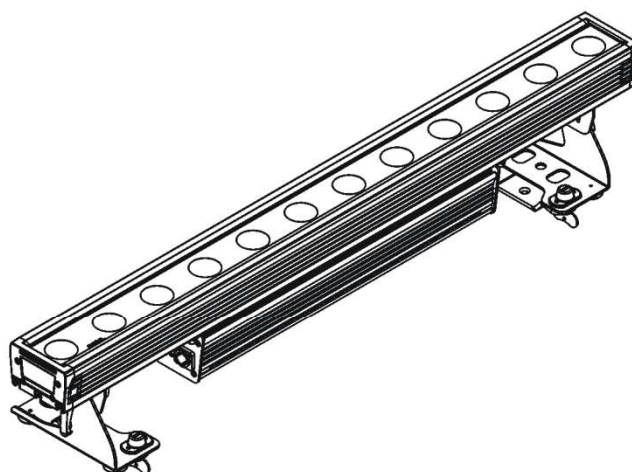


ROBE

ROBIN[®] CycBar 12

ROBIN[®] CycBar 12

Wireless DMX
CRMX[™]



USER MANUAL

Version 1.5

ROBE[®] Lighting s.r.o. • Czech republic • www.robe.cz

Table of contents

1. Safety instructions	3
2. Fixture exterior view	4
3. Installation	5
3.1 Rigging the fixture.....	5
3.2 Connection to the mains	6
3.3 DMX 512 connection	6
3.4 Inserting diffuser.....	7
4. Wireless DMX operation.....	8
5. Control menu map.....	9
6. Control menu.....	12
6.1 Fixture Address	12
6.2 Fixture information.....	12
6.3 Personality	13
6.4 Manual mode.....	14
6.5 Test sequences.....	15
6.6 Stand-alone setting.....	15
6.7 Special functions	16
7. RDM	18
8. Technical specifications	19
9. Cleaning and maintenance	22
9.1 Disposing of the product	22

**FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE POWERING OR INSTALLING YOUR Robin CycBar 12!
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.

This device is for professional use 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 side 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.

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

Do not overload wall outlets and extension cords as this can result in fire or electric shock.

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.

Do not install the unit near naked flames.

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.

**Warning! Risk Group 2 LED product according to EN 62471.
LED light emission. Risk of eye injury. Do not look straight at the fixture's LEDs during operation. The intense light beam may damage your eyes. The light source contains blue LEDs.**

Keep combustible materials away from the fixture.

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.

Avoid brute force when installing or operating the fixture.

The fixture was designed for indoor use only.

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

Avoid using the unit in locations subject to possible impacts.

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

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

Do not block the front covering glass with any object when the fixture is under operation.
The fixture body never must be covered with cloth or other materials.

Always fix the fixture with an appropriate safety cable. Fix the safety cable at the anchor point.

The fixture becomes very hot during operation. Allow the fixture to cool approximately 30 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!

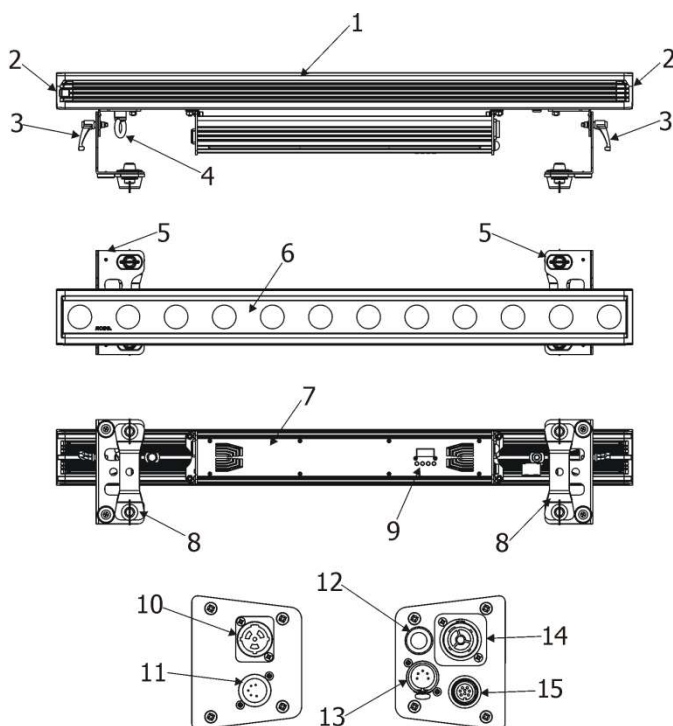
Do not attempt to dismantle or modify the unit.

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

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

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.

2. Fixture exterior view



- 1. Unit body
- 2. Side covers
- 3. Tilt locks
- 4. Anchor point for safety wire
- 5. Mounting brackets
- 6. Transparent cover
- 7. Control unit
- 8. Omega holders
- 9. Control display+buttons
- 10. Mains input
- 11. DMX input
- 12. Antenna cover
- 13. DMX output
- 14. Mains output
- 15. LED output

3. Installation

3.1 Rigging the fixture

The Robin CycBar 12 can be rigged in any orientation on a truss without altering its operation characteristics. For overhead use, always install a safety wire that can hold at least 10 times the weight of the fixture. You must only use a safety wire equipped snap hook with screw lock gate. Use the safety wire anchor point for safety cable attachment for this fixture.

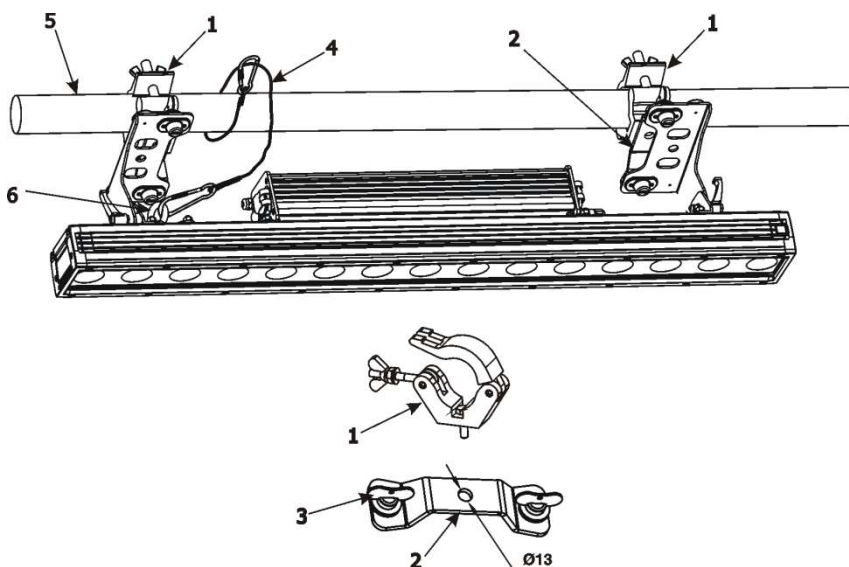
Ensure that the structure (truss) to which you are attaching the fixture is secure

Fixture may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the device and consult installation with an expert.

Truss installation

1. Bolt clamps (1) to the omega holders (2) with M12 bolt and lock nut through the hole in the omega holder.
2. Fasten the omega holders to the brackets of the CycBar 12 by inserting both ¼ turn quick locks (3) into the holes of the brackets and tighten fully clockwise.
3. Clamp the fixture on a truss (5) and tighten both rigging clamps.
4. Pull a safety wire (4) around the truss (5) and lock the snap hook through attachment point (6) as shown on the picture below.

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




- | | |
|-----------------------|---------------------|
| 1- Clamp | 4- safety wire |
| 2- Omega holder | 5- truss |
| 3- ¼ turn quick locks | 6- attachment point |

3.2 Connection to the mains

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

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	 , GND,PE

This device falls under class one and must be grounded!

Design of the Robin CycBar 12 allows to connect several fixtures 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 “

The max. number of connected fixtures depends on the AC mains power voltage and fixture version:

EU version (CE)	US version (ETL)
15 fixtures at power supply= 230V	9 fixtures at power supply= 230V
13 fixtures at power supply= 208V	7 fixtures at power supply= 208V
7 fixtures at power supply= 120V	4 fixtures at power supply= 120V

Actual numbers of fixtures may differ from values stated above as you have to take into account the length of supply cables, circuit breaker etc. at projecting of the fixtures installation.

Do not overload the supply line and the connecting leads.

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

3.3 DMX 512 connection

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

Wiring of the XLR connectors:

DMX input
XLR socket:



DMX output
XLR plug

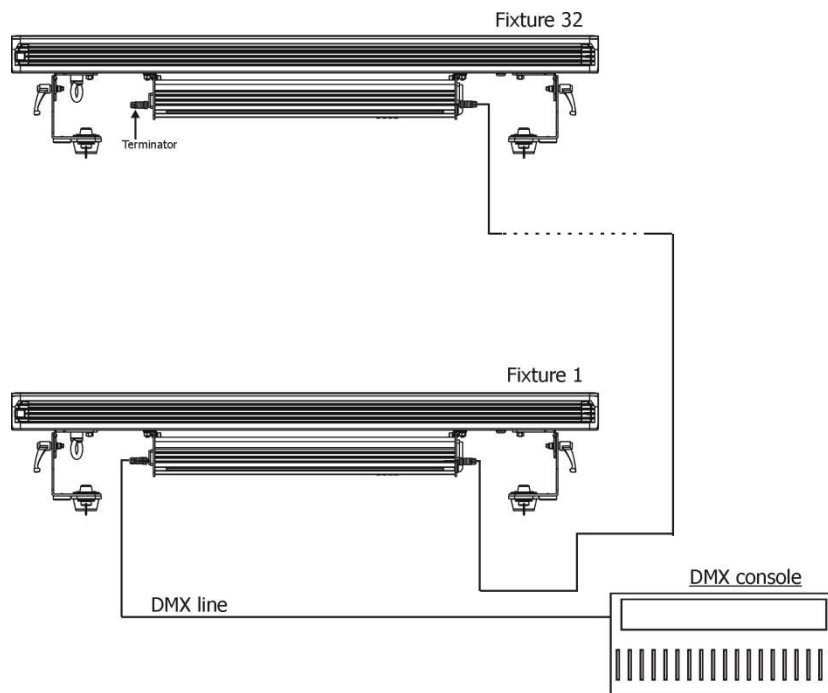


- 1 – Shield 2 - Signal (-) 3 - Signal (+) 4 – Not connected 5 – Not connected

To build a DMX chain

1. Connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX chain.
2. Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture.
3. Always connect the DMX output with the input of the next fixture until all fixtures are connected.
Do not overload the link. Max. 32 fixtures may be connected on a DMX link.

Robin CycBar 12



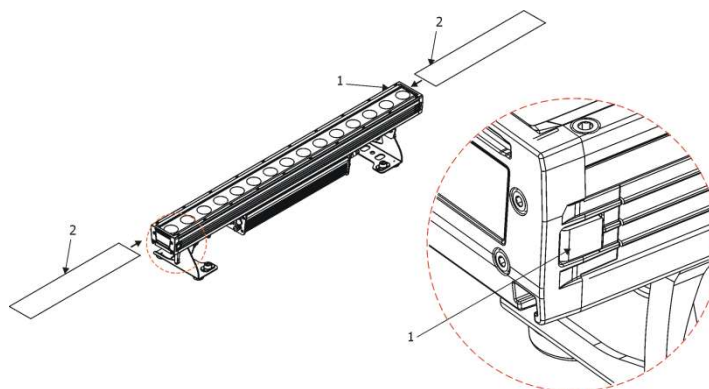
Caution: Terminate the link by installing a termination plug in the output of the last fixture. The termination plug is a 5-pin XLR male plug with a 120 Ohm resistor soldered between Signal (-) and Signal (+).

3.4 Inserting diffuser

Design of the Robin CycBar 12 allows inserting diffuser in front of the glass cover in order to change a beam angle of the fixture. Each diffuser consist of two parts. Always insert both parts of diffuser into fixture.

To insert diffuser:

1. Disconnect the fixture from mains and allow it to cool.
2. Press and hold a diffuser lock (1) and insert the first part of the diffuser (2). Release the diffuser lock.
3. Press and the hold diffuser lock (1) on the opposite side of the Robin CycBar 12 and insert the second part of the diffuser (2). Release the diffuser lock.
4. Check that both diffusers are inserted properly and cannot slide out from the fixture.



4. Wireless DMX operation

The wireless version of the CycBar 12 is equipped with the Lumen Radio CRMX module and antenna for receiving DMX signal. CRMX module operates on the 2.4 GHz band.

1. Select option Wireless DMX input from the menu **PErS** (PErS-->dM.In.--> VirL.).
2. 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 "**SPEC**" (SPEC-->ViFi.)
3. To unlink the fixture from DMX transmitter.
The fixture can be unlinked from receiver via the menu item "**SPEC**" (SPEC-->ViFi-->UnLi.)

5. Control menu map

Default settings=Bold print

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
A001	dM.Ad.	001-512			
	dM.Pr.	Mod 1			
		:			
		Mod 5			
InFo	Poti.	totL			
		rSEt			
	VErS.	IC1.b.			
		:			
		ViFi			
	tEMP.	Cur.t.			
		Hi.tE.			
		rSEt			
	DM.In.	Func.	0-255		
		:			
		din.F	0-255		
PErS	dM.Pr.	Mod1			
		Mod.2			
		:			
		Mod.5			
	dM.In	VirE			
		VirL			
		VrLo			
	dISP.	d.On	On, OFF		
		d.Int.	6...100		
		turn			
	C.CL.n.	On, OFF			

Robin CycBar 12

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
	C.MI.n.	rGbV			
		CMY			
	diM.c.	SqL			
		Lin			
	Vhl.c.	On, OFF			
	tnP.u.	°C, °F			
	In.Po.	Func	0-255		
		:			
		dim.F	0-255		
		Stor			
	oFrE	StAn, HiGh			
	FrEq	-18.. 00 ..+18			
	dFSE				
MAn.C.	Func.				
	:				
	din.F				
tEst					
St.AL.	Auto	OFF			
		tEst			
		u.PrG			
	PLAY	tEst			
		u.PrG			
	Edit	St.1	P.End	1-35	
		:	Func	0-255	
		St.35	:	:	
			S.tin.	0-25.5 sec	
			CoPY		
SPEC.	rdM.L				

Robin CycBar 12

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
	rdM.H				
	ViFi	Status, UnLI			
	Adj.	dMH			
		C.CAL	C.r I		
			:		
			C.V 12		
			Stor.		
	uPd.M.				

6. Control menu

The Robin CycBar 12 is equipped with 4-segment LED display which allows to set the fixture's behaviour according to your needs, obtain information on its operation, control various range of effects and lastly program it, if it has to be used in a stand-alone mode.

The four control buttons have the following functions:

- ↖ - ESCAPE button-leaves menu without saving changes.
- ↵ - ENTER button- enters menu, confirms adjusted values and leaves menu.
- ▲ - UP and ▼ - DOWN buttons - move between menu items on the same level, sets values.

After switching the fixture on, display shows current DMX address.



6.1 Fixture Address



Use this menu to set the DMX address of the fixture.

dM.Ad. --- **DMX addressing.** Select this submenu to set a DMX start address.

To set a DMX address.

1. Use UP/DOWN buttons to find "A001" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select desired start address.
4. Press the ENTER button to confirm the choice.

Note: After switching on, the CycBar 12 will automatically detect whether DMX 512 data is received or not. If there is no data received at the DMX input, the display will start to flash with actually set address.

DM.Pr. --- **DMX preset.** Select this menu item to set a desired DMX mode. Please refer to the chapter "DMX protocol" for detail description of each DMX mode.

Mod 1 - 16 control channels

Mod 2 - 11 control channels

Mod 3 - 52 control channels

Mod 4 - 64 control channels

Mod 5 - 38 control channels

6.2 Fixture information



Use this menu to read useful information about the fixture status.

To display desired information.

1. Use the UP/DOWN buttons to find the "Info" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select the required menu item.
4. Press the ENTER button to confirm the choice.

Po.ti. --- **Power On Time.** Use the menu item to read the number of operation hours for each LEDs operating mode.

totL - the function shows the total number of the operation hours since the CycBar 12 has been fabricated.

rESEt - the function shows the number of the operation hours since the counter was last reset.

In order to reset this counter to 0, you have to press and hold the UP and DOWN buttons and at the same time press the ENTER button.

VErS. --- **Software Versions.** Select this function to read the software version of the fixture processors.

IC1.b. --- display processor

IC2.b. --- pixel driver

IC3.P. --- pixel control

ViFi --- Wireless DMX module (if installed)

tEMP --- **Fixture Temperatures.** Select this menu to read the temperatures of the fixture:

Cur.t. --- the current temperature of the fixture inside.

Hi.tE. --- the menu item shows the max. temperatures of the fixture inside since the fixture has been fabricated.

rSEt --- the menu item shows the maximum temperatures of the fixture inside since the counter was last reset. In order to reset this counter to 0 you have to press and hold the UP and DOWN buttons and at the same time press the ENTER button.

Note: The ambient temperature should not exceed 40°C.

The temperatures can be displayed in either °C or °F units - see option "tnP.u." in the menu "Pers".

DM.In.---**DMX values.** Select this function to read DMX values of each channel received by the fixture.

6.3 Personality



Use this menu to modify the CycBar 12 operating behaviour.

DM.Pr. --- **DMX preset.** Select this menu item to set a desired DMX mode. Please refer to the chapter "DMX protocol" for detail description of each DMX mode.

dM.In. --- **DMX input.** Select this menu item to select desired DMX input:

UirE --- Wire DMX.

UirL --- Wireless DMX

UrLo --- Wireless DMX → wire DMX. The fixture receives wireless DMX signal and sends it to its DMX output connector. Next fixtures can be connected to this fixture by DMX cable (fixture works as a Wireless-DMX converter).

DiSP.--- **Display adjusting.** This function allows you to change the display settings.

d.On --- this function allows you to keep the display on or to turn off automatically 2 minutes after last pressing any button on the control panel.

d.Int. --- select this function to adjust the display intensity (6-min.,100-max.).

turn --- select this function to used to rotate menu 180 degrees from current orientation.

C.CL.n. --- **Colour calibration mode.** If the function is on, the white output from the fixture (and also mixed colours) is more uniform.

C.MI.n. --- **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.

diM.c. --- **Dimmer curve.** Use the menu to set desired dimmer curve:

SqL --- Square law curve.

Lin --- Linear curve.

Vhl.c. --- **White counting.** If this function is on, the white LED of each pixel lights when a white colour is mixed. The light intensity of the white LED is in a proportion to the intensity of the rest of pixel's LEDs (red, Green, blue) and improves the white output of the pixel. The function influences "pixel modes" only - DMX mode 3 and 4 (RGBW colour mixing mode has to be set).

tnP.u. --- **Temperature unit.** Use this menu in order to display the fixture temperatures in desired units: °C or °F.

In.Po. --- **Init effect positions.** Use this function to set all effects to the desired positions to which they will move after switching the fixture on (if DMX is not receiving).

oFrE. --- **LEDs output frequency.** The function allows you to select PWM (Pulse Width Modulation) output frequency of LEDs from the two frequencies: StAn (Standard=300Hz)
HiGh (High=1200Hz)

FrEq. --- **LEDs output frequency adjustment.** The function allows you to change the selected PWM (Pulse Width Modulation) output frequency of LEDs in 18 levels up and down around the selected frequency in the menu "oFrE".

-18...-01 --- Frequency levels 1-18 under selected frequency.

00 --- Selected frequency (Standard or High)

+01...+18 --- Frequency levels 1-18 above selected frequency.

dF.SE. --- **Default Settings.** The menu item sets all fixture parameters to the default (factory) values.

6.4 Manual mode



Use this menu to control all channels via buttons of the control board. Items in this menu depend on selected DMX mode.

To control fixture channels.

1. Use the UP/DOWN buttons to find "Man.C" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select desired effect (channel).

List of control channels:

"Func." – a Special functions channel
"rEd.A" – a red LEDs saturation coarse
"rE.A.F" – a red LEDs saturation fine
"GrE.A" – a green LEDs saturation coarse
"Gr.A.F" – a green LEDs saturation fine
"bLU.A" – a blue LEDs saturation coarse
"bL.A.F" – a blue LEDs saturation fine
"Vhl.A" – a white LEDs saturation coarse
"Vh.A.F" – a white LEDs saturation fine
"Cto" – a colour temperature correction
"Vir.C." – a virtual colour wheel
"PiH.E." – pixel effects
"PH.E.S." – a pixel effects speed
"Stro." - a strobe/shutter
"dinr" - a coarse dimmer
"F.dim" a fine dimmer
"rEd.l" a red LED 1
:
"bL.12" a blue LED 12

4. Press the ENTER button and use the UP/DOWN buttons to set value , press the ENTER button to confirm it.

6.5 Test sequences

tEst

Use this menu to run demo-test sequences without an external controller, which will show you some possibilities of using the CycBar 12.

6.6 Stand-alone setting

St.AL.

The fixtures on a data link are not connected to the controller but can execute pre-set programs which can be different for every fixture. "Stand-alone operation" can be applied to the single fixture or to multiple fixtures operating synchronously.

Auto. --- Automatic playback. This function allows you to select the program which will be played after switching the fixture on. Selected program will be played continuously in a loop.

1. Use the UP/DOWN buttons to find " **St.AL.**" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select " **Auto**" item.
4. Press the ENTER button.
5. Use the UP/DOWN buttons to select test program ("tEst"), user program ("u.PrG") or disable this function (OFF).
6. Press the ENTER button to confirm the choice.

PLAY --- Playing program. By enter to this menu a complete overview of all programs is offered, from which the program to be run can be selected.

1. Use the UP/DOWN buttons to find " **St.AL.**" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select desired program.
4. Press the ENTER button. The selected program runs in a loop.

Edit --- Editing a program. The fixture offers a freely editable program up to 40 steps. Every program step includes a step time-the total time occupied by the step in the program.

1. Use the UP/DOWN buttons to find " **St.AL.**" menu and press the ENTER button.
2. Use the UP/DOWN buttons to select " **Edit**" menu and press the ENTER button.
3. Use the UP/DOWN buttons to select a desired program step ("St.01" - "St.40") and press ENTER button.
4. Use the UP/DOWN buttons to select a channel you want to edit and press the ENTER button.

List of editable items:

"P.End" - a total number of the program steps (value 1-40). This value should be set before start Programming (e.g. if you want to create program with 10 steps, set P.End=10).

"Func." - a Special functions channel

"rEd.A" - a red LEDs saturation coarse

"GrE.A" - a green LEDs saturation coarse

"bLU.A" - a blue LEDs saturation coarse

"Vhl.A" - a white LEDs saturation coarse

"Cto" - a colour temperature correction

"Vir.C." - a virtual colour wheel

"PiH.E." - pixel effects

"PH.E.S." - a pixel effects speed

"Stro." - a strobe/shutter

"dir" - a coarse dimmer

"rEd.l" a red LED 1

:

“bL.12” a blue LED 12

“di.12” a dimmer 12

“S.tin” a step time

“COPY”. – this item duplicates the current prog. step to the next prog. step.

Note: Items in this menu depend on selected DMX mode.

5. Use the UP/DOWN buttons to set a DMX value of the channel and then press the ENTER button.
6. Use the UP/DOWN buttons to select next channel and press the ENTER button.
7. After having set all channels in the current program step, press the ESCAPE button to go by one menu level back and select another program step.

6.7 Special functions



rdM.L --- **Code**. This menu item shows the first part of the RDM identification code.

rdM.H --- **Code**. This menu item shows the second part of the RDM identification code.

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

50 --- **Wireless DMX signal**. The menu item shows level of received signal in %. If the fixture is not linked to the transmitter, “niSS” is displayed.

UnLI --- **Wireless DMX unlink**. The item serves for unlinking the fixture from transmitter.

Adj --- **Effect Adjustment**. The menu allows calibration of white colours.

dMH --- **DMX Values**. The menu item allows to set desired colour before calibrating of white colours.

C.CAL --- **Colour calibration**. Calibration of white colours.

uPd.M. --- **Updating mode**. 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 (if you want to use a serial port of PC).
- Robe Universal Interface or Robe Universal interface WTX (if you want to use an USB port of PC)

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

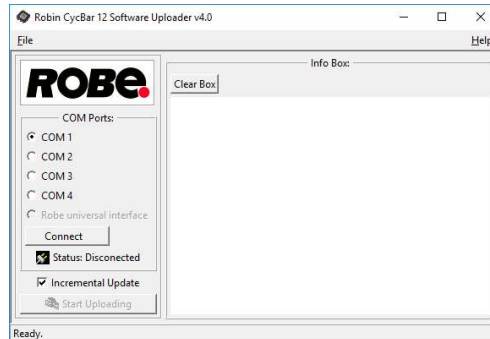
To update software in the fixture:

1. DSU file is available from the Anolis web site at WWW.anolis.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_RobinCycBar12_18060652.zip)
2. Disconnect the fixture from DMX controller.
3. If you use the flash cable RS232/DMX, connect a serial port of your computer with DMX input of the fixture by means of the cable.
If you use the Robe Universal Interface, connect a USB port of your computer with the Robe Universal Interface by means of the USB cable and DMX input of the fixture with the DMX output of the Robe Universal Interface via a DMX cable.
4. Switch the fixture to the update mode (SPEC --> Upd.M.).

Robin CycBar 12

Note: If you do not want to continue in the software update, you have to switch off and on the fixture to escape from the updating mode. We recommend to cancel all running programs on your computer before starting the software update.

5. Double-click the software uploader file (e.g. DSU_RobinCycBar12_18060652.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 not topical versions 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 "The fixture is successfully updated" will appear in this window.

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

Another way, how to update software in the fixtures (especially large installation of fixtures) is to use the ROBE Uploader. It is a software for automatized software update of Robe and Anolis fixtures. It can take advantage of Ethernet ports and RDM support if present in the units. For more information please see

<https://www.robe.cz/support/>.

7. RDM

This fixture is ready for 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 the CycBar 12 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_LEVEL		*	*
DEVICE_RESET		*	
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
STATUS_MESSAGES			*
STATUS_ID_DESCRIPTION			*
DEVICE_HOURS			*

Please, see the Robe Universal Interface user manual for detail description of RDM operation.

8. Technical specifications

Power supply

- Electronic auto-ranging
- Input voltage: 100 - 240V AC, 50-60 Hz
- Max. power consumption: 140W@230V

- Mains input: CE - max. 16A
ETL - max. 10A
- Mains output: CE - max. 15A
ETL - max. 9A

Optic & Effects

- Light source: 12 x 10W LED multi-chip
- Beam angle: 7.5° (without diffusor)
- RGBW or CMY colour mixing
- Built-in colour macros and pixel effects
- Adjustable strobe sequences
- Typical Lumen maintenance: 70% @ 60.000 hours

Control

- Setting & Addressing: 4-segment LED display & 4 control buttons
- Control: USITT DMX 512 (RDM support)
- DMX protocol modes: 5 (16, 11, 52, 64, 38 control channels)
- Operations modes: DMX, Stand-alone
- Manual control of all effects via control panel
- One editable program, up to 40 steps

Wireless DMX/RDM module (only for Robin CycBar 12 Wireless DMX)

- 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

Strobe

- Strobe effect with variable speed (max. 20 flashes per second)
- Pre-programmed random strobe pulse-effects

Dimmer

- Smooth 16-bit dimming from 0 - 100 %

Connection

- DMX data in/out: Locking 5-pin XLR
- Power In: Neutrik NAC 3MPX
- Power Out: Neutrik NAC 3FPX

Rigging

- Via two mounting brackets

Temperatures

- Maximum ambient temperature: 40° C
- Maximum housing temperature: 80° C

Minimum distances

- Min. distance from flammable surfaces: 0.4 m
- Min. distance to lighted object: 0.8 m

Total heat dissipation

- 614 BTU/h (calculated)

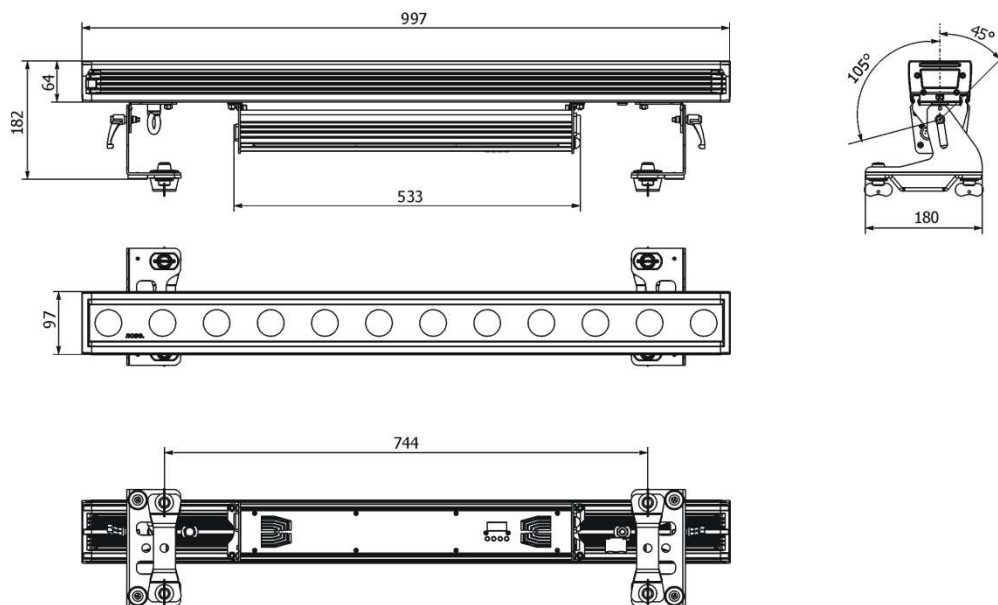
Weight

- 9.675 kg

Protection factor

- IP 2X

Dimensions (mm)



Included items

- 1 x Robin CycBar 12
- 1 x 1 x Omega Adaptor CL-regular 2 pcs in box (P/N10980033)
- 1 x User manual

Optional accessories

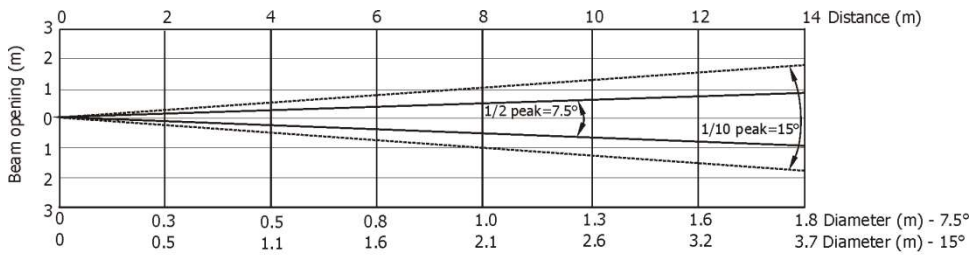
- (P/N 13052 276) Mains Cable PowerCon TRUE1 In/open ended, EU 2m, outdoor
- (P/N 13052 277) Mains Cable PowerCon TRUE1 In/open ended, US 2m, outdoor
- (P/N 13052 278) Daisy Chain PowerCon TRUE1 In/Out, EU, 0,75m, outdoor
- (P/N 13052 279) Daisy Chain PowerCon TRUE1 In/Out, US, 0,75m, outdoor
- (P/N 13052 280) Daisy Chain PowerCon TRUE1 In/Out, EU, 2m, outdoor
- (P/N 13052 281) Daisy Chain PowerCon TRUE1 In/Out, US, 2m, outdoor
- (P/N 13052 405) Mains Cable powerCON TRUE1 In/Schuko, 2m, Indoor
- (P/N 13052 406) Mains Cable powerCON TRUE1 In/US, 2m, Indoor
- (P/N 13052 445) Mains Cable powerCON TRUE1 In/CEE 16A, 2m, Indoor
- (P/N 13052 407) Mains Cable powerCON TRUE1 In/open ended, 2m, Indoor
- (P/N 13052 439) Daisy Chain powerCON TRUE1 In/Out, EU, 2m, Indoor
- (P/N 13052 440) Daisy Chain powerCON TRUE1 In/Out, US, 2m, Indoor
- (P/N 13052 444) Daisy Chain powerCON TRUE1 In/Out, EU, 5m, Indoor.

Robin CycBar 12

- (P/N 10980 247) Diffuser 35°x70° Wall Wash for Robin CycBar 15/12
- (P/N 10980 252) Diffuser 32° wash for Robin CycBar 15/12
- (P/N 10980 251) Diffuser 50° wash for Robin CycBar 15/12
- (P/N 10980 248) Diffuser 10°x30° Wall wash for Robin CycBar 15/12
- (P/N 10980 250) Diffuser 30°x10° Cyc light for Robin CycBar 15/12
- (P/N 10980 249) Diffuser 70°x35° Cyc light for Robin CycBar 15/12
- (P/N 10980 284) Gel Frame SET for ROBIN CycBar 12
- (P/N 17030 386) Doughty Trigger Clamp
- (P/N 99011 963) Safety wire 35 kg

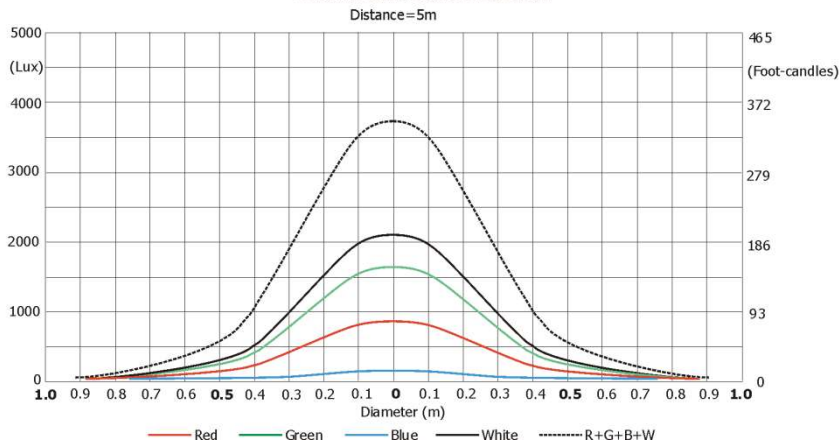
Photometric chart

Robin CycBar 12 without diffuser



Distance (m)	2	4	5	6	8	10	12	14	
Red	5375/500	1343/125	860/80	597/56	336/32	215/20	150/14	110/10	Intensity (center) Lux/Footcandles
Green	10000/929	2500/232	1600/149	1111/103	625/58	400/37	277/26	205/19	
Blue	1338/124	334/31	215/20	149/14	84/8	54/5	37/3.5	27/2.5	
White	13438/1248	3359/312	2150/200	1493/139	840/78	538/50	373/35	274/26	
R+G+B+W	22938/2131	5734/533	3670/341	2550/237	1433/133	918/85	637/59	468/44	

Illuminance distribution



9. Cleaning and maintenance

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

The front transparent cover will require monthly cleaning as smoke fluid tends to build up residues, reducing the light output very quickly. For cleaning use a wet cloth or an air-jet. Do not use solvents or any other aggressive cleaning fluid.

Maintenance and service operations are only to be carried out by a qualified person or ROBE service worker only. Should you need any spare parts, please use genuine parts.

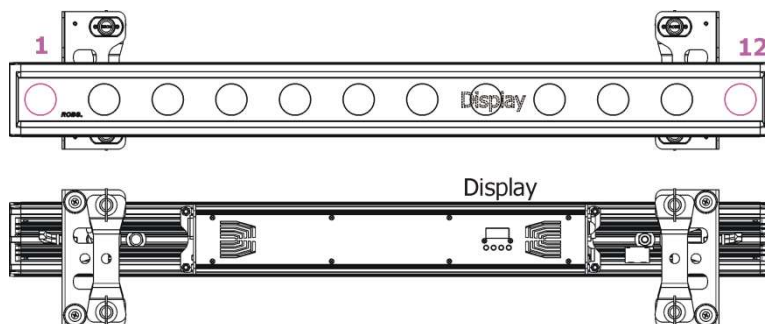
9.1 Disposing of the product

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

Colour channels priority:

1. Pixel effects channel
2. Virtual colour wheel channel
3. RGBW ALL PIXELS channels
4. If some colour from RGBW ALL PIXELS is set at 0 DMX, this colour can be set individually on each pixel 1-12 using R1G1B1....R12G12B12.

Pixels order:



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

Robin CycBar 12

DMX value	Effect	Type of Control
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
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

Robin CycBar 12

DMX value	Effect	Type of Control
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
179-180	Effect 89	Step
181-182	Effect 90	Step
183-255	Reserved	

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Made in ROBE Lighting s.r.o., Palackého 416, 757 01 Valašské Meziříčí, Czech Republic

DMX protocol

Robin CycBar 12 - DMX protocol

Version: 1.3 Mode 1 - Standard 16-bit, **Mode 2**-Reduced 8-bit, **Mode 3** -Extended 16-bit+RGB pixels, **Mode 4** - Extended 16-bit+RGBD pixels, **Mode 5** -Extended 16-bit+RGBD pixels+LED Frequency Setting

Mode/channel					DMX Value	Function	Type of control
1	2	3	4	5			
1	1	1	1	1		Power/Special functions	
					0-19	Reserved (0= default) <i>To activate following functions , stop in DMX value for at least 3 sec. and shutter must be closed at least 3 sec. (Shutter channel 14/10/2 must be at range of 0-31 DMX). Corr esponding menu items are temporarily overridden</i>	
					20-24	Display On	step
					25-29	Display Off	step
					30-39	RGBW colour mixing mode	step
					40-49	CMY colour mixing mode	step
					50-59	Colour calibration mode On	step
					60-69	Colour calibration mode Off	step
					70-89	Reserved	step
					90-99	Dimmer curve: linear	step
					100-109	Dimmer curve: square law	step
					110-119	White counting On	step
					120-129	White counting Off	step
						<i>To activate following functions, stop in DMX value for at least 3 seconds. Corresponding menu items are temporarily overridden</i>	
						The following function allows you to fine change of PWM output frequency of LEDs in 18 levels Up and Down around the selected PWM frequency (Standard, High) in the table below.	
					130	LED Frequency (step -18)	step
					131	LED Frequency (step -17)	step
					132	LED Frequency (step -16)	step
					133	LED Frequency (step -15)	step
					134	LED Frequency (step -14)	step
					135	LED Frequency (step -13)	step
					136	LED Frequency (step -12)	step
					137	LED Frequency (step -11)	step
					138	LED Frequency (step -10)	step
					139	LED Frequency (step -9)	step
					140	LED Frequency (step -8)	step
					141	LED Frequency (step -7)	step
					142	LED Frequency (step -6)	step
					143	LED Frequency (step -5)	step
					144	LED Frequency (step -4)	step
					145	LED Frequency (step -3)	step
					146	LED Frequency (step -2)	step
					147	LED Frequency (step -1)	step
					148	LED Frequency (Standard or High)	step
					149	LED Frequency (step +1)	step
					150	LED Frequency (step +2)	step

DMX protocol

					151	LED Frequency (step +3)	step
					152	LED Frequency (step +4)	step
					153	LED Frequency (step +5)	step
					154	LED Frequency (step +6)	step
					155	LED Frequency (step +7)	step
					156	LED Frequency (step +8)	step
					157	LED Frequency (step +9)	step
					158	LED Frequency (step +10)	step
					159	LED Frequency (step +11)	step
					160	LED Frequency (step +12)	step
					161	LED Frequency (step +13)	step
					162	LED Frequency (step +14)	step
					163	LED Frequency (step +15)	step
					164	LED Frequency (step +16)	step
					165	LED Frequency (step +17)	step
					166	LED Frequency (step +18)	step
					167-169	Reserved	
					170-174	PWM output frequency of LEDS: Standard (300Hz)*	step
					175-179	PWM output frequency of LEDS: High (1200Hz)* * You can adjust selected frequency in 18 steps Up or Down around selected frequency. Default value of PWM frequency set in the fixture is Standard.	step
					167-255	Reserved	
2	2	2	2	*		Red/Cyan (8 bit)- all pixels	
					0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
3	*	3	3	*		Red/Cyan (16bit)- all pixels	
					0 - 255	Colour saturation control - fine (255=default)	proportional
4	3	4	4	*		Green/Magenta (8 bit) - all pixels	
					0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
5	*	5	5	*		Green/Magenta (16bit) - all pixels	
					0 - 255	Colour saturation control - fine (255=default)	proportional
6	4	6	6	*		Blue/Yellow (8 bit) - all pixels	
					0 - 255	Colour saturation control - coarse 0-100% (255=default)	proportional
7	*	7	7	*		Blue/ Yellow (16bit) -all pixels	
					0 - 255	Colour saturation control - fine (255=default)	proportional
8	5	8	8	*		White (8 bit) - all pixels	
						<i>If RGBW mode is selected:</i>	
					0-255	Colour saturation control - coarse 0-100% (255=default)	proportional
						<i>If CMY mode is selected:</i>	
					0 - 255	No function	
9	*	9	9	*		White (16 bit) - all pixels	
					0 - 255	Colour saturation control - fine (255=default)	proportional
10	6	10	10	*		CTO (all pixels)	
					0	No function (0=255)	
					1-255	Colour temperature correction	proportional
11	7	11	11	*		Virtual colour wheel - all pixels	
					0	No function (0=default)	step
					1-2	White 2700 K	step
					3	White 2700 K (tungsten emulation)*	step
					4-5	White 3200 K	step

DMX protocol

					6	White 3200 K (tungsten emulation)*	step
					7-9	White 4200 K	step
					10-12	White 5600 K	step
					13-15	White 8000 K	step
					16	Blue (Blue=full, Red+Green+White=0)	step
					17-55	Red=0, Green → up, Blue =full, White=0	proportional
					56	Light Blue (Red=0, Green=full, Blue =full, white=0)	step
					57 - 95	Red=0, Green=full, Blue → down, White=0	proportional
					96	Green (Red=0, Green=full, Blue =0, White=0)	step
					97 – 134	Red → up, Green=full, Blue=0, White=0	proportional
					135	Yellow (Red=full, Green=full, Blue=0,White=0)	step
					136 - 174	Red=full, Green → down, Blue=0, White=0	proportional
					175	Red (Red=full, Green=0, Blue=0, White=0)	step
					176 -214	Red=full, Green=0, Blue → up, White=0	proportional
					215	Magenta (Red=full, Green=0, Blue=full, White=0)	step
					216 - 246	Red → down, Green=0, Blue=full, White=0	proportional
					247	Blue (Red=0, Green=0, Blue=full, White=0)	step
					248-251	Rainbow effect(with fade time) from min.->max. speed	proportional
					252-255	Rainbow effect(without fade time)from min.->max.speed	proportional
12	8	12	12	*		Pixel effects	
					0-2	No function (0=default)	
					3-4	Effect 1	step
					5-6	Effect 2	step
					:	:	:
					181-182	Effect 90	step
					183-255	Reserved	
13	9	13	13	*		Pixel effects speed	
					0-63	Speed from min. →max. without fade time (0=default)	proportional
					64-127	Speed from max. →min. without fade time (op. direction)	proportional
					128-191	Speed from min. →max. with fade time	proportional
					192-255	Speed from max. →min. with fade time (op. direction)	proportional
14	10	14	14	2		Shutter/ strobe - all pixels	
					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
15	11	15	15	*		Dimmer intensity (8 bit) -all pixels	
					0 - 255	Dimmer intensity from 0% to 100% (0=default)	proportional
16	*	16	16	*		Dimmer intensity fine (16 bit) -all pixels	
					0 - 255	Fine dimming (0=default)	proportional
*	*	17	17	3		Red pixel 1	
					0-255	Red LED saturation control 0-100% (0=default)	proportional
*	*	18	18	4		Green pixel 1	
					0-255	Green LED saturation control 0-100% (0=default)	proportional
*	*	19	19	5		Blue pixel 1	

DMX protocol

					0-255	Blue LED saturation control 0-100% (0=default)	proportional
*	*	*	20	*		Dimmer 1	
					0-255	Dimmer intensity control 0-100% (0=default)	proportional
						:	
*	*	50	61	36		Red pixel 12	
					0-255	Red LED saturation control 0-100% (0=default)	proportional
*	*	51	62	37		Green pixel 12	
					0-255	Green LED saturation control 0-100% (0=default)	proportional
*	*	52	63	38		Blue pixel 12	
					0-255	Blue LED saturation control 0-100% (0=default)	proportional
*	*	*	64	*		Dimmer 12	
					0-255	Dimmer intensity control 0-100% (0=default)	proportional
* In the Tungsten effect simulation the Dimmer channel imitates behaviour of the halogen lamp during dimming							
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