



STAGE-PAR CX-2 RGBAW LED PAR



user manual

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15.02.2013

Table of contents

1	General notes	5
2	Safety instructions	8
3	Features	12
4	Installation	
5	Starting up	
6	Connections and operating elements	18
7	Operating	
	7.1 Starting up the device	21
	7.2 Main menu	
	7.3 Menu overview	28
	7.4 Functions im 3-channel DMX mode	29
	7.5 Functions im 5-channel DMX mode	30
	7.6 Functions im 7-channel DMX mode	
	7.7 Functions im 8-channel DMX mode	32
8	Technical specifications	33

9	Troubleshooting	34
10	Cleaning	36
11	Protecting the environment	37



1 General notes

	This user manual contains important information on safe operation of the device. Read and follow all safety notes and all instructions. Save this manual for future reference. Make sure that it is available to all persons using this device. If you sell the device, include the manual for the next owner.
	Our products are subject to a process of continuous development. We therefore reserve the right to make changes without notice.
Symbols and signal words	This section provides an overview of the symbols and signal words used in this user manual.



Signal word	Meaning
DANGER!	This combination of symbol and signal word indicates an immediate dangerous situation that will result in death or serious injury if it is not avoided.
WARNING!	This combination of symbol and signal word indicates a possible dangerous situation that can result in death or serious injury if it is not avoided.
NOTICE!	This combination of symbol and signal word indicates a possible dangerous situation that can result in material and environmental damage if it is not avoided.
Warning signs	Type of danger
	Warning – high-voltage.



Warning signs	Type of danger
	Warning – suspended load.
	Warning – danger zone.



2 Safety instructions

Intended use

This device is intended to be used as an electronic illumination effect using LED technics. Use the device only as described in this user manual. Any other use or use under other operating conditions is considered to be improper and may result in personal injury or property damage. No liability will be assumed for damages resulting from improper use.

This device may be used only by persons with sufficient physical, sensorial, and intellectual abilities and having corresponding knowledge and experience. Other persons may use this device only if they are supervised or instructed by a person who is responsible for their safety.

Safety



DANGER!

Danger for children

Ensure that plastic bags, packaging, etc. are disposed of properly and are not within reach of babies and young children. Choking hazard!

Ensure that children do not detach any small parts (e.g. knobs or the like) from the unit. They could swallow the pieces and choke!

Never let children unattended use electrical devices.





Electric shock caused by high voltages inside

Within the device there are areas where high voltages may be present. Never remove any covers.

There are no user-serviceable parts inside.



DANGER!

WARNING!

DANGER!

Electric shock caused by short-circuit

Do not modify the mains cable or the plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.



Eye damage caused by high light intensity

Never look directly into the light source.





WARNING!

Risk of epileptic shock

Strobe lighting can trigger seizures in photosensitive epilepsy. Sensitive persons should avoid looking at strobe lights.



Risk of fire

Do not cover the device nor any ventilation slots. Do not place the device near any direct heat source. Keep the device away from naked flames.



NOTICE!

Operating conditions

This device has been designed for indoor use only. To prevent damage, never expose the device to any liquid or moisture. Avoid direct sunlight, heavy dirt, and strong vibrations.

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NOTICE!

Power supply

Before connecting the device, ensure that the input voltage (AC outlet) matches the voltage rating of the device and that the AC outlet is protected by a residual current circuit breaker. Failure to do so could result in damage to the device and possibly injure the user.

Unplug the device before electrical storms occur and when it is unused for long periods of time to reduce the risk of electric shock or fire.

3 Features

The CX series brings all-new colour creations in the line of LED lights. The multi-chip LEDs provide an unprecedented colour mixing in all spectra. Pastel colours, vivid and vibrant colours and white shades can be displayed extremely accurately with the headlights of the CX series.

Special features of the device:

- 10 × RGBA high power LEDs (8 W)
- 5 × RGBW high power LEDs (8 W)
- 42 preprogrammed automatic shows
- Control via DMX (3, 5, 7 or 8 channels) and via buttons and display on the unit
- Auto mode and sound control
- Master / Slave operation
- Aluminum die-cast housing, black

4 Installation

Unpack and carefully check that there is no transportation damage before using the unit. Keep the equipment packaging. To fully protect the device against vibration, dust and moisture during transportation or storage use the original packaging or your own packaging material suitable for transport or storage, respectively.

You can install the device on the wall, ceiling or floor. A mounting bracket and the necessary screws are included in the package.



WARNING!

Risk of injury caused by falling objects

Make sure that the installation complies with the standards and rules that apply in your country. Always secure the device with a secondary safety attachment, such as a safety cable or a safety chain.



NOTICE!

Risk of overheating

Always ensure sufficient ventilation.

The ambient temperature must always be below 40 °C (104 °F).



NOTICE!

Use of stands

When mounting the device onto a stand, ensure that the stand is in a safe and stable position and that the weight of the device does not exceed the maximum permissible load capacity of the stand.



NOTICE!

Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX output to audio devices such as mixers or amplifiers.

DMX connections



The unit offers a 3-pin XLR socket for DMX output and a 3-pin XLR plug for DMX input. Please refer to the drawing and table below for pin the assignment of a suitable XLR plug.

Pin	Configuration
1	Ground, shielding
2	Signal inverted (DMX–, 'cold signal')
3	Signal (DMX+, 'hot signal')



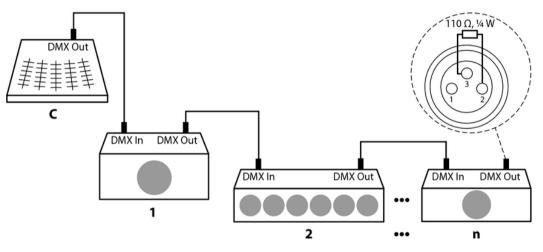
5 Starting up

Establish all connections as long as the unit is switched off. Use the shortest possible highquality cables for all connections.



Connections in DMX mode

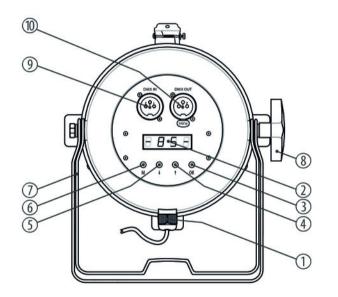
Connect the DMX input of the device to the DMX output of a DMX controller or another DMX device. Connect the output of the first DMX device to the input of the second one, and so on to form a daisy chain. Always ensure that the output of the last DMX device in the daisy chain is terminated with a resistor (110 Ω , ¼ W).





6 Connections and operating elements

Rear panel





1	Mains cable.
2	Display.
3	[OK] button
	Confirms a selected value.
4, 5	↑ ↓ buttons
	Increases / decreases the displayed value by one.
6	[M] button
	Activates the main menu or a submenu respectively.
7	Bracket for setup or hanging.
8	Locking screw for the bracket.



9	DMX IN
	DMX input.
10	DMX OUT
	DMX output.



7 Operating

7.1 Starting up the device

Connect the unit to the power grid to start the operation. After a few seconds the display shows the value 'DMX'. Then the unit is operational.

7.2 Main menu

Immediately after turning on, the device displays the main menu. Use the arrow keys to select the desired operating mode. Use the arrow keys to change the respectively displayed value. When the display shows the desired value, press OK.



DMX mode

Press [*M*]. Press one of the arrow keys repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'MODE'. Press [OK]. Now use the arrow keys to select one of the following DMX operating modes:

- '3CH' (three channels)
- '5CH' (five channels)
- '7CH' (seven channels)
- '8CH' (eight channels)

This setting is only relevant if the unit is controlled via DMX. When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

DMX address

Press [*M*]. Press one of the arrow keys repeatedly until the display shows '*DMX*'. Press [*OK*]. Now you can set the number of the first DMX channel to be used by the device (DMX address). Select a value between 1 and 512 with the arrow keys (display shows 'A001'...'A512').

When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].

Make sure that this number matches the configuration of your DMX controller. The following table shows the highest possible DMX address for the various DMX modes.

Mode	Highest possible DMX address
3-channel	510
5-channel	508
7-channel	506
8-channel	505

Operating mode 'Show/Master'	Press [M]. Press one of the arrow keys repeatedly until the display shows 'LINE'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'MA'. Press [OK]. Now you can select one of the 42 preprogrammed automatic shows. Use the arrow keys to select a value between 1 and 42 (display shows 'P-01' 'P-42').
	The automatic show can only be activated on the unit, that operates as Master.
	This setting is only relevant if the unit is not controlled via DMX. The device can work in stand- alone mode or control connected devices of the same type, which must be configured as slave. When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].
Operating mode 'Slave'	Press [<i>M</i>]. Press one of the arrow keys repeatedly until the display shows ' <i>LINE</i> '. Press [<i>OK</i>]. Press one of the arrow keys repeatedly until the display shows ' <i>SL</i> '. Press [<i>OK</i>]. Now you can set the number of the device through which it is addressed as Slave by the Master. Select a value between 1 and 512 with the arrow keys (display shows ' <i>A001</i> '' <i>A512</i> ').
	This setting is only relevant if the unit works as slave controlled by a master, but not via DMX. When the display shows the desired value, press <i>[OK]</i> to confirm the selection, and then <i>[M]</i> to return to the parent menu. To return to the parent menu without any changes, press <i>[M]</i> .



Programme speed	Press [M]. Press one of the arrow keys repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'SPEE'. Press [OK]. Now you can set the programme speed for the preprogrammed automatic shows. Select a value between 1 and 255 with the arrow keys (display shows 'T001' T255').
	This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press <i>[OK]</i> to confirm the selection, and then <i>[M]</i> to return to the parent menu. To return to the parent menu without any changes, press <i>[M]</i> .
Microphone sensitivity	Press [M]. Press one of the arrow keys repeatedly until the display shows 'SET'. Press [OK]. Press one of the arrow keys repeatedly until the display shows 'MIC'. Press [OK]. Now you can adjust the sensitivity of the built-in microphone for the sound control. Use the arrow keys to select either 'OFF' (microphone off) or a value between 1 and 30 (display shows 'M-01''M-30').
	This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press <i>[OK]</i> to confirm the selection, and then <i>[M]</i> to return to the parent menu. To return to the parent menu without any changes, press <i>[M]</i> .



Manual test	Press [<i>M</i>]. Press one of the arrow keys repeatedly until the display shows ' <i>TEST</i> '. Press [<i>OK</i>]. Press one of the arrow keys repeatedly until the display shows ' <i>RED</i> ', ' <i>GREE</i> ', ' <i>BLUE</i> ', ' <i>AMBE</i> ', ' <i>WHIT</i> ' or ' <i>STRO</i> '. Press [<i>OK</i>]. Now you can adjust the brightness of the red, green, blue, amber-coloured or white LEDs, each in a range of 0 to 255, or select the blinking speed in a range of 0 to 24.
	This operation mode is also suitable to produce constant or flashing light of a colour mixed from the five LED colours without DMX control.
	When the display shows the desired value, press [OK] to confirm the selection, and then [M] to return to the parent menu. To return to the parent menu without any changes, press [M].
Fade speed	Press [M]. Press one of the arrow keys repeatedly until the display shows 'FADE'. Press [OK]. Now you can adjust the fade speed of the preprogrammed automatic shows. Select a value between 1 and 7 with the arrow keys (display shows ' F -01'' F -07').
	This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press <i>[OK]</i> to confirm the selection and to return to the main menu. To return to the main menu without any changes, press <i>[M]</i> .



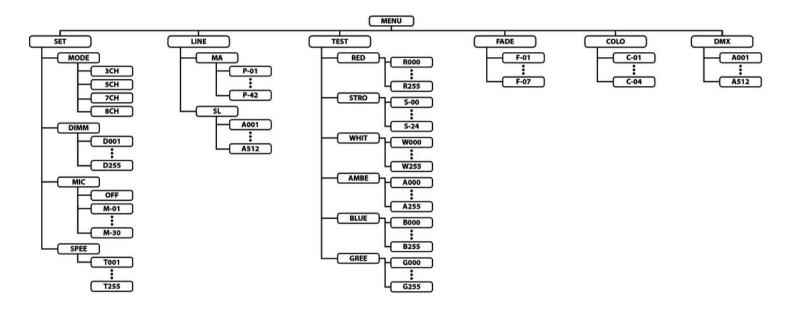
Colour selection

Press [*M*]. Press one of the arrow keys repeatedly until the display shows 'COLO'. Press [OK]. Now you can set the a basic colour for the preprogrammed automatic shows. Select a value between 1 and 4 with the arrow keys (display shows 'C-01'...'C-04').

This setting is only relevant if the unit is not controlled via DMX. When the display shows the desired value, press [OK] to confirm the selection and to return to the main menu. To return to the main menu without any changes, press [M].



7.3 Menu overview



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Operating

7.4 Functions im 3-channel DMX mode

Channel	Value	Function
1	008255	42 preprogrammed colour macros (colour mixings)
2	0255	Dimmer (0 % to 100 %)
3	0	Colouring
	110	Sound control
	11255	Strobe effect



7.5 Functions im 5-channel DMX mode

Channel	Value	Function
1	0255	Intensity red (0 % to 100 %)
2	0255	Intensity green (0 % to 100 %)
3	0255	Intensity blue (0 % to 100 %)
4	0255	Intensity amber colour (0 % to 100 %), outer LED circle
5	0255	Intensity white (0 % to 100 %), inner LED circle

Operating

7.6 Functions im 7-channel DMX mode

Channel	Value	Function
1	0255	Intensity red (0 % to 100 %)
2	0255	Intensity green (0 % to 100 %)
3	0255	Intensity blue (0 % to 100 %)
4	0255	Intensity amber colour (0 % to 100 %), outer LED circle
5	0255	Intensity white (0 % to 100 %), inner LED circle
6	0255	Dimmer (0 % to 100 %)
7	0	Colouring
	110	Sound control
	11255	Strobe effect



7.7 Functions im 8-channel DMX mode

Channel	Value	Function
1	0255	Intensity red (0 % to 100 %), outer LED circle
2	0255	Intensity green (0 % to 100 %), outer LED circle
3	0255	Intensity blue (0 % to 100 %), outer LED circle
4	0255	Intensity amber colour (0 % to 100 %), outer LED circle
5	0255	Intensity red (0 % to 100 %), inner LED circle
6	0255	Intensity green (0 % to 100 %), inner LED circle
7	0255	Intensity blue (0 % to 100 %), inner LED circle
8	0255	Intensity white (0 % to 100 %), inner LED circle



8 Technical specifications

LEDs	10 × high power RGBA (8 W)
	$5 \times high power RGBW (8 W)$
Dispersion angle	25 °
Number of DMX channels	3, 5, 7, 8
Operating voltage supply	AC 230 V ~ , 50 Hz
Power consumption	132 W
Dimensions (W \times D \times H)	$230 \text{ mm} \times 330 \text{ mm} \times 290 \text{ mm}$
Weight	4.4 kg



9 Troubleshooting



NOTICE!

Possible data transmission errors

For error-free operation make use of dedicated DMX cables and do not use ordinary microphone cables.

Never connect the DMX output to audio devices such as mixers or amplifiers.

In the following we list a few common problems that may occur during operation. We give you some suggestions for easy troubleshooting:



Symptom	Remedy
The unit does not work, no light.	Check the mains connection and the fuse.
No response to the DMX con-	1. Check the DMX ports and cables for proper connection.
troller.	2. Check the address settings and the DMX polarity.
	3. Try using another DMX controller.
	4. Check to see if the DMX cables run near or alongside to high voltage cables that may cause damage or interference to DMX interface circuits.

If the procedures recommended above do not succeed, please contact our Service Center. You can find the contact information at <u>www.thomann.de</u>.





10 Cleaning

Optical lenses

Clean the exterior of accessible optical lenses periodically to optimise light output. The frequency of cleaning depends on the operating environment: wet, smoky or particularly dirty surroundings can cause more accumulation of dirt on the optics of the device.

- Clean with a soft cloth using normal glass cleaning products.
- Always dry the parts carefully.



11 Protecting the environment

Disposal of the packaging material



Disposal of your old device



This device is subject to the European directive 2002/96/EC.

chosen that can be supplied to normal recycling.

Do not dispose of the device with your normal household waste.

Ensure that plastic bags, packaging, etc. are properly disposed of.

Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

For the transport and protective packaging, environmentally friendly materials have been

Do not just dispose of these materials with your normal household waste, but make sure that they are collected for recycling. Please follow the notes and markings on the packaging.





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