

1. BEFORE YOU BEGIN

What's included

LED wash moving head

User manual

Power plug

Hook hanger

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Safety Instructions

Please read these instructions carefully, it includes important information about the installation, usage and maintenance of this product.

- Pls. keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connection to the proper voltage, and the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20in(50cm)from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse size and type.
- Secure fixture to fastening device using a safety chain. Never carry the fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on cord.
- Avoid direct eye exposure to the light source while it is on!

Product overview



2. Description

Features

- 36x3w tri color LED with RGB colors, distributed in 3 segments
- Each segment can be controlled individually via DMX
- Compact lightweight
- 9,11,18 or 20 DMX channels selectable for various applications
- Positioning with 540° PAN and 270° TILT
- Stepless RGB color changing
- Dimmer
- Sound-controlled via built-in microphone
- Color and effect macros
- Strobe effect
- Fan-cooled
- Exact positioning via 16 bit PAN/TILT movement resolution
- DMX-controlled operation or stand-alone operation with Master/Slave function
- Control board with LCD display and foil-keyboard for adjusting the DMX-starting address, PAN/TILT reverse, reset
- DMX control via every standard DMX controller

3. Operation

After you connected the effect to the mains, the unit starts running. During the RESET, the motors are trimmed and the device is ready for use afterwards

Stand alone operation

In the stand alone mode, the unit can be used without controller.

Disconnect the unit from the controller and call the internal program. Please refer to the instructions under Control Board.

Master/Slave operation

The master/slave operation enables that several devices can be synchronized and controlled by one master device

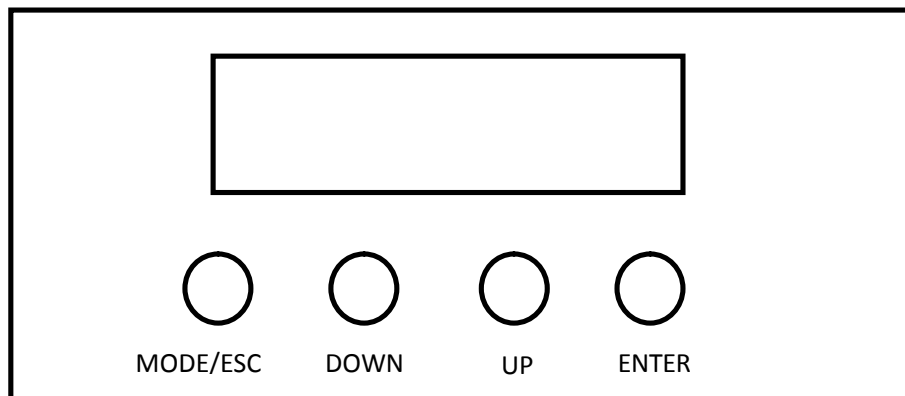
Choose the device which is to control the effects. This device then works as master-device and controls all other slave-devices, which are to be connected to the master-device via a balanced microphone lead connect the DMX OUT-jack with the DMX IN-plug of the next device.

Set the desired Master-mode—"Automatic program mode" or "Sound controlled mode" – for the master device. Set the DMX address 1 for all slave-devices.

Control Board

The Control Board offers several features: you can simply set the starting address, run the

pre-programmed program or make a reset.



The main menu is accessed by pressing the Mode/Esc-button.

Browse through the submenu by pressing UP or DOWN

Press the ENTER-button in order to select the desired menu

You can change the selection by pressing UP or DOWN

Confirm every selection by pressing the Enter-button.

You can leave every mode by pressing the Mode/Esc-button. The functions provided are described in the following sections:

RUN

DMX512

DMX CONTROL

DMX controlled mode when there is DMX signal

SOUND

SOUND CONTROL

Sound controlled mode when there is no DMX signal

AUTO1

AUTO2

Automatic program mode when there is no DMX signal

With this function, you can run the internal program

This mode allows a single unit to run to a factory installed program in one of two speeds.

To set the fixture to auto mode FAST, select "AUTO1", to set the fixture to auto mode SLOW, select "AUTO2"

ADDRESS

001-512

DMX address setting
With this function, you can adjust the desired DMX-address via the control board

SETTING

INVERT

PAN

NORMAL

REVERSE

With this function you can reverse the PAN movement

TILT

NORMAL

REVERSE

With this function you can reverse the TILT movement

CHANNELS

CH20

CH18

CH11

CH09

60s OFF

Always on

Choosing a DMX Channel Mode
With this function, you can choose a DMX Channel Mode (CH20,CH18,CH11 OR CH09)

DISPLAY

SOUND		001-255	
MIC sensitivity With this function, you can select the desired microphone sensitivity			
DEFAULT	YES		
	NO		
Restore factory settings With this function, you can restore the factory settings of the device. All setting will be set back to the default values.			
SPECIAL	RESET	YES	
		NO	
Reset Function With this function, you can reset the device via the control board			

DMX-controlled operation

You can control the projectors individually via your DMX-controller.

The device has four different DMX channel modes.

Every DMX-channel has a different occupation with different features. The individual channels and their features are listed under DMX-protocol.

Addressing

The Control Board allows you to assign the DMX starting address, which is defined as the first channel from which the unit will respond to the controller.

If you set, for example, the address to channel 21, the device will use the channel 21 to 40 for control.

Please, be sure that you don't have any overlapping channels in order to control each unit correctly and independently from any other fixture on the DMX-chain.

If several UNIT are addressed similarly, they will work synchronically.

Press the Up/Down-buttons for setting the desired starting address. Now you can start operating the UNIT via your lighting controller.

Note:

The modes of DMX512 data are shown via the DMX indicator.

After switching on, the device will automatically detect whether DMX 512 data is received or not. If the data is received, the DMX indicator to the right of the display will be flashing. If there is no data received at the DMX-input, the control LED lights up permanently.

This situation can occur if:

- the 3 PIN XLR plug (cable with DMX signal from controller) is not connected with the input of the device.
- the controller is switched off or defective, if the cable or connector is defective or the signal wires are swap in the input connector.

Note:

It's necessary to insert the XLR termination plug (with 120 Ohm) in the last device in the link in order to ensure proper transmission on the DMX data link.

DMX-protocol

The device has four different DMX channel modes. The Control Board allows you to assign the DMX channel mode.

20 channel mode (default setting)

Control-channel 1 - Horizontal movement (PAN) (within 540°)

Push slider up in order to move the head horizontally (PAN).

Gradual head adjustment from one end of the slider to the other (0-255, 128-center).

The head can be stopped at any position you wish.

Control-channel 2 - Vertical movement (TILT) (within 270°)

Push slider up in order to move the head vertically (TILT).

Gradual head adjustment from one end of the slider to the other (0-255, 128-center).

The head can be stopped at any position you wish.

Control-channel 3 - PAN-movement with 16 Bit-resolution

Control-channel 4 - TILT-movement with 16 Bit-resolution

Control-channel 5 - PAN/TILT-speed

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	F	Decreasing speed

Control-channel 6 - Red (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 7 - Green (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 8 - Blue (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 9 - Red (LED outer circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 10 - Green (LED outer circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 11 - Blue (LED outer circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 12 - Red (LED middle circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 13 - Green (LED middle circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 14 - Blue (LED middle circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 15 - Red (LED inner circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 16 - Green (LED inner circle)

Decimal	Hexad.	Percentage	S/F	Feature
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Control-channel 18 - Color and effect macros

Decimal	Hexad.	Percentage	S/F	Feature
0 10	00 0A	0% 4%	S	Neutral
11 20	0B 14	4% 8%	S	Macro 1
21 30	15 1E	8% 12%	S	Macro 2
31 40	1F 28	12% 16%	S	Macro 3
41 50	29 32	16% 20%	S	Macro 4
51 60	33 3C	20% 24%	S	Macro 5
61 70	3D 46	24% 27%	S	Macro 6
71 80	47 50	28% 31%	S	Macro 7
81 90	51 5A	32% 35%	S	Macro 8
91 100	5B 64	36% 39%	S	Macro 9
101 110	65 6E	40% 43%	S	Macro 10
111 120	6F 78	44% 47%	S	Macro 11
121 130	79 82	47% 51%	S	Macro 12
131 140	83 8C	51% 55%	S	Macro 13
141 150	8D 96	55% 59%	S	Macro 14
151 160	97 A0	59% 63%	S	Macro 15
161 170	A1 AA	63% 67%	S	Macro 16
171 180	AB B4	67% 71%	S	Macro 17
181 190	B5 BE	71% 75%	S	Macro 18
191 200	BF C8	75% 78%	S	Macro 19
201 210	C9 D2	79% 82%	S	Macro 20
211 220	D3 DC	83% 86%	S	Macro 21
221 230	DD E6	87% 90%	S	Macro 22
231 240	E7 F0	91% 94%	S	Macro 23
241 250	F1 FA	95% 98%	S	Macro 24
251 255	FB FF	98% 100%	S	Macro 25

Control-channel 19 - Switching the LEDs, Strobe, Reset

Decimal	Hexad.	Percentage	S/F	Feature
0 10	00 0A	0% 4%	S	LEDs off
11 20	0B 14	4% 8%	S	LEDs on
21 30	15 1E	8% 12%	S	Reset
31 250	1F FA	12% 98%	F	Strobe-effect with increasing speed
251 255	FB FF	98% 100%	S	LEDs on

Control-channel 20 - Dimmer intensity

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	F	Gradual adjustment of the dimmer intensity from 0 to 100 %

18 channel mode

Control-channel 1 - Horizontal movement (PAN) (within 540°)

Push slider up in order to move the head horizontally (PAN).

Gradual head adjustment from one end of the slider to the other (0-255, 128-center).

The head can be stopped at any position you wish.

Control-channel 2 - Vertical movement (TILT) (within 270°)

Push slider up in order to move the head vertically (TILT).

Gradual head adjustment from one end of the slider to the other (0-255, 128-center).

The head can be stopped at any position you wish.

Control-channel 3 - PAN/TILT-speed

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	F	Decreasing speed

Control-channel 4 - Red (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 5 - Green (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 6 - Blue (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 7 - Red (LED outer circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 8 - Green (LED outer circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 9 - Blue (LED outer circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 10 - Red (LED middle circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 11 - Green (LED middle circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 12 - Blue (LED middle circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 13 - Red (LED inner circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 14 - Green (LED inner circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 15 - Blue (LED inner circle)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 16 - Color and effect macros

Decimal	Hexad.	Percentage	S/F	Feature
0	10	00	0A	0% 4% S Neutral
11	20	0B	14	4% 8% S Macro 1
21	30	15	1E	8% 12% S Macro 2
31	40	1F	28	12% 16% S Macro 3
41	50	29	32	16% 20% S Macro 4
51	60	33	3C	20% 24% S Macro 5
61	70	3D	46	24% 27% S Macro 6
71	80	47	50	28% 31% S Macro 7
81	90	51	5A	32% 35% S Macro 8
91	100	5B	64	36% 39% S Macro 9
101	110	65	6E	40% 43% S Macro 10
111	120	6F	78	44% 47% S Macro 11
121	130	79	82	47% 51% S Macro 12
131	140	83	8C	51% 55% S Macro 13
141	150	8D	96	55% 59% S Macro 14
151	160	97	A0	59% 63% S Macro 15
161	170	A1	AA	63% 67% S Macro 16
171	180	AB	B4	67% 71% S Macro 17
181	190	B5	BE	71% 75% S Macro 18
191	200	BF	C8	75% 78% S Macro 19
201	210	C9	D2	79% 82% S Macro 20
211	220	D3	DC	83% 86% S Macro 21
221	230	DD	E6	87% 90% S Macro 22
231	240	E7	F0	91% 94% S Macro 23
241	250	F1	FA	95% 98% S Macro 24
251	255	FB	FF	98% 100% S Macro 25

Control-channel 17 - Switching the LEDs, Strobe, Reset

Decimal	Hexad.	Percentage	S/F	Feature
0	10	00	0A	0% 4% S LEDs off
11	20	0B	14	4% 8% S LEDs on
21	30	15	1E	8% 12% S Reset
31	250	1F	FA	12% 98% F Strobe-effect with increasing speed
251	255	FB	FF	98% 100% S LEDs on

Control-channel 18 - Dimmer intensity

Decimal	Hexad.	Percentage	S/F	Feature
0	255	00	FF	0% 100% F Gradual adjustment of the dimmer intensity from 0 to 100 %

11 channel mode
Control-channel 1 - Horizontal movement (PAN) (within 540°)

Push slider up in order to move the head horizontally (PAN).
 Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
 The head can be stopped at any position you wish.

Control-channel 2 - Vertical movement (TILT) (within 270°)

Push slider up in order to move the head vertically (TILT).
 Gradual head adjustment from one end of the slider to the other (0-255, 128-center).
 The head can be stopped at any position you wish.

Control-channel 3 - PAN-movement with 16 Bit-resolution
Control-channel 4 - TILT-movement with 16 Bit-resolution
Control-channel 5 - PAN/TILT-speed

Decimal	Hexad.	Percentage	S/F	Feature
0	255	00	FF	0% 100% F Decreasing speed

Control-channel 6 - Red (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0	255	00	FF	0% 100% S Red (0=off, 255=100% red)

Control-channel 7 - Green (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 8 - Blue (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 9 - Color and effect macros

Decimal	Hexad.	Percentage	S/F	Feature
0 10	00 0A	0% 4%	S	Neutral
11 20	0B 14	4% 8%	S	Macro 1
21 30	15 1E	8% 12%	S	Macro 2
31 40	1F 28	12% 16%	S	Macro 3
41 50	29 32	16% 20%	S	Macro 4
51 60	33 3C	20% 24%	S	Macro 5
61 70	3D 46	24% 27%	S	Macro 6
71 80	47 50	28% 31%	S	Macro 7
81 90	51 5A	32% 35%	S	Macro 8
91 100	5B 64	36% 39%	S	Macro 9
101 110	65 6E	40% 43%	S	Macro 10
111 120	6F 78	44% 47%	S	Macro 11
121 130	79 82	47% 51%	S	Macro 12
131 140	83 8C	51% 55%	S	Macro 13
141 150	8D 96	55% 59%	S	Macro 14
151 160	97 A0	59% 63%	S	Macro 15
161 170	A1 AA	63% 67%	S	Macro 16
171 180	AB B4	67% 71%	S	Macro 17
181 190	B5 BE	71% 75%	S	Macro 18
191 200	BF C8	75% 78%	S	Macro 19
201 210	C9 D2	79% 82%	S	Macro 20
211 220	D3 DC	83% 86%	S	Macro 21
221 230	DD E6	87% 90%	S	Macro 22

231 240	E7 F0	91% 94%	S	Macro 23
241 250	F1 FA	95% 98%	S	Macro 24
251 255	FB FF	98% 100%	S	Macro 25

Control-channel 10 - Switching the LEDs, Strobe, Reset

Decimal	Hexad.	Percentage	S/F	Feature
0 10	00 0A	0% 4%	S	LEDs off
11 20	0B 14	4% 8%	S	LEDs on
21 30	15 1E	8% 12%	S	Reset
31 250	1F FA	12% 98%	F	Strobe-effect with increasing speed
251 255	FB FF	98% 100%	S	LEDs on

Control-channel 11 - Dimmer intensity

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	F	Gradual adjustment of the dimmer intensity from 0 to 100 %

9 channel mode

Control-channel 1 - Horizontal movement (PAN) (within 540°)

Push slider up in order to move the head horizontally (PAN).

Gradual head adjustment from one end of the slider to the other (0-255, 126-center).

The head can be stopped at any position you wish.

Control-channel 2 - Vertical movement (TILT) (within 270°)

Push slider up in order to move the head vertically (TILT).

Gradual head adjustment from one end of the slider to the other (0-255, 126-center).

The head can be stopped at any position you wish.

Control-channel 3 - PAN/TILT-speed

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	F	Decreasing speed

Control-channel 4 - Red (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Red (0=off, 255=100% red)

Control-channel 5 - Green (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Green (0=off, 255=100% green)

Control-channel 6 - Blue (all 3 LED segments)

Decimal	Hexad.	Percentage	S/F	Feature
0 255	00 FF	0% 100%	S	Blue (0=off, 255=100% blue)

Control-channel 7 - Color and effect macros

Decimal	Hexad.	Percentage	S/F	Feature
0 10	00 0A	0% 4%	S	Neutral
11 20	0B 14	4% 8%	S	Macro 1
21 30	15 1E	8% 12%	S	Macro 2
31 40	1F 28	12% 16%	S	Macro 3
41 50	29 32	16% 20%	S	Macro 4
51 60	33 3C	20% 24%	S	Macro 5
61 70	3D 46	24% 27%	S	Macro 6
71 80	47 3C	28% 24%	S	Macro 7
81 90	3D 46	24% 27%	S	Macro 6

91	100	5B	64	36%	39%	S	Macro 9
101	110	65	6E	40%	43%	S	Macro 10
111	120	6F	78	44%	47%	S	Macro 11
121	130	79	82	47%	51%	S	Macro 12
131	140	83	8C	51%	55%	S	Macro 13
141	150	8D	96	55%	59%	S	Macro 14
151	160	97	A0	59%	63%	S	Macro 15
161	170	A1	AA	63%	67%	S	Macro 16
171	180	AB	A0	67%	71%	S	Macro 17
181	190	A1	AA	63%	67%	S	Macro 16
191	200	BF	C8	75%	78%	S	Macro 19
201	210	C9	D2	79%	82%	S	Macro 20
211	220	D3	DC	83%	86%	S	Macro 21
221	230	DD	E6	87%	90%	S	Macro 22
231	240	E7	F0	91%	94%	S	Macro 23
241	250	F1	FA	95%	98%	S	Macro 24
251	255	FB	FF	98%	100%	S	Macro 25

Control-channel 8 - Switching the LEDs, Strobe, Reset

Control channel 6 – Switching the LEDs, Strobe, Reset							
Decimal	Hexad.	Percentage		S/F	Feature		
0	10	00	0A	0%	4%	S	LEDs off
11	20	0B	14	4%	8%	S	LEDs on
21	30	15	1E	8%	12%	S	Reset
31	250	1F	FA	12%	98%	F	Strobe-effect with increasing speed
251	255	FB	FF	98%	100%	S	LEDs on

Control-channel 9 - Dimmer intensity

Control Channel C - Dimmer Intensity						
Decimal	Hexad.	Percentage		S/F	Feature	
0	255	00	FF	0% 100%	F	Gradual adjustment of the dimmer intensity from 0 to 100 %

TECHNICAL SPECIFICATIONS

Power supply:	230 V AC, 50 Hz ~
Power consumption:	140 W/145 VA
DMX control channels:	9/11/18/20
DMX512 connection:	3-pin XLR
Sound-control:	via built-in microphone
Number of LEDs:	36
LED type:	3 W TCL
Beam angle:	20°
Maximum PAN-movement:	540°
Maximum TILT-movement:	270°
Dimensions (LxWxH):	245 x 245 x 310 mm
Weight:	6 kg
Maximum ambient temperature T_a :	45° C
Maximum housing temperature T_c (steady state):	65° C
Min. distance from flammable surfaces:	0.5 m
Min. distance to lighted object:	0.1 m
Fuse:	F 2 A, 250 V