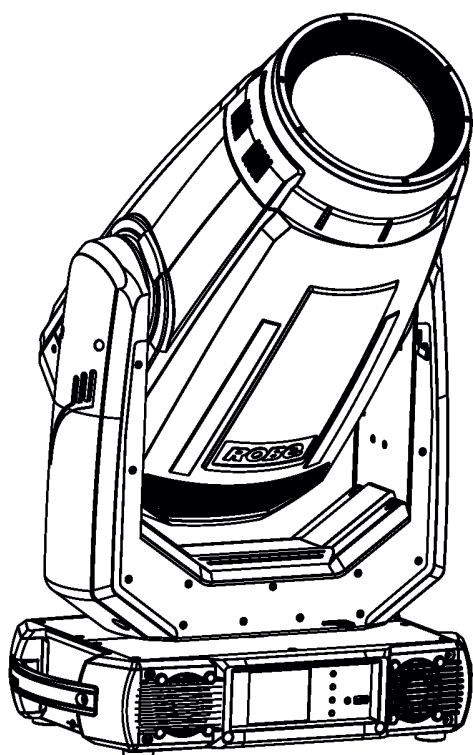
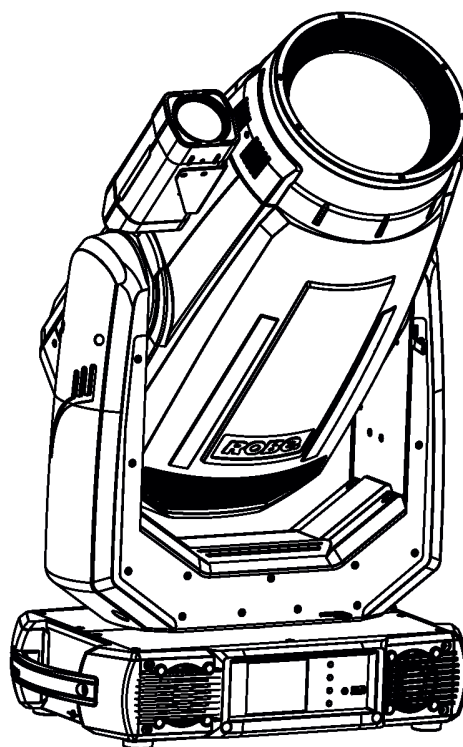

ROBE

Esprite®



Esprite® FS



ROBE
Innovative
Technology

QR code for user manual



USER MANUAL

ROBE® lighting s.r.o. • Czech Republic • www.robe.cz

Version 4.9

Esprite

Esprite FS

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CAUTION!

***Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!***

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

1. Safety instructions

Please use only an original ROBE packaging (paper box, loader case or foam shell) for transporting the device, otherwise potential damage of the device during its transport will not subject to warranty.

CAUTION!

***Be careful with your operations.
With a high voltage you can suffer
a dangerous electric shock when touching the wires!***

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 warning notes written 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.

Never let the power-cord come into contact with other cables! Handle the power cord and all connections with the mains with particular caution!

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

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.

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

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power cord.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth. The electric connection, repairs and servicing must be carried out by a qualified employee.

Do not connect this device 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.

Do not touch the device's housing bare hands during its operation (housing becomes hot)!

For replacement use fuses of same type and rating only.

***LED light emission. Risk of eye injury.
Do not look straight at the fixture's LED source during operation. The intense light beam may damage your eyes.***

Do not view the light output with optical instruments or any device that may concentrate the beam.

CAUTION! Risk group 2, RG-2



2. Operating determination

This device is a moving head for creating decorative effects and was designed for indoor use only. This device is for professional use only. It is not for household use.

If the device 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.

Do not shake the device. Avoid brute force when installing or operating the device.

Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged. Always hold the fixture at the transport handles.

When choosing the installation spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!

Make sure that the area below the installation place is blocked when rigging, de-rigging or servicing the fixture. Always fix the fixture with an appropriate safety wire. Fix the safety wire at the correct holes only.

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

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

CAUTION!

The front 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!

Do not block the front objective lens with any object when the fixture is under operation. The fixture housing never must be covered with cloth or other materials.

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

Please consider that unauthorized modifications on the device are forbidden due to safety reasons!

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock, burns etc.

CAUTION!

To avoid damage of the internal parts of the fixture head, never let the sunlight lights directly to the front lens , even when the fixture is not working !

The product (covers and cables) must not be exposed to a high frequency electromagnetic field higher than 3V/m.

Immunity of the equipment is designed according to the standard EN 55035 Electromagnetic compatibility of multimedia equipment - Immunity requirements.

Emission of the equipment complies with the standard EN55032 Electromagnetic compatibility of multimedia equipment – Emission Requirements according to class B.

Contains FCC ID: 2A6PL-DMXRDMRW001*

Contains IC: 29573-DMXRDMRW001*

* Wireless DMX version of the fixture only.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

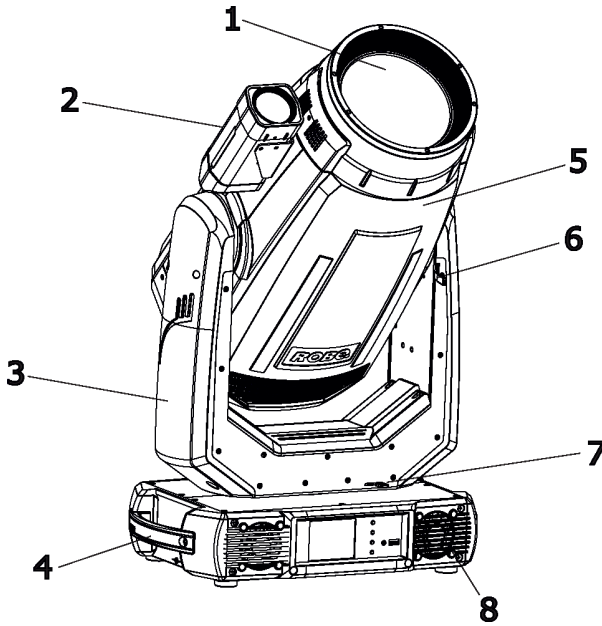
Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The [Device] wireless operation is safe and complies to RF Exposure requirements

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

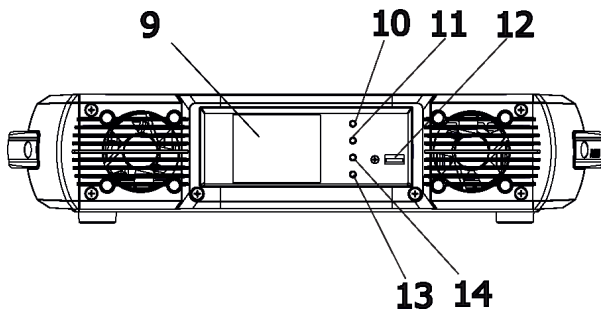
3. Fixture exterior view



- 1 - Front lens
- 2 - Camera*
- 3 - Arm
- 4 - Handles
- 5 - Head
- 6 - Tilt lock
- 7 - Pan lock
- 8 - Base

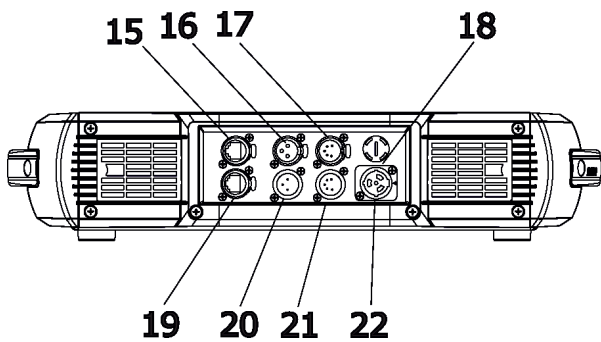
*ESPRITE FS only

The head has to be locked for transportation- the tilt lock latch (6) and the pan lock latch (7) have to be in the locked positions. To unlock the head, move these latches to unlock position before operating the fixture.



Front panel of the base:

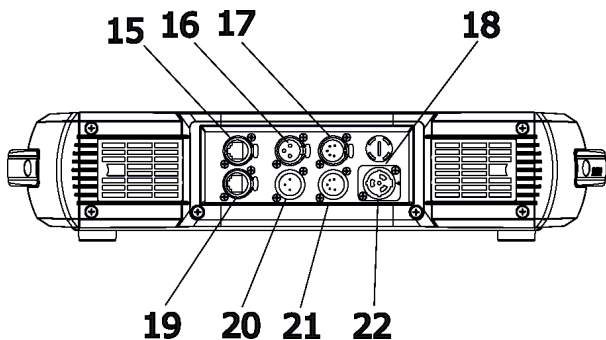
- 9 - QVGA touch screen
- 10 - ESCAPE button
- 11 - NEXT button
- 12 - USB port
- 13 - ENTER/DISPLAY ON button
- 14 - PREV button



Rear panel of the base:

- 15 - Ethernet (RJ45)
- 16 - 3-pin DMX output
- 17 - 5-pin DMX output
- 18 - Fuse holder
- 19 - Camera output (RJ 45)*
- 20 - 3-pin DMX input
- 21 - 5-pin DMX input
- 22 - Power (PowerCon True 1)

*ESPRITE FS only



Rear panel of the base - EP version:

- 15 - Ethernet output (RJ45)
- 16 - 3-pin DMX output
- 17 - 5-pin DMX output
- 18 - Fuse holder
- 19 - Ethernet input (RJ45)
- 20 - 3-pin DMX input
- 21 - 5-pin DMX input
- 22 - Power (PowerCon True 1)

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

4. Installation



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

4.1 Connection to the mains

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

The Robin Esprite 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
Yellow/Green	Green	Earth	

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

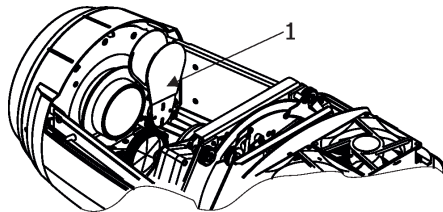
To apply power, first check that the head pan and tilt locks are released.

4.2 Replacing the medium frost

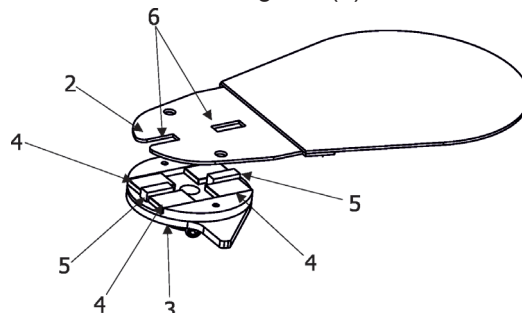
Unplug the fixture from mains before installing the frost module!

To replace the frost module.

1. Disconnect the fixture from mains and allow it to cool for 10 minutes.
2. Remove plastic cover of the head by loosening the 2 quarter-turn fasteners on the cover to get access to the frost module (1).



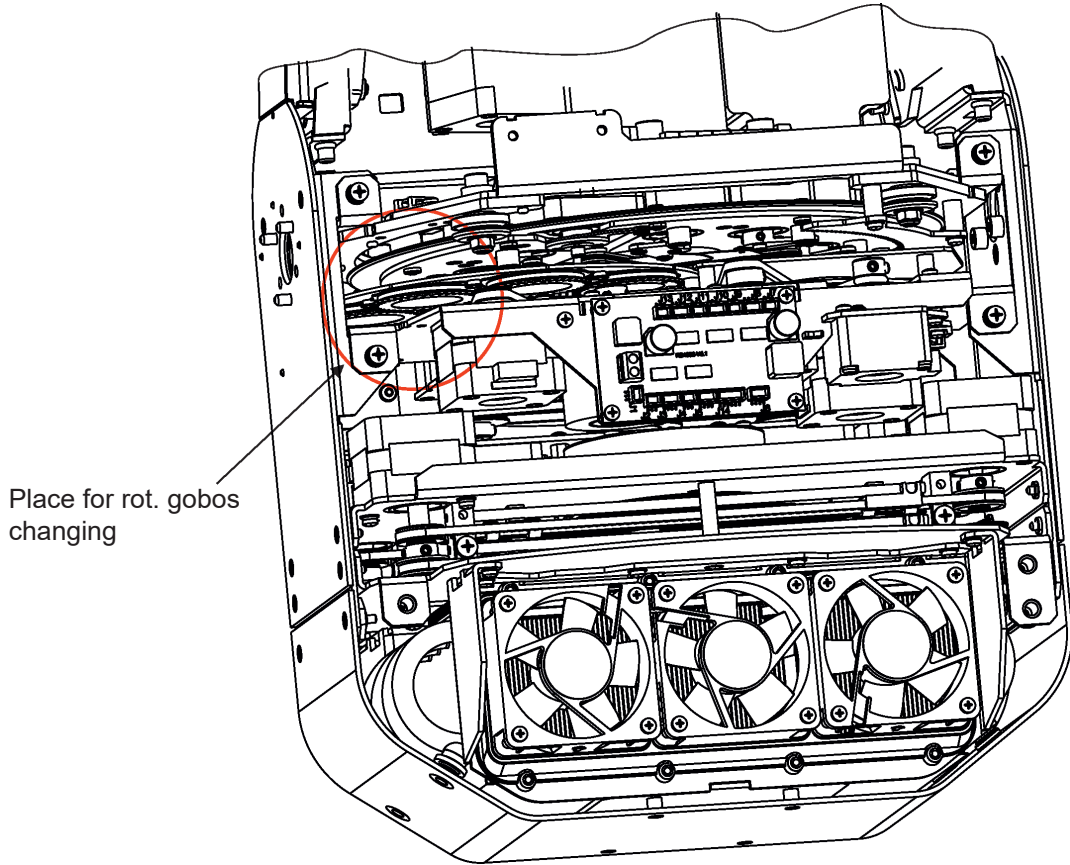
3. The holder (2) of the frost foil is fastened to the frost holder (3) by means of the four magnets (4). Grip the holder (2) and carefully tilt it out to break a force of magnets (4) on the frost holder (3).



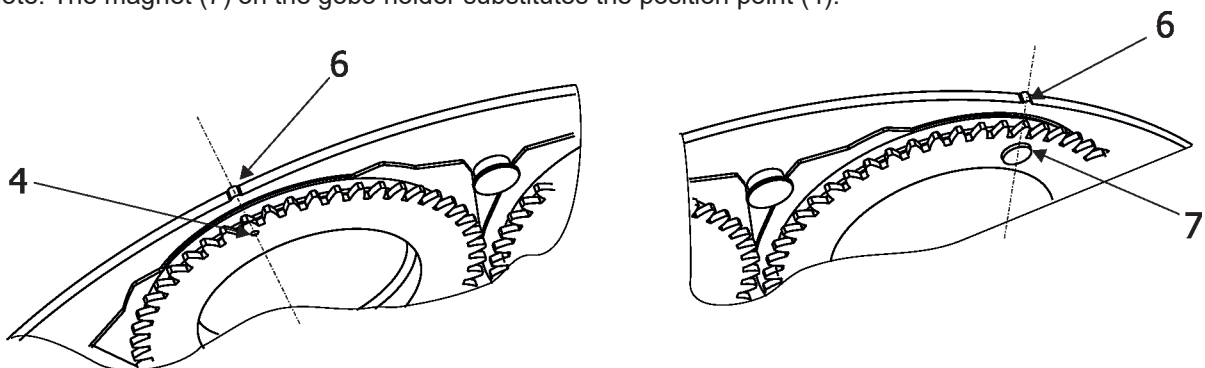
4. Place a new frost module into the frost holder (3). Check, that both slots (6) snapped correctly into two protrusions (5) in the holder (3).
5. Place the plastic cover back on the fixture before applying power.

4.3 Replacing rotating gobos

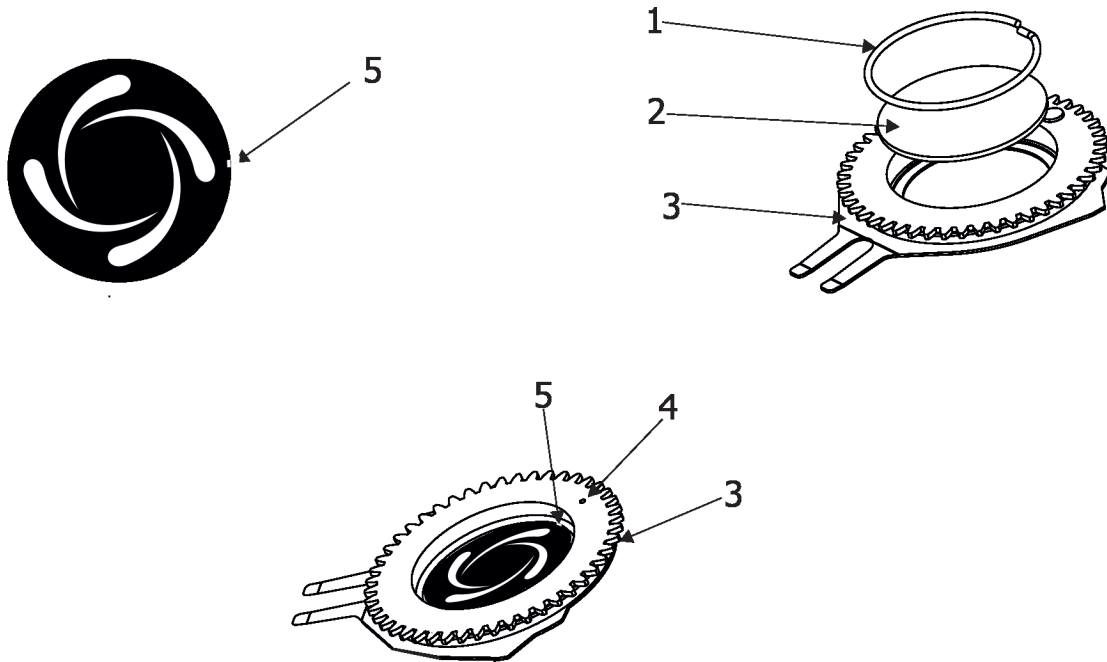
1. Close a light output of the fixture and allow the fixture to cool about 15 minutes.
2. Put the fixture on the table and remove top plastic covers of the head by loosening the 2 quarter-turn fasteners on each cover.
3. Connect the fixture to mains. Go to the tab "Service", select the menu "Adjust DMX values " and move the fixture head to the position which is intended for changing rot. gobos as shown on the picture below.
4. Remove the top plastic cover of the head by loosening the 2 quarter-turn fasteners on the cover.



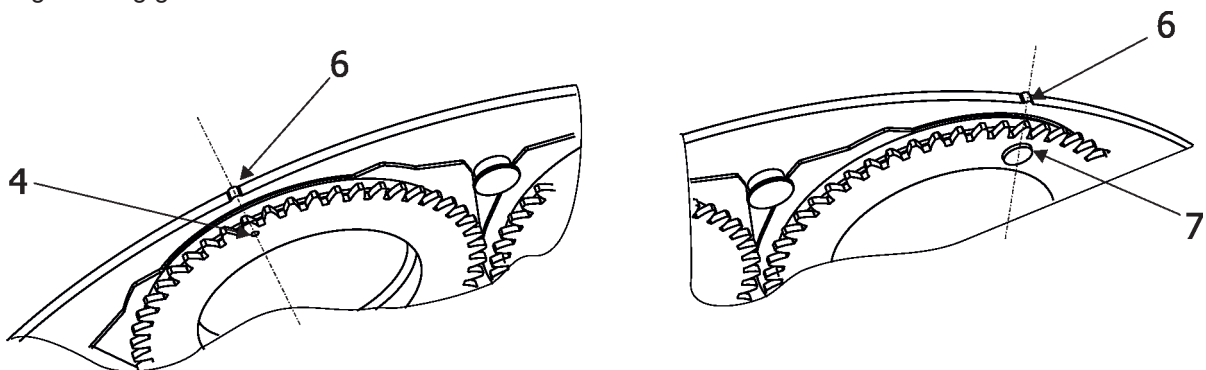
5. Escape from the menu "Adjust DMX values " and go to the menu " Rotating Gobos Change" in the same tab, select Gobo Carousel 1 and enter to its menu.
6. Select a gobo (G1-Mg, G2, G3, G4, G5, G6, G7) which you wish to replace. The selected gobo will move to the accessible position for its changing.
Note: "G1-Mg" means the gobo holder with a magnet.
7. Check that the position point (4) on the gobo holder aims exactly to the toothlike projection (6) on the edge of the rotating gobo wheel. If not, go to the option "Gobo Offset" and adjust the position point (4) exactly opposite of the toothlike projection(6). Adjusted value in the "Gobo Offset" is valid for all gobos on the gobo carousel.
Note: The magnet (7) on the gobo holder substitutes the position point (4).



8. Gently pull up the gobo holder (3) from the rotation gobo carousel.
9. Remove the spring lock (1) with an appropriate tool (e.g. small-bladed screwdriver).
Do not touch the surface of the pattern of the glass gobo with bare fingers.
10. Remove the original gobo (2) and insert the new one (glossy side towards the light source, black matt side towards the front lens).
The Robe gobo has a small position point (5) at its edge which has to aim at the position point (4) on the gobo holder (3). Insert the spring lock (1) to secure correct gobo position in the gobo holder (3).



- 11 Insert the gobo holder back into gobo carousel in this way, that its position point (4) (or magnet (7)) has to exactly aim at a small toothlike projection (6) on the edge of the rotating gobo wheel. Do not move with neighbouring gobo holders.



12. Escape the gobo item and enter another gobo item which you want to replace. You do not need to set the gobo offset again. Repeat steps 6, 8-12 for all gobos which you need to replace on the gobo carousel.

Note. The hot-spot lens with holder (optional accessories) can be installed instead of the rot. gobo 7

13. **After replacing desired gobos, connect the fixture to mains and light on changed gobo holders (or gobos) with max. intensity (shutter/dimmer=255 DMX) approximately 10 minutes per each changed gobo position to evaporate potential grease from gobo holders and gobos.**

During this procedure, the fixture head has to be in a horizontal position without top cover (side of fixture head without cover has to be up) and the gobo has to rotate.

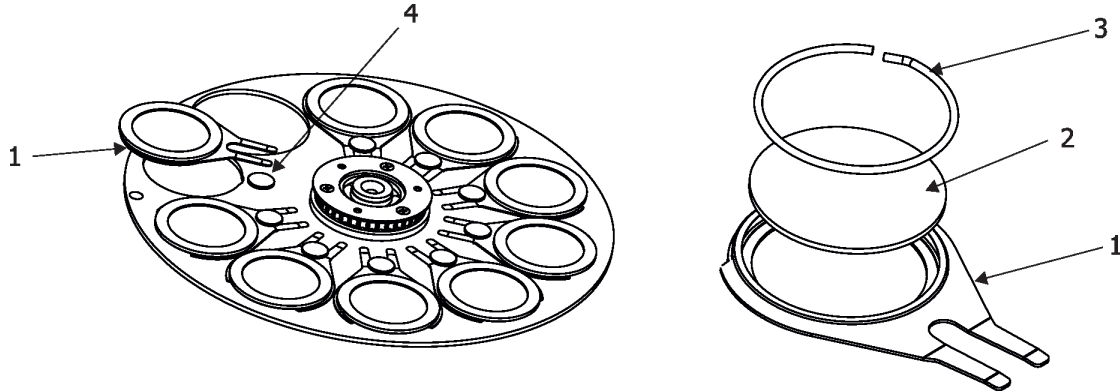
Note: this step you can leave out if you use original gobo holders from the fixture and you sure that new glass gobos are clean.

14. Place head cover back on the head (do not forget to connect safety wire between chassis and the head cover) and secure it by means of 2 quarter-turn fasteners on the cover.

4.4 Replacing static gobos

Disconnect the fixture from mains before replacing gobos!

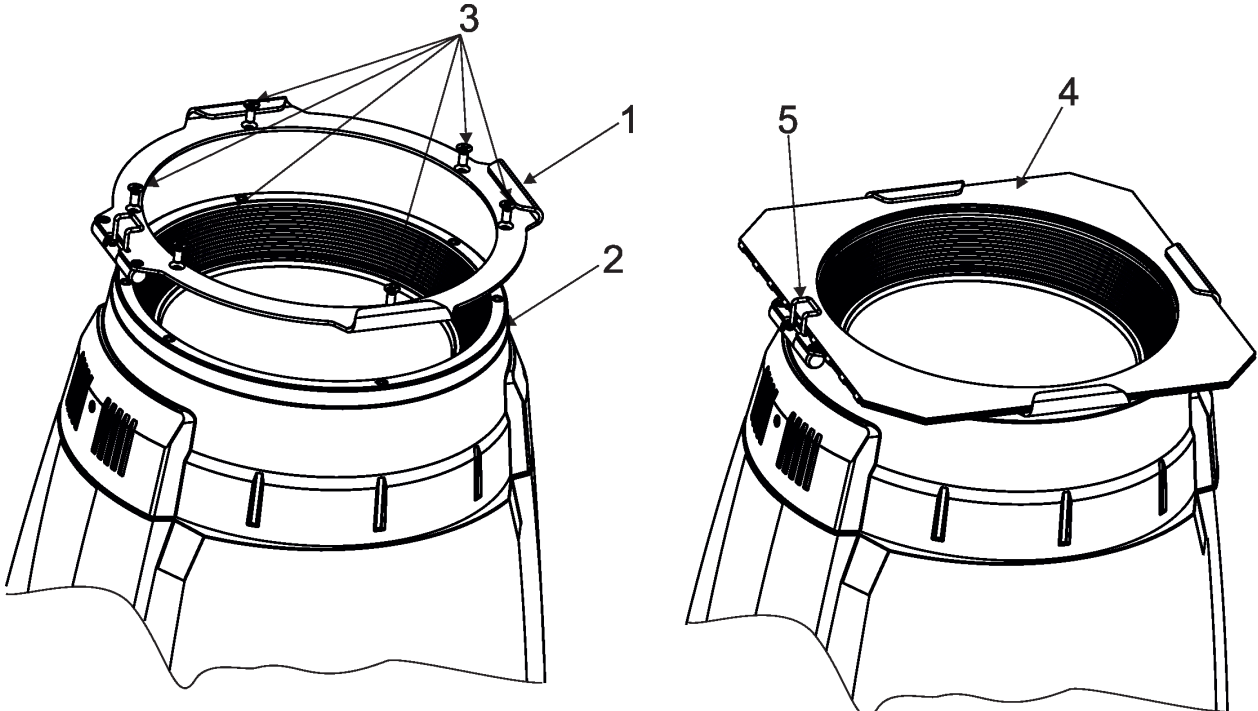
1. Disconnect the fixture from mains and allow it to cool.
2. Remove the plastic cover of the head by loosening the 2 quarter-turn fasteners on the cover.
3. Gently pull up the gobo holder (1) from the static gobo wheel.
4. Remove the spring gobo lock (3) with an appropriate tool (e.g. small-bladed screwdriver) and remove it.
Do not touch the surface of the pattern of the glass gobo.
5. Remove the original gobo (2) and insert the new one (glazy side towards the light source). Insert the spring gobo lock (3) to secure it in the gobo holder (1).
6. Insert the gobo holder back to the static gobo wheel until it reaches the stop (4) in the static gobo wheel.
5. Replace the bottom cover before applying power.



4.5 Installing the gel frame

Disconnect the fixture from mains before installing the gel frame.

1. Screw the gel frame adaptor [P/N 10980463] (1) on the head (2) by means of the six screws M4x10 (3).
2. Insert the gel frame [P/N 10980464] (4) to the gel frame adaptor and secure it by the spring lock (5).

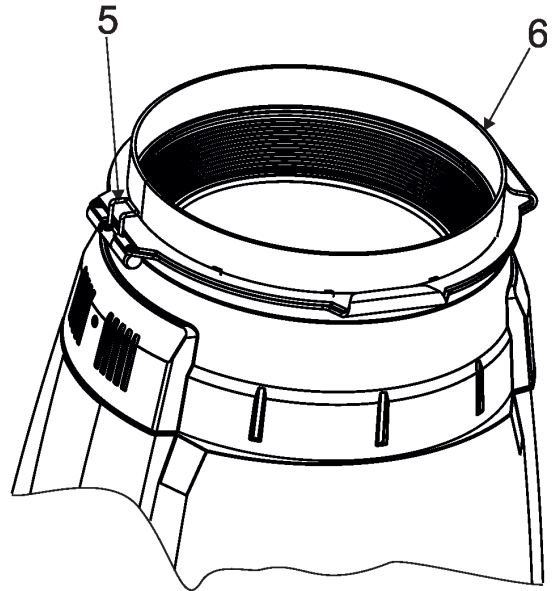
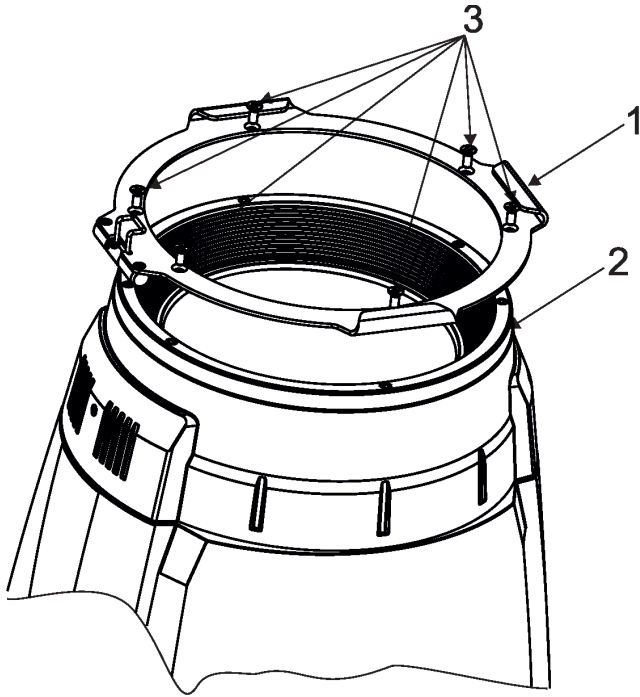


Max. dimension of transparent film (for inserting to the gel frame) is 210 x 210 mm.

4.6 Installing the top hat

Disconnect the fixture from mains before installing the top hat.

1. Screw the gel frame adaptor [P/N 10980463] (1) on the head (2) by means of the six screws M4x10 (3).
2. Insert the top hat [P/N 10980568] (6) to the gel frame adaptor and secure it by the spring lock (5).



4.7 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 regulations.

For overhead installation, the fixture must be always secured with a safety wire that can bear at least 10 times the weight of the fixture

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.***

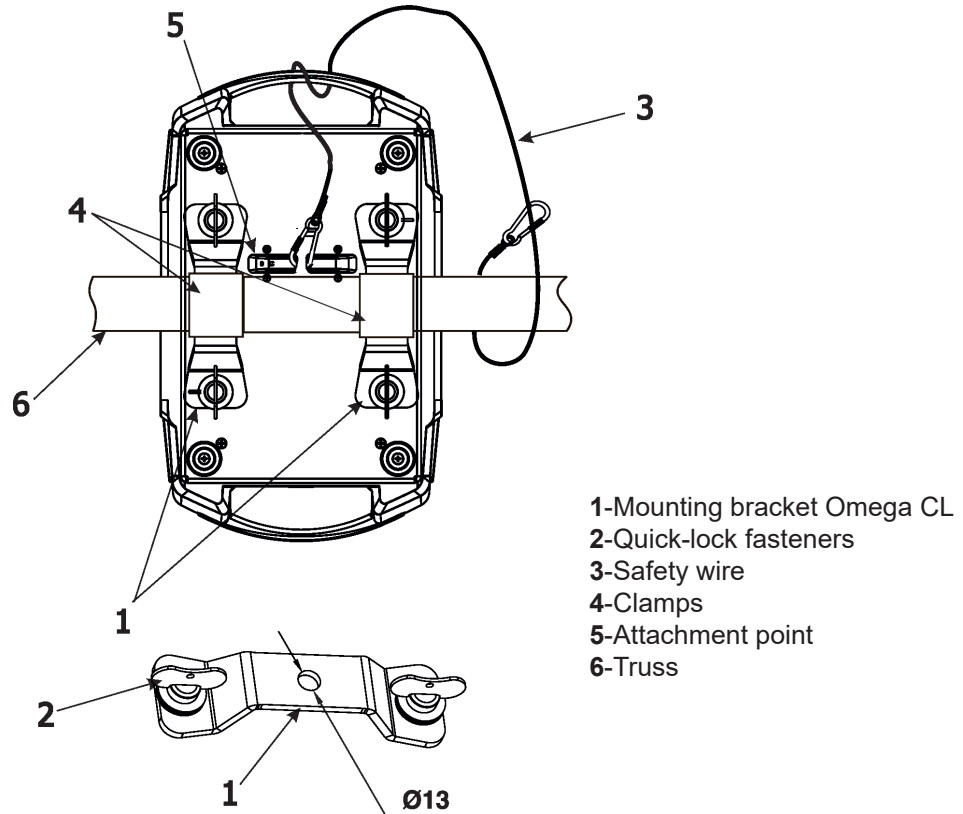
***CAUTION!
Use 2 appropriate clamps to rig the fixture on the truss.
Follow the instructions mentioned at the bottom of the base.
Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixtures is secure.***

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. Pull a safety wire (3) through the carrying handle and the truss (6) as shown on the picture below in a suitable position so that the maximum fall of the fixture will be 20 cm. Fasten a snap hook in the attachment point (5). Use only the safety wire with a snap hooks with screw lock gates.



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

DANGER TO LIFE!
***Before taking into operation for the first time, the installation has to be approved by
an expert!***

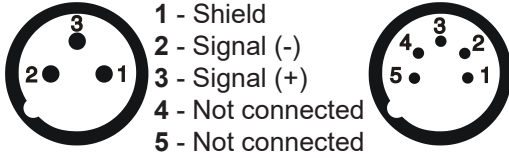
4.8 DMX-512 connection

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.

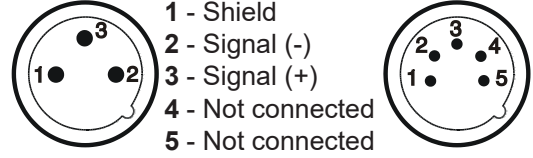
DMX output

XLR mounting sockets (rear view):



DMX input

XLR mounting plugs (rear view):

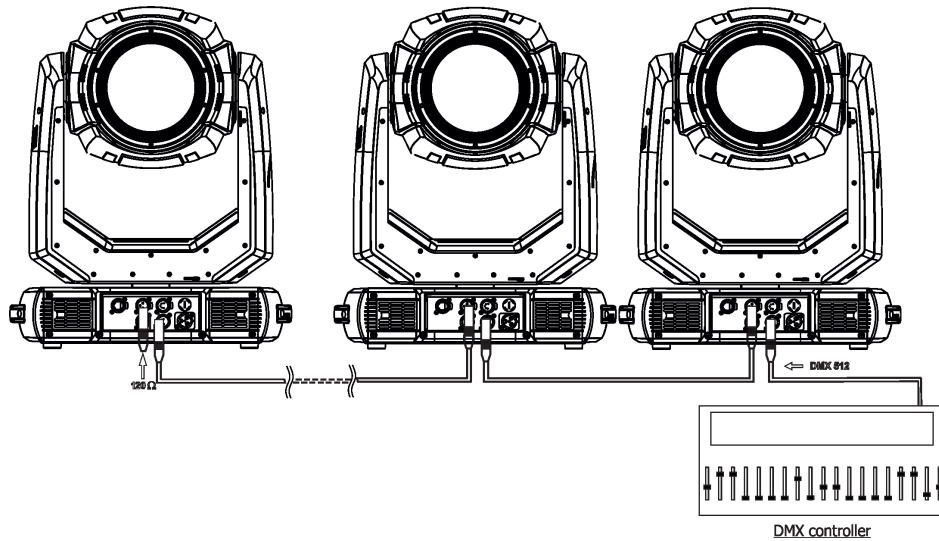


If you are using the standard DMX controllers, you can connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX chain. If you wish to connect DMX controllers with other XLR outputs, you need to use adapter cables.

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.



4.9 Ethernet connection

The fixtures on a data link are connected to the Ethernet with appropriate communication protocol (e.g. ArtNet). The control software running on your PC (or light console) has to support Art-Net protocol.

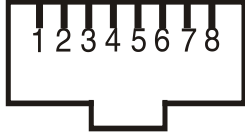
Art-Net communication protocol is a 10 Base T Ethernet protocol based on the TCP/IP. Its purpose is to allow transfer of large amounts of DMX 512 data over a wide area using standard network technology.

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.

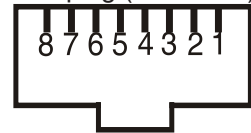
The Robin Esprite is equipped with 8-pin RJ-45 socket for Ethernet input. Use a network cable category 5 (with four "twisted" wire pairs) and standard RJ-45 plugs in order to connect the fixture to the network.

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):




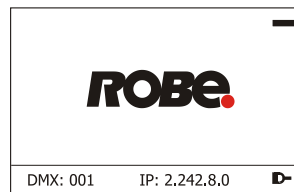
Patch cables that connect fixtures to the hubs or LAN sockets are wired 1:1, that is, pins with the same numbers are connected together:



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:



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

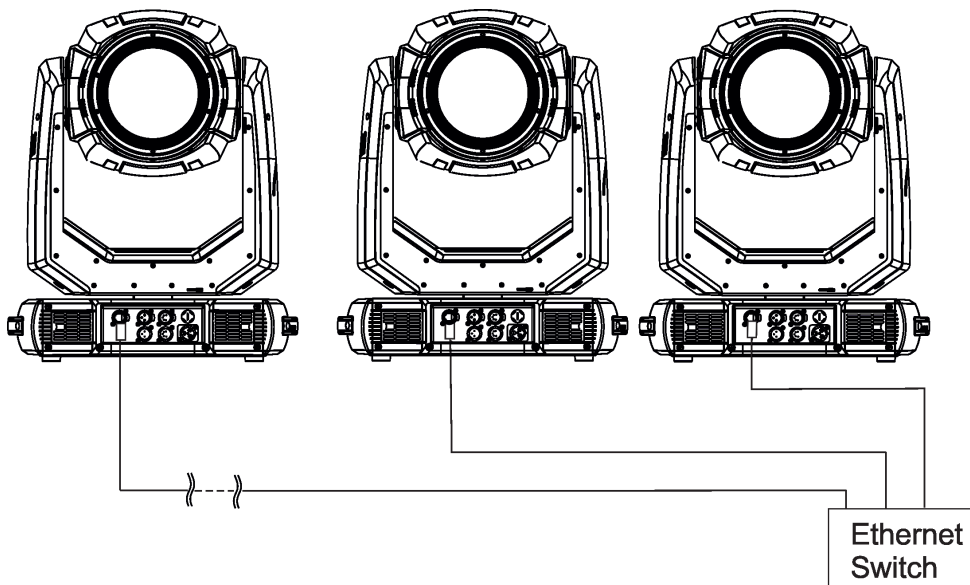
Set IP address (002.xxx.xxx.xxx / 010.xxx.xxx.xxx) and the Universe at each fixture.

Example:

(DMX address=146)
IP address=002.168.002.004
Universe=1

(DMX address=50)
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

The EP version of the fixture is equipped with Ethernet Pass Through Switch which sustains Ethernet integrity, when the fixture has no power, it automatically maintains network connectivity.

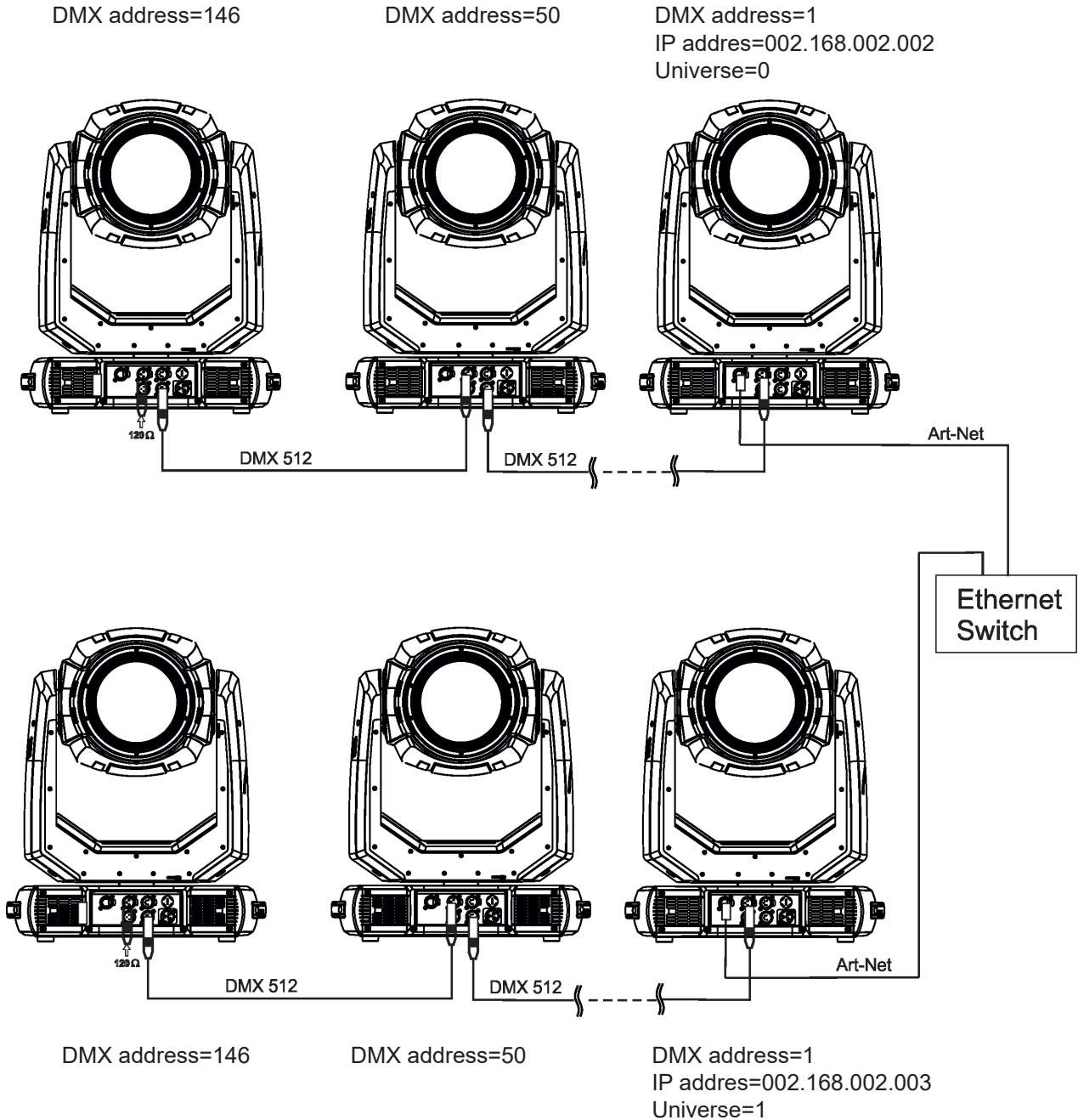
If you use the Ethernet IN-OUT way for the Ethernet connection, max. 8 fixtures can be connected in the IN-OUT line.

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 "Ethernet Mode" menu 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 the DMX output of this fixture with the 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:



4.10 Wireless DMX operation

The wireless DMX version of the fixture is equipped with the wireless DMX/RDM module which has full support for wireless communication protocols at entertainment market. The module is based on well known Lumen-Radio RF technology, with implemented wire interface for connection with Robe products. RF output for MCX interface antenna as standard output.

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 .

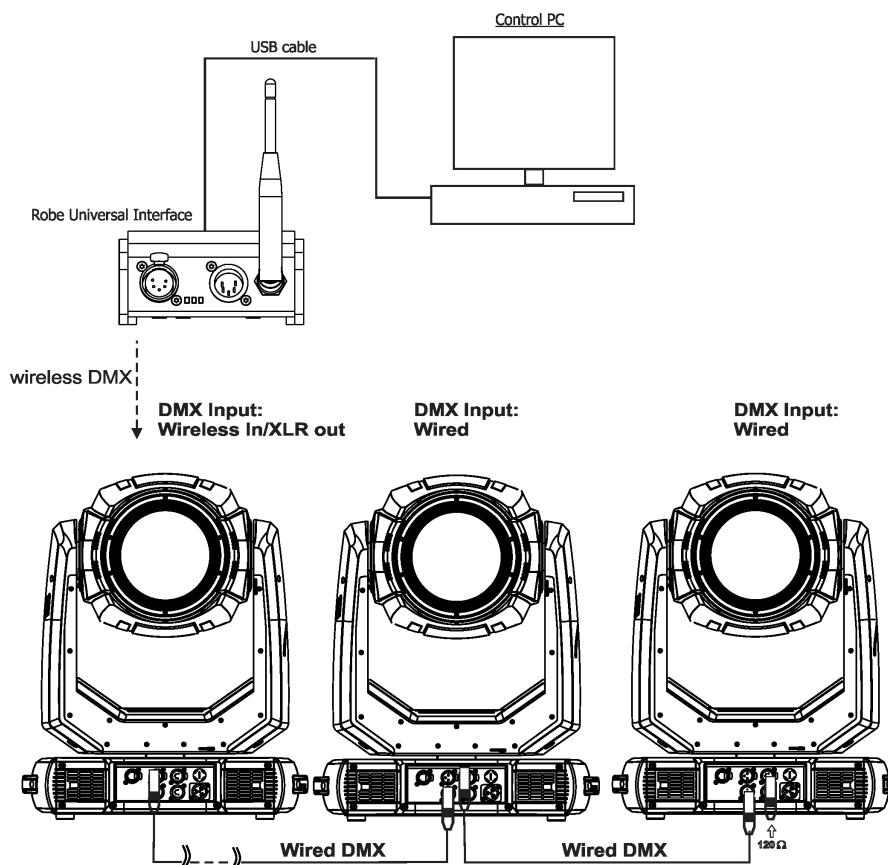
After linking , the level of DMX signal (0-100 %) is displayed in the menu item "Wireless State" (Information -->Wireless State).

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 Adaptor).

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" adaptor.

Example of connection:



5. Remotely controllable functions

Effect wheel

The wheel rotates in both directions with variable speed which creates wide spectrum of graphic effects.

Gobo wheels

The fixture includes static gobo wheel with 9 gobos and rotating gobo wheel with 7 glass gobos rotating in both directions, indexable, replaceable "SLOT&LOCK" system. The hot-spot lens can be installed instead of the rot. gobo 7.

Prism

The 6-facet prism rotates in both directions at different speeds, 16 prism/gobo macros are available.

Frost

Two frost filters (light 1° and medium 5°) provide variable frost for fine frosting. The medium frost is replaceable.

Iris

Motorized adjustable iris, wide range of variable pulse effects.

Zoom

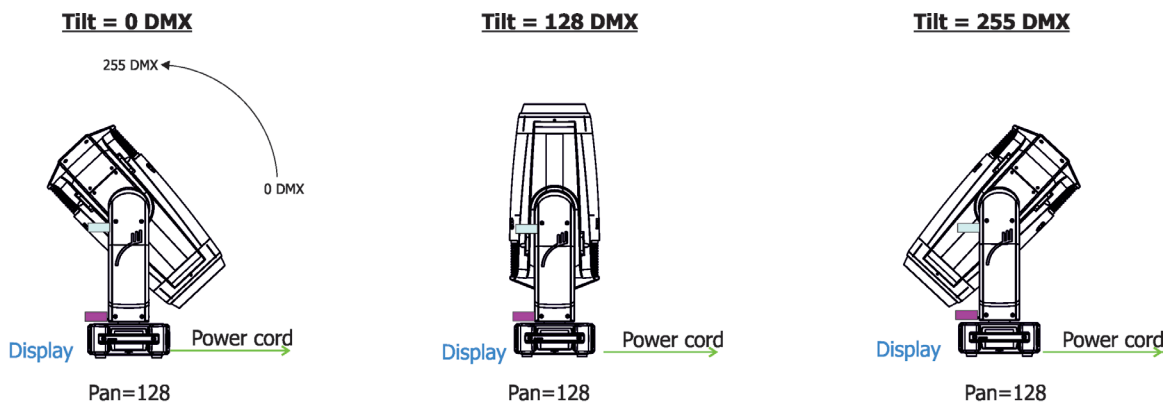
Motorized zoom unit enables zoom between 5.5° - 50°.

Focus

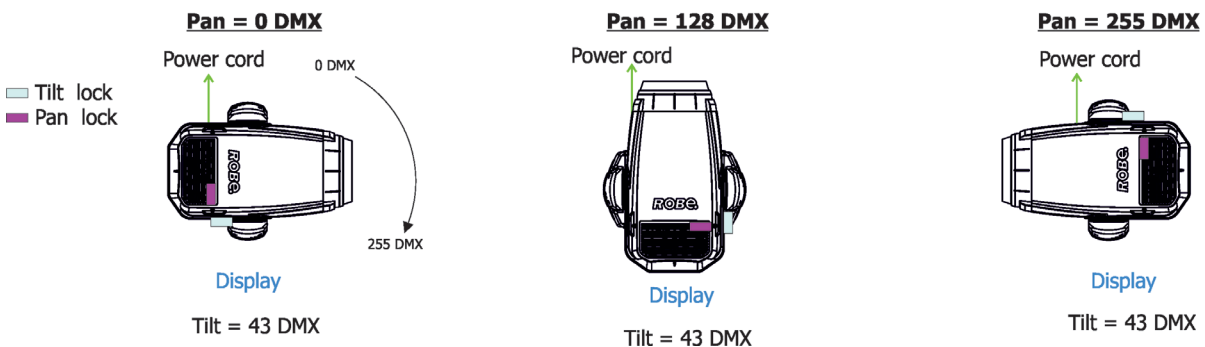
Motorized focus allows to focus beam from approx. 2 meters to infinity.

Pan/Tilt

Fast pan/tilt movement due to built-in electronic motion stabilizer (EMS). The electronic motion stabilizer ensures precise position of the fixture's head during its movement and reduces its swinging when the truss shakes. Pan /Tilt movement range: 0-540°/0-265°.



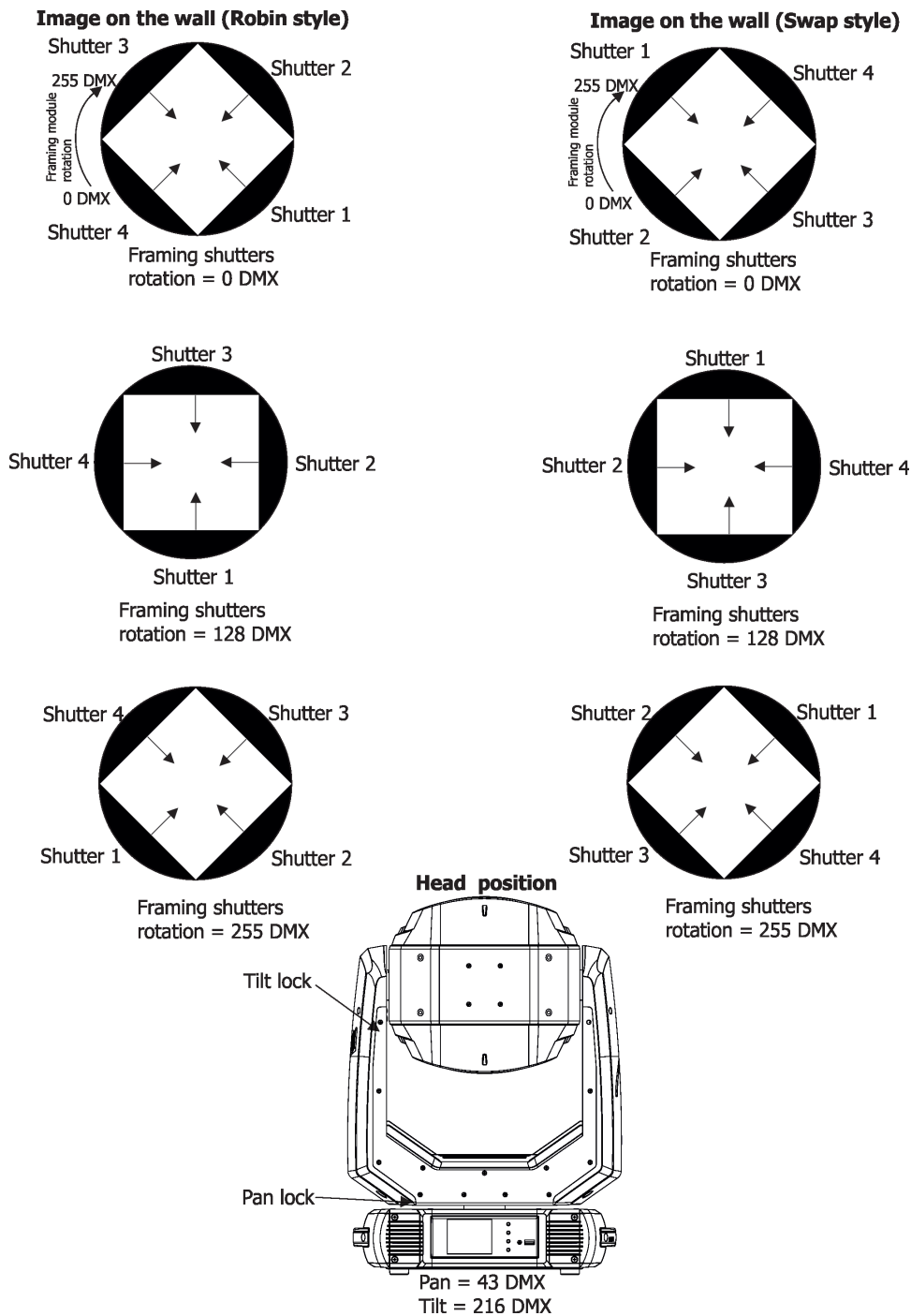
Tilt movement range: 265° Pan movement range: 540°



Framing system

Framing system consists of four framing shutters. There is individual control of each shutter blade position and angle, together with rotation of the complete framing module. As well as providing a sharp precise or soft frame for the projected image.

Framing system orientation:



Colour wheel 1

This wheel contains five 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).

Colour wheel 2

This wheel contains one multicolour filter, two dichroic filters and two CRI filters (80, 90) + 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).


CMY+CTO colour mixing system



The CMY color mixing system is based on graduated cyan, magenta, and yellow colour filters. A continuous range of colors may be achieved by varying the amount of each filter from 0 to 100%.


6. Control menu map

Default settings=**Bold print**

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Addressing	Settings	DMX Address	001-512			
	DMX Presets	Mode 1				
		Mode 2				
		:				
		Mode 5				
		View Selected Preset				
	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		
Information	Fixture Times	Power On Time	Total Hours			
			Resetable Hours			
		LEDs On Time	Total Hours			
			Resetable Hours			
		Air Filters	Elapsed Time			
			Alert Period	10-300		
	Fixture Temperatures	LEDs Temperatures	Cur.rent			
			Maximum NonRes..			
			Maximum Res..			
		Driver Temperature	Cur.rent			
			Maximum NonRes..			
			Maximum Res..			
		Base Temperature	Current			
			Maximum NonRes.			
			Maximum Res.			
	DMX Values	Pan				
		:				
		Dimmer Fine				
	Wireless State	Signal Quality				
		Unlink Wireless Adapter				
	Power Channel state					
	Software Versions	Display System				
		Module M				
		Module L				
		Module O				
		Module F-A				
		Module F-B				
		Module G				
		Module FR				
		Module C1				
		Module C2				

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Product IDs	Mac Address				
		RDM UID				
		RDM Label				
	LED Module info	First Module Assembly				
		Actual Module Info				
		Assembly History				
		Intensity History				
	LED Modules History					
	View Logs	Fixture Errors				
		Fixture States	Power On			
			Power Off			
		Fixture Position				
		Fixture Temperatures	LEDs Temperature			
			Driver Temperatures			
			Base Temperatures			
Personality	User Mode	User A Settings				
		User B Settings				
	DMX Presets	Mode 1				
		Mode 2				
		:				
		Mode 5				
		View Selected Preset				
	DMX Input	Wired				
		Wireless				
		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 Reset	With P/T				
		Without P/T				
		Tilt then Pan				
		Pan then Tilt				
	Pan/Tilt EMS	Off , On				
	Follow Spot Mode	Off				
		Soft				
		Medium				
		Hard				
	Microphone Sensitivity	1-10-20				
	Blackout Settings	Blackout During M.C.	Off , On			
		Blackout while:	Pan/Tilt moving	Off , On		
			Colour Wheel Moving	Off , On		
	Frequency Setup	300 Hz				
		600Hz				
		1200Hz				
		2400Hz				
		Frequency Adjust				
	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				

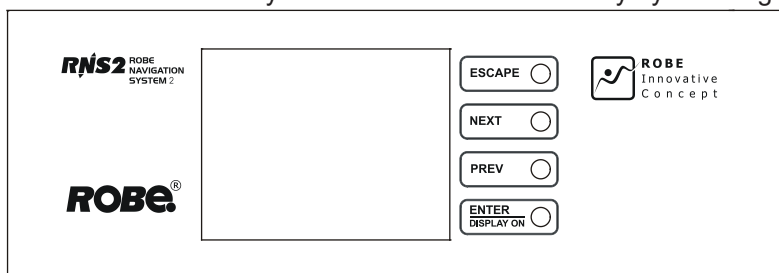
Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Display Orientation	Normal			
			Inverted			
			Auto			
	Temperature Unit	°C, °F				
	Fan Settings	Fan mode	Auto			
			High			
			Quiet			
		Quiet-Blackout Fan Off	Off, On			
	High-power Mode	Off, On				
	Dimmer Curve	Linear				
		Square law				
		Super Square Law				
	Gobo Indexing	Max. Speed & ShortCut				
		Follow Speed & Direction				
		Max. Speed & Follow Dir.				
	Date & Time Settings					
	Focus Tracking	Off, On				
	Framing Shutters mode	Robin style				
		Swap style				
	Default Settings					
	Password Protection	Off, On				
	Reset Web Password					
Manual Control	Reset Functions	Total System Reset				
		Pan/Tilt reset				
		System Reset w/o P/T				
		Pan Reset				
		Tilt Reset				
		Color System Reset				
		Gobo/Eff. Wh. Reset				
		Optics/Prism/Frost Res.				
		Iris/framing Sh. 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				
		Prog. 1				
		Prog. 2				
	Play Program	Play Program 1				
		Play Program 2				
	Edit Program	Edit Program 1	Start Step	1-80		
		Edit Program 2	End Step	1-80		
			Edit Program Steps	Step 1	Pan	0-255
				:	:	
				:	Dimmer Fine	0-255
				:	Step Time	0-25,5 sec.
				Step 80	Pan	0-255
					:	

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
					Dimmer Fine	0-255
					Step Time	0-25,5 sec.
Service	Adjust DMX Values	Pan	0-255			
		:				
		Dimmer Fine	0-255			
	Calibrations	Calibrate Effects	Pan	0-255		
			Tilt	0-255		
			Effect Wheel	0-255		
			Rot. Gobo Wheel	0-255		
			R. Gobo Index 1	0-255		
			:	:		
			R. Gobo Index 7	0-255		
			Static Gobo	0-255		
			Colour Wheel 1	0-255		
			Colour Wheel 2	0-255		
			Prism 1	0-255		
			Prism 2	0-255		
			Zoom	0-255		
			Focus	0-255		
			Iris	0-255		
			Frost 1/1	0-255		
			Frost 1/2	0-255		
			Frost 2/1	0-255		
			Frost 2/2	0-255		
			Fr. Shutters rot.	0-255		
			Fr. Shutter 1 Move	0-255		
			Fr. Shutter 1 Swiv	0-255		
			Fr. Shutter 2 Move	0-255		
			Fr. Shutter 2 Swiv	0-255		
			Fr. Shutter 3 Move	0-255		
			Fr. Shutter 3 Swiv	0-255		
			Fr. Shutter 4 Move	0-255		
			Fr. Shutter 4 Swiv	0-255		
		Calibrate Fr. Hysteresis	Framing Lamella 1	0-8		
			Framing Lamella 2	0-8		
			Framing Lamella 3	0-8		
			Framing Lamella 4	0-8		
		Calibrate Pan/Tilt EMS				
		Load Default Calibrations				
	Rotating Gobos Change	Gobo Carousel 1	G1-Mg			
			G2			
			:			
			G7			
			Gobo Offset	0-255		
	LEDs Measure					
	Update Software					

7. Control menu

The Robin Esprite is equipped with the QVGA Robe touch screen with battery backup which allows you to set the fixture's behaviour according to your needs, obtain information on its operation, control all range of effects and program it in 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.

- [Ethernet] used to indicate Ethernet connected.

- [menu rotation] used to rotate menu 180 degrees from current orientation.

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

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

- [air filters cleaning] used to signal that cleaning period of the air filters elapsed.

- [QR code] used to show QR code for RDM UID of the fixture and LED engine serial number.

The menu page displays icons for each function that you can perform from the touch screen.

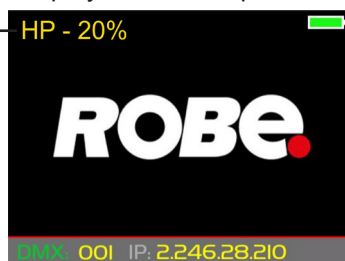
After switching the fixture on, the touch screen shows the screen with the ROBE logo:

Type of used LED engine in the fixture is displayed on the top line of the screen:

HP-type of LED engine used in the fixture.

-20% is a drop of max. light intensity set by the channel "Max. light intensity indication and setting".

Note: drop 0-5% is not signaled.



Battery indication

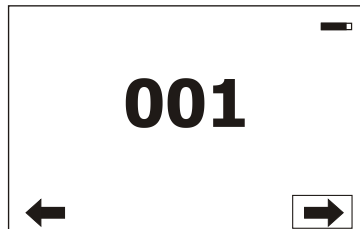
HP - High Performance Engine for maximum light output and optimal colour characteristics.

HCF - High Colour Fidelity Engine for the best light quality and colour reproduction.

TGW - Tungsten white 3200K

The type of used LED engine is displayed if the fixture is disconnected from power as well.

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



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.

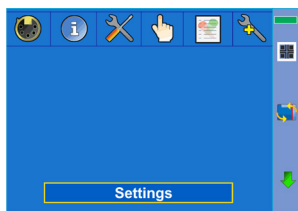
This is also indicated by an error message "Faulty battery" and if such an error message appears the battery should be replaced immediately. The lifetime of the battery is highly dependent on ambient temperature (and consequently on base temperature). If the maximum ambient temperatures (as recorded 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 the green arrow at the bottom right corner of the screen or press the [ENTER/Display On] button to enter the "Address" menu.

Each 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).



Icon for QR codes
Use [NEXT], [PREV]
buttons for moving
between QR codes

QR code for RDM UID of the fixture.



QR code for serial number of LED engine in the fixture.



(pictures for illustration only)

7.1 Tab "Address"



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

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

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

Mode 1 - 49 control channels

Mode 2 - 42 control channels

Mode 3 - 50 control channels

Mode 4 - 43 control channels

Mode 5 - 51 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

gMAI - 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. 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.

7.2 Tab "Information"



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

Power On Time - 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 Esprite has been fabricated.

Resettable Hours - The item shows the number of the operation hours that the Robin Esprite 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 "Resettable Hours:"

LED On Time - Select this menu to read the number of LEDs operation hours.

Total Hours - a total time of the LEDs module operation during which a dimmer intensity was > 0%.

Adaptive Hours - a relative time of the LEDs module operation during which a dimmer intensity was > 0%.(e.g. if dimmer = 20% for one hour, the adaptive time is 0.2 hour, if dimmer = 100% for one hour, the adaptive time is 1 hour).

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

LEDs temperature - The menu shows temperature on the LED PCB in the light source

Current - A current temperature of the LED PCB.

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

Maximum Res. - A maximum temperature of the LED PCBs since the counter was last reset.

In order to reset some counter to 0, touch desired text box under item "Max.Res."

Driver Temperature - The menu shows temperature on the LEDs control PCB in the fixture head.

Current - A current temperature on the LEDs control PCB.

Maximum NonRes. - A maximum temperature on the LEDs control PCB since the fixture has been fabricated.

Maximum Res. - A maximum temperature on the LEDs control PCB since the counter was last reset.

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

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

Current - A current temperature on the display PCB.

Maximum NonRes. - A maximum temperature on the display PCB since the fixture has been fabricated.

Maximum Res. - A maximum temperature on the display PCB 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 items allows you to read DMX values of each channel received by the fixture.

Wireless State - The menu serves for reading of the wireless operation status.

Unlink Wireless Adaptor - The item serves for unlinking the fixture from a DMX transmitter.

If the wireless module is not installed in the fixture, message "Wireless Module Not Installed" will appear.

Power Channel State - Select this item to see current setting of the functions, which can be set by menu items in "Personality" as well as by DMX command at channel "Power/Special functions".

Colour Functions State - Select this item to see current setting of the colour functions, which can be set by menu items in "Personality" as well as by DMX command at channel "Colour functions".

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

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

Module M - a Pan/Tilt processor

Module L - a LEDs control processor

Module O - a Focus/Zoom/Prism control processor

Module F-A - a Framming shutters control processor

Module F-B - a Framming shutters + Iris control processor

Module G - a Rot. gobo/Static gobo wheel control processor

Module FR - a Frost control processor

Module C1 - a Colour wheel 1 control processor

Module C2 - a Colour wheel 2 control processor

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

LED Module Info - Use this menu to read LEDs module information.

First Module Assembly - Use the item to read initial information about the LEDs module installed in the fixture. The fixture has to be connected to mains to read the values in the menu items.

Serial Number/ Device UID - a serial number of the LEDs module/RDM UID of the fixture.

Installation Date/Time - a date/time of the first installation of the LEDs module to a some Esprite device.

Intensity - an original intensity of the LEDs module in percentages (100%).

LEDs On Time Total/Adaptive - Total: a total time of the LEDs module operation during which the dimmer intensity was > 0%.

Adaptive: a relative time of the LEDs module operation during which the dimmer intensity was > 0% (e.g. if dimmer = 50% for one hour, the adaptive time is 0.5 hour, if dimmer = 100% for one hour, the adaptive time is 1 hour).

Actual Module Info - Use the item to read current information about the LEDs module installed in the fixture.

Serial Number/ Device UID - a serial number of the LEDs module/RDM UID of the fixture.

Measurement Date/Time - a date/time of running the procedure "LEDs Measure" in the tab Service.

Intensity - the item shows a light intensity of the LEDs module measured after running the procedure "LEDs Measure" in the tab Service. The light intensity is displayed in percentages in relation to the initial intensity of the new LEDs module (initial intensity=100%).

LEDs On Time Total/Adaptive - Total: a total time of the LEDs module operation during which the dimmer intensity was > 0%.

Adaptive: a relative time of the LEDs module operation during which the dimmer intensity was > 0% (e.g. if dimmer = 50% for one hour, the adaptive time is 0.5 hour, if dimmer = 100% for one hour, the adaptive time is 1 hour).

Assembly History - Use the item to read a history of the LEDs module installed in the fixture (its serial number, RDM UID of fixture at which was installed and date/time of installation).

Up to 31 records can be saved in the menu item.

Intensity History - Use the item to read a history of light intensity of the LEDs module installed in the fixture.

Serial Number/ Device UID - a serial number of the LEDs module/RDM UID of the fixture.

Measurement Date/Time - a date/time of running the procedure "LEDs Measure" in the tab Service.

Intensity - the item shows a light intensity of the LEDs module measured after running the procedure "LEDs Measure" in the tab Service. The light intensity is displayed in percentages in relation to the initial intensity of the new LEDs module (initial intensity=100%) .

Up to 31 records can be saved in the menu item.

LED Modules History - Use the item to read a history of the LEDs modules installed in the fixture (their serial numbers and date/time of installation).

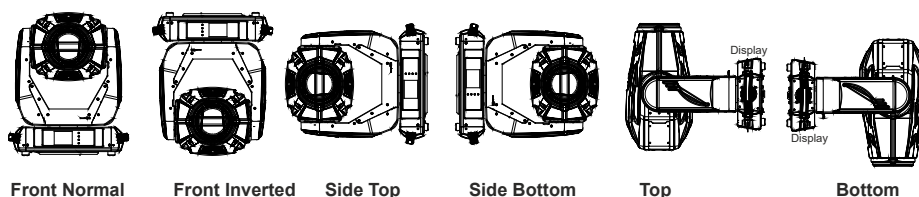
Up to 31 records can be saved in the menu item.

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 - In the menu are recorded fixture states as power on and power off.

Fixture Positions - In the menu are recorded installation positions of the fixture:



Fixture Temperatures - In the menu are recorded temperatures which have exceeded defined levels.

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

7.3 Tab "Personality"



User mode - The Robin Esprite allows you to recall two 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 two fixture operating behaviours.

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

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

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

Mode 1 - 49 control channels

Mode 2 - 42 control channels

Mode 3 - 50 control channels

Mode 4 - 43 control channels

Mode 5 - 51 control channels

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

DMX Input- Use the menu to select mode of DMX signal receiving.

Wired - DMX signal is received by means of the standard DMX cable.

Wireless - DMX signal is received by means of the inbuilt wireless module.

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.

The options "Wired" and "Wireless" are also stated in DMX chart (channel Power/Special functions).

Note. If the wireless module is not installed in the fixture, the following message will appear:

DMX Input Set to Wired

Wireless Module Missing

If the fixture is not connected to mains, the message "Not Available In Offline Mode" will appear after entering the menu DMX Input. To enter this menu, the fixture has to be connected to mains.

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 Reset - This menu item allows you to choose a way of pan/tilt reset after switching the fixture on

With P/T - With pan and tilt - the item will reset both pan and tilt simultaneously after switching the fixture on.

Without P/T - Without pan and tilt reset after switching the fixture on. The pan and tilt reset can be run by the menu Manual Control (Manual Control --> Reset Functions) or by DMX commands.

Tilt then Pan - the item will reset pan and tilt sequentially, first tilt, then set tilt to DMX 128 and reset pan.

Pan then Tilt - the item will reset pan and tilt sequentially, first pan, then set pan to DMX 128 and reset tilt.

Note: DMX triggered pan/tilt related reset commands on the channel Power/Special functions always behave in this way:

"Total fixture reset (including pan/tilt)" - resets all functions including pan and tilt. Pan and tilt always are reset, either simultaneously or sequentially.

"Total fixture reset (without pan/tilt)" - resets all functions except pan and tilt. When set to simultaneous reset (the standard reset With P/T), the head will position itself briefly into defined position for reset of the optical system.

"Pan and Tilt reset" - pan and tilt always are reset, either simultaneously or sequentially (depends on setting in the display menu Personality --> Pan/Tilt Reset).

"Pan reset" - resets pan, tilt is static in the position of a tilt DMX value received when pan reset was received.

"Tilt reset" - resets tilt, pan is static in the position of a pan DMX value received when tilt reset was received.

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.

Follow Spot Mode - If the function is activated, the pan/tilt motors perform on lower power and the head position can be controlled manually. You can choose from three levels of the pan/tilt "consistency": soft, medium and hard. Note: reset of pan/tilt will not be executed if the fixture is in the Follow Spot Mode.

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 During MC - 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 from 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 DMX values are changing.

Colour Wheel Moving - The menu item enables to close light output while colour wheel is moving.

Frequency Setup - The function allows you to set the PWM (Pulse Width Modulation) output frequency of LEDs to 300Hz, 600Hz, 1200Hz or 2400Hz.

Frequency Adjust - The menu item allows you fine adjustment of the LED frequency around selected frequency.

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 received.

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 touch screen. 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 Settings - Use the menu to set fans operation mode.

Fan Mode - Use the menu to set the fixture fans to max. power mode (option "**High**") or to the auto-control mode (option "**Auto**"). The third option "**Quiet**" allows you to set desired fan noise. The light output of the fixture is reduced at low speeds of fans and the High-power Mode is deactivated.

Quiet - Blackout Fan Off - The menu item allows you to stop all fans in the fixture (option "**On**") when its light output is closed (shutter in range of 0-31 DMX or dimmer in 0 DMX).

High-power Mode - If the High-power Mode is On, the light output from the fixture will be increased about 6% towards to the operation with fans in High mode. Fans will run on max. power.

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

Gobo Indexing - The following three options define transition from gobo rotation to gobo indexing.

Max. Speed & Shortcut - Gobo goes from its rotation to desired indexed position with max. speed and via shortest track.

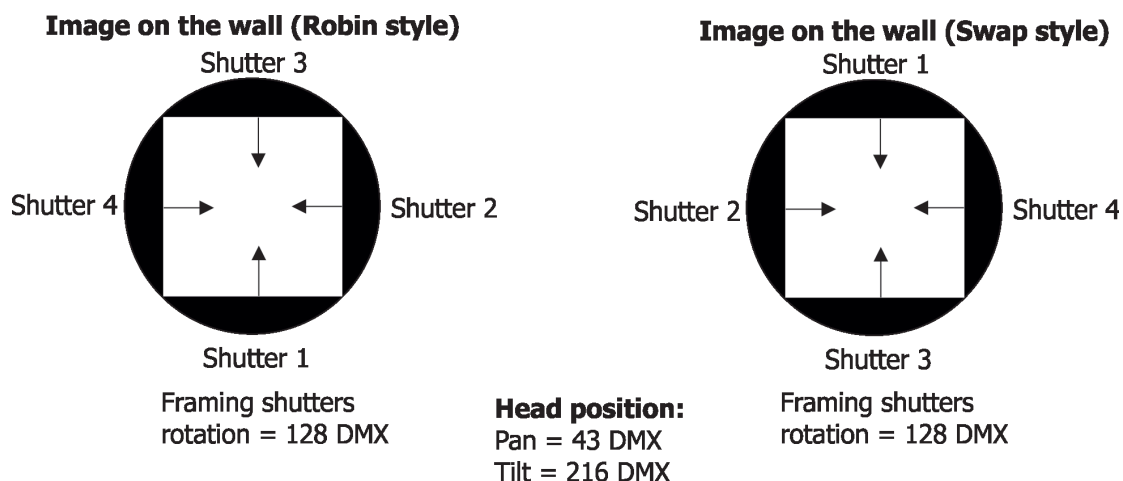
Follow Speed & Direction - Gobo goes from its rotation to desired indexed position with current speed and keeps a direction of rotation.

Max. Speed & Follow Dir. - Gobo goes from its rotation to desired indexed position with max. speed and keeps a direction of rotation.

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

Focus Tracking - This feature provides automatic sharpness re-adjustment during zoom movement, after an initial sharpness has been set by the operator by setting the focus channel and enabling the FocusTracking. The Focus Tracking feature is done via automatic movement of focus element, taking into account several internal parameters, zoom position being one of them. To utilize the Focus Tracking, make sure to enable the Focus Tracking, set the Zoom to value 200 and adjust Focus to desired sharpness. Then, while keeping Focus value untouched, you can move the Zoom. Fixture will automatically keep the projection at the desired sharpness as much as possible. You can also re-adjust the Focus value over time if needed. When switching between Gobo wheel 1, Gobo wheel 2 and an empty aperture, the Tracking Focus will adjust the internal parameters, therefore providing desired sharpness by adjusting the Focus might be required. If you use both Gobo wheel 1 and Gobo wheel 2 without further adjusting the Focus value, Gobo wheel 2 will be automatically used for Focus Tracking 's focusing.

Framing Shutters Mode - Use the menu to select desired order of framing shutters movement.



Default Settings - The menu item allows to set all fixture parameters in this menu to the default (factory) values except items "DMX Input".

Password Protection - allows to enter password in order to prevent unauthorized person from changing setting of the fixture. Password is set to 7623 and cannot be changed.

Reset Web Password - The menu item allows you to reset a password for access to the Robe Ethernet Access Portal (REAP), default password: 2479, user: robe.

7.4 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 including pan/tilt.

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

System Reset w/o P/T - The item resets all function modules except pan/tilt

Pan Reset - The item resets a pan.

Tilt Reset - The item resets a tilt.

Colour System Reset - The item resets colour wheel 1/colour wheel 2 and CMY+CTO system.

Gobo/Eff. Wh. Reset - The item resets static and rotating gobo wheel and an effect wheel.

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

Iris/Framing Sh. Reset - The item resets an iris module and framing shutters.

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

7.5 Tab "Stand-alone"



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

Dynamic Mode - This mode uses all Robin Esprite functions including pan/tilt movement and therefore is good for a complete introduction of the fixture.

Static Mode - This mode is suitable for projections on the wall, ceiling or ground without any pan/tilt movement. Adjust the pan, tilt, zoom and focus to desired positions and start test sequences by touching the green ► icon.

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.

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.

Edit Program - Use the menu to create or to edit desired program. The Robin Esprite offers 2 free programs, each up to 80 steps.

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

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

To edit program:

1. Touch the item which you want to edit ("Edit Program 1" - "Edit Program 2").

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 through 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

✓ - saves adjusted values and leaves menu

⬆ - moves up on the previous page

✓ - saves values to the current step and copy them to the following prog. step

✗ - leaves menu without saving values

7.6 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.

Pan- a pan position fine adjustment (value range: 0-255)

Tilt - a tilt position fine adjustment (value range: 0-255)

Effect Wheel - an effect wheel position fine adjustment (value range: 0-255)

Rot. Gobo Wheel - a carousel of rotating gobos fine movement (value range: 0-255)

R. Gobo Index 1 - a fine movement of the rotating gobo 1 (value range: 0-255)

R. Gobo Index 2 - a fine movement of the rotating gobo 2 (value range: 0-255)

R. Gobo Index 3 - a fine movement of the rotating gobo 3 (value range: 0-255)

R. Gobo Index 4 - a fine movement of the rotating gobo 4 (value range: 0-255)

R. Gobo Index 5 - a fine movement of the rotating gobo 5 (value range: 0-255)

R. Gobo Index 6 - a fine movement of the rotating gobo 6 (value range: 0-255)

R. Gobo Index 7 - a fine movement of the rotating gobo 7 (value range: 0-255)

Static Gobo - a static gobo wheel fine movement (value range: 0-255)

Colour Wheel 1 - a colour wheel 1 fine movement (value range: 0-255)

Colour Wheel 2 - a colour wheel 2 fine movement (value range: 0-255)

Prism 1 - a prism fine movement (value range: 0-255)

Prism 2 - a prism fine rotation (value range: 0-255)

Zoom - a zoom module fine movement (value range: 0-255)

Focus - a focus module fine movement (value range: 0-255)

Iris - an iris fine movement (value range: 0-255)

Frost 1/1 - a light frost fine position movement 1

Frost 1/2 - a light frost fine position movement 2

Frost 2/1 - a medium frost fine position movement 1

Frost 2/2 - a medium frost fine position movement 2

Fr. Shutters.rot- a framing shutters module fine rotation (value range: 0-255)

Fr. Shutter 1 Move - a Fram. lamella 1 fine moving

Fr. Shutter 1 Swiv. - a Fram. lamella 1 fine swivelling

Fr. Shutter 2 Move - a Fram. lamella 2 fine moving

Fr. Shutter 2 Swiv.- a Fram. lamella 2 fine swivelling

Fr. Shutter 3 Move - a Fram. lamella 3 fine moving

Fr. Shutter 3 Swiv. - a Fram. lamella 3 fine swivelling

Fr. Shutter 4 Move - a Fram. lamella 4 fine moving

Fr. Shutter 4 Swiv. - a Fram. lamella 4 fine swivelling

Calibration of the effects 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 "Pan" 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 next item
5. After calibrating all effects, touch the [confirm] to save all adjusted values and reset the fixture.

Calibration of the effects via the DMX controller

1. Connect DMX controller to the fixture and enter the "Calibrate Effects" menu.

Calibration protocol:

Effect	Mode 1	Mode 2	Mode 3	Mode 4	Mode 5
Pan	channel 50	channel 43	channel 51	channel 44	channel 52
Tilt	channel 51	channel 44	channel 52	channel 45	channel 53
Ef. wheel	channel 52	channel 45	channel 53	channel 46	channel 54
Rot. Gobo Wheel	channel 53	channel 46	channel 54	channel 47	channel 55
R. Gobo Index 1	channel 54	channel 47	channel 55	channel 48	channel 56
R. Gobo Index 2	channel 55	channel 48	channel 56	channel 49	channel 57
R. Gobo Index 3	channel 56	channel 49	channel 57	channel 50	channel 58
R. Gobo Index 4	channel 57	channel 50	channel 58	channel 51	channel 59
R. Gobo Index 5	channel 58	channel 51	channel 59	channel 52	channel 60

R. Gobo Index 6	channel 59	channel 52	channel 60	channel 53	channel 61
R. Gobo Index 7	channel 60	channel 53	channel 61	channel 54	channel 62
Static gobo	channel 61	channel 54	channel 62	channel 55	channel 63
Colour wheel 1	channel 62	channel 55	channel 63	channel 56	channel 64
Colour wheel 2	channel 63	channel 56	channel 64	channel 57	channel 65
Prism 1	channel 64	channel 57	channel 65	channel 58	channel 66
Prism 2	channel 65	channel 58	channel 66	channel 59	channel 67
Zoom	channel 66	channel 59	channel 67	channel 60	channel 68
Focus	channel 67	channel 60	channel 68	channel 61	channel 69
Iris	channel 68	channel 61	channel 69	channel 62	channel 70
Frost 1/1	channel 69	channel 62	channel 70	channel 63	channel 71
Frost 1/2	channel 70	channel 63	channel 71	channel 64	channel 72
Frost 2/1	channel 71	channel 64	channel 72	channel 65	channel 73
Frost 2/2	channel 72	channel 65	channel 73	channel 66	channel 74
Fr. Shutters rot.	channel 73	channel 66	channel 74	channel 67	channel 75
Fr. Shutter 1 Move	channel 74	channel 67	channel 75	channel 68	channel 76
Fr. Shutter 1 swiveling.	channel 75	channel 68	channel 76	channel 69	channel 77
Fr. Shutter 2 Move	channel 76	channel 69	channel 77	channel 70	channel 78
Fr. Shutter 2 swiveling	channel 77	channel 70	channel 78	channel 71	channel 79
Fr. Shutter 3 Move	channel 78	channel 71	channel 79	channel 72	channel 80
Fr. Shutter 3 swiveling	channel 79	channel 72	channel 80	channel 73	channel 81
Fr. Shutter 4 Move	channel 80	channel 73	channel 81	channel 74	channel 82
Fr. Shutter 4 swiveling	channel 81	channel 74	channel 82	channel 75	channel 83

Calibrate Fr. Hysteresis

Framing Lamella 1 - a framing lamella 1 reverse movement (value range: 0-8)

Framing Lamella 2 - a framing lamella 1 reverse movement (value range: 0-8)

Framing Lamella 3 - a framing lamella 1 reverse movement (value range: 0-8)

Framing Lamella 4 - a framing lamella 1 reverse movement (value range: 0-8)

The value set for every framing lamella gives a value at which the lamella reacts to its reverse movement promptly (without movement hysteresis).

Calibrate Pan/Tilt EMS - This menu item allows calibration of the pan/tilt electronic motion stabilizer.

Important: during this calibration any external force must not influence the fixture and the surface at which the fixture stands (or truss if the fixture hangs) has to be without movement, shake, strokes etc.

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

Rotating Gobos Change - This menu makes changing of rotating gobos in the fixture easier.

Gobo Carousel 1 - The menu allows movement of rotating gobos to the positions suitable for their changing.

G1-Mg - a movement of the gobo 1 (gobo holder with magnet) to the changing position.

G2 - a movement of the gobo 2 to the changing position.

:

G7 - a movement of the gobo 7 to the changing position.

Gobo Offset - a gobo offset setting. The function allows fine swiveling of the gobo holder. The set value is valid for all gobos on the gobo carousel.

LEDs Measure - This menu item runs a procedure which measures a light intensity of the LEDs module installed in the fixture. This procedure takes about 1 minute (message "LEDs Module Measurement" is displayed on the screen"). During the procedure the fixture does not receive DMX signal, pan/tilt go to 128 DMX, a shutter is open and a dimmer is set at max. light intensity (255 DMX). All effects are taken out from the light beam.

The measured light intensity is recorded in the item Intensity in the menu LED Module Info:

Tab Information --> Actual Module Info --> Intensity

Tab Information --> Intensity History --> Intensity

The light intensity in the menu item Intensity is displayed in percentages in relation to the initial intensity of the new LEDs module (initial intensity=100%).

The LEDs Measure procedure should be run after every change of the LED light source.

Note: The fixture has to be connected to mains in order to run LEDs Measure procedure.

Update software - The menu item allows you to update software in the fixture.

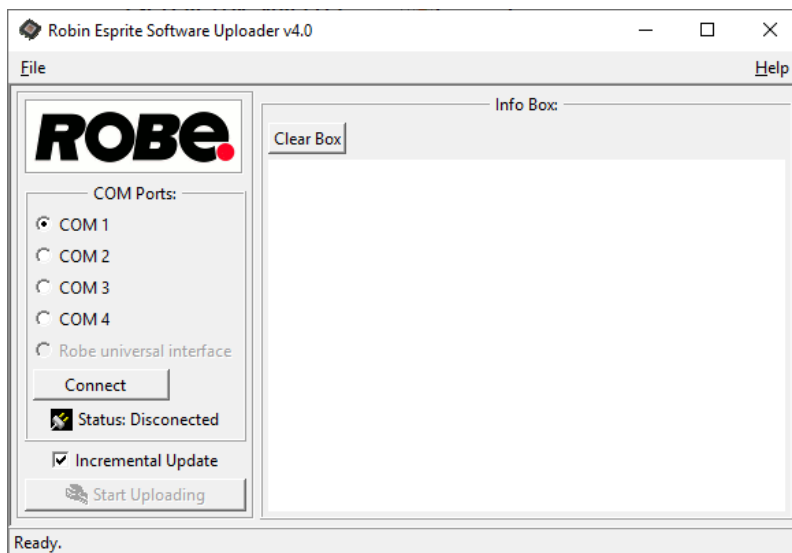
The following items are required in order to update software:

- 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:

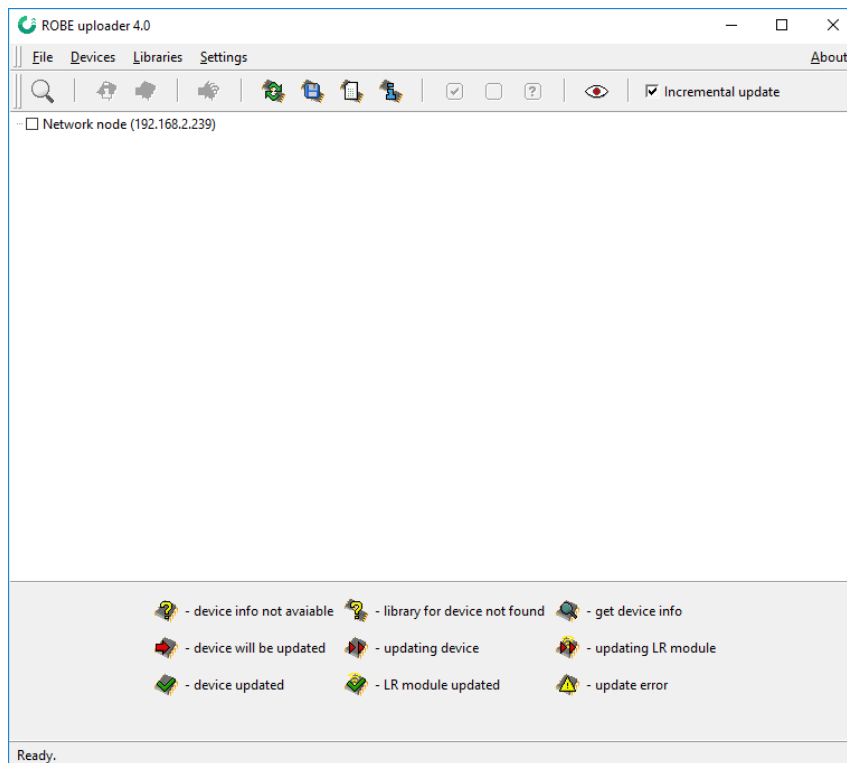
1. DSU file is available from Robe web site at WWW.robe.cz.
 File with extension zip is intended for Windows (used and tested from XP to W10 on 32/64bit systems).
 File with extension tbz is intended for Linux (used and tested on Debian and Ubuntu 32/64bit).
 File with extension dmg is intended for macOS (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_RobinEsprite_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_RobinEsprite_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/>.



8. 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 Esprite 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			*

RDM model ID for the Robin Esprite is 0x0107.

If you need to set RDMnet scope, use the ROBE Ethernet Acces Portal (REAP) and menu Personality-->-->Ethernet Settings.

The screenshot shows the 'Ethernet settings' window in the iPainte application. The window title is 'iPainte Ethernet settings'. The settings are as follows:

- Ethernet mode:** Radio buttons for 'disable' (selected), 'ArtNet', 'gMA1', 'gMA2', and 'sACN'.
- Ethernet to DMX:** Radio buttons for 'off' (selected) and 'on'.
- ArtNet universe:** Text input field containing '0'.
- MANet I/II universe:** Text input field containing '1'.
- MANet session ID:** Text input field containing '1'.
- sACN universe:** Text input field containing '1'.
- RDMnet scope:** Text input field containing 'default', highlighted with a red border.

A 'Save' button is located at the bottom right of the settings panel.

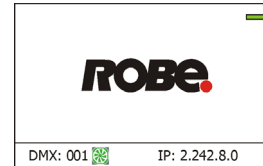
9. Error and information messages

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:

Pan Error 1

Pan sensor is not in a function state "connected".

Pan Error 2

Pan sensor is not in a function state "unconnected".

Pan Error 3

Pan feedback error.

Tilt Error 1

Tilt sensor is not in a function state "connected".

Tilt Error 2

Tilt sensor is not in a function state "unconnected".

Tilt Error 3

Tilt feedback error.

Colour Wheel 1 Error 1

Magnetic/optic sensor was not detected.

Colour Wheel 1 Error 2

Magnetic/optic sensor permanently detects colour wheel 1.

Colour Wheel 2 Error 1

Magnetic/optic sensor was not detected.

Colour Wheel 2 Error 2

Magnetic/optic sensor permanently detects colour wheel 2.

Prism Rot. Error 1

Magnetic/optic sensor was not detected at prisma wheel.

Prism Rot. Error 2

Magnetic/optic sensor permanently detects prism wheel.

Prism Error 1

Impact to the mechanical end of the prism wheel track was not detected.

Prism Error 4

Incorrect detection of a prism wheel track. Impact to a mechanical obstruction was detected within running of the prism.

Iris Error 1

Impact to the mechanical end of the iris track was not detected.

Iris Error 4

Incorrect detection of a iris track. Impact to a mechanical obstruction was detected within running of the iris.

Frost Error 1

Impact to the mechanical end of the frost 1 track (frost 2 track) was not detected.

Frost Error 4

Incorrect detection of a frost 1 track (frost 2 track). Impact to a mechanical obstruction was detected within running of the frost.

Zoom Error 1

Impact to the mechanical end of the zoom track was not detected.

Zoom Error 4

Incorrect detection of a zoom track. Impact to a mechanical obstruction was detected within running of the zoom.

Focus 1 Error 1

Impact to the mechanical end of the focus module track was not detected.

Focus Error 4

Incorrect detection of a focus track. Impact to a mechanical obstruction was detected within running of the focus module.

Gobo Carousel Error 1

Magnetic/optic sensor was not detected.

Gobo Carousel Error 2

Magnetic/optic sensor permanently detects gobo carousel.

Gobo Rotation Error 1

Magnetic/optic sensor was not detected on the rotating gobo on the gobo carousel.

Gobo Rotation 1 Error 2

Magnetic/optic sensor permanently detects rotating gobo on the gobo carousel.

Static Gobo Error 1

Magnetic/optic sensor was not detected.

Static Gobo Error 2

Magnetic/optic sensor permanently detects static gobo wheel.

Effect Wheel Error 1

Impact to the mechanical end of the effect wheel track was not detected.

Effect Wheel Error 4

Incorrect detection of an effect wheel track. Impact to a mechanical obstruction was detected within running of the effect wheel.

Fr. Shutters Rot. Error 1

Impact to the mechanical end of the framing shutters wheel was not detected.

Fr. Shutters Rot. Error 2

Incorrect detection of the framing shutters wheel. Impact to a mechanical obstruction was detected within running of the framing shutters wheel.

Fr. Shutter 1 Error 1

Impact to the mechanical end of the framing shutter 1 was not detected.

Fr. Shutter 1 Error 4

Incorrect detection of the framing shutter 1. Impact to a mechanical obstruction was detected within running of the framing shutter 1.

Fr. Shutter 2 Error 1

Impact to the mechanical end of the framing shutter 2 was not detected.

Fr. Shutter 2 Error 4

Incorrect detection of the framing shutter 2. Impact to a mechanical obstruction was detected within running of the framing shutter 2.

Fr. Shutter 3 Error 1

Impact to the mechanical end of the framing shutter 3 was not detected.

Fr. Shutter 3 Error 4

Incorrect detection of the framing shutter 3. Impact to a mechanical obstruction was detected within running of the framing shutter 3.

Fr. Shutter 4 Error 1

Impact to the mechanical end of the framing shutter 4 was not detected.

Fr. Shutter 4 Error 4

Incorrect detection of the framing shutter 4. Impact to a mechanical obstruction was detected within running of the framing shutter 4.

EEprom Error

Hardware error of the EEprom.

Recharge The battery

The battery on the display board needs to be charged. Let the fixture on for cca 6 hrs.

Battery Faulty. Replace it.

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

Pan/Tilt EMS Cal. Error

The EMS system is not calibrated.

Pan/Tilt EMS Error

Control electronics cannot communicate with the EMS system.

Internal Error 1

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

Internal Error 2

Communication error (some PCB has failed or is disconnected (this PCB will show as N/A in menu --> Information --> Software versions) or error/noise was detected on communication wires)

Clean Air Filters

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

Overheated

The LED engine is overheated and light output is closed.

White 1 Short Error (White 2 Short Error/ White 3 Short Error/ White 4 Short Error)

Some white LEDs in the light source have short circuit or are disconnected.

White 5 Short Error (White 6 Short Error/ White 7 Short Error/ White 8 Short Error)

Some white LEDs in the light source have short circuit or are disconnected.

Base Fan Bad

One or both fans in the fixture base are disconnected from their control PCB or are faulty and has to be replaced. .

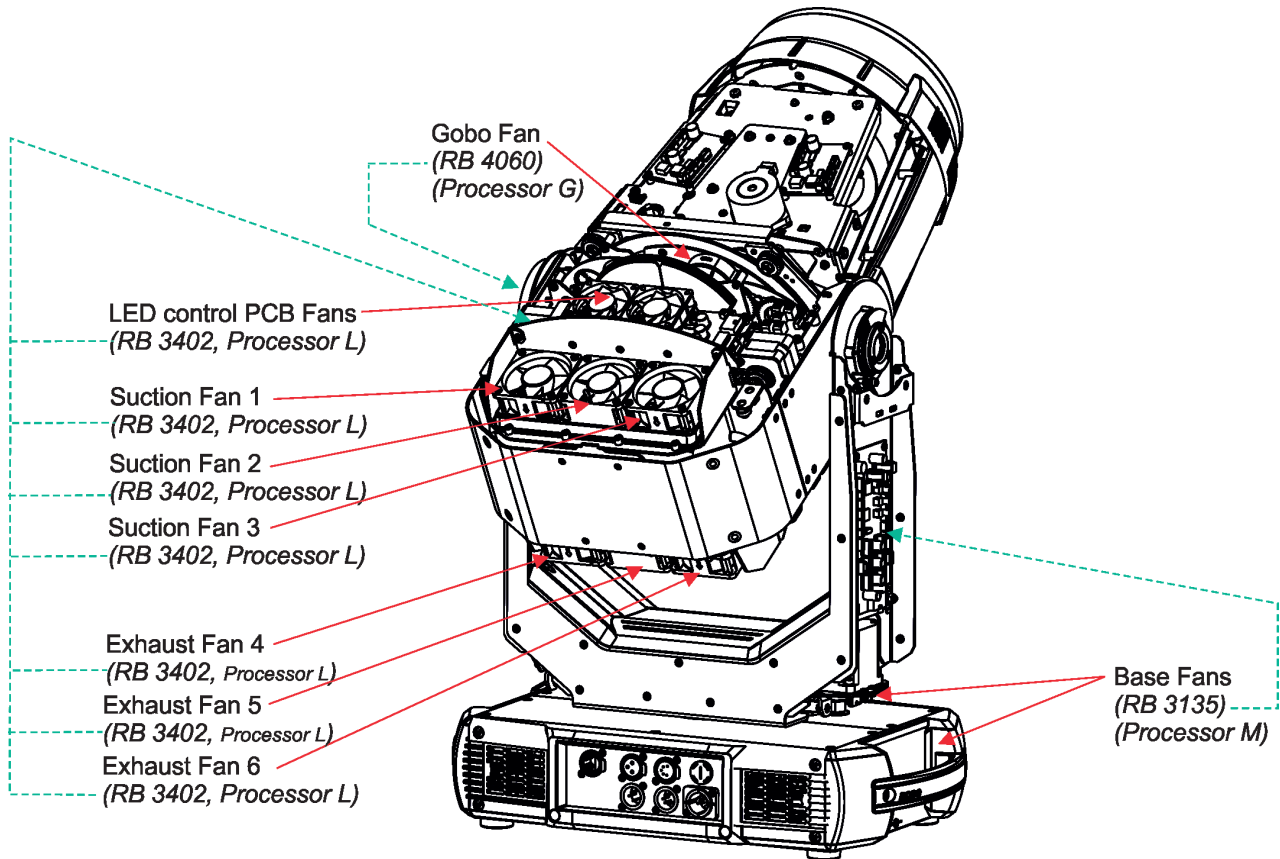
Fan 1 Bad/Fan 2 Bad/Fan 3 Bad

The suction fan 1 (fan 2/ fan 3) at the LED engine is disconnected from its control PCB or is faulty and has to be replaced.

Fan 4 Bad/ Fan 5 Bad/ Fan 6 Bad

The exhaust fan 4 (fan 5/ fan6) at the LED engine is disconnected from its control PCB or is faulty and has to be replaced.

Positions of cooling fans, their control PCBs and control processors:



10. Robe Ethernet Access Portal (REAP)

The REAP allows you to display on your computer information about some fixture settings, operating conditions (e.g. temperature in the fixture) and error messages which were generated during fixture operation. Your computer needs to be connected to the fixture(s) through the means of Ethernet wired network and a network switch.

The Ethernet network connection (Local LAN) typically needs to be set to 2.x.x.x address, assuming that no other computer on the network contains such an address while keeping all ROBE fixtures in default IP settings.

For more information about REAP options, computer and fixture settings please see the REAP user manual at https://www.robe.cz/res/downloads/user_manuals/User_manual_REAP.pdf.

11. Technical Specifications

Electrical

Power supply: electronic auto-ranging
 Input voltage range: 100-240V, 50-60Hz
 Fuse: T 12 A
 Max. power consumption: 950W (Power factor 0.98)

Optic

Light source: TE™ 650W HP White LED Engine (Transferable)
 Colour temperature: 6500K
 CRI: 70/80/90, remotely selectable
 Light source warranty: 4 years or 20 000 hours
 Light sources available: TE™ 650W HCF LED Engine (6000K, 95 CRI)
 TE™ 650W TWG LED Engine (3200K, 95 CRI)

Colour wheel 1

five dichroic filters (deep red, deep blue, orange, green, congo blue) + open

Colour wheel 2

one multicolour filter, two dichroic filters (lavender, laser green), CRI filter 80, CRI filter 90 + open

CMY + CTO mixing module

Smooth CMY colour mixing system
 Variable CTO: 3000K - 6.500K

Virtual colour wheel

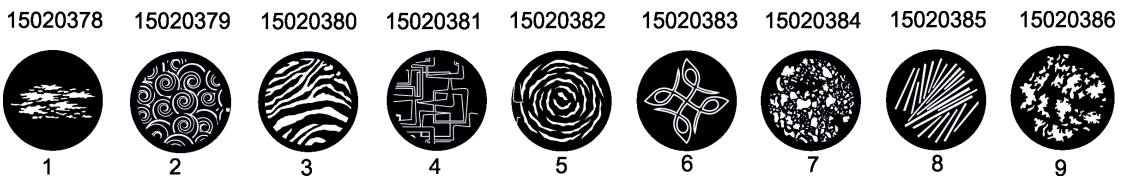
66 preset colours

Effect wheel

Aluminium effect wheel rotating in both directions with variable speed

Static gobo wheel

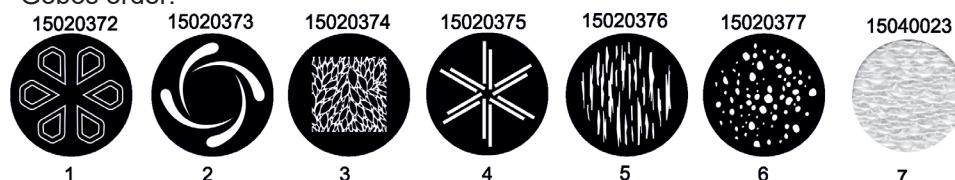
9 replaceable gobos, outside diameter: 26.8^{+0.1} mm, image diameter=23.5 mm, high temperature borofloat or better glass, thickness=1.1 mm
 Gobo wheel continuous rotation
 Gobos order:



Note. Steel (or aluminium) gobos cannot be used due to thermal stress.

Rotating gobo wheel

7 replaceable gobos can be indexed and rotated in both directions at different speeds
 Gobo carousel continuous rotation,
 Gobos: outside diameter= 26.8^{+0.1} mm, image diameter=23.5 mm, thickness=1.1-3.5 mm, high temperature borofloat or better glass. Do not use steel gobos 0.15mm
 "Slot&lock" system for easy replacement of gobos
 Gobos order:



Note. Steel (or aluminium) gobos cannot be used due to thermal stress.

Prism

Rotating 6-facet prism with continuous rotation in both directions

Iris

Motorized iris for different beam diameters

Frost filters

2 separate, variable frost filters (light (1°) and medium (5°))
The medium filter is replaceable

Framing shutters module

4 individually positionable blades plus rotation of the complete frame system +/- 60°
Each framing shutter can move up to 80% of the beam and swivel +/- 30°

Zoom

Linear motorized zoom
Min. beam angle :5.5°
Max. beam angle: 50°

Strobe

Strobe effect with variable speed (0.3 - 20Hz)

Dimmer

Smooth dimmer from 0 - 100 % (8 or 16 bit (internal 18 bit))

Camera (Robin Esprite FS only)

Type: SNZ-6320
Max. resolution: 1920 x 1080
16 : 9 Full HD (1080p) resolution support
32x optical zoom, 16x digital zoom
H.264, MJPEG dual codec, Multiple streaming
Day & Night (ICR), WDR (120dB)

Control

Graphic touch screen for fixture setting and addressing
Gravitation sensor for auto screen positioning
Battery backup of the touch screen
Readout fixture and LEDs usage, receiving DMX values, temperatures, etc
Built-in analyzer for easy fault finding, error messages
Built-in demo sequences
Stand-alone operation
2 user editable programs, each up to 80 steps
Supported protocols: USITT DMX 512-A, RDM, RDMnet, ArtNet, MANet, MANet2, sACN
Support of RDM (Remote Device Management)
5 DMX modes (49, 42, 50, 43, 51 control channels)

Wireless DMX/RDM module type RW 001 (only wireless DMX version of the fixture)

Supported protocols: full RDM support, CRMX , W-DMX™ G2, G3,G4 and G4S
Operational frequency range: 2402-2480 MHz
Output power: 100 mW
Receiver sensitivity (0.1% BER): -93 dBm
Crystal Clock Frequency : 16.0 MHz

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

Max. number of fixtures in Ethernet IN/Out line (EP version only)

8

Connection

DMX data in/out: Locking 3-pin and 5-pin XLR
AC power input: Chassis connector Neutrik PowerCon TRUE 1, NAC3MPX
Ethernet: 1x RJ45
Ethernet: 2x RJ 45 (Esprite EP only)
Camera output: RJ 45 (Esprite FS only)

Rigging

Mounting points: 5 pairs of 1/4-turn locking points
Mounting horizontally or vertically via 2 Omega brackets

Temperatures

Maximum/Minimum ambient operating temperature : +45°C/-5°C
Maximum housing temperature : 80° C

Minimum distances

Min. distance from flammable surfaces: 1 m
Min. distance to lighted object: 3 m

Total heat dissipation

max. 2430 BTU/hr (calculated)

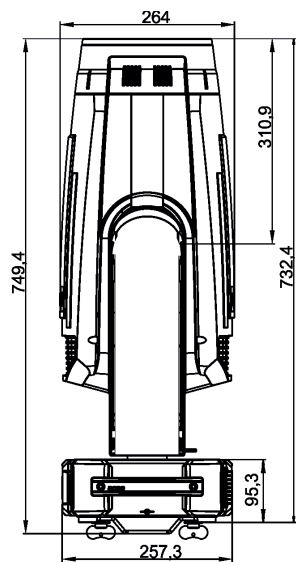
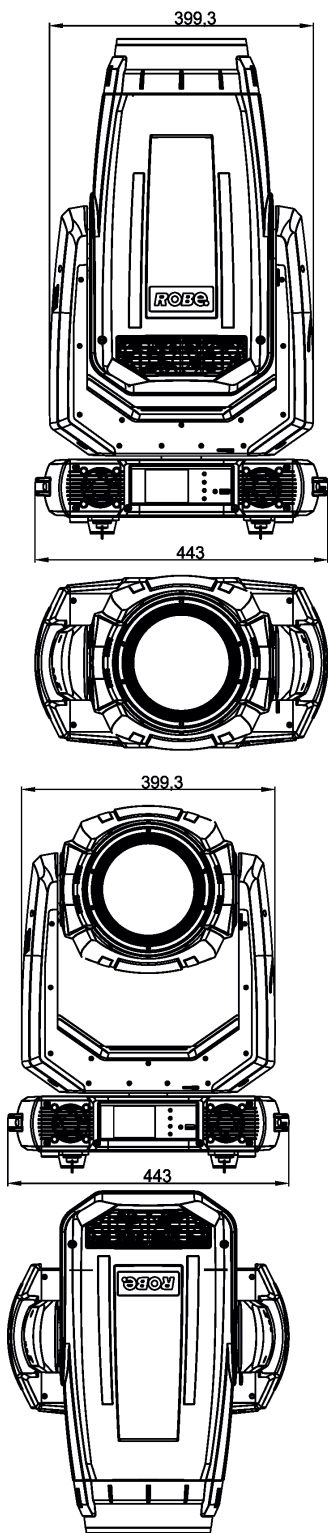
Ingress protection rating

IP20

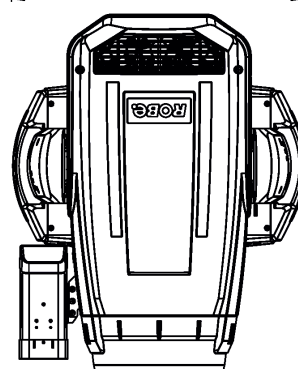
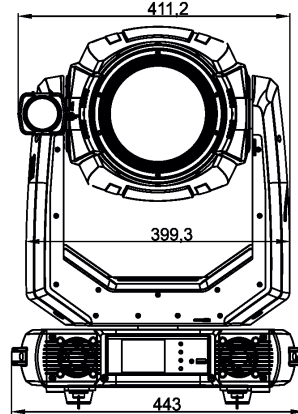
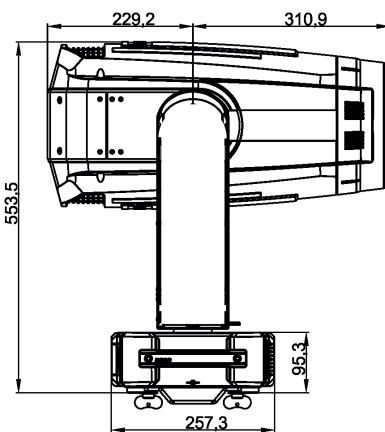
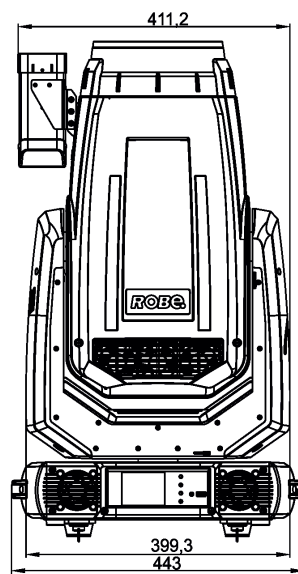
Weight

28.2 kg (Robin Esprite)
29.4 kg (Robin Esprite FS)

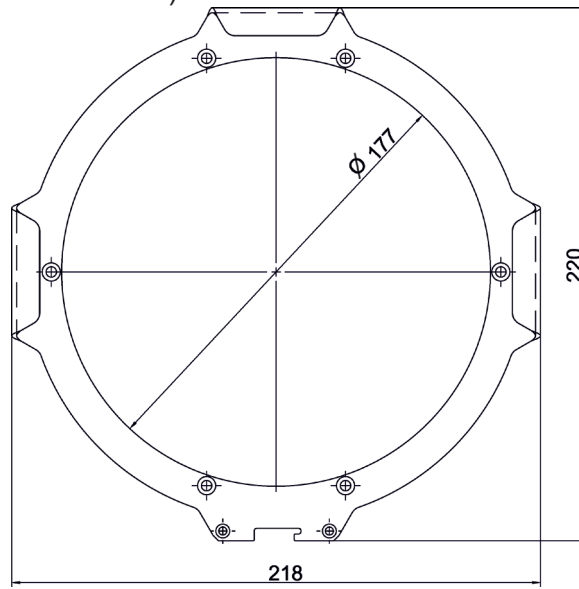
Dimensions (mm) Robin Esprite



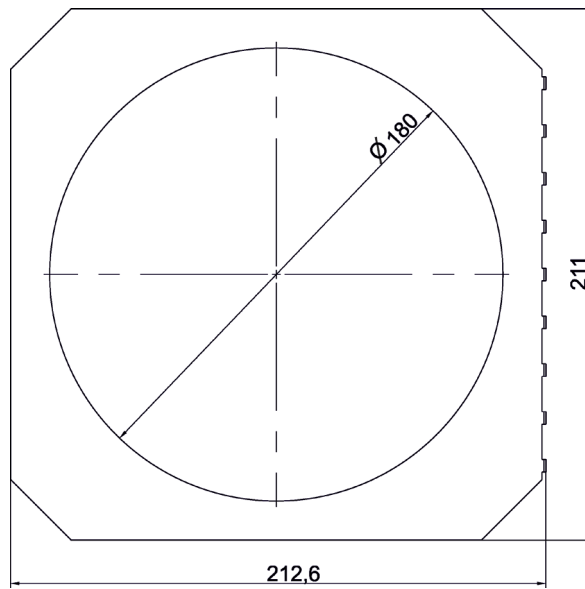
Robin Esprite FS



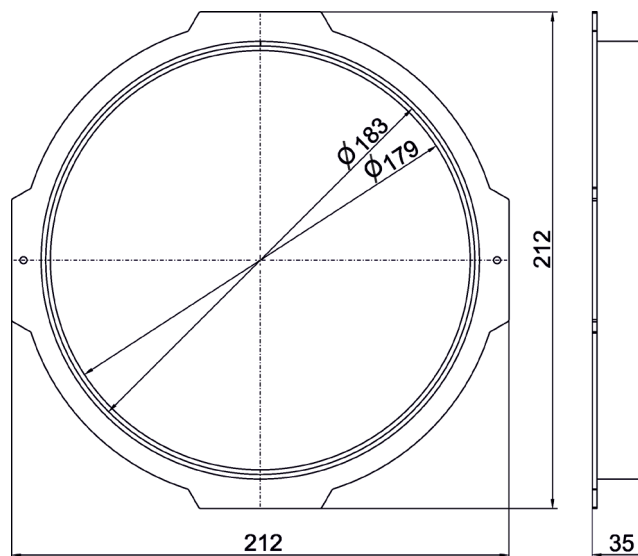
Gel Frame Adaptor Esprite (P/N 10980463)



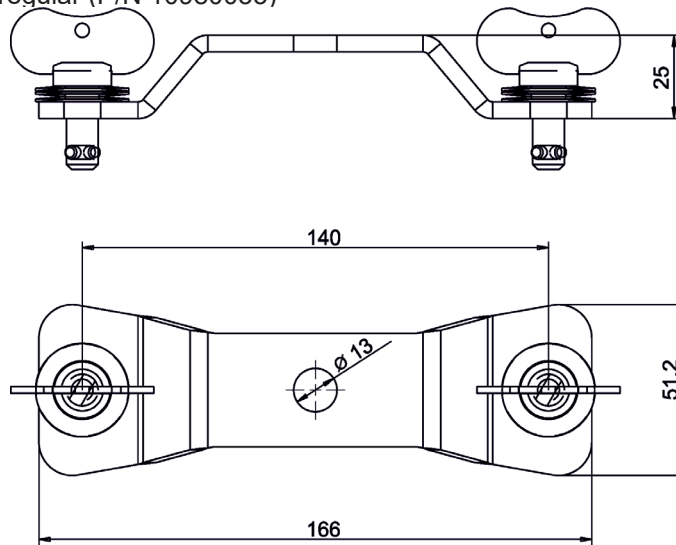
Gel Frame Esprite (P/N 10980464)



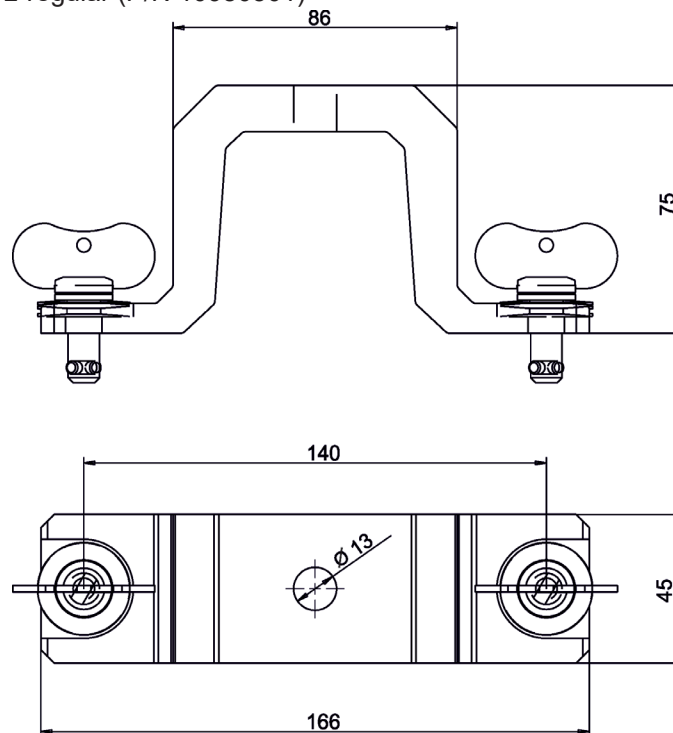
Top Hat 35 Esprite (P/N 10980568)



Omega adaptor CL-regular (P/N 10980033)



Omega adaptor Tall CL-regular (P/N 10980501)



Accessories

- 1 x Omega adaptor CL-regular 2 pcs in box (P/N 10980033)
- 1 x Power cable including powerCON TRUE1 In connector

Optional accessories

- Gel Frame Adaptor Esprite (P/N 10980463)
- Gel Frame Esprite (P/N 10980464)
- Doughty Trigger Clamp (P/N 17030386)
- LED light source for Esprite (P/N 14080066)
- Top hat 35 Esprite (P/N 10980568)
- Frost 0,5° (exchange) for Robin T1 Profile/Esprite (P/N 10980583)
- Frost 1° (exchange) for Robin T1 Profile/Esprite (P/N 10980578)
- Frost 5° (exchange) for Robin T1 Profile/Esprite (P/N 10980573)
- Frost 10° (exchange) for Robin T1 Profile/Esprite (P/N 10980497)
- Frost 20° (exchange) for Robin T1 Profile/Esprite (P/N 10980574)
- Frost 30° (exchange) for Robin T1 Profile/Esprite (P/N 10980584)
- Omega Adaptor Tall CL-regular 2 pcs in box (P/N 10980501)
- Upgrade kit CRMX Universal 260 (P/N 99030100)
- Hot-spot lens in gobo holder (P/N 10980483)
- Robin Esprite LightMaster Side kit SET (P/N 10080332)

Safety wire 35 kg (P/N 99011963)
TE™ HP LED Engine for Esprite (P/N 14080066)
TE™ HP LED Engine for Esprite in protective case (P/N 14080075)
TE™ HCF LED Engine for Esprite (P/N 14080071)
TE™ HCF LED Engine for Esprite in protective case (P/N 14080073)
TE™ TGW LED Engine for Esprite (P/N 14080079)
TE™ TGW LED Engine for Esprite in protective case (P/N 14080080)

12. 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 !
***Disconnect from mains before starting any
maintenance work***

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output 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.
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 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).

Sliding bars of CMY colour mix. system should be lubricated every 6 months. As lubricant we recommend ARONIX silicone oil 500 cSt - it is a medium viscosity lubricant, release agent, high temperature oil (from -20°C to +300°C).

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.

Checking plastic parts of the fixture.

The plastic parts of the fixture should be checked for damages and beginning cracks at least every two months. In addition, the plastic part of the front lens has to be checked mechanically (by means of movement by the plastic part) if it is firmly fastened to the fixture. If hint of a crack is found on some plastic part, do not use the fixture until the damaged part will be replaced.

Cracks or another damages of the plastic parts can be caused by the fixture transportation or manipulation and also ageing process may influence plastic materials.

This checking is necessary for both fixed installations and preparing fixtures for renting. Any free moving parts inside of the fixture head, cracked plastic or any plastic part of front lens not sitting properly in place need to be immediately replaced.

12.1 Disposing of the product

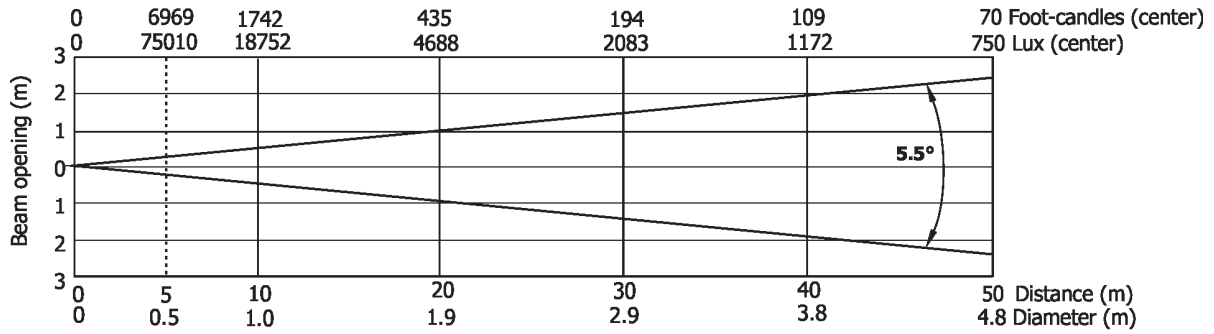
To preserve the environment please dispose or recycle this product at the end of its life according to the local regulations and codes.

13. Photometric diagrams

Auto mode - CRI 70

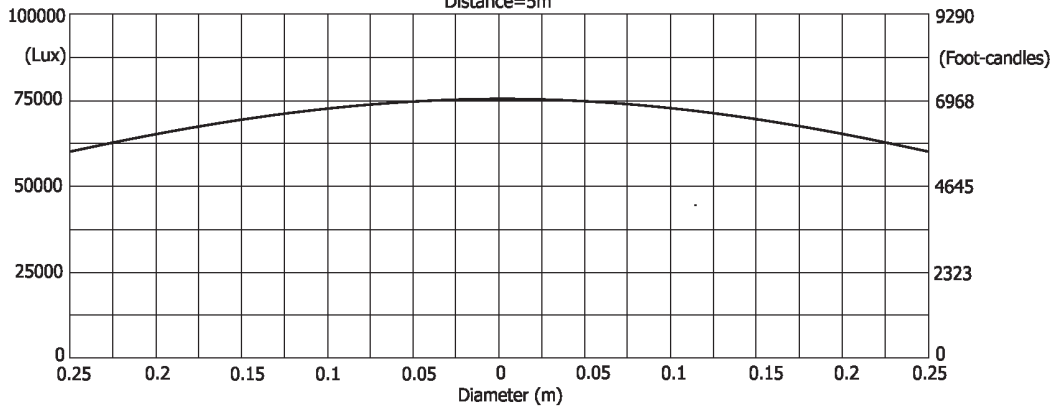
Beam angle 5.5° - Min. zoom

Total Output: 14185 lumens



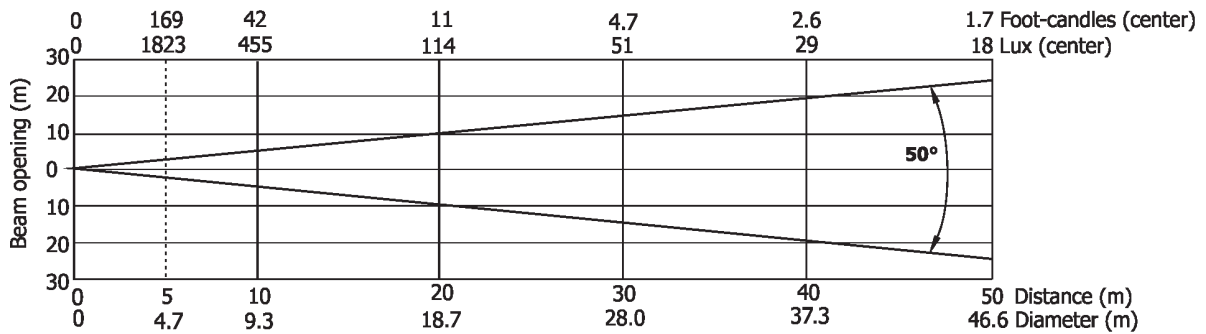
Illuminance distribution

Distance=5m



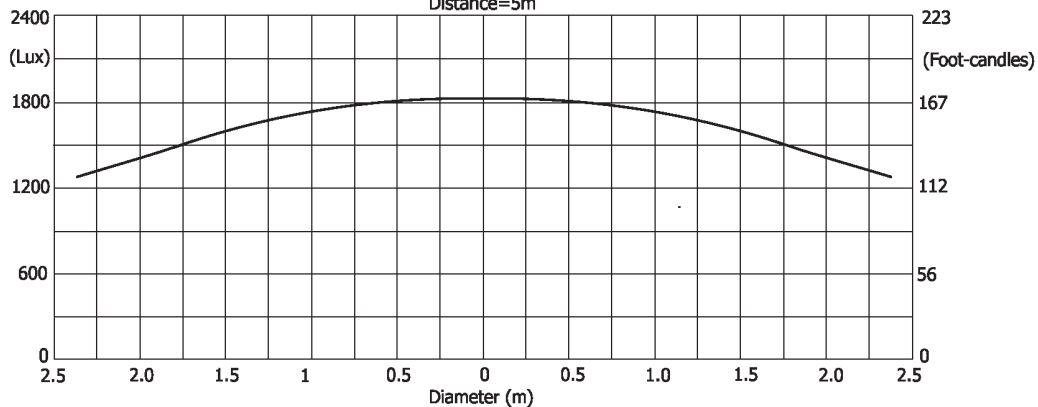
Beam angle 50° - Max. zoom

Total Output: 23866 lumens



Illuminance distribution

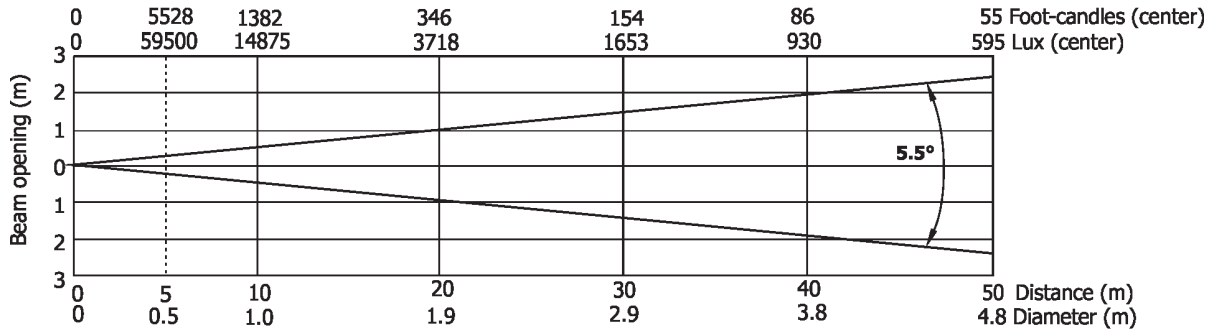
Distance=5m



Auto mode - CRI 80

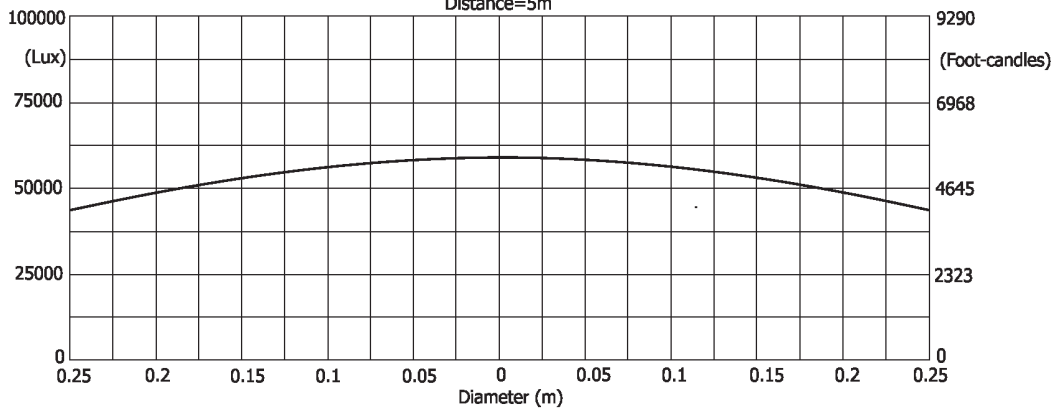
Beam angle 5.5° - Min. zoom

Total Output: 13697 lumens



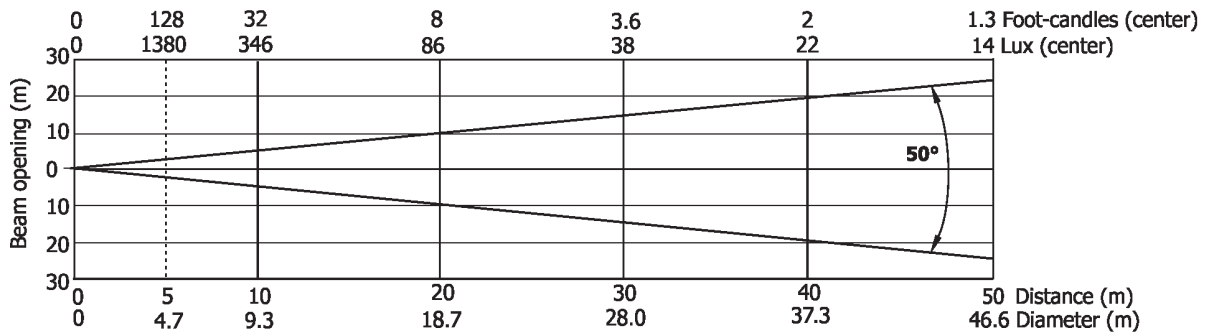
Illuminance distribution

Distance=5m



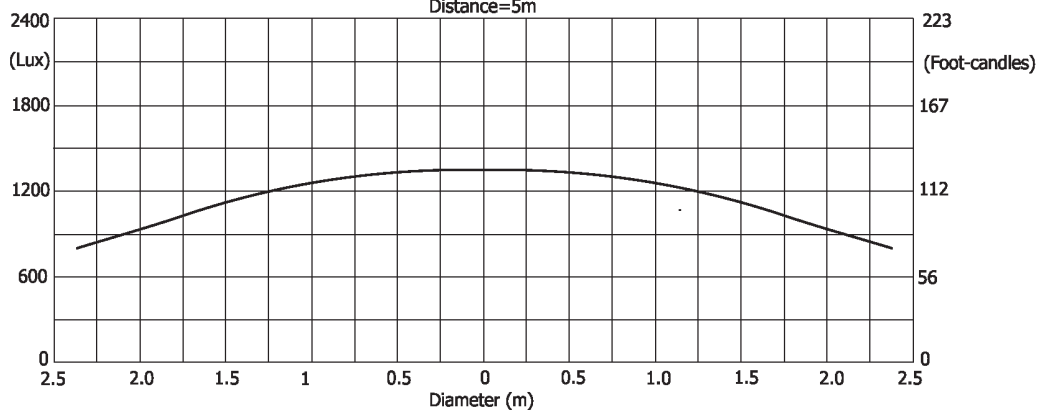
Beam angle 50° - Max. zoom

Total Output: 18377 lumens



Illuminance distribution

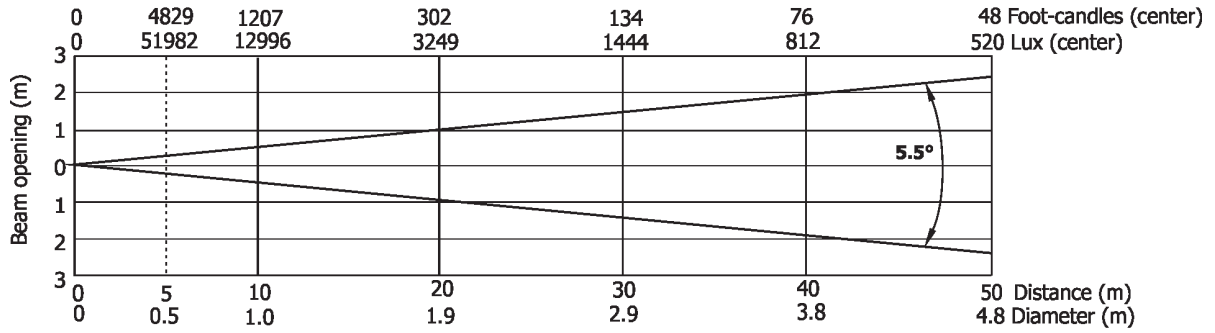
Distance=5m



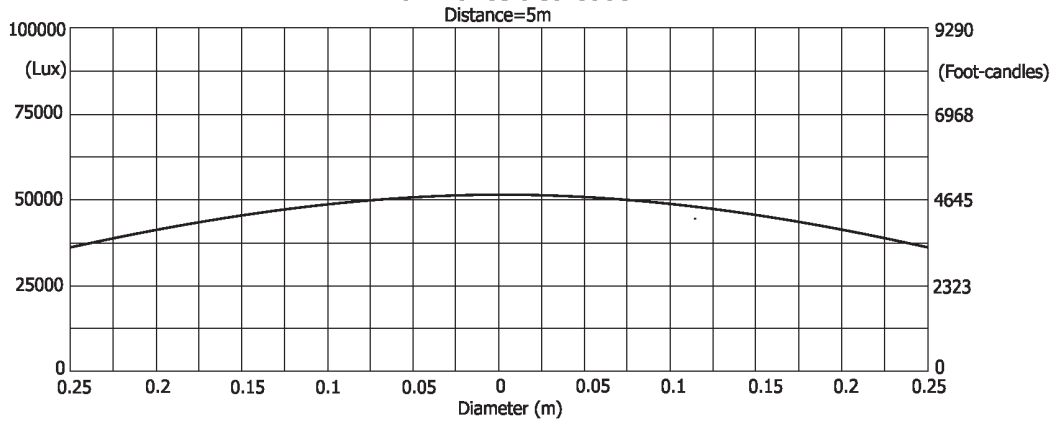
Auto mode - CRI 90

Beam angle 5.5° - Min. zoom

Total Output: 10034 lumens

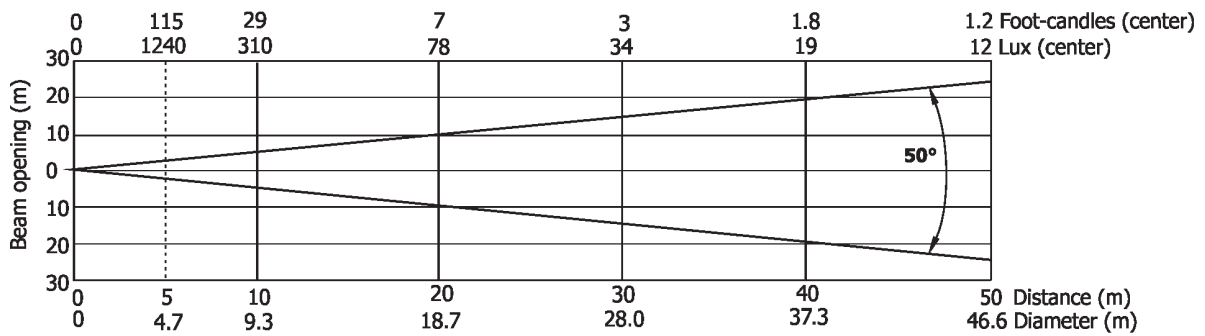


Illuminance distribution

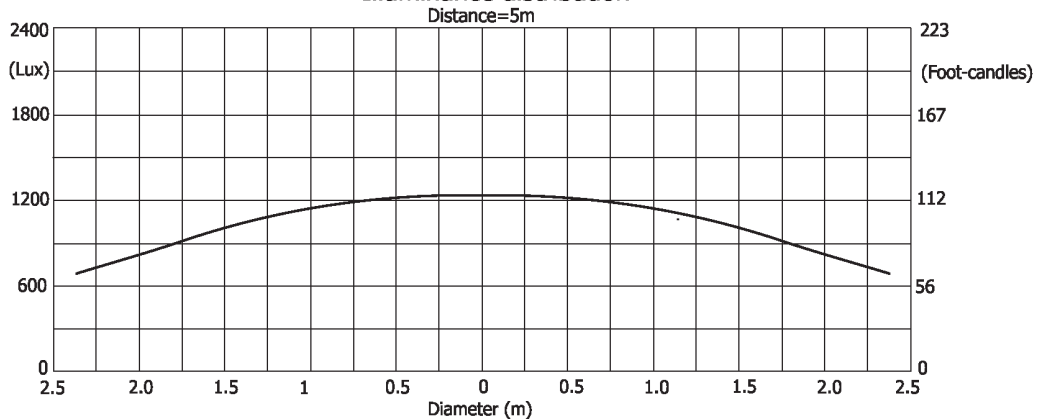


Beam angle 50° - Max. zoom

Total Output: 16644 lumens



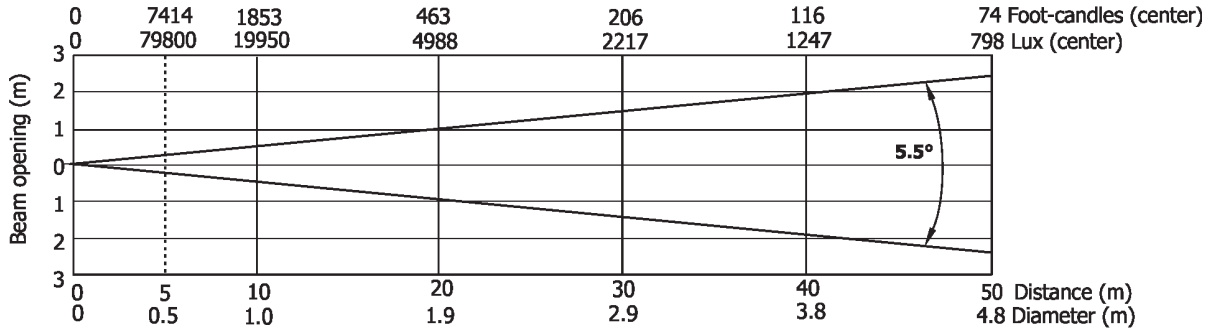
Illuminance distribution



High mode - CRI 70

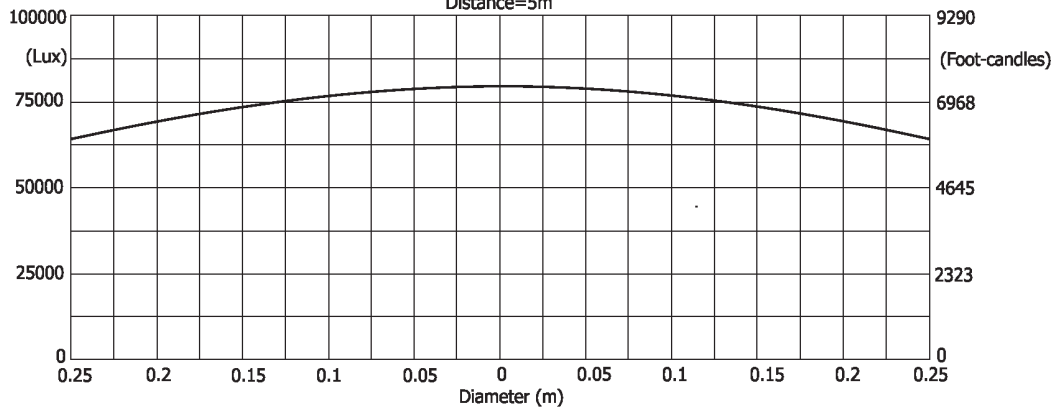
Beam angle 5.5° - Min. zoom

Total Output: 15090 lumens



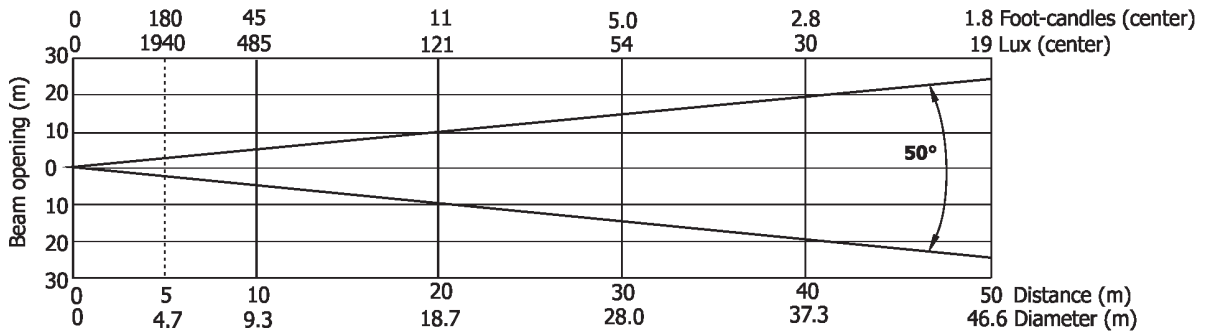
Illuminance distribution

Distance=5m



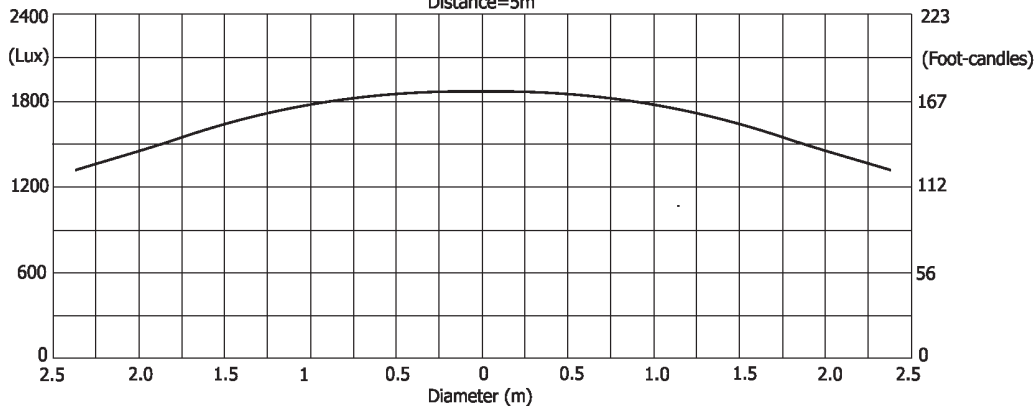
Beam angle 50° - Max. zoom

Total Output: 25390 lumens



Illuminance distribution

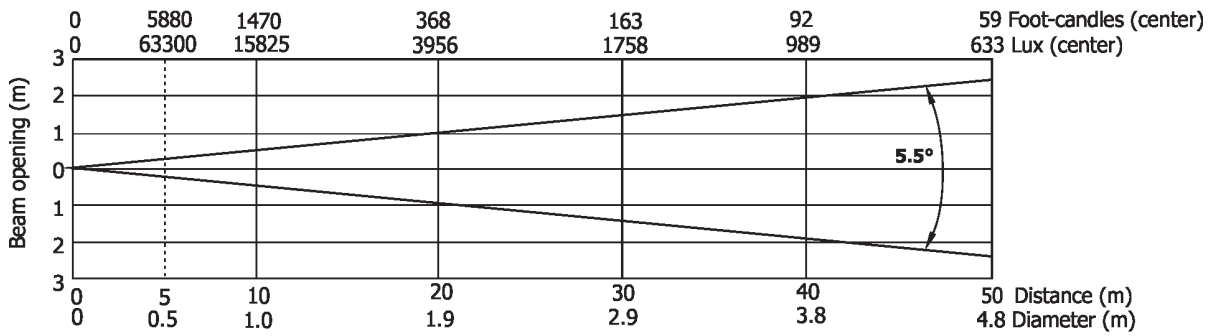
Distance=5m



High mode - CRI 80

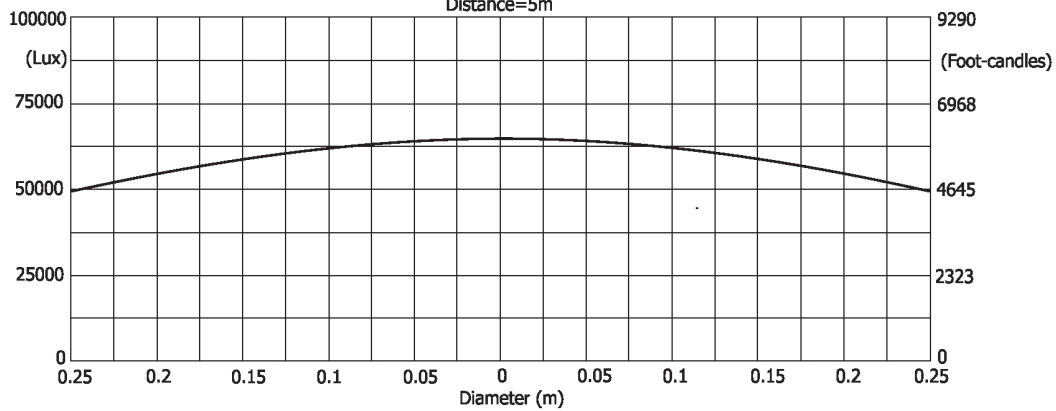
Beam angle 5.5° - Min. zoom

Total Output: 14572 lumens



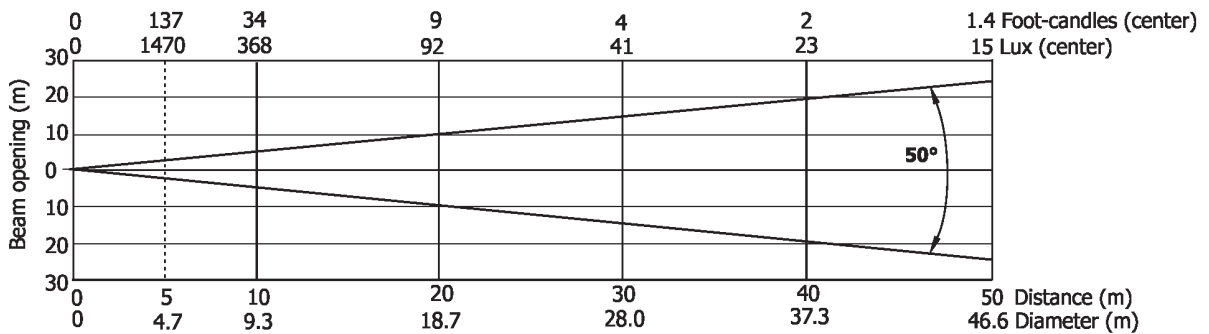
Illuminance distribution

Distance=5m



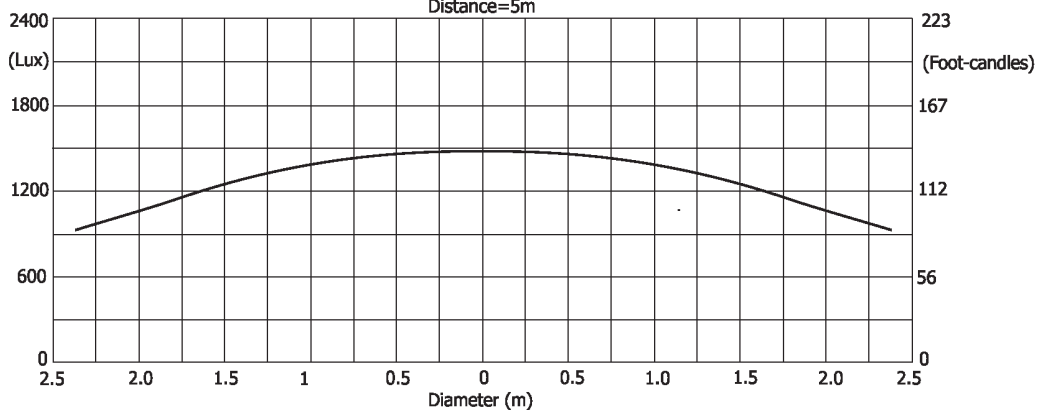
Beam angle 50° - Max. zoom

Total Output: 19550 lumens



Illuminance distribution

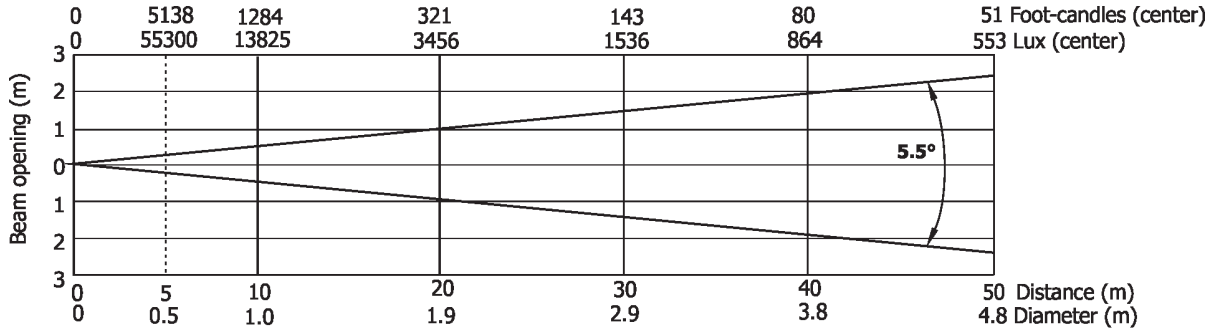
Distance=5m



High mode - CRI 90

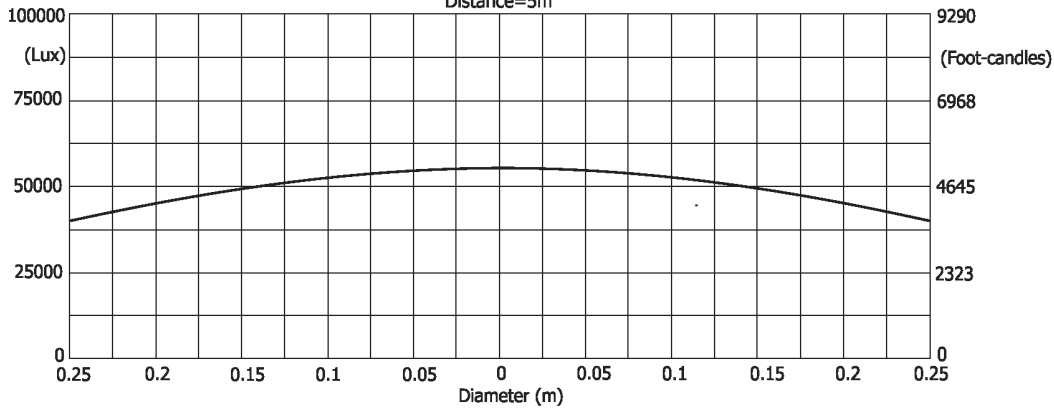
Beam angle 5.5° - Min. zoom

Total Output: 10563 lumens



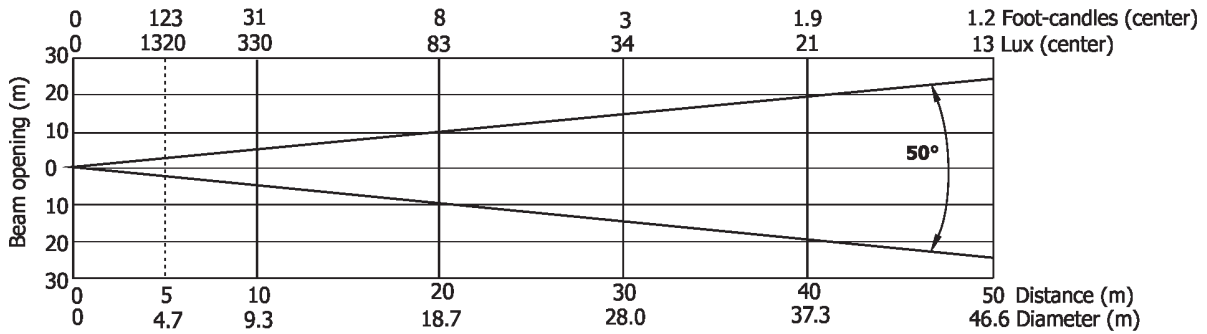
Illuminance distribution

Distance=5m



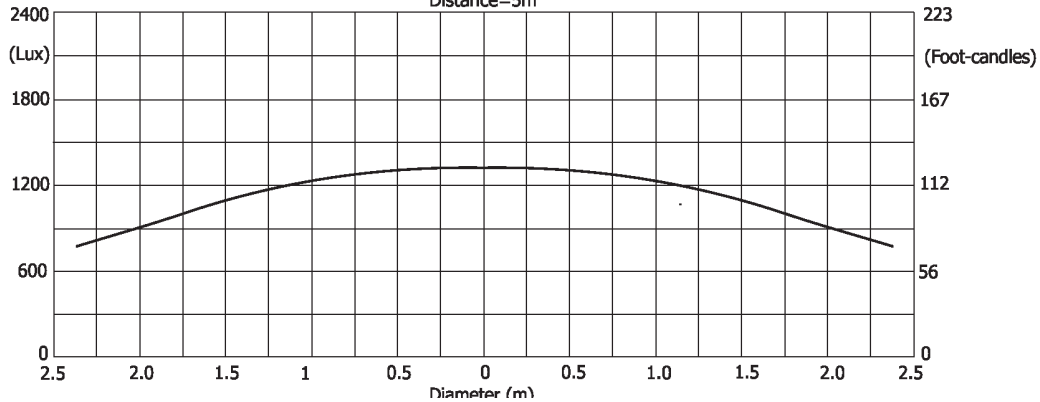
Beam angle 50° - Max. zoom

Total Output: 17520 lumens



Illuminance distribution

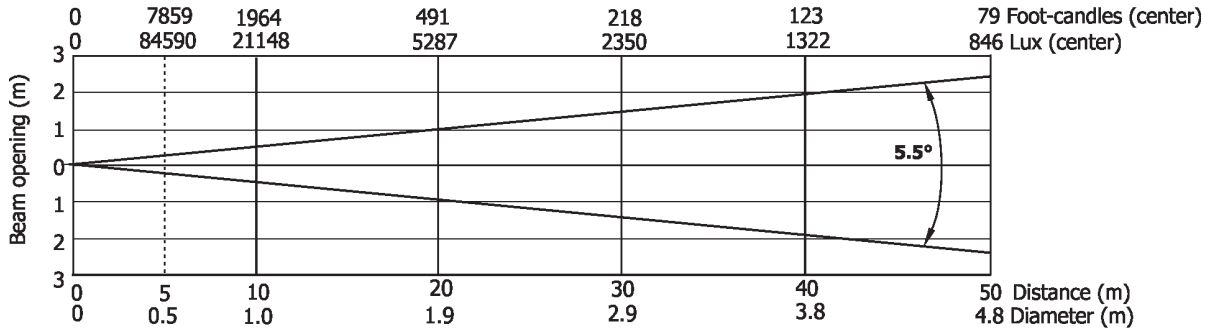
Distance=5m



High-power mode - CRI 70

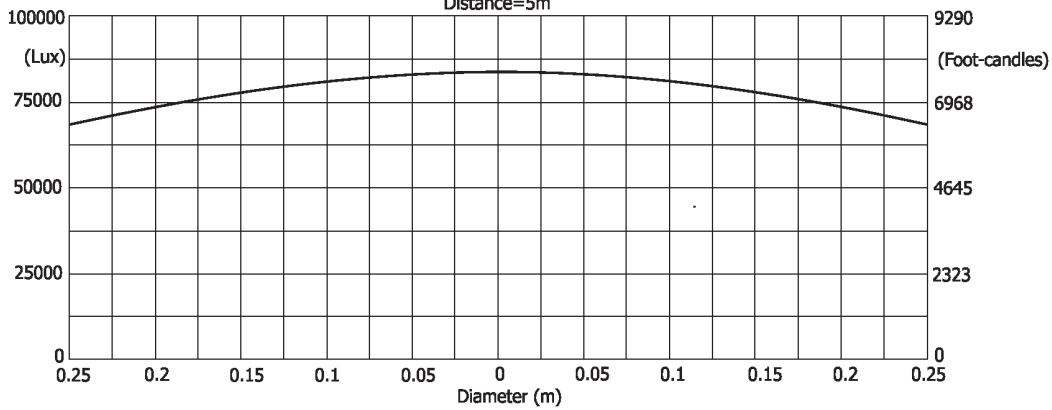
Beam angle 5.5° - Min. zoom

Total Output: 15915 lumens



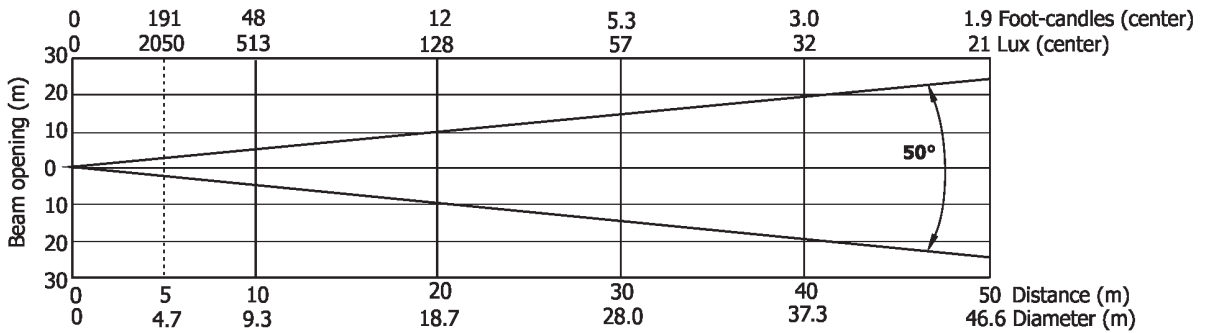
Illuminance distribution

Distance=5m



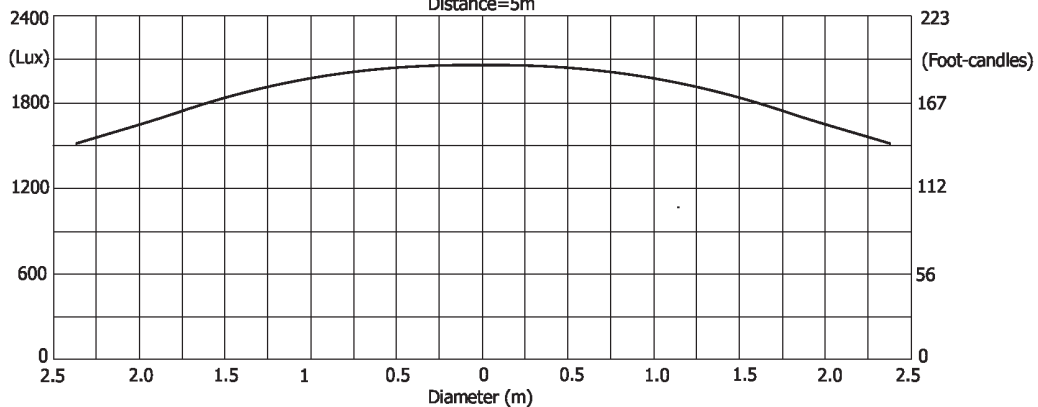
Beam angle 50° - Max. zoom

Total Output: 26910 lumens



Illuminance distribution

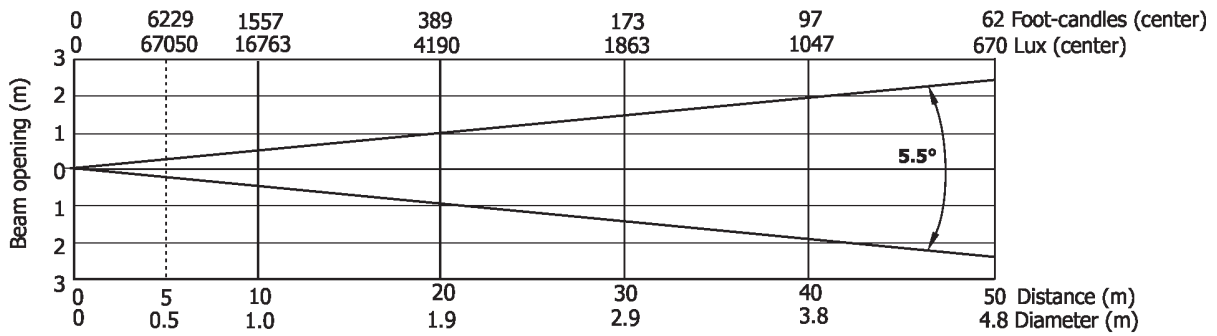
Distance=5m



High-power mode - CRI 80

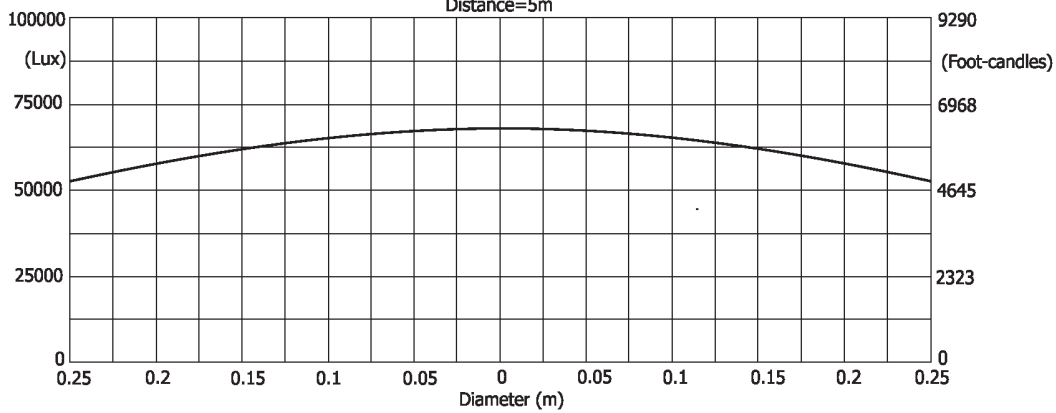
Beam angle 5.5° - Min. zoom

Total Output: 15446 lumens



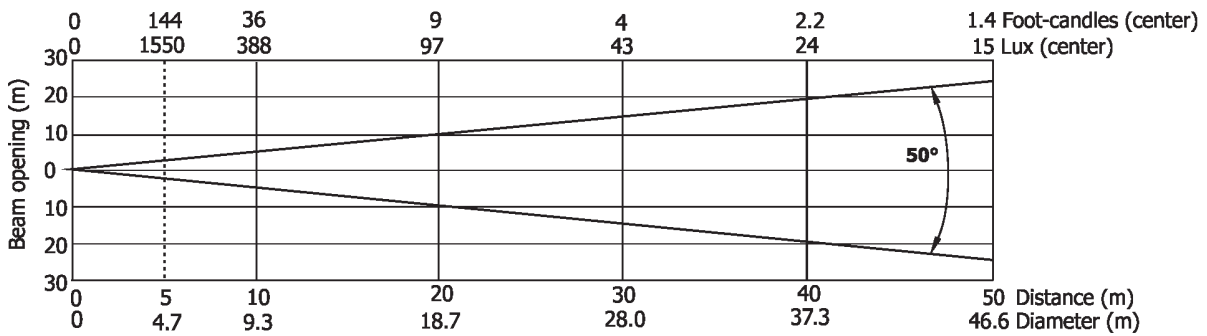
Illuminance distribution

Distance=5m



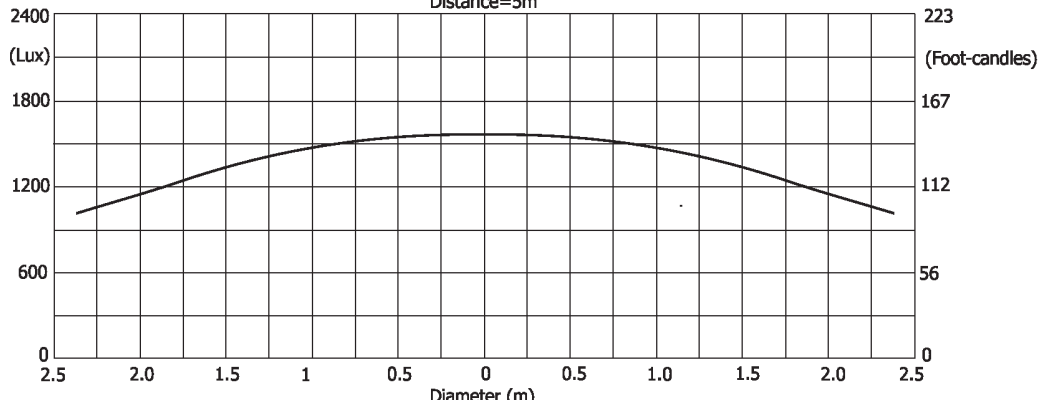
Beam angle 50° - Max. zoom

Total Output: 20723 lumens



Illuminance distribution

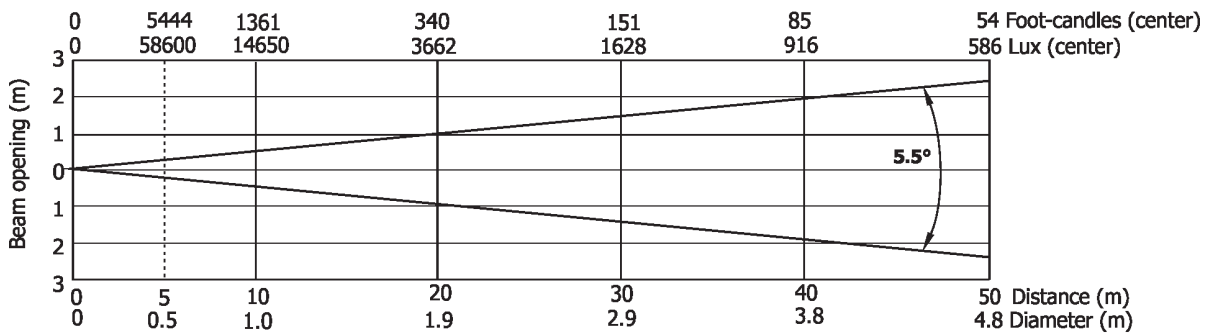
Distance=5m



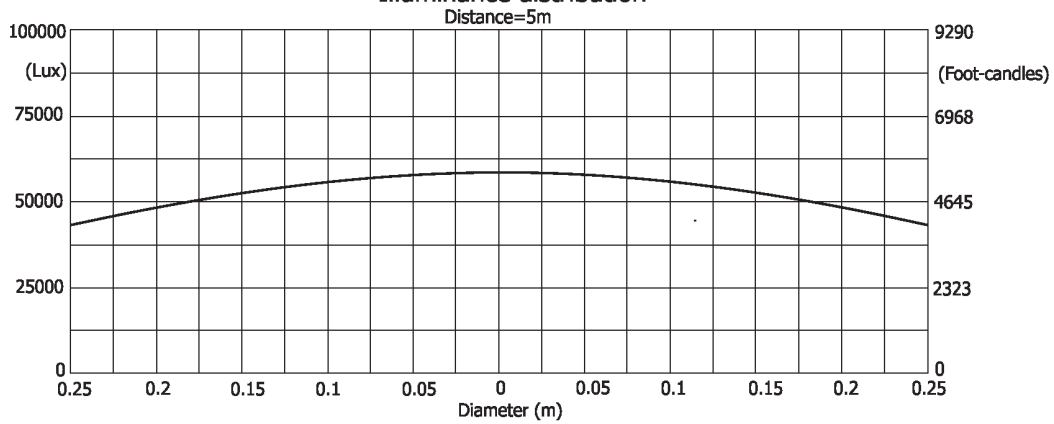
High-power mode - CRI 90

Beam angle 5.5° - Min. zoom

Total Output: 11190 lumens

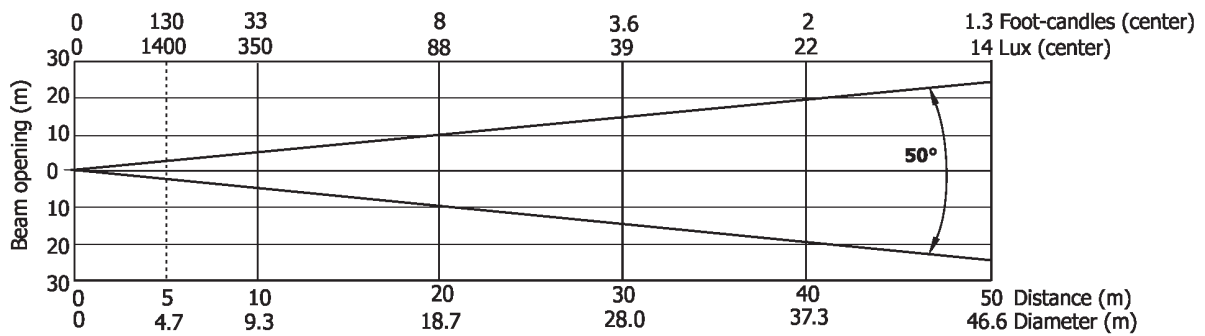


Illuminance distribution

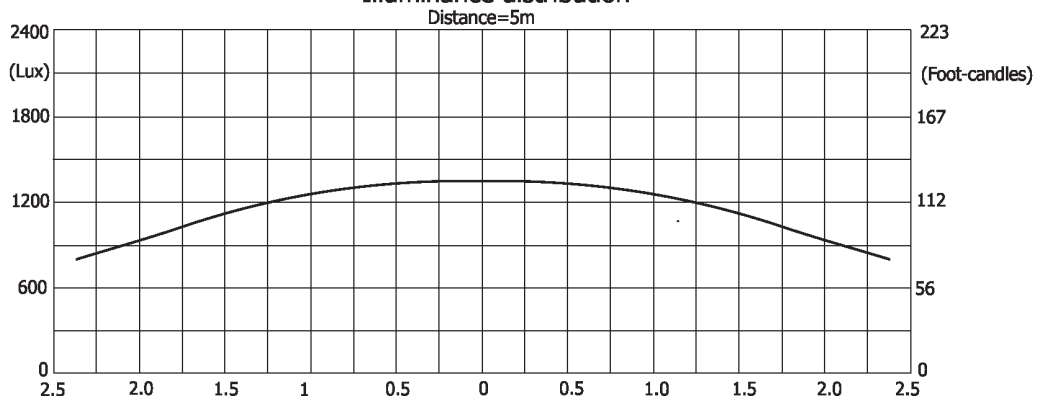


Beam angle 50° - Max. zoom

Total Output: 18571 lumens



Illuminance distribution



14. ChangeLog

This section summarizes changes in the user manual.

Version of the manual	Date of issue	Description of changes
1.1	11/09/2019	Accessories changed
1.2	12/09/2019	High-power Mode added
1.3	03/10/2019	DMX chart ver. 1.2. (virtual colour wheel -colours specified).
1.4	08/10/2019	Changing the LED source added.
1.5	14/10/2019	DMX chart ver. 1.3. (framing shutter swivelling 30°)
1.6	17/10/2019	Version "Esprite FS" added
1.7	30/10/2019	DMX chart ver. 1.4 (CTC range changed 6700K-3000K)
1.8	20/11/2019	Hot-spot lens added to Optional accessories
1.9	29.11/2019	Optional accessories specified
2.0	06/01/2020	Frost filter 10° - new P/N 10980497
2.1	20/01/2020	Warning "Risk group 2, RG-2 " added
2.2	14/02/2020	Gel frame installation added
2.3	18/02/2020	menu LED Module Info added
2.4	03/03/2020	Obtaining information about the LED light source by mobile phone
2.5	11/03/2020	Follow spot mode added (tab Personality)
2.6	31/03/2020	DMX chart ver. 1.5 (Virtual colours more specified)
2.7	08/04/2020	Omega adaptors dimensions added (chapter Tech. specification)
2.8	23/04/2020	DMX chart ver. 1.6 (Tilt movement range corrected)
2.9	08/09/2020	Tech. specifications changed
3.0	12/11/2020	DMX chart v. 1.7
3.1	07/01/2020	DMX chart v. 1.8 (Mode 3 and 4 added)
3.2	25/01/2021	Optional frosts added
3.3	17/03/2021	Truss installation description changed
3.4	20/03/2021	Display menu changed
3.5	10/06/2021	DMX chart ver. 2.1
3.6	28/06/2021	Focus tracking and way of pan/tilt reset added
3.7	18/08/2021	Types of LED engine (HFC, HP) indication added
3.8	13/10/2021	ROBE COM pictures updated
3.9	25/10/2021	Rot. gobos specification changed
4.0	16/12/2021	Framing shutters mode changed, new dimmer curve added, DMX chart 2.2
4.1	25/12/2022	EP version added
4.2	18/08/2022	New error messages added
4.3	13/10/2022	DMX chart ver. 2.3
4.4	14/12/2022	Type of lubricant for CMY system added
4.5	01/02/2023	Chapter REAP added
4.6	24/03/2023	EMC notes added
4.7	09/11/2023	Gobo change procedure changed
4.8	07/12/2023	DMX mode 5 added, DMX chart ver. 2.4
4.9	12/12/2023	RDMnet, intensity drop signalization and QR code on display

December 12. 2023

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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



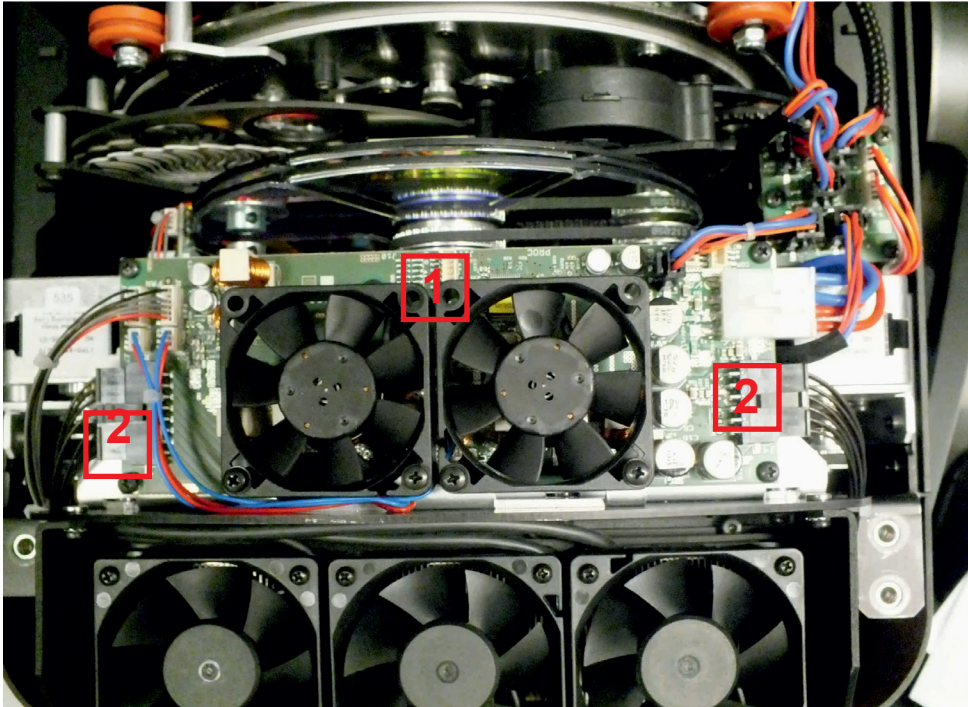
15. Appendix

15.1 Changing the LED light source

The Robin Esprite allows you to change the LED light source and this way keep a high performance of the fixture.

To change the LED light source.

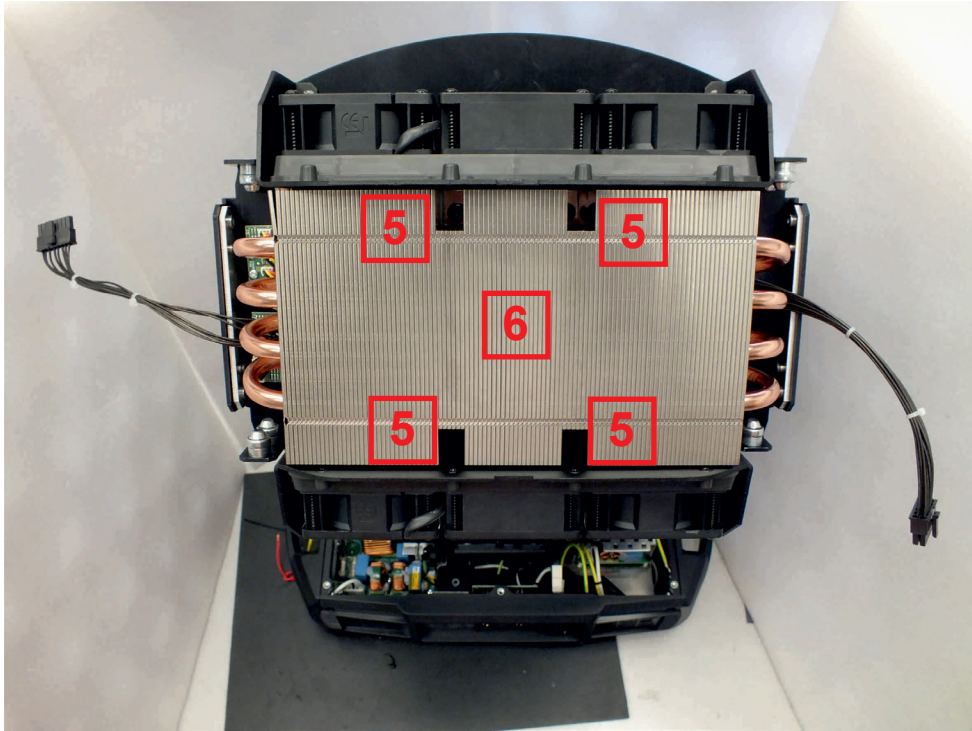
1. Disconnect the fixture from mains and allow it to cool about 30 minutes.
2. Remove top covers of the fixture and lock the head in a horizontal position in which you will have access to the control PCB (1) of the LED source.
3. Disconnect both LED source connectors (2) from the LED control PCB (1).



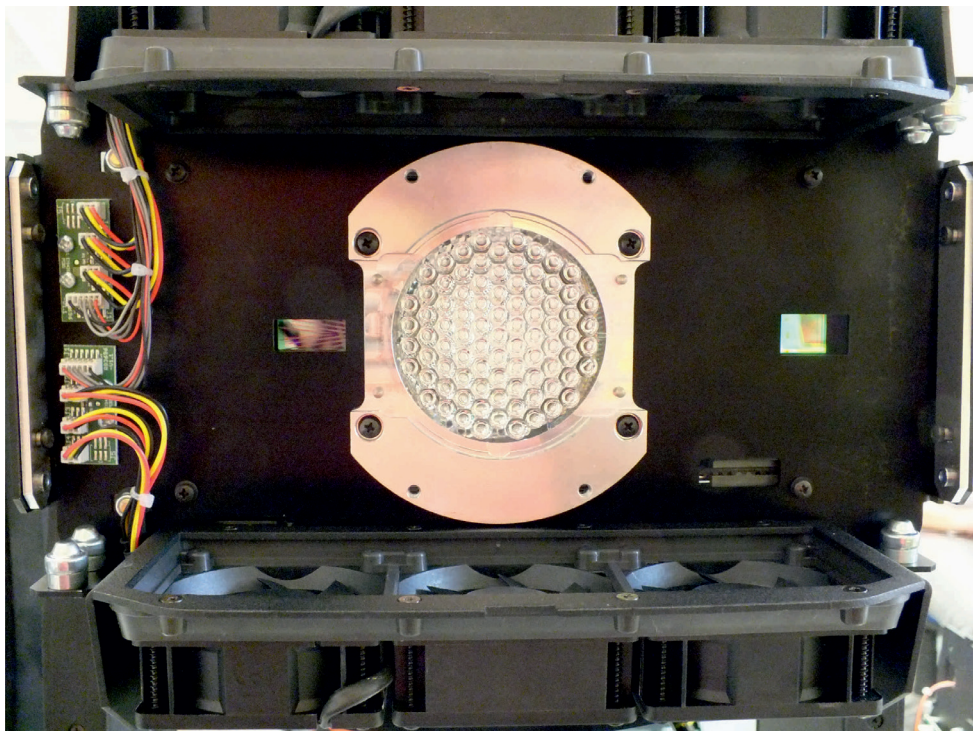
4. Unscrew two screws M3x12 with star washers (3) on each side of the rear cover (4) of the head and remove the cover (4).



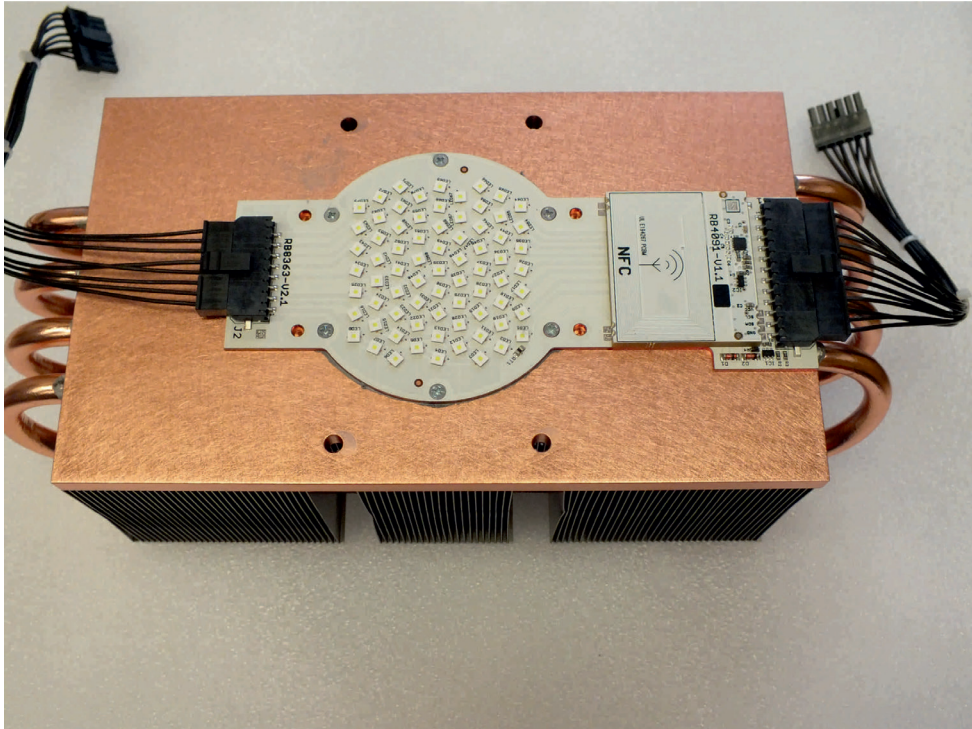
5. Unscrew the four socket head screws M4x16 (use Allen key 3) with plain washers (5) and remove the LED source module (6) from the head. Be careful, the LED source module is heavy.



Fixture head without LED source module.

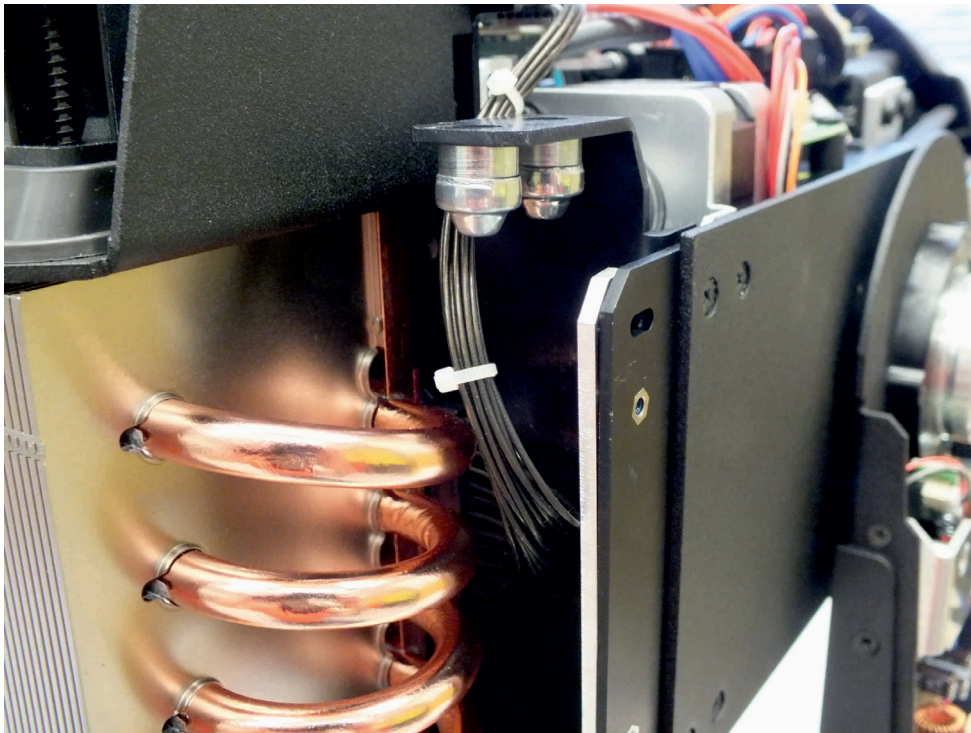


The new LED light source includes PCB with LEDs, connecting cables with connectors and the heat sink. Handle with care. Do not touch LEDs with bare hands.



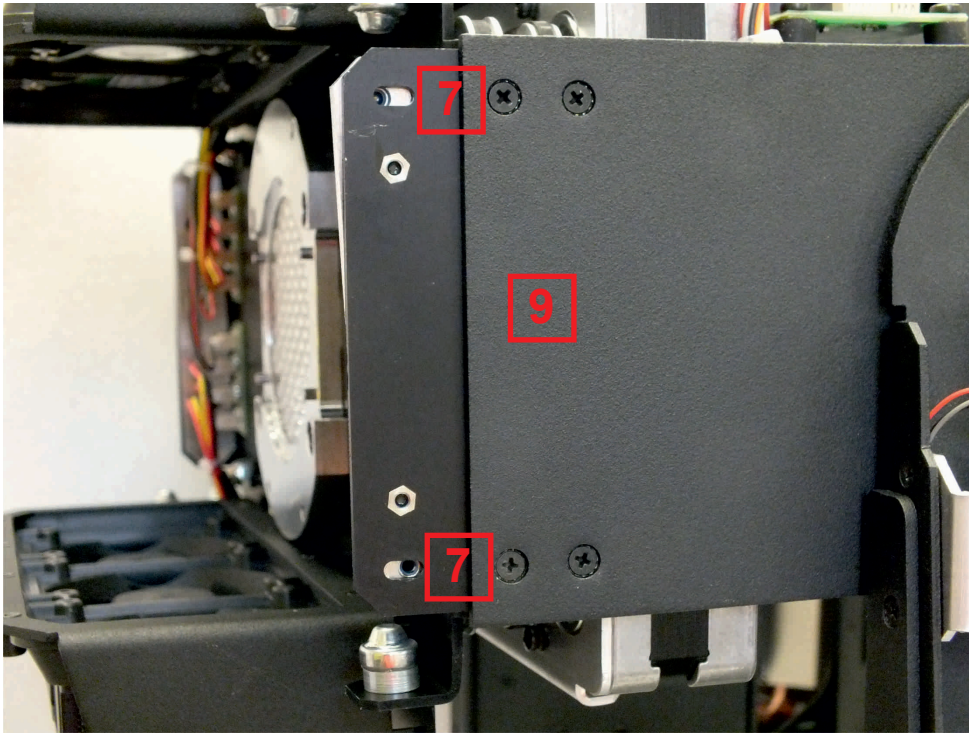
6. To install the new LED source module, proceed in a reverse order than at its dismantling, i.e. screw the LED source module (6) to the head, screw the rear cover (4) to the head and connect the connectors from the LED source module to the LED control PCB (1).

Placing of the LED source module cable:

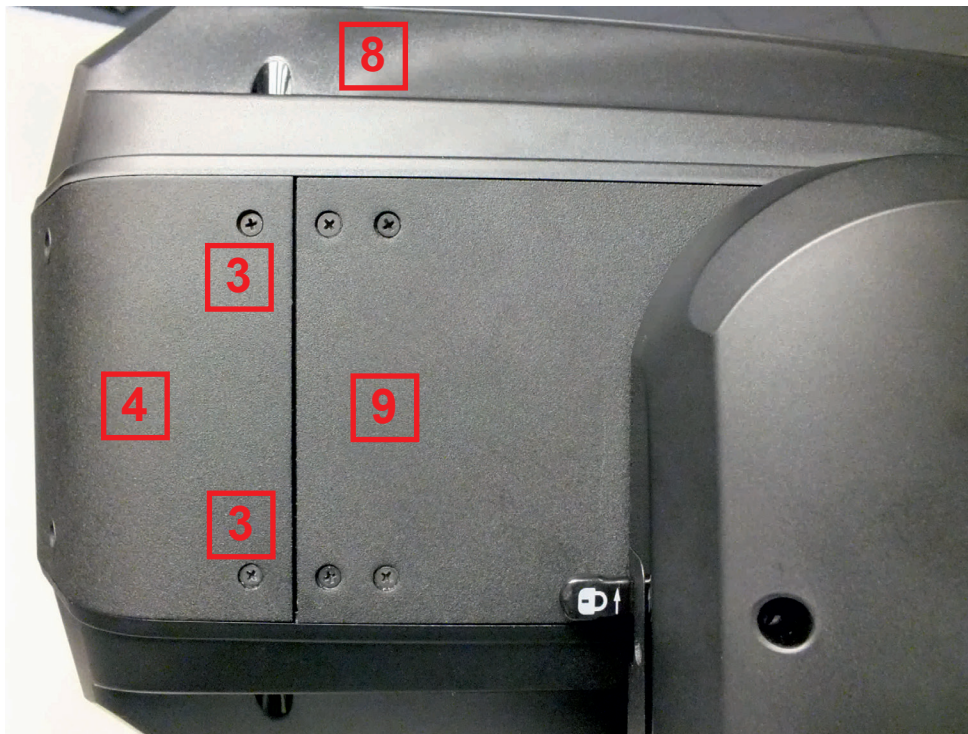


Note for mounting of the rear cover (4).

After placing the rear cover (4) on the head, do not fully tighten the screws (3) in the holes with M3 thread (7). We recommend you to install one or both plastic covers (8) on the head, check that cover (s) properly fits to the rear cover (4) and then fully tighten the rear cover screws (3).



There can be a space (about 1 mm) between the rear cover (4) and the side cover (9).




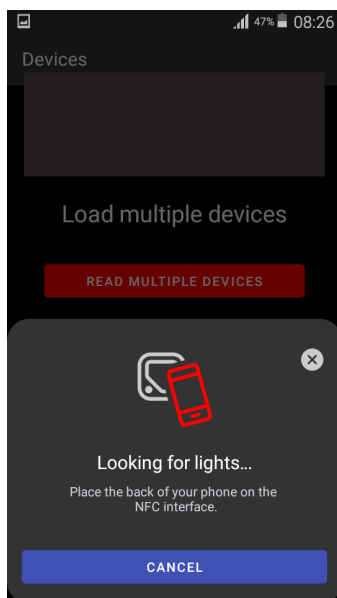
After finishing the LED source module installation and placing all covers back on the fixture, connect the fixture to mains and run the procedure LEDs Measure from the tab Service.

15.2. Obtaining information about the LED light source by mobile phone

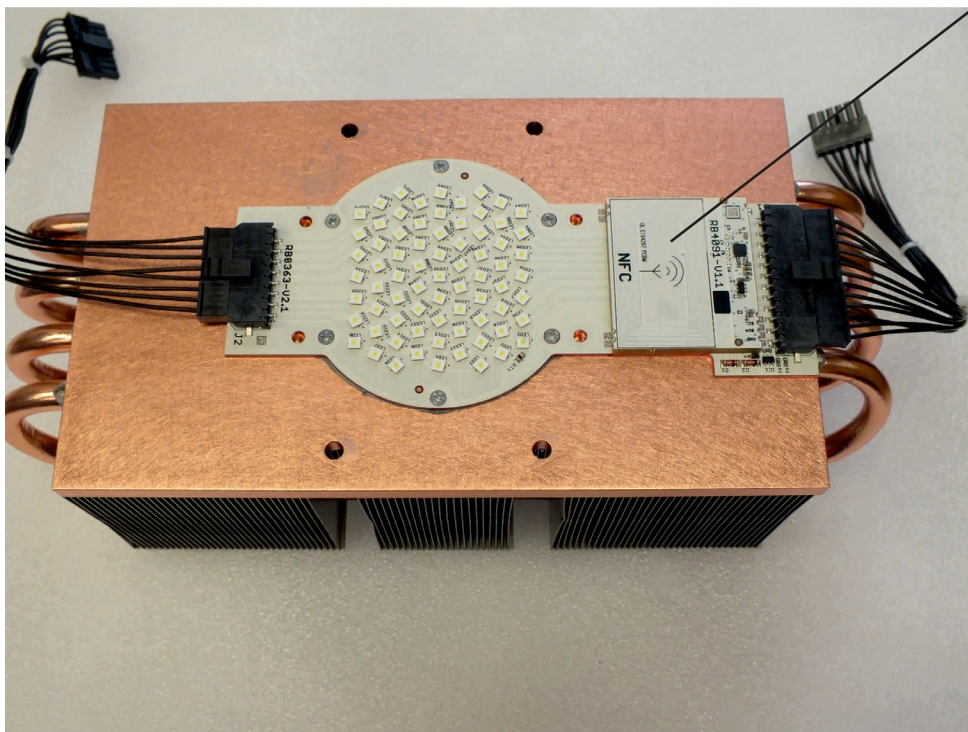
You can read information about the LED light source by means of the mobile application ROBE COM. The LED light source has to be outside of the fixture.

Download and install the application ROBE COM from Google Play (for Android 5.0 and higher) or App Store (for iOS 12.0 and higher) to your mobile phone. Your mobile phone has to support NFC (Near-Field Communication).

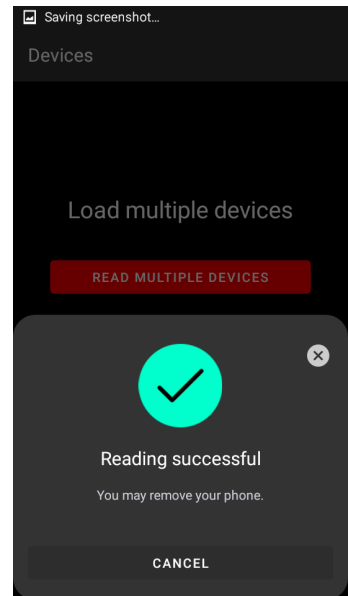
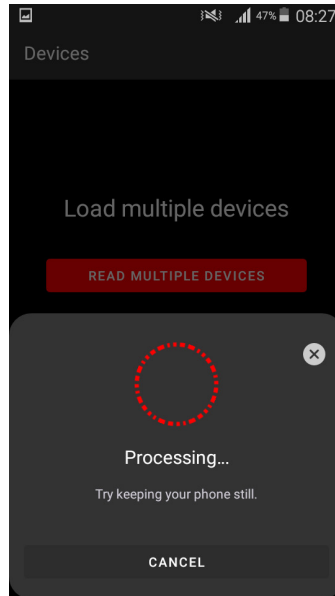
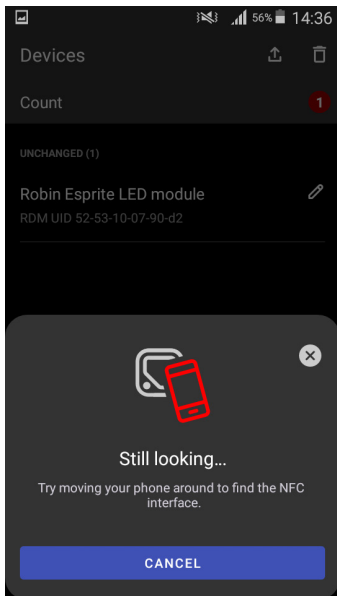
After installing the ROBE COM, run the application by touching the icon  . The following screen will appear:



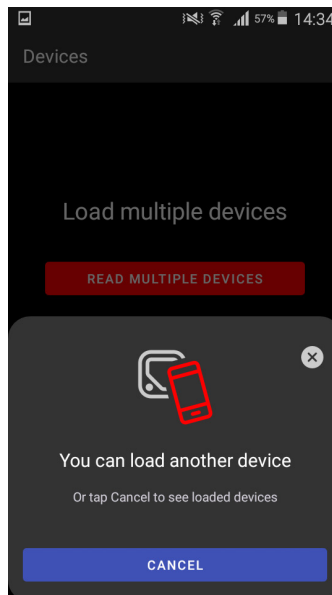
Hold the mobile phone close to the point of the LED light source PCB which is marked with the symbol NFC.



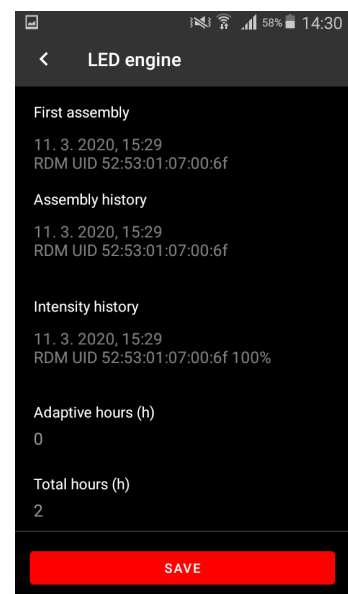
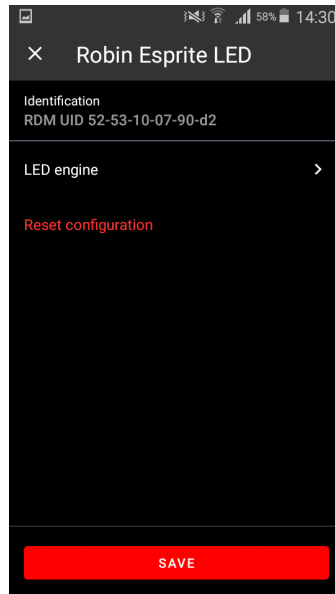
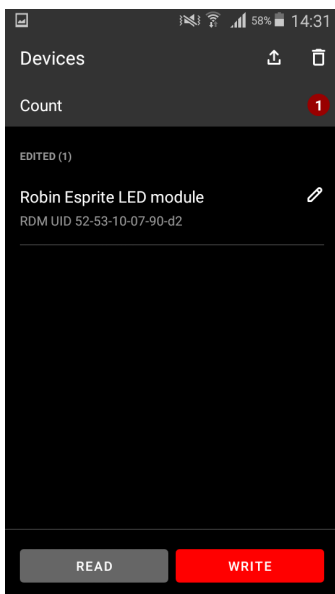
If NFC connection is OK, the following screens will appear.



When the following screen will appear, touch the button CANCEL



Touch the found LED module ("Robin Esprite LED module") and then touch "LED engine" to read information about found LED module.



DMX protocol

Robin Esprite - DMX protocol

Version: 2.4 Mode 1 - Standard 16 bit, Mode 2 - Reduced 8 bit, Mode 3 -Standard 16 bit + green corre., Mode 4 -Reduced 8 bit + green corre.

Mode 5 - Enhanced gobo control

Quick overview of default DMX values for each channel

Mode/channel					Default DMX Value	Function
1	2	3	4	5		
1	1	1	1	1	128	Pan
2	2	2	2	2	0	Pan Fine
3	3	3	3	3	128	Tilt
4	4	4	4	4	0	Tilt fine
5	5	5	5	5	0	Pan/Tilt speed , Pan/Tilt time
6	6	6	6	6	0	Power/Special functions
7	7	7	7	7	10	LED frequency selection
8	8	8	8	8	128	LED frequency fine adjusting
9	9	9	9	9	0	Max. light intensity indication and setting
10	10	10	10	10	0	Colour wheel 1
11	*	11	*	11	0	Colour wheel 1-fine positioning
12	11	12	11	12	0	Colour wheel 2
13	*	13	*	13	0	Colour wheel 2-fine positioning
14	12	14	12	14	0	Cyan
15	13	15	13	15	0	Magenta
16	14	16	14	16	0	Yellow
17	15	17	15	17	0	CTO
*	*	18	16	18	128	Green Correction
18	16	19	17	19	0	Virtual colour wheel
19	17	20	18	20	0	Effects speed
20	18	21	19	21	0	CMY+CTO+Colour wheels time
21	19	22	20	22	0	Static gobo/ Framing shutters/Zoom/Focus/Iris/Frost/Prism time
22	20	23	21	23	0	Effect wheel positioning
23	21	24	22	24	128	Effect wheel rotation
24	22	25	23	25	0	Effect wheel animations
25	23	26	24	26	0	Static gobo wheel
26	24	27	25	27	0	Rotating gobo wheel
*	*	*	*	28	0	Rotating gobo wheel- fine positioning
27	25	28	26	29	128	Rot. gobo indexing and rotation
28	*	29	*	30	0	Rot. gobo indexing/rotation - fine
29	26	30	27	31	0	Prism
30	27	31	28	32	128	Prism indexing/rotation
31	28	32	29	33	0	Frost
32	29	33	30	34	0	Iris
33	*	34	*	35	0	Iris - fine
34	30	35	31	36	128	Zoom
35	*	36	*	37	0	Zoom - fine
36	31	37	32	38	128	Focus
37	*	38	*	39	0	Focus - fine
38	32	39	33	40	128	Framing shutters module rotation
39	33	40	34	41	0	Framing shutter 1- movement
40	34	41	35	42	128	Framing shutter 1- swivelling
41	35	42	36	43	0	Framing shutter 2- movement

DMX protocol

Mode/channel					Default DMX Value	Function	
1	2	3	4	5			
42	36	43	37	44	128	Framing shutter 2- swivelling	
43	37	44	38	45	0	Framing shutter 3 movement	
44	38	45	39	46	128	Framing shutter 3- swivelling	
45	39	46	40	47	0	Framing shutter 4 movement	
46	40	47	41	48	128	Framing shutter 4- swivelling	
47	41	48	42	49	32	Shutter/ strobe	
48	42	49	43	50	0	Dimmer intensity	
49	*	50	*	51	0	Dimmer intensity - fine	
Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
1	1	1	1	1		Pan	
					0 - 255	Pan movement by 540° (128=default)	proportional
2	2	2	2	2		Pan Fine	
					0 - 255	Fine control of pan movement (0=default)	proportional
3	3	3	3	3		Tilt	
					0 - 255	Tilt movement by 265° (128=default)	proportional
4	4	4	4	4		Tilt fine	
					0 - 255	Fine control of tilt movement (0=default)	proportional
5	5	5	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 sec. to 25.5 sec.	proportional
6	6	6	6	6		Power/Special functions	
						Factory display menu setting: DMX Input-Wired ,Graphic display-On, Pan/tilt Mode-Speed,Blackout while pan/tilt moving-Off, Blackout while gobo wheels moving-Off,Blackout while colour wheels moving-Off, Fans mode-Auto, High-power mode - Off, Focus Tracking- Off, Gobo transition - Maximum speed and shortcut	
					0 -9	Reserved (0=default)	
						<i>To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec. (Channel „Shutter/ Strobe“ 47/41/48/42/49 must be at range: 0-31 DMX). Corresponding menu items are temporarily overwritten.</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
					30-31	Quiet mode: Fans On at blackout	step
					32-33	Quiet mode: Fans Off at blackout	step
					34-35	Dimmer curve: Super Square Law	step
					36-39	Reserved	

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					40-44	Pan/Tilt mode: Speed	step
					45-49	Pan/Tilt mode: Time	step
					50-54	Blackout while pan/tilt moving: On	step
					55-59	Blackout while pan/tilt moving: Off	step
					60-64	Blackout while gobo wheels moving: On	step
					65-69	Blackout while gobo wheels moving: Off	step
					70-74	Blackout while colour wheels moving: On	step
					75-79	Blackout while colour wheels moving: Off	step
					80-84	Fans mode: Auto	step
					85-89	Fans mode: High	step
					90-94	High-power mode: On	step
					95-99	High power mode: Off	step
					100-104	Focus Tracking: On	step
					105-109	Focus Tracking: Off	step
					110-114	Dimmer curve: Square law	step
					115-119	Dimmer curve: Linear	step
					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	Total fixture reset (without pan/tilt)	step
					140 - 149	Pan and Tilt reset	step
					150 - 159	Colour system reset	step
					160 - 169	Gobo wheels/effect wheel reset	step
					170-174	Pan reset	step
					175-179	Tilt reset	step
					180 - 189	Zoom/focus/frost/prism reset	step
					190 - 199	Iris /framing shutters reset	step
					200 - 209	Total fixture reset (including pan/tilt)	step
					210 - 218	Reserved	
						The following three commands define transition from gobo rotation to gobo indexing:	
					219 - 220	Gobo indexing: Maximum speed and shortcut	step
					221 - 222	Gobo indexing: Follow speed and direction	step
					223 - 224	Gobo indexing: Maximum speed and follow direction	step
						The following RoboSpot related commands are only applicable when the RoboSpot is connected:	
					225 - 229	RoboSpot enabled	step
					230 - 234	RoboSpot disabled - except handle faders and pan/tilt	step
					235 - 239	RoboSpot fully disabled	step
					240	Disabled "Quiet mode"	step
					241 - 255	Quiet mode - fan noise control from min. to max.	proportional
7	7	7	7	7		LED frequency selection	
						Factory display menu setting: 600Hz	
						<i>Select PWM output frequency of LEDs. Selected PWM frequency can be fine adjusted in 127 steps up/down around selected PWM frequency on the channel below. Corresponding menu item (Frequency Setup) is temporarily overridden.</i>	
					0-4	PWM frequency from Display menu (fixture utilizes PWM frequency set in the display menu item Frequency Setup).	step

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					5-9	300 Hz	step
					10-14	600 Hz (10=default)	step
					15-19	1200 Hz	step
					20-24	2400 Hz	step
					25-255	Reserved (fixture utilizes PWM frequency set in the display menu item Frequency Setup).	
8	8	8	8	8		LED frequency fine adjusting	
						Factory display menu setting: 600Hz	
						<i>Select desired PWM output frequency of LEDs on the channel above.</i>	
					0-1	Selected LED Frequency	step
					2	LED Frequency (step -126)	step
					3	LED Frequency (step -125)	step
					4	LED Frequency (step -124)	step
					:		
					125	LED Frequency (step -3)	step
					126	LED Frequency (step -2)	step
					127	LED Frequency (step -1)	step
					128	Selected LED Frequency (128=default)	step
					129	LED Frequency (step +1)	step
					130	LED Frequency (step +2)	step
					131	LED Frequency (step +3)	step
					:		
					252	LED Frequency (step +124)	step
					253	LED Frequency (step +125)	step
					254	LED Frequency (step +126)	step
					255	Selected LED Frequency	step
9	9	9	9	9		Max. light intensity indication and setting	
					0-10	No function (0=default)	
					11-20	Indication of drop of max. light intensity	step
						<i>A drop of max. light intensity of the fixture (compared to its original intensity) is indicated by a corresponding colour output:</i>	
						<i>0-5%, (WHITE /new LED module/)</i>	
						<i>6-10% (RED)</i>	
						<i>11-15% (GREEN)</i>	
						<i>16-20% (BLUE)</i>	
						<i>21-25% (CYAN)</i>	
						<i>26-30% (MAGENTA)</i>	
						<i>31-35% (YELLOW)</i>	
						<i>36-40% (ORANGE)</i>	
						<i>Pan/tilt/zoom is set at 128 DMX (50%), Dimmer is open at 255 DMX (100%).</i>	
						<i>To set a drop of max. light intensity (compared to original light intensity), stay at DMX value for at least 3 sec. and shutter must be closed at least 3 sec. (Channel „Shutter/Strobe“ 47/41 must be at range: 0-31 DMX). Corresponding menu items are permanently overwritten.</i>	
					21-30	Set drop by 6-10% (RED)	step
					31-40	Set drop by 11-15% (GREEN)	step

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					41-50	Set Drop by 16-20% (BLUE)	step
					51-60	Set drop by 21-25% (CYAN)	step
					61-70	Set drop by 26-30% (MAGENTA)	step
					71-80	Set drop by 31-35% (YELLOW)	step
					81-90	Set drop by 36-40% (ORANGE)	step
					91-100	Original intensity (WHITE)	step
					101-255	Reserved	
10	10	10	10	10		Colour wheel 1	
						Continual positioning	
					0	Open/white (0=default)	proportional
					21	Deep red	proportional
					43	Deep blue	proportional
					64	Orange	proportional
					86	Green	proportional
					107	Congo blue	proportional
					128-129	Open/White	step
						Positioning	
					130-141	Deep red	step
					142-153	Deep blue	step
					154-165	Orange	step
					166-177	Green	step
					178-189	Congo 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 (Set microphone sensitivity in menu „Personality“)	step
					250 - 255	Auto random colour selection from fast to slow	proportional
11	*	11	*	11		Colour wheel 1 - fine positioning	
					0 - 255	Fine positioning (0=default)	proportional
12	11	12	11	12		Colour wheel 2	
						Continual positioning	
					0	Open/white (0=default)	proportional
					21	Multicolour	proportional
					43	Laser green	proportional
					64	Lavender	proportional
					86	Filter CRI 80	proportional
					107	Filter CRI 90	proportional
					128-129	Open/White	step
						Positioning	
					130-141	Multicolour	step
					142-153	Laser green	step
					154-165	Lavender	step
					166-177	Filter CRI 80	step
					178-189	Filter CRI 90	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

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					244 - 249	Random colour selection by audio control (Set microphone sensitivity in menu „Personality“)	step
					250 - 255	Auto random colour selection from fast to slow	proportional
13	*	13	*	13		Colour wheel 2 - fine positioning	
					0 - 255	Fine positioning (0=default)	proportional
14	12	14	12	14		Cyan	
					0 - 255	Cyan from min. saturation --> full cyan (0=default)	proportional
15	13	15	13	15		Magenta	
					0 - 255	Magenta from min. saturation --> full magenta (0=default)	proportional
16	14	16	14	16		Yellow	
					0 - 255	Yellow from min. saturation --> full yellow (0=default)	proportional
17	15	17	15	17		CTO	
					0 - 255	CTO from 6500K --> 3000K (0=default), HP LED module	proportional
						CTO from 5800K --> 2200K (0=default), HCF LED module	proportional
*	*	18	16	18		Green correction	
					0	Uncorrected white	step
					1-127	Minus green --> uncorrected white	proportional
					128	Uncorrected white (128=default)	step
					129-255	Uncorrected white --> Plus green	proportional
18	16	19	17	19		Virtual colour wheel	
						<i>See table "Colours on Virtual Colour Wheel" to find components of each colour</i>	
						<i>The following channels are disabled: 9-17/15/18/16/18 (depends on mode)</i>	
					0	No function (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

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					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
					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	Reserved	
19	17	20	18	20		Effects Speed	
						<i>Speed of CMY&CTO movement and Rot. Gobo/Static Gobo selection</i>	
					0-255	Speed of CMY+CTO movement from max. to min. (0=default)	proportional
					0-255	Speed of Rot. Gobo/Stat. Gobo selection from max. to min.	proportional

DMX protocol

Mode/channel					DMX Value	Function	Type of control					
1	2	3	4	5								
20	18	21	19	21		CMY+CTO+Colour wheels time						
					0	Function is off (0=default)	step					
					1 - 255	Time of CMY, CTO and Colour wheels movement (0.1sec-->25.5sec.)	proportional					
21	19	22	20	22		Static gobo wheel/ Framing shutters/Zoom/Focus/Iris/Frost/Prism time						
					0	Function is off (0=default)	step					
					1-255	Time of Static gobo movement (0.1 sec-->25.5 sec.)	proportional					
					1 - 255	Time of framing shutters, zoom, focus, iris and frost movement (0.1 sec-->25.5 sec.)	proportional					
					1-50	Time of prism movement (0.1 sec-->5 sec.)	proportional					
22	20	23	21	23		Effect wheel positioning						
					0-19	No function (0=default)	step					
					20-127	Proportional indexing (73-center)	proportional					
					128-170	Ramping from open to full position (max--->min. speed)	proportional					
					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					
23	21	24	22	24		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					
24	22	25	23	25		Effect wheel animations						
					0-7	No animation (0=default) <i>Note : Set suitable DMX value at Focus channel to get desired animation. All animations were created at distance of 5 m from screen with zoom=128 DMX, Focus value is different for each effect (focus value is stated in parentheses for this distance)</i> <i>The following channels are blocked: Effect wheel positioning, Effect wheel rotation,Static gobo wheel. Rotating gobo wheel, Rot. Gobo indexing and rotation, Rot. Gobo wheel fine rotation.</i>						
					8-9	Macro 1 (Focus=159)	step					
					10-11	Macro 2 (Focus=144)	step					
					12-13	Macro 3 (Focus=146)	step					
					14-15	Macro 4 (Focus=160)	step					
					16-17	Macro 5 (Focus=181)	step					
					18-19	Macro 6 (Focus=181)	step					
					20-21	Macro 7 (Focus=166)	step					
					22-23	Macro 8 (Focus=142)	step					
					24-25	Macro 9 (Focus=151)	step					
					26-27	Macro 10 (Focus=152)	step					
										28-255	Reserved	
					25	23	26	24	26		Static gobo wheel	
										0-8	Open/hole (0=default)	step
9-17	Gobo 1	step										
18-26	Gobo 2	step										
27-35	Gobo 3	step										
36-44	Gobo 4	step										
45-53	Gobo 5	step										
					54-62	Gobo 6	step					

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					63-71	Gobo 7	step
					72-80	Gobo 8	step
					81-91	Gobo 9	step
						<u>Shaking gobos from slow to fast</u>	
					92-103	Gobo 1	proportional
					104-115	Gobo 2	proportional
					116-127	Gobo 3	proportional
					128-139	Gobo 4	proportional
					140-151	Gobo 5	proportional
					152-163	Gobo 6	proportional
					164-175	Gobo 7	proportional
					176-187	Gobo 8	proportional
					188-199	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 <i>(Set microphone sensitivity in menu „Personality“)</i>	step
					250 - 255	Auto random gobo selection from fast to slow	proportional
26	24	27	25	*		Rotating gobo wheel	
						<i>Index - set indexing on channel 27/25/28/26</i>	
					0-3	Open/hole (0=default)	step
					4-7	Gobo 1	step
					8-11	Gobo 2	step
					12-15	Gobo 3	step
					16-19	Gobo 4	step
					20-23	Gobo 5	step
					24-27	Gobo 6	step
					28-31	Gobo 7	step
						<i>Rotation - set rotation on channel 27/25/28/26</i>	
					32-35	Gobo 1	step
					36-39	Gobo 2	step
					40-43	Gobo 3	step
					44-47	Gobo 4	step
					48-51	Gobo 5	step
					52-55	Gobo 6	step
					56-59	Gobo 7	step
						<u>Shaking gobos from slow to fast</u>	
						<i>Index - set indexing on channel 27/25/28/26</i>	
					60 - 69	Gobo 1	proportional
					70 - 79	Gobo 2	proportional
					80 - 89	Gobo 3	proportional
					90 - 99	Gobo 4	proportional
					100 - 109	Gobo 5	proportional
					110 - 119	Gobo 6	proportional
					120 - 129	Gobo 7	proportional
						<u>Shaking gobos from slow to fast</u>	
						<i>Rotation - set rotation on channel 27/25/28/26</i>	

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					130 - 139	Gobo 1	proportional
					140 - 149	Gobo 2	proportional
					150 - 159	Gobo 3	proportional
					160 - 169	Gobo 4	proportional
					170 - 179	Gobo 5	proportional
					180 - 189	Gobo 6	proportional
					190 - 199	Gobo 7	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 (Set microphone sensitivity in menu „Personality“)	step
					250 - 255	Auto random gobo selection from fast to slow	proportional
*	*	*	*	27		Rotating gobo wheel	
						<i>Index - set indexing on channel 29</i>	
					0-3	Open/hole (0=default)	step
					4-7	Gobo 1	step
					8-11	Gobo 2	step
					12-15	Gobo 3	step
					16-19	Gobo 4	step
					20-23	Gobo 5	step
					24-27	Gobo 6	step
					28-31	Gobo 7	step
						<i>Rotation - set rotation on channel 29</i>	
					32-35	Gobo 1	step
					36-39	Gobo 2	step
					40-43	Gobo 3	step
					44-47	Gobo 4	step
					48-51	Gobo 5	step
					52-55	Gobo 6	step
					56-59	Gobo 7	step
						Continual positioning	
						<i>Max. transition time between two adjacent gobos is 35 sec.</i>	
						<i>Index - set indexing on channel 29</i>	
					60	Open/hole	proportional
					68	Gobo 1	proportional
					76	Gobo 2	proportional
					84	Gobo 3	proportional
					92	Gobo 4	proportional
					100	Gobo 5	proportional
					108	Gobo 6	proportional
					116	Gobo 7	proportional
					124	Open/hole	proportional
						Continual positioning	
						<i>Max. transition time between two adjacent gobos is 35 sec.</i>	
						<i>Rotation - set rotation on channel 29</i>	
					125	Open/hole	proportional
					133	Gobo 1	proportional

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					141	Gobo 2	proportional
					149	Gobo 3	proportional
					157	Gobo 4	proportional
					165	Gobo 5	proportional
					173	Gobo 6	proportional
					181	Gobo 7	proportional
					189	Open/hole	proportional
					190-201	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 (Set microphone sensitivity in menu „Personality“)	step
					250 - 255	Auto random gobo selection from fast to slow	proportional
*	*	*	*	28		Rotating gobo wheel - fine positioning	
					0 - 255	Fine positioning (0=default)	proportional
27	25	28	26	29		Rot. gobo indexing and rotation	
						<i>Gobo indexing - set position on channel 26/24/27/25/27</i>	
					0 - 255	Gobo indexing (128=default)	proportional
						<i>Gobo rotation - set position on channel 26/24/27/25/27</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
28	*	29	*	30		Rot. gobo indexing/rotation - fine	
					0-255	Fine indexing/rotation (0=default)	proportional
29	26	30	27	31		Prism	
					0 - 19	Open position - hole (0=default)	step
					20 - 73	Prism indexing	step
					74-127	Prism rotation	step
						Prism/gobo macros <i>The following channels are blocked: Prism, Prism rotation, Static gobo wheel, Rotating gobo wheel, Rot. Gobo indexing and rotation, Rot. Gobo wheel fine rotation.</i>	
					128 - 135	Macro 1	step
					136 - 143	Macro 2	step
					144 - 151	Macro 3	step
					152 - 159	Macro 4	step
					160 - 167	Macro 5	step
					168 - 175	Macro 6	step
					176 - 183	Macro 7	step
					184 - 191	Macro 8	step
					192 - 199	Macro 9	step
					200 - 207	Macro 10	step
					208 - 215	Macro 11	step
					216 - 223	Macro 12	step
					224 - 231	Macro 13	step
					232 - 239	Macro 14	step
					240 - 247	Macro 15	step

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
					248 - 255	Macro 16	step
30	27	31	28	32		Prism indexing/rotation	
						<i>Prism indexing - set position on channel 29/26/30/27/31</i>	
					0 - 255	Prism 1 indexing	proportional
						<i>Prism rotation - set position on channel 29/26/30/27/31</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
31	28	32	29	33		Frost	
					0	Open (0=default)	step
						<i>Light Frost</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
						<i>Medium Frost</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
						<i>Combined Frost</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	29	33	30	34		Iris	
					0	Open (0=default)	step
					1 - 179	From max. diameter to min. diameter	proportional
					180 - 191	Closed	step
						<i>Pulse effects with Iris blackout</i>	
					192 -219	Pulse opening from slow to fast	proportional
					220 - 247	Pulse closing from fast to slow	proportional
					248 - 249	Random pulse opening (fast)	step
					250 - 251	Random pulse opening (slow)	step
					252 - 253	Random pulse closing (fast)	step
					254 - 255	Random pulse closing (slow)	step
33	*	34	*	35		Iris - fine	
					0 - 255	Fine iris movement (0=default)	proportional
34	30	35	31	36		Zoom	
					0 - 255	Zoom from max. to min. beam angle (128=default)	proportional
35	*	36	*	37		Zoom - fine	
					0-255	Fine zooming (0=default)	proportional

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
36	31	37	32	38		Focus	
					0 - 255	Continuous adjustment from far to near (128=default)	proportional
37	*	38	*	39		Focus - fine	
					0- 255	Fine focusing (0=default)	proportional
38	32	39	33	40		Framing shutters module rotation	
					0-127	Rotation from right (0°) to 60°	proportional
					128	Centre (128=default)	step
					129-255	Rotation from 60° to left (120°)	proportional
39	33	40	34	41		Framing shutter 1- movement	
					0-255	Movement from Outward to Inward (0=default)	proportional
40	34	41	35	42		Framing shutter 1- swivelling	
					0-127	Swivelling from -30 degrees towards 0 degrees	proportional
					128	0 degrees (128=default)	step
					129-255	Swivelling from 0 degrees to +30 degrees	proportional
41	35	42	36	43		Framing shutter 2- movement	
					0-255	Movement from Outward to Inward (0=default)	proportional
42	36	43	37	44		Framing shutter 2- swivelling	
					0-127	Swivelling from -30 degrees towards 0 degrees	proportional
					128	0 degrees (128=default)	step
					129-255	Swivelling from 0 degrees to +30 degrees	proportional
43	37	44	38	45		Framing shutter 3 movement	
					0-255	Movement from Outward to Inward (0=default)	proportional
44	38	45	39	46		Framing shutter 3- swivelling	
					0-127	Swivelling from -30 degrees towards 0 degrees	proportional
					128	0 degrees (128=default)	step
					129-255	Swivelling from 0 degrees to +30 degrees	proportional
45	39	46	40	47		Framing shutter 4 movement	
					0-255	Movement from Outward to Inward (0=default)	proportional
46	40	47	41	48		Framing shutter 4- swivelling	
					0-127	Swivelling from -30 degrees towards 0 degrees	proportional
					128	0 degrees (128=default)	step
					129-255	Swivelling from 0 degrees to +30 degrees	proportional
47	41	48	42	49		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	step
48	42	49	43	50		Dimmer intensity	
					0 - 255	Dimmer intensity from 0% to 100% (0=default)	proportional
49	*	50	*	51		Dimmer intensity - fine	
					0 - 255	Fine dimming (0=default)	proportional

DMX protocol

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
All Specifications subject to change without notice							

Robin Esprite - Colours on Virtual Colour Wheel						
Colour name	Col. Wheel 1 DMX	Col. Wheel 2 DMX	Cyan DMX	Magenta DMX	Yellow DMX	CTO DMX
Filter 4 (Medium Bastard Amber)	0	0	0	134	150	225
Filter 10 (Medium Yellow)	0	0	0	45	210	255
Filter 19 (Fire)	154	0	0	210	0	0
Filter 26 (Bright Red)	130	0	0	45	255	90
Filter 58 (Lavender)	0	0	10	205	93	101
Filter 68 (Sky Blue)	0	154	165	120	0	0
Filter 71 (Tokyo Blue)	144	0	0	0	0	0
Filter 79 (Just Blue)	0	154	165	135	0	0
Filter 88 (Lime Green)	0	142	0	90	0	225
Filter 90 (Dark Yellow Green)	0	142	201	0	147	0
Filter 100 (Spring Yellow)	0	0	0	0	210	165
Filter 101 (Yellow)	0	0	0	75	210	255
Filter 102 (Light Amber)	0	0	0	60	165	240
Filter 103 (Straw)	0	0	0	0	150	240
Filter 104 (Deep Amber)	0	0	0	150	225	210
Filter 105 (Orange)	0	0	0	195	240	150
Filter 106 (Primary Red)	154	0	0	240	0	15
Filter 111 (Dark Pink)	0	0	0	182	164	255
Filter 115 (Peacock Blue)	0	0	246	0	185	0
Filter 116 (Medium Blue-Green)	0	0	239	0	193	0
Filter 117 (Steel Blue)	0	0	180	90	165	15
Filter 118 (Light Blue)	0	0	225	0	165	30
Filter 119 (Dark Blue)	0	0	255	120	0	0
Filter 120 (Deep Blue)	0	154	255	30	0	105
Filter 121 (Filter Green)	0	142	135	0	210	0
Filter 128 (Bright Pink)	0	0	52	235	194	113
Filter 131 (Marine Blue)	0	0	210	15	135	30
Filter 132 (Medium Blue)	0	0	240	0	15	105
Filter 134 (Golden Amber)	0	0	49	201	237	28
Filter 135 (Deep Golden Amber)	0	0	49	223	254	40
Filter 136 (Pale Lavender)	0	0	64	198	131	0
Filter 137 (Special Lavender)	0	0	34	159	112	0
Filter 138 (Pale Green)	0	0	120	81	201	50
Filter 139 (Primary Green)	166	0	0	0	0	240
Filter 141 (Bright Blue)	0	0	240	0	45	195
Filter 147 (Apricot)	0	0	0	182	221	0
Filter 148 (Bright Rose)	0	0	0	225	217	0
Filter 152 (Pale Gold)	0	0	57	190	204	0
Filter 154 (Pale Rose)	0	0	57	185	189	67
Filter 157 (Pink)	0	0	59	224	223	0
Filter 158 (Deep Orange)	0	0	0	220	255	0
Filter 162 (Bastard Amber)	0	0	0	165	195	0
Filter 164 (Flame Red)	154	0	0	240	30	195
Filter 165 (Daylight Blue)	0	0	210	0	0	75
Filter 169 (Lilac Tint)	0	0	87	202	169	0

Colour name	Col. Wheel 1 DMX	Col. Wheel 2 DMX	Cyan DMX	Magenta DMX	Yellow DMX	CTO DMX
Filter 170 (Deep Lavender)	0	0	98	200	133	0
Filter 172 (Lagoon Blue)	0	0	225	30	135	15
Filter 179 (Chrome Orange)	0	0	57	190	240	0
Filter 180 (Dark Lavender)	0	0	175	185	0	0
Filter 181 (Congo Blue)	0	0	195	225	0	15
Filter 197 (Alice Blue)	0	154	225	0	0	60
Filter 201 (Full C.T. Blue)	0	0	180	0	105	60
Filter 202 (Half C.T. Blue)	0	0	168	0	37	118
Filter 203 (Quarter C.T. Blue)	0	0	135	45	120	0
Filter 204 (Full C.T. Orange)	0	0	0	195	240	30
Filter 205 (Half C.T. Orange)	0	0	90	180	210	0
Filter 206 (Quarter C.T. Orange)	0	0	0	165	163	30
Filter 247 (Filter Minus Green)	0	0	0	184	131	20
Filter 248 (Half Minus Green)	0	0	48	134	110	24
Filter 281 (Three Quarter C.T. Blue)	0	0	180	0	105	120
Filter 285 (Three Quarter C.T. Orange)	0	0	0	173	234	90
Filter 352 (Glacier Blue)	0	0	210	0	105	60
Filter 353 (Lighter Blue)	0	0	220	0	144	0
Filter 715 (Cabana Blue)	0	154	255	0	0	105
Filter 778 (Millennium Gold)	0	0	0	215	255	0
Filter 793 (Vanity Fair)	0	0	15	225	0	255

Robin Esprite - CTO DMX values

Colour temperature (K)	DMX value	
	HP module	HCF module
2200	*	255
2800	*	224
3000	255	208
3200	213	197
3600	182	183
4000	160	131
4500	131	95
4800	115	73
5000	103	59
5600	67	17
5800	54	0
6000	41	*
6500	0	*

Note: zoom 128DMX