

# **Lumos Color Rol 500/1000 User manual**

Ver. 1.0

## Product Overview

### ➤ Optical Characteristics

**CRI** : 85Ra (Max.)

**Correlated Color Temperature(CCT)** : 2800K ~ 10000K (Green-Magenta Adjustable)

**Full Color RGBW LED** : HUE 360°, Adjust the Saturation

### ➤ Features

**Flicker Free** : Flicker-free lighting

**DMX** : DMX 512 channel module control for all functions remotely

**Dimming Control** : Smooth digital dimming technology from 100% to 0%

**Various modes** : CCT&RGBW / CCT&HSI / Effect [Color chase, Strobe, Light bar] / fan control

**Case Material** : Metal (Aluminum & steel)

**Advanced Heat managing technology**

The patented technology to improve air flow to cool down the heat created inside the product.

The convection heat mode is at LED PCB temperatures below 55°C. (No fan)

And cooling fans operate automatically when LED PCB temperatures above 56°C.

## Product size & Technical Specifications

### ➤ Product size

#### ▪ Lumos Color Rol 500

1. **Size** : W500 X H292.6 X L160 (mm)

W19.7 X H11.6 X L6.3 (in)

2. **Weight** : 5.9 kg (13.0 lbs)

3. **Dimensions**

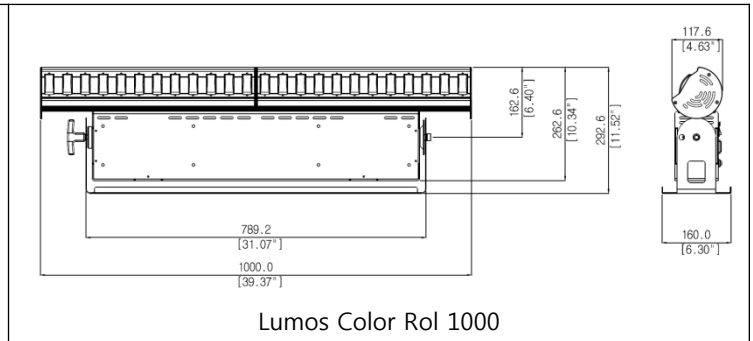
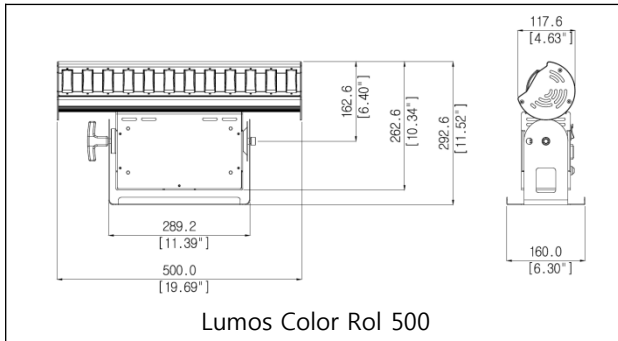
#### ▪ Lumos Color Rol 1000

1. **Size** : W1000 X H292.6 X L160 (mm)

W39.4 X H11.6 X L6.3 (in)

2. **Weight** : 13.0 kg (28.7 lbs)

3. **Dimensions**



### ➤ Technical specifications

#### 1. Power Consumption

- Lumos Color Rol 500 : 150W Nominal / 200W Max.
- Lumos Color Rol 1000 : 300W Nominal / 350W Max.

2. **Power Input** : AC 110~240V, 50~60Hz

3. **Power connection** : Daisy chain up to 5

- Power Input / Output : Neutrik PowerCON TRUE 1

#### 4. Photometric

5. **Beam angle** : 90° x 20°

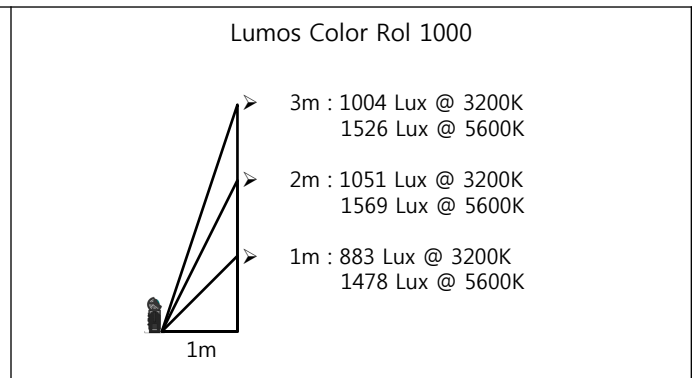
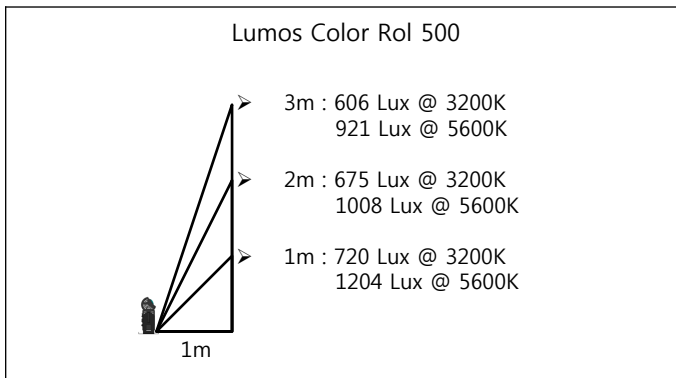
6. **CRI** : 85Ra (Max.)

7. **CCT** : 2800K~10000K (Green-Magenta Adjustable)

8. **Dimming** : Digital

9. **DMX** : DMX controlling up to 512 channels

10. **Operating Temp.** : 0°C ~ 45°C



## Installing the fixture

### ➤ How to calculate the installation distance from a cyclorama

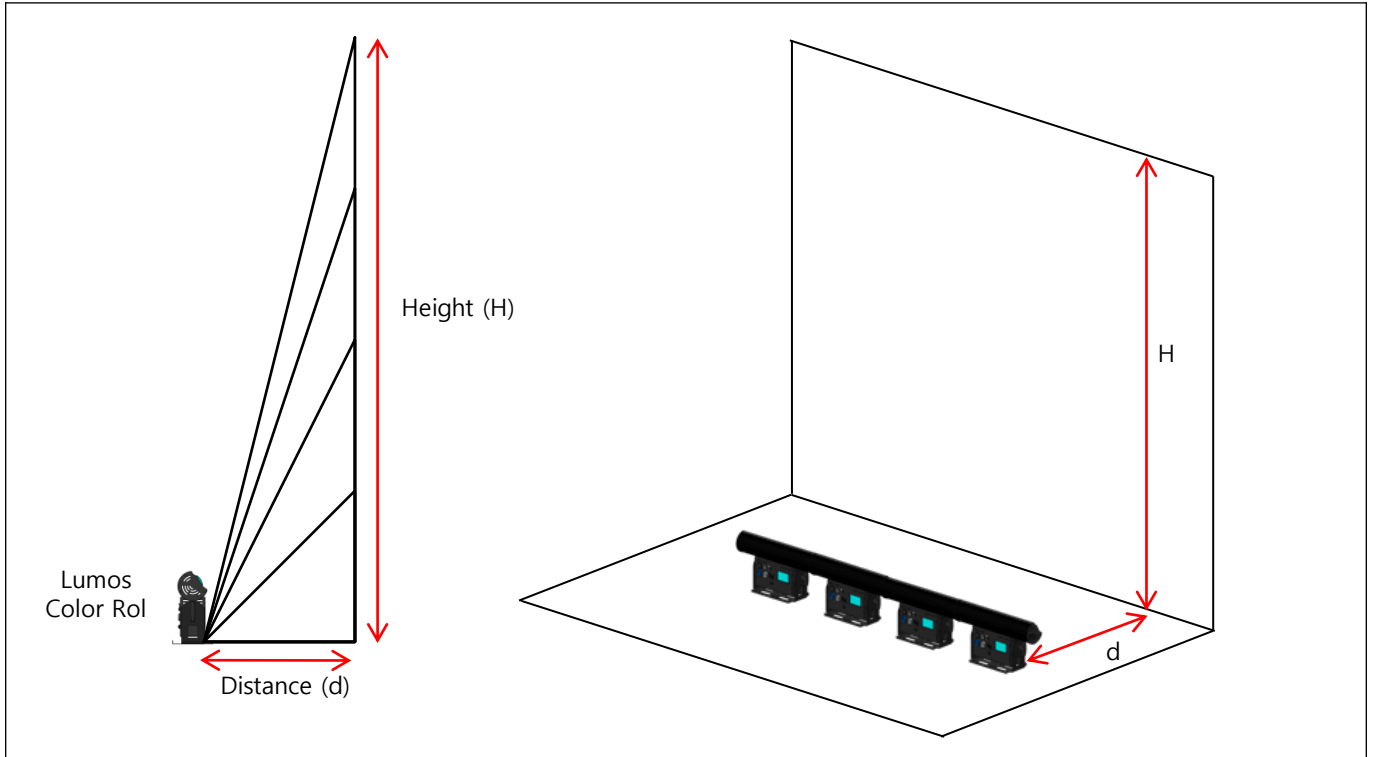
In the case of the single row (top or bottom) set-up, recommended distance for the most even light on a cyclorama can be easily calculated using the following formula :

$$d = \frac{H}{4}$$

d=distance from cyclorama

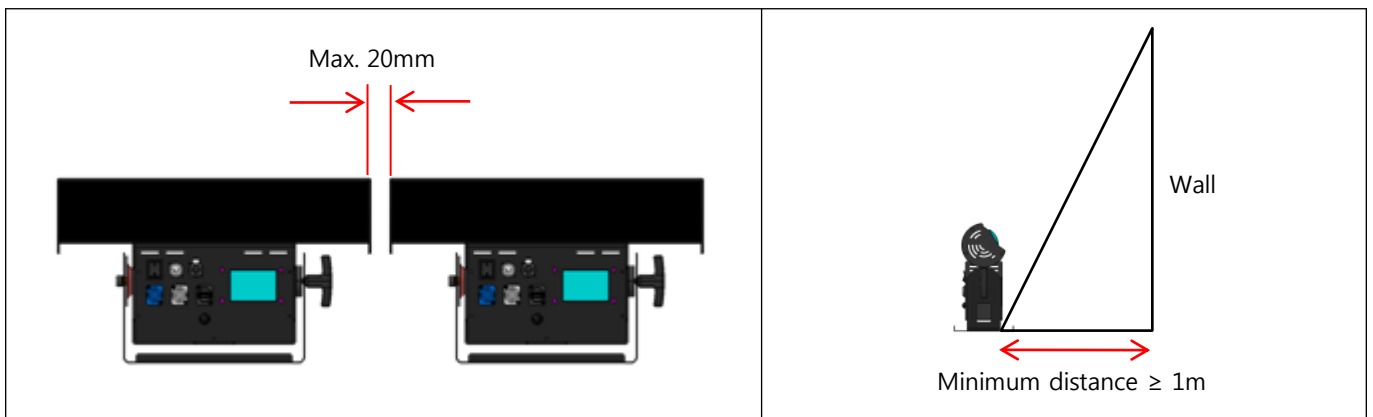
H=height of cyclorama

( ex. H=4m → d= 1m, H=8m → d= 2m)



### ➤ Installation configurations

The Lumos Color Rol has been designed to work in a linear set-up, so the fixtures must be aligned in a continuous row. The maximum clearance allowed between one fixture and the next is 20 mm. And the minimum distance allowed between one fixture and the wall is 1m.



# Lumos Color Rol Series

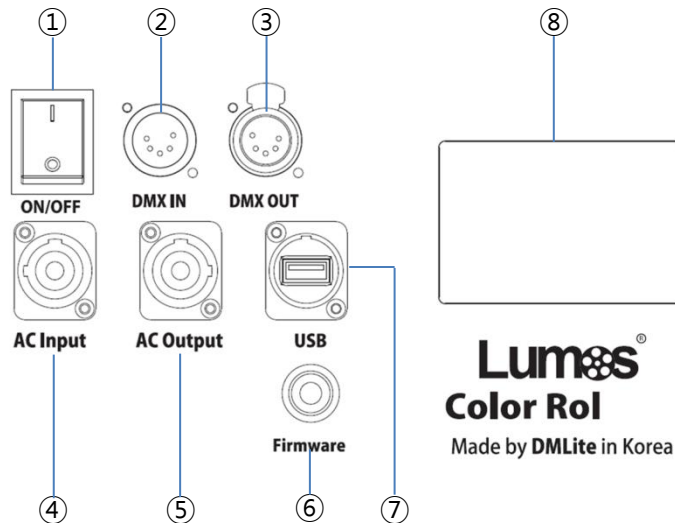
## Components

The components shown in this manual are subject to change.



## Control

### ➤ Key functions



	Part names	Print names	Function
①	Power ON/OFF	ON/OFF	Turning the power On/Off
②	DMX Input	DMX IN	Input for DMX signal
③	DMX output	DMX out	Output for DMX signal
④	AC Input	AC Input	Input AC
⑤	AC Output	AC Output	Output AC
⑥	Firmware	Firmware	Button for Firmware update
⑦	USB port	USB	Firmware update
⑧	LCD	-	Display menu / functions / status

### ➤ Firmware update

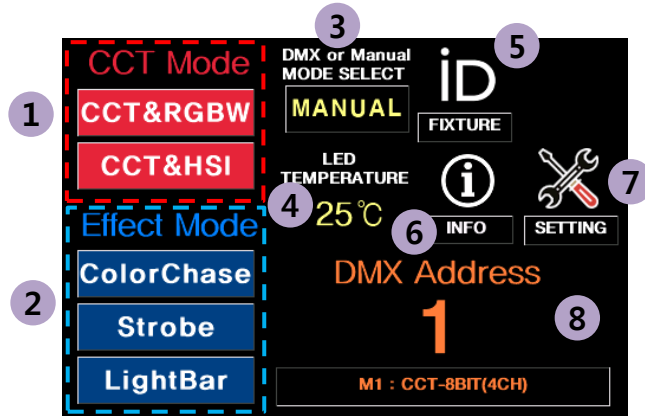
Lumos Color Rol 500's new firmware can be updated using USB 2.0 flash drive. (USB format FAT32 type)

- 1) Copy firmware HEX file (image.hex) to USB flash drive.  
( **Do not change the file name.** And **do not put in any folder.** If do, the system will not recognize the file.)
- 2) Turn off the Color Rol 500 and connect the USB flash drive to the USB port on the back of the light.
- 3) While holding the push Firmware button, turn on the Glow panel and hold the push mode button for 5 seconds.
- 4) After holding for 5 seconds, releasing the Firmware button will automatically complete the firmware update.

# Lumos Color Rol Series

## ➤ Mode

### ▪ Main screen

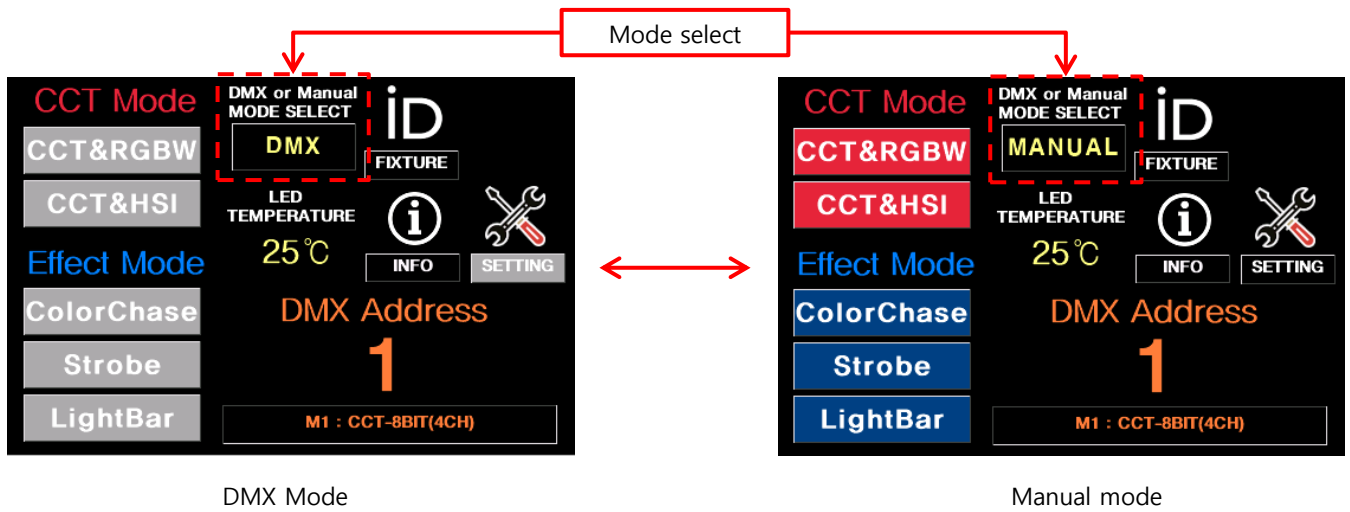


NO.	Display	Function
1	CCT Mode	<ul style="list-style-type: none"> <li>CCT &amp; RGBW mode</li> <li>CCT 2800K~10000K / Green-Magenta GN -0.030~+0.030 Control</li> <li>Change mode by Mixing button</li> <li>Red / Green / Blue / White LED 0~100% Control</li> </ul>
		<ul style="list-style-type: none"> <li>CCT &amp; HSI mode</li> <li>CCT 2800K~10000K control / Green-Magenta GN -0.030~+0.030 Control</li> <li>Change mode by Mixing button</li> <li>HUE 0°~360° / Saturation 0~100% control</li> </ul>
2	Effect Mode	<ul style="list-style-type: none"> <li>Color chase</li> <li>Color change Speed 0~100% / Saturation 0~100% Control</li> </ul>
		<ul style="list-style-type: none"> <li>Strobe</li> <li>CCT 2800K~10000K / Flash speed 0~100% control</li> </ul>
		<ul style="list-style-type: none"> <li>Light bar</li> <li>Select Flash color (Red / Green / Blue / White)</li> <li>Select flash type (Single / Double / Triple / Triple all / Cycle)</li> </ul>
3	DMX or Manual MODE SELECT	<ul style="list-style-type: none"> <li>DMX mode or Manual mode select button</li> </ul>
4	LED TEMPERATURE	<ul style="list-style-type: none"> <li>Display LED Temperature</li> </ul>
5	FIXTURE	<ul style="list-style-type: none"> <li>Display Fixture ID (No.) and Change the Fixture ID</li> </ul>
6	INFO	<ul style="list-style-type: none"> <li>Display status and information</li> <li>LED PCB temperature</li> <li>Fan status and input Voltage</li> <li>Firmware version and date</li> </ul>
7	Setting	<ul style="list-style-type: none"> <li>Dimming Speed Setting (Very Fast / Fast / Medium / Slow)</li> <li>LCD Brightness (0%~100%)</li> <li>Fan control</li> <li>Fan Auto on (Automatic fan with variable speed)</li> <li>Fan High (Full speed) / Fan Middle (Speed 50%) / Fan Low (Speed 30%) / Fan off</li> </ul>
8	DMX Address	<ul style="list-style-type: none"> <li>Change DMX address (1~512)</li> <li>Change DMX protocol</li> <li>M1 : CCT / M2 : HSI / M3 : RGBW / M4 : CCT&amp;RGBW / M5 : CCT&amp;HSI / M6 : EFFECT</li> </ul>

# Lumos Color Rol Series

## ➤ Mode

- DMX or Manual mode select

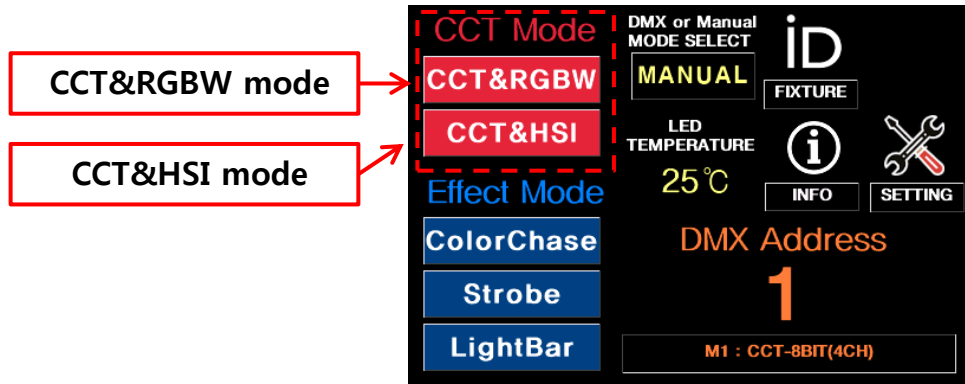


Control Mode		DMX mode (DMX mode can control to change values only using DMX signal)	Manual mode
CCT Mode	CCT&RGBW	Control value only using DMX signal	Manual control
	CCT&HSI	Control value only using DMX signal	Manual control
Effect Mode	Color Chase	Control value only using DMX signal	Manual control
	Strobe		
	Light bar		
Fixture		○	○
Information		○	○
Setting		X	○
DMX Address		○	○

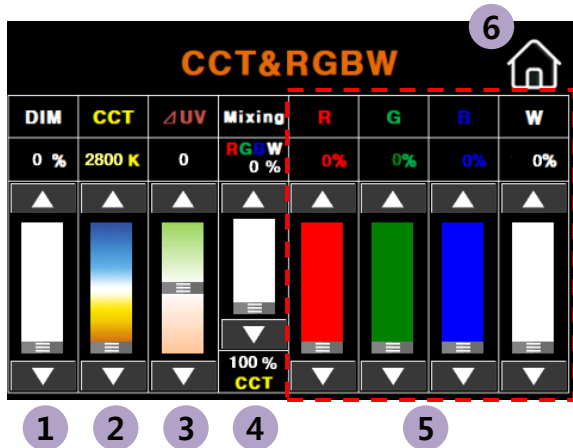
# Lumos Color Rol Series

## ➤ Mode

### ▪ CCT Mode



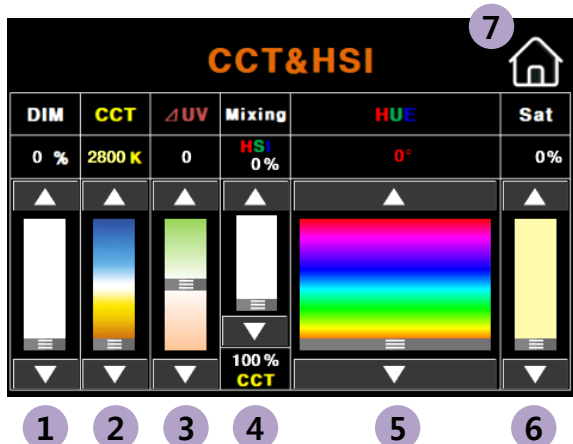
### ▪ CCT&RGBW mode



NO.	Button	Function
1	Dimming	1% Dimming (0~100%)
2	CCT	100K CCT control (2800K~10000K)
3	ΔUV	1 Green-Magenta control ( -30 ~ +30 )
4	Mixing	1% CCT ↔ RGBW mode mixing (0~100%)
5	R / G / B / W	1% Red/Green/Blue/White color control (0~100%)
6	Home	Return to the main screen

※ ▲▼ button – change value per unit  
 ※ Bar button – change value within the range

### ▪ CCT&HSI mode



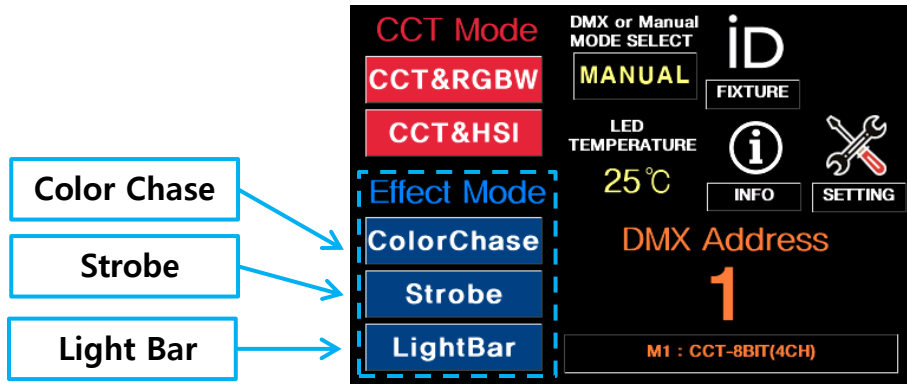
NO.	Button	Function
1	Dimming	1% Dimming (0~100%)
2	CCT	100K CCT control (2800K~10000K)
3	ΔUV	1 Green-Magenta control ( -30 ~ +30 )
4	Mixing	1% CCT ↔ HSI mode mixing (0~100%)
5	HUE	1° HUE control (0°~360°)
6	Sat	1% Saturation control (0~100%)
7	Home	Return to the main screen

※ ▲▼ button – change value per unit  
 ※ Bar button – change value within the range

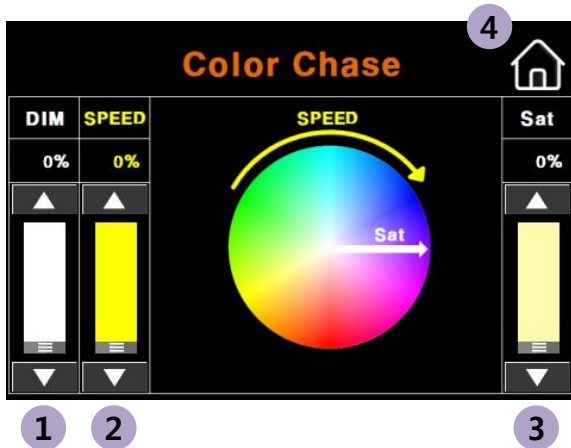
# Lumos Color Rol Series

## ➤ Mode

### ▪ Effect Mode



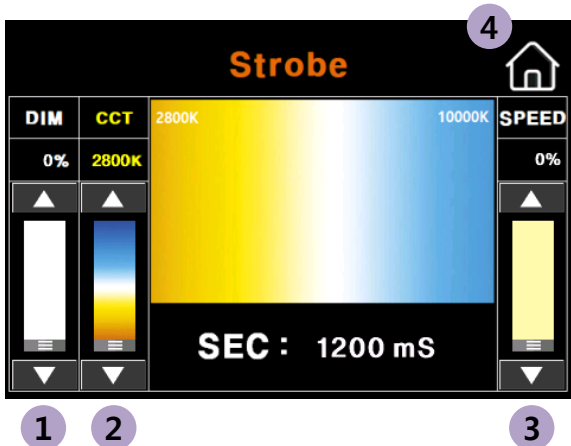
### ▪ Color Chase



NO.	Button	Function
1	Dimming	1% Dimming (0~100%)
2	SPEED	1% Color change speed (0~100%)
3	Sat	1% Saturation control (0~100%)
4	Home	Return to the main screen

※ ▲▼ button – change value per unit  
 ※ Bar button – change value within the range

### ▪ CCT&HSI mode



NO.	Button	Function
1	Dimming	1% Dimming (0~100%)
2	CCT	100K CCT control (2800K~10000K)
3	SPEED	1% Color change speed (0~100%)
4	Home	Return to the main screen

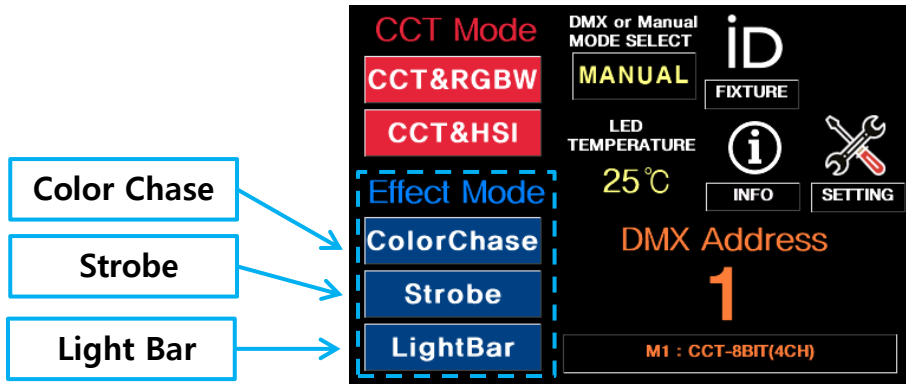
※ ▲▼ button – change value per unit  
 ※ Bar button – change value within the range



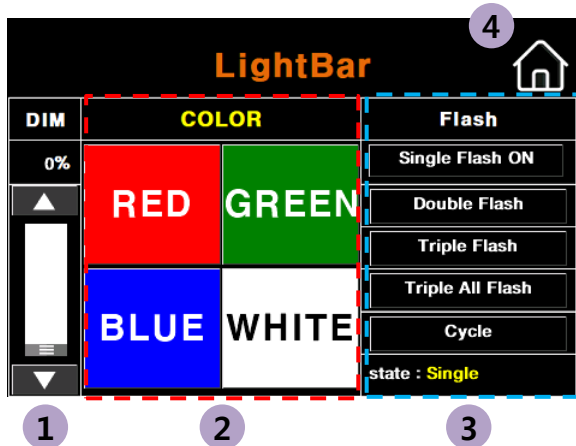
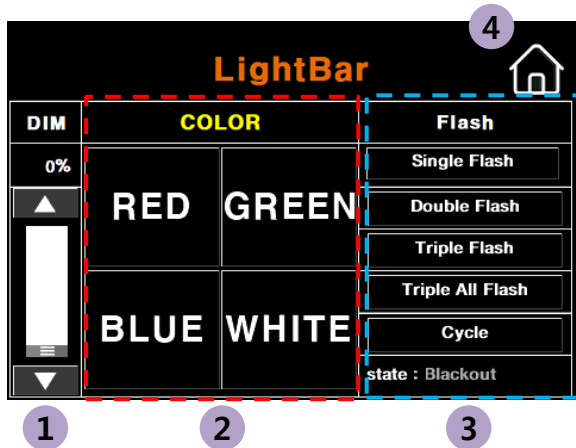
# Lumos Color Rol Series

## ➤ Mode

### ▪ Effect Mode



### ▪ Light Bar



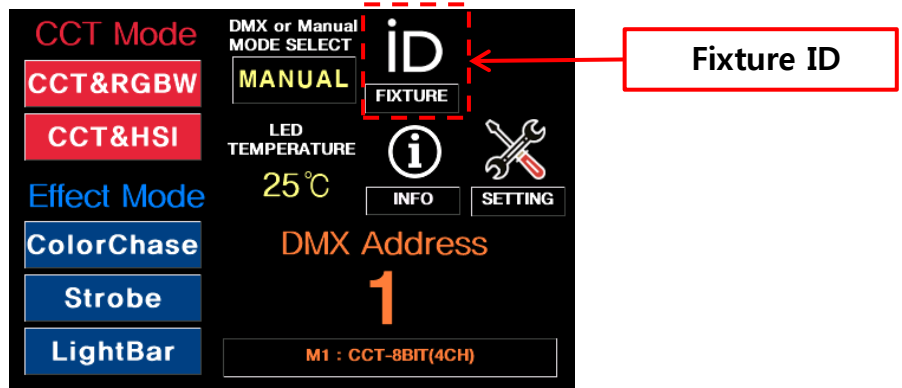
NO.	Button	Function
1	Dimming	1% Dimming (0~100%)
2	COLOR	Select flash Color (Red / Green / Blue / White)
3	Flash	Select flash type Single Flash Double Flash Triple Flash Triple All Flash Cycle
4	Home	Return to the main screen

※ ▲▼ button – change value per unit  
 ※ Bar button – change value within the range

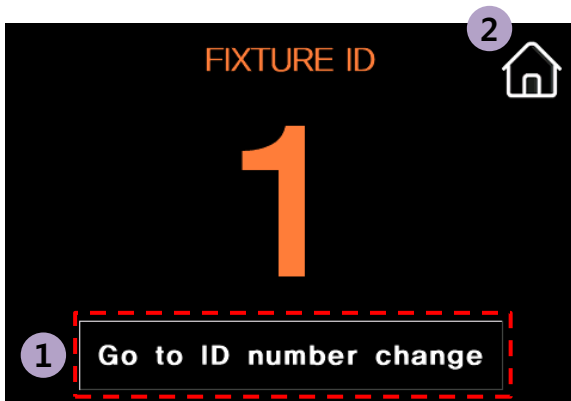
# Lumos Color Rol Series

## ➤ Mode

### ▪ Fixture ID

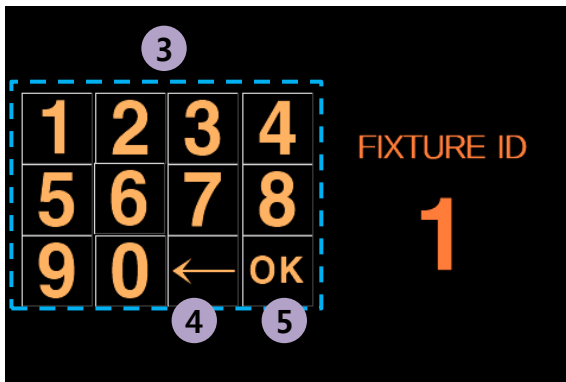


### ▪ FIXTURE ID



NO.	Button	Function
1	Go to ID number change	Change the Fixture ID number
2	Home	Return to the main screen

### ▪ Change the FIXTURE ID number

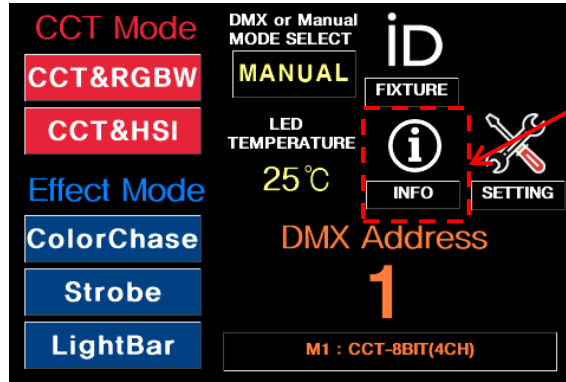


NO.	Button	Function
3	No. 1~0	Give Fixture ID number
4	←	Erase Fixture ID number
5	OK	Select Fixture ID number (Return to the Fixture ID screen)

# Lumos Color Rol Series

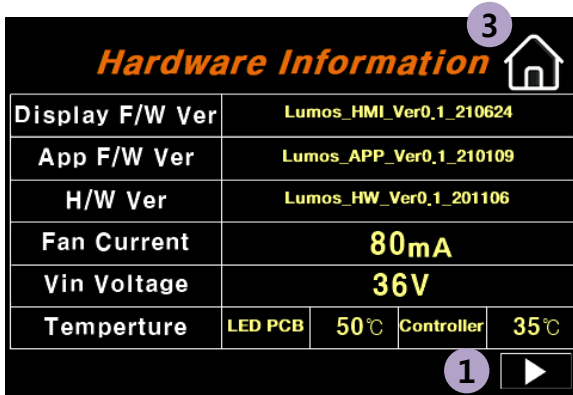
## ➤ Mode

### ▪ Information



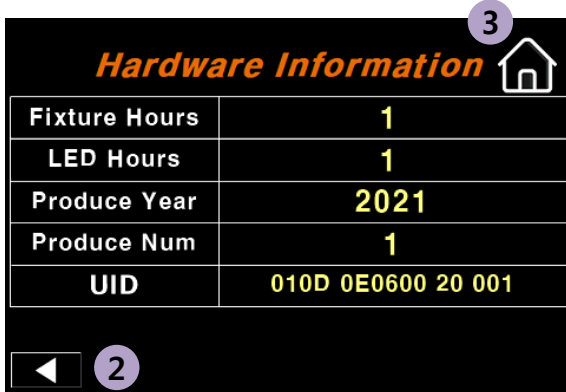
Information

### ▪ Information (Hardware Information)

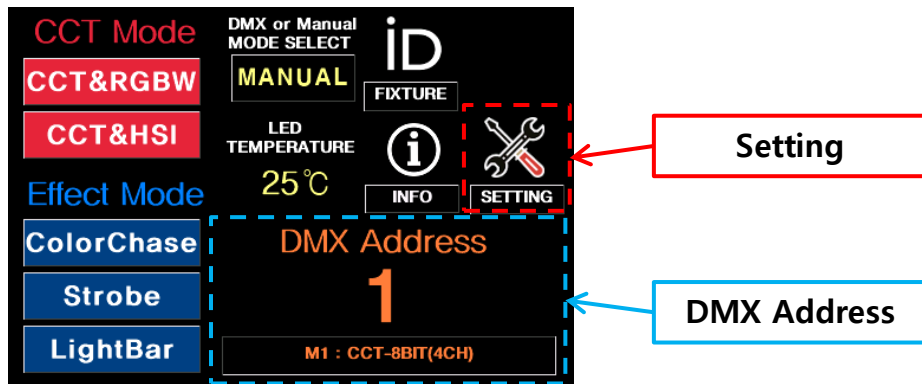


NO.	Button	Function
1	▶	Change information 2 page
2	◀	Change information 1 page
3	Home	Return to the main screen

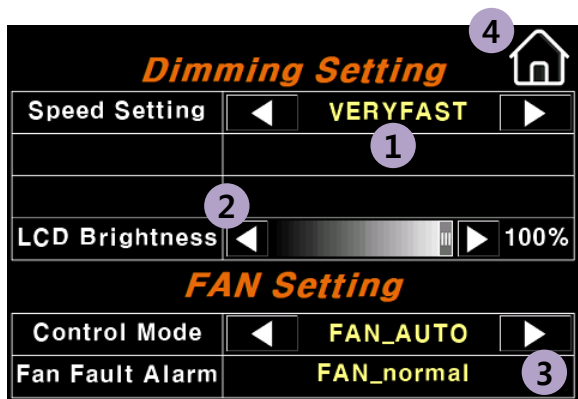
### ▪ Change the FIXTURE ID number



- Mode
  - Setting



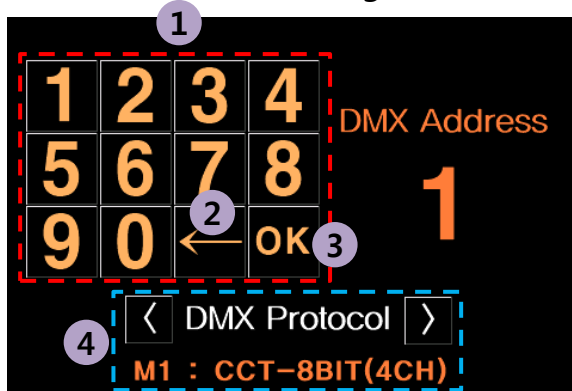
- Setting (Dimming speed setting / LCD Brightness / Fan setting)



NO.	Button	Function
1	Dimming Speed Setting	Change Dimming Speed Very Fast / Fast / Medium / Slow
2	LCD Brightness	1% change LCD Brightness (0%~100%)
3	Fan control mode	Change Fan control mode - Fan Auto on (Automatic fan with variable speed) - Fan High (Full speed) - Fan Middle (Speed 50%) - Fan Low (Speed 30%) - Fan off
4	Home	Return to the main screen

※ ◀▶ button – change value per unit  
 ※ Bar button – change value within the range (LCD Brightness)

- DMX Address (Change DMX Address and DMX protocol)



NO.	Button	Function
1	No. 1~0	Give DMX address number
2	←	Erase DMX address number
3	OK	Select DMX address number (Return to the main screen)
4	DMX Protocol ◀ ▶	Change DMX Protocol - M1 : CCT mode - M2 : HSI mode - M3 : RGBW mode - M4 : CCT&RGBW mode - M5 : CCT&HSI mode - M6 : Effect mode

※ ◀ ▶ button – change DMX Protocol

## Protocol

### ➤ DMX Protocol

Mode	Function	Use Channels
M 1	CCT mode	4
M 2	HSI mode	4
M 3	RGBW mode	6
M 4	CCT & RGBW mode	9
M 5	CCT & HSI mode	7
M 6	Effect mode	8

### ➤ Overview of CCT values as DMX values

CCT value	DMX value	
	Value	Percent
2800 K	0~6	0~2
3200 K	17~20	7~8
4400 K	59~62	23~24
5600 K	101~104	40~41
6500 K	133~135	52~53
8000 K	185~188	73~74
10000 K	255	100

## Protocol

### ➤ M1 : CCT mode [Dimming 8 bit] (4 Channels per function)

Channel	Value	Percent	Function
1	0~255	0~100	Dimming 0~100%
2	0~255	0~100	CCT 2800~10000K
3	0~12	0~4	Green-Magenta control
	13~25	5~9	➤ No effect
	26~119	10~46	➤ -30 (Full plus Magenta)
	120~147	47~57	➤ -29 ~ -01
	148~244	58~95	➤ No effect
	245~255	96~100	➤ +01 ~ +29 ➤ +30 (Full plus green)
4	0~65	0~25	Fan control
	66~129	26~50	➤ Fan auto on (LED PCB Temp. 0~55°C fan off, 56~75°C fan middle speed, 76°C~ Fan high speed)
	130~193	51~75	➤ Fan high speed (Dimming 0~100% )
	194~255	76~100	➤ Fan middel speed (Dimming 0~75% max.,)
			➤ Fan off (Dimming 0~50% max.)

### ➤ M2 : HSI mode [Dimming 8 bit] (4 Channels per function)

Channel	Value	Percent	Function
1	0~255	0~100	Dimming 0~100%
2	0~255	0~100	HUE 0~360°
3	0~255	0~100	Saturation 0~100%
4	0~65	0~25	Fan control
	66~129	26~50	➤ Fan auto on (LED PCB Temp. 0~55°C fan off, 56~75°C fan middle speed, 76°C~ Fan high speed)
	130~193	51~75	➤ Fan high speed (Dimming 0~100% )
	194~255	76~100	➤ Fan middel speed (Dimming 0~75% max.,)
			➤ Fan off (Dimming 0~50% max.)

### ➤ M3 : RGBW mode [Dimming 8 bit] (6 Channels per function)

Channel	Value	Percent	Function
1	0~255	0~100	Dimming 0~100%
2	0~255	0~100	Intensity Red 0~100%
3	0~255	0~100	Intensity Green 0~100%
4	0~255	0~100	Intensity Blue 0~100%
5	0~255	0~100	Intensity White 0~100%
6	0~65	0~25	Fan control
	66~129	26~50	➤ Fan auto on (LED PCB Temp. 0~55°C fan off, 56~75°C fan middle speed, 76°C~ Fan high speed)
	130~193	51~75	➤ Fan high speed (Dimming 0~100% )
	194~255	76~100	➤ Fan middel speed (Dimming 0~75% max.,)
			➤ Fan off (Dimming 0~50% max.)

# Lumos Color Rol Series

## ➤ M4 : CCT & RGBW mode [Dimming 8 bit] (9 Channels per function)

Channel	Value	Percent	Function
1	0~255	0~100	Dimming 0~100%
2	0~255	0~100	CCT 2800~10000K
3	0~12 13~25 26~119 120~147 148~244 245~255	0~4 5~9 10~46 47~57 58~95 96~100	Green-Magenta control ➤ No effect ➤ -30 (Full plus Magenta) ➤ -29 ~ -01 ➤ No effect ➤ +01 ~ +29 ➤ +30 (Full plus green)
4	0~25 26~231 232~255	0~10 10~90 91~100	Change to mode ➤ CCT mode ➤ CCT mode + RGBW mode ➤ RGBW mode
5	0~255	0~100	Intensity Red 0~100%
6	0~255	0~100	Intensity Green 0~100%
7	0~255	0~100	Intensity Blue 0~100%
8	0~255	0~100	Intensity White 0~100%
9	0~65 66~129 130~193 194~255	0~25 26~50 51~75 76~100	Fan control ➤ Fan auto on (LED PCB Temp. 0~55°C fan off, 56~75°C fan middle speed, 76°C~ Fan high speed) ➤ Fan high speed (Dimming 0~100% ) ➤ Fan middel speed (Dimming 0~75% max.,) ➤ Fan off (Dimming 0~50% max.)

## ➤ M5 : CCT & HSI mode [Dimming 8 bit] (7 Channels per function)

Channel	Value	Percent	Function
1	0~255	0~100	Dimming 0~100%
2	0~255	0~100	CCT 2800~10000K
3	0~12 13~25 26~119 120~147 148~244 245~255	0~4 5~9 10~46 47~57 58~95 96~100	Green-Magenta control ➤ No effect ➤ -30 (Full plus Magenta) ➤ -29 ~ -01 ➤ No effect ➤ +01 ~ +29 ➤ +30 (Full plus green)
4	0~25 26~231 232~255	0~10 10~90 91~100	Change to mode ➤ CCT mode ➤ CCT mode + HSI mode ➤ HSI mode
5	0~255	0~100	HUE 0~360°
6	0~255	0~100	Saturation 0~100%
7	0~65 66~129 130~193 194~255	0~25 26~50 51~75 76~100	Fan control ➤ Fan auto on (LED PCB Temp. 0~55°C fan off, 56~75°C fan middle speed, 76°C~ Fan high speed) ➤ Fan high speed (Dimming 0~100% ) ➤ Fan middel speed (Dimming 0~75% max.,) ➤ Fan off (Dimming 0~50% max.)

# Lumos Color Rol Series

## ➤ M6 : Effect mode [Dimming 8 bit] (8 Channels per function)

Channel	Vlaue	Percent	Function
1	0~255	0~100	Dimming 0~100%
2	0~12 13~19 20~30 31~40 41~255	0~4 5~7 8~11 12~15 16~100	Effect select ➤ No effect ➤ Color chase ➤ Strobe ➤ Light bar ➤ Reserved for upgrade firmware
3	0~255	0~100	Effect parameter 1 (see effect parameter table)
4	0~255	0~100	Effect parameter 2 (see effect parameter table)
5	0~255	0~100	Effect parameter 3 (see effect parameter table)
6	0~255	0~100	Effect parameter 4 (see effect parameter table)
7	0~255	0~100	Effect parameter 5 (see effect parameter table)
8	0~65 66~129 130~193 194~255	0~25 26~50 51~75 76~100	Fan control ➤ Fan auto on (LED PCB Temp. 0~55°C fan off, 56~75°C fan middle speed, 76°C~ Fan high speed) ➤ Fan high speed (Dimming 0~100% ) ➤ Fan middel speed (Dimming 0~75% max.,) ➤ Fan off (Dimming 0~50% max.)

## ➤ Effect parameter table

Effect name	Effect parameter	Value	Percent	Function
Color chase	1	0~255	0~100	Speed control
	2	0~255	0~100	Saturation 0~100%
Strobe	1	0~255	0~100	CCT 2800K~10000K
	2	0~255	0~100	Speed Flashes control
Light bar	1	0~2 3~27 28~53 54~78 79~107 108~129 130~155 156~180 181~206 207~231 232~255	0 1~10 11~20 21~30 31~40 41~50 51~60 61~70 71~80 81~90 91~100	Color change ➤ Red ➤ Green ➤ Blue ➤ Red + Green ➤ Red + Blue ➤ Green + Blue ➤ Red + White ➤ Green + White ➤ Blue + White ➤ Red + Blue + White ➤ Red + Green + Blue
	2	0~53 54~104 105~155 156~206 207~255	0~20 21~40 41~60 61~80 81~100	Flash type Single flash Double flash Triple flash Triple all flash Cycle



## ➤ Memo

## ➤ Memo

A large, empty rectangular box with a thin black border, intended for writing a memo.

## ➤ Memo

The Natural LED Lighting

Lumos®

DMLite Co., Ltd.

#501, 26, Yangcheon-ro 57-gil, Gangseo-gu, Seoul 07526, Korea  
Tel +82 2 540 0984 / Fax +82 2 6003 0094  
Sales@dmlite.co.kr