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

Mounting hole
In centimeters

Cable length
Maximum cable attached to the fixture in centimeters

Driver
Inclusive or exclusive

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

LEDs
Kind of LED used in the fixture

Plug & play
Easy connection using the SmartConnect system

Colour
Available colours;
Amber, blue, red or green

Colour temperature
White in different Kelvin values;
Cold white, neutral white, warm white or extra warm white

Colour changing
RGB, RGB-W or RGB-A

Curve
Minimal bending curve in centimeters

Cutting length
Indicated by the cutting marks

LED pitch
Pitch between the LEDs in millimeters

Power supply
In VAC, VDC or milliAmpere

Power consumption
In VA or Watt

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

Housing
Housing material

DMX channels
Numbers of DMX channels on a product

DMX input
Fixture works on DMX512 protocol

Combined product
Compose your own fixture

Warranty
3 years warranty on the product

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

Energy label

Creative Lighting Solutions

CLS Colour Par 12

Version 1.0 September 2011

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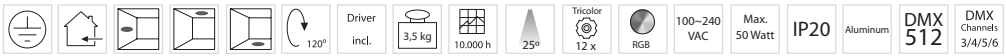
TECHNICAL SPECIFICATIONS

LEDs:	Tricolor RGB
Colour:	RGB
Lenses:	25º
Power supply:	Voltage: 100 ~ 240 VAC
Power consumption:	Max. 50 Watt
Primary fuse:	2 amp
Weight:	3,5 kg
Measurements:	258 x 293 x 194 mm (hxwxd)
Control in & output:	XLR 3 pole male-female
Channels:	3, 4, 5 or 6 maximum
Control signal:	DMX 512/1990
Modes:	DMX512 or Stand-Alone
IP value:	IP20
Housing:	Aluminum
Ambient temperature:	Max. 40 ºC



MAINTENANCE
Make sure fixture is cool and disconnected from power mains before any service.

Weekly operating hours and environmental conditions will establish how often the fixtures need cleaning. Fixtures should be cleaned and inspected at least once a month to maintain optimum performance. Accumulation of dust and fog residue increases heat build up, can lead to malfunctions, overheating and reduction in maximum light output, reduced fixture life and over all performance. Before conducting any maintenance, disconnect fixture from power mains.

- Disconnect fixture from power mains.
- Use a vacuum with a soft brush to remove dust collected on external vents and internal components. If using an air compressor, use low pressures and extreme care to prevent damaging any internal parts or effects. 3) Clean all optical elements when the fixture is cold. Use a soft lint free cotton cloth or tissue and cleaner safe for plastics.
- Inspect clamps and safety cables to ensure fixture is secure and safe.

TROUBLESHOOTING

Symptom	**Possible causes/solutions**
No Power	Check for power on mains Check main fuse and fuse holder
Erratic / No response to DMX	Check data cables: connection and proper wiring Check Display settings Check Start Address Check Master/slave settings
Incorrectly responds to (Diagnostic technique for DMX issues: Set suspect fixture's Start Address the same as a correctly functioning fixture. If both units then function correctly, issue is programming)	DMX Check Start Address Check Start Address Check for overlapping addresses Check Menu settings Check Data cables (faults and proper wiring)

INTRODUCTION
Thank you for selecting the CLS Colour Par 12 with 512 DMX-channels. The CLS Colour Par 12 is a universal DMX controlled luminairy that uses 12 Tricolor LEDs to create an even light-output.

Available Colour Par 12
- 875590 CLS Colour Par 12, Tricolor-LED DMX 50W 100-240VAC

The CLS Colour Par 12 features:
- 100 ~ 240 VAC input
- Tricolor RGB colour mixing with intensity and strobe effects
- Precise DMX control using 6 channels
- Stand alone or DMX 512 controllable
- Dual joke for floor or mounting
- Indoor use only

Included items
The CLS Colour Par 12 is shipped in one package containing the following items:
- 1 CLS Colour Par 12
- 1 user manual

Optional accessories
- 707028 CLS Zense DMX controller + built in 4 amp RGB dimmer
- 707030 CLS ACX60 DMX controller for max. 60 channels
- 875580 CLS PAR RGB DMX controller
- 911200 CLS Extension cable black XLR male/female 80cm
- 911201 CLS Extension cable black XLR male/female 1.5mtr
- 911203 CLS Extension cable black XLR male/female 3mtr
- 911205 CLS Extension cable black XLR male/female 5mtr
- 911206 CLS Extension cable black XLR male/female 10mtr
- 911207 CLS Extension cable black XLR male/female 15mtr
- 911209 CLS Extension cable black XLR male/female 20mtr

Note: It is important to read this manual before you install this product.

SAFETY INFORMATION
Warning! This product is for professional use only. Read this manual before powering up or installing the CLS Colour Par 12. Follow the instructions listed below and observe all warnings in this manual.

Protection from electric shock
- Disconnect the power supply from AC power before installing, dismounting or maintening of the unit.
- Make sure all connectors are connected properly.
- Use only a source of AC power that complies with local building and electrical codes.
- Do not expose the unit to rain or moisture.
- Refer all service to a qualified technician.

Protection from burns and fire
- Provide a clearance of at least 50 mm around the unit.
- Do not install the Colour Par 12 near a heat source.
- Do not install the Colour Par 12 in a corrosive, flammable or explosive area.
- Do not modify the Colour Par 12, or install other than genuine parts.
- Do not operate the unit if the ambient temperature exceeds 35 ºC.
- Operate in a well-ventilated area

Protection from damage due to falls
- Verify that all covers and mounting hardware is securely fastened.
- Block access below the work area whenever installing or removing the unit.

SETUP AND OPERATION MODES (LED SEGMENT DISPLAY)
The following refers to the different modes that are available on this fixture via the LED Segment Control Panel display. All functions are selectable from the display menu located at the back of the fixture.

Control Panel Menu
Use the fixture's Control Panel to access the Control Menu. The MENU Key puts the fixture in the settings menu itself and also acts as a BACK key between options, UP/DOWN moves through the menu options and allows the assignment of a value.
The ENTER key is used to enter that option and confirms the selection once the UP/DOWN is used to adjust the value. When in edit, the display will Flash. Settings are stored and recalled on subsequent power cycles. R, G, B, refers to Red, Green and Blue respectively. DMX and master/slave modes require data cables to be connected between fixtures. Manual and some stand-alone modes do not require data cables for independent use of the fixture.

Colour Macro/Scroll Mode

0-4	No Macro or Scroll	130-134	Colour Scroll Snap Speed 10
5-9	Cool White	135-139	Colour Scroll Snap Speed 11
10-14	Lt. Blue	140-144	Colour Scroll Snap Speed 12
15-19	Blue	145-149	Colour Scroll Snap Speed 13
20-24	Purple	150-154	Colour Scroll Snap Speed 14
25-29	Blue Magenta	155-159	Colour Scroll Snap Speed 15
30-34	Magenta	160-164	Colour Scroll Snap Speed 16
35-39	Hot Pink	165-169	Colour Scroll Snap Speed 17 (Slowest)
40-44	Pink	170-174	Colour Scroll FADE Speed 1 (Fastest)
45-49	Red	175-179	Colour Scroll FADE Speed 2
50-54	Orange	180-184	Colour Scroll FADE Speed 3
55-59	Yellow	185-189	Colour Scroll FADE Speed 4
60-64	Lime	190-194	Colour Scroll FADE Speed 5
65-69	Lt. Green	195-199	Colour Scroll FADE Speed 6
70-74	Green	200-204	Colour Scroll FADE Speed 7
75-79	Teal	205-209	Colour Scroll FADE Speed 8
80-84	Cyan	210-214	Colour Scroll FADE Speed 9
85-89	Colour Scroll Snap Speed 1 (Fastest)	215-219	Colour Scroll FADE Speed 10
90-94	Colour Scroll Snap Speed 2	220-224	Colour Scroll FADE Speed 11
95-99	Colour Scroll Snap Speed 3	225-229	Colour Scroll FADE Speed 12
100-104	Colour Scroll Snap Speed 4	230-234	Colour Scroll FADE Speed 13
105-109	Colour Scroll Snap Speed 5	235-239	Colour Scroll FADE Speed 14
110-114	Colour Scroll Snap Speed 6	240-244	Colour Scroll FADE Speed 15
115-119	Colour Scroll Snap Speed 7	245-249	Colour Scroll FADE Speed 16
120-124	Colour Scroll Snap Speed 8	250-255	Colour Scroll FADE Speed 17 (Slowest)
125-129	Colour Scroll Snap Speed 9		

CH 6 : Strobe
The Strobe functions in all modes. The strobe effect will toggle the Master Level between Off and its present value.
0-4 No Strobe
5-255 Strobe Effect - Slow to Fast

CHANNEL VALUES AND FUNCTIONS – 6 CHANNEL MODE

CH 1: Master Dimmer
The Master Dimmer controls the actual output level while the relative level of each colour is set by the R, G or B channels or the Colour Macro/Scroll Channel.
0 – 4 Black Out
5-255 Intensity - Dark to Full Brightness

CH 2: Red
Sets relative intensity of Red. Actual value is subject to Master Dimmer channels. The Colour Macro/Scroll Channel will override this channel.
0-4 No Output
5-255 Intensity - Off to Full On

CH 3: Green
Sets relative intensity of Green. Actual value is subject to Master Dimmer channels. The Colour Macro/Scroll Channel will override this channel.
0-4 No Output
5-255 Intensity - Off to Full On

CH 4: Blue
Sets relative intensity of Blue. Actual value is subject to Master Dimmer channels. The Colour Macro/Scroll Channel will override this channel.
0-4 No Output
5-255 Intensity - Off to Full On

CH 5: Colour Macro/Scroll
The Colour Macro/Scroll selects between 16 colours and two Colour Scroll Modes. The first Colour Scroll Mode snaps between colours, the second Colour Scroll Mode fades between colours. This will override the relative values set by the individual RGB channels 2, 3 & 4.

Control Panel Menu Table
The following table describes the control panel's menu options and settings. What is displayed on the screen is marked in "quotations". When this unit powers up, it will display "SYON" for System Power On.

Menu options	Function	Options
MODE [MODE]	Select Number of DMX operating channels	01 = 3ch, 02 = 4ch, 03 = 5ch or 04 = 6ch
ADDRESS [ADDR]	Select DMX start address	1-512
COLBALANCE [COBA]	Enable/disable colour balance preferences	BALANCE [BAL]: Off or on [RGB]-set individual values for the Colour balance: R 0-255, G 0-255, B 0-255
DISPLAY [DISP]	Set the Display Backlight	Off or on
MANUAL [MANL]	Manual operations options	RESET [RESY] TEST [TEST]: Test the individual colours: R 0-255, G 0-255, B 0-255 PROGRAMMER "PROG": SCENE [SCEN]: 16 user programmable scenes: SC01-16 set R 0-255, G 0-255, B 0-255 strobe 0-255 CHASE [CHAS]: 6 user programmable chases: CA01-06 set speed S000-255
STANDALONE [STAL]	functions for automatic run options	SOUND [SOND]: Off or 001 - 100 MASTER [MAST]: Off or on SLAVE [SLAV]: Off or 001-031 PLAYBACK [PLAY]: Scene SC01-16 or Chase CA01-06

DMX-512 CONTROL
Fixtures require a 'Start Address' from 1 to 512, setting the first DMX channel containing data for the fixture (see DMX Background). Before addressing fixtures, consult the manual of the system's DMX controller to select a desirable addressing scheme. Valid Start Addresses range from 1 to 512.

Fixtures requiring more than one channel for control will read subsequent channels up to the total number of channels required. Since this fixture requires a maximum of 6 channels of DMX, if set to a Start Address of 7 it would use data from channels: 7 and 8, 9, 10, 11, 12. Choose a Start Address so the channels used do not overlap with other fixtures.

In some cases, it may be desirable to set two or more same type fixtures to the same Start Address. In this case, the fixtures will be slaved together and respond to the same data. Because all fixtures see the same data, fixtures may be set to any address without concern for the order they are connected by the DMX cables.

Note: For DMX to operate on this unit, all STAND ALONE options must be set to Off.

DMX Data Connection
This fixture uses 3-pin XLR type connectors and shielded twisted pair cable approved for EIA-422/EIA485 use. Fixtures are connected in Daisy Chain topography: Connection is made from the controller to the DMX-IN of the first light, then from the DMX-OUT to the DMX-IN of the next light and so on. Only one data source can be on a chain and no branching is allowed. The physical order in which the fixtures are connected is not important, use the most convenient.

Data Terminator
A Data Terminator can be connected to the DMX-OUT of the last fixture to reduce the effects of signal noise; it is not required for all installations. To make a Terminator, connect a 120-ohm 1/4 watt resistor across pin 2, Data Negative (S-) and pin 3, Data positive (S+). A qualified technician can determine if a Data Terminator is needed.

DMX Start Address
To place the fixture in DMX mode, press the MENU key, then using the UP/DOWN keys get to the Address Menu Option. Press ENTER and using the UP/DOWN buttons, set the start address number for this particular unit in the DMX chain. Once selected, press ENTER again to save your selection. More than one fixture may have the same start address, but they will behave the same. Giving a unique start address that does not overlap with any other units allows you to individually control that fixtures's features fully.

Never allow channels to overlap. You will need to select the number of channels you wish the fixture to use first. Your choices are 3, 4, 5, or 6 channel modes. This will determine the spacing of channels you will need to avoid overlapping of channels when selecting your start addresses.

Example: Select Start Addresses for 4 fixtures each requiring 6 channels of DMX (6 channel mode).

For this example, start with the first unit set to the first possible Start Address = 1. This fixture occupies DMX channels 1 thru 6. The next DMX channel available for a Start Address is found by adding the previous fixture's Start Address to its channel requirement: 1+6=7. To maximize channel usage, we will leave no empty channels between fixtures so the second Start Address is set to DMX channel 7 and that fixture occupies channels 7 thru 12. The third fixture will be addressed 7+6=13 and occupy channels 13 thru 18. The last fixture is addressed 13+6=19 and will occupy channels 19 thru 24. Thus, 4 fixtures using 6 channels each have Start Addresses of 1, 7, 13 and 19 and the next free channel in the system is 19+6=25.

DMX Channel Assignments
This fixture features 4 different DMX Channel modes, 3, 4, 5, and 6 channel mode. Using the 6 channel mode provides the most features, however it takes up the most channels of DMX. The different channel assignments are shown below. We will provide a full description of the values and functions of the 6 channel mode only. All other modes of less channels, do the same functions described within the 6 channel mode. Note that the channel order maybe different for each of the mode.

3 channel mode	4 Channel mode	5 Channel mode	6 Channel mode
1 Red (0-255)	1 Red (0-255)	1 Red (0-255)	1 Master dimmer (0-255)
2 Green (0-255)	2 Green (0-255)	2 Green (0-255)	2 Red (0-255)
3 Blue (0-255)	3 Blue (0-255)	3 Blue (0-255)	3 Green (0-255)
	4 Master dimmer (0-255)	4 Master dimmer (0-255)	4 Blue (0-255)
		5 Strobe (0-255)	5 0-4 No function, 5-84 colour macro, 85-169 colour snap, 170-255 colour fade
			6 Strobe (0-255)