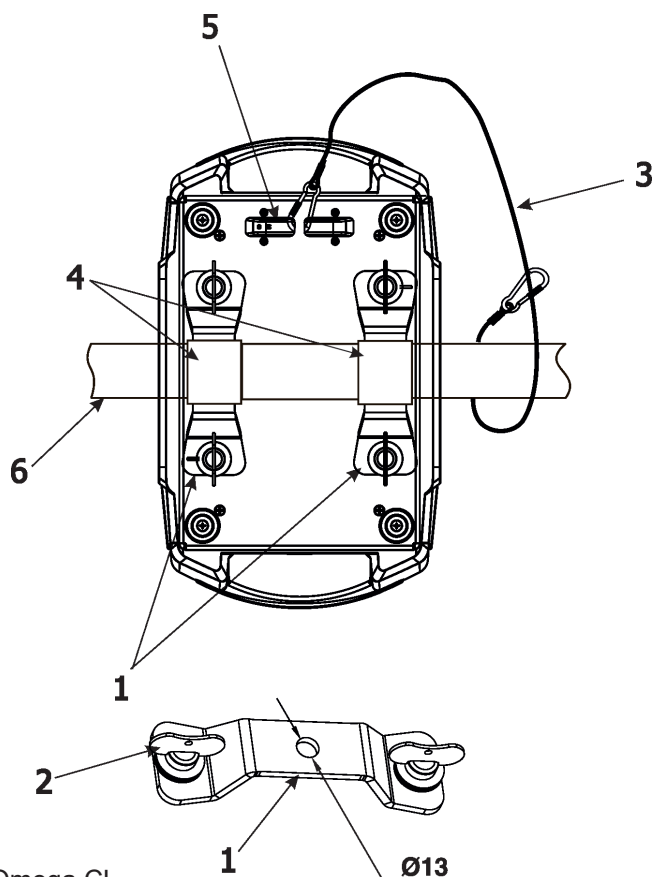
Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixtures is secure.

The fixture can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics .

For securing the fixture to the truss, install a safety wire which can hold at least 10 times the weight of the fixture. Use only the safety wire with a snap hook with screw lock gate.

Truss installation

1. Bolt clamps (4) to the brackets Omega CL (1) with M12 bolts and lock nuts through the hole in the bracket Omega CL.
2. Fasten the brackets Omega CL on the bottom of the base by means of the quick-lock fasteners (2) and tighten them fully clockwise.
3. Fasten the safety cable in the attachment point (5) and around the truss (6) as shown on the picture below.



- 1-Mounting bracket Omega CL
- 2-Quick-lock fasteners
- 3-Safety wire
- 4-Clamps
- 5-Attachment point
- 6-Truss

**When installing fixtures side-by-side,
avoid illuminating one fixture with another!**

**In order to protect the internal parts of the head from the sun, the function
PARKING POSITION must be switched ON before switching the fixture off.**

The PARKING POSITION function is located on the Power/Special functions channel (120-129 DMX). If the function is on, the fixture will automatically detect via G-sensor whether the fixture is on the floor or hangs on the truss or is mounted sideways on the truss and moves the pan and tilt to the position (including movement of zoom and focus lenses to the front part of the head) in which the front lens of the head will always face down. Owing this position of the fixture head, there is not chance to burn internal parts of the head by the sun light.

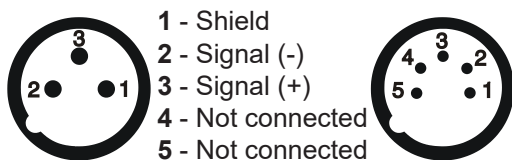
3.6 DMX-512 connection

The fixture is equipped with both 3-pin and 5-pin XLR sockets for DMX input and output. The sockets are wired in parallel.

Only use a shielded twisted-pair cable designed for RS-485 and 3-pin or 5-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

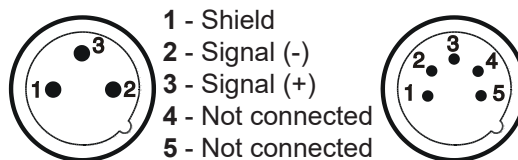
DMX - output

XLR mounting-sockets (rear view):

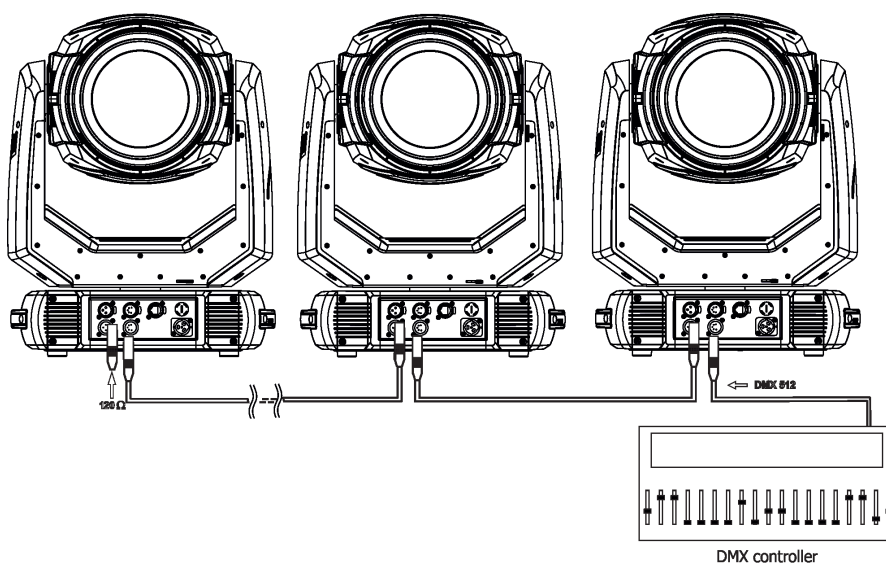


DMX-input

XLR mounting-plugs (rear view):



Building a serial DMX chain



Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be connected.

Caution: At the last fixture, the DMX cable has to be terminated with a terminator. Solder a 120 Ω resistor between Signal (-) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX output of the last fixture.

3.7 Ethernet connection

The fixtures on a data link are connected to the Ethernet with ArtNet (or MANet, MANet2, sACN) communication protocol. The control software running on your light console has to support some of the protocols. Art-Net communication protocol is a 10 Base T Ethernet protocol based on the TCP/IP. Its purpose is to allow transfer of large amounts of DMX 512 data over a wide area using standard network technology.

IP address is the Internet protocol address. The IP uniquely identifies any node (fixture) on a network.

The Universe is a single DMX 512 frame of 512 channels.

The Robin MegaPointe is equipped with 8-pin RJ-45 socket for Ethernet input. Use a network cable category 5 (with four “twisted” wire pairs) and standard RJ-45 plugs in order to connect the fixture to the network.

RJ-45 socket (front view):



- | | |
|------------------|------------------|
| 1- TD+ | 5- Not connected |
| 2- TD- | 6- RX- |
| 3- RX+ | 7- Not connected |
| 4- Not connected | 8- Not connected |

RJ-45 plug (front view):



Patch cables that connect fixtures to the hubs or LAN sockets are wired 1:1, that is, pins with the same numbers are connected together:

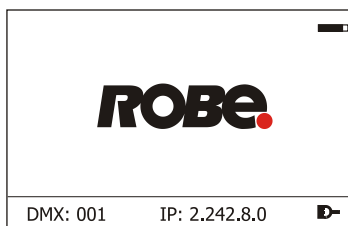
1-1	2-2	3-3	4-4	5-5	6-6	7-7	8-8
-----	-----	-----	-----	-----	-----	-----	-----

If only the fixture and the computer are to be interconnected, no hubs or other active components are needed.

A cross-cable has to be used:

1-3	2-6	3-1	4-8	5-7	6-2	7-5	8-4
-----	-----	-----	-----	-----	-----	-----	-----

If the fixture is connected with active Ethernet socket (e.g. switch) the network icon  will appear at the bottom right corner of the screen:



Ethernet operation

Connect the Ethernet inputs of all fixtures with the Ethernet network.

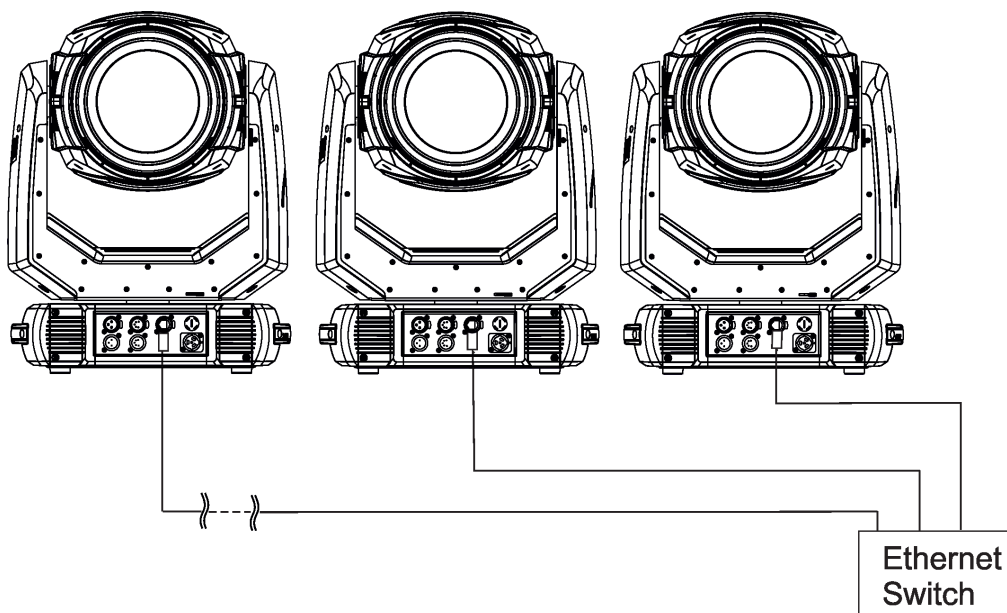
Option “ArtNet (gMA1 or gMA2 or sACN)” has to be selected from “Ethernet Mode” menu on the fixture.

Set IP address (002.xxx.xxx.xxx / 010.xxx.xxx.xxx) and the Universe.

(DMX address=196)
IP address=002.168.002.004
Universe=1

(DMX address=40)
IP address=002.168.002.003
Universe=1

(DMX address=1)
IP address=002.168.002.002
Universe=1



An advised PC setting: IP address: 002.xxx.xxx.xxx / 010.xxx.xxx.xxx (Different from fixture IP addresses)
NET mask: 255.0.0.0

Ethernet / DMX operation

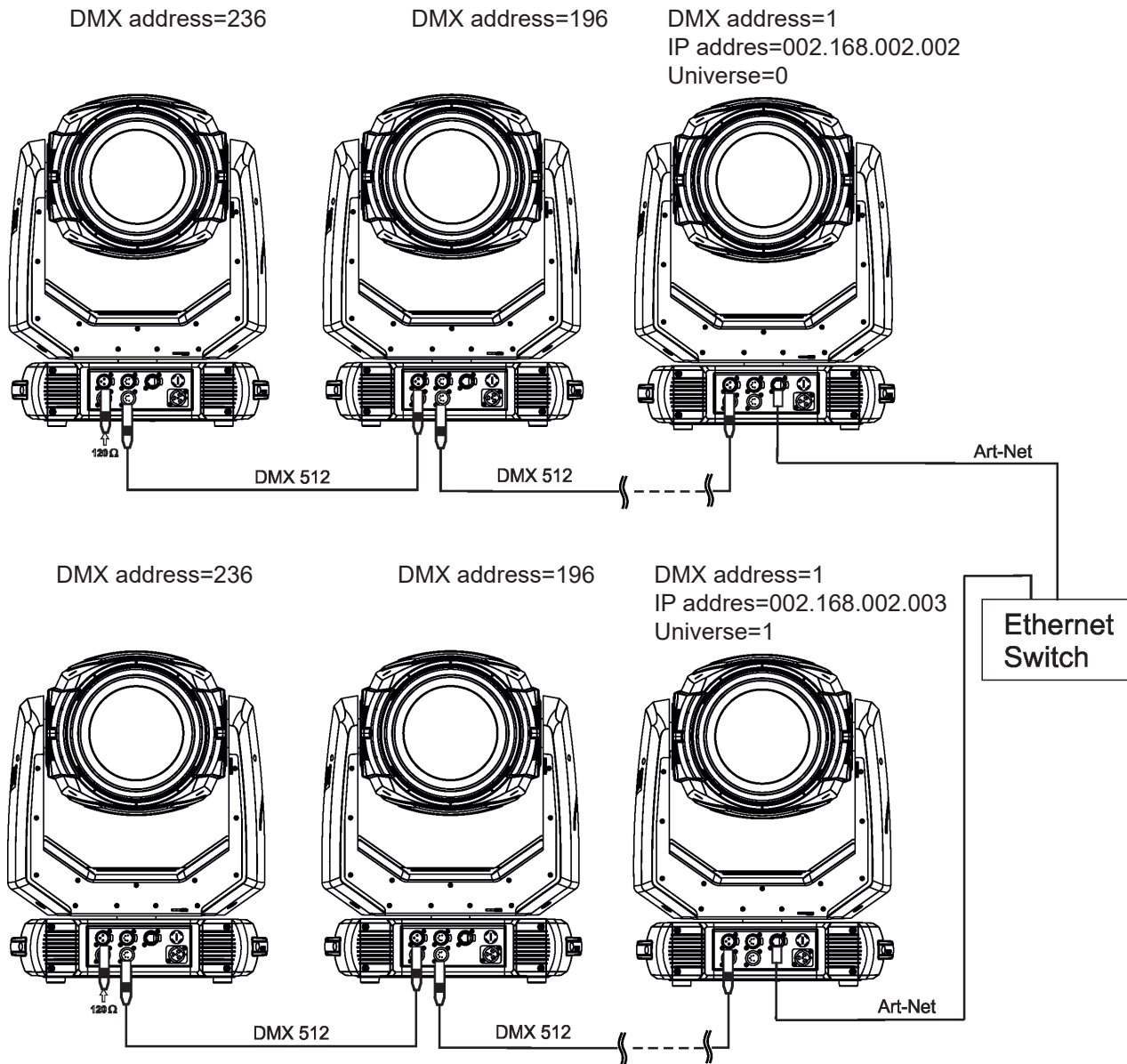
Option "Artnet" (gMal or gMA2 or sACN) has to be selected from "Ethernet Mode" menu at first fixture.

Option "Ethernet To DMX" has to be selected from the menu "Ethernet Mode" at the first fixture (connected to the Ethernet) in the fixture chain, next fixtures have standard DMX setting.

Connect the Ethernet input of the first fixture in the data chain with the network. Connect DMX output of this fixture with DMX input of the next fixture until all fixtures are connected to the DMX chain.

Caution: At the last fixture, the DMX chain has to be terminated with a terminator. Solder a 120 Ω resistor between Signal (-) and Signal (+) into a XLR-plug and connect it in the DMX-output of the last fixture.

Example:



3.8 Wireless DMX operation

The wireless version of the Robin MegaPointe is equipped with the Lumen Radio CRMX module and antenna for receiving DMX signal. CRMX module operates on the 2.4 GHz band.

The item " Wireless " from the menu "DMX Input" allows you to activate receiving of wireless DMX (Personality--> DMX Input -->Wireless.). First two options from the "DMX Input" menu are stated in DMX chart as well (channel Power/Special functions , range of 10-19 DMX). If DMX input option is changed by DMX command, the change is permanently written into fixture's memory.

DMX range of 10-19 switching fixture to the wired/wireless operation is active only during first 10 seconds after switching the fixture on.

After switching the fixture on, the fixture checks both modes of receiving DMX in the following order:

1. For the first five seconds, the fixture receives DMX signal from the wired input. If the Power/Special functions channel is set at some DMX input option, the fixture will receive DMX value according to this option. If DMX input option is set to the wired input , this option is saved and checking procedure is finished. If DMX input option is not set, the fixture continues next 5 seconds in scanning wireless DMX signal-see point 2.

2. For the next 5 seconds the fixture receives wireless DMX signal and again detects if the Power/Special functions channel is set at some DMX input option, if not, the fixture will take option which is set in the fixture menu "DMX Input".

To link the fixture with DMX transmitter.

The fixture can be only linked with the transmitter by running the link procedure at DMX transmitter .

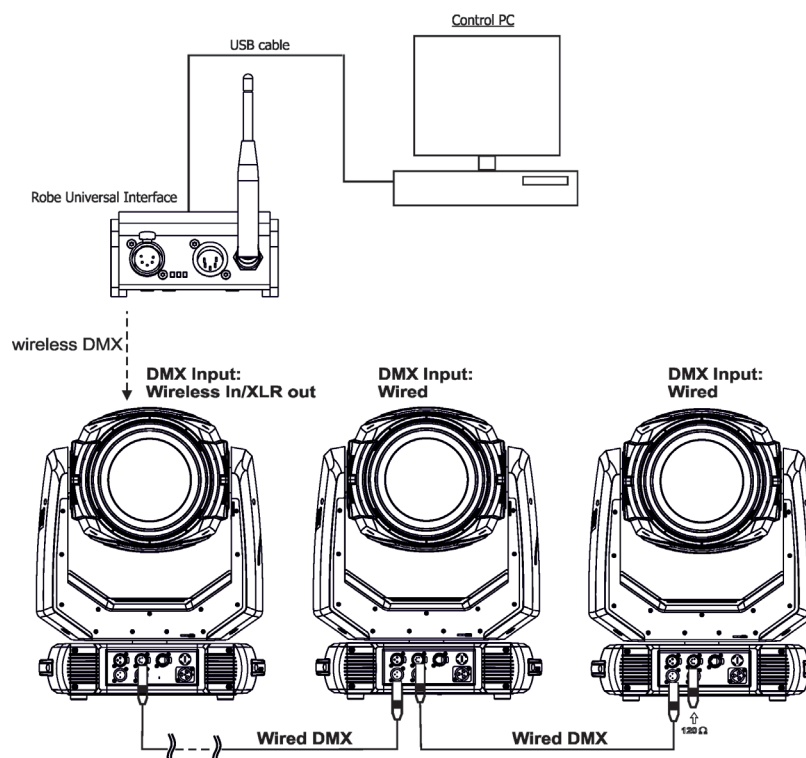
After linking , the level of DMX signal (0-100 %) is displayed in the menu item "Wireless State" (Information -->Wireless State).

To unlink the fixture from DMX transmitter.

The fixture can be unlinked from receiver via the menu item " Unlink Wireless Adapter" (Information--> Wireless State --> Unlink Wireless Adapter.).

Note: If the option "Wireless In/XLR Out" is selected (Personality--> DMX Input -->Wireless In/XLR Out), the fixture receives wireless DMX and sends the signal to its wired DMX output. The fixture behaves as " Wireless/ Wired" adapter.

Example:



4. Remotely controllable functions

Lamp

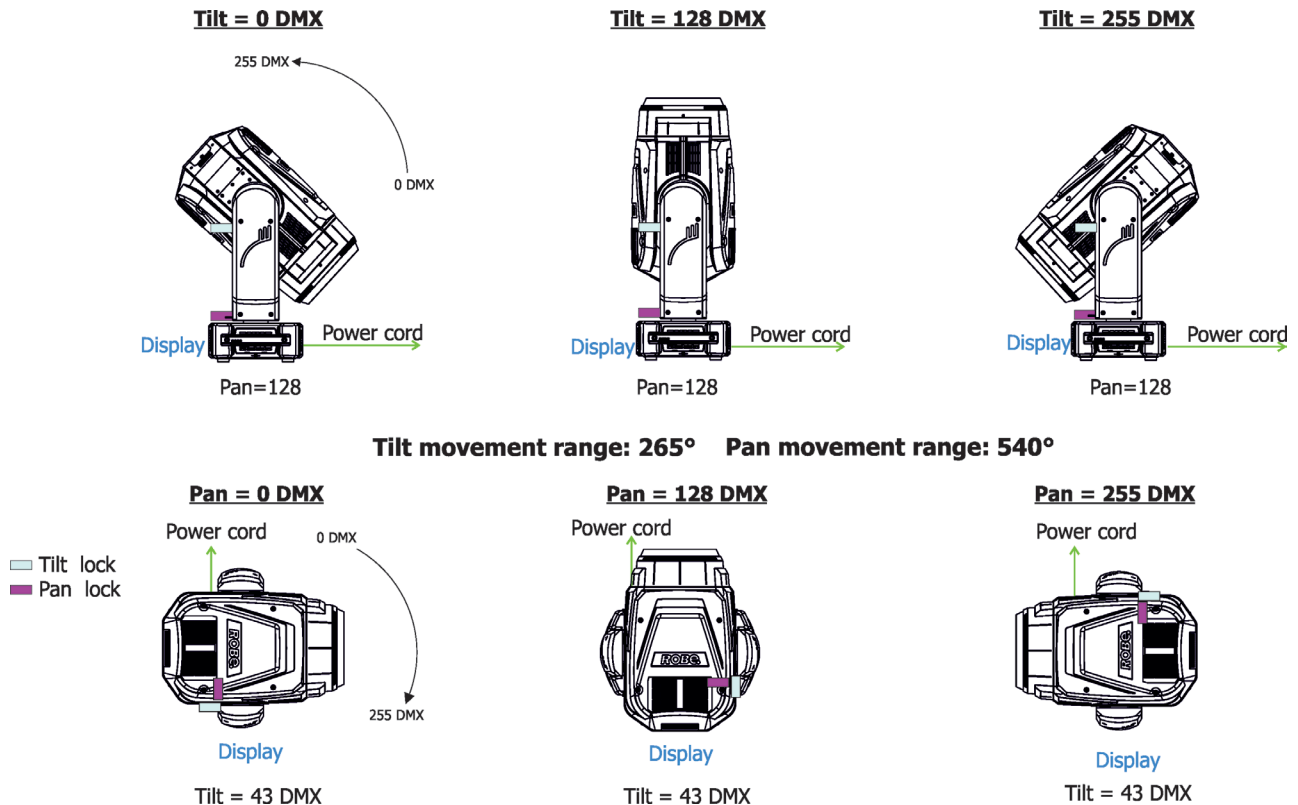
The Robin MegaPointe is to be operated with a Osram Sirius HRI 470W RO lamp. The Osram Sirius HRI 470W RO is a lamp system consisting of a short arc burner within a reflector.

The fixture offers two modes for lamp operation:

Standard Mode (full power of 470W, 1500hrs lamp life) and Eco Mode (lamp power of 380W, 2000hrs lamp life)

Pan/Tilt

Fast pan/tilt movement due to built-in electronic motion stabilizer. The electronic motion stabilizer ensures precise position of the fixture's head during its movement and reduces its swinging when the truss shakes.



Colour wheel

This wheel contains 13 dichroic filters + open. The colour wheel can be positioned between two adjacent colours in any position. It is also possible to rotate the colour wheel continuously at different speeds ("Rainbow effect" in both directions).

Effect wheel

The effect wheel rotating in both directions with variable speed creates wide spectrum of graphic effects.

Static gobo wheel

The static gobo wheel includes 10 metal gobos and 4 beam reducers. Gobo positioning and continual gobo positioning is available as well as a gobo-shake function.

Rotating gobo wheel

The rotating gobo wheel includes 9 replaceable "SLOT&LOCK" glass gobos rotating in both directions, indexable, + open position. Gobo positioning and gobo selection speed is available as well as a gobo-shake function.

Prism wheels

Two prism wheels offer 2 x 6-facet linear prism, 2 x 8-facet circular prism, 1 x 32-facet circular prism and 1 x cylindrical prism. All prisms can be rotated in both directions at different speeds.

Hot-Spot

Motorized movement of lamp reflector allows control light intensity of the centre of the image.

Frost

The fixture is equipped with two separated frosts: light and medium.

Zoom

Motorized zoom unit enables zoom between 1.8° - 21° beam angle (beam application) or 3° - 42° (beam application).



Dimmer/Shutter unit



Smooth 0 - 100 % dimming is provided by the mechanical dimmer /shutter unit. This unit is also used for strobe effects with variable speed.

5. Control menu map

Default settings=Bold print

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Addressing	DMX Address	001-512				
	DMX Presets	Mode 1				
		Mode 2				
	Ethernet Settings	Ethernet Mode	Disable			
			ArtNet			
			gMA1			
			gMA2			
			sACN			
		Ethernet To DMX	Off, On			
		IP Address/Net Mask	Default IP Address			
			Custom IP Address			
			Net Mask			
		ArtNet Universe	0-255			
		MANet settings	MANet/II Universe	01-256		
			MANet Session ID	01-32		
		sACN Settings	sACN Universe	00001-32000		
			sACN Priority	0-255		
Information	Fixture Times	Power On Time	Total Hours			
			Resetable Hours			
		Lamp On Time	Total Hours			
			Resetable Hours			
		Lamp Strikes	Total Strikes			
			Resetable Strikes			
		Air Filters	Elapsed Time			
			Alert Period	10-300		
	Fixture Temperatures	Head Temperature	Current			
			Maximum NonRes.			
			Maximum Res.			
		Ambient Temperature	Current			
			Maximum NonRes.			
			Maximum Res.			
		Base Temperature	Current			
			Maximum NonRes.			
			Maximum Res.			
	DMX Values	Pan				
		:				
		Dimmer Fine				
	Wireless State					
	Power Channel State					
	Software Versions	Display System				
		Module M				
		Module G				
		Module O				
		Module P1				
		Module P2				
		Module C1				
		Module C2				
	Product IDs	Mac Address				
		RDM UID				
		RDM Label				
	View Logs	Fixture Errors				

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Fixture States	Power On			
			Power Off			
			Lamp On			
			Lamp Off			
		Fixture Position				
		Fixture Temperatures	Head Temperature			
			Ambient Temperature			
			Base Temperatures			
Personality	User Mode	User A Settings				
		User B Settings				
		User C Settings				
	DMX Presets	Mode 1				
		Mode 2				
		View Selected Preset				
	DMX Input	Wired Input				
		Wireless Input				
		Wireless In/XLR out				
	Pan/Tilt Settings	Pan Reverse	Off, On			
		Tilt Reverse	Off, On			
		Pan/Tilt Feedback	Off, On			
		Pan/Tilt mode	Time			
			Speed			
	Pan/Tilt EMS	Off, On				
	Microphone Sensitivity	1- 10 -20				
	Blackout Settings	Blackout During M.C.	Off, On			
		Blackout while:	Pan/Tilt moving	Off, On		
			Prisms Moving	Off, On		
	CRI Setting	Standard CRI				
		High CRI				
	Close proximity mode	Off, On				
	Init Effect Positions	Pan	0-255			
		:				
		Dimmer Fine	0-255			
	Screen Settings	Display Intensity	1- 10			
		Screen Saver Delay	Off -10min.			
		Touchscreen Lock	Off -10min.			
		Recalibrate Touchscreen				
		Display Orientation	Normal			
			Inverted			
			Auto			
	Temperature Unit	°C, °F				
	Fan Mode	Auto				
		High				
	Dimmer curve	Linear				
		Square Law				
	Date & Time Settings					
	Default Settings					
Manual Control	Reset Functions	Total system Reset				
		Pan/Tilt reset				
		Colour System Reset				
		Gobo System Reset				
		Strobe/HotSpot Reset				

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Optics/Prism/Frost Reset.				
		Effect Wheel reset				
	Manual Effect Control	Pan	0-255			
		:				
		Dimmer Fine	0-255			
Stand -Alone	Test Sequences	Dynamic Mode				
		Static Mode	Pan	0-255		
			Tilt	0-255		
			Zoom	0-255		
			Focus	0-255		
	MusicTrigger	Off, On				
	Preset Playback	None				
		Test				
		Prg. 1				
		Prg. 2				
		Prg. 3				
	Play Program	Play Program 1				
		Play Program 2				
		Play Program 3				
	Edit Program	Edit Program 1	Start Step	1-100		
			End Step	1-100		
			Edit Program Steps	Step 1	Pan	0-255
				:	:	
				:	Dimmer Fine	0-255
				:	Step Time	0-25,5 sec.
				Step 100	Pan	0-255
					:	
					Dimmer Fine	0-255
					Step Time	0-25,5 sec.
Service	Adjust DMX Values	Pan	0-255			
		:				
		Dimmer Fine	0-255			
	Adjust Lamp	Pan	0-255			
		:				
	Calibrations	Calibrate Effects	Pan	0-255		
			Tilt	0-255		
			Cyan	0-255		
			Magenta	0-255		
			Yellow	0-255		
			Colour	0-255		
			Effect wheel	0-255		
			Static Gobo	0-255		
			Rot. Gobo Wheel	0-255		
			R. Gobo Index 1	0-255		
			R. Gobo Index 2	0-255		
			R. Gobo Index 3	0-255		
			R. Gobo Index 4	0-255		
			R. Gobo Index 5	0-255		
			R. Gobo Index 6	0-255		
			R. Gobo Index 7	0-255		
			R. Gobo Index 8	0-255		
			R. Gobo Index 9	0-255		
			Prism W. 1	0-255		
			Pri. W. 1 R.1	0-255		
			Pri. W. 1 R.2	0-255		
			Pri. W. 1 R.3	0-255		

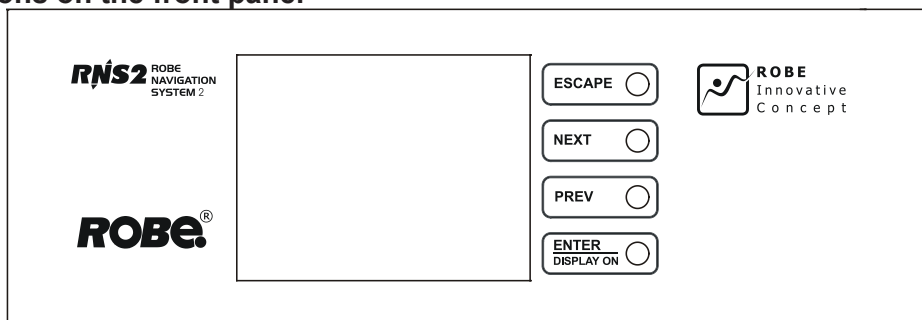
Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
			Prism W. 2	0-255		
			Pri. W. 2 R.1	0-255		
			Pri. W. 2 R.2	0-255		
			Pri. W. 2 R.3	0-255		
			Frost 1/1	0-255		
			Frost 1/2	0-255		
			Frost 2/1	0-255		
			Frost 2/2	0-255		
			Zoom	0-255		
			Focus	0-255		
			Strobo 1/1	0-255		
			Strobo 1/2	0-255		
			Strobo 2/1	0-255		
			Strobo 2/2	0-255		
			Light Green F.	0-255		
			Frost Filter	0-255		
			HotSpot 1	0-255		
			HotSpot 2	0-255		
		Calibrate Pan/Tilt EMS				
		Load Default Calibrations				
	Update Software					

6. Control menu

The Robin MegaPointe is equipped with the QVGA Robe touch screen with battery backup which allows to set the fixture's behaviour according to your needs, obtain information on its operation, test its various parts and program it, if it has to be used in a stand-alone mode.

The fixture's menu can be controlled either by the control buttons or directly by touching the icon.

Control buttons on the front panel



[ESCAPE] button used to leave the menu without saving changes.

[NEXT] , [PREV] buttons for moving between menu items and symbols, adjusting values.

[ENTER/Display On] button used to enter the selected menu (menu item) and to confirm adjusted value.

If the fixture is disconnected from mains, the button switches the touch screen on.

Icons used in the touch screen menu:



- [back arrow] used to move back to the previous screen (menu).



- [up arrow] used to move up on the previous page.



- [down arrow] used to move down on the next page.



- [confirm] used to save adjusted values, to leave menu or to perform desired action.



- [cancel] used to leave menu item without saving changes.



- [confirm+copy] used to save adjusted values and copy them to the next prog. step.



- [warning icon] used to indicate some error which has occurred in the fixture.



- [lamp menu] used to switch on/off the lamp and to set lamp functions.



- [Ethernet] used to indicate Ethernet connected.



- [display turn] used to turn the display by 180°.

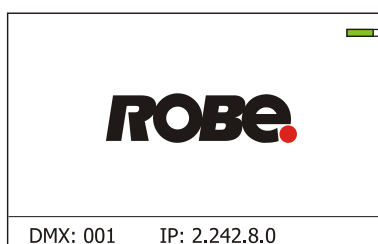


- [slider control] used to recall slider system for setting desired value.



- [keyboard control] used to recall keyboard system for setting desired value.

The menu page displays icons for each function that you can perform from the touch screen. After switching the fixture on, the touch screen shows the screen with the ROBE logo:

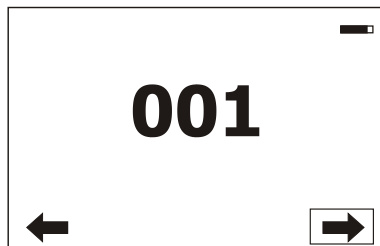


Note: The green icon at the top right corner of the screen indicates the level of the display battery charging. If the whole icon is green, the battery is fully charged while the red icon indicates exhausted battery. The battery charges during fixture operation, its charging lasts cca 6 hours.

We recommend that the fixture should be in operation at least 7 hours per week to keep the battery fully charged. If you switch the fixture on and this screen will not appear till 1 minute, switch the fixture off and on again. If the screen lights, the battery is exhausted. In case the screen still does not light, the battery is faulty.

This is also indicated by an error message "Faulty battery" and if such an error message appears the battery should be replaced immediately. The lifetime of the battery is highly dependent on ambient temperature (and consequently on base temperature). If the maximum ambient temperatures (as recorded and displayed in menu: Information -> Fixture Temperatures -> Ambient Temperature -> Maximum NonRes.) are kept within the specified limits, the battery should last for at least two years. Should the ambient temperatures exceed the specified maximum temperature, the lifetime of the batteries could be considerably shortened even up to just one year or less and also result in physical damage (battery leakage) or unreliable fixture functions.

Damage caused by batteries failed due to exceeded maximum ambient temperature cannot be claimed under warranty terms.



Touch any part of the screen or press the [ENTER/Display On] button to display the initial screen with the current stored DMX address:

Touch the green arrow at the bottom right corner of the screen or press the [ENTER/Display On] button to enter the "Address" menu.

An item (such as a Tab, menu item, text box, icon) may be selected from a screen by simply touching the item in the list or by pressing the [NEXT] or [PREV] buttons to scroll through list items. With each press, the next item is highlighted. Press [ENTER/Display On] to select the highlighted item.

**Before first fixture operation, set current date and time in the menu
"Date & Time Settings" (menu path: Personality--> Date & Time Settings).**

6.1 Tab "Address"



DMX Address - Select the menu to set the DMX start address.

DMX Preset - Use the menu to select desired channel mode.

Mode 1 - 39 control channels

Mode 2 - 34 control channels

View Selected Preset - Use the menu to display channels included in the selected mode.

Ethernet Settings - The menu allows all needed settings for the Ethernet operation

Ethernet Mode

Disable - The option disables Ethernet operation.

Artnet - Fixture receives Artnet protocol

gMA1 - Fixture receives MANet 1 protocol

gMA2 - Fixture receives MANet 2 protocol

sACN - Fixture receives sACN protocol

Ethernet To DMX - Fixture receives protocol from the Ethernet input and sends DMX data to its DMX output (fixture works as an "Ethernet/DMX converter", next fixture can

be connected to its DMX output and you can build a standard DMX chain by connecting another fixtures using their DMX inputs/outputs.
Only one fixture has to be connected to the Ethernet.

IP Address/Net Mask - Select this menu to set IP address. IP address is the Internet protocol address. The IP uniquely identifies any node (fixture) on a network.
There cannot be 2 fixtures with the same IP address on the network!

Default IP Address -Preset IP address, you can set up only first byte of IP address (2 or 10) e.g. **002**.019.052.086.

Custom IP Address - The option enables to set up all bytes of IP address.

Net Mask - The option enables to set up all bytes of Net Mask.

ArtNet Universe - Use this item to set a Universe (0-255). The Universe is a single DMX 512 frame of 512 channels.

MANet Settings - Use this menu to set parameters for MANet operation.

MANet Universe I/II - The value of this item can be set in range 1-256.

MANet Session ID - The value of this item can be set in range 1-32.

sACN Settings - Use this menu to set parameters for sACN operation.

sACN Universe - The value of this item can be set in range 1-32000.

sACN Priority - The value of this item can be set in range 0-255.

6.2 Tab "Information"



Fixture Times - The menu provides readouts of fixture and lamp operation hours.

Power On Time Hours - Select this menu to read the number of fixture operation hours.

Total Hours - The item shows the total number of the operation hours since the Robin MegaPointe has been fabricated.

Resetable Hours - The item shows the number of the operation hours that the Robin MegaPointe has been powered on since the counter was last reset.

In order to reset this counter to 0, touch the text box next to the item "Resetable Hours:"

Lamp On Time Hours - Select this menu to read the number of the operation hours with the lamp on.

Total Hours - The item shows the total number of the operation hours with the lamp on since the Robin MegaPointe has been fabricated.

Resetable Hours - The item shows the number of the operation hours with the lamp on that the Robin MegaPointe has been powered on since the counter was last reset.

In order to reset this counter to 0, touch the text box next to the item "Resetable Hours:"

Lamp Strikes - Select this menu to read the number of lamp strikes.

Total Strikes - The item shows the total number of the lamp strikes since the Robin MegaPointe has been fabricated.

Resetable Strikes - The item shows the number of the lamp strikes since the counter was last reset.

In order to reset this counter to 0, touch the text box next to the item "Resetable Strikes:"

Air Filters - Regular cleaning of the air filters is very important for the fixture's life and performance.

Bild-up of dust, dirt and fog fluid residues reduces the fixture's light output and cooling ability.

The two items of this menu help you to keep cleaning period of the air filters.

Alert period - Cleaning schedule for the fixture depends on the operating environment.

It is therefore impossible to specify accurate cleaning interval. This item allows you to change the cleaning interval of the air filters. This "alert" value is 300 hours and it is set as default. Inspect the fixture within its 300 hours of operation to see whether cleaning is necessary. If cleaning is required, clean all air filters and change the value in this menu on acceptable level. Min. level of alert period is 10 hours, max. is 300 hours.

Elapsed Time - The item allows you to read the time which remains to cleaning air filters.

The time period is set in the menu mentioned above.

Expired time period is signalled by a negative mark (-) at the time value and a warning icon on the display.

Clean the filters and reset this menu item (by touching the text box next to the item "Elapsed Time").

Fixture Temperatures - The menu is used to view temperatures of the fixture's inside.

Head Temperature - The menu shows temperatures in the fixture head near the lamp.

Current - A current temperature of the fixture head.

Maximum NonRes. - A maximum temperature of the fixture head since the fixture has been fabricated.

Maximum Res. - A maximum temperature of the fixture head since the counter was last reset.

In order to reset this counter to 0, touch the text box next to the item "Maximum Res."

Note. If the head temperature exceeds 83°C for 1 minute, the lamp will be switched off.

Base Temperature - The menu shows temperature in the fixture base (on the display PCB).

Current - A current temperature in the fixture base.

Maximum NonRes. - A maximum temperature in the fixture base since the fixture has been fabricated.

Maximum Res. - A maximum temperature in the fixture base since the counter was last reset.

In order to reset this counter to 0, touch the text box next to the item "Maximum Res."

Ambient Temperature - The menu shows temperature of the induced air on the fan in the fixture base .

Current - A current temperature of the induced air in the fixture base.

Maximum NonRes. - A maximum temperature of the induced air in the fixture base since the fixture has been fabricated.

Maximum Res. - A maximum temperature of the induced air in the fixture base since since the counter was last reset.

In order to reset this counter to 0, touch the text box next to the item "Maximum Res."

DMX Values - The menu is used to read DMX values of each channel received by the fixture.

Wireless State - The menu serves for reading of the wireless operation status (only for Wireless DMX version).

Software Version - Select this item to read the software version of the fixture modules:

Display System - A display processor on the display board in the fixture base

Module M - A pan/tilt processor

Module G - A static gobos/rot. gobos/effect wheel processor.

Module O - A focus/zoom processor

Module P1 - A light frost/prism wheel 1 processor

Module P2 - A medium frost/prism wheel 2 processor.

Module C1 - A cyan wheel/magenta wheel/strobe/hot-spot 1 processor.

Module C2 - A colour wheel/yellow wheel/CRI filter/frost filter/hot-spot 2 processor.

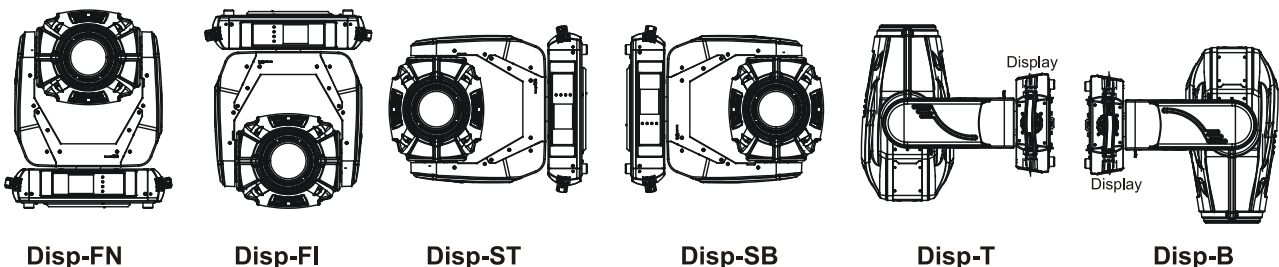
Product IDs - The menu is used to read the MAC Address ,RDM UID and RDM Label.

View Logs - Use this menu to read fixture's data which have been recorded during fixture operation. This collected data allows easier troubleshooting.

Fixture Errors - Use this menu to read fixture errors which have occurred during fixture operation.

Fixture States - Recorded following actions: Fixture On, Fixture Off, Lamp On, Lamp Off.

Fixture Position - Recorded installation positions of the fixture:



Fixture Temperatures - Recorded temperatures which have exceeded defined levels.

Note: The log buffer can contain 8000 records max. If the buffer is full, old data will be overwritten.

6.3 Tab "Personality"



User mode - The Robin MegaPointe allows you to recall up to 3 user settings. After switching the fixture on for the first time, the User A settings is active. Now all changes made in the "Personality" menu, "Addressing" menu and the "Music Trigger" and "Preset Playback" items from the "Stand-alone" menu are saved to the User A settings. If you now select the User B settings, from this moment the changes made in these menus will be saved to the User B settings. After switching the fixture off and on, the User B setting is active. In this way you may use the 3 fixture operating behaviours.

User A Settings - the function recalls the user A settings.

User B Settings - the function recalls the user B settings.

User C Settings - the function recalls the user C settings.

DMX Preset - Use the menu to select desired channel mode.

Mode 1 - 39 control channels

Mode 2 - 34 control channels

View Selected Preset - Use the menu to display channels included in the selected mode.

Pan/Tilt Settings - Use the menu set behaviour of both pan and tilt movements.

Pan Reverse - The item allows to invert pan movement.

Tilt Reverse - The item allows to invert tilt movement.

Pan/Tilt Feedback - The item allows to return the moving head to the required pan/tilt position after changing the position by an external force if this option is set on.

Note. Be careful, the Pan/Tilt Feedback should be permanent On, the option Off is not suitable for standard operation and the head of the fixture can be damaged!

Pan/Tilt mode - Use this menu to set the mode of the pan/tilt movement

Time mode - The pan and tilt will move with different speeds and they will come at the same time to the end point of their tracks (pan and tilt use their optimal speeds).

Time of the pan/tilt movement (25.5 sec. max.) is set by the channel "Pan/Tilt speed, Pan/Tilt time".

Speed Mode - Both Pan and tilt will move with the same speed as adjusted at the channel "Pan/Tilt speed, Pan/Tilt time".

Pan/Tilt EMS - Built-in electronic motion stabilizer ensures precise position of the fixture's head during its movement and also reducing its swinging when the truss shakes.

Microphone Sensitivity - Enter the menu if you want to adjust the microphone sensitivity from 1 (max.) to 20 (min.).

Blackout Settings - Use the menu if you need to close the light output under certain conditions which are described below

Blackout DMC - Blackout during movement correction. Set this option On if you wish to close light output during the time when the head goes to its correct position, which has been changed by an external force.

Active Blackouts - Use this menu if you wish to close the light output during effect changes.

Pan/Tilt Moving - The menu item enables to close light output while the pan/tilt coordinates are changing.

Prisms Moving - The menu item enables to close light output while the prism wheel 1 (prism wheel 2 goes from position to position).

CRI Setting - Use this menu to set a desired colour rendering index (CRI).

Standard CRI - CRI=80.

High CRI - CRI=90+

Close Proximity Mode - If this function is on, a light beam temperature is reduced and thanks to this fact the minimum distance of illuminated objects and the fixture can be reduced to 8 m. A min. zoom and power of the fixture is reduced if this mode is active.

Warning: this function is a software aid for operator of the fixture and requires increased attention at its using. Operating the fixture with active Close Proximity Mode is at its own risk and we disclaim any responsibility in case of damage of illuminated objects.

The safety distance between the fixture and illuminated objects regardless of software state in the fixture is 18m.

Init Effect Positions - Use the menu to set all effects to the desired positions at which they will stay after switching the fixture on without DMX signal connected.

Screen Settings - Use this menu to change the touch screen settings.

Display Intensity - The item allows to control the intensity of the screen (1-min., 10-max.).

Screen saver Delay - The item allows you to keep the screen on or to turn it off automatically after 1-10 minutes after last touch (or pressing any button on the control panel).

Touchscreen Lock - The item allows you to lock the screen after last touch (or pressing any button on the control panel). The time delay can be set in range of 1-10 minutes. To unlock the screen, press the [ENTER/Display On] button.


Recalibrate Touchscreen - The item starts calibration of the touchscreen. Follow the instructions on the screen.

Display Orientation - The menu allows to change display orientation.

Normal - Standard display orientation if the fixture is placed horizontally (e.g. on the ground).

Inverted - Inverted orientation (needed if the fixture is hanging on the truss).

Auto - The option activates a gravitation sensor for automatic screen orientation.

Note: **Auto** option is set as default. You change the display orientation by touching the icon  on the display, and the option set in the "Display Orientation" menu is temporarily overridden.

Temperature unit - Use the menu item to change temperature unit from °C to °F.

Fan Mode - Use the menu to set the fixture fans to max. power mode ("**High**") or to auto-control mode ("**Auto**")

It lets you turn ON a light beam temperature reduction when Focus movement is 50% over its stroke, if no CMY colour wheels are inserted, Soft Filter is automatically inserted on the Cyan wheel.

Dimmer Curve - Use the menu item to select desired dimmer curve: Linear or Square Law.

Date & Time Settings - Use this menu to set current date and time for the fixture log system (menu "**View Logs**"). Set this menu item before first fixture operation.

Unlink Wireless Adapter - The menu serves for unlinking the fixture from the transmitter (only WDMX version)

Default Settings - The menu item allows to set all fixture parameters to the default (factory) values.

6.4 Tab "Manual Control"



Reset Functions - The menu allows to reset the fixture either per function modules or all modules together.

Total System Reset - The item resets all function modules.

Pan/Tilt Reset - The item resets a pan and tilt movement.

Colour System Reset - The item resets a colour wheel and CMY wheels.

Gobo System Reset - The item resets a static gobo wheel and a rotating gobo wheel.

Strobe/Hot Spot Res. - The item resets strobe lamellas and a hot-spot module.

Optics/Prism/Frost Res. - The item resets a zoom, focus, prism wheels and frost modules.

Effect Wheel Reset - The item resets an effect wheel.

Manual Effect control - Use the menu to control all fixture channels by means of the control panel.

6.5 Tab "Stand-alone"



Test Sequences - Use the menu to run test sequences without an external controller, which will show you some possibilities of using Robin MegaPointe.

Dynamic Mode - This option uses all Robin MegaPointe functions including pan/tilt movement and

therefore is good for a complete introduction of the fixture.

Static Mode - This option is suitable for projections on the wall, ceiling or ground without a pan/tilt movement. Adjust the "Pan", "Tilt", "Zoom" and "Focus" to desired positions and select option "Run":

Music Trigger - Use the item to activate the sound control of the running program via the built-in microphone.

Preset Playback - This menu allows you to select the program which will be played in a loop after switching the fixture on (the option is commonly used in a stand-alone operation without an external controller).

None - The option disables "Presetting playback" function.

Test - The option starts the test sequences.

Prog. 1 - The option starts user program No. 1.

Prog. 2 - The option starts user program No. 2.

Prog. 3 - The option starts user program No. 3.

Play program - Use the menu to run desired program in a loop.

Play Program 1 - The option starts user program No.1.

Play Program 2 - The option starts user program No. 2.

Play Program 3 - The option starts user program No. 3.

Edit Program - Use the menu to create or to edit desired program. The Robin MegaPointe offers 3 free programs, each up to 100 steps.

Edit Program 1 - The option allows to edit user program No.1.






Edit Program 2 - The option allows to edit user program No.2.

Edit Program 3 - The option allows to edit user program No.3

To edit program:

1. Touch the item which you want to edit ("Edit Program 1" - "Edit Program 3").
2. Touch the item "Edit Program Steps".
3. Touch the item "Step 1".
4. From the list of effects touch desired effect and set its value. Browse throw the list by touching the [up arrow] and [down arrow] and set all desired effects.
An item "Step Time" (value of 0-25.5 sec.) is the time during which effects last in the current step
5. Save adjusted effects to the current step by touching the [confirm] or save and copy them to the following step by touching the [confirm+copy]. By touching the text box "Preview" next to the current program step you can view created scene.
6. Repeat the steps 4 and 5 for next program steps.
7. After editing desired program steps, adjust the length of the program by touching the text boxes "Start Step" and "End Step".

Meaning of the icons used in the "Edit Program" menu:

-  - moves down on the next page
-  - moves up on the previous page
-  - saves adjusted values and leaves menu
-  - saves values to the current step and copy them to the following prog. step
-  - leaves menu without saving values

There is a chart describing behaviour of items "Pan/Tilt Macro" and "P./T. Macro Speed".

DMX	Pan/Tilt Macro
0 - 9	Disabled pan/tilt macro
10 - 31	Reserved
32 - 63	Figure of circle (from small to large)
64 - 95	Figure of horizontal eight (from small to large)
96 - 127	Figure of vertical eight (from small to large)
128 - 159	Figure of rectangle (from small to large)
160 - 191	Figure of triangle (from small to large)
192 - 223	Figure of star (from small to large)
224 - 255	Figure of cross (from small to large)
	Pan/Tilt Macro Speed
0	No macro generation
1 - 127	Macro generation from fast to slow-forwards
128 - 129	No macro generation
130 - 255	Macro generation from slow to fast-backwards

6.6 Tab "Service"



Adjust DMX Values - The menu allows you to set all effects to desired positions before fine calibration of the effects .

Calibrations - This menu enables fine calibration of fixture effects and download default calibration values.

Calibrate Effects - The menu allows the fine adjustment of effects. The menu contains list of effects which can be calibrated:

Pan - a fine pan movement

Tilt - a fine tilt movement

Cyan - a cyan wheel

Magenta - a magenta wheel

Yellow - a yellow wheel

Colour Wheel - a colour wheel

Effect Wheel - an effect wheel

Static Gobo - a static gobo wheel

Rot. Gobo Wheel - a carousel of rotating gobos

R. Gobo Index 1 - a fine movement of rotating gobo 1

R. Gobo Index 2 - a fine movement of rotating gobo 2

R. Gobo Index 3 - a fine movement of rotating gobo 3

R. Gobo Index 4 - a fine movement of rotating gobo 4

R. Gobo Index 5 - a fine movement of rotating gobo 5

R. Gobo Index 6 - a fine movement of rotating gobo 6

R. Gobo Index 7 - a fine movement of rotating gobo 7

R. Gobo Index 8 - a fine movement of rotating gobo 8

R. Gobo Index 9 - a fine movement of rotating gobo 9

Prism W 1 - a prism carousel 1

Pri W. 1 R.1 - a fine movement of rotating prism 1 on prism carousel 1

Pri W. 1 R.2 - a fine movement of rotating prism 2 on prism carousel 1

Pri W. 1 R.3 - a fine movement of rotating prism 3 on prism carousel 1

Prism W 2 - a prism carousel 2

Pri W. 2 R.1 - a fine movement of rotating prism 1 on prism carousel 2

Pri W. 2 R.2 - a fine movement of rotating prism 2 on prism carousel 2

Pri W. 2 R.3 - a fine movement of rotating prism 3 on prism carousel 2

Frost 1/1 - a light frost position 1

Frost 1/2 - a light frost position 2

Frost 2/1 - a medium frost position 1

Frost 2/2 - a medium frost position 2

Zoom - a zoom module position

Focus 1 - a focus module position for rot gobo

Focus 2 - a focus module position for static gobo

Strobe 1/1 - a strobe lamella 1 position 1

Strobe 1/2 - a strobe lamella 1 position 2

Strobe 2/1 - a strobe lamella 2 position 1

Strobe 2/2 - a strobe lamella 2 position 2

Light Green F - a minus half green filter position

Frost Filter - an auxiliary optic element position

HotSpot 1 - a hotspot position 1

HotSpot 2 - a hotspot position 2

By using these items you can calibrate and adjust effects to their right positions.

Calibration via the control board

1. Disconnect DMX controller from the fixture and enter the "Calibrate Effects" menu.
2. Use the [up arrow] and [down arrow] to find desired effect and touch it to enter the fine effect adjustment screen.
3. Set desired value and save it by touching the [confirm].
4. Repeat steps 2 and 3 for the next effects.
5. After calibrating all effects, touch the [confirm] to save all adjusted values and reset the fixture.

Calibration via the DMX controller

1. Connect DMX controller to the fixture and set fixture effects to the desired positions before fine calibration.
2. Enter the "Calibrate Effects" menu and now you can calibrate desired effects by a DMX controller.

There is a calibration protocol:

Effect	Mode 1	Mode 2
Pan	channel 40	channel 35
Tilt	channel 41	channel 36
Cyan	channel 42	channel 37
Magenta	channel 43	channel 38
Yellow	channel 44	channel 39
Colour Wheel	channel 45	channel 40
Effect Wheel	channel 46	channel 41
Static Gobo	channel 47	channel 42
Rot. Gobo Wheel	channel 48	channel 43
R. Gobo Index 1	channel 49	channel 44
R. Gobo Index 2	channel 50	channel 45
R. Gobo Index 3	channel 51	channel 46
R. Gobo Index 4	channel 52	channel 47
R. Gobo Index 5	channel 53	channel 48
R. Gobo Index 6	channel 54	channel 79
R. Gobo Index 7	channel 55	channel 50
R. Gobo Index 8	channel 56	channel 51
R. Gobo Index 9	channel 57	channel 52
Prism W 1	channel 58	channel 53
Pri W. 1 R.1	channel 59	channel 54
Pri W. 1 R.2	channel 60	channel 55
Pri W. 1 R.3	channel 61	channel 56
Prism W 1	channel 62	channel 57
Pri W. 2 R.1	channel 63	channel 58
Pri W. 2 R.2	channel 64	channel 59
Pri W. 2 R.3	channel 65	channel 60
Frost 1/1	channel 66	channel 61
Frost 1/2	channel 67	channel 62
Frost 2/1	channel 68	channel 63
Frost 2/2	channel 69	channel 64
Zoom	channel 70	channel 65
Focus 1	channel 71	channel 66
Focus 2	channel 72	channel 67
Strobe 1/1	channel 73	channel 68
Strobe 1/2	channel 74	channel 69
Strobe 2/1	channel 75	channel 70
Strobe 2/2	channel 76	channel 71
Light Green F	channel 77	channel 72
Frost Filter	channel 78	channel 73
HotSpot 1	channel 79	channel 74
HotSpot 2	channel 80	channel 75

After having calibrated all effects, touch the [confirm] to save adjusted values and reset the fixture.

Load Default Calibrations - The item loads default (factory) calibration values.

Updating software - The menu item allows you to switch the fixture to the updating mode and to update software in the fixture via either serial or USB port of PC.

The following items are required in order to update software:

- PC running Windows or Linux or macOS
- DSU file
- Flash cable RS232/DMX, P/N13050624 (if you want to use a serial port of PC)
- Robe Universal Interface or Robe Universal interface WTX (if you want to use an USB port of PC)

After the software updating the fixture will be set to default values.

To update software in the fixture:

1. DSU file is available from Robe web site at WWW.robe.cz.

File with extension zip is intended for Windows (used and tested from XP to W10 on 32/64bit systems).

File with extension tbz is intended for Linux (used and tested on Debian and Ubuntu 32/64bit).

File with extension dmg is intended for macOS (used and tested on OSX up to Sierra) XQuartz required, install it from <https://www.xquartz.org/>

Save the download file to a folder on your computer.

In case that you use windows, extract files in the zip file (e.g. DSU_RobinPointe_18100828.zip)

2. Disconnect the fixture from DMX controller.

3. If you use the flash cable RS232/DMX, connect a serial port of your computer with DMX input of the fixture by means of the cable.

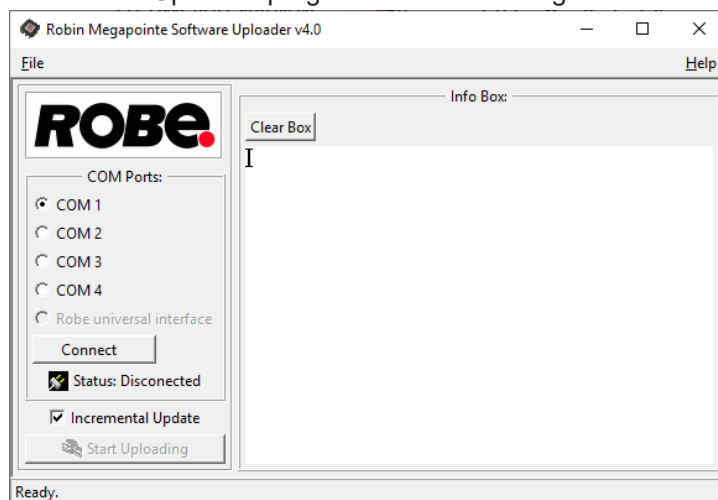
If you use the Robe Universal Interface, connect a USB port of your computer with the Robe Universal Interface by means of the USB cable and DMX input of the fixture with the DMX output of the Robe Universal Interface via a DMX cable.

4. Switch the fixture to the update mode (tab "Service" --> Update Software).

Note: If you do not want to continue in the software update, you have to switch off and on the fixture to escape from the updating mode.

We recommend to cancel all running programs on your computer before starting the software update.

5. Double-click the software uploader file (e.g. DSU_RobinPointe_18100828.exe) in the extracted files. The Software Uploader program will start running.



6. Select correct "COM " number if you use a Flash cable RS232/DMX or select "Robe Universal Interface " if you use the Robe Universal Interface/Robe Universal Interface WTX and then click on the "Connect" button.

7. If the connection is OK, click the "Start Uploading" button to start software uploading. It will take several minutes to perform software update.

If the option "Incremental Update" is not checked, all processors will be updated (including processors with the same software version).

If you wish to update only processors with new version of software, check the "Incremental Update box".

Avoid interrupting the process. Update status is being displayed in the "Info Box" window.

When the update is finished, the line with the text "Fixture is successfully updated" will appear in this window.

In case upload process is interrupted (e.g. power loss), the fixture stays in "Updating mode" and you will have to repeat the software update again.

Another way, how to update software in the fixtures (especially large installation of fixtures) is to use the ROBE Uploader. It is a software for automatized software update of Robe fixtures. It takes advantage of RDM support).

For more information please see <https://www.robe.cz/robe-uploader/>.

6.7 Icon "Lamp menu"



Lamp Status - The item enables to switch the lamp on/off.

Settings - The menu offers many items for setting of lamp behaviour.

Lamp Power - The item allows to set desired power of the lamp

Eco mode - Lamp power is reduced to 380W, lamp life is extended to 2000 hrs.

Standard mode - Lamp runs on max. power of 470W. Lamp life is 1500hrs. This mode is set as default.

This setting can be temporarily changed by DMX command at "Power/Special functions" channel

Lamp Ignition Delay - The item allows to set the time delay(0-90sec.) before igniting the lamp by DMX command. If the lamp is started directly from the control panel, the time delay will be ignored.

Lamp Light Sensor - Select this item to switch the light sensor off. The option "On" is intended for a standard operation. The option "Off" is for "emergency operation" only! If the lamp light sensor is switched off, the fixture will still try to ignite the lamp (even when the lamp is damaged or absent), on this account some electronics parts of the fixture can be damaged!

Lamp On/Off Settings - Use the menu to set rules for automatic switching on/off the lamp.

Lamp On Power On - If the item is on, the lamp will be automatically turn on after switching the fixture on.

Lamp Off via DMX - The item enables to switch the lamp off via DMX command from DMX controller.

Lamp On if DMX Present - The item allows you to strike the lamp automatically after 26 seconds if DMX signal is present on the fixture's DMX input.

Lamp Off if not DMX - The item allows you to switch off the lamp automatically after 2 minutes if DMX signal is missing on the fixture's DMX input.

7. RDM

This fixture supports RDM operation. RDM (Remote Device Management) is a bi-directional communications protocol for use in DMX512 control systems, it is the new open standard for DMX512 device configuration and status monitoring.

The RDM protocol allows data packets to be inserted into a DMX512 data stream without adversely affecting existing non-RDM equipment. By using a special „Start Code,“ and by complying with the timing specifications for DMX512, the RDM protocol allows a console or dedicated RDM controller to send commands to and receive messages from specific moving lights.

RDM allows explicit commands to be sent to a device and responses to be received from it.

The list of commands for Robin MegaPointe is the following.

Parameter ID	Discovery command	SET command	GET command
DISC_UNIQUE_BRANCH	*		
DISC_MUTE	*		
DISC_UN_MUTE	*		
DEVICE_INFO			*
SUPPORTED_PARAMETERS			*
SOFTWARE_VERSION_LABEL			*
DMX_START_ADDRESS		*	*
IDENTIFY_DEVICE		*	*
DEVICE_MODEL_DESCRIPTION			*
MANUFACTURER_LABEL			*
DEVICE_LABEL		*	*
SENSOR_DEFINITION			*
SENSOR_VALUE			*
DISPLAY_INVERT		*	*
DISPLAY_LEVEL		*	*
PAN_INVERT		*	*
TILT_INVERT		*	*
DEVICE_RESET		*	
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
STATUS_MESSAGES			*
STATUS_ID_DESCRIPTION			*
LAMP_STATE		*	*
LAMP_ON_MODE ¹		*	*
DEVICE_HOURS ²			*

LAMP_HOURS ²			*
LAMP_STRIKES ²			*

¹...Another options for this command (only for Robe's fixtures):

value PARAMETER_DATA=0x84 - lamp OFF by DMX value on DMX channel

value PARAMETER_DATA=0x88 - lamp OFF if DMX is not present

²...Commands relative resetable values

RDM model ID for the Robin MegaPointe is 0x00e2.

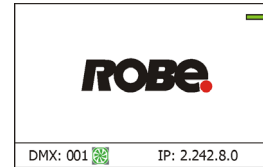
8. Error and information messages

Information icons



- Air Filters Cleaning

This icon signals that cleaning period of the air filters has elapsed and you have to clear air filters and reset the menu item "Elapsed Time".



Errors

Error in the fixture is signalled by the yellow warning icon at the bottom line of the screen:



Touch the warning icon or press the [ESCAPE] button to display error messages.
List of error and information messages:

Lamp Error

If the ignition of the lamp is 3 times unsuccessful, the display shows "Lamp Error", meaning that the lamp could be damaged or even missed or there could be a failure on the lamp driver.

Overheated

This message informs that the fixture had been overheated and the lamp was switched off by means of the head temperature sensor.

Temper. Sensor Error

The message informs you that the communication between the head temperature sensor and the main processor failed and the lamp has been switched off.

Faulty battery

The battery on the display board is exhausted and should be replaced immediately.

Tilt Error 1 (Tilt Error 2)

This message will appear after the reset of the fixture if the head's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or the stepping motor is defective or its driving IC on the PCB. The head is not located in the default position after the reset.

Pan Error 1 (Pan Error 2)

This message will appear after the reset of the fixture if the yoke's magnetic-indexing circuit malfunctions (sensor failed or magnet is missing) or the stepping motor is defective or its driving IC on the PCB. The yoke is not located in the default position after the reset of the fixture.

Colour Wheel Error 1 (Colour Wheel Error 2)

The messages will appear after the reset of the colour wheel if this wheel is not located in the default position.

Cyan 1 (Cyan Error 2)

The messages will appear after the reset of the cyan colour wheel if this wheel is not located in the default position.

Magenta 1 (Magenta Error 2)

The messages will appear after the reset of the magenta colour wheel if this wheel is not located in the default position.

Yellow 1 (Yellow Error 2)

The messages will appear after the reset of the cyan colour wheel if this wheel is not located in the default position.

Strobe Error 1 (Strobe Error 2)

The messages will appear after the reset of the dimmer/strobe module if the strobe lamellas are not located in the default position.

Pattern 1 Error 1 (Pattern 1 Error 2)

The messages will appear after the reset of the prism wheel 1 if this wheel is not located in the default position.

Pattern 1 Rotation Error 1 (Pattern 1 Rotation Error 2)

The messages will appear after the reset of the prism wheel 2 if some rotating prism not located in the default position.

Pattern 2 Error 1 (Pattern 2 Error 2)

The messages will appear after the reset of the prism wheel 2 if this wheel is not located in the default position.

Pattern 2 Rotation Error 1 (Pattern 2 Rotation Error 2)

The messages will appear after the reset of the prism wheel 2 if some rotating prism is not located in the default position.

Zoom Error 1 (Zoom Error 2)

The messages will appear after the reset of the zoom module if the zoom lens is not located in the default position.

Focus Error 1 (Focus Error 2)

The messages will appear after the reset of the focus module if the focus lens is not located in the default.

Gobo Carousel Error 1 (Gobo Carousel Error 2)

The messages will appear after the reset of the rotating gobo wheel if the carousel of rotating gobos is not located in the default position.

Gobo rotation Error 1 (Gobo Rotation Error 2)

The messages will appear after the reset of the rotating gobo wheel if the rotating gobos are not located in the default positions.

Static Gobo Error 1 (Static Gobo Wheel Error 2)

The messages will appear after the reset of the static gobo wheel if this wheel is not located in the default position.

Effect wheel Error 1 (Effect wheel Error 2)

The messages will appear after the reset of the effect wheel if this wheel is not located in the default position.

Internal Error

Communication error between PCBs (error or "noise" was detected on communication wires)

Clean Air Filters

The message informs that the item "Elapsed Time" in the "Fixture Information" menu is at 0 value. Clean air filters and reset this counter.

Lamp Fan 1 Error

The fan (turbine) above lamp in the fixture head is faulty. The lamp has been switched off.

Lamp Fan 2 Error

The fan (turbine) above lamp in the fixture head is faulty. The lamp has been switched off.

Gobo Fan Error

The fan (turbine) cooling gobo wheels is faulty. The lamp has been switched off.

Front Fan 1 Error

The fan in the front part of the head is faulty. The lamp has been switched to Eco mode.

Front Fan 2 Error

The fan in the front part of the head is faulty. The lamp has been switched to Eco mode.

Front Fans Error

Both fans (Front Fan 1, Front Fan 2) in the front part of the head are faulty. The lamp has been switched off.

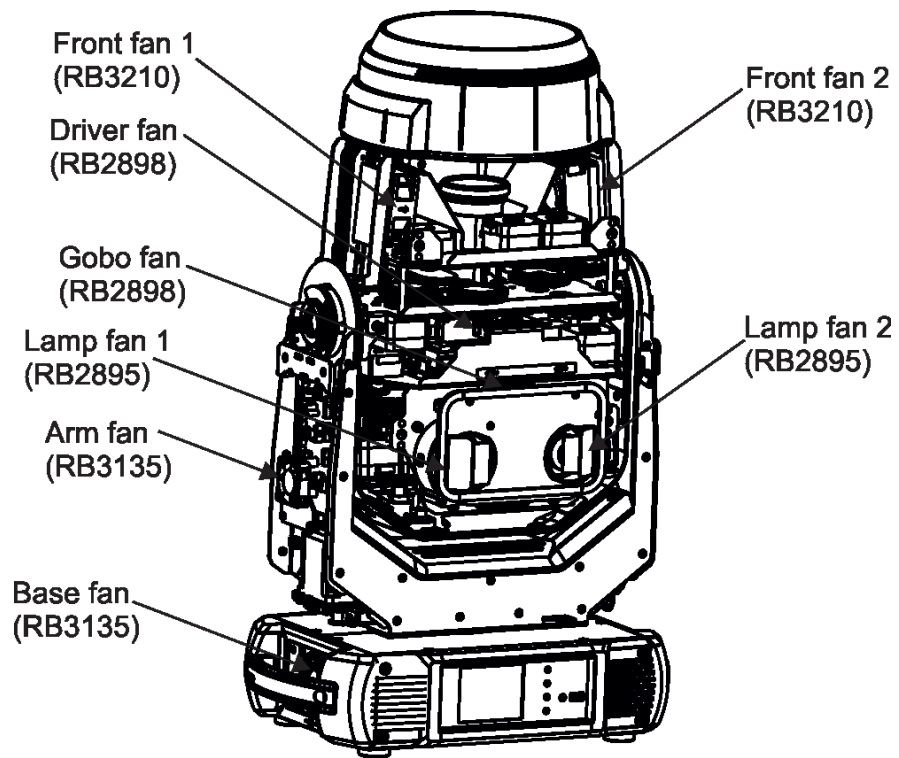
Driver Fan Error

The fan cooling lamp driver is faulty. The lamp has been switched off.

Base Fan Error

The fan in the fixture base is faulty. The lamp has been switched off.

Positions of fans (and numbers of their control PCBs):



9. Technical Specifications

Electrical

Power supply:.....electronic auto-ranging
Input voltage range:.....100-240V, 50-60Hz
Fuse:.....T 8 A
Max. power consumption:.....670 W (power factor 0.97)

Lamp

Approved model: Osram Sirius HRI 470W RO
Lamp life: 1500 hrs (Standard mode, 470W)
2000 hrs (Eco mode, 380W)

Ballast

Electronic

Optical System

Beam range: 3° - 42° (spot application)
1.8° - 21° (beam application)
CRI : 80 (Standard), 90+ (High CRI), switchable by DMX command
CTC: 6500K

Colour wheel

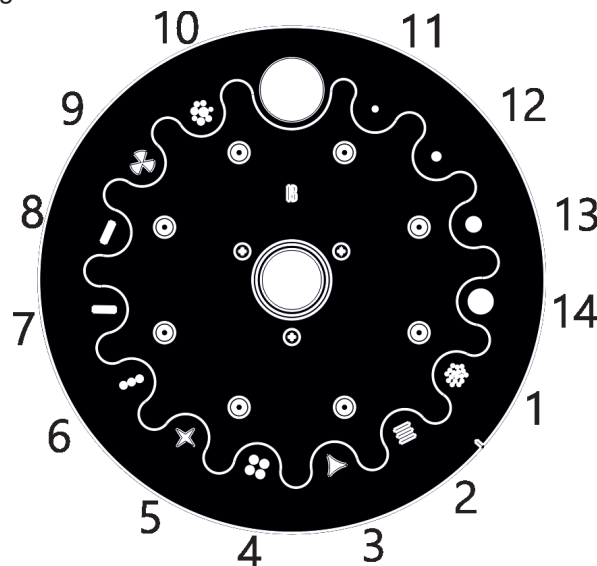
13 dichroic filters (deep red, deep blue, yellow, light green, magenta, lavender, pink, dark green, CTO 2700K, blue, orange, CTO 3200K, Kongo blue) + white

Virtual Colour wheel

66 preset colours

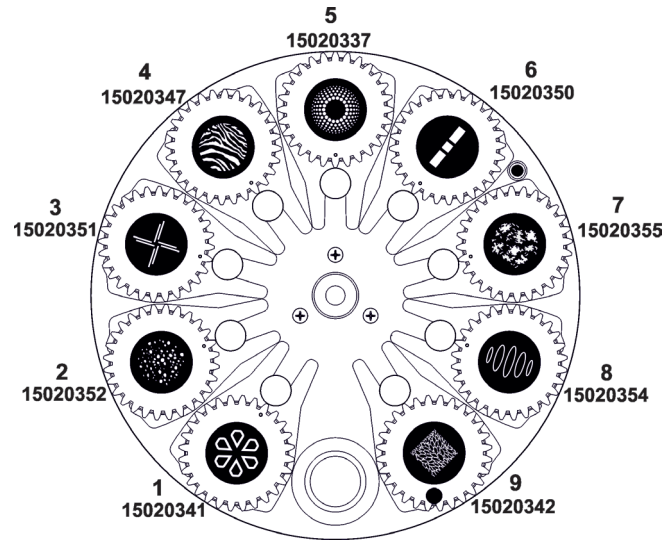
Static gobo wheel

10 metal gobos and 4 beam reducers



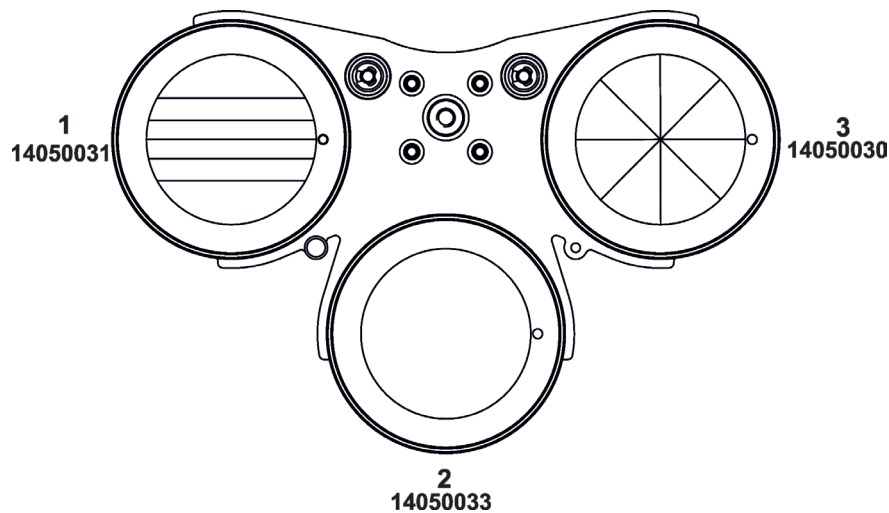
Rotating gobo wheel

9 glass gobos can be indexed and rotated in both directions at different speeds
Gobo wheel continuous rotation
Glass gobos: outside diameter=15.9 mm, image diameter=12.5 mm, thickness=1.1 mm, high temperature borofloat or better glass
"Slot&lock" system for easy replacement of gobos



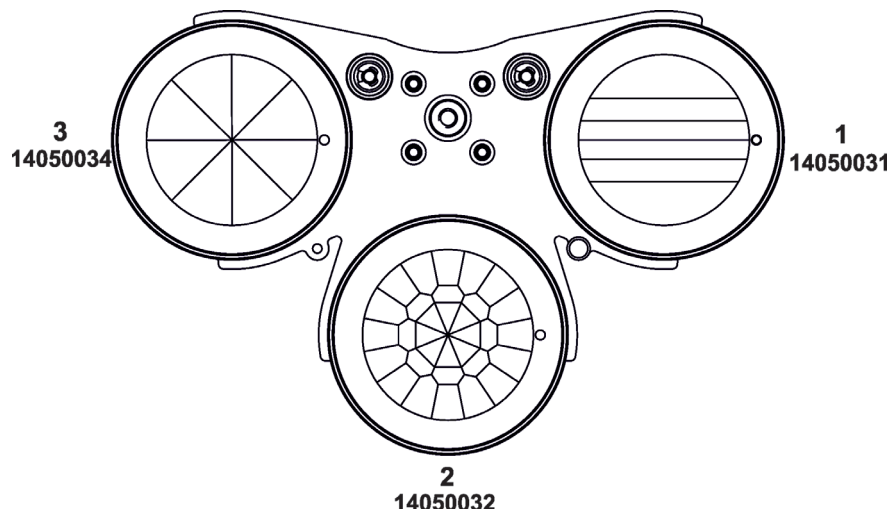
Prism wheel 1

Rotating 6-facet linear prism with continuous rotation in both directions
 Rotating 8-facet 12° circular prism with continuous rotation in both directions
 Rotating cylindrical prism with continuous rotation in both directions



Prism wheel 2

Rotating 6-facet linear prism with continuous rotation in both directions
 Rotating 32-facet circular prism with continuous rotation in both directions
 Rotating 8-facet 18° circular prism with continuous rotation in both directions



Effect wheel

Effect wheel rotating in both directions

Beam shaper

Four beam shapers with continuous rotation in both directions

Frost filters

Two separate, variable frost filters (light and medium)

Zoom

Linear motorized zoom

Focus

Motorized focus

Hot-Spot control

Motorized control of lamp position in order to change intensity of beam centre

Strobe

Strobe effect with variable speed (max.15 flashes/sec.)

Pan/Tilt

Pan movement range 540°
Tilt movement range 265°
16 bit movement resolution
Pan/Tilt electronic motion stabilizer
Automatic Pan/Tilt position correction
Remotely controllable speed of pan/tilt movement for easy programming
Pan/tilt-lock mechanism

Dimmer

Smooth dimmer from 0 - 100 %

Control

Graphic touch screen for fixture setting and addressing
Gravitation sensor for auto screen positioning
Battery backup of the touch screen
Readout fixture and lamp usage, receiving DMX values, temperatures, etc
Built-in analyzer for easy fault finding, error messages
Remotely switching on/off the lamp
Black out while head moving or prism wheel changing
Stand-alone operation
3 user editable programs, each up to 100 steps
Supported protocols: USITT DMX 512, RDM, ArtNet, MANet, MANet2, sACN
Support of RDM (Remote Device Management)
2 DMX modes (34, 39 control channels)

Wireless DMX/RDM module (only for wireless DMX version)

Compliance with USITT DMX-512 (1986 & 1990) and 512-A
Full DMX fidelity and frame integrity
Auto sensing of DMX frame rate and frame size
<5ms DMX latency
Operational frequency range of 2402-2480 MHz
Producer: LumenRadio

Connection

DMX in/Out: 3-pin and 5-pin XLR
Ethernet: 2 x RJ 45
Power IN: Neutrik TrueOne NAC3MPX
Power OUT: Neutrik TrueOne NAC3FPX

Rigging

Mounting points: 2 pairs of 1/4-turn locks
Mounting horizontally or vertically via 2 Omega brackets

Temperatures

Maximum ambient temperature : 45° C
Maximum housing temperature : 80° C

Minimum distances

Min. distance from flammable materials: 1 m
Min. distance of illuminated objects (Standard mode): 18 m
Min. distance of illuminated objects (Eco mode): 15 m

Total heat dissipation

2490 BTU/h (calculated)

Weight

22 kg

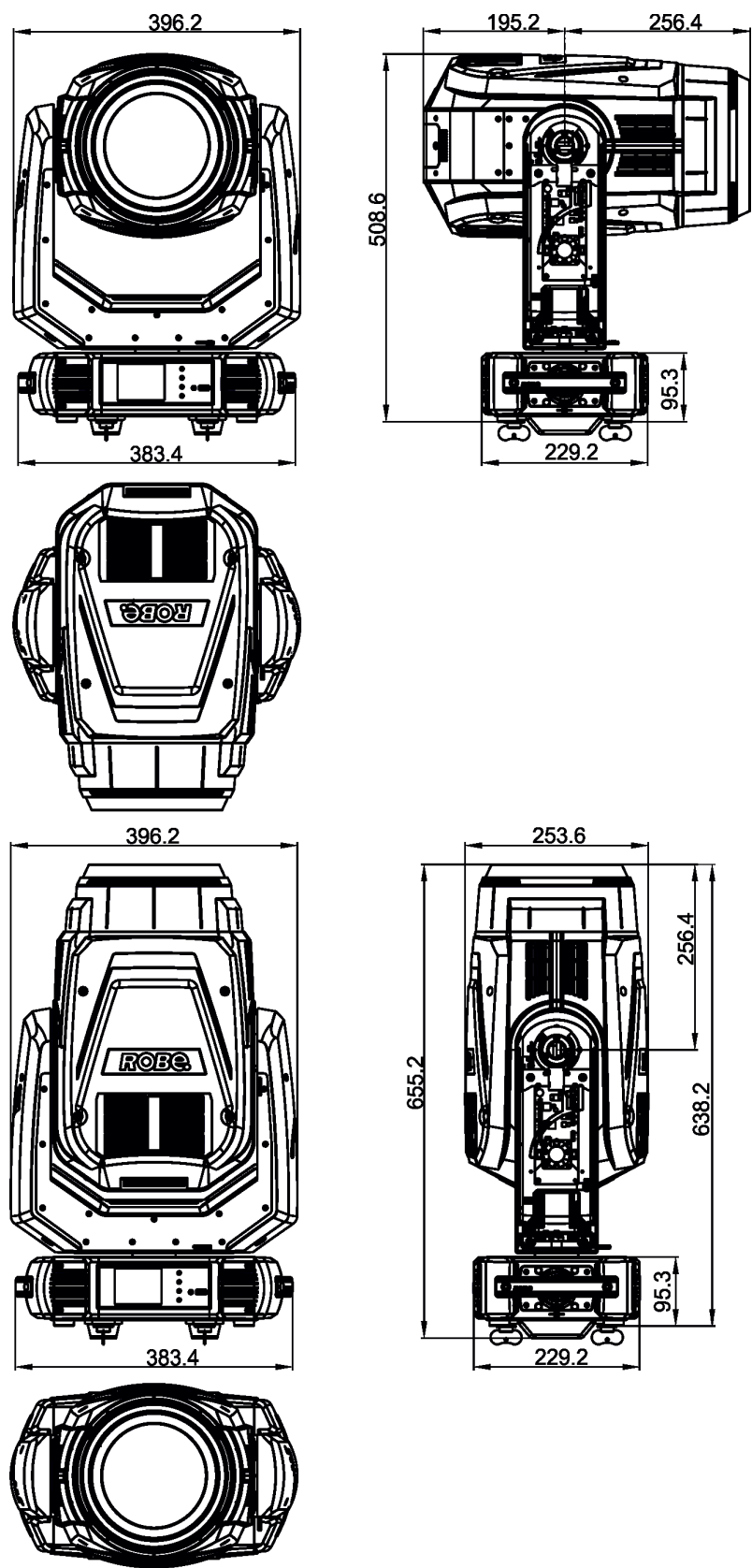
Accessories

1x Omega adaptor CL-regular 2 pcs in box (P/N10980033)
1x power cable

Optional accessories

Upgrade kit CRMX Universal 260 (P/N 99030100)
Doughty Trigger Clamp (P/N 17030386)
Safety wire 35 kg (P/N 99011963)
Lamp Osram SIRIUS HRI 470W RO (P/N 14080061)

Dimensions (mm)



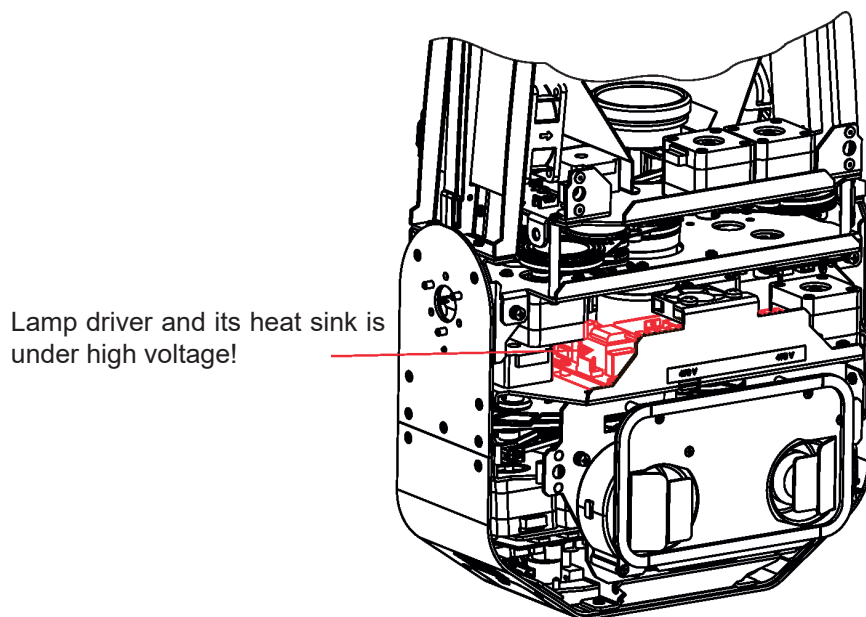
10. Maintenance and cleaning

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on or within the fixture. Otherwise, the fixture's light output will be significantly reduced. Regular cleaning will not only ensure the maximum light output, but will also allow the fixture to function reliably throughout its life. A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

DANGER !

Always disconnect the fixture from mains before starting any maintenance work.

If the fixture is connected to mains, high voltage is present at a heat sink and some parts of the lamp driver in the fixture head !



Lamp driver and its heat sink is under high voltage!

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the lightoutput very quickly. The cooling-fans should be cleaned monthly.

The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet.

Dichroic colour filters and gobo wheels and the internal lenses should be cleaned monthly.

Remove dust and dirt from the fans and cooling vents using a soft brush and vacuum-cleaner.

Important! Check the air filters periodically and clean before they become clogged!

Clean the air filters placed in the fixture head and base. Use a vacuum cleaner, compressed air or you can wash them and put back dry.

After replacing the air filters, reset the elapsed time counter in the menu "Information" (Information--->Air Filters---> Elapsed Time).

Replacing the fuse.

Before replacing the fuse, unplug mains lead.

- 1) Remove the fuse holder on the rear panel of the base with a fitting screwdriver from the housing (anti-clockwise).
- 2) Remove the old fuse from the fuse holder.
- 3) Install the new fuse in the fuse holder (only the same type and rating).
- 4) Replace the fuseholder in the housing and fix it.

10.1 Disposing of the product

To preserve the environment please dispose or recycle this product at the end of its life according to the local regulations and codes.

11. ChangeLog

This section summarizes all types of changes in the user manual.

Version of the manual	Date of issue	Description of changes
1.1	16/08/2017	DMX chart version 1.1 (Changes on Power channel) Changes in menu Personality
1.2	22/08/2017	Changes in menu Personality
1.3	28/08/2017	Changes in menu Personality, DMX chart version 1.2 (Close Proximity mode)
1.4	4/09/2017	DMX chart version 1.3 (Change on Power channel - Linear/Square Law-dimmer curves)
1.5	20/10/2017	DMX chart version 1.4 (Change on Power channel - Parking position, RoboSpot support)
1.6	15/01/2018	Optional accessories changed
1.7	23/02/2018	DMX chart version 1.5 (Combined frost restricted if Prism wheel 1 active)
1.8	12.04/2018	Rot. gobo change- description changed .
1.9	12/12/2018	Numbers of PCBs for fans added.
2.0	21/03/2019	Risk group 2 warning added.

March 21, 2019

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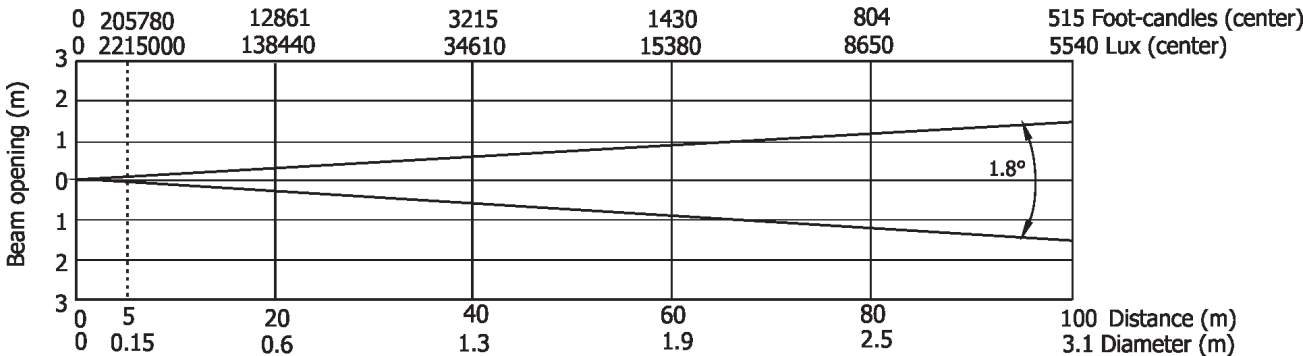
All Specifications subject to change without notice

Made in CZECH REPUBLIC by ROBE LIGHTING s.r.o. Palackeho 416/20 CZ 75701 Valasske Mezirici

Beam Application

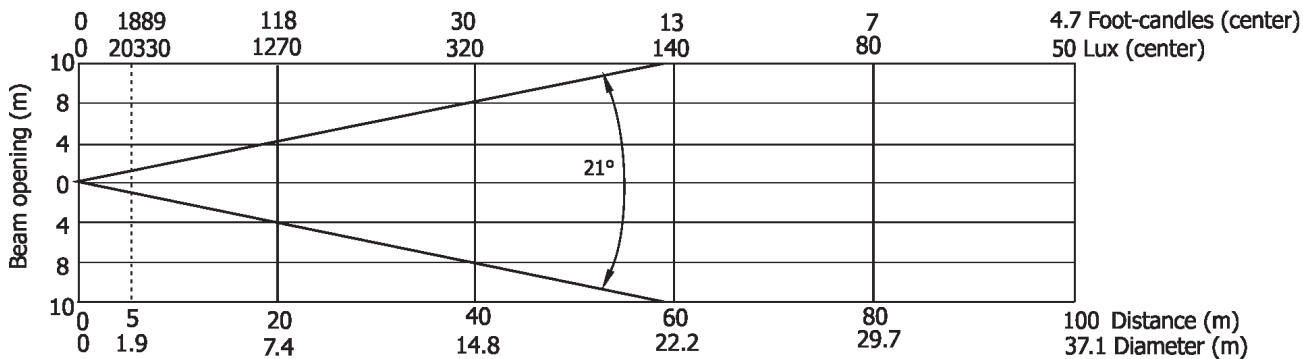
Min. Zoom (Max. Hot-Spot, Ratio 5:1)

Total Output: 12807 lumens



Max. Zoom (Max. Hot-Spot, Ratio 7:1)

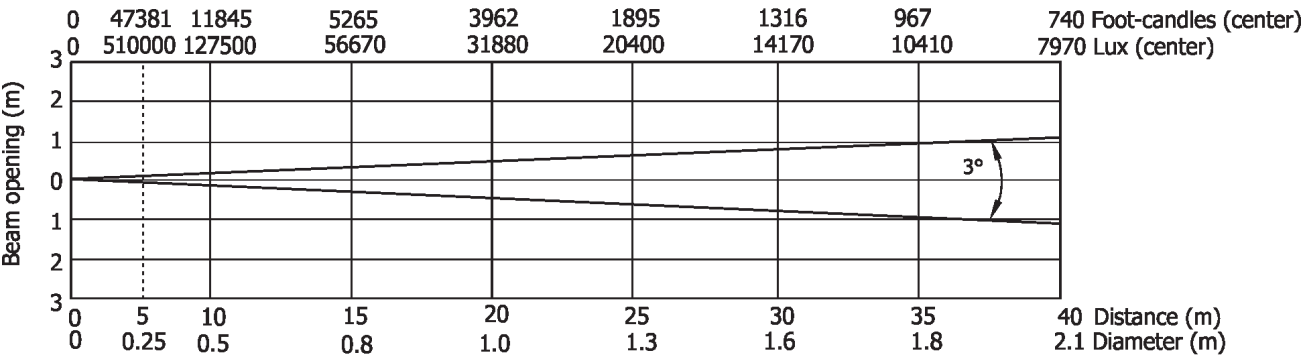
Total Output: 16008 lumens



Spot Application

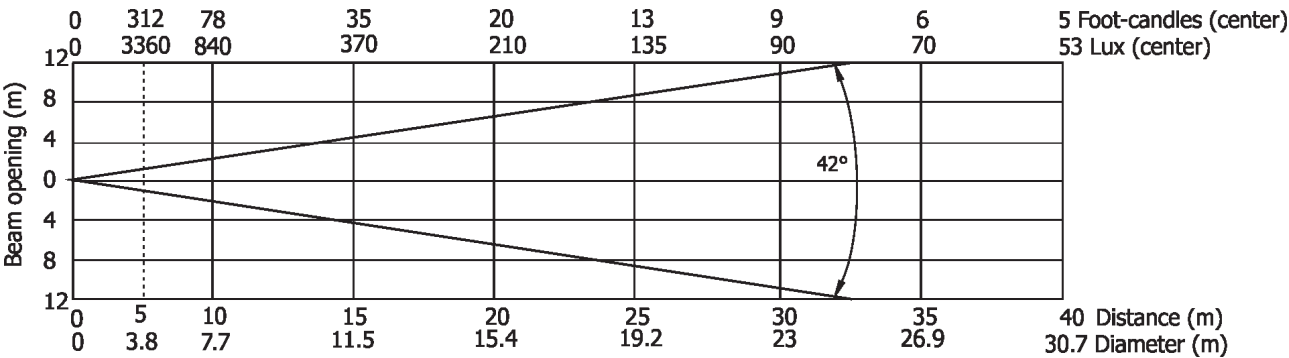
Min. Zoom (Min. Hot-Spot, Ratio 2.5:1)

Total Output: 14240 lumens



Max. Zoom (Min. Hot-Spot, Ratio 3.2:1)

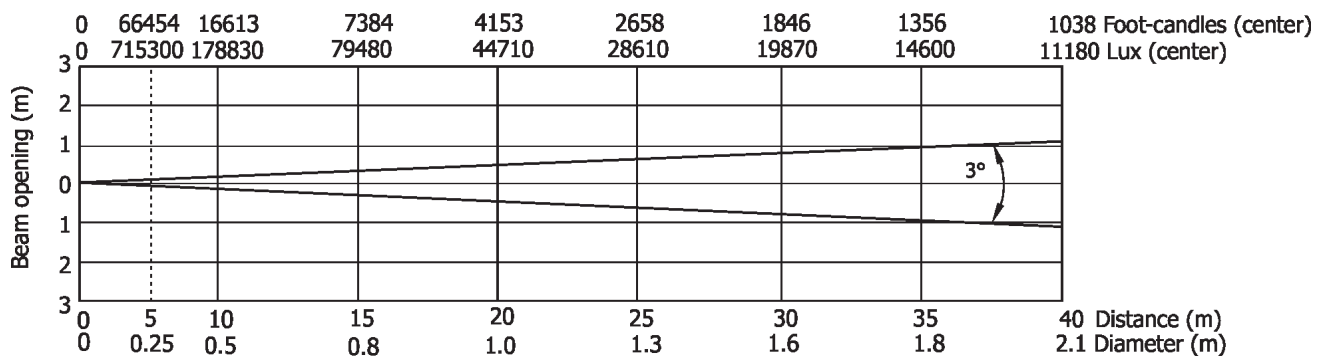
Total Output: 17800 lumens



Spot Application

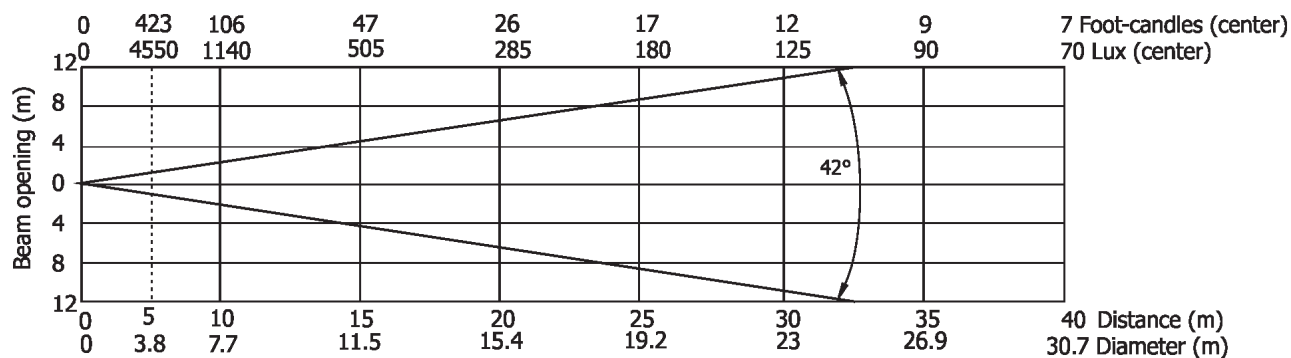
Min. Zoom (Max. Hot-Spot, Ratio 4:1)

Total Output: 16300 lumens



Max. Zoom (Max. Hot-Spot, Ratio 5:1)

Total Output: 20375 lumens



DMX protocol

Robin MegaPointe - DMX protocol				
Version: 1.5 Mode 1 -Standard 16-bit, Mode 2 -Reduced 8-bit				
Mode/channel		DMX Value	Function	Type of control
1	2			
1	1		Pan	
		0 - 255	Pan movement by 540° (128=default)	proportional
2	2		Pan Fine	
		0 - 255	Fine control of pan movement (0=default)	proportional
3	3		Tilt	
		0 - 255	Tilt movement by 265° (128=default)	proportional
4	4		Tilt fine	
		0 - 255	Fine control of tilt movement (0=default)	proportional
5	5		Pan/Tilt speed , Pan/Tilt time	
		0	Standard mode (0=default)	step
		1	Max. Speed Mode	step
			Pan/Tilt speed mode	
		2 - 255	Speed from max. to min.	proportional
			Pan/Tilt time mode	
		2 - 255	Time from 0.2 s to 25.5 sec.	proportional
6	6		Power/Special functions	
		0 - 9	Reserved (0=default)	
			<i>To activate following functions , stop in DMX value for at least 3 s and shutter must be closed (except CRI setting) at least 3 sec. („Shutter,Strobe“ channel 37/33 must be at range: 0-31 DMX). Corresponding menu items are temporarily overridden except DMX Input.</i>	
		10-14	DMX input: Wired DMX *	step
		15-19	DMX input: Wireless DMX *	step
			* function is active only 10 seconds after switching the fixture on	
		20-24	Graphic display On	step
		25-29	Graphic display Off	step
			<i>To activate CRI setting, stop in DMX value for at least 3 seconds.</i>	
		30-34	High CRI (CRI=90+)	step
		35-39	Standard CRI (CRI=80)	step
		40-44	Eco mode (Lamp power 380W)	step
		45-49	Standard mode (Lamp power 470W)	step
		50-54	Close proximity mode On	step
		55-59	Close proximity mode Off	step
		60-64	Fans mode: Auto	step
		65-69	Fans mode: High	step
		70-74	Dimmer curve: Square law	step
		75-79	Dimmer curve: Linear	step
		80-84	Autofocus On	step
		85-89	Autofocus Off	step
		90-94	Pan/Tilt speed mode	step
		95-99	Pan/Tilt time mode	step
		100-101	Blackout while pan/tilt moving	step
		102-103	Disabled blackout while pan/tilt moving	step
		104-105	Blackout while prism wheel 1 (wheel 2) moving	step
		106-107	Disabled blackout while prism wheel 1 (wheel 2) moving	step
		108-119	Reserved	

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		120-124	Parking position On	step
		125-129	Parking position Off	step
			<i>To activate following functions, stop in DMX value for at least 3 seconds.</i>	
		130 - 139	Lamp On	step
		140 - 149	Pan/Tilt reset	step
		150 - 159	Colour system reset	step
		160 - 169	Gobo wheels reset	step
		170 - 179	Dimmer/Shutter/Hot Spot reset	step
		180 - 189	Zoom/focus/frost/prism wheels reset	step
		190 - 199	Effect wheel reset	step
		200 - 209	Total reset	step
		210 - 229	Reserved	
		230 - 239	Lamp Off	step
			The following RoboSpot related commands are only applicable when the RoboSpot is connected:	
		240 - 244	RoboSpot enabled	step
		245 - 249	RoboSpot disabled - except handle faders and pan/tilt	step
		250 - 255	RoboSpot fully disabled except pan/tilt	step
7	7		Cyan	
		0 - 255	Cyan from min. saturation --> full cyan (0=default)	proportional
8	8		Magenta	
		0 - 255	Magenta from min. saturation --> full magenta (0=default)	proportional
9	9		Yellow	
		0 - 255	Yellow from min. saturation --> full yellow (0=default)	proportional
10	10		Colour wheel	
			<i>Continual positioning</i>	
		0	Open/white (0=default)	proportional
		9	Deep Red	proportional
		18	Deep Blue	proportional
		27	Yellow	proportional
		37	Light green	proportional
		46	Magenta	proportional
		55	Lavender	proportional
		64	Pink	proportional
		73	Dark green	proportional
		82	CTO 2700K	proportional
		91	Blue	proportional
		101	Orange	proportional
		110	CTO 3200K	proportional
		119	UV (Kongo blue)	proportional
		128-129	White	step
			<i>Positioning</i>	
		130-134	Deep Red	step
		135-138	Deep Blue	step
		139-143	Yellow	step
		144-147	Light green	step
		148-152	Magenta	step
		153-157	Lavender	step
		158-161	Pink	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		162-166	Dark green	step
		167-171	CTO 2700K	step
		172-176	Blue	step
		177-180	Orange	step
		181-185	CTO 3200K	step
		186-189	UV (Kongo blue)	step
		190 - 215	Forwards rainbow effect from fast to slow	proportional
		216 - 217	No rotation	step
		218 - 243	Backwards rainbow effect from slow to fast	proportional
		244 - 249	Random colour selection by audio control	step
			(Set microphone sensitivity in menu „Personality“)	
		250 - 255	Auto random colour selection from fast to slow	proportional
11	*		Colour wheel - fine positioning	
		0 - 255	Fine positioning (0=default)	proportional
12	11		Virtual colour wheel	
		0	Open/white (0=default)	step
		1-2	Filter 4 (Medium Bastard Amber)	step
		3-4	Filter 10 (Medium Yellow)	step
		5-6	Filter 19 (Fire)	step
		7-8	Filter 26 (Bright Red)	step
		9-10	Filter 58 (Lavender)	step
		11-12	Filter 68 (Sky Blue)	step
		13-14	Filter 71 (Tokyo Blue)	step
		15-16	Filter 79 (Just Blue)	step
		17-18	Filter 88 (Lime Green)	step
		19-20	Filter 90 (Dark Yellow Green)	step
		21-22	Filter 100 (Spring Yellow)	step
		23-24	Filter 101 (Yellow)	step
		25-26	Filter 102 (Light Amber)	step
		27-28	Filter 103 (Straw)	step
		29-30	Filter 104 (Deep Amber)	step
		31-32	Filter 105 (Orange)	step
		33-34	Filter 106 (Primary Red)	step
		35-36	Filter 111 (Dark Pink)	step
		37-38	Filter 115 (Peacock Blue)	step
		39-40	Filter 116 (Medium Blue-Green)	step
		41-42	Filter 117 (Steel Blue)	step
		43-44	Filter 118 (Light Blue)	step
		45-46	Filter 119 (Dark Blue)	step
		47-48	Filter 120 (Deep Blue)	step
		49-50	Filter 121 (Filter Green)	step
		51-52	Filter 128 (Bright Pink)	step
		53-54	Filter 131 (Marine Blue)	step
		55-56	Filter 132 (Medium Blue)	step
		57-58	Filter 134 (Golden Amber)	step
		59-60	Filter 135 (Deep Golden Amber)	step
		61-62	Filter 136 (Pale Lavender)	step
		63-64	Filter 137 (Special Lavender)	step
		65-66	Filter 138 (Pale Green)	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		67-68	Filter 139 (Primary Green)	step
		69-70	Filter 141 (Bright Blue)	step
		71-72	Filter 147 (Apricot)	step
		73-74	Filter 148 (Bright Rose)	step
		75-76	Filter 152 (Pale Gold)	step
		77-78	Filter 154 (Pale Rose)	step
		79-80	Filter 157 (Pink)	step
		81-82	Filter 158 (Deep Orange)	step
		83-84	Filter 162 (Bastard Amber)	step
		85-86	Filter 164 (Flame Red)	step
		87-88	Filter 165 (Daylight Blue)	step
		89-90	Filter 169 (Lilac Tint)	step
		91-92	Filter 170 (Deep Lavender)	step
		93-94	Filter 172 (Lagoon Blue)	step
		95-96	Filter 179 (Chrome Orange)	step
		97-98	Filter 180 (Dark Lavender)	step
		99-100	Filter 181 (Congo Blue)	step
		101-102	Filter 197 (Alice Blue)	step
		103-104	Filter 201 (Full C.T. Blue)	step
		105-106	Filter 202 (Half C.T. Blue)	step
		107-108	Filter 203 (Quarter C.T. Blue)	step
		109-110	Filter 204 (Full C.T. Orange)	step
		111-112	Filter 205 (Half C.T. Orange)	step
		113-114	Filter 206 (Quarter C.T. Orange)	step
		115-116	Filter 247 (Filter Minus Green)	step
		117-118	Filter 248 (Half Minus Green)	step
		119-120	Filter 281 (Three Quarter C.T. Blue)	step
		121-122	Filter 285 (Three Quarter C.T. Orange)	step
		123-124	Filter 352 (Glacier Blue)	step
		125-126	Filter 353 (Lighter Blue)	step
		127-128	Filter 715 (Cabana Blue)	step
		129-130	Filter 778 (Millennium Gold)	step
		131-132	Filter 793 (Vanity Fair)	step
		133-255	Raw DMX	proportional
13	12		Effect Speed	
			<i>Speed of Cyan and Magenta and Yellow movement</i>	
		0-255	Speed of CMY movement from max. to min. (0=default)	proportional
14	13		CMY & Colour wheel time	
		0	Function is off (0=default)	step
		1 - 255	Time of CMY and col. wheel movement (0.1sec-->25.5sec.)	proportional
15	14		Zoom & Focus & Frost & Prism time	
		0	Function is off (0=default)	step
		1 - 255	Time of zoom/ focus movement (0.1 sec-->25.5 sec.)	proportional
		1-100	Time of frost movement (0.1 sec -->10 sec)	proportional
		1-50	Time of prism movement (0.1 sec-->5 sec.)	proportional
16	15		Effect wheel positioning	
		0-19	No function (0=default)	step
		20-127	Proportional indexing	proportional
		128-170	Ramping from open to full position (max--->min. speed)	proportional

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		171-213	Ramping from open to half position (max. --->min. speed)	proportional
		214-255	Ramp. from half position to full position (max. --->min. speed)	proportional
17	16		Effect wheel rotation	
		0	No rotation	step
		1 - 127	Forwards rotation from fast to slow	proportional
		128	No rotation (128=default)	step
		129 -255	Backwards rotation from slow to fast	proportional
18	17		Effect wheel animations	
		0-3	No animation (0=default)	
			Note : All animations were created at distance of 5 m from screen with zoom=16 DMX. Focus value for each animation is stated in brackets	
			Coloured animations. The channels are blocked: CMY, Colour wheel, Virtual colour wheel, Effect wheel positioning, Effect wheel rot., Rotat. Gobos and Rot. Gobo rotation	
		4-5	Animation Macro 1 (Focus=159 DMX at 5 m)	step
		6-7	Animation Macro 2 (Focus=154 DMX at 5 m)	step
		8-9	Animation Macro 3 (Focus=154 DMX at 5 m)	step
		10-11	Animation Macro 4 (Focus=157 DMX at 5 m)	step
		12-13	Animation Macro 5 (Focus=157 DMX at 5 m)	step
		14-15	Animation Macro 6 (Focus=166DMX at 5 m)	step
		16-17	Animation Macro 7 (Focus=145 DMX at 5 m)	step
		18-19	Animation Macro 8 (Focus=162 DMX at 5 m)	step
		20-21	Animation Macro 9 (Focus=162 DMX at 5 m)	step
		22-23	Animation Macro 10 (Focus=162 DMX at 5m)	step
			Black and white animations . The channels are blocked: Effect wheel positioning, Effect wheel rot., Rotat. Gobos and Rot. Gobo rotation	
		24-25	Animation Macro 1 (Focus=159 DMX at 5 m)	step
		26-27	Animation Macro 2 (Focus=154 DMX at 5 m)	step
		28-29	Animation Macro 3 (Focus=154 DMX at 5 m)	step
		30-31	Animation Macro 4 (Focus=157 DMX at 5 m)	step
		32-33	Animation Macro 5 (Focus=157 DMX at 5 m)	step
		34-35	Animation Macro 6 (Focus=166DMX at 5 m)	step
		36-37	Animation Macro 7 (Focus=145 DMX at 5 m)	step
		38-39	Animation Macro 8 (Focus=162 DMX at 5 m)	step
		40-41	Animation Macro 9 (Focus=162 DMX at 5 m)	step
		42-43	Animation Macro 10 (Focus=162 DMX at 5m)	step
		44-255	Raw DMX	proportional
19	18		Static gobo wheel	
		0-3	Open/Hole (0=default)	step
			<u>Positioning</u>	
		4-9	Gobo 1	step
		10-15	Gobo 2	step
		16-21	Gobo 3	step
		22-27	Gobo 4	step
		28-33	Gobo 5	step
		34-39	Gobo 6	step
		40-45	Gobo 7	step
		46-51	Gobo 8	step
		52-57	Gobo 9	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		58-63	Gobo 10	step
		64-69	Beam reducer 1	step
		70-75	Beam reducer 2	step
		76-81	Beam reducer 3	step
		82-87	Beam reducer 4	step
			<i>Shaking gobos from slow to fast</i>	
		88-95	Gobo 1	proportional
		96-103	Gobo 2	proportional
		104-111	Gobo 3	proportional
		112-119	Gobo 4	proportional
		120-127	Gobo 5	proportional
		128-135	Gobo 6	proportional
		136-143	Gobo 7	proportional
		144-151	Gobo 8	proportional
		152-159	Gobo 9	proportional
		160-167	Gobo 10	proportional
		168-175	Beam reducer 1	proportional
		176-183	Beam reducer 2	proportional
		184-191	Beam reducer 3	proportional
		192-199	Beam reducer 4	proportional
		200-201	Open/hole	step
		202 - 222	Forwards gobo wheel rotation from fast to slow	proportional
		223 - 243	Backwards gobo wheel rotation from slow to fast	proportional
		244 - 249	Random gobo selection by audio control	step
			<i>(Set microphone sensitivity in menu „Personality“)</i>	
		250 - 255	Auto random gobo selection from fast to slow	proportional
20	19		Rotating gobo wheel	
			<i>Index - set indexing on channel 21/20</i>	
		0	Open/Hole (0=default)	step
		1-4	Hole (flat field)	step
		5-7	Gobo 1	step
		8-10	Gobo 2	step
		11-13	Gobo 3	step
		14-16	Gobo 4	step
		17-19	Gobo 5	step
		20-22	Gobo 6	step
		23-25	Gobo 7	step
		26-28	Gobo 8	step
		29-31	Gobo 9	step
			<i>Rotation - set rotation on channel 21/20</i>	
		32-34	Gobo 1	step
		35-37	Gobo 2	step
		38-40	Gobo 3	step
		41-43	Gobo 4	step
		44-46	Gobo 5	step
		47-49	Gobo 6	step
		50-52	Gobo 7	step
		53-55	Gobo 8	step
		56-59	Gobo 9	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
			<i>Shaking gobo from slow to fast</i>	
			<i>Index - set indexing on channel 21/20</i>	
		60-67	Gobo 1	proportional
		68-75	Gobo 2	proportional
		76-83	Gobo 3	proportional
		84-91	Gobo 4	proportional
		92-99	Gobo 5	proportional
		100-107	Gobo 6	proportional
		108-115	Gobo 7	proportional
		116-123	Gobo 8	proportional
		124-129	Gobo 9	proportional
			<i>Shaking gobo from slow to fast</i>	
			<i>Rotation - set rotation on channel 21/20</i>	
		130-137	Gobo 1	proportional
		138-145	Gobo 2	proportional
		146-153	Gobo 3	proportional
		154-161	Gobo 4	proportional
		162-169	Gobo 5	proportional
		170-177	Gobo 6	proportional
		178-185	Gobo 7	proportional
		186-193	Gobo 8	proportional
		194-199	Gobo 9	proportional
		200 - 201	Open/hole	step
		202 - 222	Forwards gobo wheel rotation from fast to slow	proportional
		223 - 243	Backwards gobo wheel rotation from slow to fast	proportional
		244 - 249	Random gobo selection by audio control	step
			(Set microphone sensitivity in menu „Personality“)	
		250 - 255	Auto random gobo selection from fast to slow	proportional
21	20		Rot. gobo indexing and rotation	
			<i>Gobo indexing - set position on channel 20/19</i>	
		0 - 255	Gobo indexing	proportional
			<i>Gobo rotation - set position on channel 20/19</i>	
		0	No rotation	step
		1 - 127	Forwards gobo rotation from fast to slow	proportional
		128	No rotation (128=default)	step
		129 - 255	Backwards gobo rotation from slow to fast	proportional
22	*		Rot. gobo indexing/rotation - fine	
		0-255	Fine indexing/rotation (0=default)	proportional
23	21		Prism wheel 1	
			<i>This wheel is blocked If Rotating gobo wheel >0 DMX</i>	
		0 - 3	Open position/hole (0=default)	step
			<i>Index - set indexing on channel 24/22</i>	
		4-7	Prism 1 - 6-facet linear	step
		8-11	Prism 2 - cylindrical	step
		12-15	Prism 3 - 8-facet 12° circular	step
			<i>Rotation - set rotation on channel 24/22</i>	
		16-19	Prism 1 - 6-facet linear	step
		20-23	Prism 2 - cylindrical	step
		24-27	Prism 3 - 8-facet 12° circular	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		28-255	Raw DMX	proportional
24	22		Prism wheel 1 indexing/rotation	
			<i>Prism indexing - set position on channel 23/21</i>	
		0 - 255	Prism 1 indexing	proportional
			<i>Prism 1 rotation - set position on channel 23/21</i>	
		0	No rotation	step
		1 - 127	Forwards prism rotation from fast to slow	proportional
		128	No rotation (128=default)	step
		129-255	Backwards prism rotation from slow to fast	proportional
25	23		Prism wheel 2	
		0 - 3	Open position/hole (0=default)	step
			<i>Index - set indexing on channel 26/24</i>	
		4-7	Prism 1 - 6-facet linear	step
		8-11	Prism 2 - 32-facet circular	step
		12-15	Prism 3 - 8-facet 18° circular	step
			<i>Rotation - set rotation on channel 26/24</i>	
		16-19	Prism 1 - 6-facet linear	step
		20-23	Prism 2 - 32-facet circular	step
		24-27	Prism 3 - 8-facet 18° circular	step
		28-255	Raw DMX	proportional
26	24		Prism wheel 2 indexing/rotation	
			<i>Prism indexing - set position on channel 25/23</i>	
		0 - 255	Prism 1 indexing	proportional
			<i>Prism 1 rotation - set position on channel 25/23</i>	
		0	No rotation	step
		1 - 127	Forwards prism rotation from fast to slow	proportional
		128	No rotation (128=default)	step
		129-255	Backwards prism rotation from slow to fast	proportional
27	25		Pattern selection	
			<i>The channels are blocked: Prism Wheel 1/2, Prism Wheel 1/2 rot.</i>	
		0-3	Open position/hole (0=default)	step
			<i>Index - set indexing on channel 28/26</i>	
		4-5	Pattern 1	step
		6-7	Pattern 2	step
		8-9	Pattern 3	step
		10-11	Pattern 4	step
		12-13	Pattern 5	step
		14-15	Pattern 6	step
		16-17	Pattern 7	step
		18-19	Pattern 8	step
		20-21	Pattern 9	step
		22-23	Pattern 10	step
		24-25	<i>Pattern 11</i>	step
		26-27	<i>Pattern 12</i>	step
			<i>Rotation - set rotation on channel 28/26</i>	
		28-29	Pattern 1	step
		30-31	Pattern 2	step
		32-33	Pattern 3	step
		34-35	Pattern 4	step

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		36-37	Pattern 5	step
		38-39	Pattern 6	step
		40-41	Pattern 7	step
		42-43	Pattern 8	step
		44-45	Pattern 9	step
		46-47	Pattern 10	step
		48-49	<i>Pattern 11</i>	step
		50-51	<i>Pattern 12</i>	step
			<i>Dynamic patterns-set rotation on channel 28/26</i>	
		52-53	Pattern 13	step
		54-55	Pattern 14	step
		56-57	Pattern 15	step
		58-59	Pattern 16	step
		60-61	Pattern 17	step
		62-63	Pattern 18	step
		64-65	<i>Pattern 19</i>	step
		66-67	<i>Pattern 20</i>	step
		68-255	Raw DMX	proportional
28	26		Pattern rotation and indexing	
			<i>The channels are blocked: Prism Wheel 1/2, Prism Wheel 1/2 rot.</i>	
			<i>Pattern indexing - set position on channel 27/25</i>	
		0 - 255	Pattern indexing	proportional
			<i>Pattern rotation - set position on channel 27/25</i>	
		0	No rotation	step
		1 - 127	Forwards pattern rotation from fast to slow	proportional
		128	No rotation (128=default)	step
		129-255	Backwards pattern rotation from slow to fast	proportional
29	27		Beam shaper selection	
			<i>The channels are blocked: Pris.Wheel 1 and 2, Static gobo, Rotating gobo, Frost (Light frost only)</i>	
		0 - 3	Open position/hole (0=default)	step
			<i>Index - set indexing on channel 30/28</i>	
		4-7	Beam shaper 1	step
		8-11	Beam shaper 2	step
		12-15	Beam shaper 3	step
		16-19	Beam shaper 4	step
			<i>Rotation - set rotation on channel 30/28</i>	
		20-23	Beam shaper 1	step
		24-27	Beam shaper 2	step
		28-31	Beam shaper 3	step
		32-35	Beam shaper 4	step
		36-255	Reserved	
30	28		Beam shaper rotation and indexing	
			<i>Beam shaper indexing - set position on channel 29/27</i>	
		0 - 255	Shaper indexing	proportional
			<i>Beam shaper rotation - set position on channel 29/27</i>	
		0	No rotation	step
		1 - 127	Forwards shaper rotation from fast to slow	proportional
		128	No rotation (128=default)	step
		129-255	Backwards shaper rotation from slow to fast	proportional

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
31	29		Frost	
		0	Open (0=default)	step
			Light Frost	
			<i>Max. time of Light frost movement 0 -->100% (100% -->0) is 10 sec.</i>	
		1-50	Light Frost from 0% to 100%	proportional
		51-53	100% Light Frost	step
		54-63	Pulse closing from slow to fast	proportional
		64-73	Pulse opening from fast to slow	proportional
		74-83	Ramping from fast to slow	proportional
		84-86	Open	step
			Medium Frost	
			<i>Max. time of Medium frost movement 0 -->100% (100% -->0) is 10 sec.</i>	
		87-136	Medium Frost from 0% to 100%	proportional
		137-139	100% Medium Frost	step
		140-149	Pulse closing from slow to fast	proportional
		150-159	Pulse opening from fast to slow	proportional
		160-169	Ramping from fast to slow	proportional
		170-172	Open	step
			Combined Frost	
			<i>Note: Combined Frost and Prism weel 1 cannot be inserted into light beam at the same time . The Prism wheel 1 has priority to Combined Frost .</i>	
			<i>Max. time of Medium frost movement 0 -->100% (100% -->0) is 10 sec.</i>	
		173-222	Medium Frost from 0% to 100% (Light Frost inserted)	proportional
		223-225	100% Medium Frost (Light Frost inserted)	step
		226-235	Pulse closing from slow to fast	proportional
		236-245	Pulse opening from fast to slow	proportional
		246-255	Ramping from fast to slow	proportional
32	30		Zoom	
		0 - 255	Zoom from max. to min.beam angle (128=default)	proportional
33	*		Zoom - fine	
		0-255	Fine zooming (0=default)	proportional
34	31		Focus	
		0 - 255	Continuous adjustment from far to near (128=default)	proportional
35	*		Focus Fine	
		0- 255	Fine focusing (0=default)	proportional
36	32		Hot-Spot control	
		0	Automatic Hot-Spot control (0=default)	step
		1-255	Hot-Spot control (from min. to max. intensity of image centre)	proportional
37	33		Shutter/ strobe	
		0 - 31	Shutter closed	step
		32 - 63	Shutter open (32=default)	step
		64 - 95	Strobe-effect from slow to fast	proportional
		96 - 127	Shutter open	step
		128 - 143	Opening pulse in sequences from slow to fast	proportional
		144 - 159	Closing pulse in sequences from fast to slow	proportional
		160 - 191	Shutter open	step
		192 - 223	Random strobe-effect from slow to fast	proportional
		224 - 255	Shutter open, Full lamp power	step
38	34		Dimmer intensity	

DMX protocol

Mode/channel		DMX Value	Function	Type of control
1	2			
		0 - 255	Dimmer intensity from 0% to 100% (0=default)	proportional
39	*		Dimmer intensity - fine	
		0 - 255	Fine dimming (0=default)	proportional
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Robin MegaPointe - colours on Virtual Colour Wheel				
Colour name	Cyan (DMX)	Magenta (DMX)	Yellow (DMX)	Colour Wheel (DMX)
Filter 4 (Medium Bastard Amber)	0	143	142	170
Filter 10 (Medium Yellow)	0	146	247	155
Filter 19 (Fire)	105	255	248	181
Filter 26 (Bright Red)	18	0	97	130
Filter 58 (Lavender)	195	195	4	170
Filter 68 (Sky Blue)	245	149	170	0
Filter 71 (Tokyo Blue)	255	106	228	136
Filter 79 (Just Blue)	255	132	11	182
Filter 88 (Lime Green)	55	0	224	0
Filter 90 (Dark Yellow Green)	255	0	246	0
Filter 100 (Spring Yellow)	123	131	241	0
Filter 101 (Yellow)	123	162	248	0
Filter 102 (Light Amber)	87	158	234	0
Filter 103 (Straw)	16	146	195	0
Filter 104 (Deep Amber)	49	173	245	0
Filter 105 (Orange)	16	0	0	177
Filter 106 (Primary Red)	0	255	247	151
Filter 111 (Dark Pink)	0	165	190	159
Filter 115 (Peacock Blue)	241	14	212	0
Filter 116 (Medium Blue-Green)	255	18	37	145
Filter 117 (Steel Blue)	163	13	184	0
Filter 118 (Light Blue)	249	78	194	0
Filter 119 (Dark Blue)	255	116	203	172
Filter 120 (Deep Blue)	255	169	58	173
Filter 121 (Filter Green)	199	116	244	0
Filter 128 (Bright Pink)	0	255	197	0
Filter 131 (Marine Blue)	222	72	215	0
Filter 132 (Medium Blue)	255	71	119	182
Filter 134 (Golden Amber)	0	192	233	0
Filter 135 (Deep Golden Amber)	0	244	253	0
Filter 136 (Pale Lavender)	124	132	90	182
Filter 137 (Special Lavender)	188	162	144	182
Filter 138 (Pale Green)	176	0	219	182
Filter 139 (Primary Green)	255	160	252	0
Filter 141 (Bright Blue)	255	0	182	0
Filter 147 (Apricot)	0	187	227	0
Filter 148 (Bright Rose)	0	248	195	170

Colour name	Cyan (DMX)	Magenta (DMX)	Yellow (DMX)	Colour Wheel (DMX)
Filter 152 (Pale Gold)	0	110	127	170
Filter 154 (Pale Rose)	0	124	48	168
Filter 157 (Pink)	0	202	188	168
Filter 158 (Deep Orange)	0	206	246	168
Filter 162 (Bastard Amber)	36	87	129	168
Filter 164 (Flame Red)	0	255	250	153
Filter 165 (Daylight Blue)	240	122	176	182
Filter 169 (Lilac Tint)	105	83	133	182
Filter 170 (Deep Lavender)	138	162	103	182
Filter 172 (Lagoon Blue)	255	0	192	182
Filter 179 (Chrome Orange)	0	189	250	0
Filter 180 (Dark Lavender)	213	205	0	182
Filter 181 (Congo Blue)	200	146	207	188
Filter 197 (Alice Blue)	241	170	144	167
Filter 201 (Full C.T. Blue)	208	102	172	168
Filter 202 (Half C.T. Blue)	194	88	183	167
Filter 203 (Quarter C.T. Blue)	192	126	190	167
Filter 204 (Full C.T. Orange)	0	138	189	167
Filter 205 (Half C.T. Orange)	0	76	152	167
Filter 206 (Quarter C.T. Orange)	0	31	82	167
Filter 247 (Filter Minus Green)	92	151	93	167
Filter 248 (Half Minus Green)	92	121	93	167
Filter 281 (Three Quarter C.T. Blue)	187	24	157	167
Filter 285 (Three Quarter C.T. Orange)	0	121	179	167
Filter 352 (Glacier Blue)	242	58	186	167
Filter 353 (Lighter Blue)	239	35	197	167
Filter 715 (Cabana Blue)	255	192	82	167
Filter 778 (Millennium Gold)	0	227	255	167
Filter 793 (Vanity Fair)	116	255	220	149