

Eminere[®] Inground 2 Eminere[®] Inground 4



OR code for user manual



USER MANUAL

Version 2.0

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FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE POWERING OR INSTALLING YOUR Eminere ! Save it for future reference.

This device has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure safe operation, it is absolutely necessary for the user to follow the safety instructions and warnings written in this manual.

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Unauthorized modification will void warranty.

1. Safety instructions

DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT!

Always disconnect the fixture from AC power before cleaning, servicing or installing.

Make sure the supply/data cable cord is not damaged by sharp edges.

Do not install the fixture near an open flame.

Refer servicing to qualified service personnel.

This fixture falls under protection class I. Therefore this fixture has to be connected to a mains socket outlet with a protective earthing connection.

Do not connect this fixture to a dimmer pack.

LED light emission. Risk of eye injury. Do not look into the beam from a short distance without suitable protective eyewear. Do not look at LEDs with magnifiers or similar optical instruments that may concentrate the light output.

Avoid brute force when installing or operating the fixture.

The fixture was designed for outdoor use. This fixture must not be used for underwater installation.

When choosing the installation spot, please make sure that the fixture is not exposed to extreme heat or dust.

Avoid using the unit in locations subject to possible impacts.

The fixture body never must be covered with cloth or other materials when the fixture is under operation.

Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.

The fixture becomes hot during operation. Allow the fixture to cool approximately 30 minutes prior to servicing or maintenance.

Dismantling of the unit in case of its repair must not be carried out in rain.

Immunity of the equipment is designed for electromagnetic environments E1, E2, E3 according to the standard EN55103-2 ed.2 Electromagnetic compatibility. Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use. Part 2: Immunity.

The product (covers and cables) must not be exposed to a high frequency electromagnetic field higher than 3V/m.

The installation company should check levels of possible interferences above the tested levels E1,E2,E3 given by this standard (e.g. transmitters in surrounding area) before installing the equipment. Emission of the equipment complies with the standard EN55032 Electromagnetic compatibility of multimedia equipment – Emission Requirements according to class B.

Please consider that unauthorized modifications on the fixture are forbidden due to safety reasons!

Operate the fixture only after having familiarized yourself with its functions. Do not permit operation by persons not qualified to operate the fixture.

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the warranty becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock etc.

2. Fixture exterior view



3. Installation

The unit must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations. This device falls under class one and must be grounded! With respect to the purpose of using the unit, the residual current circuit breaker is highly recommended.

3.1 Mounting the Eminere Inground

Warning! If the Eminere Inground will be exposed to max. allowed static load, the subsoil under the installation sleeve has to withstand load of: 45kN (standard covering glass) 23kN (antiskid covering glass).

Example of installation of the Eminere Inground 2

1. Prepare an adequate hole with a good drainage leaving at least 300 mm of gravel on the bottom of the hole for inserting the mounting sleeve (1) into the prepared hole. There must not stay water in the mounting sleeve.



- 2. Remove the temporary cover (4) from the mounting sleeve (1) by unscrewing the six cap head allen bolts (5).
- 3. In sleeve that Emineres inground wil be installed side by side, the four holes (10) on the side of the mounting sleeve serve for attaching next mounting sleeve by means of the four screws M5x10 (2) (with washer and nuts). Two rubber grommets (3) insert to the holes (9) on the side of the mounting sleeve which you will use for passing cables to next mounting sleeve (the rubber grommets insert to holes after screwing both mounting sleeves together).
- **4.** The connection points (7) serve for grounding the Eminere inground and the mounting sleeves each other.



5. Connect the Eminere Inground (13) and all needed cables to the junction box (8).

Note: the cabel (11) of the Eminere Inground is 2 m long, we recommend to shorten the cable on 1 m.



The supply/data cable to and from the mounting sleeve must be placed in a protective tube (12).

- 6. After connecting cables to the junction box (8), screw the Eminere Inground (13) to the mounting sleeve (1) by means of the countersunk- allen head bolts M5x25 (14). The screws (14) must be tightened smoothly with torque of 4Nm. Do not use impact wrench.
- 7. Screw the cover plates (15), (22) on the mounting sleeve (1) by means of the six countersunk- allen head bolts M5x30 (16). The crews (16) must be tightened smoothly with torque of 4Nm. Do not use impact wrench.

Junnction box

The Eminere Inground is equipped with auto-switching power supply that automatically adjusts to any 50-60Hz AC power source from 120-277 Volts.

The Emineres Inground should be connected to the E-box (E-box Daisy/E-box Star/E-box Pro/E-box Lite) which allows power supply of the Emineres Inground and their control.

Do not connect (disconnect) Emineres Inground to the E-box and each other when they are under voltage!

When you change any setting of the E-box, disconnect the E-box from power and connect it to power again to activate changes which you have made.

1. Unscrew the four screws M4x20 (17) on the cover of the junction box and remove this cover (18) with gasket (19) to get access to the connection block (20).



2. Connect cables to the junction box (20).

Wiring of the Eminere cable (CE version):

Core	Power Connection	Core	DATA Connection
Brown	L	Purple	Data +
Blue	Ν	Orange	Data -
Yellow/Green	(earth)	Shielding	Data ground (0V)

Wiring of the Eminere cable (US version):

Core	Power Connection	Core	DATA Connection
Black	L	Red	Data +
White	Ν	Orange	Data -
Green	(earth)	Shielding	Data ground (0V)

The three cable glands M20 (21) are intended for cable of diameter of 6-12mm.

Cable gland M20:



We recommend to apply an adequate layer of the paste LOCTITE 5331 on the plastic holder of the cable gland before inserting it into the body of the gland and an adequate layer of the paste LOCTITE 577 on the thread of the gland body in case that you need to unscrew and remove the cable gland from the housing of the junction box and and screw it back to the housing.

Remove end caps from cable glands before passing cables into the junction box.

Fully tighten cable gland nuts and check that cables are properly fastened in the cable glands.

Note: every cable gland has to be covered with the end cap if this cable gland is not used for cable passing.
3. After checking all connections, fill the junction box with synthetic resin. Make sure that the End cap is inserted in unused cable gland and the earth wire for cover is pulled out of the junction box before filling it. At filling of the junction box proceed according instructions stated on the bag of the resin. The connection block (20) has to be fully poured in the resin.

Prepared junction box and resin bag.



Junction box filled with resin.



- 4. Screw the cover (18) with gasket (19) to the junction box by means of the four screws (17) and check they are fully tighten.
- 8. If you install two or more Emineres Inground side by side, you have to screw three types of the cover plates: end (15), middle (23) and continuous (22). Insert the cover plate middle (23) between two mounting sleeves and screw rest of cover plates to the Emineres Inground by means of the countersunk allen head bolts M5x25 (16).



Note: If the Emineres Inground are installed in a loose soil (e.g. sand, gravel) the cover plate support (25) has to be fastened under the cover plate at outer (end) Eminere Inground. Screw the cover plate support (25) on the outside of the Eminere Inground by means of two screws Allen bolts M5x10 with washers and nuts M5.



Cover plates overview:



(22)-Cover plate continuous (optional)

(23)-Cover plate middle (one piece is a standard part of fixture)

9. Tilt adjustment. The Eminere Inground can be tilted by +/-15° after installing it in the mounting sleeve. Push and hold the small tube (24) to release the lock of the Eminere Inground and tilt the device to desired position. Release the small tube (24) to lock the new position of the Eminere Inground.



Use E-boxes (E-box Daisy, E-box Star, E-box Pro, E-box Lite) to control Emineres Inground. Please read the E-boxes user manual for more information about their setting.

Important: the item "E-box mode" has to be set at "Pass-Thr" (Personality \rightarrow E-box mode \rightarrow Pass-Thr) in the E-box menu.

DMX addressing of connected Emineres Inground has to be done manually by means of the Robe Universal Interface (or its wireless version Robe Universal Interface WTX) and a software RDM Manager. See the E-box user manual.

The tables below state max. theoretical number of Emineres connected to the one LED output of the E-box without using Booster boxes. Number of Emineres depends on voltage and cable length.

Eminere Inground 2	Voltage					
Cable length *	120V	190V	230V	277V		
10 m	32	32	32	32		
20 m	32	32	32	32		
30 m	28	32	32	32		
50 m	17	32	32	32		
70 m	12	31	32	32		
100 m	9	21	32	32		

Eminere Inground 4	Voltage					
Cable length *	120V	190V	230V	277V		
10 m	21	32	32	32		
20 m	21	32	32	32		
30 m	15	32	32	32		
50 m	9	22	32	32		
70 m	6	16	23	32		
100 m	4	11	16	23		

* Cable length is a total cable length between E-box and last connected Eminere.

Example of connection:

E-box Daisy



Total cable length= $L1+\SigmaL2+\SigmaL3$.

Max. total cable length between one LED output of the E-box and last connected Eminere Inground must not exceed 100m.

4. Software update

Software update of Eminere has to be done by means of the software ROBE Uploader running on PC. The ROBE Uploader is a software for automatized software update of ROBE fixtures. The ROBE Uploader switches Emineres to the update mode automatically.

Please see https://www.robe.cz/robe-uploader/ for more information.

DMX or Ethernet connection via E-box

If the option **Pass-Thr** has to be selected from the menu **E-box mode** and LED modules are connected in parallel series, you have to do the following steps to update Emineres including the E-box:

In the first step you have to update connected LED modules by means of the file Eminere.lib in the ROBE Uploader. Only LED modules will be shown in the ROBE Uploader. The E-box will not be updated, only connected LED modules.

In the second step you have to set the E-box to the Standard mode and switch it off/on. Use the file EminereEbox.lib in the ROBE Uploader for software update of the E-box. Only E-box will be shown in the ROBE Uploader. After updating the E-box, set the E-box to the Pass-Thorough mode and switch it off/on.

For more information about updating please see the E-box Lite/Daisy/Star user manual.

5. Technical specifications

Power supply

- Electronic auto-ranging
- Input voltage: 120 277V AC, 50-60 Hz
- Power consumption:
 - Eminere Inground 2: 50W
 - Eminere Inground 4: 90W
- Inrush current:
 - Eminere Inground 2: <70A/250µs Eminere Inground 4: <100A/200µs

Optic

- Light source:
 - Eminere Inground 2: 24 x high power LEDs
 - Eminere Inground 4: 48 x high power LEDs
- Colour variants: RGBW (W 6500 K), RGBA, WW (W 3000 K)
- Beam angles: Symetrical: 9°, 15°, 30°, 50°, 65°, 100°
 - Bi-symetrical: 10° x 30°, 30° x 10°, 10° x 60°, 60° x 10°, 35° x 70°, 70° x 35°, 15° x 90°, 90° x 15°
 - Anti- Skid (symmetrical): 18°, 22°, 35°, 50°, 65°, 100°
 - Anti-Skid (Bi-symmetrical): 20° x 35°, 20° x 65°, 20° x 90°, 40° x 70°
 - Wallwasher, Wide Wallwasher
- Projected Lumen Maintenance: L90B10 >90.000 hrs, Ta = 25°C / 77°F

Interface Protocol

• USITT DMX512, RDM

Compatible drivers

- E-box Daisy
 - 1 output 1 Main power Input Control: DMX, Art-Net, sACN , W-DMX control, RDM Pixel control (1px= 1ft) 120-277V Input Connection via terminal blocks, inlets via grommet IP67
- E-box Star

6 outputs 1 Main power Input Control: DMX, Art-Net, sACN , W-DMX control, RDM Pixel control (1px= 1ft) 120-277V Input Connection via terminal blocks, inlets via grommet IP67

• E-box Pro

6 outputs 6 Main power Inputs Control: DMX, Art-Net, sACN , W-DMX control, RDM Pixel control (1px= 1ft) 120-277V Input Connection via terminal blocks, inlets via grommet IP67 • E-box Lite

1 output 1 Main power Input Control: DMX, W-DMX control, RDM Pixel control (1px= 1ft) 120-277V Input Connection via screw terminal blocks, inlets via grommet IP67

Mounting method

Inground mount

Adjustability

• +/- 15° after instalation

Housing

- High pressure extruded aluminium body
- End caps Die-Cast Aluminium
- Welded instalation sleeve for pre-instalation
- Tempered glass

Cooling system

Convection

Total heat dissipation

- Eminere Inground 2: 130 BTU/h (calculated)
- Eminere inground 4: 228 BTU/h (calculated)

Protection factor

- CE: IP 67
- US: Suitable for wet location

Impact rating

• CE: IK09

Max. static load

- Standard tempered glass: 45kN
- Antiskid tempered glass: 23kN

Operating ambient temperature range

• -20°C /+40°C (-4°F /+104°F)

Operating temperature

• +80 °C @ Ambient +40 °C (+176 °F @ Ambient +104 °F)

Connection

Junction box

Weight

- Eminere Inground 2: 23.6 kg / 52 lbs (12.2 kg / 26.9 lbs Eminere Inground 2 Fixture, 11.4 kg / 25 lbs install. Sleeve)
- Eminere Inground 4: 43.85 kg/ 96.67 lbs (22.65 kg / 49.93 lbs Eminere Inground 4 Fixture, 21.2 kg / 46.74 lbs Install. Sleeve)

Dimensions (All dimensions in mm [inch])

• Eminere Inground 2/Eminere Inground 4



Dimensions with mounting sleeve (All dimensions in mm [inch])

• Eminere Inground 2/Eminere Inground 4



Included items

- 1 x Eminere Inground
- 1 x mounting sleeve
- 1 x User manual

Optional accessories

P/N 10980506 Eminere Inground 2 Mounting Sleeve P/N 10980508 Eminere Inground 2 cover plate continuous P/N 10980539 Eminere Inground 4 Mounting Sleeve P/N 10980526 Eminere Inground 4 cover plate continuous P/N 10980509 Eminere Inground cover plate end P/N 10063655 E-box Daisy P/N 10063638 E-box Daisy/W P/N 10063653 E-box Lite P/N 10063653 E-box Lite/W P/N 10063656 E-box Star P/N 10063644 E-box Star/W P/N 13053138 Cable CE WCA P/N 13053139 Cable US WCA

6. Cleaning and maintenance

DANGER !

Disconnect from the mains before starting any maintenance or cleaning work

Rinse off loose dirt with low pressure water spray. Wash the housing with a soft brush or sponge and a mild, nonabrasive washing detergent. Rinse it.

Maintenance and service operations are only to be carried out by a qualified person. Should you need any spare parts, please use ROBE OEM parts.

6.1 Disposing of the product

To preserve the environment please dispose or recycle this product at the end of its life according to the local regulations and codes.

7. ChangeLog

This section summarizes changes in the user manual.

Version of the manual	Date of issue	Description of changes
1.1	09/07/2020	Voltage range change
1.2	30/09/2020	Static load changed
1.3	08/01/2020	Cover plates changed
1.4	03/09/2021	Torques for plate cover screws added
1.5	19/10/2021	Technical specifications changed
1.6	26/11/2021	Optional accessories changed
1.7	08/03/2022	Screw lengths changed
1.8	19/05/2022	QR code added
1.9	10/01/2023	Software update added
2.0	10/02/2023	DMX chart ver.3.2

					min	oro l	narour	nd 2/4; Eminere Remote 1/2/3/4;	
							-		
								2/4; UVinere Remote 1/2/4	
/ersi	on: 3.2	-			-	ware	version 3	3.0 and higher	
		Mod	e/Cha	annels	in all		-	Mode 1: RGBW(A)-8bit, Mode 2: RGB 8-bit, Mode 3: full RGBW(A)	
1	2	3	4	5	6	7	8-10	Mode 4: White-full control, Mode 5: Reduced RGBW(A)	
4	3	12	3	6	8	15	Reserved	Mode 6- Reduced RGBW(A)+white control	
								Mode 7- full RGBW(A)+virtual colour wheel	
				-				RGBW(A) / RGB modes	
			e/chan				DMX	Function	Type of
1	2	3	4	5	6	7	Value		control
-	-	-	-	-	-	1		Special functions	
							0	No function	step
								To activate following functions , stop in DMX value for at least 3 sec.	
							1-2	Save current DMX values to fixture as initial DMX values.	step
							3-4	Show saved initial DMX values	step
								Run factory demo sequences at switching fixture on (without DMX)	step
							7-255	Reserved	
1	1	1	-	1	1	2		Red	
							0-255	Red LEDs saturation control (0-100%)	proportiona
-	-	2	-	-	-	3		Red Fine	
							0-255	Red LEDs saturation control fine	proportiona
2	2	3	-	2	2	4		Green	
							0-255	Green LEDs saturation control (0-100%)	proportiona
-	-	4	-	-	-	5		Green Fine	
							0-255	Green LEDs saturation control fine	proportiona
3	3	5	-	3	3	6		Blue	
							0-255	Blue LEDs saturation control (0-100%)	proportiona
-	-	6	-	-	-	7		Blue Fine	
							0-255	Blue LEDs saturation control fine	proportiona
4	-	7	-	4	4	8		White (Amber)	
							0-255	White LEDs saturation control (0-100%)	proportiona
-	-	8	-	-	-	9		White (Amber) Fine	
							0-255	White LEDs saturation control fine	proportiona
-	-	9	1	-	5	10		Green correction	· · ·
							0	Uncorrected white	step
								Minus green> uncorrected white	proportiona
							128	Uncorrected white (128=default)	step
								Uncorrected white> Plus green	proportiona
-	-	10	2	-	6	11		Colour temperature correction (CTC)	
			_		-		0	No function	step
							1-10	Tungsten dimming 2700 K	step
							_	Tungsten dimming 2200 K	step
								Colour temperature changing from 1800 K> 6500 K	proportiona
							21 255	(21-1800K, 66-2700K, 91-3200K,141-4200K, 211-5600K, 255-	pi oportiona
								6500K)	
_	-	-	-	l -	-	12	1	Virtual Colour Wheel	

DMX protocol

		Mod	e/char	nnels			DMX	Function	Type of
1	2	3	4	5	6	7	Value	i dictori	control
							1-2	White 1800 K	step
							3-4	White 2700 K	step
							5-6	White 3200 K	step
							7-8	White 4200 K	step
							9-10	White 5600 K	step
							11-12	White 6500 K	step
							13	Blue (Blue=full, Red+Green+White/Amber=0)	step
							14-23	Red=0, Green->up,Blue =full, White/Amber=0	proportiona
							24	Cyan (Red=0, Green=full, Blue =full, White/Amber=0)	step
							25-34	Red=0, Green=full, Blue->down, White/Amber=0	proportiona
							35	Green (Red=0, Green=full, Blue =0, White/Amber=0)	step
							36-45	Red->up, Green=full, Blue=0, White/Amber=0	proportiona
							46	Yellow (Red=full, Green=full, Blue=0, White/Amber=0)	step
							47-56	Red=full, Green->down, Blue=0, White/Amber=0	proportiona
							57	Red(Red=full, Green=0, Blue=0, White/Amber=0)	step
							58-67	Red=full, Green=0, Blue->up, White/Amber=0	proportiona
							68	Magenta (Red=full, Green=0, Blue=full, White/Amber=0)	step
							69-78	Red -> down, Green=0, Blue=full, White/Amber=0	proportiona
							79	Blue (Red=0, Green=0, Blue=full, White/Amber=0)	step
								Transition effects	
							80-87	Rainbow effect (with fade time) from slow-> fast	proportiona
								Rainbow effect (without fade time) from slow-> fast	proportiona
							96-103	Full dynamic white (1800K->6500K->1800K) (with fade time) from	proportiona
								slow-> fast	
								Full dynamic white (1800K->6500K->1800K) (without fade time) from slow-> fast	proportiona
							112-119	Dynamic warm white (1800K-3000K-1800K) (with fade time) from slow-> fast	proportiona
							120-127	Dynamic warm white (1800K-3000K-1800K) (without fade time) from slow-> fast	proportiona
							128-135	Rainbow effect + full dynamic white (with fade time) from slow-> fast	proportiona
							136-143	Rainbow effect + full dynamic white (without fade time) from slow-> fast	proportiona
							145-151	Blue/Green effect (with fade time) from slow-> fast	proportiona
							152-159	Blue/Green effect (without fade time) from slow-> fast	proportiona
							160-167	Red/Blue effect (with fade time) from slow-> fast	proportiona
							168-175	Red/Blue effect (without fade time) from slow-> fast	proportiona
							176-183	Green/Red effect (with fade time) from slow-> fast	proportiona
							184-191	Green/Red effect (without fade time) from slow-> fast	proportiona
								Blue/4000K effect (with fade time) from slow-> fast	proportiona
								Blue/4000K effect (without fade time) from slow-> fast	proportiona
								Green/4000K effect (with fade time) from slow-> fast	proportiona
							216-223	Green/4000K effect (without fade time) from slow-> fast	proportiona
								Red/4000K effect (with fade time) from slow-> fast	proportiona
								Red/4000K effect (without fade time) from slow-> fast	proportiona
								Reserved	
	İ				İ	13	1	Shutter/Strobe	
						_	0-31	Shutter closed	step
								Shutter open	step

DMX protocol

		Mod	e/char	nels			DMX	Function	Type of
1	2	3	4	5	6	7	Value	Function	control
							64-95	Strobe-effect from slow to fast	proportional
							96-127	Shutter open	step
							128-143	Opening pulse in sequences from slow to fast	proportional
							144-159	Closing pulse in sequences from fast to slow	proportional
							160-191	Shutter open	step
							192-223	Random strobe-effect from slow to fast	proportional
							224-255	Shutter open	step
-	-	11	3	5	7	14		Dimmer	
							0-255	Light intensity coarse (0-100%)	proportional
-	-	12	-	6	8	15		Dimmer Fine	
							0-255	Light intensity fine	proportional
Copyr	ight ©	2022-	2023	Robe I	Lightin	ig s.r.o	All rig	shts reserved	
All Sp	ecifica	tions s	ubject	to ch	ange v	vithou	t notice		

		Emir	nere Ingi	round 2/4; Eminere Remote 1/2/3/4;	
			UVine	ere 2/4; UVinere Remote 1/2/4	
Version: 3	.2 (23 mod	es in total)			
	Mode/Cha	nnels in all		Mode 11: TW – White selection + Dimmer, Mode 12: TW – WW + CW	
11	12	13	14-16	Mode 13: PW - Dimmer	
3	4	2	Reserved	Mode 13 is suitable for UVinere and UVinere Remote	
				TW and PW modes	
N 11	lode/channo 12	els 13	DMX Value	Function	Type of control
1	-	-	Value	White colour selection	control
			0 - 255	White from 2700 K - 6500 K	proportiona
-	1	-		Warm White	
			0 - 255	Warm White LEDs saturation control (0-100%)	proportiona
-	2	-		Cool White	
			0 - 255	Cool White LEDs saturation control (0-100%)	proportiona
2	3	1		Dimmer	
			0 - 255	Light intensity coarse (0 - 100%)	proportiona
3	4	2		Dimmer Fine	
			0 - 255	Light intensity fine	proportiona
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DMX protocol for: Eminere 1/2/3/4; Eminere Side 1/2/3/4;
Eminere Inground 2/4; Eminere Remote 1/2/3/4;

	•	des in total e/Channels	, in all		Mada 16: BCBW(A) nivels Mada 17 BCB nivels Mada 18:	FW/ nivola
17		19		21-23	Mode 16: RGBW(A) pixels, Mode 17 RGB pixels, Mode 18:	i w pixels,
	18		20		Mode 19- PW dimmer pixels	
16	12	8	8	Reserved		
	Mode/	channels			Pixel modes	
17	18	19	20	DMX Value	Function	Type of control
17	18	19	20	Value	Red 1 -Eminere 1/2/3/4	control
1		-	-	0 - 255	Red LEDs saturation control (0-100%)	proportional
2	2			0-255	Green 1-Eminere 1/2/3/4	proportional
2	2	-	-	0 - 255	Green LEDs saturation control (0-100%)	proportional
3	3		-	0 - 255	Blue 1-Eminere 1/2/3/4	proportional
3	5	-	-	0 - 255	Blue LEDs saturation control (0-100%)	proportional
4	-		_	0 233	White (Amber) 1-Eminere 1/2/3/4	proportional
4	-	-	-	0 - 255	White LEDs saturation control (0-100%)	proportional
5	4	-	-	0 233	Red 2 -Eminere 2/3/4	proportional
5				0 - 255	Red LEDs saturation control (0-100%)	proportiona
6	5	-	-	0 255	Green 2-Eminere 2/3/4	proportional
•				0 - 255	Green LEDs saturation control (0-100%)	proportional
7	6	-	-	0 200	Blue 2-Eminere 2/3/4	proportiona
				0 - 255	Red LEDs saturation control (0-100%)	proportiona
8	-	-	-	0 200	White (Amber) 2-Eminere 2/3/4	propertiend
•				0 - 255	White LEDs saturation control (0-100%)	proportiona
9	7	-	-		Red 3-Eminere 3/4	P P
-	-			0 - 255	Red LEDs saturation control (0-100%)	proportiona
10	8	-	-		Green 3-Eminere 3/4	
				0 - 255	Green LEDs saturation control (0-100%)	proportiona
11	9	-	-		Blue 3-Eminere 3/4	
				0 - 255	Blue LEDs saturation control (0-100%)	proportional
12	-	-	-		White (Amber) 3-Eminere 3/4	
				0 - 255	White LEDs saturation control (0-100%)	proportional
13	10	-	-		Red 4-Eminere 4	
				0 - 255	Red LEDs saturation control (0-100%)	proportional
14	11	-	-		Green 4-Eminere 4	
				0 - 255	Green LEDs saturation control (0-100%)	proportiona
15	12	-	-		Blue 4-Eminere 4	
				0 - 255	Blue LEDs saturation control (0-100%)	proportiona
16	-	-	-		White (Amber) 4 -Eminere 4	
				0 - 255	White LEDs saturation control (0-100%)	proportional
-	-	1	-		Warm White 1 -Eminere 1/2/3/4	
					Warm White LEDs saturation control (0-100%)	proportiona
-	-	2	-		Cool White 1-Eminere 1/2/3/4	
				0 - 255	Cool White LEDs saturation control (0-100%)	proportional
-	-	3	-		Warm White 2-Eminere 2/3/4	

DMX protocol

	Mode/channels				Function	Type of
17	18	19	20	Value	Function	control
				0 - 255	Warm White LEDs saturation control (0-100%)	proportion
-	-	4	-		Cool White 2-Eminere 2/3/4	
				0 - 255	Cool White LEDs saturation control (0-100%)	proportion
-	-	5	-		Warm White 3-Eminere 3/4	
				0 - 255	Warm White LEDs saturation control (0-100%)	proportion
-	-	6	-		Cool White 3-Eminere 3/4	
				0 - 255	Cool White LEDs saturation control (0-100%)	proportior
-	-	7	-		Warm White 4 -Eminere 4	
				0 - 255	Warm White LEDs saturation control (0-100%)	proportior
-	-	8	-		Cool White 4 -Eminere 4	
				0 - 255	Cool White LEDs saturation control (0-100%)	proportior
-	-	-	1		Dimmer 1	
				0 - 255	Light intensity coarse (0 - 100%)	proportior
-	-	-	2		Dimmer Fine 1	
				0 - 255	Light intensity fine	proportior
-	-	-	3		Dimmer 2	
				0 - 255	Light intensity coarse (0 - 100%)	proportior
-	-	-	4		Dimmer Fine 2	
				0 - 255	Light intensity fine	proportior
-	-	-	5		Dimmer 3	
				0 - 255	Light intensity coarse (0 - 100%)	proportior
-	-	-	6		Dimmer Fine 3	
				0 - 255	Light intensity fine	proportior
-	-	-	7		Dimmer 4	
				0 - 255	Light intensity coarse (0 - 100%)	proportior
-	-	-	8		Dimmer Fine 4	