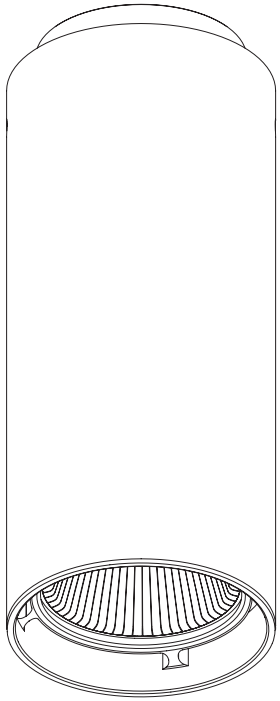

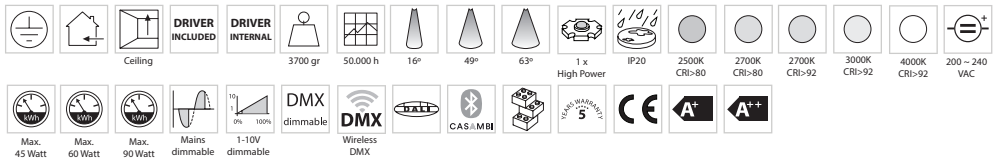

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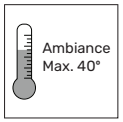
SAFETY INFORMATION



Make sure all connectors are connected properly

Use a source of AC power that complies to local electrical codes

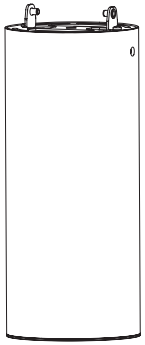
Block access below the work area when maintaining the unit

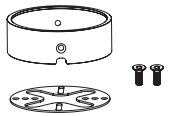
Don't modify or install genuine parts on this product

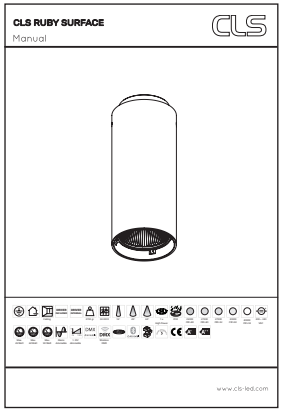
Don't install in a flammable or explosive area

Warning! Some surfaces can be hot

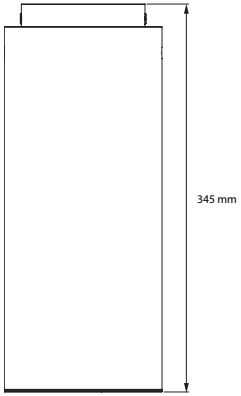
CONTENT

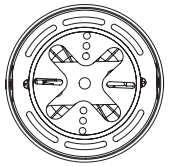


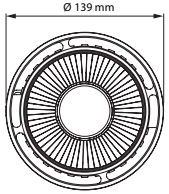


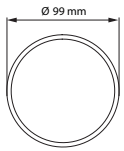


TECHNICAL

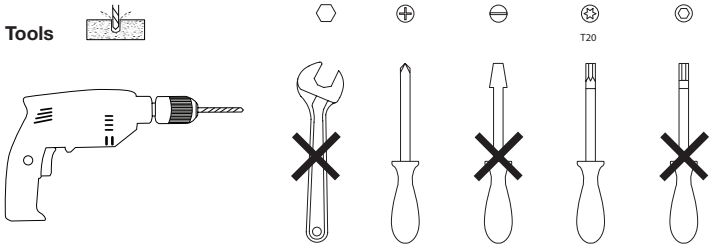








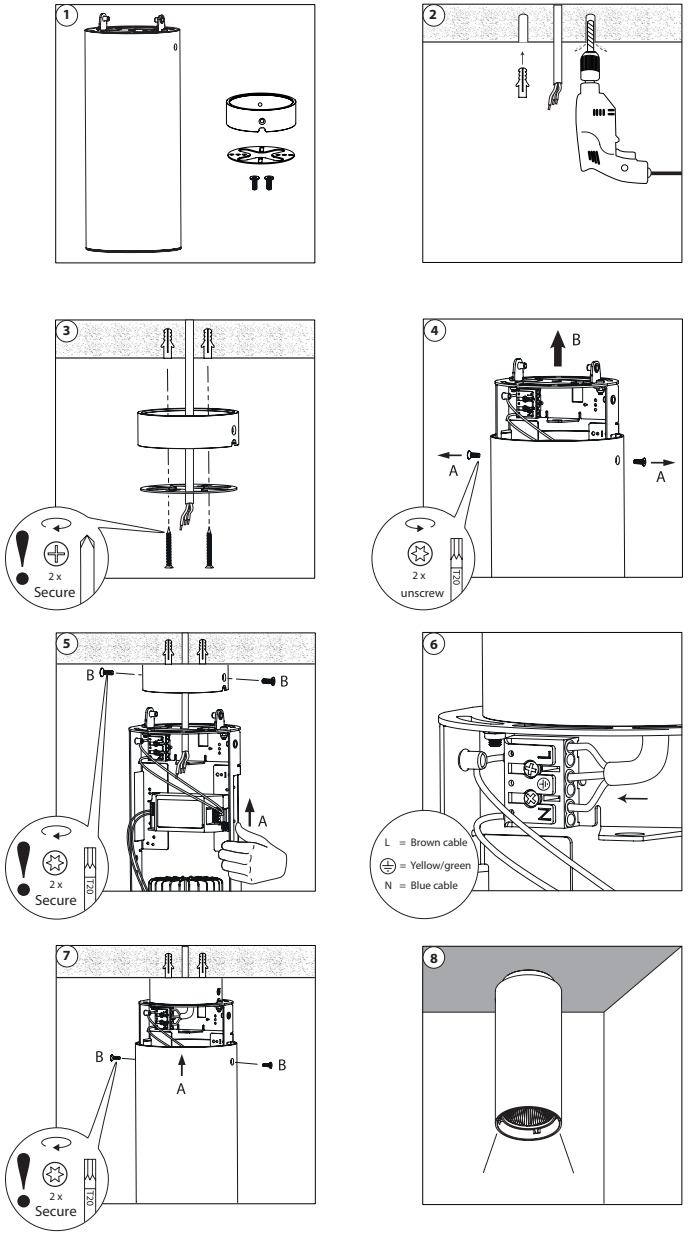
Tools



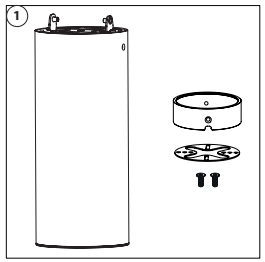
SPECIFICATIONS

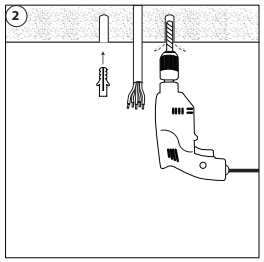
LED:	1 x High Power LED
Available colours:	CRI>80: 2500K or 2700K
	CRI>92: 2700K, 3000K, 4000K
Lenses:	16°, 49°, 63°
Power supply:	200 ~ 240 VAC
Power consumption:	7 serie: Max. 45 Watt
	8 serie: Max. 60 Watt
	9 serie: Max. 90 Watt
Housing:	Anodised aluminium black or white coated
Weight:	3500 gr
IP value:	IP20
Measurements:	345 x 139 mm (hxø)
Ambient temperature:	-10° C till +40° C

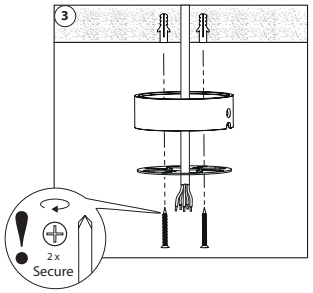
INSTALLATION

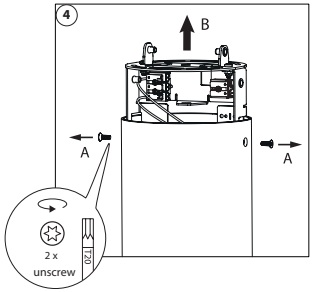


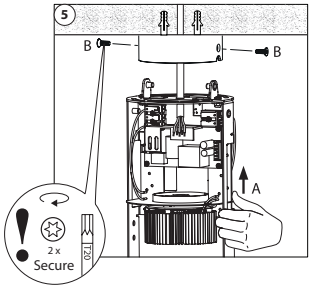
INSTALLATION DMX VERSION

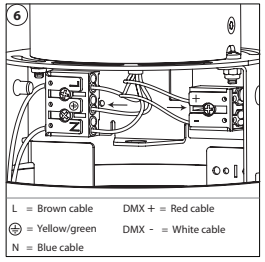


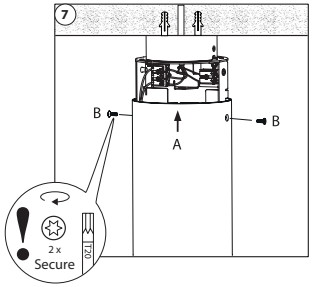


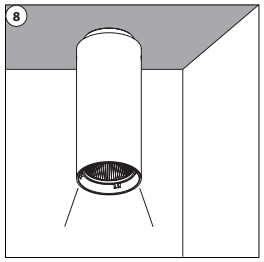


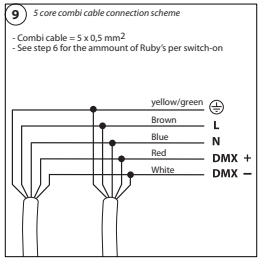


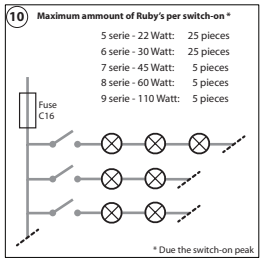










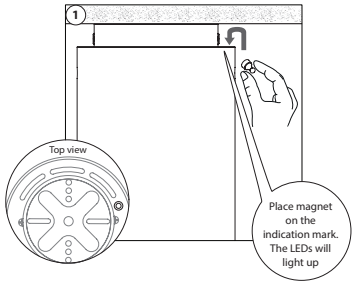


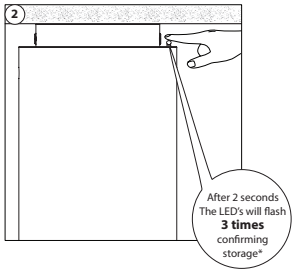
PROGRAMMING

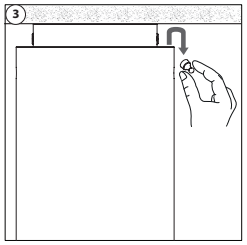
All settings can be configured via DMX. Settings can be configured at once or separately. When one or a couple settings needs to be changed just leave all other setting values zero. This keeps those settings unchanged. Please check the table for more information.

Always use a (universal) DMX controller with digital interface.

First make sure to set the DATA on the DMX controller. To program the setting into the LED fixture follow the next steps using a CLS magnet (#Y106017).







* If all LEDs flash **10 times,** something went wrong. Please try again. If the problem continues to occur, please contact your local sales distributor.

WIRELESS DMX

See the Manual of Wireless Solutions. The Manual can be found on our CLS website, in the Downloads section. Or use the link below
https://www.cls-led.com/wp-content/uploads/cls-files/W-DMX-manual.pdf

Unlink procedure
When the fixture does not receive a DMX signal (DMX controller off), place the magnet on the bottom of the fixture for 5 seconds. Slow flash indicates that the fixture is unlinked.

BLUETOOTH BY CASAMBI

For Casambi controlled fixtures, see the manual of Casambi. The Manual can be found on our CLS website, in the Downloads section. Or use the link below:
https://www.cls-led.com/wp-content/uploads/cls-products/CLS_CASAMBI/MANUAL/Manual_Casambi_controlsystem_EN.pdf

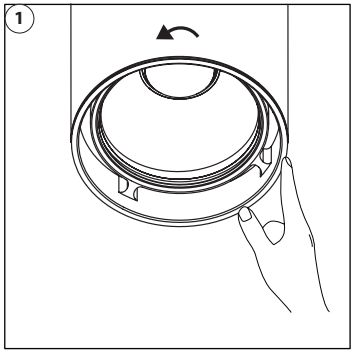
PROGRAMMING TABLE

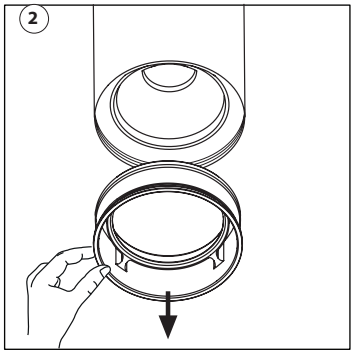
PROGRAMMING TABLE				
DMX	**Function**	**Data**	**Parameters**	**Description**
CH1	Set address 001 to 255	0	0 = no change *	Use this DMX channel to set address from 001 to 255. The configured DMX address is called “n”
		1…255	DMX address = 1…255	
CH2	Set address 256 to 508	0	no change	Use this DMX channel to set address from 256 to 508. The configured DMX address is called “n”
		1…255	DMX address = 256…508	
CH3	Static behavior	0	no change	If no DMX is present the fixture will respond like set in this function.
		1	last DMX value *	
		2	output off	
		3	load static values	
CH4	Soft dim	0	no change	When dynamic softdim is activated an extra DMX channel behind the colours and/or Master controls the soft dim reaction. If fixed no extra DMX channel is used.
		1	off *	
		2	dynamic	
		3-250	fixed interpolation delay	
CH5	Master control	0	no change	If master is first channel is selected the channel will be DMX channel “n”. If master is last channel is selected the channel will be “n+x” (“x” is calculated in the output patch).
		1	no master used *	
		2	master is first channel	
		3	master is last channel	
CH6	Output 1 patch	0	no change	Each output channel can be patched to respond to the desired DMX channel. This enables the user to mix up the colours according to the controller that is used. **Example: all outputs are patched as 1** All outputs will be controlled by DMX channel “n”. If master is used total DMX channels will be 2 otherwise it uses 1 channel (“x” = 1). **Example: output 1&2 are patched as 1 and 3&4 are patched as 2** Output 1&2 will be controlled by DMX channel “n”. Output 3&4 will be controlled by DMX channel “n+1”. If master is used total DMX channels will be 3 otherwise it uses 2 channels (“x” = 2).
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH7*	Output 2 patch	0	no change	
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH8*	Output 3 patch	0	no change	
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH9*	Output 4 patch	0	no change	
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH10	Static output 1	0	no change	Each output channel can be set to a static intensity. If no DMX is present and Static behavior is set to “load static values”. The outputs will be set to the configured intensity values.
		1	output off	
		2…255	intensity 2…255 *(255)*	
CH11*	Static output 2	0	no change	
		1	output off	
		2…255	intensity 2…255 *(255)*	
CH12*	Static output 3	0	no change	
		1	output off	
		2…255	intensity 2…255 *(255)*	
CH13*	Static output 4	0	no change	
		1	output off	
		2…255	intensity 2…255 *(255)*	
CH14*	Load default settings	0	no change	This function resets all settings to the Factory setting.
		1	load Factory settings	
CH15	Input Resolution setting	0	no change	In 16 bit mode 2 channels are used per colour. First channel is rough channel, second channel fine. 16 bit mode is only available in DRIVE mode 2.
		1	8 bit *	
		2	16 bit	
CH16	Drive mode setting	0	no change	You can set the frequency of the PWM for best compatibility with Camera Systems. However, the highest resolution of the dimming curve will be at the lowest frequency. Option 1 can be used to be compatible with older installation and new fixtures.
		1	compatible with version < 2020	
		2	PWM frequency 0.7kHz *	
		3	PWM frequency 1.4kHz	
		4	PWM frequency 2.8kHz	
		5	PWM frequency 5.6kHz	

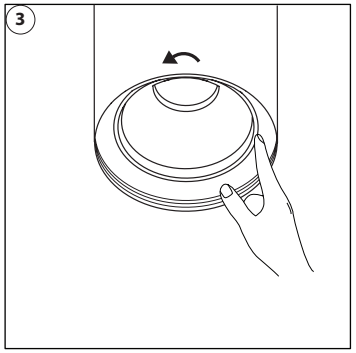
Default setting

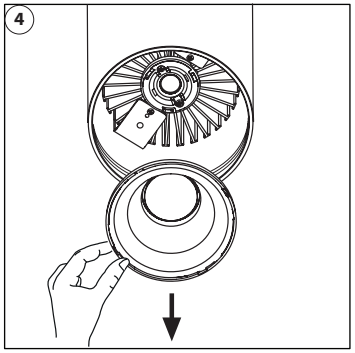
CHXX Not applicable on the Ruby Surface DMX single colour*

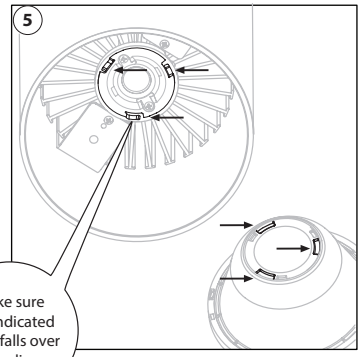
REFLECTOR REPLACEMENT

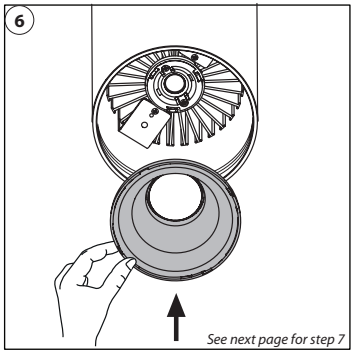




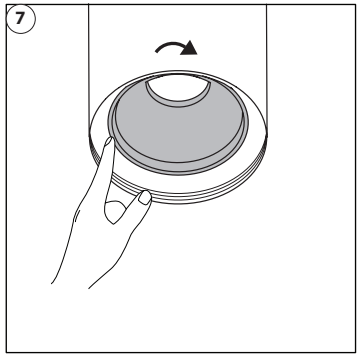


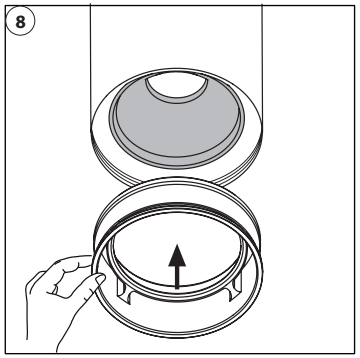


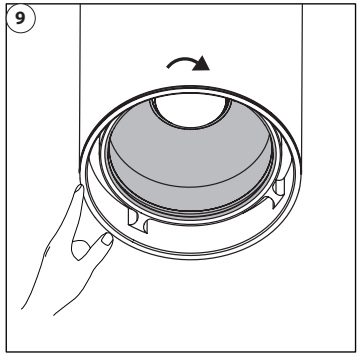


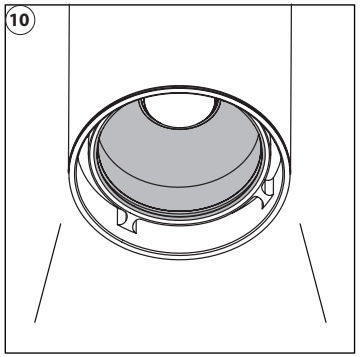


Following steps on the next page









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LIST OF SYMBOLS

Protection class
One, two or three

Application area
Indoor or outdoor

Application area
Floor, wall or ceiling

Swivel
Fixture is horizontally rotatable, indicated in degrees

Swivel
Fixture is vertically rotatable, indicated in degrees

Multiple connection
Daisychain connectivity

Installation depth
In centimeters

Installation size
In centimeters

Cable length
Maximum cable attached to the fixture in centimeters

Driver
Inclusive or exclusive
Internal or external

Weight
In grams/kilograms

Pressure
Maximum pressure on the fixture in kg/cm²

Lifespan
Of the light source in hours

Lenses
Availble lenses, indicated in degrees

Performance Zoom
Adjustable beam angle

LEDs
Kind of LED used in the fixture

Plug & play
Easy connection using the SmartConnect system

IP value
Ingress Protection classifies the degrees of protection provided against the intrusion of the product

Colour changing
RGB, RGB-W, RGB-A, AWB or Tunable White

Retail & Food LED modules
Clothing, furniture, kitchens, jewellery, shoes, bread, meat, fish and vegetables & fruit.

Colour
Available colours;
Amber, blue, red or green

White colour temperature
In different Kelvin values;
Cold white, neutral white, warm white or extra warm white

Curve
Minimal bending curve in centimeters

Cutting length
Indicated by the cutting marks

LED pitch
Pitch between the LEDs in millimeters

Power supply
In VDC, VAC or milliAmpere

Power consumption
In VA or Watt

Dimmable
1-10 Volt, Phase, individual, DMX dimmable or DALI

PWM dimming
Traditional PWM dimming, DMX analog or DMX Hybrid dim

Bluetooth controlled
By Casambi

Magno dimming
Accurate dimming from 100 – 1% by using a magnet

Dynamic Control
Dynamic Power Control or Dynamic Temperature Control

DMX input
Fixture works on DMX512 protocol or Wireless DMX

Combined product
Compose your own fixture

Warranty
3 or 5 years warranty on the product

Conformité Européenne
CE marking for free marketability of industrial goods within the EU

Energy label

Lightsource
Equipped with a CLS, Bridgelux or a Xicato LED module