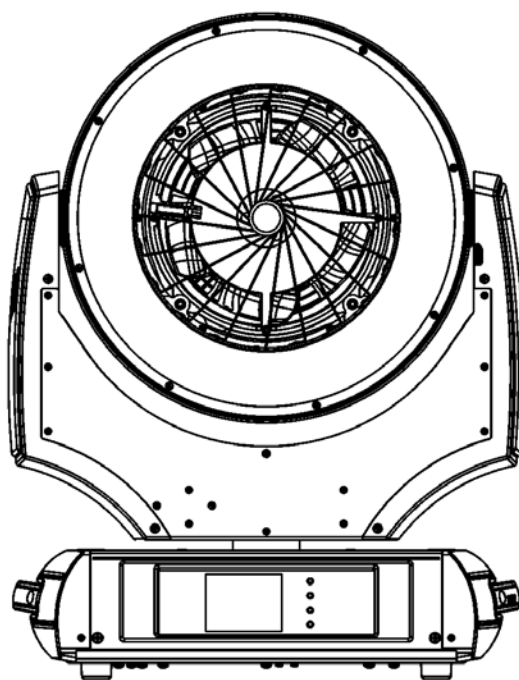

ROBE

ROBIN[®] Cyclone

ROBIN[®] Cyclone

Wireless DMX

CRMX[™]



 **ROBIN[®]**
Innovative Technology

USER MANUAL

Version 1.3

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

Robin Cyclone

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**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE POWERING OR INSTALLING YOUR ROBIN Cyclone !**

Save it for future reference.

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.

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

1. Safety instructions

DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT!

Make sure that the available voltage is not higher than stated on the rear panel of the fixture. This fixture should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized distributor or local power company.

Always disconnect the fixture from AC power before cleaning, removing or installing the fuses, or any part.

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

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

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

Refer servicing to qualified service personnel.

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

Do not connect this fixture to a dimmer pack.

LED light emission. Risk of eye injury. Do not look into the beam at a distance of less than 1 meter from the front surface of the product. Do not view the light output with optical instruments or any device that may concentrate the beam

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

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

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

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

Secure the blowed objects so that they cannot slide or fall, even if air pressure during full speed operation of the Robin Cyclone is present.

The openings for fixture cooling should never be covered with cloth or other materials, and never must be blocked.

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

Always use a secondary safety wire for over head installation of this fixture.

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

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

The fixture becomes hot during operation. Allow the fixture to cool approximately 10 minutes prior to manipulate with it.

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

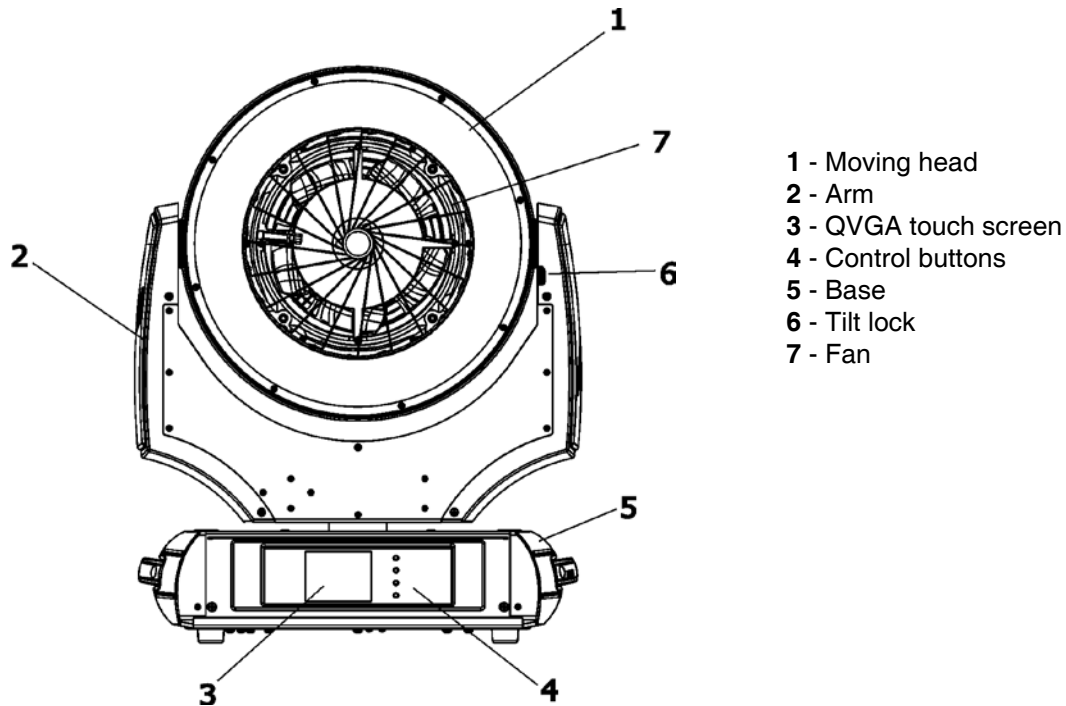
Please use the original packaging if the fixture is to be transported.

Please consider that unauthorized modifications on the fixture 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, crash etc.

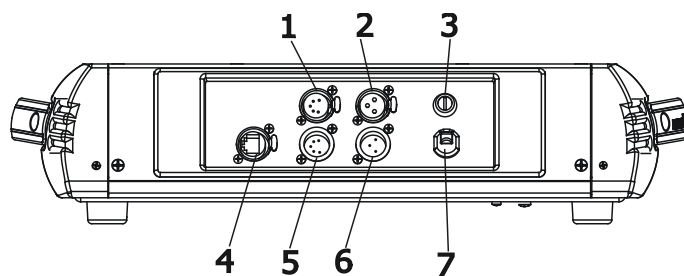
Never allow any object or part of your body to enter the path of the fan blades, and ensure that clothing, cables or other items cannot be sucked into the fan. Position the fan well out of reach of members of the public.

2. Fixture exterior view



The head should be locked for transportation- the tilt lock latch (6) has to be in the locked positions. To unlock the head, move this latch to unlock position before operating the fixture.

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



Rear panel of the base

- 1 - 5-pin DMX IN
- 2 - 3-pin DMX IN
- 3 - Fuse holder
- 4 - Ethernet input
- 5 - 5-pin DMX OUT
- 6 - 3-pin DMX OUT
- 7 - Power cord

3. Installation



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

3.1 Connection to the mains

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

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

Install a suitable plug on the power cord, note that the cores in the power cord are coloured according to the following table. The earth has to be connected!

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	

3.2 Rigging the fixture

The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

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 an expert after every four year in the course of an acceptance test.

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

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

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE, including (but not limited to) 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 instead use a professional structural rigger. Improper installation can result in bodily injury or damage to property. The fixture has to be installed out of the reach of people.

If the fixture shall be lowered from the ceiling or high joists, professional trussing systems have to be used. The fixture must never be fixed swinging freely in the room.

Caution: Fixture may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the moving head!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the fixture's weight.

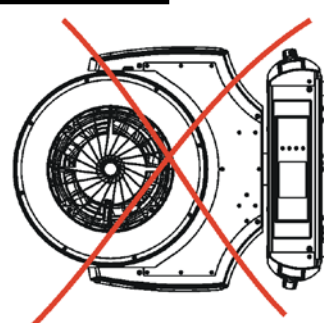
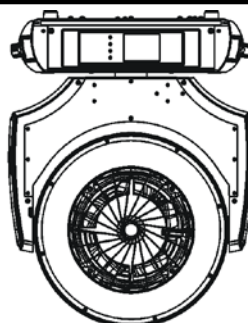
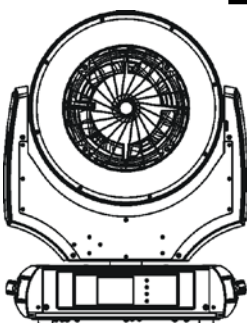
When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 0.5 m.

CAUTION!

Use an appropriate clamp to rig the fixture on the truss. 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 only directly on the stage floor or rigged upside down on a truss without altering its operation characteristics.

Never rig the fixture in the side position!



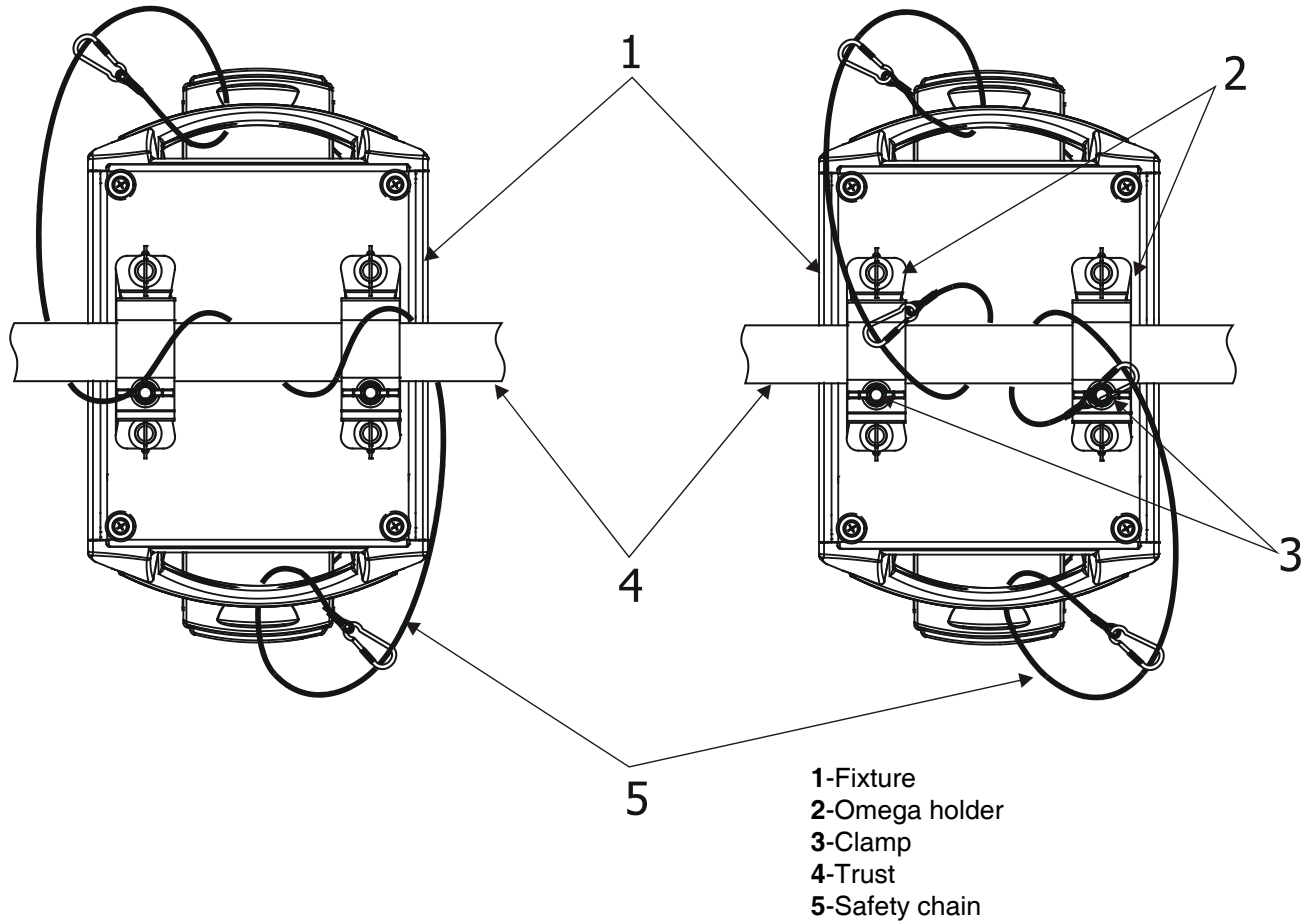
For securing a fixture to the truss install a safety wire that can hold at least 10 times the weight of the fixture. Use only safety wire with screw-on carabine. Pull the safety wire through the carrying handles and around the truss as shown on the pictures below.

Note: If the safety wire is too long, whip it several times around the truss in order to attach the fixture tight. In case of an accident, the way of the falling fixture will be short.

Rigging via two Omega holders

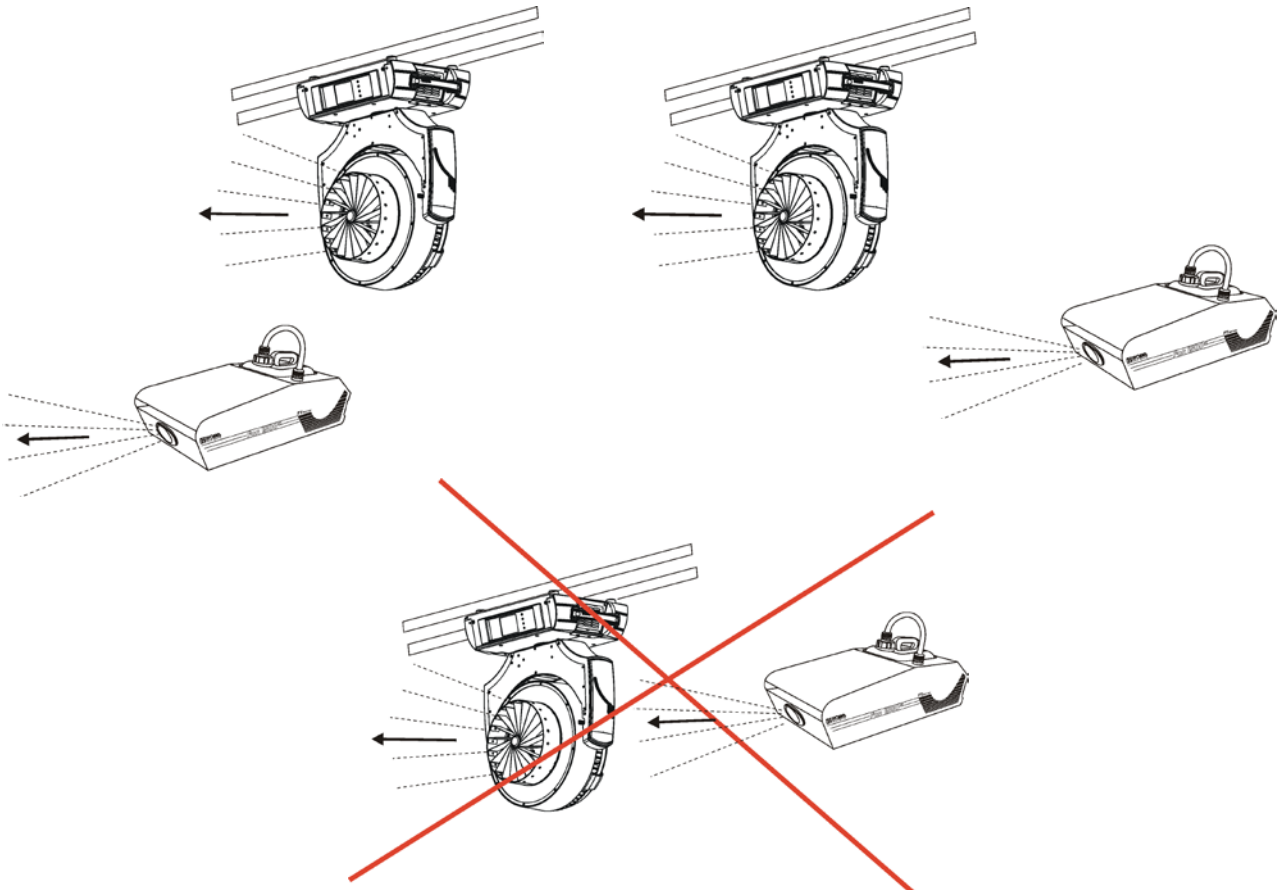
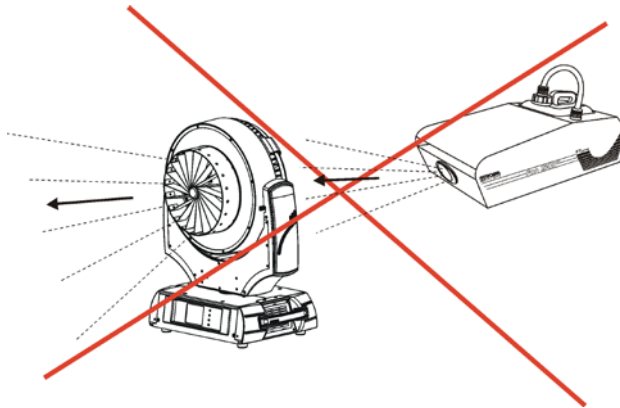
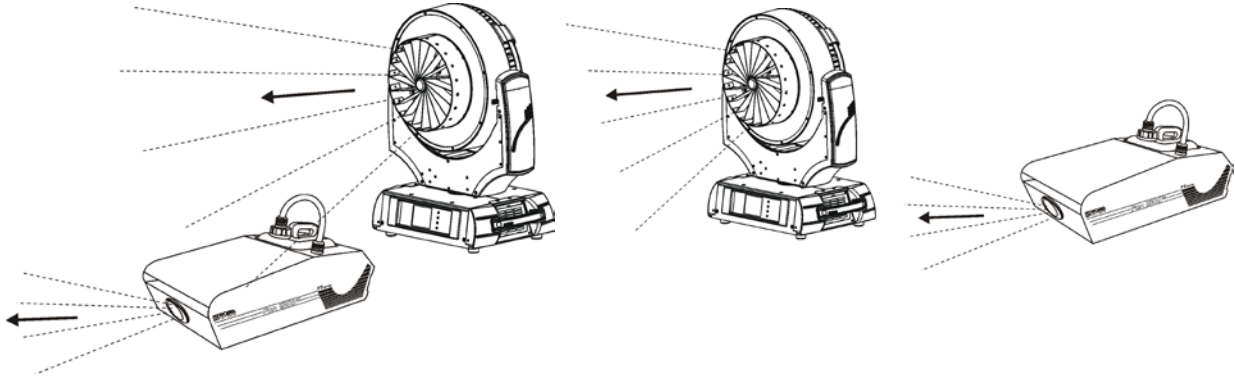
Securing the fixture using one safety wire

Securing the fixture using two safety wires



3.3 Operating the Robin Cyclone with smoke machines

When using the Robin Cyclone in combination with a smoke machine, fog machine or hazer, **place the fixture behind the machine or aside the direct output from the machine**, as shown on the pictures below. Do not place the fixture in front of the machine and direct the output from the machine into the fixture, as this will cause undesirable moisture and residue build-up.



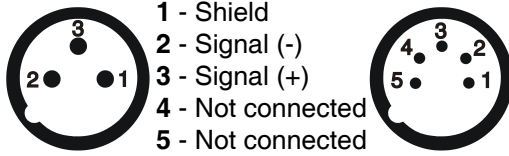
3.4 DMX-512 connection

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.

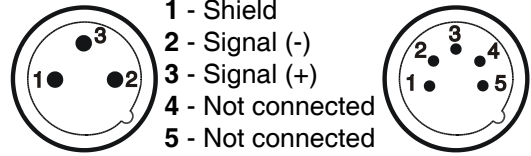
DMX - output

XLR mounting-sockets (rear view):



DMX-input

XLR mounting-plugs (rear view):

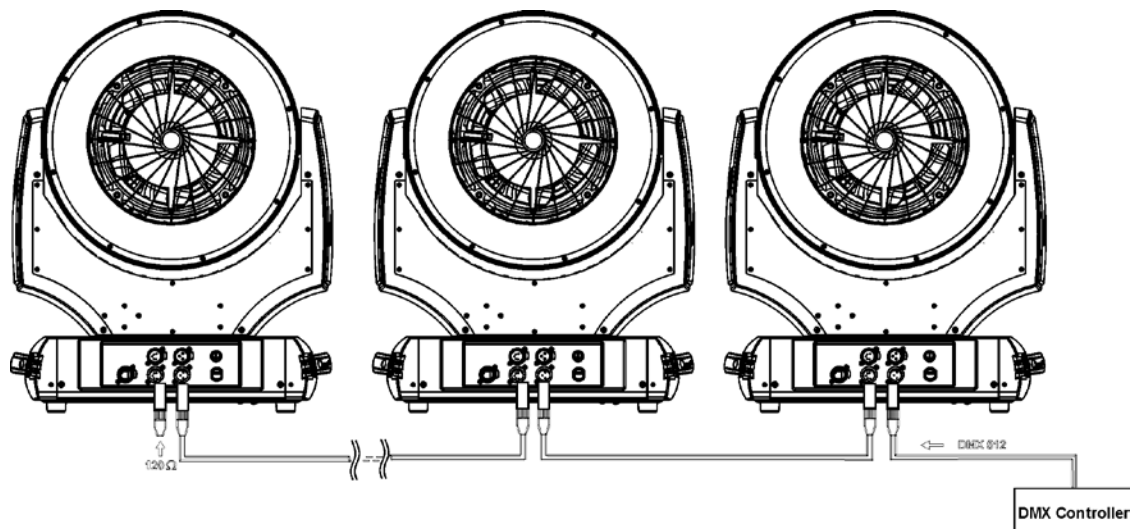


If you are using the standard DMX controllers, you can connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX chain. If you wish to connect DMX controllers with other XLR-outputs, you need to use adapter cables.

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.

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 (5-pin) XLR-plug and plug it in the DMX-output of the last fixture.



3.5 Ethernet connection

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

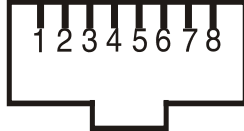
Art-Net communication protocol is a 10 Base T Ethernet protocol based on the TCP/IP. Its purpose is to allow transfer of large amounts of DMX 512 data over a wide area using standard network technology.

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.

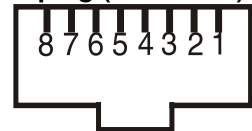
The Robin 300E Wash is equipped with 8-pin RJ-45 socket for Ethernet input. Use a network cable category 5 (with four "twisted" wire pairs) and standard RJ-45 plugs in order to connect the fixture to the network.

RJ-45 socket (front view):



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

RJ-45 plug (front view):




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

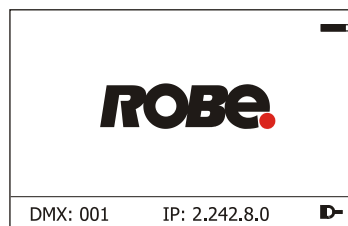
1-1	2-2	3-3	4-4	5-5	6-6	7-7	8-8
-----	-----	-----	-----	-----	-----	-----	-----

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

A cross-cable has to be used:

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

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



Direct Ethernet operation

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

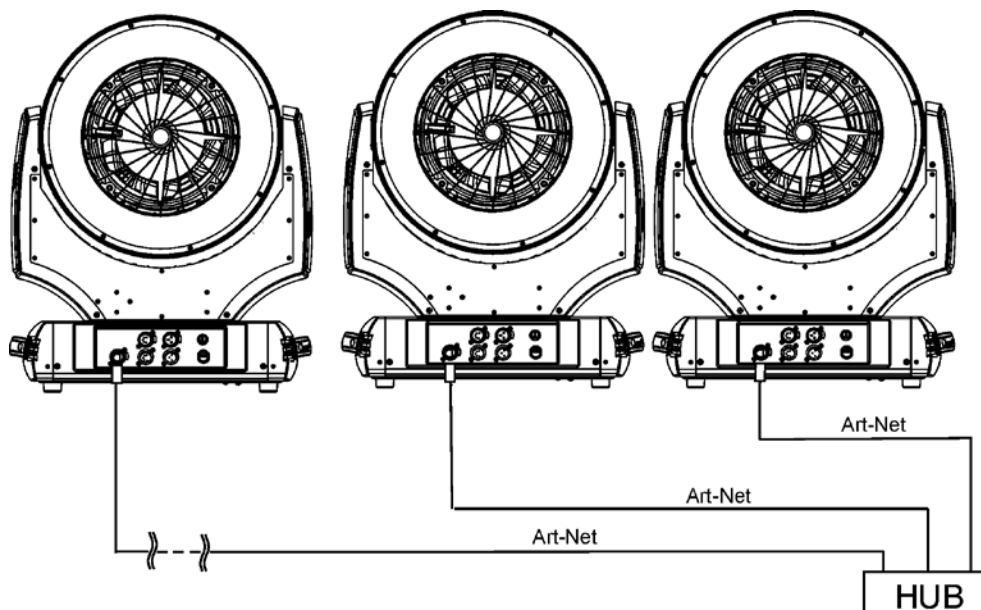
Option "Artnet (gMa1 or gMa2)" has to be selected from "Ethernet Mode" menu on the fixture.

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

(DMX address=46)
IP address=002.168.002.004
Universe=1

(DMX address=17)
IP address=002.168.002.003
Universe=1

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



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

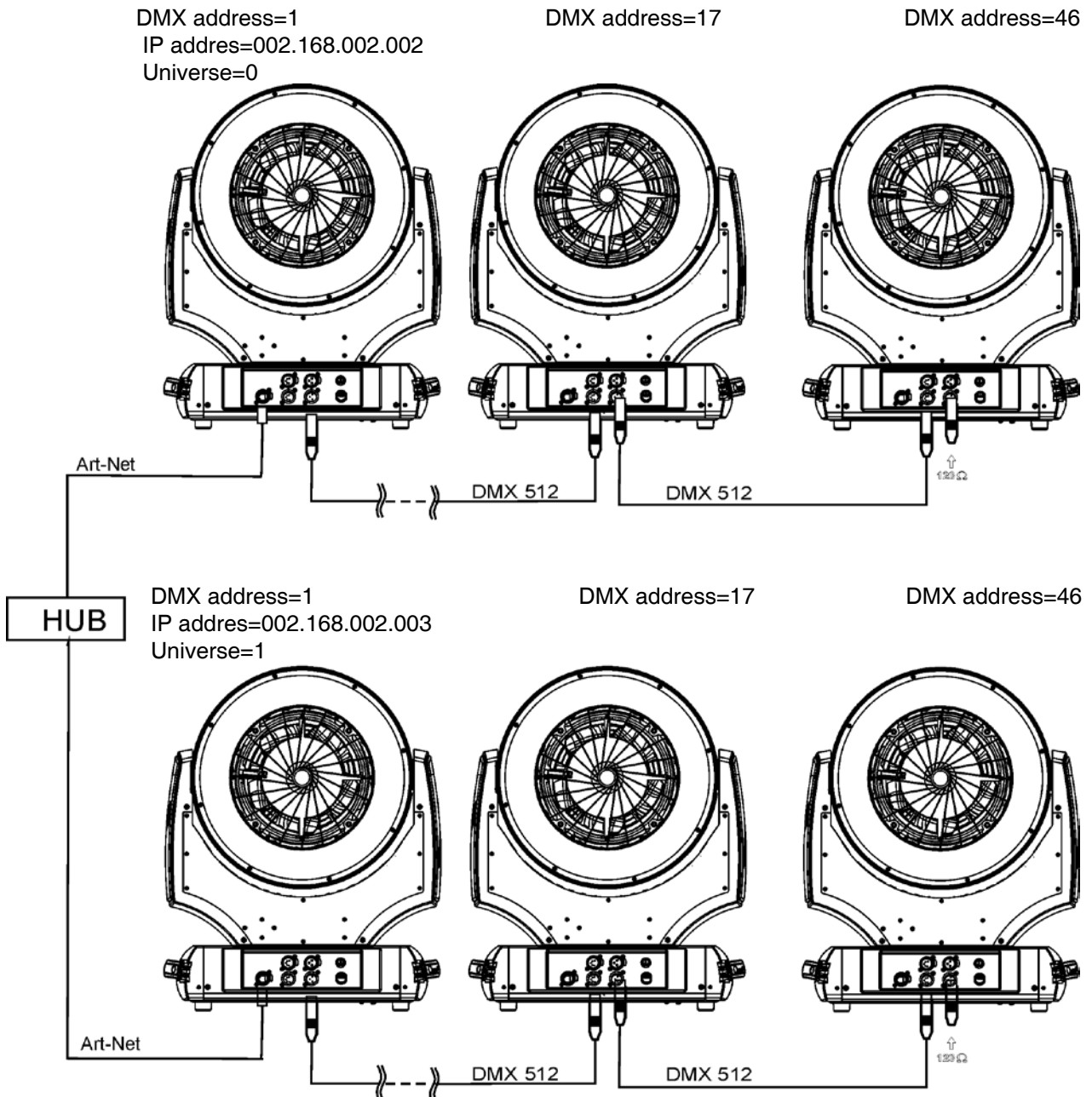
Ethernet / DMX operation

Option "Art2DMX" has to be selected from the "Ethernet Mode" menu on 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. Control menu map

Default settings=Bold print

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
Addressing	Settings	DMX Address	001-255			
		Ethernet Settings	Ethernet Mode	Disable		
				ArtNet		
				gMA1		
				gMA2		
				Art2DMX		
			IP Address/NetMask	Default IP Address		
				Custom IP Address		
				Net Mask		
			ArtNet Universe	0-255		
			MANet settings	MANet I/IIUniverse	1-256	
				MANet Session ID	1-32	
Information	Fixture Times	Power On Time	Total Hours			
			Resetable Hours			
		Air Filters	Elapsed Time			
			Alert Period	10-300		
	Fixture Temperatures	LEDs Temperature	Current			
			Maximum NonRes.			
			Maximum Res.			
		AmbientTemperature	Current			
			Maximum NonRes.			
			Maximum Res.			
		Base Temperature	Current			
			Maximum NonRes.			
			Maximum Res.			
	DMX Values	Pan				
		:				
		Dimmer Fine				
	Wireless State*	Signal Quality				
		Unlink Wireless Adapter				
	Software Versions	Display System				
		Module M				
		Module DR				
		Module L				
		Wireless				
	Product IDs	Mac Address				
		RDM UID				
		RDM Label				
	View Logs	Fixture Errors				
		Fixture Status	Power On			
			Power Off			
		Fixture Position				
		Fixture Temperatures	LEDs Temperature			
			Ambient Temperature			
			Base Temperature			
Personality	User Mode	User A Settings				
		User B Settings				
		User C Settings				
	DMX Presets	Mode 1				
		Mode 2				

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		Mode 3				
		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			
	Microphone Sensitivity	1-10-20				
	Blackout Settings	Blackout During M.C.	Off, On			
		Blackout while:	Pan/Tilt moving	Off, On		
	Colour Mixing mode	RGBW, CMY				
	Dimmer Curve	Linear				
		Theatrical				
	Zoom Mode	Beam				
		Wash				
	Colour Calibration Mode	Off, On				
	Init Effect Positions	Pan	0-255			
		:				
		Dimmer Fine	0-255			
	Screen Settings	Display Intensity	1-10			
		Screen Saver Delay	Off-10min.			
		Touchscreen Lock	Off-10min.			
		Recalibrate Touchscreen				
		Display Orientation	Normal			
			Inverted			
			Auto			
	Temperature Unit	°C, °F				
	Fan Mode	Auto				
		High				
	Date & Time Settings					
	Default Settings					
Manual Control	Reset Functions	Total System Reset				
		Pan/Tilt reset				
		Zoom Reset.				
	Preset Effect Control	Pan	Position 1-Position 5			
		:				
		Dimmer	Position 1- Position 5			
	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		
	MusicTrigger	Off, On				
	Preset Playback	None				
		Test				

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		:				
		Prog. 3				
	Play Program	Play Program 1				
		Play Program 2				
		Play Program 3				
	Edit Program	Edit Program 1	Start Step	1-100		
			End Step	1-100		
			Edit Program Steps	Step 1	Pan (0-255)	
				:	:	
				:	Dimmer Fine (0-255)	
				:	Step Time (0-25.5s)	
				Step 100	Pan (0-255)	
					:	
					Dimmer Fine (0-255)	
					Fade Time (0-25.5s)	
Service	Adjust DMX Values	Pan	0-255			
		:				
		Dimmer Fine	0-255			
	Calibrations	Calibrate Effects	Pan	0-255		
			Tilt	0-255		
		Calibrate colours	Red	0-255		
			Green	0-255		
			Blue	0-255		
			White	0-255		
		Temperarure Calibration				
		Load Default Calibra-tions				
	Update Software					

5. Robin Cyclone - DMX chart

Version 1.1

Mode/Channel			Value	Function	Type of control
1	2	3			
1	1	1	0-255	Pan (8 bit) Pan movement by 450°	proportional
-	2	2	0-255	Pan Fine (16 bit) Fine control of pan movement	proportional
2	3	3	0-255	Tilt (8bit) Tilt movement by 300°	proportional
-	4	4	0-255	Tilt fine (16 bit) Fine control of tilt movement	proportional
3	5	5	0	Pan/Tilt speed, Pan/Tilt time Standard Mode	step
			1	Max. Speed mode	
			2 - 255	<u>Pan/Tilt speed</u> Speed from max. to min.	proportional
			2 - 255	<u>Pan/Tilt time</u> Time from 0.2 s to 25.5 s.	proportional
4	6	6	0 - 9	Special functions Reserved <i>To activate following functions , stop in DMX value for at least 3sec. and shutter must be closed at least 3sec. (Shutter channel 15/22 must be at range of 0-31DMX). Corresponding menu items are temporarily overrided except DMX Input.</i>	
			10 - 14	DMX input: Wired DMX *	step
			15 - 19	DMX input: Wireless DMX*	step
				* function is active only 10 seconds after switching the fixture on	
			20 - 49	Reserved	
			50 - 59	Pan/Tilt speed mode	step
			60 - 69	Pan/Tilt time mode	step
			70 - 79	Blackout while pan/tilt moving	step
			80 - 89	Disabled blackout while pan/tilt moving	step
			90 - 139	Reserved <i>To activate following reset function, stop in DMX value for at least 3 sec.</i>	
			140 - 149	Pan/Tilt reset	step
			150 - 179	Reserved	
			180 - 189	Zoom reset	step
			190 - 199	Reserved	
			200 - 209	Total reset	step
			210 - 255	Reserved	
5	7	7	0 1-255	Fan speed Rotation=off Fan speed min.->max..	step proportional
6	8	8	0-255	Red (8 bit) - all pixels Red LEDs saturation control (0-100%)	proportional
-	9	9	0-255	Red fine(16 bit) - all pixels Fine red LEDs saturation control	proportional
7	10	10	0-255	Green (8 bit) - all pixels Green LEDs saturation control (0-100%)	proportional
-	11	11	0-255	Green fine (16 bit) - all pixels Fine green LEDs saturation control	proportional
8	12	12	0-255	Blue (8 bit) - all pixels Blue LEDs saturation control (0-100%)	proportional
-	13	13	0-255	Blue fine (16 bit) - all pixels Fine blue LEDs saturation control	proportional

Mode/Channel			Value	Function	Type of control
1	2	3			
9	14	14	0-255	White (8 bit) - all pixels White LEDs saturation control (0-100%)	proportional
-	15	15	0-255	White fine (16 bit) - pixels Fine white LEDs saturation control	proportional
10	16	16	0 1-255	CTO No function Colour temperature correction from 15500K to 2700K	step proportional
11	17	17	0 1-2 3 4-5 6 7-9 10-12 13-15 16 17-55 56 57 - 95 96 97 - 134 135 136 - 174 175 176 - 214 215 216 - 246 247 248-251 252-255	Virtual Colour Wheel For detailed description see " Virtual colour wheel- colour mixing chart No function White 2700 K White 2700 K (tungsten emulation**) White 3200 K White 3200 K (tungsten emulation**) White 4200 K White 5600 K White 8000 K Blue (Blue=full, Red+Green+White=0) Red=0, Green->up, Blue =full, White=0 Light Blue (Red=0, Green=full, Blue =full, White=0) Red=0, Green=full, Blue->down, White=0 Green (Red=0, Green=full, Blue =0, White=0) Red->up, Green=full, Blue=0, White=0 Yellow (Red=full, Green=full, Blue=0, White=0) Red=full, Green->down, Blue=0, White=0 Red(Red=full, Green=0, Blue=0, White=0) Red=full, Green=0, Blue->up, White=0 Magenta (Red=full, Green=0, Blue=full, White=0) Red -> down, Green=0, Blue=full, White=0 Blue (Red=0, Green=0, Blue=full, White=0) Rainbow effect(with fade time) from min.->max. speed Rainbow effect (without fade time) from min.->max.	step step step step step step step step step proportional step proportional step proportional step proportional step proportional step proportional step proportional proportional
12	18	18		Pixel effects <i>See table below</i>	
13	19	19	0-63 64-127 128-191 192-255	Pixel effects speed Speed from min. —>max. without fade time Speed from max. —>min. without fade time (op. direc.) Speed from min. —>max. with fade time Speed from max. —>min. with fade time (op. direc.)	proportional proportional proportional proportional
14	20	20	0 - 255	Zoom (8 bit) Zoom from min. to max. beam angle	proportional proportional
-	21	21	0 - 255	Zoom fine (16 bit) Fine zooming from min. to max.	proportional
15	22	22	0-31 32-63 64-95 96-127 128-143 144-159 160-191 192-223 224-255	Shutter/Strobe Shutter closed Shutter open Strobe effect from slow--> fast Shutter open Opening pulses in sequences from slow--> fast Closing pulses in sequences from fast--> slow Shutter open Random strobe effect from slow--> fast Shutter open	step step proportional step proportional proportional step proportional step

Mode/Channel			Value	Function	Type of control
1	2	3			
16	23	23	0-255	Dimmer (8 bit) Dimmer intensity from 0% to 100%	proportional
-	24	24	0-255	Dimmer fine (16 bit) Fine dimming	proportional
-	-	25	0-255	Red pixel 1 Red LEDs saturation control (0-100%)	proportional
-	-	26	0-255	Green pixel 1 Green LEDs saturation control (0-100%)	proportional
-	-	27	0-255	Blue pixel 1 Blue LEDs saturation control (0-100%)	proportional
-	-	28	0-255	Red pixel 2 Red LEDs saturation control (0-100%)	proportional
-	-	29	0-255	Green pixel 2 Green LEDs saturation control (0-100%)	proportional
-	-	30	0-255	Blue pixel 2 Blue LEDs saturation control (0-100%)	proportional
-	-	31	0-255	Red pixel 3 Red LEDs saturation control (0-100%)	proportional
-	-	32	0-255	Green pixel 3 Green LEDs saturation control (0-100%)	proportional
-	-	33	0-255	Blue pixel 3 Blue LEDs saturation control (0-100%)	proportional
-	-	34	0-255	Red pixel 4 Red LEDs saturation control (0-100%)	proportional
-	-	35	0-255	Green pixel 4 Green LEDs saturation control (0-100%)	proportional
-	-	36	0-255	Blue pixel 4 Blue LEDs saturation control (0-100%)	proportional
-	-	37	0-255	Red pixel 5 Red LEDs saturation control (0-100%)	proportional
-	-	38	0-255	Green pixel 5 Green LEDs saturation control (0-100%)	proportional
-	-	39	0-255	Blue pixel 5 Blue LEDs saturation control (0-100%)	proportional
-	-	40	0-255	Red pixel 6 Red LEDs saturation control (0-100%)	proportional
-	-	41	0-255	Green pixel 6 Green LEDs saturation control (0-100%)	proportional
-	-	42	0-255	Blue pixel 6 Blue LEDs saturation control (0-100%)	proportional
-	-	43	0-255	Red pixel 7 Red LEDs saturation control (0-100%)	proportional
-	-	44	0-255	Green pixel 7 Green LEDs saturation control (0-100%)	proportional
-	-	45	0-255	Blue pixel 7 Blue LEDs saturation control (0-100%)	proportional
-	-	46	0-255	Red pixel 8 Red LEDs saturation control (0-100%)	proportional
-	-	47	0-255	Green pixel 8 Green LEDs saturation control (0-100%)	proportional
-	-	48	0-255	Blue pixel 8 Blue LEDs saturation control (0-100%)	proportional

Mode/Channel			Value	Function	Type of control
1	2	3			
-	-	49	0-255	Red pixel 9 Red LEDs saturation control (0-100%)	proportional
-	-	50	0-255	Green pixel 9 Green LEDs saturation control (0-100%)	proportional
-	-	51	0-255	Blue pixel 9 Blue LEDs saturation control (0-100%)	proportional
-	-	52	0-255	Red pixel 10 Red LEDs saturation control (0-100%)	proportional
-	-	53	0-255	Green pixel 10 Green LEDs saturation control (0-100%)	proportional
-	-	54	0-255	Blue pixel 10 Blue LEDs saturation control (0-100%)	proportional
-	-	55	0-255	Red pixel 11 Red LEDs saturation control (0-100%)	proportional
-	-	56	0-255	Green pixel 11 Green LEDs saturation control (0-100%)	proportional
-	-	57	0-255	Blue pixel 11 Blue LEDs saturation control (0-100%)	proportional
-	-	58	0-255	Red pixel 12 Red LEDs saturation control (0-100%)	proportional
-	-	59	0-255	Green pixel 12 Green LEDs saturation control (0-100%)	proportional
-	-	60	0-255	Blue pixel 12 Blue LEDs saturation control (0-100%)	proportional
-	-	61	0-255	Red pixel 13 Red LEDs saturation control (0-100%)	proportional
-	-	62	0-255	Green pixel 13 Green LEDs saturation control (0-100%)	proportional
-	-	63	0-255	Blue pixel 13 Blue LEDs saturation control (0-100%)	proportional
-	-	64	0-255	Red pixel 14 Red LEDs saturation control (0-100%)	proportional
-	-	65	0-255	Green pixel 14 Green LEDs saturation control (0-100%)	proportional
-	-	66	0-255	Blue pixel 14 Blue LEDs saturation control (0-100%)	proportional
-	-	67	0-255	Red pixel 15 Red LEDs saturation control (0-100%)	proportional
-	-	68	0-255	Green pixel 15 Green LEDs saturation control (0-100%)	proportional
-	-	69	0-255	Blue pixel 15 Blue LEDs saturation control (0-100%)	proportional
-	-	70	0-255	Red pixel 16 Red LEDs saturation control (0-100%)	proportional
-	-	71	0-255	Green pixel 16 Green LEDs saturation control (0-100%)	proportional
-	-	72	0-255	Blue pixel 16 Blue LEDs saturation control (0-100%)	proportional
-	-	73	0-255	Red pixel 17 Red LEDs saturation control (0-100%)	proportional
-	-	74	0-255	Green pixel 17 Green LEDs saturation control (0-100%)	proportional

Mode/Channel			Value	Function	Type of control
1	2	3			
-	-	75	0-255	Blue pixel 17 Blue LEDs saturation control (0-100%)	proportional
-	-	76	0-255	Red pixel 18 Red LEDs saturation control (0-100%)	proportional
-	-	77	0-255	Green pixel 18 Green LEDs saturation control (0-100%)	proportional
-	-	78	0-255	Blue pixel 18 Blue LEDs saturation control (0-100%)	proportional
-	-	79	0-255	Red pixel 19 Red LEDs saturation control (0-100%)	proportional
-	-	80	0-255	Green pixel 19 Green LEDs saturation control (0-100%)	proportional
-	-	81	0-255	Blue pixel 19 Blue LEDs saturation control (0-100%)	proportional
-	-	82	0-255	Red pixel 20 Red LEDs saturation control (0-100%)	proportional
-	-	83	0-255	Green pixel 20 Green LEDs saturation control (0-100%)	proportional
-	-	84	0-255	Blue pixel 20 Blue LEDs saturation control (0-100%)	proportional
-	-	85	0-255	Red pixel 21 Red LEDs saturation control (0-100%)	proportional
-	-	86	0-255	Green pixel 21 Green LEDs saturation control (0-100%)	proportional
-	-	87	0-255	Blue pixel 21 Blue LEDs saturation control (0-100%)	proportional
-	-	88	0-255	Red pixel 22 Red LEDs saturation control (0-100%)	proportional
-	-	89	0-255	Green pixel 22 Green LEDs saturation control (0-100%)	proportional
-	-	90	0-255	Blue pixel 22 Blue LEDs saturation control (0-100%)	proportional
-	-	91	0-255	Red pixel 23 Red LEDs saturation control (0-100%)	proportional
-	-	92	0-255	Green pixel 23 Green LEDs saturation control (0-100%)	proportional
-	-	93	0-255	Blue pixel 23 Blue LEDs saturation control (0-100%)	proportional
-	-	94	0-255	Red pixel 24 Red LEDs saturation control (0-100%)	proportional
-	-	95	0-255	Green pixel 24 Green LEDs saturation control (0-100%)	proportional
-	-	96	0-255	Blue pixel 24 Blue LEDs saturation control (0-100%)	proportional

**In the Halogen lamp mode the Dimmer channel imitates behaviour of the halogen lamp during dimming.

Channel "Pixel effects"

DMX value	Effect	Type of control
0-2	No function	Step
3-4	Effect 1	Step
5-6	Effect 2	Step
7-8	Effect 3	Step
9-10	Effect 4	Step
11-12	Effect 5	Step
13-14	Effect 6	Step
15-16	Effect 7	Step
17-18	Effect 8	Step
19-20	Effect 9	Step
21-22	Effect 10	Step
23-24	Effect 11	Step
25-26	Effect 12	Step
27-28	Effect 13	Step
29-30	Effect 14	Step
31-32	Effect 15	Step
33-34	Effect 16	Step
35-36	Effect 17	Step
37-38	Effect 18	Step
39-40	Effect 19	Step
41-42	Effect 20	Step
43-44	Effect 21	Step
45-46	Effect 22	Step
47-48	Effect 23	Step
49-50	Effect 24	Step
51-52	Effect 25	Step
53-54	Effect 26	Step
55-56	Effect 27	Step
57-58	Effect 28	Step
59-60	Effect 29	Step
61-62	Effect 30	Step
63-64	Effect 31	Step
65-66	Effect 32	Step
67-68	Effect 33	Step
69-70	Effect 34	Step
71-72	Effect 35	Step
73-74	Effect 36	Step
75-76	Effect 37	Step
77-78	Effect 38	Step
79-80	Effect 39	Step
81-82	Effect 40	Step
83-84	Effect 41	Step
85-86	Effect 42	Step
87-88	Effect 43	Step
89-90	Effect 44	Step
91-92	Effect 45	Step
93-94	Effect 46	Step

DMX value	Effect	Type of control
95-96	Effect 47	Step
97-98	Effect 48	Step
99-100	Effect 49	Step
101-102	Effect 50	Step
103-104	Effect 51	Step
105-106	Effect 52	Step
107-108	Effect 53	Step
109-110	Effect 54	Step
111-112	Effect 55	Step
113-114	Effect 56	Step
115-116	Effect 57	Step
117-118	Effect 58	Step
119-120	Effect 59	Step
121-122	Effect 60	Step
123-124	Effect 61	Step
125-126	Effect 62	Step
127-128	Effect 63	Step
129-130	Effect 64	Step
131-132	Effect 65	Step
133-134	Effect 66	Step
135-136	Effect 67	Step
137-138	Effect 68	Step
139-140	Effect 69	Step
141-142	Effect 70	Step
143-144	Effect 71	Step
145-146	Effect 72	Step
147-148	Effect 73	Step
149-150	Effect 74	Step
151-152	Effect 75	Step
153-154	Effect 76	Step
155-156	Effect 77	Step
157-158	Effect 78	Step
159-160	Effect 79	Step
161-162	Effect 80	Step
163-164	Effect 81	Step
165-166	Effect 82	Step
167-168	Effect 83	Step
169-170	Effect 84	Step
171-172	Effect 85	Step
173-174	Effect 86	Step
175-176	Effect 87	Step
177-178	Effect 88	Step
179-255	Reserved	

5.1 Virtual colour wheel - colour mixing chart

Virtual colour wheel					
Scale*	Virtual Colour Wheel	Red	Green	Blue	White
	DMX	DMX	DMX	DMX	DMX
	1-2 (White 2700K)	255	119	0	57
	3 (White 2700K /Hal.mode/)	255	119	0	57
	4-5 (White 3200K)	255	128	0	100
	6 (White 3200K /Hal.mode/)	255	128	0	100
	7-9 (White 4200K)	255	143	4	218
	10-12 (White 5600K)	255	206	31	255
	13-15 (White 8000K)	217	255	71	255
	16	0	0	255	0
	17	0	3	255	0
	18	0	6	255	0
	19	0	9	255	0
	20	0	12	255	0
	21	0	15	255	0
	22	0	18	255	0
	23	0	21	255	0
	24	0	24	255	0
	25	0	27	255	0
	26	0	30	255	0
	27	0	36	255	0
	28	0	41	255	0
	29	0	46	255	0
	30	0	52	255	0
	31	0	58	255	0
	32	0	64	255	0
	33	0	68	255	0
	34	0	74	255	0
	35	0	80	255	0
	36	0	86	255	0
	37	0	92	255	0
	38	0	98	255	0
	39	0	104	255	0
	40	0	110	255	0
	41	0	119	255	0
	42	0	129	255	0
	43	0	138	255	0
	44	0	147	255	0
	45	0	156	255	0
	46	0	165	255	0
	47	0	174	255	0
	48	0	183	255	0
	49	0	192	255	0
	50	0	201	255	0
	51	0	210	255	0
	52	0	219	255	0
	53	0	228	255	0
	54	0	237	255	0
	55	0	246	255	0
	56	0	255	255	0
	57	0	255	246	0
	58	0	255	237	0
	59	0	255	228	0
	60	0	255	219	0
	61	0	255	210	0
	62	0	255	201	0
	63	0	255	192	0

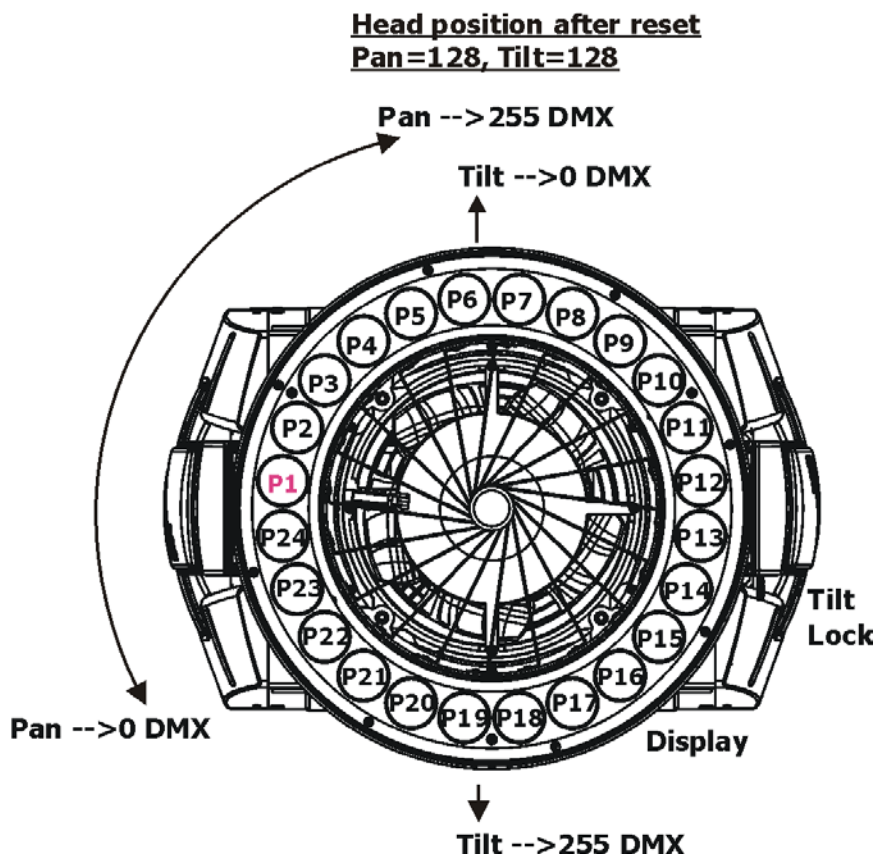
Scale*	Virtual Colour Wheel	Red	Green	Blue	White
	DMX	DMX	DMX	DMX	DMX
	64	0	255	183	0
	65	0	255	174	0
	66	0	255	165	0
	67	0	255	156	0
	68	0	255	147	0
	69	0	255	138	0
	70	0	255	129	0
	71	0	255	119	0
	72	0	255	110	0
	73	0	255	104	0
	74	0	255	98	0
	75	0	255	92	0
	76	0	255	86	0
	77	0	255	80	0
	78	0	255	74	0
	79	0	255	68	0
	80	0	255	64	0
	81	0	255	58	0
	82	0	255	52	0
	83	0	255	46	0
	84	0	255	41	0
	82	0	255	36	0
	86	0	255	30	0
	87	0	255	27	0
	88	0	255	24	0
	89	0	255	21	0
	90	0	255	18	0
	91	0	255	15	0
	92	0	255	12	0
	93	0	255	9	0
	94	0	255	6	0
	95	0	255	3	0
	96	0	255	0	0
	97	3	255	0	0
	98	6	255	0	0
	99	9	255	0	0
	100	12	255	0	0
	101	15	255	0	0
	102	18	255	0	0
	103	21	255	0	0
	104	24	255	0	0
	105	27	255	0	0
	106	30	255	0	0
	107	36	255	0	0
	108	41	255	0	0
	109	46	255	0	0
	110	52	255	0	0
	111	58	255	0	0
	112	64	255	0	0
	113	68	255	0	0
	114	74	255	0	0
	115	80	255	0	0
	116	86	255	0	0
	117	92	255	0	0
	118	98	255	0	0

Scale*	Virtual Colour Wheel	Red	Green	Blue	White
	DMX	DMX	DMX	DMX	DMX
	119	104	255	0	0
	120	110	255	0	0
	121	119	255	0	0
	122	129	255	0	0
	123	138	255	0	0
	124	147	255	0	0
	125	156	255	0	0
	126	165	255	0	0
	127	174	255	0	0
	128	183	255	0	0
	129	192	255	0	0
	130	201	255	0	0
	131	210	255	0	0
	132	219	255	0	0
	133	228	255	0	0
	134	240	255	0	0
	135	255	255	0	0
	136	255	246	0	0
	137	255	237	0	0
	138	255	228	0	0
	139	255	219	0	0
	140	255	210	0	0
	141	255	201	0	0
	142	255	192	0	0
	143	255	183	0	0
	144	255	174	0	0
	145	255	165	0	0
	146	255	156	0	0
	147	255	147	0	0
	148	255	138	0	0
	149	255	129	0	0
	150	255	119	0	0
	151	255	110	0	0
	152	255	104	0	0
	153	255	98	0	0
	154	255	92	0	0
	155	255	86	0	0
	156	255	80	0	0
	157	255	74	0	0
	158	255	68	0	0
	159	255	64	0	0
	160	255	58	0	0
	161	255	52	0	0
	162	255	46	0	0
	163	255	41	0	0
	164	255	36	0	0
	165	255	30	0	0
	166	255	27	0	0
	167	255	24	0	0
	168	255	21	0	0
	169	255	18	0	0
	170	255	15	0	0
	171	255	12	0	0
	172	255	9	0	0
	173	255	6	0	0

Scale*	Virtual Colour Wheel	Red	Green	Blue	White
	DMX	DMX	DMX	DMX	DMX
	174	255	3	0	0
	175	255	0	0	0
	176	255	0	3	0
	177	255	0	6	0
	178	255	0	9	0
	179	255	0	12	0
	180	255	0	15	0
	181	255	0	18	0
	182	255	0	21	0
	183	255	0	24	0
	184	255	0	27	0
	185	255	0	30	0
	186	255	0	36	0
	187	255	0	41	0
	188	255	0	46	0
	189	255	0	52	0
	190	255	0	58	0
	191	255	0	64	0
	192	255	0	68	0
	193	255	0	74	0
	194	255	0	80	0
	195	255	0	86	0
	196	255	0	92	0
	197	255	0	98	0
	198	255	0	104	0
	199	255	0	110	0
	200	255	0	119	0
	201	255	0	129	0
	202	255	0	138	0
	203	255	0	147	0
	204	255	0	156	0
	205	255	0	165	0
	206	255	0	174	0
	207	255	0	183	0
	208	255	0	192	0
	209	255	0	201	0
	210	255	0	210	0
	211	255	0	219	0
	212	255	0	228	0
	213	255	0	237	0
	214	255	0	246	0
	215	255	0	255	0
	216	246	0	255	0
	217	237	0	255	0
	218	228	0	255	0
	219	219	0	255	0
	220	210	0	255	0
	221	201	0	255	0
	222	192	0	255	0
	223	183	0	255	0
	224	174	0	255	0
	225	165	0	255	0
	226	156	0	255	0
	227	147	0	255	0
	228	138	0	255	0

Scale*	Virtual Colour Wheel	Red	Green	Blue	White
	DMX	DMX	DMX	DMX	DMX
	229	129	0	255	0
	230	119	0	255	0
	231	110	0	255	0
	232	104	0	255	0
	233	98	0	255	0
	234	91	0	255	0
	235	84	0	255	0
	236	77	0	255	0
	237	70	0	255	0
	238	63	0	255	0
	239	56	0	255	0
	240	49	0	255	0
	241	42	0	255	0
	242	35	0	255	0
	243	28	0	255	0
	244	21	0	255	0
	245	14	0	255	0
	246	7	0	255	0
	247	0	0	255	0
	248-255 (Rainbow+ zone effects)	****	****	****	****
* Colour scale as an illustration only					

5.2 Pixels order

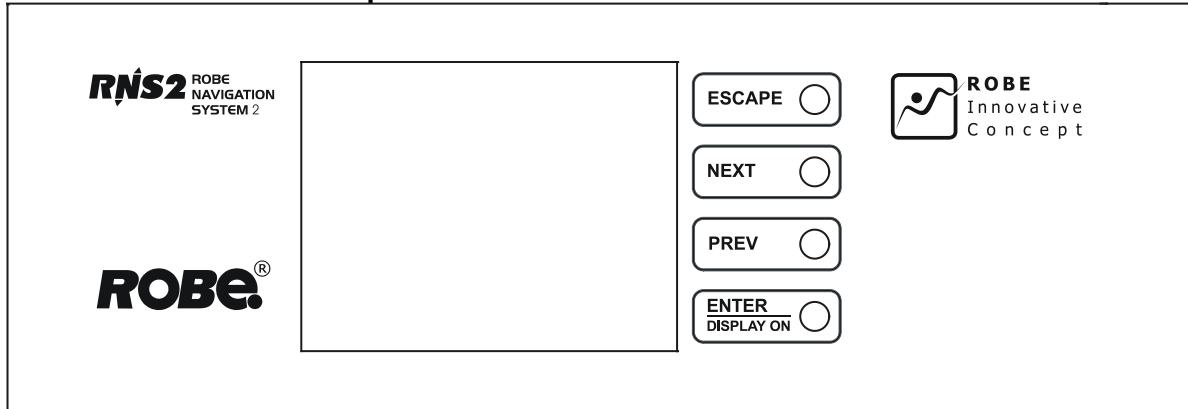


6. Control menu

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

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

Control buttons on the front panel:



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

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

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

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

Icons used in the touch screen menu:



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



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



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



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



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



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



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



- [Ethernet] used to indicate Ethernet connected.



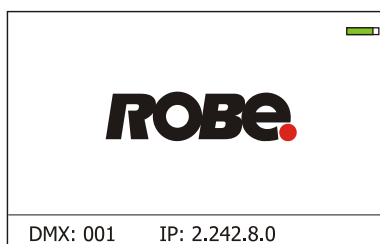
- [display turn] used to turn the display by 180°.



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

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

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

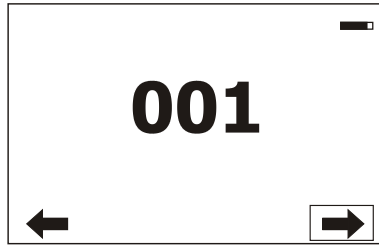


The green icon at the top right corner of the screen indicates the level of the display battery charging. If the whole icon is green, the battery is fully charged while the red icon indicates exhausted battery. The battery charges during fixture operation, its charging lasts cca 6 hours.

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.

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



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

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

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

6.1 Tab "Address"



Settings - Select the menu to set desired fixture address setting.

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

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

Ethernet Mode - Use the menu to set the Ethernet operation mode:

Disable - The option disables Ethernet operation.

Artnet - Fixture receives Artnet protocol - every fixture has to be connected to the network.

gMAI - Fixture receives MANet protocol.

gMA2 - Fixture receives MANet2 protocol.

Art2DMX - Fixture receives Artnet protocol from the Ethernet input and sends DMX data to its DMX output (fixture works as an "Artnet/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 I/II Universe - 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.

6.2 Tab "Information"



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

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

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

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

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

Air Filters - Regular cleaning of the air filter on the side of the base is very important for the fixture's life and performance.

Build-up of dust, dirt and fog fluid residues reduces the cooling of the base inside.

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

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 filter. 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 air filter 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 filter.

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 temperatures in the LED module.

Current - A current temperature of the LED module.

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

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

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

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

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

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

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

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

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

Current - A current temperature in the fixture base.

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

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

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

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

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

Unlink Wireless Adapter - The item serves for unlinking the fixture from the transmitter.

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

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

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

Module M - A pan/Tilt processor on the main board in the fixture arm

Module DR - A zoom processor on the main board in the fixture arm

Module L - LED control processor on the board in the fixture head.

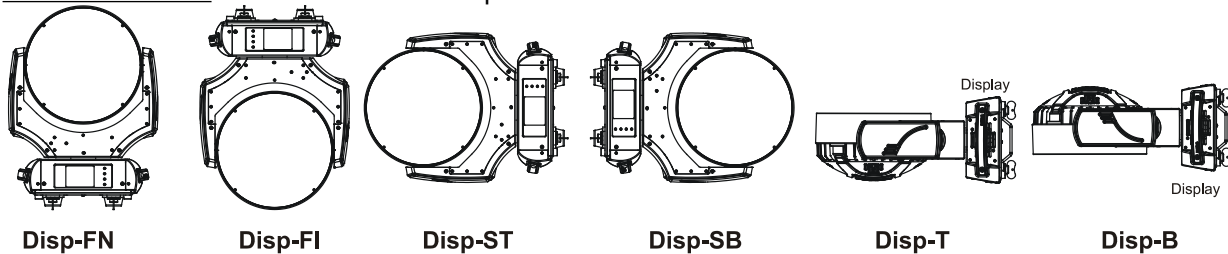
Wireless - Version of wireless DMX module

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

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

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

Fixture Position - Recorded installation positions of the fixture:



Fixture Temperatures - Recorded temperatures which have exceeded defined levels.

6.3 Tab "Personality"



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

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

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

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

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

Mode 1 - 16 control channels

Mode 2 - 24 control channels

Mode 3 - 96 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 receiving DMX signal.

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).

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 mowing 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".

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

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

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

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

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

Colour Calibration Mode - If the function is on, the white output from the fixture (and also mixed colours) is more uniform. Each colour is dynamically corrected according to the value set in the menu "Calibrate Effects" (Service-> Calibrations-> Calibrate Effects).

Colour Mixing Mode - This item allows switching into RGBW or CMY mode. In the CMY mode, the white(8bit)/white (16) bit channels are not active.

Dimmer Curve - Use this menu to select desired dimmer running.

Linear - linear running

Theatrical - finer dimming at start of dimmer opening.

Zoom mode - Use this menu to change min. beam angle.

Beam - Beam angle 8°-53° (half beam)

Wash - Beam angle 15°-53° (half beam), compatible zoom range with the Robin LEDWash 300/600.

These zoom options are also stated in DMX chart (channel Power/Special functions).

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

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

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

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

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


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

Display Orientation - The menu allows to change display orientation.

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

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

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

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

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

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

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

6.4 Tab "Manual Control"



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

Total System Reset - The item resets all function modules.

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

Zoom Reset - The item resets a zoom module.

Preset Effect Control - Use the menu to show preset positions of each channel effect.

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

6.5 Tab "Stand-alone"



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

Dynamic Mode - This mode uses all Robin Cyclone 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 and zoom 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.

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

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

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

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

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

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

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





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

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

To edit program:

1. Touch the item which you want to edit ("Edit Program 1" - "Edit Program 3").
2. Touch the item "Edit Program Steps".
3. Touch the item "Step 1".
4. From the list of effects touch desired effect and set its value. Browse 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

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

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

6.6 Tab "Service"



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

Calibrate Effects - The menu allows the fine adjustment of effects.

Pan- a pan position fine adjustment

Tilt - a tilt position fine adjustment

Calibrate Colours - The menu serves for adjusting of LEDs saturation to achieve colour temperature of 5600K for white output.

Red - a red LEDs saturation fine adjustment

Green - a green LEDs saturation fine adjustment

Blue - a blue LEDs saturation fine adjustment

White - a white LEDs saturation fine adjustment

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

Calibration of the pan/tilt 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 colour saturations via the control board

1. Disconnect DMX controller from the fixture , open shutter and dimmer and set the Virtual cpl. wheel channel to DMX=10 (white 5600K). Aim the light beam on the lux meter (e.g. Minolta CL-200 Chroma meter) which is placed at min distance of 2.5m from the fixture
2. Set the menu item "Colour Calibration Mode" to On (Personality-> Colour Calibration Mode-> On).
3. Enter the menu "Calibrate Effects".
4. Use the [up arrow] and [down arrow] to find desired colour and touch it to enter the fine effect adjustment screen.
5. By means of the Red, green, Blue and White items adjust the 5600K colour temperature as exactly as possible ($\Delta u'v' = 0$).

7. After adjusting 5600K colour temperature, touch the [confirm] to save all adjusted values and reset the fixture.

Note: you can also use DMX controller for both calibrations stated above, calibration protocol is the following:

<i>Effect</i>	<i>Mode 1</i>	<i>Mode 2</i>	<i>Mode 3</i>
Pan-fine movement	channel 17	channel 25	channel 97
Tilt - fine movement	channel 18	channel 26	channel 98
Red - red saturation	channel 19	channel 27	channel 99
Green- green saturation	channel 20	channel 28	channel 100
Blue - blue saturation	channel 21	channel 29	channel 101
White - white saturation	channel 22	channel 30	channel 102

Temperature Calibration - A setting of temperature of the control processor for LEDs calibration. This temperature has to be set before calibration of colours. Disconnect the fixture from mains and let it at room temperature (cca 25°C) until the fixture gets ambient temperature (as it can last 2 hours and more, better is used cold fixture before its operation). After that, set the ambient (room) temperature in this menu.

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

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

The following are required in order to update software:

- PC running Windows 95/98/2000/XP or Linux
- DMX Software Uploader
- Flash cable RS232/DMX No.13050624 (if you want to use a serial port of PC)
- Robe Universal Interface (if you want to use an USB port of PC)

Note 1: Software update should execute a qualified person. If you lack qualification, do not attempt the update yourself and ask for help your ROBE distributor.

Note 2: DMX address, IP address, programs 1-3 and all items in the menu "Personality" will be set to their default (factory) values.

To update software in the fixture:

I. Installation of the DMX Software Uploader.

1. DMX Software Uploader program is available from the ROBE web site at WWW.robe.cz.
2. Make a new directory (e.g. Robe_Uploader) on your hard disk and download the software to it.
3. Unpack the program from the archive. If the Robe fixture is produced in both magnetic and electronic ballast version, name of DMX Software Uploader is the same for both versions.

II. Fixture software updating.

1. Determine which of your ports is available on your PC and connect it:
 - with the DMX input of the fixture if you using the flash cable RS232/DMX
 - with the DMX output of the Robe Universal Interface if you using the USB cable.Disconnect the fixture from the other fixtures in a DMX chain. Turn both the computer and the fixture on. Make sure the lamp is switched off (only if the fixture involves a lamp).
2. Switch the fixture to the updating mode by touching the "Updating Software " item
Note: If you do not want to continue in software update, you have to switch off and on the fixture to escape from this menu.
We recommend to cancel all running programs before starting the Software Uploader.
3. Run the Software Uploader program. Select desired COM and then click on the Connect button. (Select COM if the serial port is used or Robe Universal Interface if the USB port is used).
If the connection is OK, click on the "Start Uploading button" to start 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 later versions of processors, 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 "The fixture is successfully updated" will appear in this window and the fixture will reset with the new software.

Note: In the case of an interruption of the upload process (e.g. power cut), the fixture keeps the updating mode and you have to repeat the software update again.

After software update please do a full power off/on cycle with a complete display blackout in order to reset battery error checking procedure.

7. RDM

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

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

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

The list of commands for Robin Cyclone 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			*
DEVICE_HOURS			*
PARAMETER_DESCRIPTION			*
ROBE_DMX_INPUT		*	*
ROBE_WIRELESS_UNLINK		*	

8. Wireless DMX operation

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

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

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

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

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

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

To link the fixture with DMX transmitter.

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

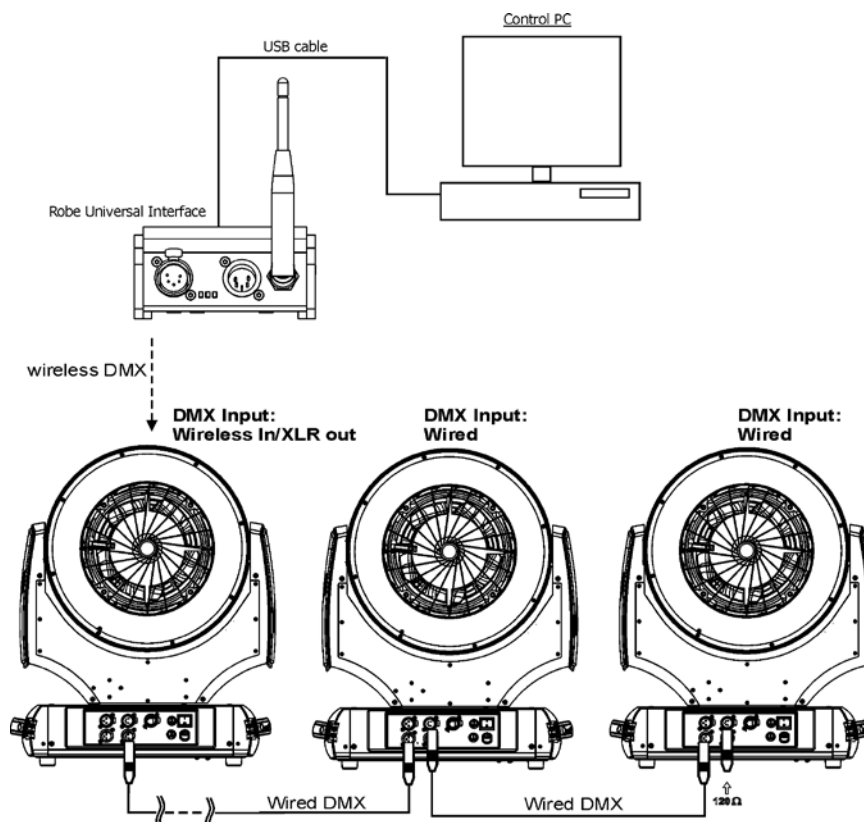
After linking, the level of DMX signal (0-100 %) is displayed in the menu item "Wireless State" (Information --> Wireless State).

To unlink the fixture from DMX transmitter.

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

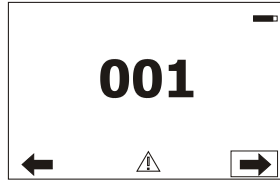
Note: If the option "Wireless In/XLR Out" is selected (Personality--> DMX Input --> Wireless In/XLR Out), the fixture receives wireless DMX and sends the signal to its wired DMX output. The fixture behaves as "Wireless/Wired" adapter.

Example of using



9. Error and information messages

Occurred errors during fixture operation are 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:

Temper.Sensor Error

The message informs you that the communication between the head temperature sensor and the main processor failed.

Tilt Error 1 (Tilt Error 2)

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

Pan Error 1 (Pan Error 2)

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

LED Zone Short Error

The message informs you that short circuit has occurred on the PCB of LED ring.

Recalibrate Temperature

Set correct ambient (room) temperature in the menu "Temperature Calibration" (see tab "Service")

10. Technical Specifications

Electrical

Power supply:.....electronic auto-ranging

Input voltage range:..... supply 100-240V, 50/60Hz

Fuse:.....T 6.3 A

Power consumption*:.....570W @230V, power factor=0.98, I=2.5A

*Allow for a deviation of +/-10%

Optic

Light source: 24x15W Cree MC-E RGBW LED multichips

Typical Lumen Maintenance: 70% @ 60,000 hours

LED life expectancy: 60.000 hours

RGBW or CMY colour mixing +CTC

Virtual colour wheel

237 colours including whites (2700K, 3200K, 4200K, 5600K and 8000K)

Halogen lamp effect at whites 2700K and 3200K

Rainbow effect with in both directions with variable speed

Zone effects in both directions with variable speed

Dimmer

Smooth dimmer from 0 - 100 %

Zoom

Motorized

Fan

Fan diameter: 180mm (7.1")
Max. power: 93W
Airflow: 900 m3/h (530 CFM)
Noise level: 68 dB @ full speed
Max. speed: 4.550 RPM

Pan/Tilt

Pan movement range: 450°
Tilt movement range: 300°
16 bit movement resolution
Automatic Pan/Tilt position correction
Remotely controllable speed of pan/tilt movement for easy programming
Movement control: tracking and vector

Control

Graphic touch screen for fixture setting and addressing
Gravitation sensor for auto screen positioning
Battery backup of the touch screen
Readout fixture usage, receiving DMX values, temperatures, etc
Built-in analyzer for easy fault finding, error messages
Built-in demo sequences
Stand-alone operation
3 user editable programs, each up to 100 steps
pixel control of all 24 LEDs
Supported protocols: USITT DMX 512, RDM, ArtNet, MANet, MANet2
Support of RDM (Remote Device Management)
3 DMX modes (16,24,96 control channels)

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

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

Connection

DMX data in/out: Locking 3-pin and 5-pin XLR
AC power input: 1 m power cord without plug
Ethernet: RJ45

Rigging

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

Temperatures

Maximum ambient temperature : 45° C
Maximum housing temperature : 75° C

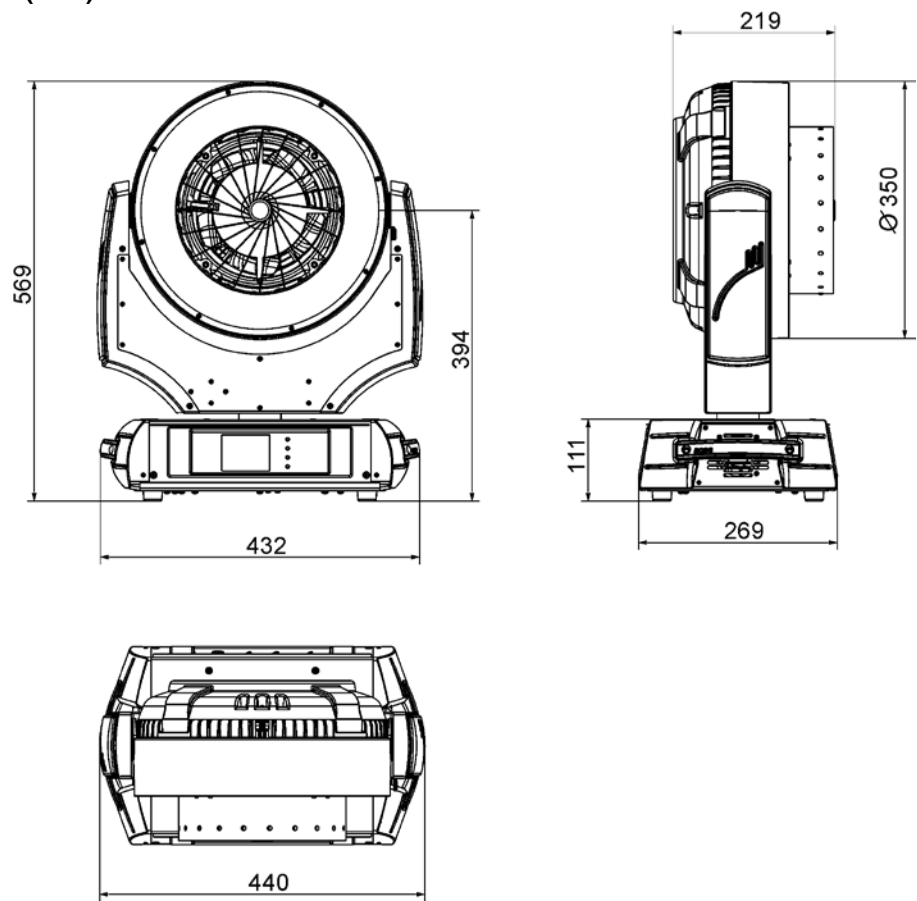
Minimum distances

Min. distance from flammable surfaces: 0.5 m

Total heat dissipation
955 BTU/h (calculated)

Weight (net):
19 kg

Dimensions (mm)



Accessories
Omega holder (No.99010420).....2 pcs

11. 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 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 solvents be used!

DANGER !
***Disconnect from the mains before starting any
maintenance work***

The air filter in the fixture base requires frequent cleaning as smoke-fluid tends to building up residues, reducing the air flow through the filter (and the fixture base) very quickly. The cover of the filter is fastened by means of magnets. Bend this cover out to reach the air filter.

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

If the fixture has been used in a smoke, fog, haze or similar environment, the fixture surface has to be cleaned before inserting into flight case!

Do not dismantle the fixture except air filters replacing as the weather sealing of the fixture housing could be damaged!

More complicated maintenance and service operations are only to be carried out by authorized distributors.

11.1 Replacing fuse

Only replace the fuse by a fuse of the same type and rating.

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 fuse holder in the housing and fix it.

12. ChangeLog

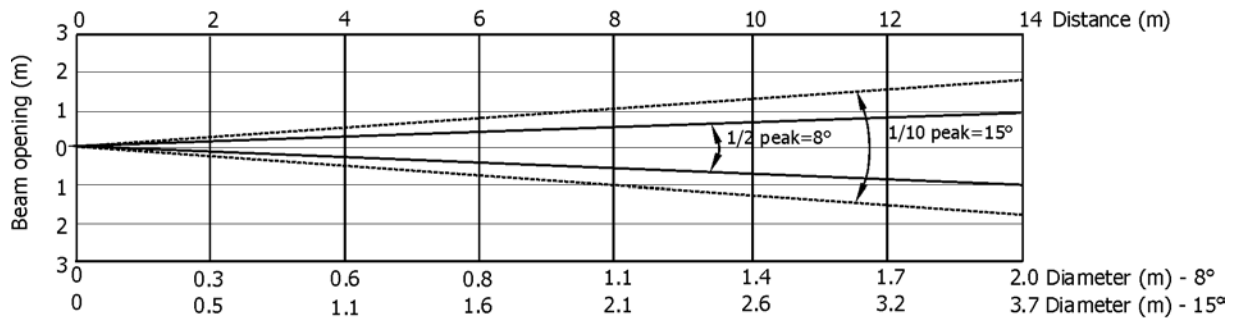
This section summarizes all types of changes in the user manual.

Version of the manual	Date of issue	Description of changes
1.3	05/02/2014	Added item Air Filters in the menu Information
1.2	22/01/2014	Added chapter " Operating the Robin Cyclone with smoke machines"
1.1	30/09/2013	New DMX chart vers. 1.1.

*Specifications are subject to change without notice.
January 30, 2014*

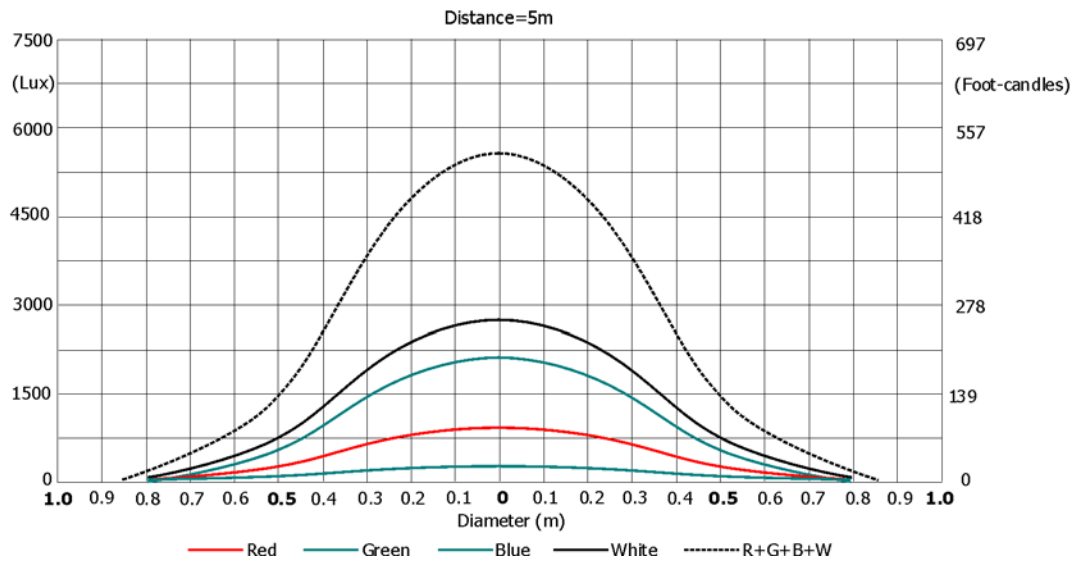
13. Photometric diagrams

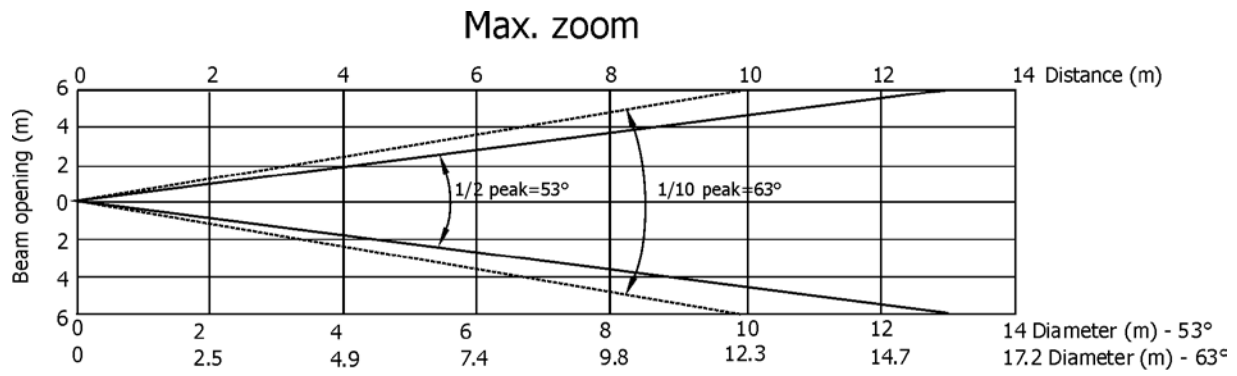
Min. Zoom



Distance (m)	2	4	5	6	8	10	12	14	
Red	5313/494	1328/123	850/79	590/55	332/31	213/20	148/14	108/10	Intensity (center) Lux/Footcandles
Green	12625/1173	3156/293	2020/188	1402/130	789/73	505/47	351/33	258/24	
Blue	51688/157	422/39	270/25	188/17	105/10	67/6	47/4.4	34/3	
White	16625/1545	4156/386	2660/247	1847/172	1039/97	665/62	462/43	339/32	
R+G+B+W	34625/3218	8656/804	5540/514	3847/357	2164/201	1385/129	962/89	707/66	

Illuminance distribution





Distance (m)	2	4	5	6	8	10	12	14	
Red	325/30	81/8	52/5	36/3.4	20/2	13/1.2	9/0.8	7/0.6	Intensity (center) Lux/Footcandles
Green	813/76	203/19	130/12	90/8	51/5	33/3	23/2	17/1.5	
Blue	113/11	28/3	18/1.7	13/1.2	7/0.7	5/0.4	3/0.3	2/0.2	
White	1094/102	274/25	175/16	121/11	68/6	44/4	30/3	22/2	
R+G+B+W	2200/204	550/51	352/33	244/23	138/13	88/8	61/6	45/4	

