Anolis
A ROBE Business

Lyrae XS SC FIX
Lyrae XS MC FIX
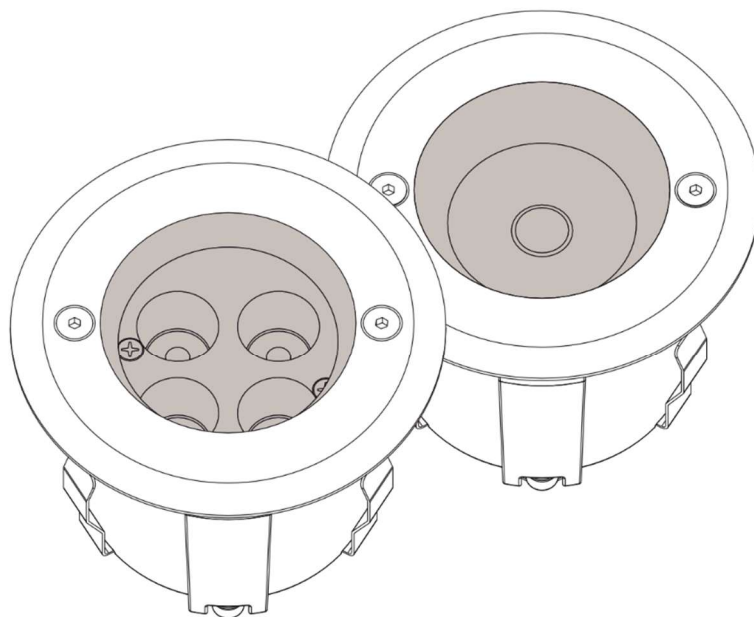
OR code for user manual

USER MANUAL

Version 1.1

Table of contents

> **FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY**
> **BEFORE POWERING OR INSTALLING YOUR LYRA XS FIX !**
> **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 power before cleaning, servicing or installing.

This fixture should be operated only from the type of power source indicated on the marking label.

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 III.

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 or snowfall.

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

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.

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

Immunity of the equipment is designed according to the standard EN 55035 Electromagnetic compatibility of multimedia equipment - Immunity requirements.

Emission of the equipment complies with the standard EN55032 Electromagnetic compatibility of multimedia equipment – Emission Requirements according to class B.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

2. Fixture exterior view

1. Mounting sleeve
2. Temporary cover
3. Trim
4. Housing of Lyrae XS FIX
5. Supply cable
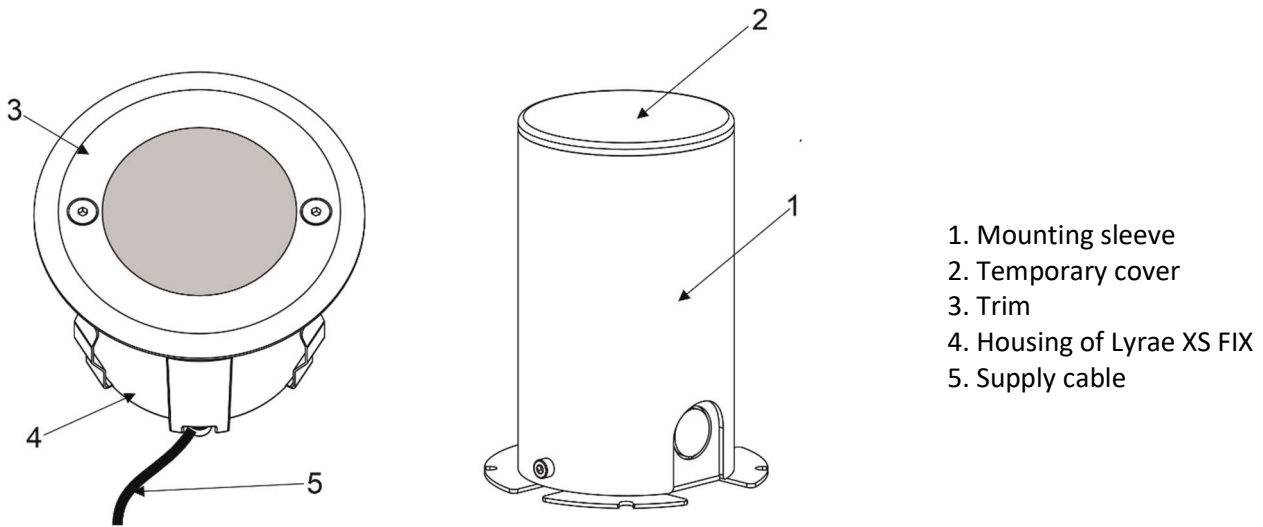
3. Installation

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.

Warning!
If the Lyrae will be exposed to max. allowed static load, the subsoil under the installation sleeve has to withstand load of: 35 kN (standard covering glass)
23 kN (anti-skid covering glass)

Prepare a mounting hole with a good drainage - minimum depth of the gravel drainage has to be 300mm. There must not stay water in the mounting sleeve (1). If the mounting sleeve will be placed to the concrete hole, suitable draining pipe should be installed on the bottom of the hole.
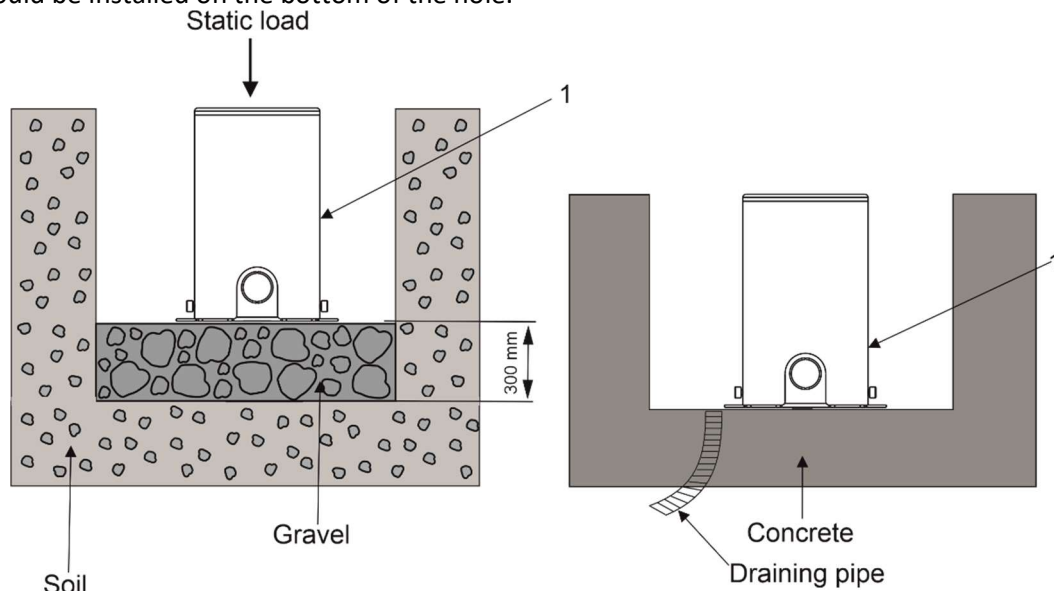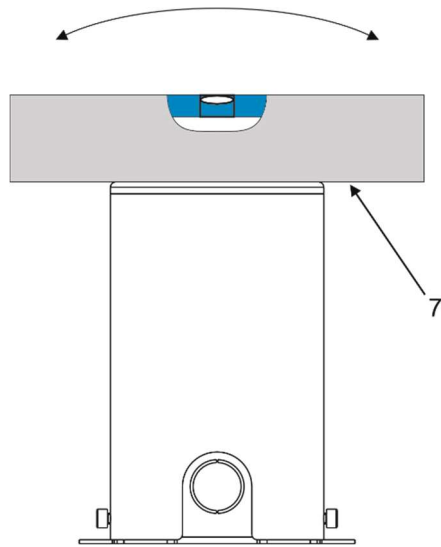
1. Prepare hole (6) in the mounting sleeve according to the size of the protection conduit.
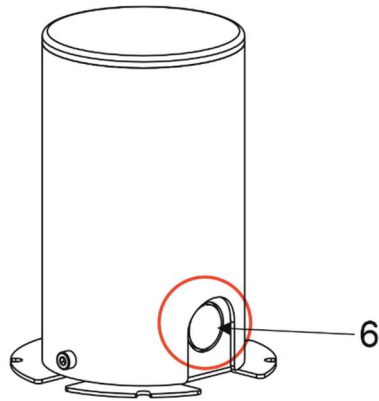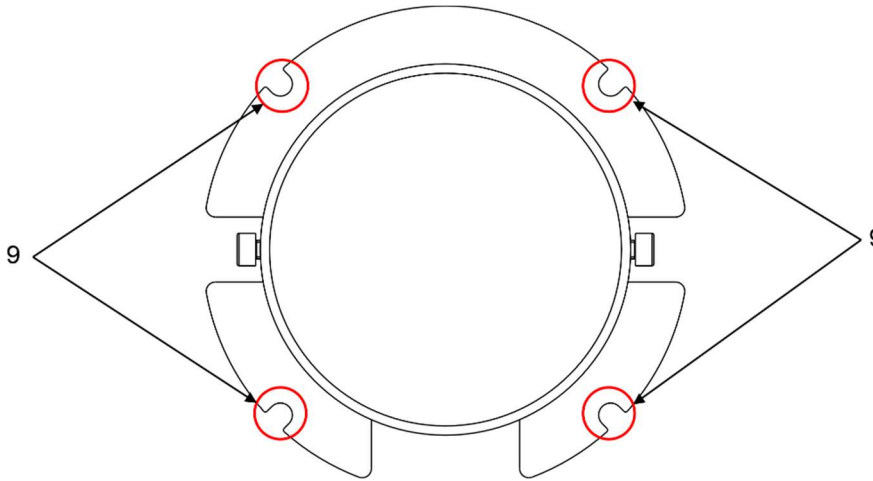

2. Insert the mounting sleeve into the mounting hole and level it using a spirit level (7).

3. Remove the temporary cover (8) and pull the protection conduit (9) into the mounting sleeve. The supply cables of Lyrae XS FIX must be placed in a protective conduit. Place the temporary cover back on the mounting sleeve.
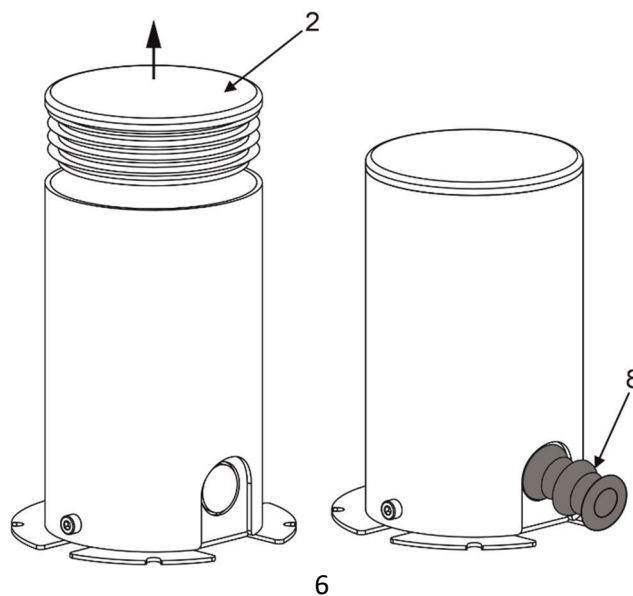
4. Fasten the mounting sleeve to the bottom of the mounting hole by means of four apertures (10) with diameter of 5 mm.
Use fasteners suitable for your mounting surface.

5. The mounting hole can be filled up with soil, gravel or concrete. Filling material should be in the same level with the top of the temporary cover (for Flush Trim) or with the top edge of the mounting sleeve (for Bevel Edge Trim).
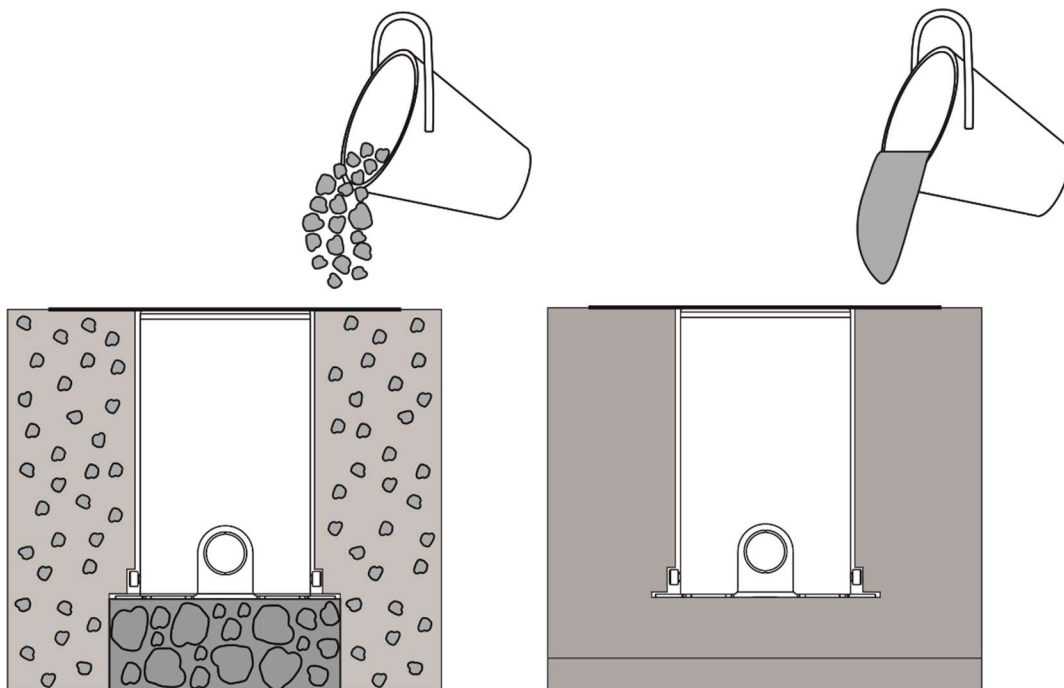
Note: the Lyrae XS FIX can be installed with the Bevel Edge Trim or the Flush Trim. Every trim version requires different height of filling material on the top edge of the mounting sleeve:
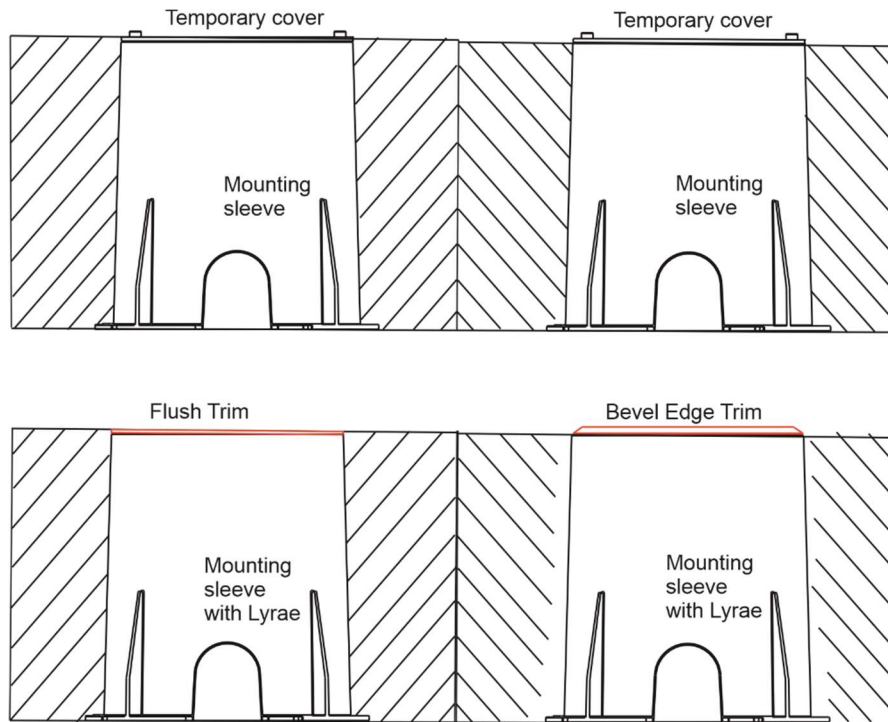
6. Remove the temporary cover (2) from the mounting sleeve.

7. Insert the cable (5) from the Lyrae XS FIX (4) into the mounting sleeve (1) and pull it through the conduit (8).
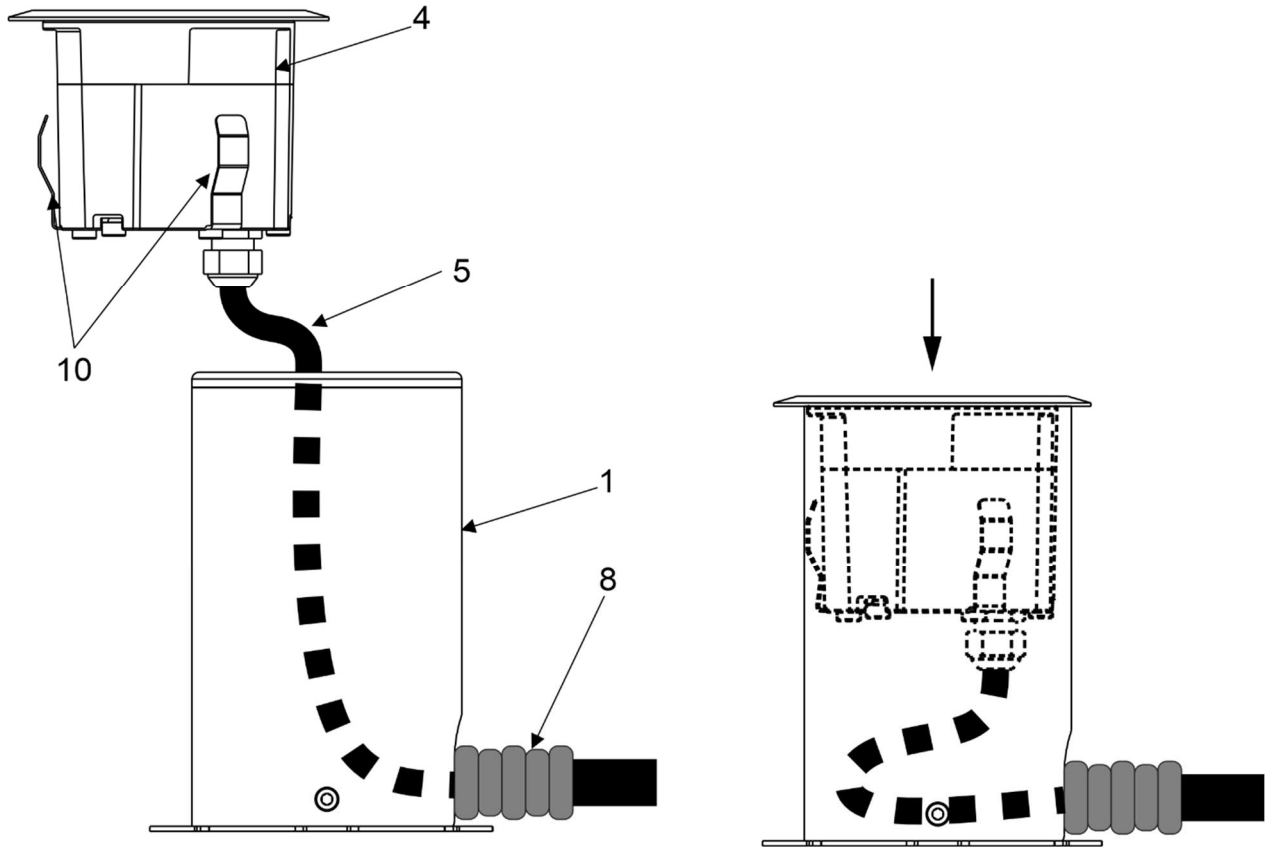Insert the Lyrae XS FIX (4) into the mounting sleeve (1). The Lyrae is fastened in the mounting sleeve by means of springs (10) on the housing of the Lyrae XS FIX.

4. Control and connection options

4.1 DMX or Ethernet via E-box

The Lyrae XS FIX modules should be connected to the E-Box Remote or E-Box Remote basic via junction boxes. The Lyrae XS FIX modules have to be operated in Pass-Through mode.

⚠ **The E-box Remote has to be switched to the Pass-Through mode**.

Example of connection with E-box Remote
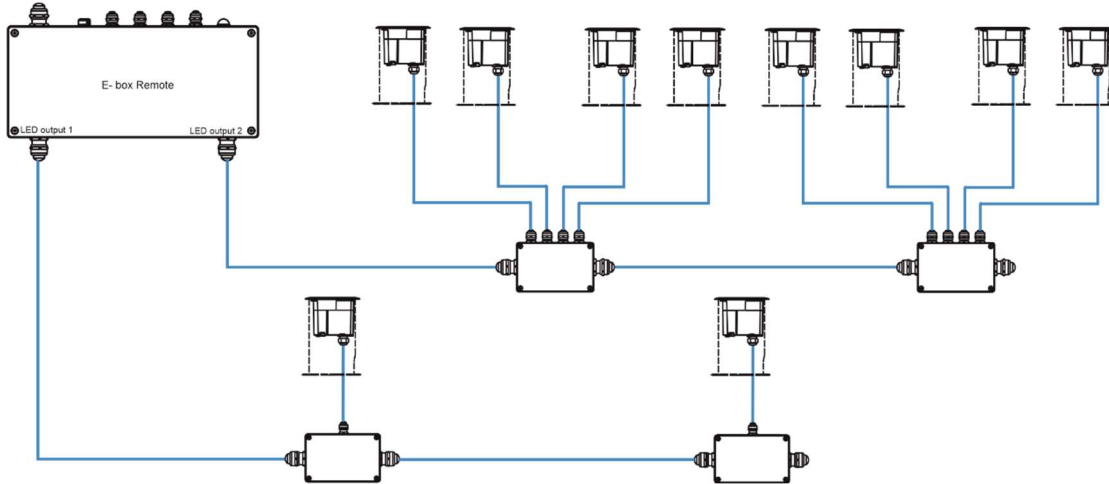
Example of connection with E-box Remote Basic

⚠ **NOTE**: **NOTE**: DMX data line of Lyraes XS FIX at each LED output of the E-box has to be terminated at the last fixture.

Lyraes XS FIX have to be operated in the Pass-through mode, it means that max. 32 Lyraes XS FIX can be connected in one DMX string.
Max. number of Lyraes XS FIX connected to the E-box Remote/E-box Remote Basic also depends on cable length.

E-box Remote

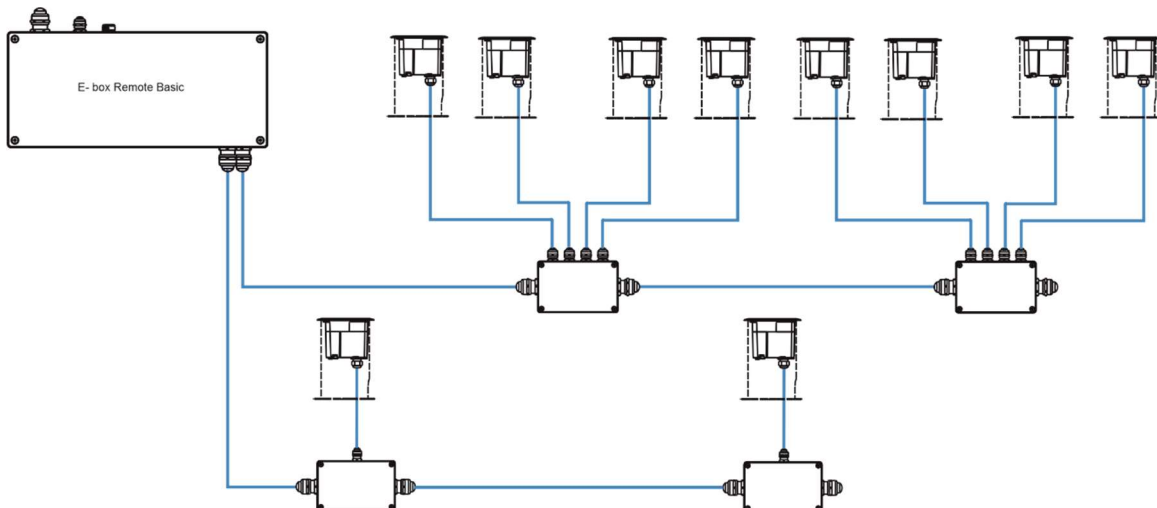| Cable length *	Max. number of Lyraes XS
50 m	25 per output, 40 in total
100 m	20 per output, 40 in total

E-box Remote Basic

Cable length *	Max. number of Lyraes XS
50 m	25
100 m	20

* Cable length is a total cable length on both LED outputs.

Numbers of Lyraes XS stated in the tables above applies to the following cables:
Lyrae cable: UL 20969 5x 20AWG (P/N 13053481)
Interconnecting cable between junction boxes: SJTW 5x 14AWG (P/N 13053336)

Example:
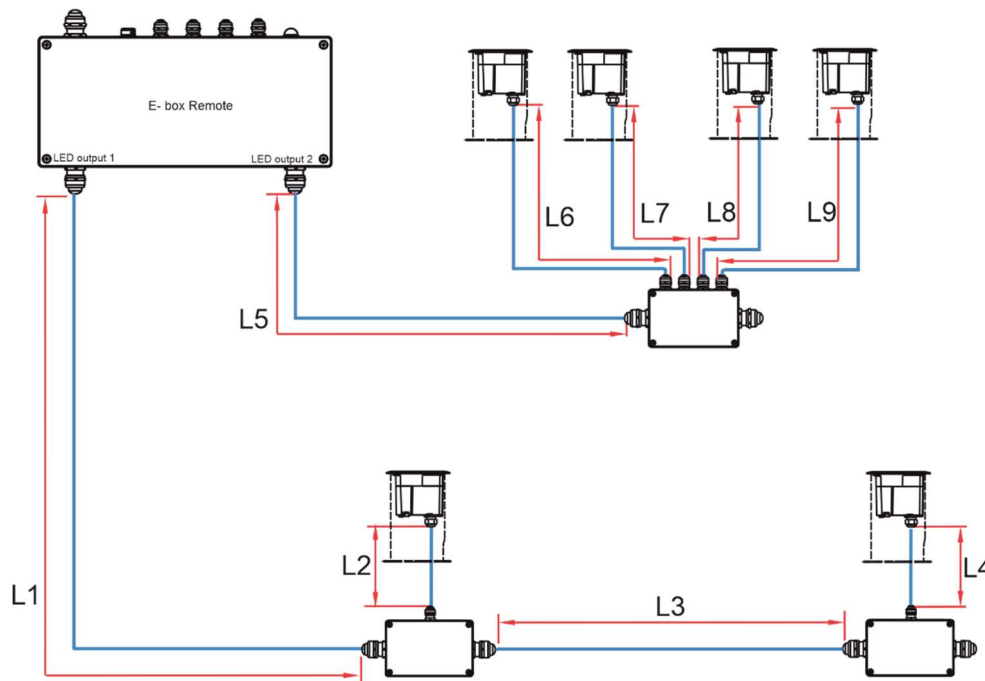
Total cable length=L1+L2+L3+L4+L5+L6+L7+L8+L9

4.2 Junction box

> *The junction box must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.*

Junction box installation

> *Every junction box has to be placed in a protective box. It cannot be placed directly in a soil.*

Junction box with one output
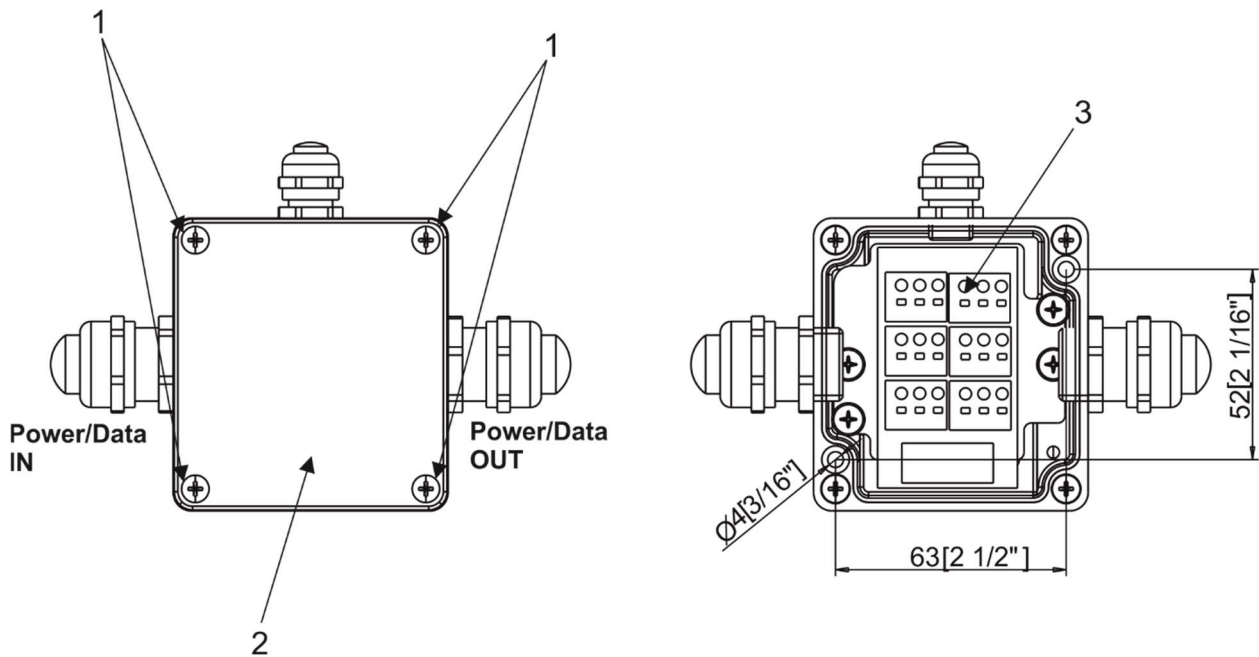
Junction box with four outputs
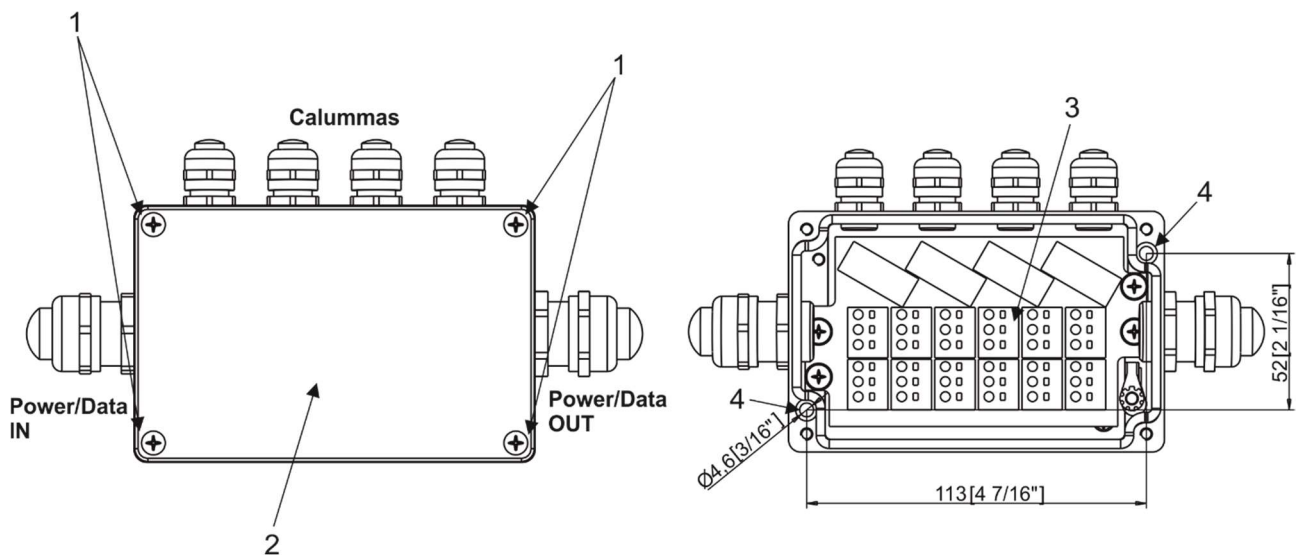
1.Unscrew the four screws (1) from the cover (2) on the junction box to get access to the DPS with terminal blocks (3) and two mounting holes (4).

2. Screw the junction box on a non-flammable flat surface.

3. Connect cables to terminal blocks.

Two cable glands M20 x 1.5 serves for a power/data cable. One (or four) cable gland M12 x 1.5 serves for Lyrae XS FIX connection cable.
Remove the end cap from the cable gland before passing the cable.
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.

Cable gland M20x1.5 and M12x1.5
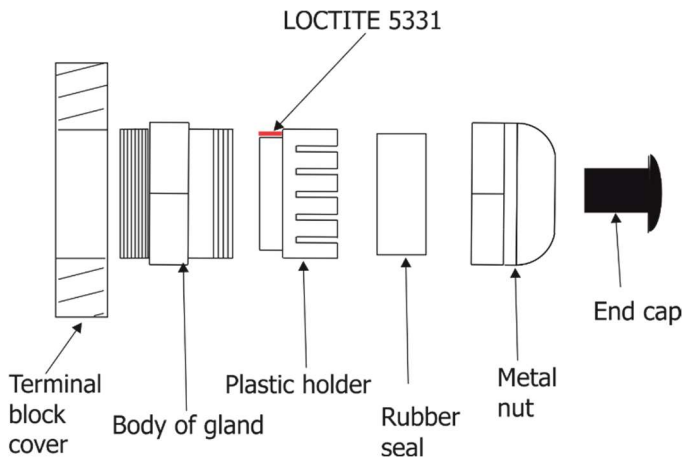
Wiring of connection blocks on DPS RB4232 in the junction box with one LED output.
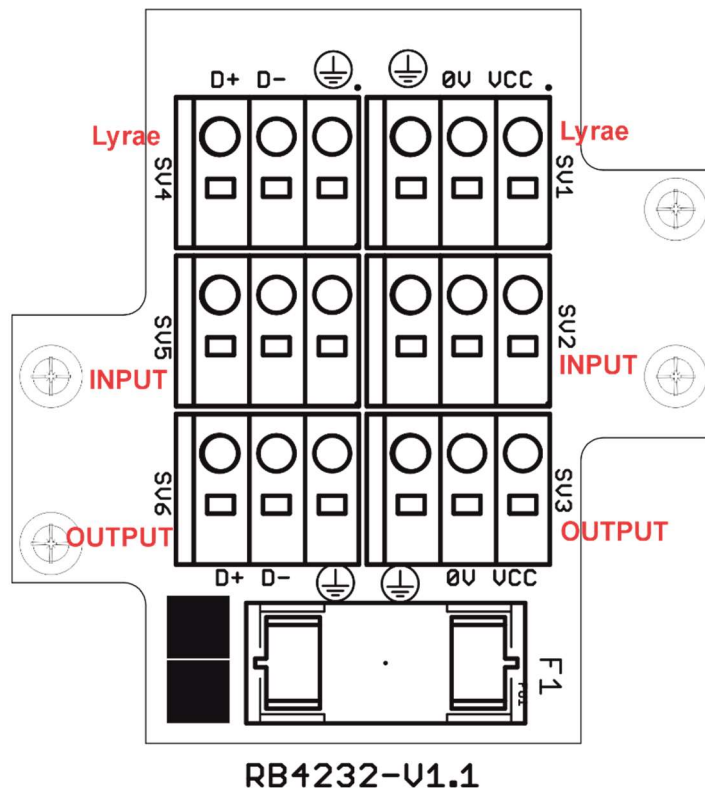
Fuse F1: 2A/500V AC.

Wiring of connection blocks on DPS RB4233 in the junction box with four LED outputs.
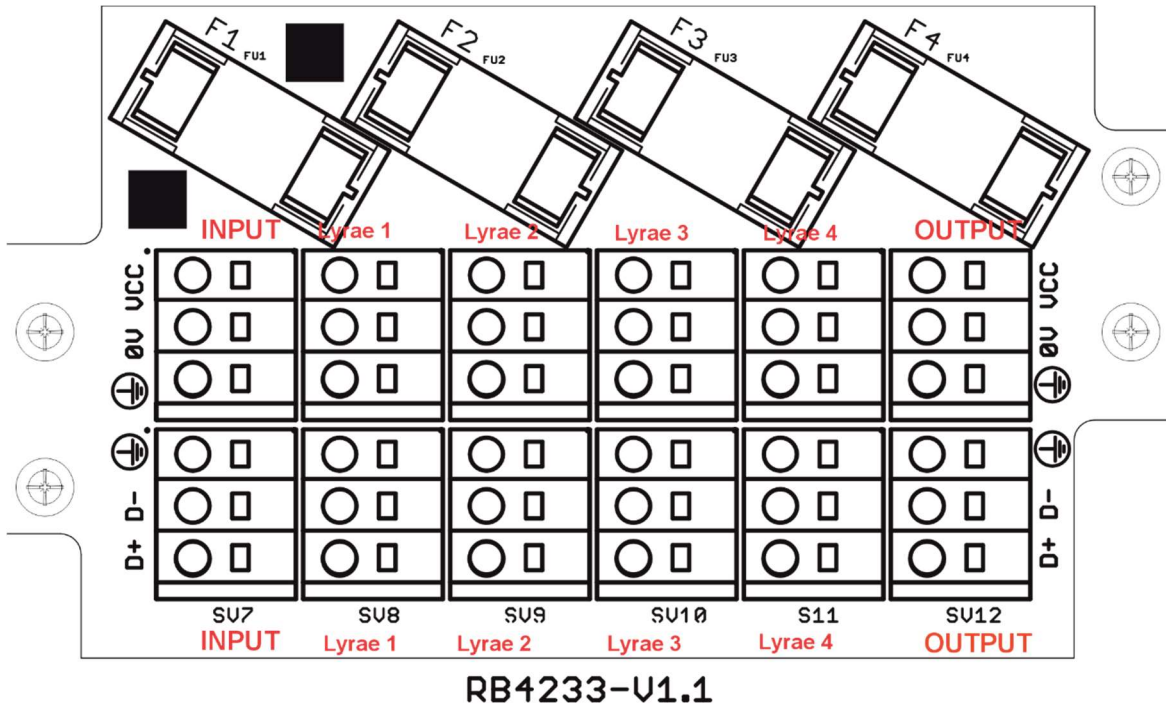
Fuse F1-F4: 2A/500V AC.

Lyrae XS FIX connection

CE

Connection block	Vcc	D+	D-	0V	⏚
Function	LEDs +	Data +	Data -	LEDs -	Not connected
Colour of wire	Red	Orange	White	Black	-

Colours of wires apply to the 5-cored cable UL 20969 5x 20AWG (P/N 13053481)

US

Connection block	Vcc	D+	D-	0V	⏚
Function	LEDs +	Data +	Data -	LEDs -	Ground
Colour of wire	Red	Orange	White	Black	Yellow/green

Colours of wires apply to the 5-cored cable UL 20969 5x 20AWG (P/N 13053481)

Connection between junction box and E-box Remote and among junction boxes

CE

Connection block	Vcc	D+	D-	0V	⏚
Function	LEDs +	Data +	Data -	LEDs -	Not connected
Colour of wire	Red	Orange	White	Black	-

Colours of wires apply to the 5-cored cable SJTW 5x 14AWG (P/N 1305 3336).

US

Connection block	Vcc	D+	D-	0V	⏚
Function	LEDs +	Data +	Data -	LEDs -	Ground
Colour of wire	Red	Orange	White	Black	Yellow/green

Colours of wires apply to the 5-cored cable SJTW 5x 14AWG (P/N 1305 3336).

⚠ **NOTE**: Each DMX line of Lyraes XS FIX connected to the LED output of the E-box Remote has to be terminated at the last fixture. Connect a 120 Ohm resistor between terminals D+ and D- in the last junction box.
Example:

RB4233-V1.1
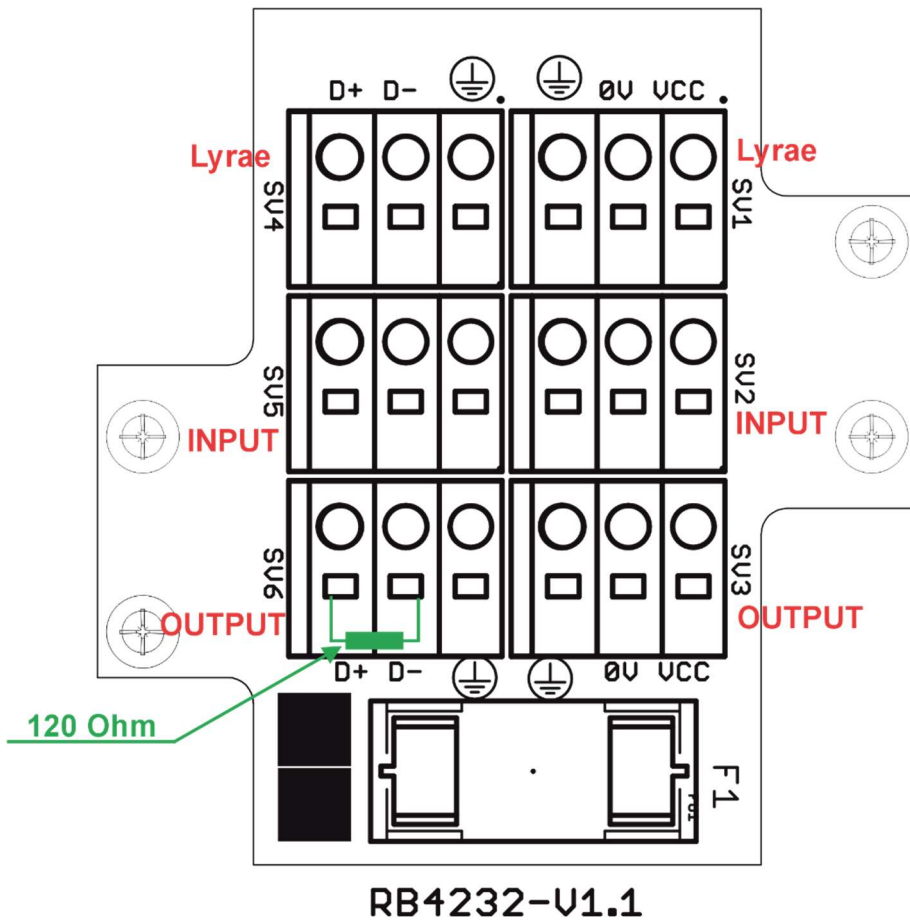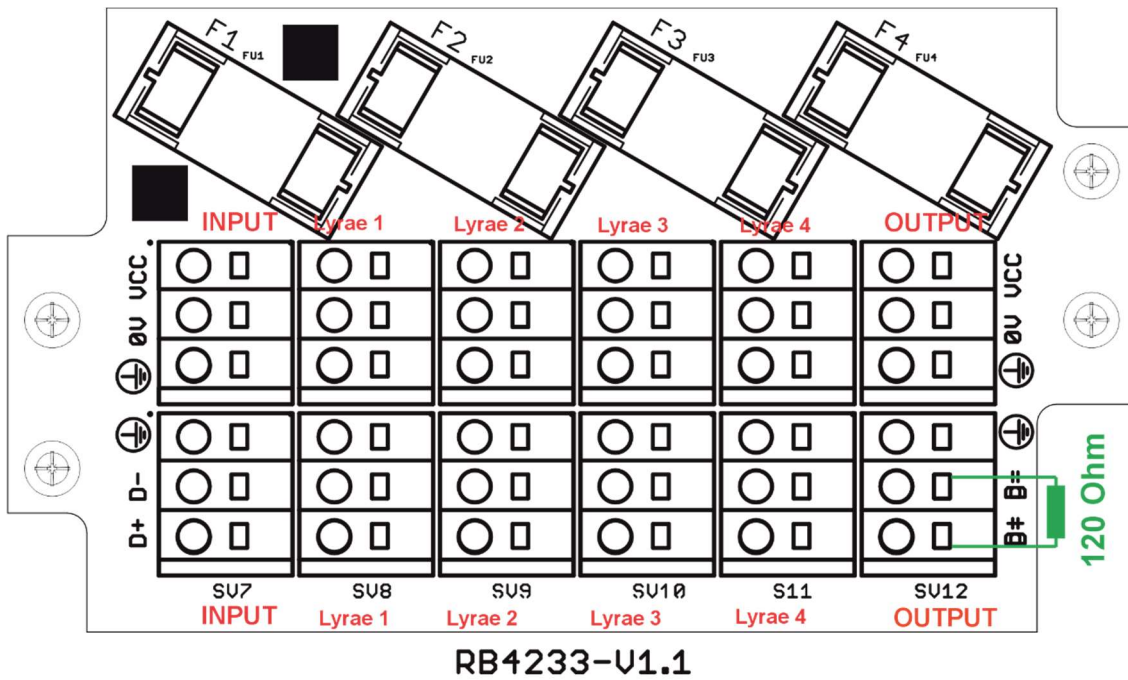
4. After checking all connections in terminal blocks, fill the junction box with synthetic resin (3M™ Scotchcast™ Re-Enterable Electrical Insulating Resin 2123). Make sure the end cap is inserted in any unused cable glands, and the ground wire for cover is pulled from the junction box before filling it with resin. Read and follow all instructions stated on the resin bag prior to filling the junction box. The junction box has to be fully filled by resin. **Fastening of the cover must be done before hardening the resin.**

5. Connect the ground wire to the cover (2) and screw the cover (2) back on the junction box.

4.3 Example of Control panel in RDM manager

The software RDM manager is available on the ROBE website (https://www.robe.cz/support), product RUNIT WTX.

Green arrow ▶ saves changes made in the Control panel to the Lyrae XS.

Manufacturer PIDs

LED calibration 4byte HEX! (RGBW/RGBA) - the item shows 4 bytes of calibration values for calibrated white colours of RGBW(RGBA) Lyrae XS FIX.

E.g.

CTC channel has to be set to some calibrated white colour (21 DMX-1800K, 66 DMX-2700K, 91 DMX-3200K, 141 DMX-4200K, 211 DMX-5600K, 255 DMX-6500K) otherwise the item shows values "ff ff ff ff" (and calibration values cannot be saved to the Lyrae XS FIX).

Warning!
Changing and saving values in this item will affect calibrated white colour(s) of the Lyrae XS .

Insect friendly light - the item effects RGBA Lyrae XS FIX only. If the item is on, blue colour is not used in calibrated white colours. This modification of white lights results in a smaller attraction of white light for insects (mosquitos, moths…). The function is also available from DMX chart (channel Special Function, range 7-10 DMX).

Wireless unlink - the item is inactive for Lyrae XS FIX.

Terminator active - the item is inactive for Lyrae XS FIX.

5. Software update

Software update of Lyraes 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 Lyraes to the update mode automatically.
Please see https://www.robe.cz/robe-uploader/ for more information.

Note: CalummaXS modules in ON/OFF connection cannot be updated.

The Lyraes XS have to be operated in the Pass-Through mode only.
To update Lyraes XS including the E-box Remote.
   1. Update connected LED modules by means of the file Lyrae.lib in the ROBE Uploader.
   2. Set the E-box Remote 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 Remote.
   3. After updating the E-box Remote, set the E-box Remote to the Pass-Through mode and switch it off/on.

For more information about updating please see the E-box Remote user manual and the E-box Remote Base user manual.

Examples of connection for software update
1. By means of DMX connection and Robe Universal Interface.
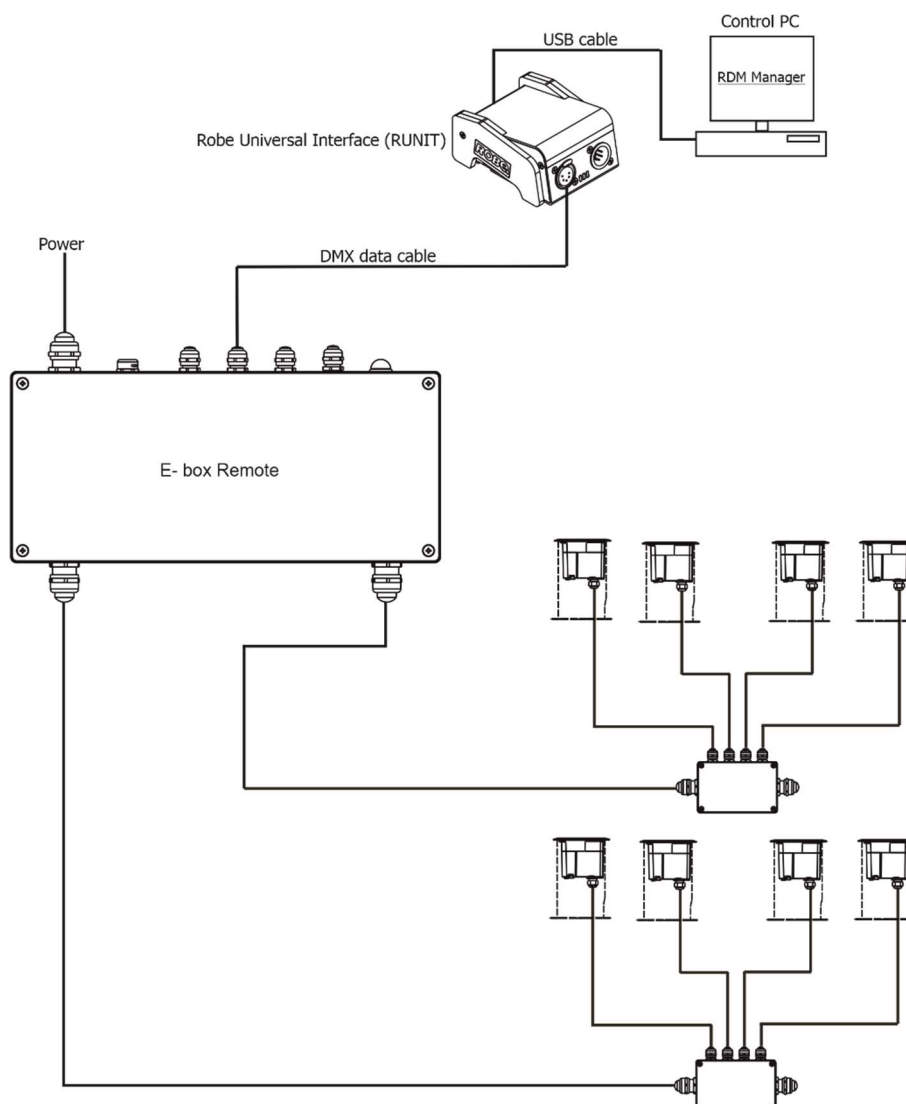
2. By means of the Ethernet connection
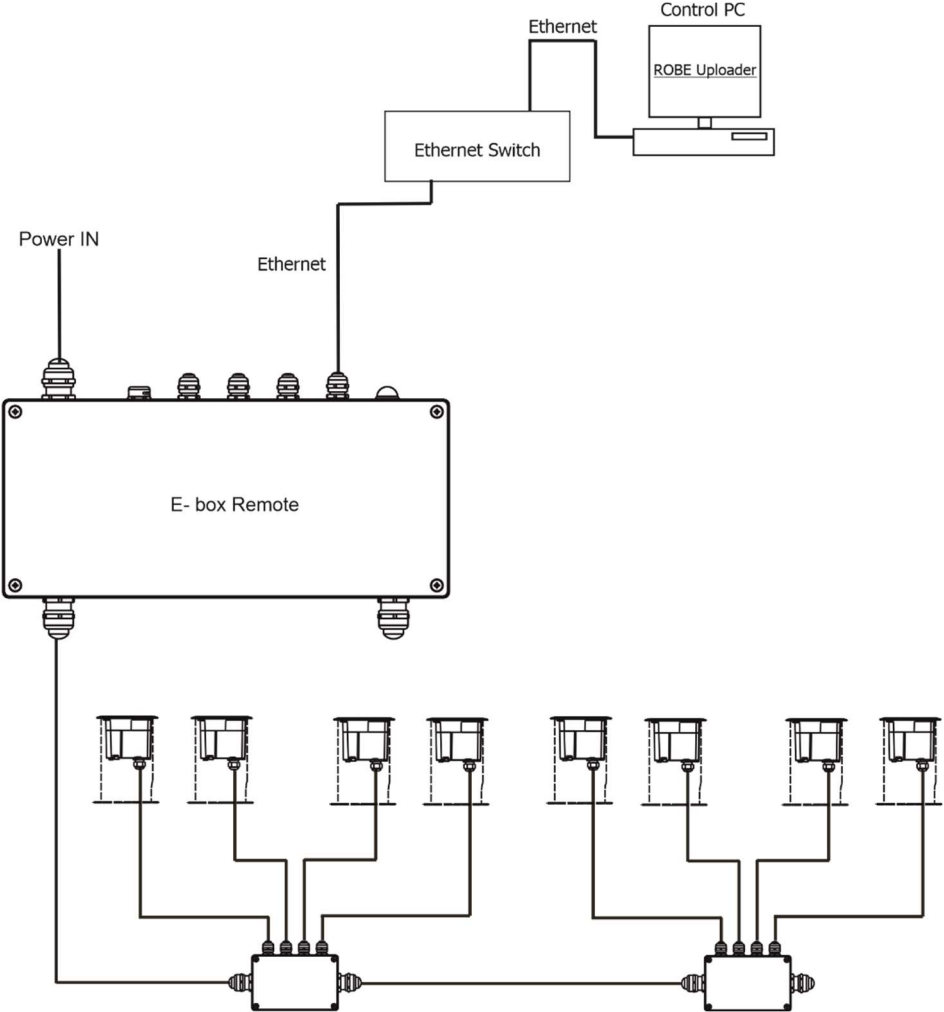
6. Technical specifications

Power supply
- Input voltage: 48V
- Power consumption:
  - Lyrae XS SC FIX: 10 W
  - Lyrae XS MC FIX: 10 W

Optical
- Light source:
  - Lyrae XS SC FIX: 4 x high power single chip LED
  - Lyrae XS M FIX: 1 x high power multi chip LED

- Colour variants:
  - Lyrae XS SC FIX: PW (3000 K)
    - Variants on request: TW (2200 - 4000 K, 2700-6500K), 2200 K, 2700 K, 3500 K, 4000 K, 6500 K
  - Lyrae XS MC FIX: RGBW (W - 6500 K), RGBA

- Beam angles:
  - Lyrae XS SC FIX:
    - Clear glass:
      - symmetrical: 10°, 15°, 25°, 30°, 45°, 65°
      - bi-symmetrical: 10°x30°, 30°x10°, 10°x60°, 60°x10°,15°x45°,45°x15° 30°x60°, 60°x30°
    - Anti-Skid Glass:
      - symmetrical: 18°, 22°, 35°, 50°
      - bi-symmetrical: 20° x 35°, 35° x 20°, 20° x 65°, 65° x 20°, 20° x 50°, 50° x 20°, 35° x 65°, 65° x 35°
  - Lyrae XS MC FIX:
    - Clear glass:
      - symmetrical: 9°, 12°, 15°, 25°, 30°, 45°, 65°
      - bi-symmetrical: 10°x30°, 30°x10°, 10°x60°, 60°x10°,15°x45°,45°x15° 30°x60°, 60°x30°
    - Anti-Skid Glass:
      - symmetrical: 18°, 22°, 35°, 50°
      - bi-symmetrical: 20° x 35°, 35° x 20°, 20° x 65°, 65° x 20°, 20° x 50°, 50° x 20°, 35° x 65°, 65° x 35°

- Projected Lumen Maintenance: L90B10 >90.000 hrs, Ta = 25°C / 77°F

E-box Remote control protocols
- USITT DMX512/RDM, ArtNet, MA Net, MA Net2, sACN, Kling-Net

Settings/Addressing
- E-box Remote

Compatible drivers
- E-box Remote
- E-box Remote Basic

Mounting method
- External mounting sleeve

Housing
- High pressure die-cast aluminium body
- Stainless Flange
- Tempered glass

Trim
- Options: Bevel edge trim, Flush trim
- Shape: Round, Square
- Finish options: Stainless steel, Bronze, Brass

Cooling system
- Convection

Total heat dissipation
- Lyrae XS SC FIX: 25 BTU/h (calculated)
- Lyrae XS MC FIX: 25 BTU/h (calculated)

Protection factor
- CE: IP 68 (8h @ 1m) ; Junction box IP 66 (IP 68 after filling the Junction box with rezin)
- US: Suitable for wet location

IK rating
- IK10

Max. static load
- Standard tempered glass: 35 kN
- Antiskid tempered glass: 23kN

Operating ambient temperature range
- -20°C /+40°C (-4°F /+104°F)

Connection
- Via E-box Remote/E-box Remote Basic
    Lyrae XS FIX: cable UL 20969 5x 20AWG (P/N 13053481), length 1m standard, bare end
    Interconnecting cable between junction boxes: SJTW 5x 14AWG (P/N 13053336)
    Junction Box for Calumma XS, (1x Output)
    Junction Box for Calumma XS, (4x Output)

Weight
- Lyrae XS SC FIX: 0.56 kg (1.24 lbs)
- Lyrae XS MC FIX: 0.56 kg (1.24 lbs)

Dimensions (All dimensions in mm [inch])

Lyrae XS FIX

82 [3 1/4"]

Ø 95 [3 3/4"]

Mounting sleeve

Ø 80 [3 1/8"]

136 [5 3/8"]

Ø 105 [4 1/8"]
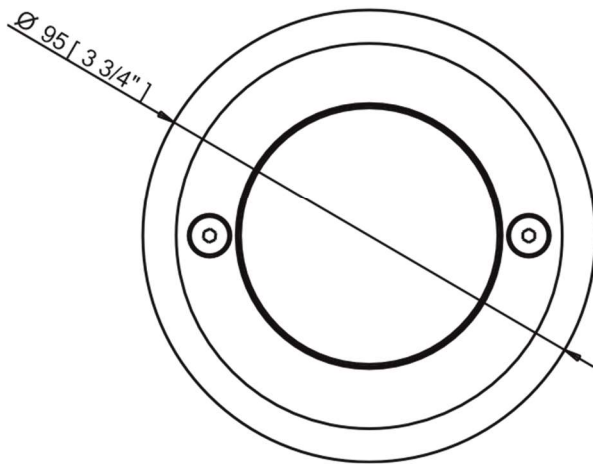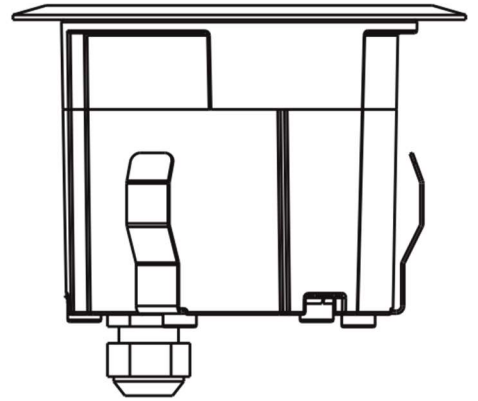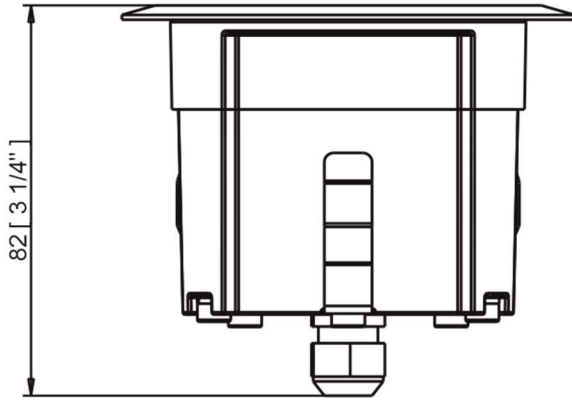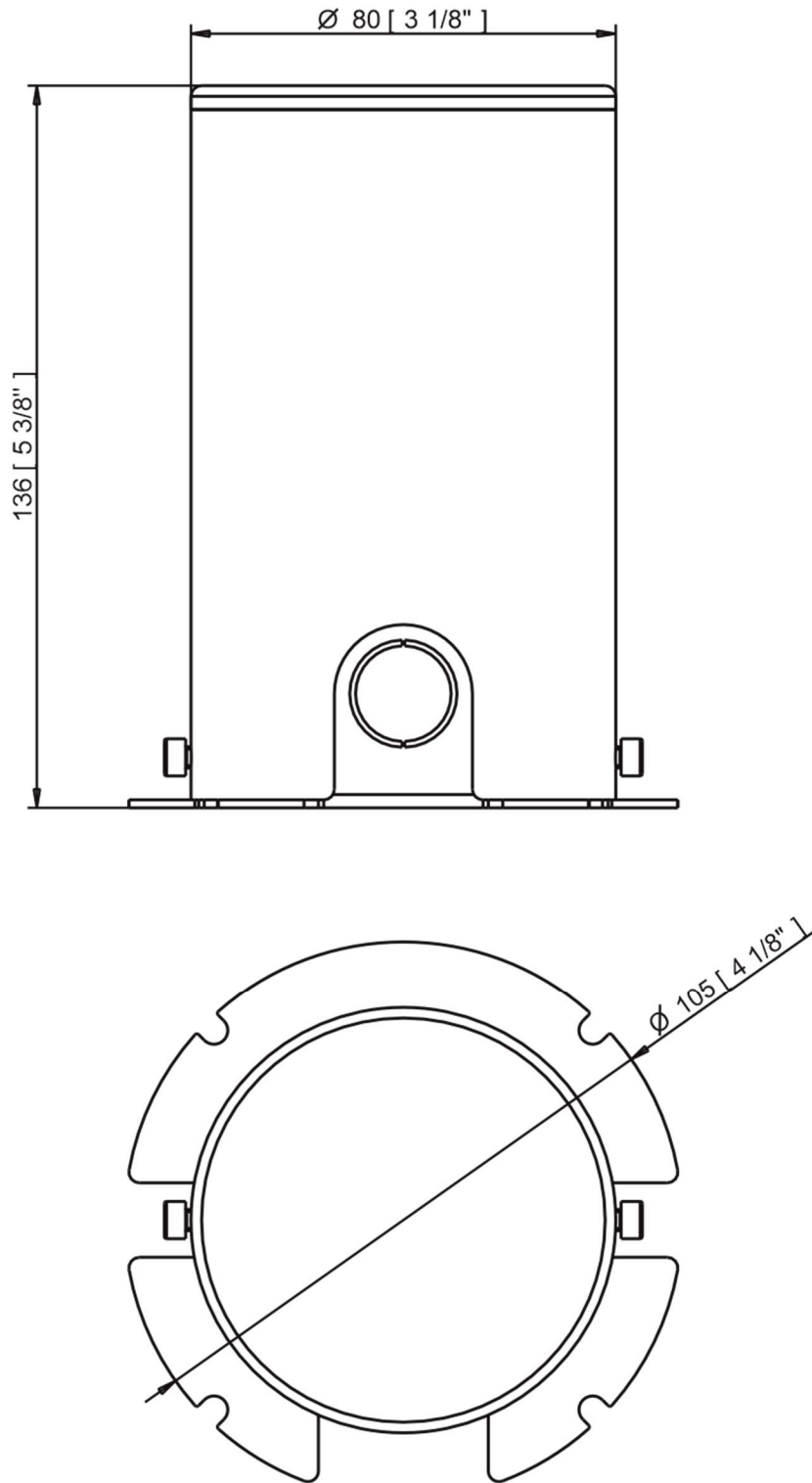
Included items
- 1 x Lyrae XS FIX
- 1 x User manual

Accessories (order separately)
(P/N 10980715) Junction Box for Calumma XS, 1x Output, Ral 9011
(P/N 10980716) Junction Box for Calumma XS, 4x Output, Ral 9011
(P/N10980982) Mounting Sleeve Lyrae XS FIX
(P/N 13053336) Cable SJTW 5x 14AWG
(P/N 10980658) 3M™ Scotchcast™ Re-Enterable Electrical Insulating Resin 2123

7. 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, non-abrasive 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.

7.1 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.

8. ChangeLog
This section summarizes changes in the user manual.

Version of the manual	Date of issue	Description of changes
1.1	12/09/2024	DMX chart ver.1.0

DMX protocol for Lyrae XS, Lyrae XS FIX - MC and SC

Version: 1.0 (16 modes in total)

Mode/Channels in all								
1	**2**	**3**	**4**	**5**	**6**	**7**	**8-10**	Mode 1- RGBW(A)-8bit, Mode 2- RGB 8-bit, Mode 3- full RGBW(A)
4	3	12	3	6	8	15	Reserved	Mode 4- White-full control, Mode 5- Reduced RGBW(A)
								Mode 6- Reduced RGBW(A)+white control, Mode 7- Full control
								Mode 7-Full RGBW(A)+virt. Colour wheel

RGBW/RGBA/RGB modes

Mode/channels							DMX Value	Function	Type of control
1	**2**	**3**	**4**	**5**	**6**	**7**			
-	-	-	-	-	-	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
							5-6	Run factory demo sequences at switching fixture on (without DMX)	step
							7-8	Insect friendly light On (RGBA version only)	step
							9-10	Insect friendly light Off (RGBA version only)	step
							11-255	Reserved	
1	1	1	-	1	1	2		**Red**	
							0 - 255	Red LEDs saturation control (0-100%)	proportional
-	-	2	-	-	-	3		**Red Fine**	
							0 - 255	Red LEDs saturation control fine	proportional
2	2	3	-	2	2	4		**Green**	
							0 - 255	Green LEDs saturation control (0-100%)	proportional
-	-	4	-	-	-	5		**Green Fine**	
							0 - 255	Green LEDs saturation control fine	proportional
3	3	5	-	3	3	6		**Blue**	
							0 - 255	Blue LEDs saturation control (0-100%)	proportional
-	-	6	-	-	-	7		**Blue Fine**	
							0 - 255	Blue LEDs saturation control fine	proportional
4	-	7	-	4	4	8		**White (Amber)**	
							0 - 255	White LEDs saturation control (0-100%)	proportional
-	-	8	-	-	-	9		**White (Amber) Fine**	
							0 - 255	White LEDs saturation control fine	proportional
-	-	9	1	-	5	10		**Green correction**	
							0	Uncorrected white	step
							1-127	Minus green - uncorrected white	proportional
							128	Uncorrected white (128=default)	step
							129-255	Uncorrected white - Plus green	proportional
-	-	10	2	-	6	11		**Colour temperature correction (CTC)**	
							0	No function	step
							1 - 10	Tungsten dimming 2700 K	step
							11 - 20	Tungsten dimming 3200 K	step
							21-255	Colour temperature changing from 1800 K --> 6500 K	proportional
								(21-1800K, 66-2700K, 91-3200K,141-4200K, 211-5600K, 255-6500K)	
-	-	-	-	-	-	12		**Virtual Colour Wheel**	
							0	No function	step

Mode/channels							DMX Value	Function	Type of control
1	2	3	4	5	6	7			
							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	proportional
							24	Cyan (Red=0, Green=full, Blue =full, White/Amber=0)	step
							25-34	Red=0, Green=full, Blue->down, White/Amber=0	proportional
							35	Green (Red=0, Green=full, Blue =0, White/Amber=0)	step
							36-45	Red->up, Green=full, Blue=0, White/Amber=0	proportional
							46	Yellow (Red=full, Green=full, Blue=0, White/Amber=0)	step
							47-56	Red=full, Green->down, Blue=0, White/Amber=0	proportional
							57	Red(Red=full, Green=0, Blue=0, White/Amber=0)	step
							58-67	Red=full, Green=0, Blue->up, White/Amber=0	proportional
							68	Magenta (Red=full, Green=0, Blue=full, White/Amber=0)	step
							69-78	Red -> down, Green=0, Blue=full, White/Amber=0	proportional
							79	Blue (Red=0, Green=0, Blue=full, White/Amber=0)	step
								Transition effects	
							80-87	Rainbow effect (with fade time) from slow-> fast	proportional
							88-95	Rainbow effect (without fade time) from slow-> fast	proportional
							96-103	Full dynamic white (1800K->6500K->1800K) (with fade time) from slow-> fast	proportional
							104-111	Full dynamic white (1800K->6500K->1800K) (without fade time) from slow-> fast	proportional
							112-119	Dynamic warm white (1800K-3000K-1800K) (with fade time) from slow-> fast	proportional
							120-127	Dynamic warm white (1800K-3000K-1800K) (without fade time) from slow-> fast	proportional
							128-135	Rainbow effect + full dynamic white (with fade time) from slow-> fast	proportional
							136-143	Rainbow effect + full dynamic white (without fade time) from slow-> fast	proportional
							144-151	Blue/Green effect (with fade time) from slow-> fast	proportional
							152-159	Blue/Green effect (without fade time) from slow-> fast	proportional
							160-167	Red/Blue effect (with fade time) from slow-> fast	proportional
							168-175	Red/Blue effect (without fade time) from slow-> fast	proportional
							176-183	Green/Red effect (with fade time) from slow-> fast	proportional
							184-191	Green/Red effect (without fade time) from slow-> fast	proportional
							192-199	Blue/4000K effect (with fade time) from slow-> fast	proportional
							200-207	Blue/4000K effect (without fade time) from slow-> fast	proportional
							208-215	Green/4000K effect (with fade time) from slow-> fast	proportional
							216-223	Green/4000K effect (without fade time) from slow-> fast	proportional
							224-231	Red/4000K effect (with fade time) from slow-> fast	proportional
							232-239	Red/4000K effect (without fade time) from slow-> fast	proportional
						13		**Shutter/Strobe**	
							0-31	Shutter closed	step
							32-63	Shutter open	step
							64-95	Strobe-effect from slow to fast	proportional

DMX protocol

Mode/channels							DMX Value	Function	Type of control
1	2	3	4	5	6	7			
							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

DMX protocol for Lyrae XS, Lyrae XS FIX - MC and SC

Version: 1.0 (16 modes in total)

Mode/Channels in all				TW Modes: Mode 11- White selection + Dimmer, Mode 12- WW + CW	
11	*12*	*13*	*14-16*	**PW Mode: Mode 13- Dimmer**	
3	4	2	Reserved		

				TW and PW modes		
Mode/channels			DMX Value	Function		Type of control
11	*12*	*13*				
1	**-**	**-**		**White colour selection**		
			0 - 255	White from 2700 K - 6500 K		proportional
-	**1**	**-**		**Warm White**		
			0 - 255	Warm White LEDs saturation control (0-100%)		proportional
-	**2**	**-**		**Cool White**		
			0 - 255	Cool White LEDs saturation control (0-100%)		proportional
2	**3**	**1**		**Dimmer**		
			0 - 255	Light intensity coarse (0 - 100%)		proportional
3	**4**	**2**		**Dimmer Fine**		
			0 - 255	Light intensity fine		proportional