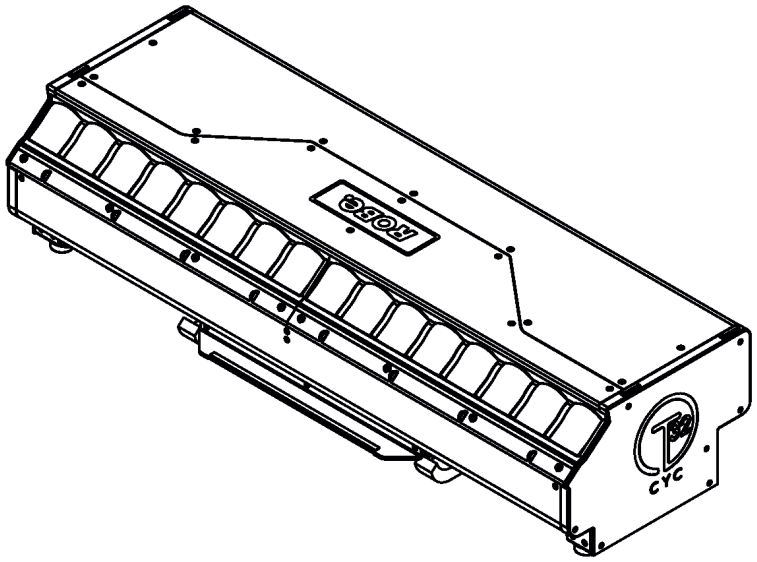
T32 CYC™



ROBE Innovative Technology

QR code for user manual

USER MANUAL

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

Version 1.8

T32 CYC

Table of contents

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

Every person involved with installation and maintenance of this fixture have to:
- be qualified
- follow the instructions of this manual

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

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.

Important
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.

The cooling openings and front lens array must not be covered with cloth or other materials.

Make sure that the available voltage is not higher than stated on the bottom side of the device.

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

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.

For replacement of the fuse use a fuse of same type and rating only.

The device becomes hot during operation. Do not touch the device's housing bare hands during its operation. Allow the device to cool approximately 30 minutes prior to manipulate with it.

LED light emission. Risk of eye injury. Do not look into the beam at short distance of the of the device. Do not view the light output with optical instruments or any device that may concentrate the beam. The light source contains blue LEDs.

CAUTION! Risk group 2, RG-2

2. Operating determination

The device was designed for indoor use only.

The 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.

Avoid brute force when installing the device.

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

Make sure that the area below the installation place is blocked when rigging, de-rigging or servicing the device.

Always secure the device with an appropriate safety wire.

The maximum ambient temperature 40°C must never be exceeded.

To avoid damage of an internal optical system of the device, never let the sunlight (or other light source) lights directly to the lens array, even when the device is not in operation

Operate the device only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the device!

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 etc.

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*

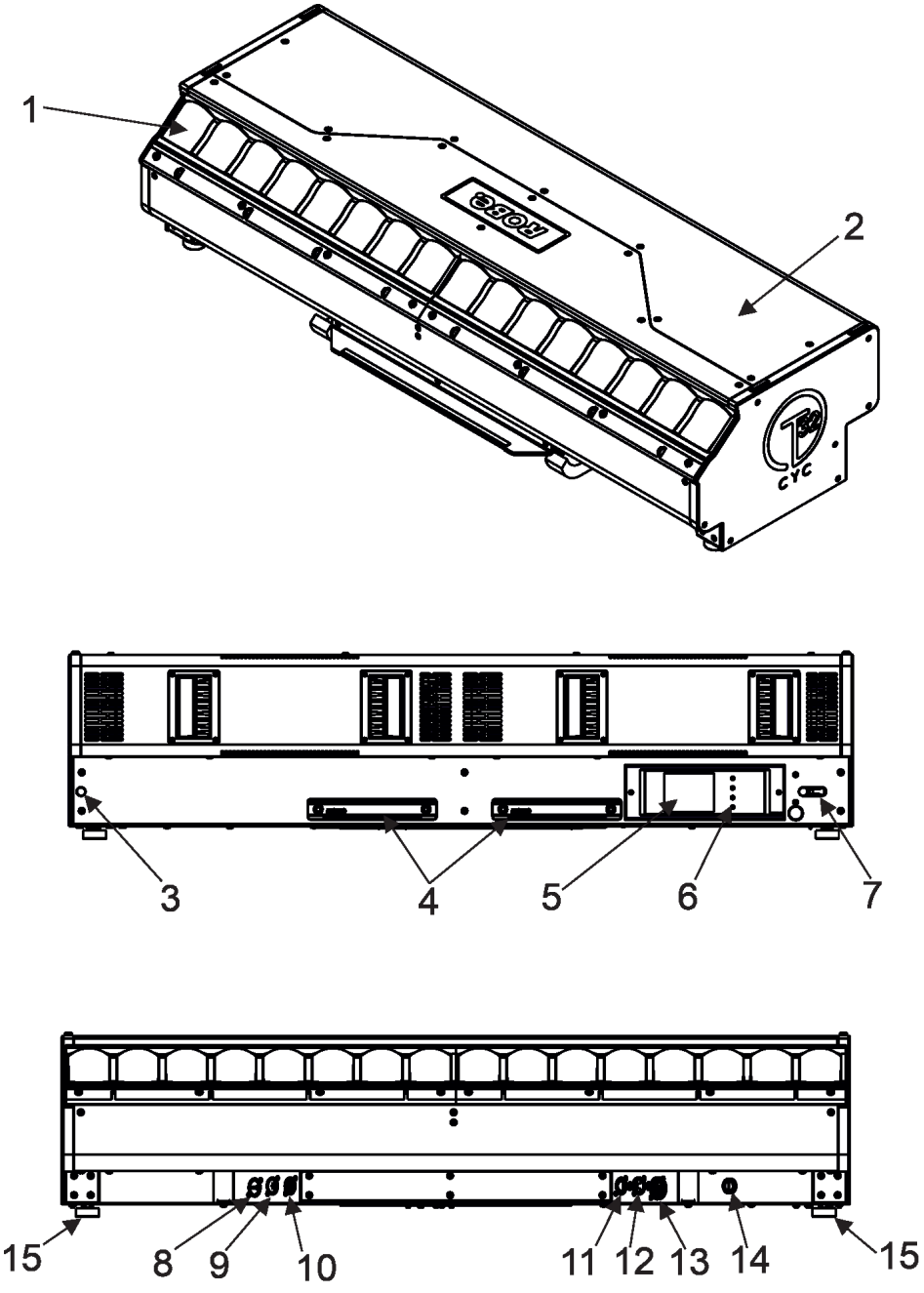
* Wireless DMX version of the fixture only.

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 - Lens array
2 - Top cover
3 - Safety catch
4 - Handles
5 - QVGA touch screen
6 - Control buttons
7 - Side lock
8 - Power IN
9 - DMX IN
10 - Ethernet IN
11 - Ethernet OUT
12 - DMX OUT
13 - Power OUT
14- Fuse holder
15- Adjustable feet

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 T32 CYC is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 100-240 Volts.

If you install a cord cap on the power cable to allow connection to power outlets, install a grounding-type (earthed) plug, following the plug manufacturer's instructions.
The cores in the power cable are coloured according to the following table.

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)!

Design of the ROBIN T32 CYC allows you to connect several fixtures (7 fixtures at 230V/16A circuit breaker; 3 fixtures at 120V/16 A circuit breaker) to AC mains power in one interconnected daisy chain using power input and throughput connectors. Needed daisy chain cords are stated in the chapter "Technical specifications "

4.2 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 30 minutes before handling.

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!

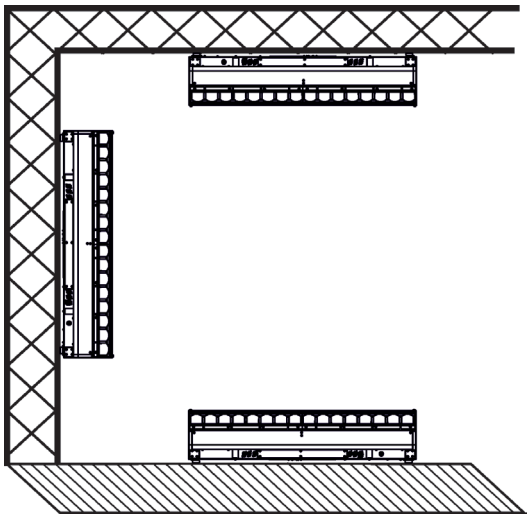
The fixture has to be installed out of the reach of public.

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

Danger of fire !
When installing the fixture, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 0.3 m.

CAUTION!
Use two appropriate clamps 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.

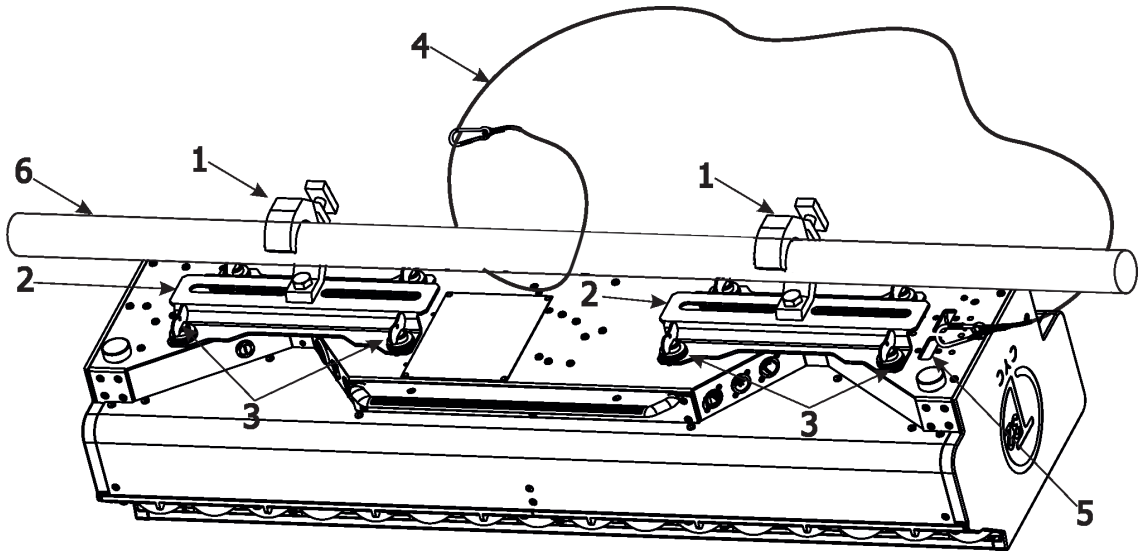
The fixture can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.



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 the rigging clamps (1) to the mounting adaptors (2) by means of M12 bolts and lock nuts through openings in the mounting adaptors.
2. Fasten the mounting adaptors (2) to the bottom side of the fixture by means of four quick-lock fasteners (3) on each mounting adaptor.
3. Fasten first end of the safety wire (4) with snap hook through the attachment point (5) on the bottom side of the fixture and lock the snap hook with screw lock gate.
4. Clamp the fixture on the truss (6) and tighten the rigging clamps (1).
5. Pull second end of the safety wire (4) around the truss and lock the snap hook with screw lock gate. Use a safety wire of a suitable length that maximum fall of the fixture will be 20 cm.

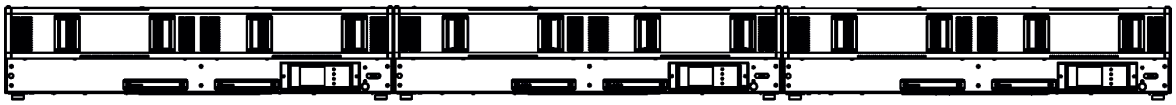


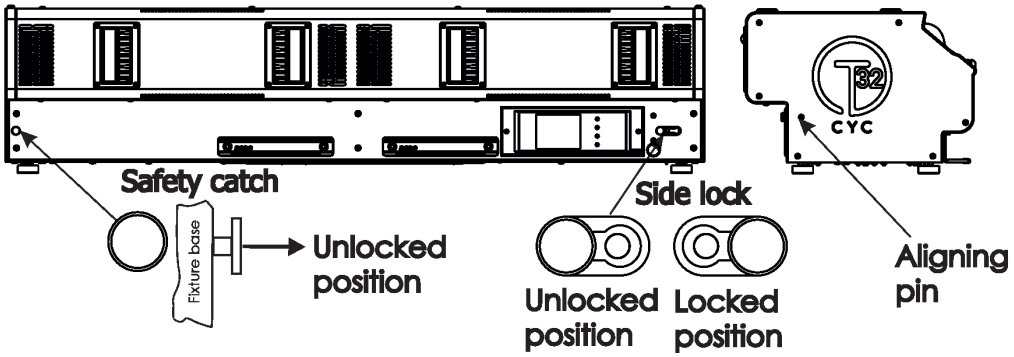
Floor installation

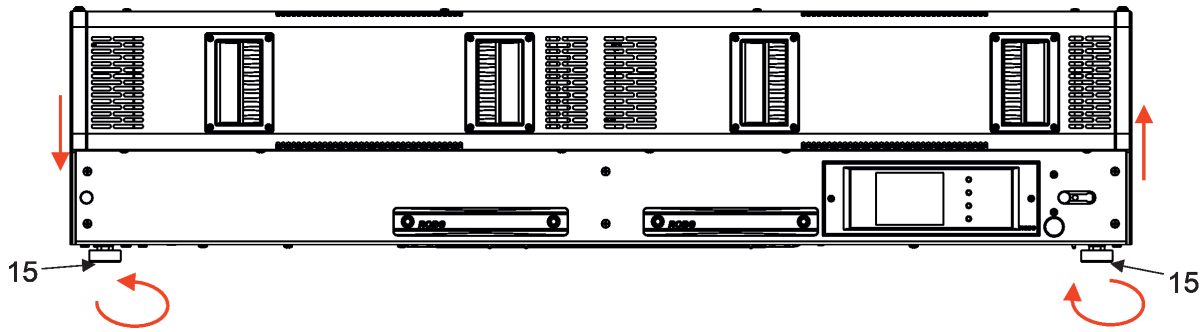
The side lock allows you to interlock fixtures in a row when fixtures are installed side-by-side. If you set the side lock to a locked position, aligning pin will stick out of the fixture housing and will snap into hole in the housing of the adjacent fixture.

To dismantle two (or more) fixtures, move the side lock of the first fixture to the unlock position and the safety catch on the adjacent fixture pull towards from the fixture base.

Four adjustable feet (15) of the fixture serve for aligning fixtures in side-by side installation.

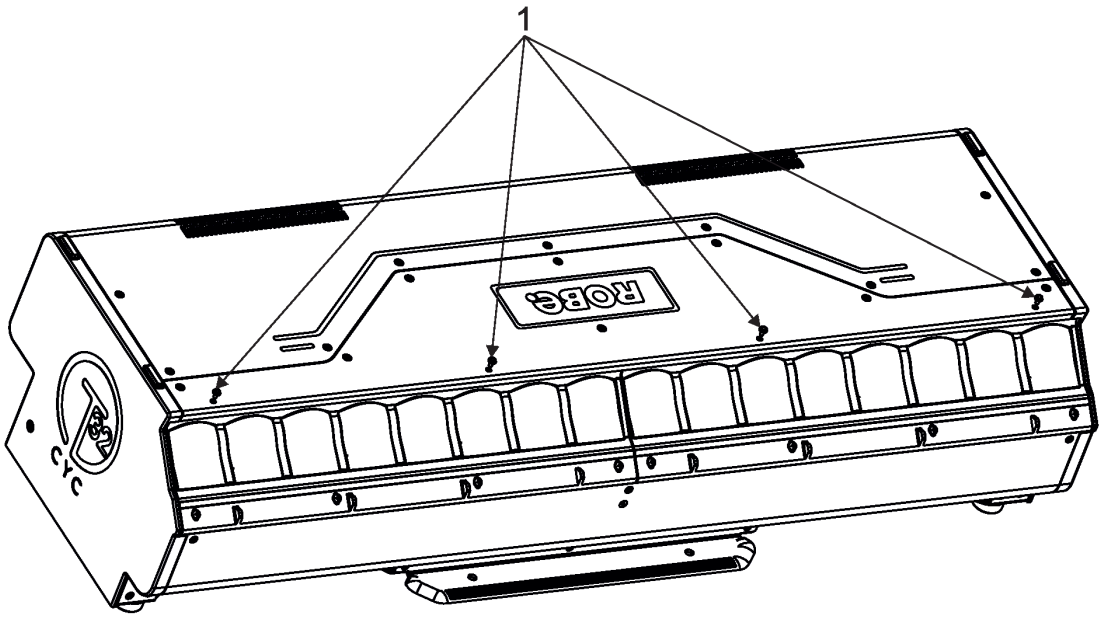


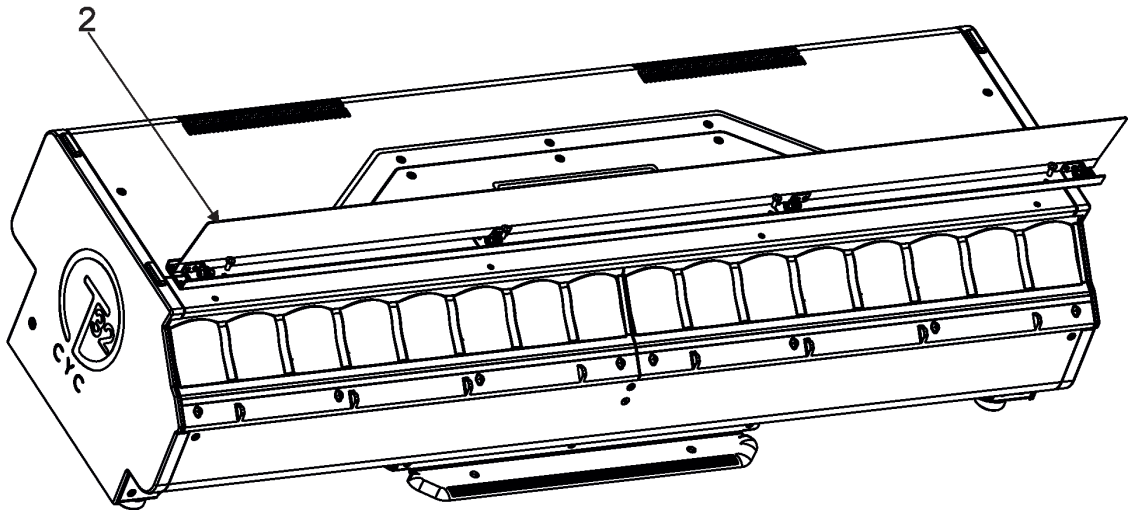




4.3 Shield installation

1. Disconect the T32 CYC from mains.
2. Remove four end caps (1) from the housing of the T32 CYC.
3. Screw the shield (2) on the housing of the T32 CYC by means of four screws M4x10 (screws are part of the T32 Shields set).

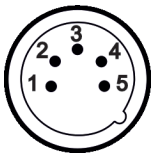




4.4 DMX-512 connection

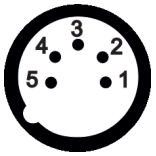
The fixture is equipped with 5-pin XLR sockets for DMX input and output.
Only use a shielded twisted-pair cable designed for RS-485 and 5-pin XLR plugs and connectors in order to connect the controller with the fixture or one fixture with another.

DMX output
XLR socket (female)



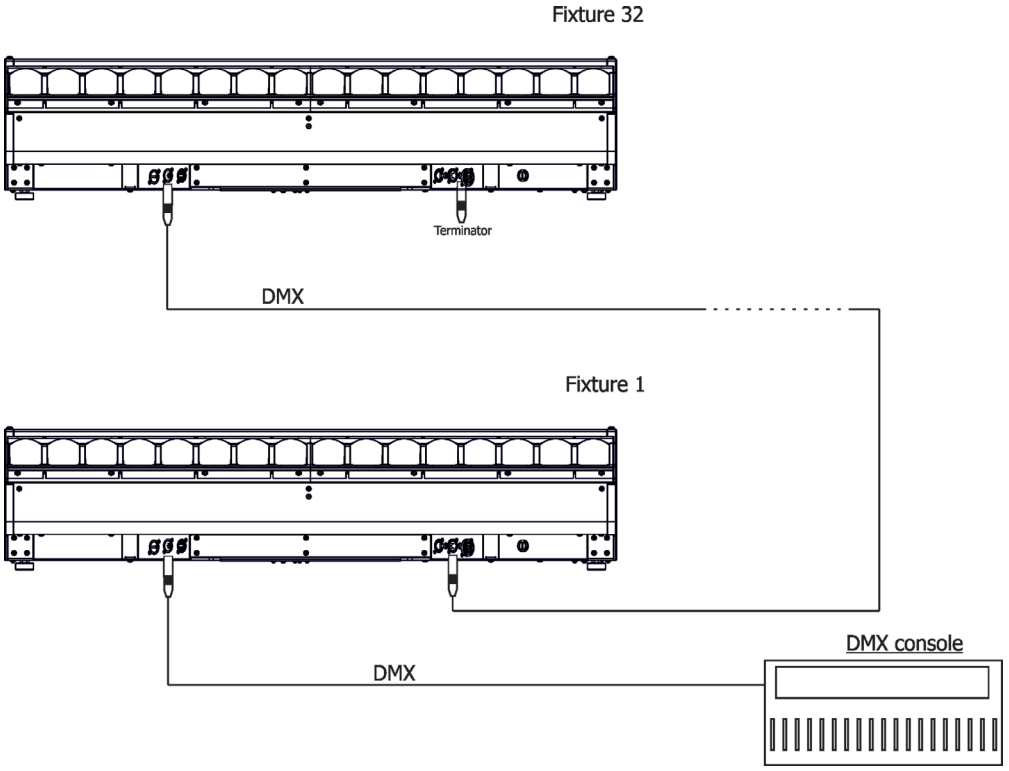
1 - Shield
2 - Signal (-)
3 - Signal (+)
4 - Not connected
5 - Not connected

DMX input
XLR socket (male)



1 - Shield
2 - Signal (-)
3 - Signal (+)
4 - Not connected
5 - Not connected

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



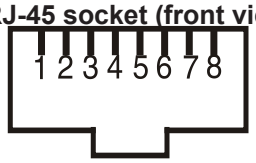
4.5 Ethernet connection

The fixtures on a data link are connected to the Ethernet with appropriate communication protocol (e.g. Art-Net). 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.

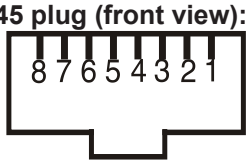
The Robin T32 CYC is equipped with two 8-pin RJ- 45 sockets for Ethernet connection. Use a network cable category 5 (with four “twisted” wire pairs) and standard RJ-45 plugs in order to connect the fixture to the network.

RJ-45 socket (front view):



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

RJ-45 plug (front view):



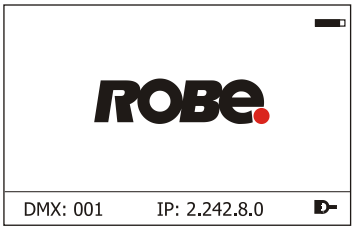
Patch cables that connect fixtures to the hubs or LAN sockets are wired 1:1,that is,pins with the same numbers are connected together:

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

If only the fixture and the computer are to be interconnected,no hubs or other active components are needed.A cross-cable has to be used:

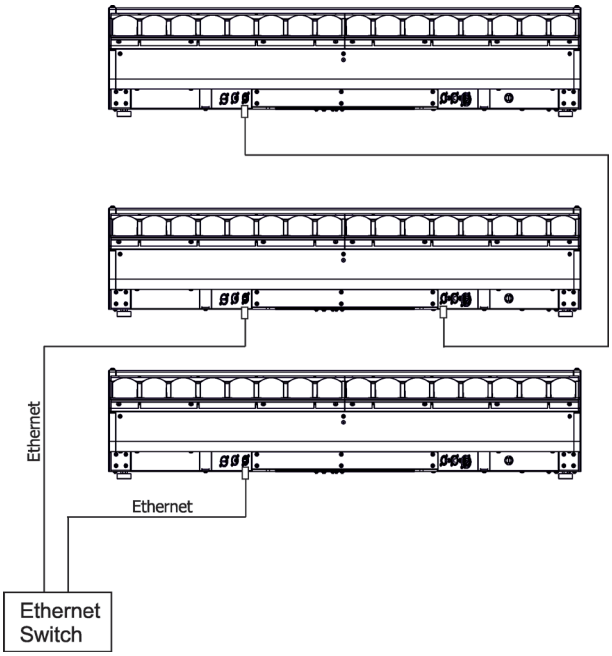
1-3	2-6	3-1	4-8	5-7	6-2	7-5	8-4

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



Ethernet operation

Connect the Ethernet inputs of all fixtures with the Ethernet network.
Option “Artnet (gMaI or gMA2 or sACN)" has to be selected from “Ethernet Mode” menu on the fixture.
Set IP address (002.xxx.xxx.xxx / 010.xxx.xxx.xxx) and the Universe.
Example of connection:



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

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

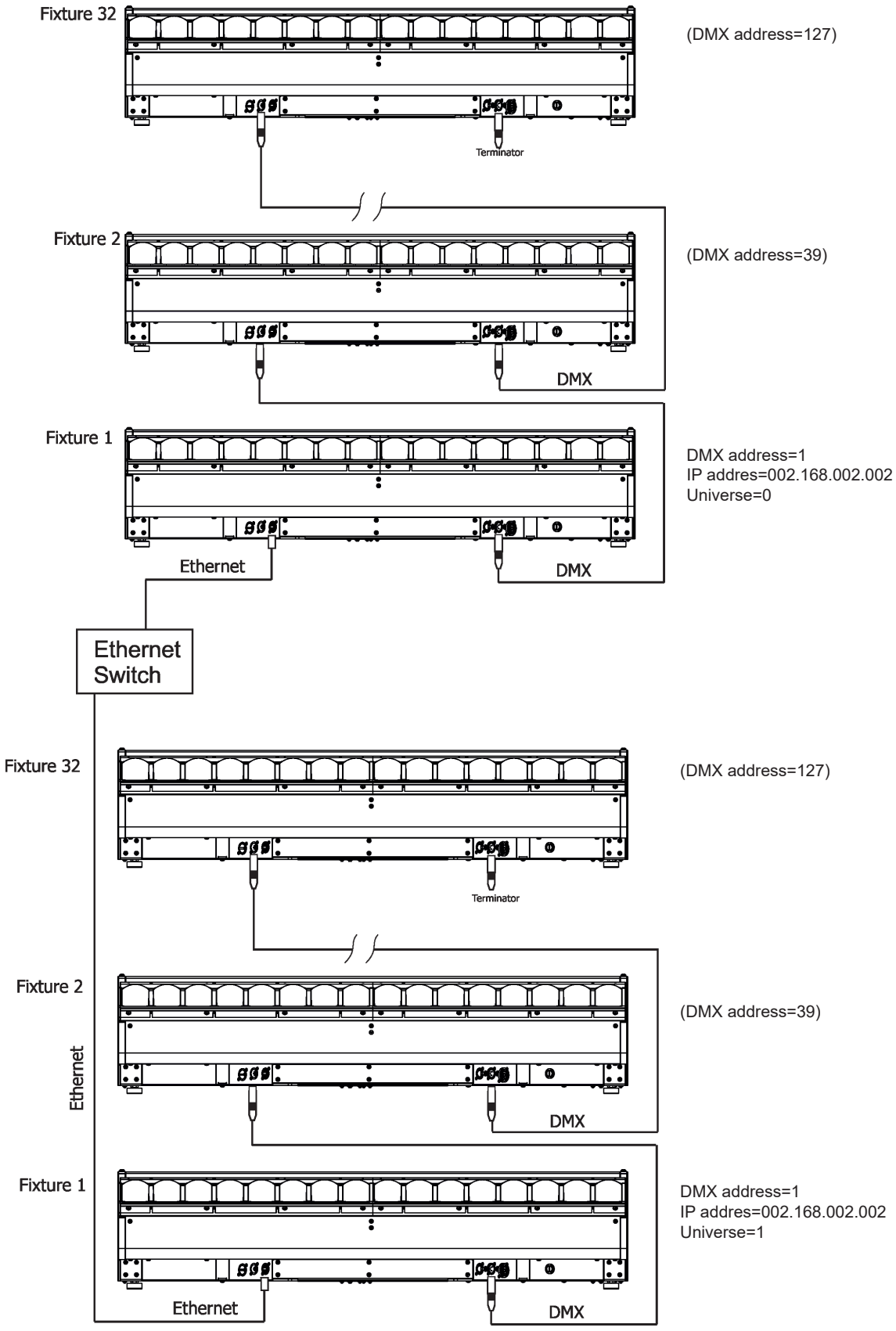
Ethernet / DMX operation

Option “Ethernet To DMX” has to be selected from the “Ethernet Settings” 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:



4.6 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:

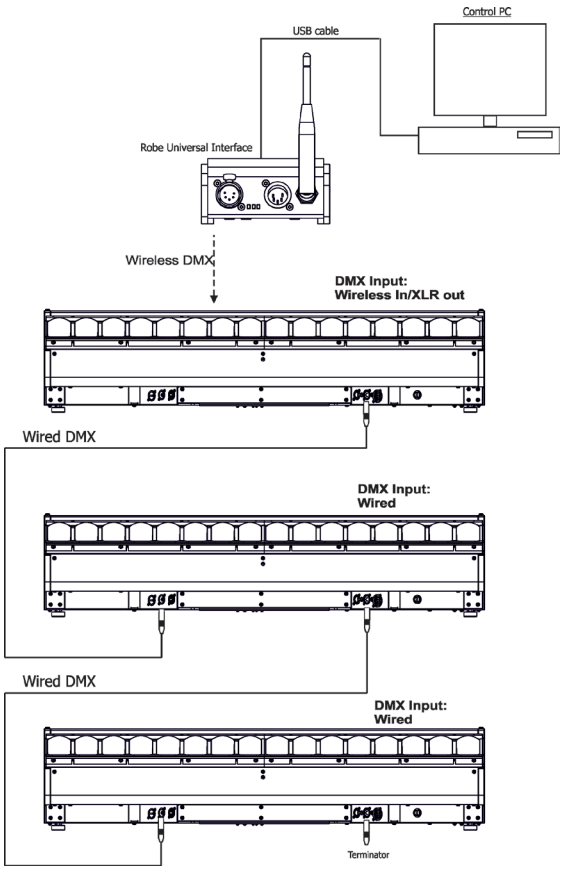
1. For the first five seconds, the fixture receives DMX signal from the wired input. If the Power/Special functions channel is set at some DMX input option, the fixture will receive DMX value according to this option. If DMX input option is set to the wired input , this option is saved and checking procedure 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

5.1 Colour influencing functions

Factory setting of menu functions (channels) which influence behaviour of colour channels is the following:

Function	Factory setting	Function	Factory setting
DMX mode	1	Colour mix control	0 DMX
Colour calibration mode	On	Colour mix control zones	45 DMX
Colour mixing mode	CMY	CTO	110 DMX (5600K)
Dimmer curve	Square law	CRI Selection	Standard (80)
Tungsten effect simulation	Off	Green correction	Uncorrected
Chromatic white	Off	Shutter/Strobe	Open (32 DMX)
Light output stability	Off	Dimmer	Closed (0 DMX)
Uniformity	Off		

Colour calibration mode ***(menu tab "Personality")***
The function switches on/off an internal control of colours. For a standard operation of the fixture the option should be switched on. Option off has to be set during colour calibration of the fixture (in this mode some functions e.g. Tungsten effect, Virtual colour wheel are disabled).

Colour mixing system ***(menu tab "Personality", DMX channel "Colour functions")***
This item allows selection between RGB and CMY mode. In 3-colour controlling mode (Mode 1) all internal 5 colours are always utilized where possible.

Dimmer curve ***(menu tab "Personality", DMX channel "Colour functions")***
The fixture allows you to select a linear dimmer curve or a square law curve.

Tungsten effect simulation ***(menu tab "Personality", DMX channel "Colour functions")***
The function simulates behaviour of a halogen lamp during dimming at calibrated white colours 2700K - 4200K. You can select from various lamp wattage simulation: 750W, 1000W, 1200W, 2000W, 2500W.
If the function Chromatic white is on, the Tungsten effect will influence also mixed colours.

Saving user colours ***(DMX channel "Colour functions")***
To save user colours:
1.Set the function White Point to off (channel Colour Mix Control, range 70-79 DMX).
1.Mix desired colour on colour channels.
2.Stay in desired position of user colours (216-235 DMX) on the Virtual colour wheel for 1 sec.
3.Leave the range of user colours (216-235 DMX) on the Virtual colour wheel.
4. Repeat steps 2-3 for next user colour.
5.To permanently save user colours, stay for 3 sec. at DMX range of 110-114 on the channel Colour functions. After that the colour system will be reset (this action can last about 2 minutes). Previous user colours will be overwritten.

Chromatic white ***(menu tab "Personality", DMX channel "Colour functions")***
If the function is on, the CTC channel influences calibrated white colours and mixed colours (also colours on Virtual colour wheel).
If the function is off, the CTC channel influences calibrated whites only.

Light output stability ***(menu tab "Personality", DMX channel "Colour functions")***
If the function is on, the light output from the fixture is immediately reduced to a value corresponding to a thermal drop of the light intensity from the LED engine (the thermal drop of light intensity - decreasing of the light intensity on circa 90 % of starting level after first 5 minutes, then is the thermal drop of light intensity inconsiderable).

Output Uniformity ***(menu tab "Personality", DMX channel "Colour functions")***
If the function is on, the light intensity from the fixture is corrected in order to get approximately the same light intensity as from another fixture which has also the function on. Thanks to the function, light outputs from more fixtures will have approximately the same light intensity.

Colour Mix control *(DMX channel "Colour Mix control")*

The Colour mix control channel defines relation between Colour channels (Cyan, Magenta, Yellow, Red, Green, Blue, Amber, Lime and CTC) and the Virtual colour wheel:

DMX value	Function
0 - 9	Virtual colour wheel has priority over colour channels (default setting)
10-19	Maximum mode (highest values have priority)
20-29	Minimum mode (lowest values have priority)
30-39	Multiply mode (multiply virtual colour wheel and colour channels)
40-49	Addition mode (virtual colour wheel + colour channels)
50-59	Subtraction mode (virtual colour wheel – colour channels)
60-69	Inverted Subtraction mode (colour channels - virtual colour wheel)
70-79	White Point Off (CTC+green correction+virtual col. wheel deactivated)
80-128	Reserved
129	Crossfade Virtual colour wheel only
130-254	Crossfade between virtual colour wheel and colour channels
255	Crossfade colour channels only

The Colour mix control zones channel defines relation between Virtual colour wheel + Colour channels (Cyan, Magenta, Yellow, Red, Green, Blue, Amber, Lime and CTC) and Zone colours (Red, Green, Blue individual zones or Kling-Net):

DMX value	Function
0 - 9	Virtual colour wheel and Colour channels have priority (default setting)
10-19	Maximum mode (highest values have priority)
20-29	Minimum mode (lowest values have priority)
30-39	Multiply mode (Virtual colour wheel and Colour channels and Zone colours)
40-49	Addition mode (Virtual colour wheel and Colour channels + Zone colours) (default set.)
50-59	Subtraction mode (Virtual colour wheel and Colour channels - Zone colours)
60-69	Inverted Subtraction mode (Zone colours - Virtual colour wheel and Colour channels)
70-79	White Point Off (CTC+green correction+virtual col. wheel deactivated)
80-127	Reserved
128	Virtual colour wheel and Colour channels have priority
129-254	Crossfade between virtual colour wheel + colour channels and Zone colours
255	Zone colours have priority

CTO *(DMX channel " Colour temperature correction")*

The CTO channel allows you to change a colour temperature of calibrated white colours in range of 8000K-2700K and also can influence mixed colours including colours on the Virtual colour wheel.

For correct function of the CTO channel on calibrated white colours, the following conditions have to be kept:

1.The Colour calibration mode has to be set on.
If the Chromatic white is set off, the CTO channel influences white colours only.
If the Chromatic white is set on, the CTO channel influences white colours and mixed colours including colours on the Virtual colour wheel.

2. The following channels have to be set at:
Virtual colour wheel at 0 DMX
Green correction at 128 DMX
Colour mix control channel at 0 DMX

3. Colour channels have to be set depending on the colour mixing mode and the DMX mode.
CMY colour mixing mode.
DMX mode 1:
Channels Cyan/Red, Magenta/Green and Yellow/Blue (both 8-bit and 16-bit channels for each colour) have to be set at 0 DMX or at the same DMX value (except 255 DMX).

DMX mode 2:
The mode is not intended for CMY colour mixing mode.

RGB(A,L) colour mixing mode

DMX mode 1:

Channels Cyan/Red, Magenta/Green and Yellow/Blue (both 8-bit and 16-bit channels for each colour) have to be set at 255 DMX or at the same DMX value (except 0 DMX).

DMX mode 2 :

Channels Red, Green, Blue, Amber, Lime (both 8-bit and 16-bit channels for each colour) have to be set at 255 DMX or at the same DMX value (except 0 DMX).

4. Shutter and dimmer have to be open.

CRI correction *(DMX channel " CRI Selection")*

The channel allows you to set CRI from Standard (80) to High (90+). Default setting is to 0 DMX (Standard CRI).

Green correction *(DMX channel "Green correction ")*

The channel allows you a fine correction of colours (whites, mixed colours, colours on the Virtual colour wheel). E.g. white colour from red to green tint.

Virtual colour wheel *(DMX channel " Virtual colour wheel")*

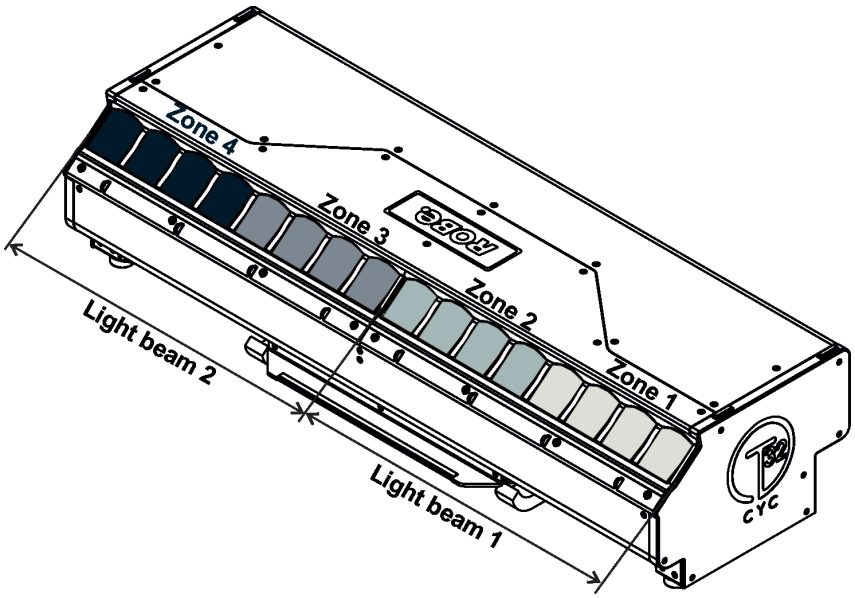
The virtual colour contains 66 preset colours.

Dimmer/Shutter *(DMX channels " Shutter/Strobe" and "Dimmer Intensity")*

Smooth 0 - 100 % dimming is provided by the electronic control unit of the light source. The control of the light source also allows strobe effects with variable speed.

Zone control

4 individually controlled RGB zones allow you to create many effects when fixtures are placed in a row.



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 Preset	**Mode 1**			
			Mode 2			
		Ethernet Settings	Ethernet Mode	Disable		
				ArtNet		
				gMAI		
				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	MANetI/II Universe	01-256	
				MANet Session ID	01-32	
			sACN Settings	sACN Universe	00001-32000	
				sACN Priority	0-255	
Information	Fixture Times	Power On Time	Total Hours			
			Resetable Hours			
		LEDS On Time	Red			
			Green			
			Blue			
			Amber			
			Lime			
	Fixture Temperatures	LEDs Temperature	Current			
			Maximum NonRes.			
			Maximum Res.			
		LEDs Board Temperature	Current			
			Maximum NonRes.			
			Maximum Res.			
		Base Temperature-rature	Current			
			Maximum NonRes.			
			Maximum Res.			
	DMX Values	Special Funsctions				
		:				
		Blue Zone 4				
	Wireless State	Signal Quality				
		Unlink Wireless Adapter				
	Power Channel State					
	Colour Functions State					
	Software Versions	Display System				
		Module M				
		Module L1				
		Module L2				
		Module L3				
		Module L4				
		Module L5				
	Product IDs	Mac Address				

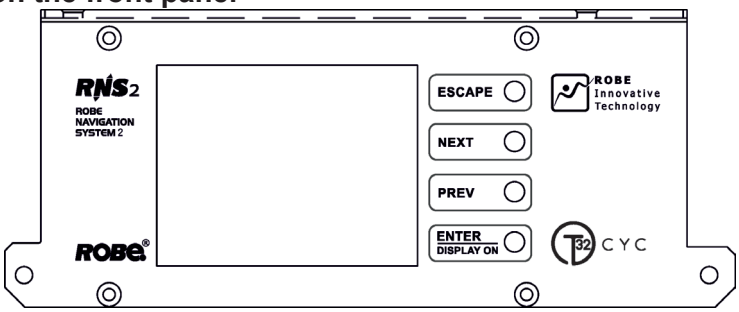
Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
		RDM UID				
		RDM Label				
	View Logs	Fixture Errors				
		Fixture States	Power On			
			Power Off			
		Fixture Position				
		Fixture Temperatures	LEDs Temperature			
			LEDs Board Temperatures			
Personality	User Mode	User A Settings				
		User B Settings				
	DMX Presets	**Mode 1**				
		Mode 2				
		View Selected Preset				
	DMX Input	**Wired Input**				
		Wireless Input				
		Wireless In/XLR Out				
	Colour Calibration Mode	Off**, On**				
	Colour Mixing Mode	RGBW				
		CMY				
	Chromatic White	**Off**, On				
	Light Output Stability	On, **Off**				
	Output Uniformity	On, **Off**				
	Frequency Setup	300 Hz				
		600Hz				
		1200Hz				
		2400Hz				
		High				
		Frequency Adjust				
	User Colours	View User Colours	View User Colour 1.. View User Colour 10			
		Distribute User Colours				
	Thungsten Eff. Sim.	**Off**				
		750W				
		1000W				
		1200W				
		2000W				
		25000W				
	Init Effect Positions	Special functions	0-255			
		:	:			
		Blue Zone 4	0-255			
	Reset Effect Positions					
	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 settings	Fan Mode	**Auto**			
			High			
			Quiet			
		Quiet-Blackout Fan Off	**Off**, On			

Tab	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6
	Dimmer Curve	Linear				
		Square Law				
		Super Square Law				
	Date & Time Settings					
	Default Settings					
Manual Control	Reset Functions	Total System reset				
						
	Manual Effect Control	Power	0-255			
		:				
		Blue Zone 4	0-255			
Stand -Alone	Test Sequences	Dynamic Mode				
		Static Mode	Light beam 1 position	0-255		
			Light beam 1 position	0-255		
	Preset Playback	**None**				
		Test				
		Prog. 1				
		Prog. 2				
	Play Program	Play Program 1				
		Play Program 2				
	Edit Program	Edit Program 1	Start Step	1-68		
			End Step	1-68		
			Edit Program Steps	Step 1	Power	0-255
				:	:	
				:	Blue Zone 4	0-255
				:	Step Time	0-25,5 sec.
				Step 68	Power	0-255
					:	
					Blue Zone 4	0-255
					Step Time	0-25,5 sec.
Service	Adjust DMX Values	Special Functions	0-255			
		:				
		Blue Zoom 4	0-255			
	Calibrations	Calibrate Effects	Light beam 1	0-255		
			Light beam 2	0-255		
		Calibrate colours	Red Calibration	X, Y, Int, Temp		
			Green Calibration	X, Y, Int, Temp		
			Blue Calibration	X, Y, Int, Temp		
			Amber Calibration	X, Y, Int,, Temp		
			Lime Calibration	X, Y, Int,, Temp		
		Green Corrections	2700K CRI 70			
			3200 K CRI 70			
			4200K CRI 70			
			5600K CRI 70			
			8000K CRI 70			
			2700K CRI 90			
			3200K CRI 90			
			4200K CRI 90			
			5600K CRI 90			
			8000K CRI 90			
		Calibrate L. Beams Reset				
		Load Default Calibrations				
		LEDs Current Calibration				
	Update Software					

7. Control menu

The Robin T32 CYC 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, 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



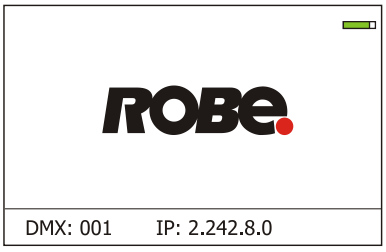
[ESCAPE] button used to leave the menu without saving changes.
[NEXT] , [PREV] buttons for moving between menu items and symbols, adjusting values.
[ENTER/Display On] button used to enter the selected menu (menu item) and to confirm adjusted value.
If the fixture is disconnected from mains, the button 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°.
- [slider control] used to recall slider system for setting desired value.
- [keyboard control] used to recall keyboard system for setting desired value.

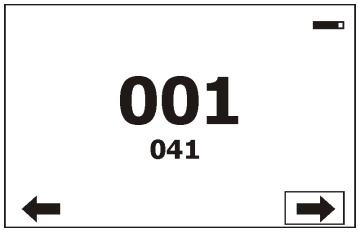
The menu page displays icons for each function that you can perform from the touch screen.

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



Note: The green icon at the top right corner of the screen indicates the level of the display battery charging. If the whole icon is green, the battery is fully charged while the red icon indicates exhausted battery. The battery charges during fixture operation, its charging lasts cca 6 hours.
We recommend that the fixture should be in operation at least 7 hours per week to keep the battery fully charged. If you switch the fixture on and this screen will not appear till 1 minute, switch the fixture off and on again. If the screen lights, the battery is exhausted. In case the screen still does not light, the battery is faulty.
This is also indicated by an error message "Faulty battery" and if such an error message appears the battery should be replaced immediately. The lifetime of the battery is highly dependent on ambient temperature (and consequently on base temperature). If the maximum ambient temperatures are kept within the specified limits, the battery should last for at least two years. Shell the ambient temperatures exceed the specified maximum temperature, the lifetime of the batteries could be considerably shortened even up to just one year or less and also result in physical damage (battery leakage) or unreliable fixture functions.
Damage caused by batteries failed due to exceeded maximum ambient temperature cannot be claimed under warranty terms.

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



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

7.1 Tab " Address"

DMX Address - Select the menu to set the DMX start address.
Blinking DMX address means that the fixture is either not receiving DMX data or that the set DMX address is higher then allowed, exceeding the DMX footprint of the set DMX mode.

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

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

7.2 Tab "Information"

Fixture Times - The menu provides readouts of fixture operation hours and air filters using 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 fixture has been fabricated.

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

LEDs On Time - Select this menu to read the number of operation hours of red, green, blue, amber and lime LEDs.

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

LEDs temperatures - The menu shows temperatures on PCBs of LED zones (L1,L2,L3,L4).

Cur. - A current temperature on PCBs of LED zones (L1,L2,L3,L4).

Max. - A maximum temperature on PCBs of LED zones (L1,L2,L3,L4) since the fixture has been fabricated.

Max. Res. - A maximum temperature on PCBs of LED zones (L1,L2,L3,L4) since the counter was last reset.
In order to reset some counter to 0, touch desired text box under item "Max.Res."

LEDs Board Temperature - The menu shows temperature on the LEDs control PCB.

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 in the fixture base (on the display PCB).

Current - A current temperature in the fixture base.

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

Maximum Res. - A maximum temperature in the fixture base since the counter was last reset.
In order to reset this counter to 0, touch the text box next to the item "Maximum Res."

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

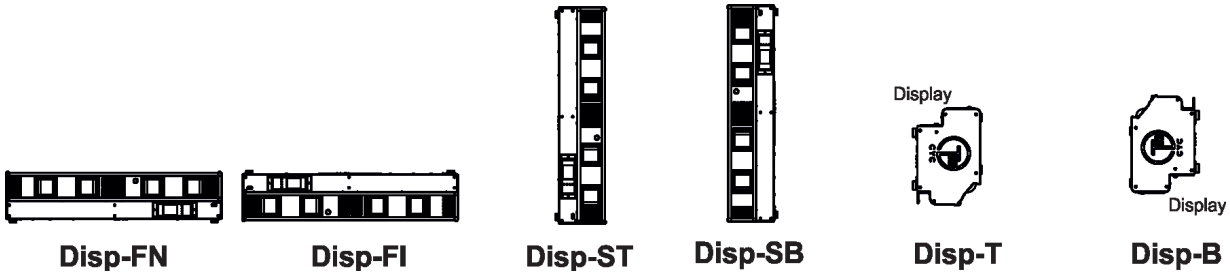
Power Channel State - The menu item shows state of functions on the channel Power/Special functions.

Colour Functions State - The menu item shows state of functions on the channel Colour Functions, which can be set by items in the tab "Personality" as well as by DMX command on the channel "Colour functions".

Software Version - Select this item to read the software version of the fixture modules:
Display System - A display processor on the display board
Module M - A beam position control processor
Module L1 - A master LEDs control processor
Module L2 - A slave LEDs control processor 1
Module L3 - A slave LEDs control processor 2
Module L4 - A slave LEDs control processor 3
Module L5 - A slave LEDs control processor 4

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

View Logs - Use this menu to read fixture´s data which have been recorded during fixture operation. This collected data allows easier troubleshooting.
Fixture Errors - Use this menu to read fixture errors which have occurred during fixture operation.
Fixture States - Recorded following actions: Fixture On, Fixture Off.
Fixture Position - Recorded installation positions of the fixture:



Fixture Temperatures - Recorded temperatures which have exceeded defined levels.

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

7.3 Tab "Personality"

DMX Preset - Use the menu to select desired channel mode.
Mode 1 - 38 control channels
Mode 2 - 42 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" adaptor.
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.

Colour Calibration Mode - the function switches on/off an internal control of colours. For a standard operation of the fixture the option should be switched on. Option off has to be set during colour calibration of the fixture.

Colour Mixing Mode - This item allows selection between RGB and CMY mode. In 3-colour controlling mode (Mode 1) all internal 5 colours are always utilized where possible.

Chromatic White - If this function is on, the CTO channel influences colours and calibrated white colours. If this function is off, the CTO channel influences calibrated whites only.

Output Uniformity - if the function is on, the light intensity from the fixture is corrected in order to get approximately the same light intensity as from another fixture which has also the function on. Thanks to the function, light outputs from more fixtures will have approximately the same light intensity.

Light Output Stability - If the function is on, the light output from the fixture is immediately reduced to a value corresponding to a thermal drop of the light intensity from the LED engine (the thermal drop - decreasing of the light intensity on 87 % of a starting level after first 5 minutes, then is the thermal drop inconsiderable).

Frequency Setup - The function allows you to set the PWM (Pulse Width Modulation) output frequency of LEDs to 300Hz, 600Hz, 1200Hz, 2400Hz or High.
Frequency Adjust - The menu item allows you fine adjustment of the LED frequency around selected frequency.

User Colours - Use this menu to change the touch screen settings.
View User Colours - The item allows you to read DMX values of colour channels for each user colour (1-10).
Distribute User Colour - The item allows you to "send" user colours from this fixture to all connected Robin T1 Profile fixtures by means of RDM protocol. User colours in the fixtures will be overwritten

Tungsten Effect Sim. - This function simulates behaviour of a halogen lamp during dimming at calibrated whites 2700K, 3200K. You can select from various lamp wattage simulation: 750W, 1000W, 1200W, 2000W, 2500W.

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.

Reset Effect Positions - Use the menu item to reset effects in the menu "Init Effect Positions" to the default (factory) values.

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. T.
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 - This function rotates menu 180 degrees from current orientation.
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, an 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.
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). The menu item does not influence fans in the "**High**" mode.

Dimmer Curve - You can select desired dimmer curve: **Linear**, **Square Law** or **Super Square Law**.

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

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

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

7.4 Tab "Manual Control"

Reset Function - The menu allows to reset a light beam position 1 and 2.

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 the Robin T32 CYC.
Dynamic Mode - This mode uses all Robin T32 CYC functions including light beam movement.
Static Mode - This mode is suitable for projections on the wall, without any beam movement.
Adjust the Light beam 1 and light beam 2 position and start test sequences by touching the green ▶ icon.

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 T32 CYC offers 2 free programs, each up to 68 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.

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

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

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.

Light Beam 1 - a fine adjustment of the light beam 1 position

Light Beam 2 - a fine adjustment of the light beam 2 position

Calibrate Colours - The menu serves for calibration of white colours in a factory, user should not change values in the menu.

Green Corrections - The menu allows you to correct calibrated whites 2700K, 3200K, 4200K, 5600K and 8000K. Both shutter and dimmer have to be open during the correction.

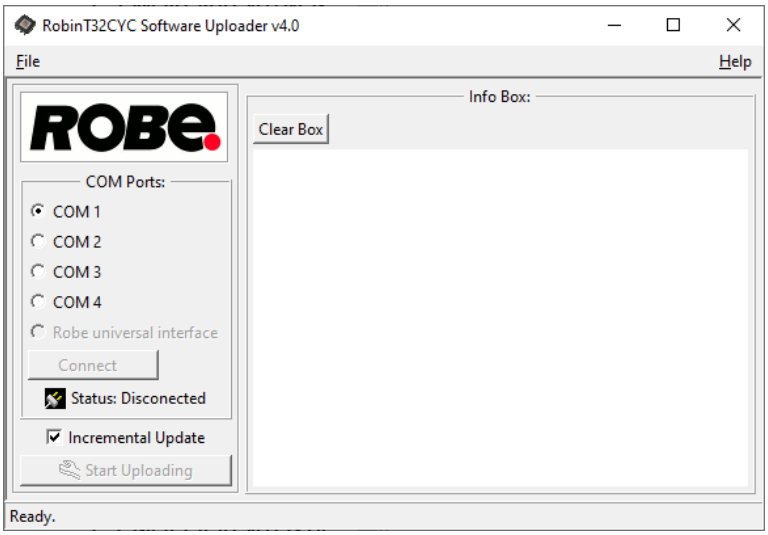
LEDs Current Calibration - This process waits about 5 minutes and after its finishing the sign "Current Calibration DONE" will apear on the display. The procedure should be run if some colour nonuniformity has occurred during fixture operation.
I**mportant. The procedure must be run after each LEDs PCB (RB 6298) changing**, otherwise damage of the LEDs PCBs may occur! This calibration of LEDs curent must be run before dimmer activation!
Note: Calibration of LEDs current can be also run by means of the RDM manager ver. 1.0.12 and higher (LED Driver -->Start Current Calibration).

Calibrate L. Beams Reset - The menu item is used for calibration of light beams reset in factory and also has to be used in case of change of beam motor(s) or beam motors control PCB RB3138.

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

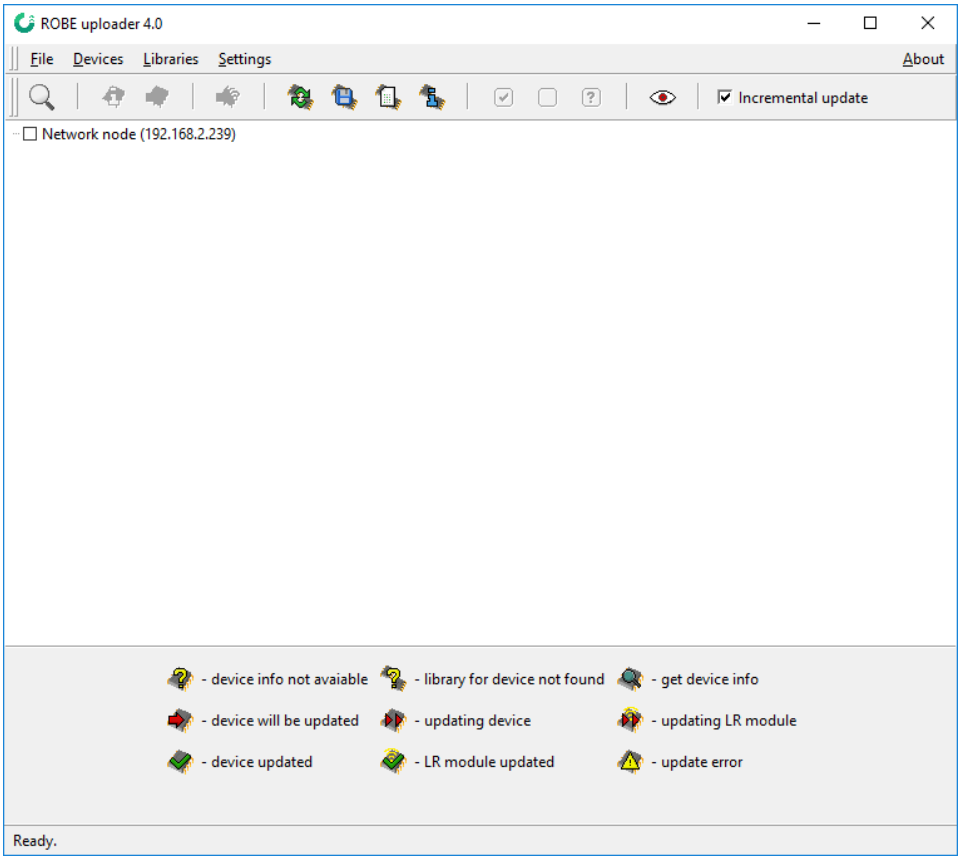
Update software - The menu item allows you to update software in the fixture via either serial or USB port of PC.
The following items are required in order to update software:
- PC running Windows or Linux or macOS
- DSU file
- Flash cable RS232/DMX (P/N13050624) or Robe Universal Interface / Robe Universal interface WTX.

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_RobinT32 CYC_18051835.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 (probably you will need some USB to RS 232 converter if your computer has USB ports only).
   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 uploader.
5. Double-click the software uploader file (e.g. DSU_RobinT32 CYC_18051835.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.

Note: After all processors updating, the fixture will be set to default values. If you use the Incremental update, setting the fixture to default values depends on type of updated processors.
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 can take advantage of RDM support and Ethernet ports if present in the units.
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 T32 CYC 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		*	*
DEVICE_RESET		*	
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
STATUS_MESSAGES			*
STATUS_ID_DESCRIPTION			*
DEVICE_HOURS [2]			*
ROBE_DMX_INPUT		*	*
ROBE_WIRELESS_UNLINK		*	

[2]...Commands relative resetable values

RDM model ID for the Robin T32 CYC is 0x0137.

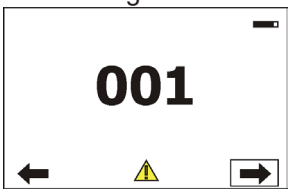
9. Robe Ethernet Access Portal (REAP)

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.

10. Error and information messages

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:

Temperature Sensor Error

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

EEprom Error

Hardware error of the EEprom.

Recharge The battery

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

Battery faulty. Replace it.

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

LEDs Current Cal. Missing

LEDs current calibration was not done. Go to the tab Service and run the item LEDs Current Calibration.
Note: Calibration of LEDs current can be also run by means of the RDM manager ver. 1.0.12 and higher (LED Driver -->Start Current Calibration).

11. Technical Specifications

Electrical

Power supply: electronic auto-ranging
Input voltage range: 100-240V, 50-60Hz
Fuse: T 10 A, 250V
Max. power consumption: 500W (power factor= 0.98)
Mains output: max. 11A

Optic

Light source: 16x RGBBAL LED multichips
Asymmetrical field angle 85° x 45°
A 6:1 height-to-distance ratio asymmetrical optical system
RGB/RGBAL or CMY colour mixing
4 controllable LED zones
CRI: 96
LED life expectancy: min. 50.000 hours
Typical lumen maintenance: L70/B50 @ 50.000 hours

Colour effects

Virtual colour wheel (66 preset colours)
Rainbow effect with in both directions with variable speed
CTC in range of 2700K-8000K
Halogen lamp effect at whites from 2700K to 4200K

Beam position

Motorized beam position

Strobe

Strobe effect with variable speed (0.3 - 20Hz)

Dimmer

Imperceptible 18 bit dimming for ultra smooth fade to black

Control

Graphic touch screen for fixture setting and addressing
Gravitation sensor for auto screen positioning
Battery backup of the touch screen
Readout fixture and LED module usage, receiving DMX values, temperatures, etc
Built-in analyzer for easy fault finding, error messages
Individual control of each zone
MAPS™ - Motionless absolute positioning system for internal movement affecting beam distribution
Stand-alone operation
2 user editable programs, each up to 68 steps
Supported protocols: USITT DMX 512, RDM, ArtNet, MANet, MANet2, sACN
Support of RDM (Remote Device Management)
2 DMX modes (38, 42 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

Connection

AC power In/Out : Neutrik power CON TRUE 1
DMX data in/out: Locking 5-pin XLR
Ethernet In/Out: RJ45

Max. number of fixtures in Ethernet IN/Out line

8

Mounting

Mounting points: 2 pairs of 1/4-turn locking points
2x Mounting adaptor with 1/4-turn quick locks

Temperatures

Maximum ambient temperature : 40° C
Maximum housing temperature : 75° C

Minimum distances

Min. distance from flammable surfaces: 0.3 m
Min. distance to lighted object: 0.35 m

Total heat dissipation

1270 BTU/hr (calculated)

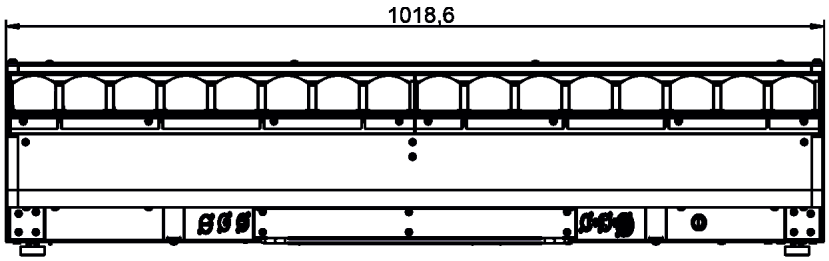
Ingress protection factor

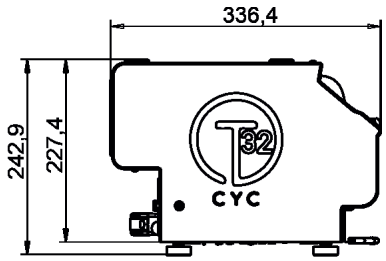
IP20

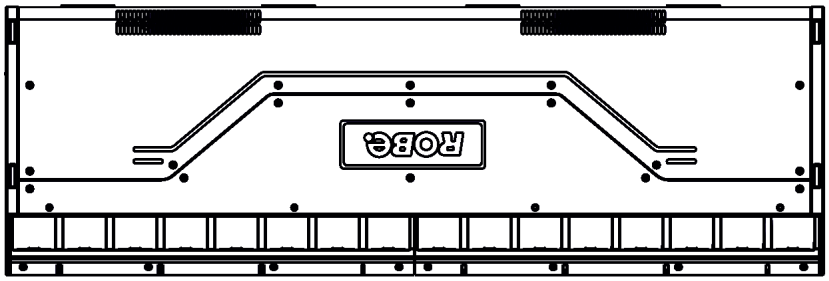
Weight

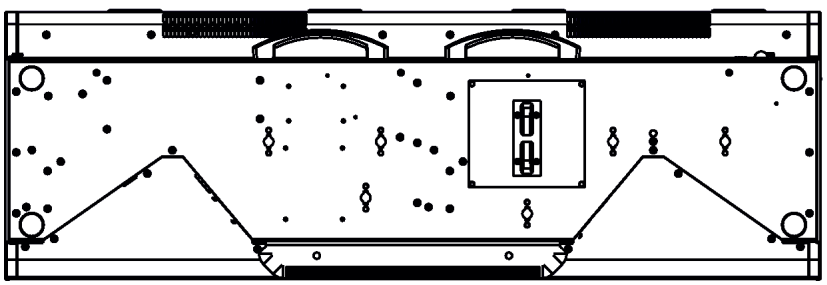
34.5 kg (76.0 lbs)

Dimensions (mm)









Accessories

1 x Power cable including powerCON TRUE1 In connector
1 x Mounting Adaptor for T32 CYC/T32 CYC Slim 2pcs (P/N 10981130)
1 x user manual

Optional accessories

Safety wire 36 kg (P/N 99011963)
Daisy Chain powerCON TRUE1 In/Out, EU, 2m, Indoor (P/N 13052439)
Daisy Chain powerCON TRUE1 In/Out, US, 2m, Indoor (P/N 13052440)
Daisy Chain powerCON TRUE1 In/Out, EU, 5m, Indoor (P/N 13052444)
Doughty Trigger Clamp (P/N 17030386)
T32 Shields set (P/N 10981070)
Upgrade kit CRMX Universal 260 (P/N 99030100)

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 inside optical system. 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 weak detergent solution is recommended for cleaning fixture´s covers, under no circumstances should alcohol or solvents be used!

DANGER !
Disconnect from the mains before starting any maintenance and cleaning work.

The interior of the fixture should be cleaned at least annually using a vacuum cleaner or compressed air. The cooling fans in the fixture should be cleaned at least once a year.

Important! Never use alcohols (ethanol, methanol, isopropyl alcohol), acetone and another aggressive solvents for cleaning the LED lens array. Do not immerse lenses in liquid (e.g. water) during cleaning.

Recommended steps for cleaning the LED lens array:
1. Use low-pressure compressed air to remove coarse dust from lenses.
2. Use distilled water with weak detergent solution and lint-free small cloth for further cleaning of lenses.
3. Use an antistatic, alcohol-free screen cleaner (we recommend the Lyreco Screen Cleaner) and polish lenses until they are dry.
4. Check the lenses are dry before reapplying power.

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 fuse holder 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. 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 aging 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, cracked plastic or any plastic part 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. ChangeLog

This section summarizes changes in the user manual.

Ver. of the manual	Date of issue	Description of changes
1.1	15/06/2024	Parking position added, DMX chart ver. 1.5
1.2	26/06/2024	Parking position removed, DMX chart ver. 1.6
1.3	09/07/2024	Order of LED zones changed, shield installation added
1.4	15/07/2024	Mounting adaptor nstallation added
1.5	20/08/2024	BARS removed, DMX chart ver: 1.8
1.6	15/10/2024	New mounting adaptor
1.7	04/12/2024	Menu Spec aktualized
1.8	05/02/2024	Power consumption changed

Robin T32™ CYC - DMX protocol

Version: 1.8 Mode 1-CMY/RGB, Mode 2 -RGBAL

Quick overview of default DMX values for each channel

Mode/channel		Default DMX Value	Function
1	2		
1	1	0	Power/Special functions
2	2	10	LED frequency selection
3	3	128	LED frequency fine adjusting
4	4	0	Colour functions
5	5	0	CRI selection
6	6	0	Virtual colour wheel-all zones
7	*	0/255	Cyan/Red (8 bit)- all zones
8	*	0/255	Cyan/Red fine (16 bit)-all zones
9	*	0/255	Magenta/Green (8 bit)-all zones
10	*	0/255	Magenta/Green fine (16 bit)-all zones
11	*	0/255	Yellow/Blue (8 bit)-all zones
12	*	0/255	Yellow/Blue fine (16 bit) all zones
*	7	255	Red (8 bit)-all zones
*	8	255	Red fine (16bit)-all zones
*	9	255	Green (8 bit)-all zones
*	10	255	Green fine (16bit)- all zones
*	11	255	Blue (8 bit)-all zones
*	12	255	Blue fine (16bit)-all zones
*	13	255	Amber (8 bit)-all zones
*	14	255	Amber fine (16bit)-all zones
*	15	255	Lime (8 bit)-all zones
*	16	255	Lime fine (16bit)-all zones
13	17	110	CTO -all zones
14	18	128	Green correction -all zones
15	19	0	Colour mix control
16	20	45	Colour mix control Zones
17	21	0	Light beam position time
18	22	128	Master light beam position (8 bit)
19	23	128	Master light beam position fine (16 bit)
20	24	128	Light beam 1 position (8bit)
21	25	128	Light beam 1 position fine (16 bit)
22	26	128	Light beam 2 position (8bit)
23	27	128	Light beam 2 position fine (16 bit)
24	28	32	Shutter/ strobe -all zones
25	29	0	Dimmer intensity (8 bit) -all zones
26	30	0	Dimmer intensity fine (16 bit) -all zones
27	31	0	Red Zone 1
28	32	0	Green Zone 1
29	33	0	Blue Zone 1
30	34	0	Red Zone 2
31	35	0	Green Zone 2
32	36	0	Blue Zone 2
33	37	0	Red Zone 3

34	38	0	Green Zone 3
35	39	0	Blue Zone 3
36	40	0	Red Zone 4
37	41	0	Green Zone 4
38	42	0	Blue Zone 4

Mode/channel		DMX Value	Function	Type of control
1	2			
1	**1**		**Power/Special functions**	
			Factory display menu setting: DMX Input-Wired ,Graphic display-On, Fans mode-Auto, WP 8000K-On, Dimmer curve-Square law, Tungsten effect simulation-Off	
		0 -9	Reserved (0=default)	
			To activate following functions, stop in DMX value for at least 3 s and shutter must be closed at least 3 sec. („Shutter,Strobe" channel 24/28 must be at range: 0-31 DMX). Corresponding menu items are temporarily overriden.	
		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
		30-69	Reserved	step
		70-74	Fans mode: Auto	step
		75-79	Fans mode: High	step
		80-84	Quiet mode: Fans On at blackout	step
		85-89	Quiet mode: Fans Off at blackout	step
		90-129	Reserved	
			To activate following functions, stop in DMX value for at least 3 seconds.	
		130-199	Reserved	
		200-209	Fixture reset (Light beam positions)	step
		210-239	Reserved	
		240	Disabled Fans Quiet mode	step
		241-255	Fans mode: Quiet - fans noise control from min. to max.	proportional
2	**2**		**LED frequency selection**	
			Factory display menu setting: 600Hz	
			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 overriden.	
		0-4	PWM frequency from Display menu (fixture utilizes PWM	step
			frequency set in the display menu item Frequency Setup).	
		5-9	300 Hz	step
		10-14	600 Hz (10=default)	step
		15-19	1200 Hz	step
		20-24	2400 Hz	step
		25-29	High	step
		30-255	Reserved (fixture utilizes PWM frequency set in the display menu item	
			Frequency Setup).	
3	**3**		**LED frequency fine adjusting**	

Mode/channel		DMX Value	Function	Type of control
1	2			
			Factory display menu setting: 600Hz	
			Select desired PWM output frequency of LEDs on the channel above.	
		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
4	**4**		**Colour functions**	
			Factory display menu setting: Colour mixing mode-CMY, Dimmer Curve-Square Law, Tungsten effect simulation-Off, Chromatic white-Off, Light output stability-Off, Uniformity-Off	
		0	No function (0=default)	step
			To activate following functions, stop in DMX value for at least 3 seconds. Corresponding menu items are temporarily overriden	
		1-39	Reserved	
		40-44	Colour mixing mode: CMY (DMX Mode 1)	step
		45-49	Colour mixing mode: RGB (DMX mode 1),	step
		50-54	Dimmer curve: Square law	step
		55-59	Dimmer curve: Linear	step
		60-64	Dimmer curve: Super square law	step
		65-79	Raw DMX	proportional
			Tungsten effect simulation for whites 2700K-4200K:	
		80-84	Tungsten effect simulation (750W/80V): On	step
		85-89	Tungsten effect simulation (1000W/240V): On	step
		90-94	Tungsten effect simulation (1200W/240V): On	step
		95-99	Tungsten effect simulation (2000W/230V): On	step
		100-104	Tungsten effect simulation (2500W/230V): On	step
		105-109	Tungsten effect simulation: Off	step
		110-114	Save user colour (see user manual)	step
		115-119	Chromatic white: On	step
		120-124	Chromatic white: Off	step
		125-129	Light output stability On	step
		130-134	Light output stability Off	step
		135-139	Uniformity On	step
		140-144	Uniformity Off	step
		145-255	Reserved	
5	**5**		**CRI selection**	

Mode/channel		DMX Value	Function	Type of control
1	2			
		0-255	CRI selection from Standard (80) to High (90+) (0=default)	proportional
6	6		**Virtual colour wheel-all zones**	
		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
		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

Mode/channel		DMX	Function	Type of
1	2	Value		control
		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
		133-215	Reserved	
		216-217	User colour 1	step
		218-219	User colour 2	step
		220-221	User colour 3	step
		222-223	User colour 4	step
		224-225	User colour 5	step
		226-227	User colour 6	step
		228-229	User colour 7	step
		230-231	User colour 8	step
		232-233	User colour 9	step
		234-235	User colour 10	step
		236-245	Rainbow effect (with fade time) from slow-> fast	proportional
		246-255	Rainbow effect (without fade time) from slow-> fast	proportional
7	*		**Cyan/Red (8 bit)-all zones**	
		0-255	Colour saturation control - coarse 0-100% (0=default for CMY mode, 255=default for RGB mode)	proportional
8	*		**Cyan/Red fine (16 bit)-all zones**	
		0-255	Colour saturation control - fine (0=default for CMY mode, 255=default for RGB mode)	proportional
9	*		**Magenta/Green (8 bit)-all zones**	
		0-255	Colour saturation control - coarse 0-100% (0=default for CMY mode, 255=default for RGB mode)	proportional
10	*		**Magenta/Green fine (16 bit)-all zones**	
		0-255	Colour saturation control - fine (0=default for CMY mode, 255=default for RGB mode)	proportional
11	*		**Yellow/Blue (8 bit)-all zones**	
		0-255	Colour saturation control - coarse 0-100% (0=default for CMY mode, 255=default for RGB mode)	proportional

Mode/channel		DMX	Function	Type of
1	2	Value		control
12	*		**Yellow/Blue fine (16 bit)-all zones**	
		0-255	Colour saturation control - fine (0=default for CMY mode, 255=default for RGB mode)	proportional
*	**7**		**Red (8 bit)-all zones**	
		0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
*	**8**		**Red fine (16bit)-all zones**	
		0-255	Colour saturation control - fine (255=default)	proportional
*	**9**		**Green (8 bit)-all zones**	
		0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
*	**10**		**Green fine (16bit)-all zones**	
		0-255	Colour saturation control - fine (255=default)	proportional
*	**11**		**Blue (8 bit)-all zones**	
		0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
*	**12**		**Blue fine (16bit)-all zones**	
		0-255	Colour saturation control - fine (255=default)	proportional
*	**13**		**Amber (8 bit)-all zones**	
		0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
*	**14**		**Amber fine (16bit)-all zones**	
		0-255	Colour saturation control - fine (255=default)	proportional
*	**15**		**Lime (8 bit)-all zones**	
		0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
*	**16**		**Lime fine (16bit)-all zones**	
		0-255	colour saturation control - fine (255=default)	proportional
13	**17**		**CTO-all zones**	
		0-1	8000 K	step
		2-64	Colour temperature changing 7978 K ->6622 K (22 K /1 DMX)	proportional
		65	6600 K	step
		66-109	Colour temperature changing 657 8K ->5622 K (22 K/1 DMX)	proportional
		110	5600 K (110=default)	step
		111-179	Colour temperature changing 5580 K ->4220 K (20 K/1 DMX)	proportional
		180	4200 K	step
		181-229	Colour temperature changing 4180 K ->3220 K (20 K/1 DMX)	proportional
		230	3200 K	step
		231-254	Colour temperature changing 3180 K ->2720 K (20K /1 DMX)	proportional
		255	2700K	step
14	**18**		**Green correction-all zones**	
		0	Uncorrected white	step
		1-127	Minus green --> uncorrected white	proportional
		128	Uncorrected white (128=default)	step
		129-255	Uncorrected white --> Plus green	proportional
15	**19**		**Colour mix control**	
			Defines relation between Virtual Colour wheel and Colour channels	
			Virtual = Virtual Colour Wheel	
			Colour mix = Colour channels (CMY/RGBAL/CTO)	
		0-9	"Virtual " has priority over "Colour mix" (0=default)	step
		10-19	Maximum mode (highest values have priority)	step
		20-29	Minimum mode (lowest values have priority)	step
		30-39	Multiply mode (multiply "Virtual" and "Colour mix")	step

Mode/channel		DMX	Function	Type of
1	2	Value		control
		40-49	Addition mode ("Virtual" + "Colour mix")	step
		50-59	Subtraction mode ("Virtual" – "Colour mix")	step
		60-69	Inverted Subtraction mode ("Colour mix"-"Virtual")	step
		70-79	White Point Off (CTO+Green Cor.+Virtual Colour Wheel deactivated)	step
		80-128	Reserved	
		129	Crossfade "Virtual" only	step
		130-254	Crossfade between "Virtual" and "Colour mix"	proportional
		255	Crossfade "Colour mix" only	step
16	**20**		**Colour mix control Zones**	
			The channel defines relation between Virtual colour wheel + Colour channels and zones	
			"Global" = Global colours (CMY/RGB/RGBAL colours, Virtual Colour Wheel, CTO)	
			"Pixel" = Zone colours(RGB individual zones)	
		0-9	Global colours (Global has priority)	step
		10-19	Maximum mode (highest values have priority)	step
		20-29	Minimum mode (lowest values have priority)	step
		30-39	Multiply mode (multiply "Global" and "Pixel")	step
		40-49	Addition mode ("Global" + "Pixel") (45=default)	step
		50-59	Subtraction mode ("Global" – "Pixel")	step
		60-69	Inverted Subtraction mode ("Pixel"-"Global")	step
		70-79	White Point Off (CTC+Green Cor.+Virtual Colour Wheel deactivated)	step
		80-127	Reserved	
		128	Global colours only ("Global" has priority)	step
		129-254	Crossfade between "Global" and "Pixel"	proportional
		255	Zone colours ("Pixel" has priority)	step
17	**21**		**Light beam position time**	
		0	Function is off (0=default)	step
		1-255	Time of beam movement (0.1 sec-->25.5 sec.)	proportional
18	**22**		**Master light beam position (8 bit)**	
			The Master light beam has priority over Light Beam1/Light Beam 2 with the exception of the following setting: Master Light beam (8bit)=128 DMX and Master Light beam fine (16bit)=0 DMX.	
		0-127	Movement from -20 degrees towards centre	proportional
		128	0 degrees (128=default)	step
		129-255	Movement from centre to +20 degrees	proportional
19	**23**		**Master light beam position fine (16 bit)**	
		0-255	Fine movent of the light beam (0=default)	proportional
20	**24**		**Light beam 1 position (8 bit)**	
		0-127	Beam movement from -20 degrees towards centre	proportional
		128	0 degrees (128=default)	step
		129-255	Beam movement from centre to +20 degrees	proportional
21	**25**		**Light beam 1 position fine (16 bit)**	
		0-255	Fine movent of the light beam (0=default)	proportional
22	**26**		**Light beam 2 position (8 bit)**	
		0-127	Beam movement from -20 degrees towards centre	proportional
		128	0 degrees (128=default)	step
		129-255	Beam movement from centre to +20 degrees	proportional
23	**27**		**Light beam 2 position fine (16 bit)**	

Mode/channel 1	Mode/channel 2	DMX Value	Function	Type of control
		0-255	Fine movent of the light beam (0=default)	proportional
24	**28**		**Shutter/ strobe-all zones**	
		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
25	**29**		**Dimmer intensity-all zones**	
		0-255	Dimmer intensity from 0% to 100% (0=default)	proportional
26	**30**		**Dimmer intensity fine-all zones**	
		0-255	Fine dimming (0=default)	proportional
27	**31**		**Red zone 1**	
		0-255	Red LEDs saturation control 0-100% (0=default)	proportional
28	**32**		**Green zone 1**	
		0-255	Green LEDs saturation control 0-100% (0=default)	proportional
29	**33**		**Blue zone 1**	
		0-255	Blue LEDs saturation control 0-100% (0=default)	proportional
30	**34**		**Red zone 2**	
		0-255	Red LEDs saturation control 0-100% (0=default)	proportional
31	**35**		**Green zone 2**	
		0-255	Green LEDs saturation control 0-100% (0=default)	proportional
32	**36**		**Blue zone 2**	
		0-255	Blue LEDs saturation control 0-100% (0=default)	proportional
33	**37**		**Red zone 3**	
		0-255	Red LEDs saturation control 0-100% (0=default)	proportional
34	**38**		**Green zone 3**	
		0-255	Green LEDs saturation control 0-100% (0=default)	proportional
35	**39**		**Blue zone 3**	
		0-255	Blue LEDs saturation control 0-100% (0=default)	proportional
36	**40**		**Red zone 4**	
		0-255	Red LEDs saturation control 0-100% (0=default)	proportional
37	**41**		**Green zone 4**	
		0-255	Green LEDs saturation control 0-100% (0=default)	proportional
38	**42**		**Blue zone 4**	
		0-255	Blue LEDs saturation control 0-100% (0=default)	proportional

Robin T32™ CYC/Robin T32™ CYC Slim - Colours on Virtual Colour Wheel					
Colour name	**Red** DMX	**Green** DMX	**Blue** DMX	**Amber** DMX	**Lime** DMX
Filter 4 (Medium Bastard Amber)	255	47	7	255	80
Filter 10 (Medium Yellow)	255	65	0	255	132
Filter 19 (Fire)	255	0	0	186	1
Filter 26 (Bright Red)	255	0	0	25	0
Filter 58 (Lavender)	255	0	68	255	44
Filter 68 (Sky Blue)	132	190	159	0	36
Filter 71 (Tokyo Blue)	0	0	255	0	0
Filter 79 (Just Blue)	123	147	171	0	56
Filter 88 (Lime Green)	255	237	2	198	185
Filter 90 (Dark Yellow Green)	0	255	2	0	169
Filter 100 (Spring Yellow)	255	0	0	255	223
Filter 101 (Yellow)	255	0	0	255	157
Filter 102 (Light Amber)	255	142	4	255	73
Filter 103 (Straw)	255	138	4	255	97
Filter 104 (Deep Amber)	255	0	0	255	124
Filter 105 (Orange)	255	0	0	255	60
Filter 106 (Primary Red)	255	0	0	104	0
Filter 111 (Dark Pink)	255	0	11	255	59
Filter 115 (Peacock Blue)	0	255	31	0	72
Filter 116 (Medium Blue-Green)	0	255	20	0	63
Filter 117 (Steel Blue)	45	255	42	158	183
Filter 118 (Light Blue)	4	255	37	0	77
Filter 119 (Dark Blue)	0	165	118	0	0
Filter 120 (Deep Blue)	3	165	111	0	0
Filter 121 (Filter Green)	84	255	0	235	24
Filter 128 (Bright Pink)	255	0	10	127	0
Filter 131 (Marine Blue)	0	255	75	51	116
Filter 132 (Medium Blue)	0	255	102	0	42
Filter 134 (Golden Amber)	255	51	0	255	42
Filter 135 (Deep Golden Amber)	255	35	0	255	0
Filter 136 (Pale Lavender)	184	7	51	255	60
Filter 137 (Special Lavender)	231	63	43	255	99
Filter 138 (Pale Green)	255	224	6	255	200
Filter 139 (Primary Green)	0	255	0	0	84
Filter 141 (Bright Blue)	0	255	77	0	82
Filter 147 (Apricot)	255	0	4	255	115
Filter 148 (Bright Rose)	255	0	7	255	13
Filter 152 (Pale Gold)	255	0	11	255	112
Filter 154 (Pale Rose)	255	0	16	255	119
Filter 157 (Pink)	255	0	7	255	27
Filter 158 (Deep Orange)	255	0	0	255	30
Filter 162 (Bastard Amber)	255	175	7	255	50
Filter 164 (Flame Red)	255	0	0	142	0
Filter 165 (Daylight Blue)	12	255	158	3	156
Filter 169 (Lilac Tint)	255	12	27	255	61
Filter 170 (Deep Lavender)	255	0	65	255	90
Filter 172 (Lagoon Blue)	0	238	113	0	255

Colour name	**Red** DMX	**Green** DMX	**Blue** DMX	**Amber** DMX	**Lime** DMX
Filter 179 (Chrome Orange)	255	0	0	255	112
Filter 180 (Dark Lavender)	92	15	188	76	46
Filter 181 (Congo Blue)	185	0	214	0	0
Filter 197 (Alice Blue)	0	249	163	39	0
Filter 201 (Full C.T. Blue)	38	150	97	36	246
Filter 202 (Half C.T. Blue)	164	13	123	34	255
Filter 203 (Quarter C.T. Blue)	255	203	54	104	255
Filter 204 (Full C.T. Orange)	255	125	0	255	4
Filter 205 (Half C.T. Orange)	255	139	5	255	67
Filter 206 (Quarter C.T. Orange)	255	60	17	255	98
Filter 247 (Filter Minus Green)	255	28	36	255	56
Filter 248 (Half Minus Green)	255	20	45	255	200
Filter 281 (Three Quarter C.T. Blue)	38	255	102	136	227
Filter 285 (Three Quarter C.T. Orange)	255	0	0	255	121
Filter 352 (Glacier Blue)	16	255	119	5	149
Filter 353 (Lighter Blue)	14	255	66	0	157
Filter 715 (Cabana Blue)	0	222	182	0	0
Filter 778 (Millennium Gold)	255	0	0	255	37
Filter 793 (Vanity Fair)	255	0	26	171	0