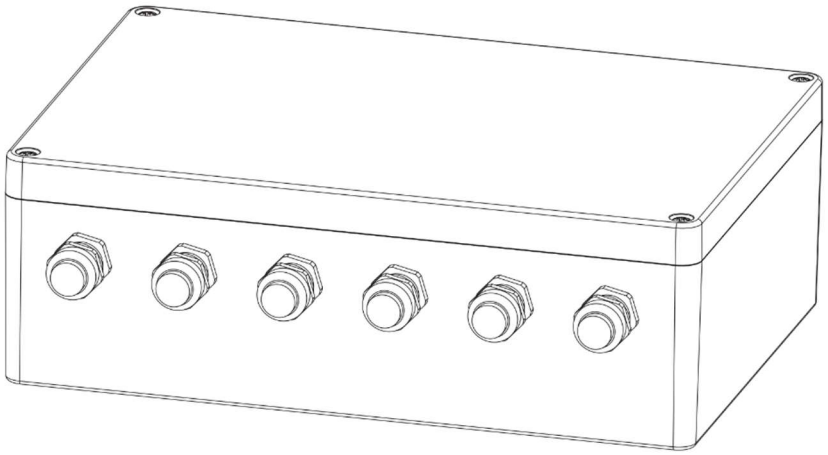
Anolis
A ROBE Business

E-box Remote Synodus



QR code for user manual

USER MANUAL

Version 1.1

E-box Remote Synodus

Table of contents

1. Safety information

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE POWERING OR INSTALLING YOUR E-BOX REMOTE SYNODUS!
Save it for future reference.

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

The fixture was designed for outdoor use, and it is intended for professional application only. It is not for household use.

Make sure that the available voltage is not higher than stated on the fixture

Do not install the fixture near an open flame.

Do not cover the fixture with cloth or other materials.

Keep combustible materials at least 10 cm away from the fixture.

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

The E-box Remote Synodus must not be submerged in water!

Do not connect this fixture to a dimmer pack.

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

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

Operate the fixture only after having familiarized yourself with its functions. Do not permit operation by persons not qualified to operate the fixture. Most damages are the result of unprofessional operation!

Please consider that unauthorized modifications on the fixture are forbidden due to safety reasons! Please use the original packaging if the fixture is to be transported.

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 A.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

The [Device] wireless operation is safe and complies to RF Exposure requirements.

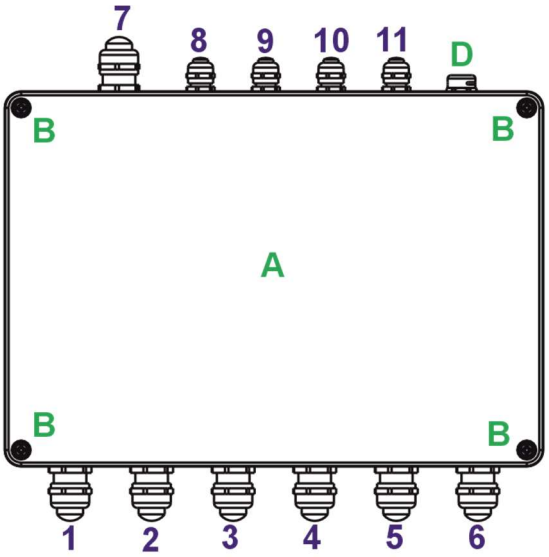
This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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.

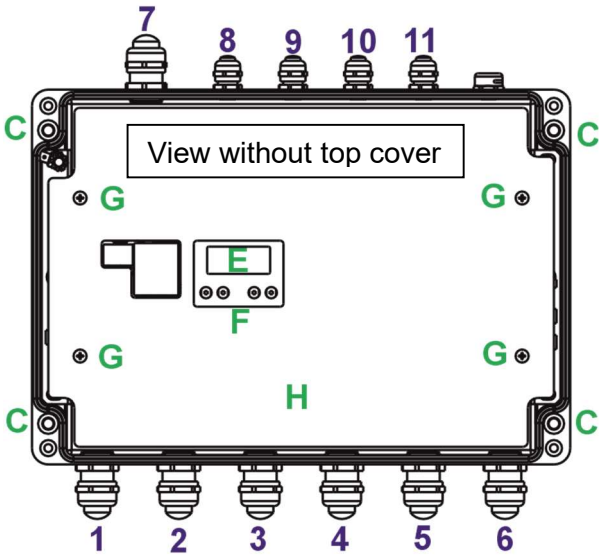
ATTENTION!
Risque de choc. Couper L’alimentation avant L’entretien.
Non destine a à un usage domestique

Convient aux emplacements mouillés.
Ce produit doit être installé selon le code d'installation pertinent,par une personne qui connaît bien les produit et son fonctionnement ainsi que les risques inhérents.

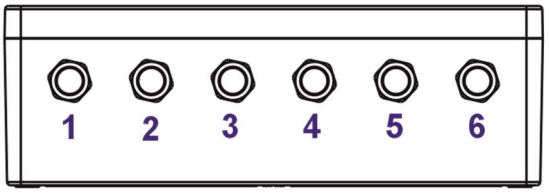
2. Fixture description

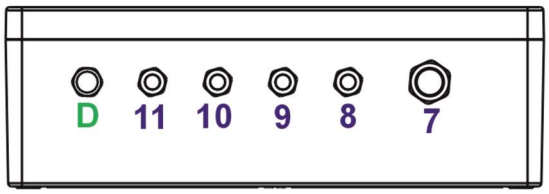


A - Top cover
B - Top cover screws
C - Mounting holes
D - Gore-Tex valve
E - Display
F - Control buttons
G - Screws of terminal blocks cover
H - Terminal blocks cover

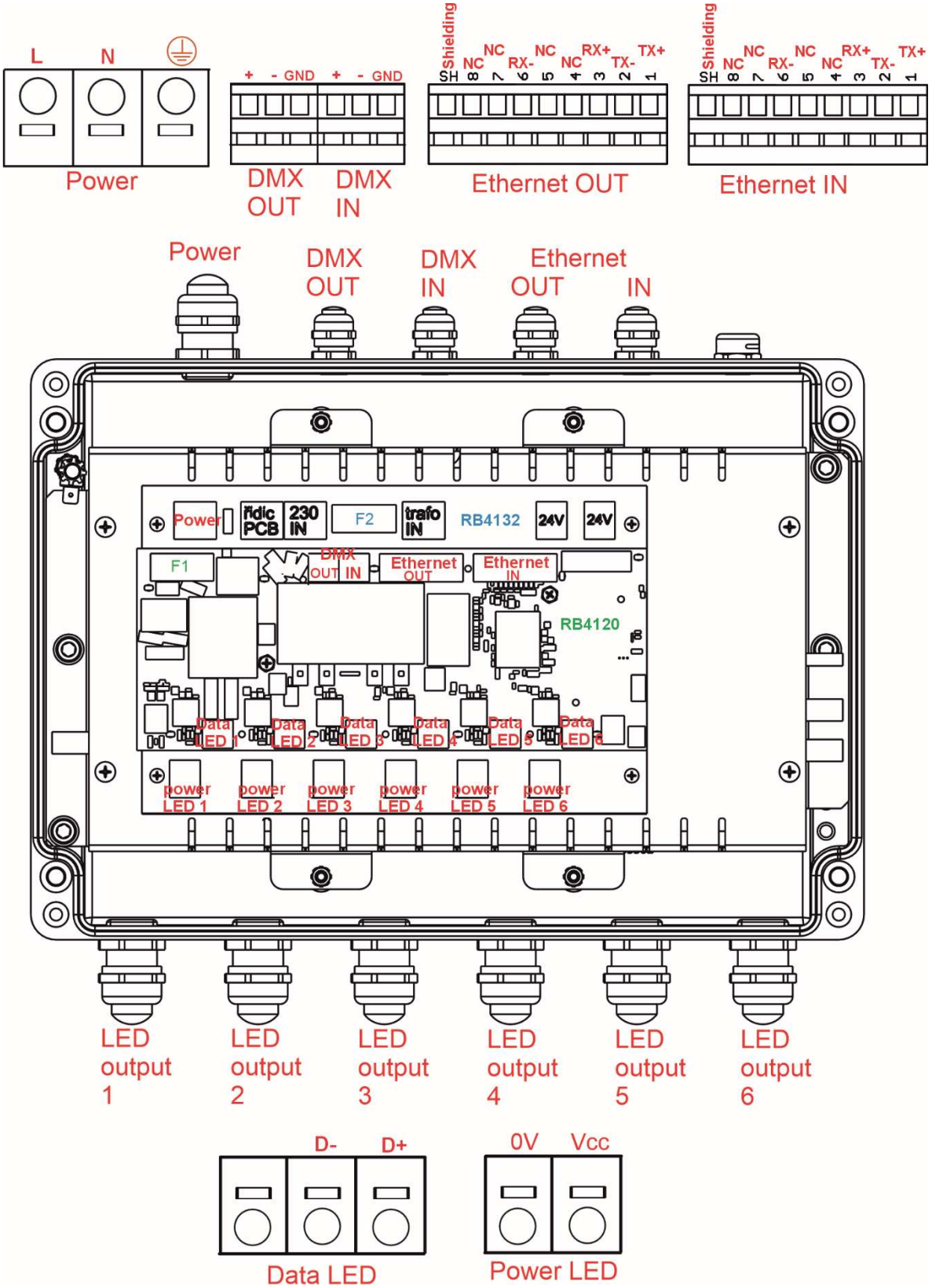


1 - LED Output 1 (cable gland M20x1.5)
2 - LED Output 2 (cable gland M20x1.5)
3 - LED Output 3 (cable gland M20x1.5)
4 - LED Output 4 (cable gland M20x1.5)
5 - LED Output 5 (cable gland M20x1.5)
6 - LED Output 6 (cable gland M20x1.5)
7 - Power IN (cable gland M20x1.5)
8 - DMX OUT (cable gland M12x1.5)
9 - DMX IN (cable gland M12x1.5)
10 - Ethernet OUT (cable gland M12x1.5)
11 - Ethernet IN (cable gland M12x1.5)





Connection points (DPS RB4120 and DPS RB 4132)



Fuses:
F1 on PCB RB4120: 0.5A/500 VAC
F2 on PCB RB4132: 10A/500 VAC
Every LED output is protected by a SMD fuse 4A (non-replaceable) on PCB RB4132.

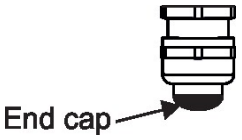
Disconnect the fixture from mains before replacing the fuse!

3. Mounting

Fixture must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.

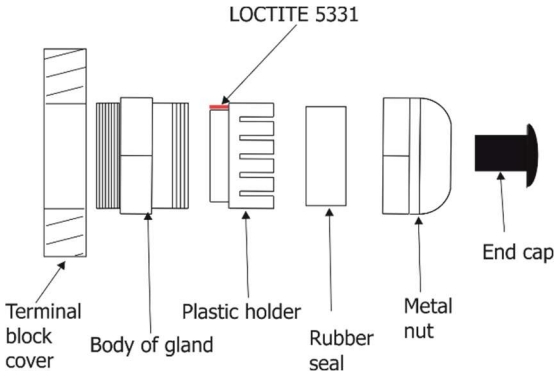
Setting and addressing the E-box Remote Synodus without top cover can be done by a qualified person only!

1. Remove the top cover (A) from the E-box Remote Synodus by unscrewing four fastening screws (B) in order to get access to the display (E) and control buttons (F).
2. Fasten the E-box Remote Synodus on a non-flammable flat surface via four mounting holes (C) of a diameter of 6 mm in its housing.
3. Remove the terminal blocks cover (H) from the E-box Remote Synodus by unscrewing four fastening screws (G) in order to get access to the terminal blocks.
4. Remove end caps from cable glands before passing cables. To keep declared IP rating of the device, every cable gland has to be covered with the end cap if the cable gland is not used.



5. Pass cables for DMX and Ethernet through cable glands M12x1.5 and connect them to the terminal blocksand tighten the cables in the cable glands.
6. Pass cables for Power and LED outputs through cable glands M20x1.5 and connect them to the terminal blocks and tighten the cables in the cable glands.
   Cable glands serve for cables of the following diameters:
   Cable gland M12x1.5 (DMX IN/OUT, Ethernet IN/OUT) - for cable of a diameter 3-7mm.
   Cable gland M20x1.5 (LED outputs, Power IN) - for cable of a diameter 7-13mm (suitable for standard Synodus power/data cable (SJTOW 4x16AWG)).
   For smaller diameter of cable (4-8mm) you have to remove original seal from the cable gland M20 and use the reducing seal (P/N 13051388) instead of it. One reducing seal is enclosed to the product.

Note for cable glands.
We recommend applying 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.



   Check that all screws and cable glands are firmly tightened.
7. Screw the terminal blocks cover (H) back to the E-box Remote Synodus.
8. Connect the E-box Remote Synodus to mains.
9. Set the E-box Remote Synodus by means of the control panel (E) and buttons (F).
10. Disconnect the E-box Remote Synodus from mains and screw the cover (A) back on the box. Use tightening torque 2 Nm.

ALWAYS DISCONNECT THE E-BOX REMOTE SYNODUS FROM MAINS BEFORE CONNECTING/DISCONNECTING LED MODULES.

This device falls under protection class I. Therefore, every E-box Remote Synodus has to be connected to a mains socket outlet with a protective earthing connection.

Power connection

	L	N	⏚
Wire (CE)	Brown	Blue	Green/yellow
Wire (US)	Black	White	Green

DMX connection

D+	D-	0V
Data +	Data -	Data ground (shielding)

Ethernet connection

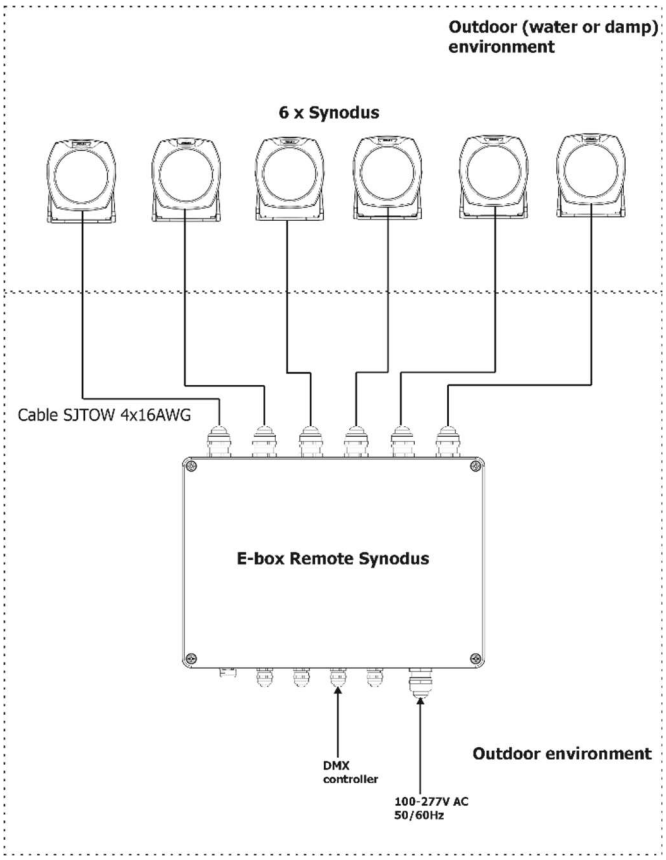
Pin	1	2	3	4	5	6	7	8
Function	TX+	TX-	RX+	NC	NC	RX-	NC	NC

Synodus connection

Wire colours apply to the cable SJTOW 4x16AWG (P/N 13053831)

Colour of wire	Red	Black	Grey	White
Function	Vcc	0V	Data -	Data +

Example of connection



The E-box Remote Synodus must not be submerged in water !

Max. distance between the E-box Remote Synodus and the Synodus depends on operating mode.

Minimum Mode	Medium Mode	Maximum Mode
100 m	70 m	55 m

Only one Synodus can be connected to the one LED output of the E-box Remote Synodus.

4. Synodus modes

The E-box Remote Synodus menu allows you to switch connected Synodus to the two modes:

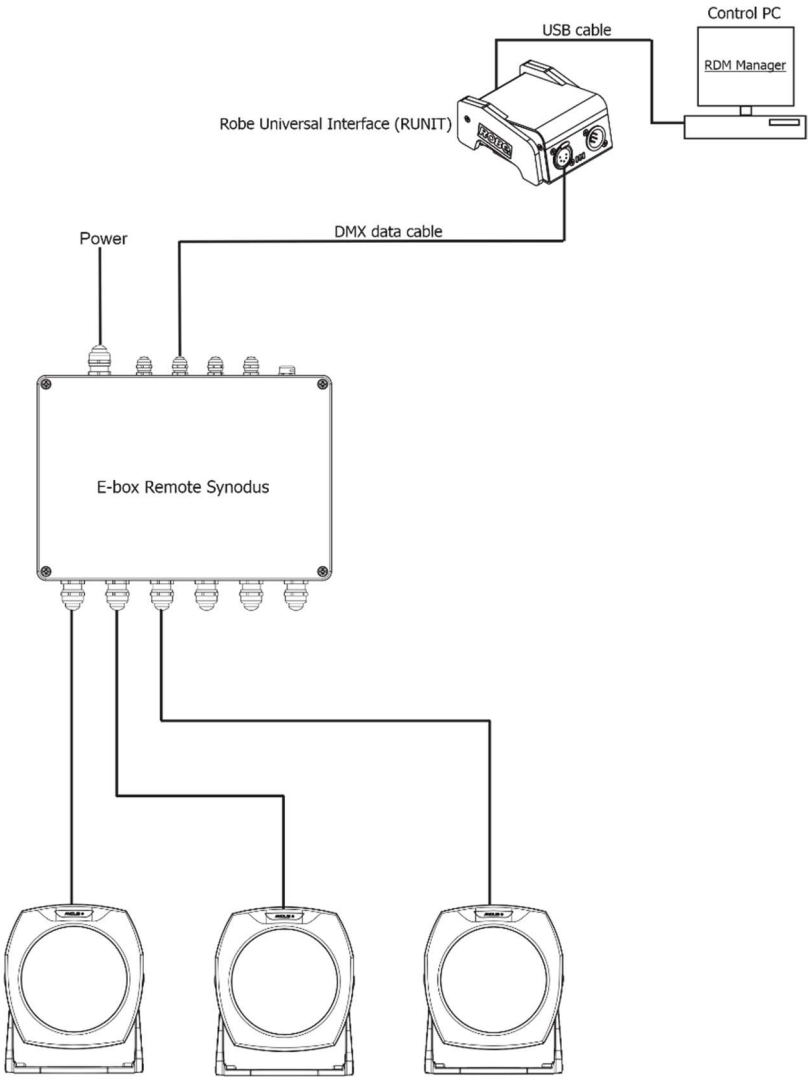
Standard - LED modules are switched to an internal serial connection. DMX addressing of connected LED modules is made automatically (default DMX address = 1, changes can be done by the E-box Remote Synodus or by RDM). The Standard mode is set as default.
E-box Remote Synodus and connected LED modules will be shown in the RDM Manager.
DMX address is shown on the E-box display, e.g “0001”.
This mode is set as default because only one Synodus can be connected to the one LED output of the E-box Remote Synodus.

Pass-Thr - (Pass through). LED modules are switched to an internal parallel connection. DMX addressing of connected LED modules has to be done manually by means of the Robe Universal Interface (or its wireless version Robe Universal Interface WTX) and the software RDM Manager.
Only connected LED modules will be shown in the RDM Manager.
Notice “Pass Thru” is shown on the E-box display.

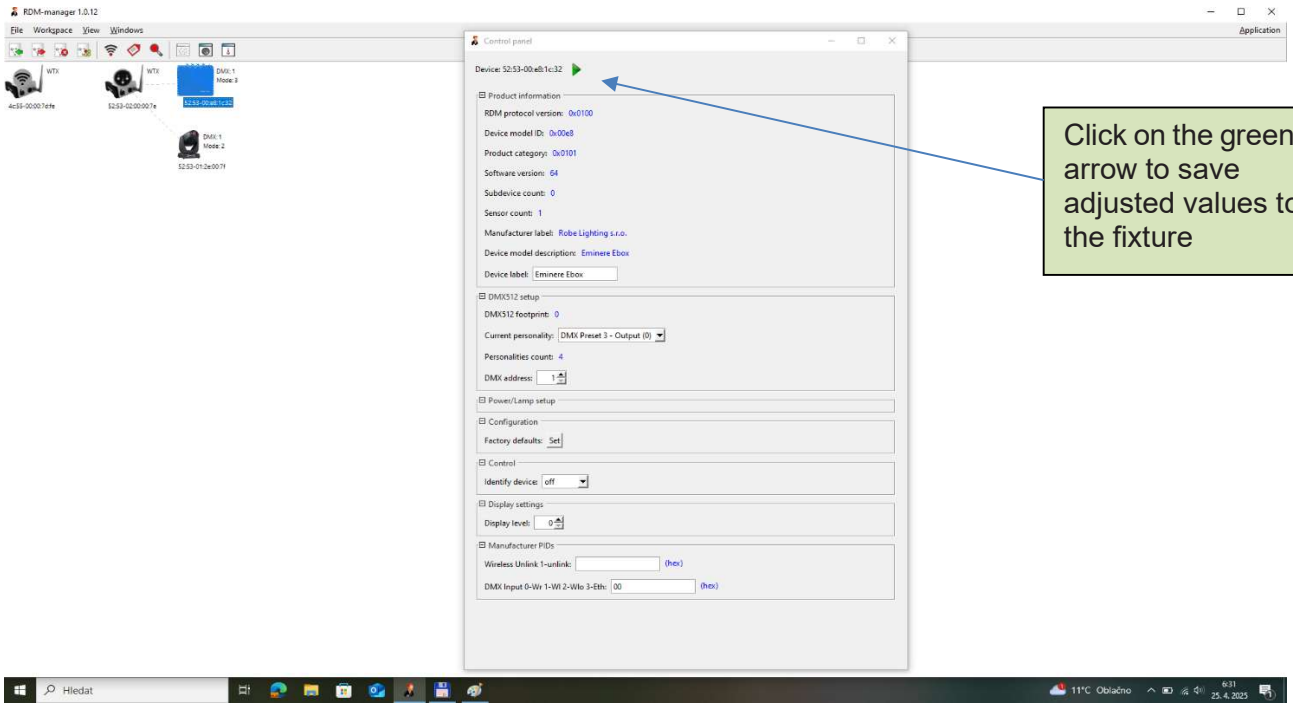
5. RDM manager

The software RDM manager is available on the ROBE website (https://www.robe.cz/support), product RUNIT WTX.
Note: RDM manager and DMX controller cannot be connected to the E-box Remote Synodus at the same time.

Example of RDM manager connection:



Example of the control panel for the E-box Remote Synodus in the RDM manager.



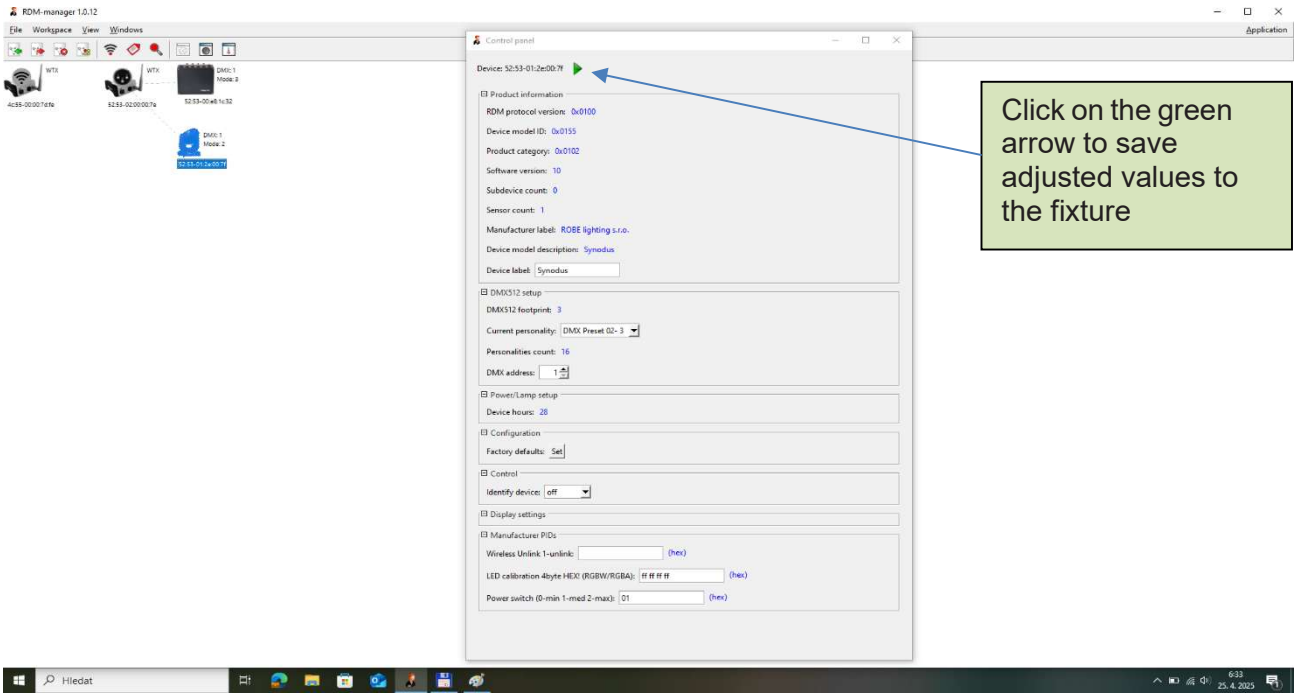
Manufacturer PIDs

Wireless unlink - the item allows you to unlink the E-box Remote Synodus from a DMX transmitter (Wireless DMX version of the E-box Synodus only).

DMX Input: Wr-wired DMX (0)
Wi- wireless DMX (1)
Eth- Ethernet (3)

Note: if the E-box Remote Synodus is set to the Pass-Through mode, only connected Synoduses are shown in the RDM Manager.

Example of the control panel for the Synodus in the RDM manager.



Manufacturer PIDs

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

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 Synodus).

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

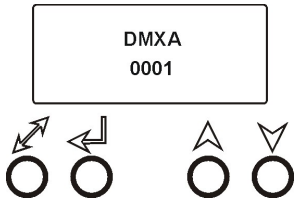
Power Switch (0-min 1-med 2-max) - the item allows you to switch the Synodus to desired operating mode:

0- Minimum mode
1- Medium mode
2- Maximum mode

6. E-box Remote Synodus menu

The E-box Remote Synodus is equipped with 2-row LCD display and four buttons which allows to address the fixture and set the fixture´s behaviour according to your needs.
Note. Some menu items are inactive (does not work) because only one Synodus can be connected on one LED output.

The four control buttons have the following functions:



- ESCAPE button - to escape function or menu.
- ENTER button - to select a function or confirm adjusted value.
- UP and DOWN buttons - to move within the menu.

Note: If DMX signal has been disconnected, DMX address blinks on the display.

When you changed any setting of the E-box Remote Synodus, disconnect the E-box Remote Synodus from power and connect it to power again to activate changes in the E-box Remote Synodus setting.

Some menu items are not accessible if the option Pass-Thr is selected from the menu E-box mode (menu Personality).

These menu items are marked by # in the text below.

6.1 DMX Addr

 # Set DMX Address - use this menu item to set the DMX start address of the fixture, which is defined as the first channel from which the E-box Remote Synodus will respond to a DMX controller.
Note 1: If DMX signal has been disconnected, DMX address blinks.

Note 2: if the option Pass-Thr is selected from the menu E-box mode, the sign "Pass-Thr" is displayed instead of the sign "DMX Addr", and the menu item Set DMX Address is not available.

IP address - select this menu item to set desired IP address. IP address is the Internet protocol address. The IP uniquely identifies any node (fixture) on a network. There cannot be 2 fixtures with the same IP address on the network!

Default Address. This address is derived from fixture´s MAC address and cannot be changed. Confirm the item **"Set Address"** to select this address.

Custom Address. IP address consists of four decimal numbers, each ranging from 0 to 255, separated by dots, e.g., 172.16.254.1. Each part represents a group of 8 bits (octet) of the address.
The following items **"IP Adr 1"**, **" IP Adr 2", " IP Adr 3", " IP Adr 4"** allow you to set each part (number) of the address. After setting desired IP address, confirm the item **"Set Address"** to save this address.

Network mask - select this menu item to set desired network mask. A network mask is a 32-bit mask used to divide an IP address into subnets and specify the network's available hosts.
The following items **"Net.M.1"**, **"Net.M.2", " Net.M.3", " Net.M.4"** serve for setting of each part (number) of the net mask.
After setting desired network mask, confirm the item **"Set Net M."** to save adjusted values.

6.2 Info

Use this menu to read useful information about the fixture.

Software version - select this menu item to read software versions of the E-box Remote Synodus and connected Synoduses.

Databox - version of the E-box Remote Synodus

WL - version of wireless DMX module (if installed).

IP Addr - this menu item shows the current IP address (the IP address "runs" on display).

RDM UID - select this menu item to read the RDM UID (the RDM UID "runs" on display).

MAC Adr - select this menu item to read the MAC address (the MAC address "runs" on display).

 # Outputs Info - information about Synoduses connected to the LED outputs.

Example:

Output 1 Info .....information about E-box Remote Synodus output 1

Fixtures Cnt: 12..... Number of connected Synoduses to the selected output.

If some LED output is not used, the message "No output" will be displayed.

Temp - temperature inside the E-box Remote Synodus.

6.3 Personality

Use this menu to modify the E-box Remote Synodus operating behaviour.

 # Devices - use this menu to find and set connected LED modules.

Search – The menu item finds connected Synoduses. After finishing searching procedure, number of found LED modules will be displayed and if you want to founded LED modules save, select the option Y (option N leaving the menu without saving) and press the ENTER button.

Sort – The option allows you to sort LED modules according selected DMX preset for colour variant. Option **Default** means that LED modules will be sorted according last DMX preset (LED module remembers its last DMX mode, in case of change of the E-box you do not need to set DMX mode for each LED module, sorting will be done according last DMX mode).

Note: Default DMX mode for new LED modules (default from factory) is first DMX mode for corresponding colour variant of the LED module (Mode 1-for RGBW/RGBA variant, Mode 11-for TW and PW variant).

Settings – The menu item allows you to select desired LED output and display LED modules connected to the LED outputs. The LED modules are identified by RDM UID. At every LED module you can change DMX address and DMX preset.

Note: If you change DMX address or DMX preset, you will need to run the procedure **Sort** again and new footprint will be saved.

Locate – The menu item allows you to identify LED modules, selected LED module will light.

DMX Input - this menu allows you to choose desired DMX data input:

Wired DMX - DMX signal is received by means of the standard DMX cable.

Wireless* - DMX signal is received by means of the inbuilt wireless DMX module.

Wireless Out DMX*- the fixture receives wireless DMX and sends the signal to its wired DMX output. The fixture behaves as a " Wireless/Wired" adaptor.

Ethernet - DMX signal is received by means of the Ethernet cable.

* If wireless DMX module is installed.

Ethernet Settings - use the menu item to select and set desired operating mode.

Ethernet mode - use the menu to select a protocol.

Artnet - fixture receives Artnet protocol

sACN - fixture receives sACN protocol

gMAI - fixture receives MANet I protocol

gMAII - fixture receives MANet 2 protocol

ArtNet Settings - use the menu item to set parameters for ArtNet operation.

ArtNet Uni. - selection of the ArtNet Universe (1-12)

Net - selection of a network (0-127)
Sub-Net - selection of a subnet (0-15).
Universe - selection of a Universe (0-15).
Menu items "ArtNet Uni. " and "Universe" allow a "crossing of Universes".

sACN Settings - use the menu item to set parameters for sACN operation.
sACN Uni - selection of the sACN Universe (1-1…12-12). A universe from a range of 1-63999 can be assigned to the selected universe. It allows a "crossing of Universes".

MANet Settings - Use this menu to set parameters for MANet operation.
MA Uni - MANet I (II) universe. The value of this item can be set in range of 1-256.
MA S. ID - MANet I(II) session ID. The value of this item can be set in range of 1-32.

IGMP rep - repeating time for Internet Group Management Protocol (Off, 1s-10s).

Display Settings - this menu allows you to change the display settings.
Display Off Timer - if this item is on, the display will be switched off 2 minutes after last pressing any button on the control panel.
Display Lightness - select this menu item to adjust the display intensity (0-100%).
Display Contrast- select this menu item to adjust contrast of the display (0-100%).

 # DMX Hold - if the function is on, the fixture keeps last received DMX values in case that DMX data receiving was interrupted (e.g., disconnected DMX cable or DMX controller).

E-box mode - this menu item allows you to select a way of Synoduses connection.
Standard - Synoduses are switched to the internal serial connection.
Pass-Thr - Synoduses are switched to the internal parallel connection.

Important: Switch Off/On the E-box Remote Synodus after changing the E-box Synodus mode.

Output Data - this menu item allows you to block sending data to the LED outputs of E-box Remote Synodus.
Enabled – The E-box Remote Synodus sends data to the connected LED modules.
Disabled – Sending data to the connected LED modules is blocked. This option has to be selected if you wish to use Initial DMX values saved in the LED modules.

Setting and running initial DMX values in connected LED module (Synodus)

1. Switch the connected Synodus to DMX mode 7 (by RDM Manager or by REAP).
2. Set desired effects (by DMX console)
3. Save effects to the Synodus by using command “Save current DMX values to fixture as initial DMX values” (DMX range 1-2, channel 1).
4. Set the item “Output Data” to Disabled (by the E-box Remote Synodus menu or by REAP).
   Note: after disabling output data by the REAP screen, click on the red button “Reset Now):

5. Switch the E-box Remote Synodus off and on. Connected Synodus (Synoduses) should light with initial DMX values.

Default setting - select this option to set fixture personalities to the default (factory) values.

6.4 Special settings

Wireless* - wireless DMX information. The menu allows to read some information about wireless DMX operation
Stat - wireless status. Use the menu to read wireless DMX status.
Unlink - use this item to unlink the fixture from wireless DMX.
* If wireless DMX module is installed.

Software Update - the menu item switches the E-box Remote Synodus to the update mode.
If the software update is done by means of the software ROBE RDM Uploader, switching the E-box Remote Synodus to the update mode will be done automatically.

7. Robe Ethernet Access Portal (REAP)

7.1 Settings on computer

Your computer needs to be connected to the fixtures through the means of Ethernet wired network and a network switch. The computer needs to have configured network settings in order to be able to communicate with the fixtures through the network.
To do this, refer to the manual of your computer how TCP/IP network settings should be done. Set up manual IP address of your computer. The Ethernet network connection (Local LAN) typically needs to be set to 10.x.x.x address, for example 10.0.0.10, assuming no other computer on the network contains such an address while keeping all ROBE fixtures in default IP settings. Netmask of the computer should be 255.0.0.0

7.2 Settings on fixtures

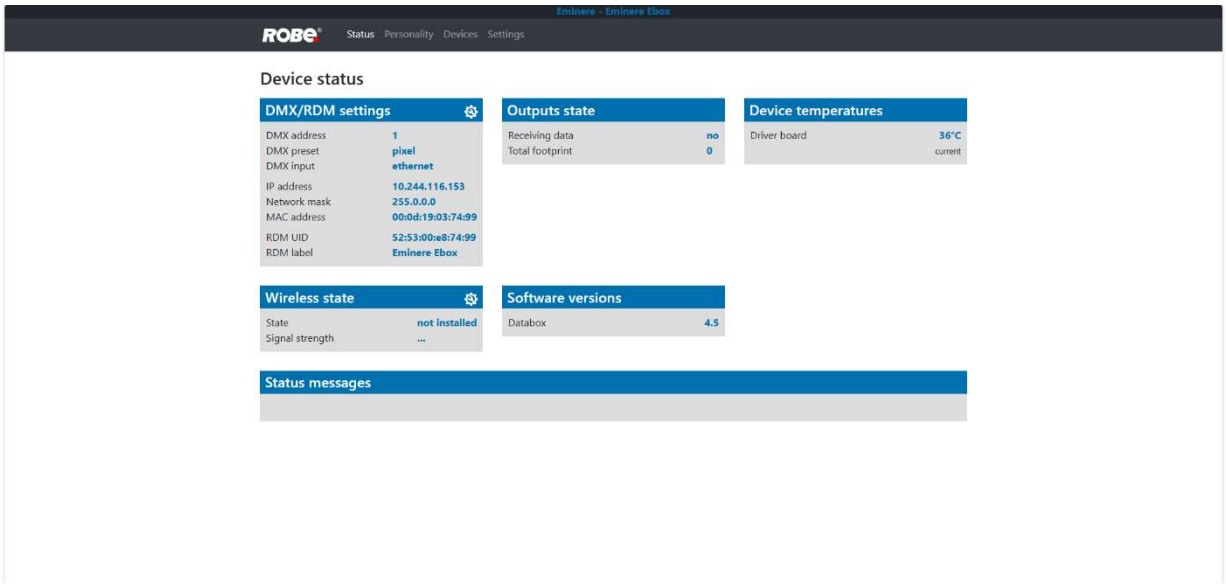
Typically, make sure to use the default 10.x.x.x IP address as provided.There is no need to set the fixture into Art-Net mode.

7.3. REAP menu screens

Type the IP address of the ROBE fixture to your web browser, e.g. http://10.245.20.82, enter the user name: **robe** and the password: **2479**, the first menu screen of the ROBE fixture will appear.

Status screen

The screen gives you a fast overview of the E-box Remote settings.



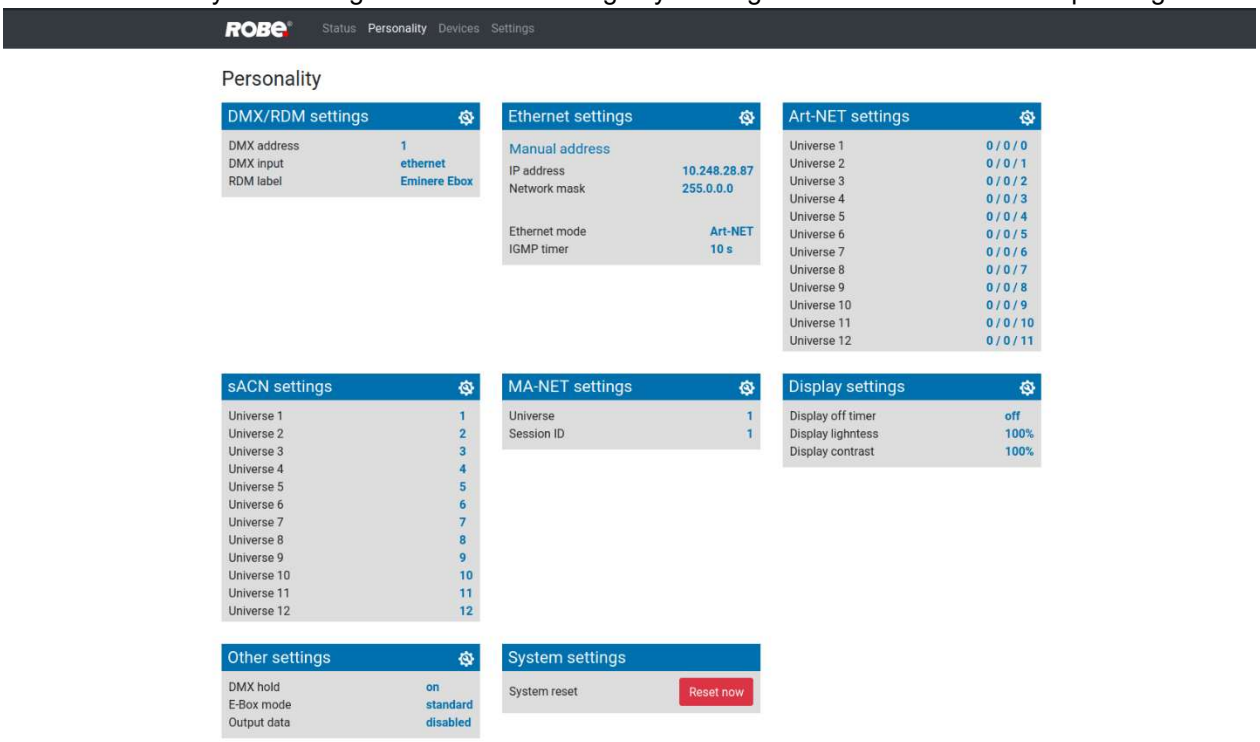
The background colour of the top raw of the screen with the name and RDM label of the fixture denotes state of the fixture:

Black colour - fixture is ready for operation
Yellow colour - fixture does not communicate with computer
Red colour - fixture with error messages

The icon allows you to change some values in a corresponding table.

Personality screen

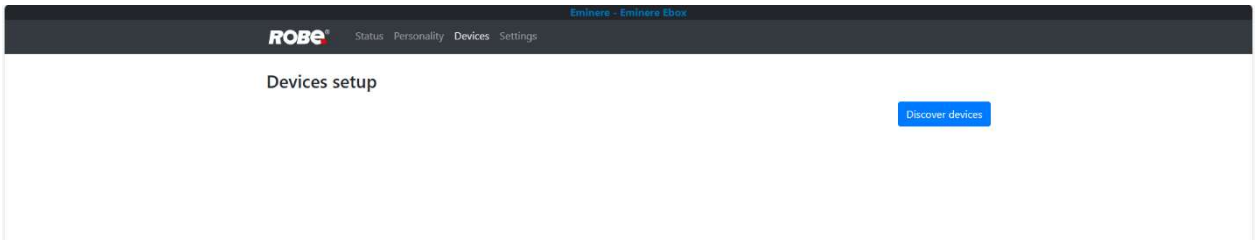
The screen allows you to change some fixture settings by clicking on the icon in a corresponding table .



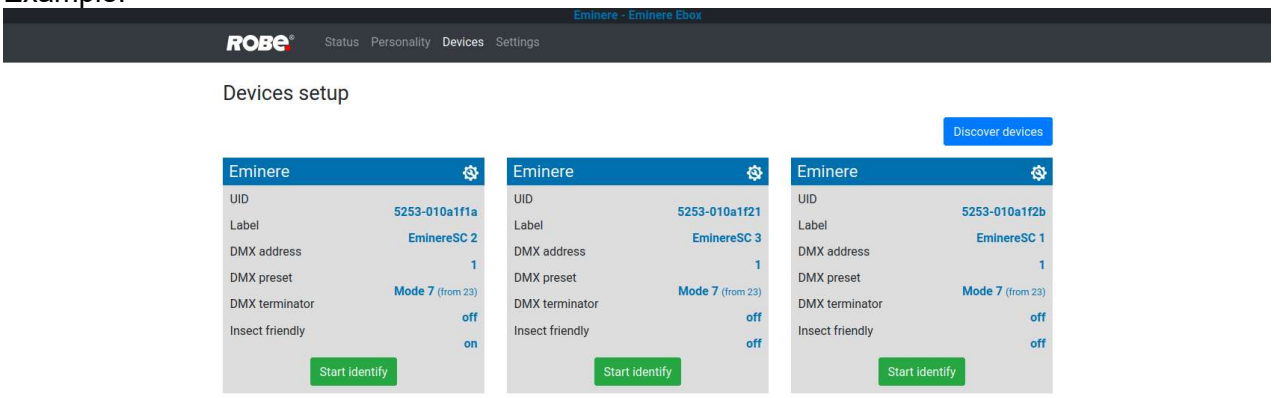
Important: if you set the item “Output data” to disabled, click on the red button “Reset now” to reset the E-box.

Devices screen

The screen allows you to show connected LED modules to the E-box fixture.

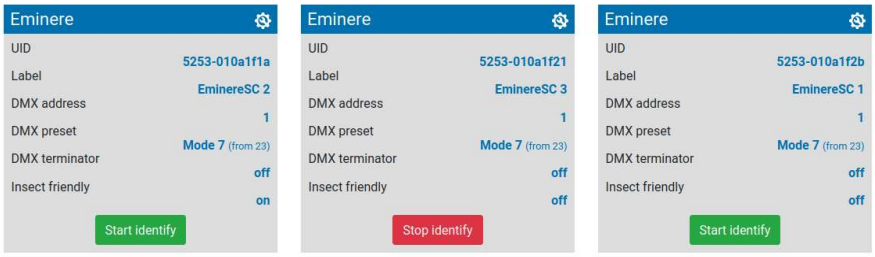


Click on the button “Discover devices” and LED modules connected to the E-box fixture will appear. Example:



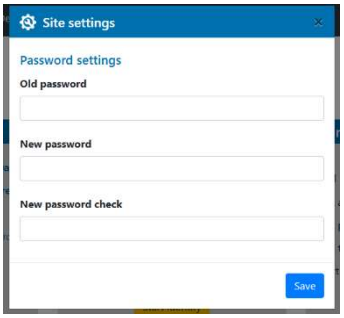
Click on the icon to change some values in a corresponding table.

If you click on the green button “Start identify”, the corresponding LED module will start flashing.



Settings screen

The screen allows you to change password to REAP.



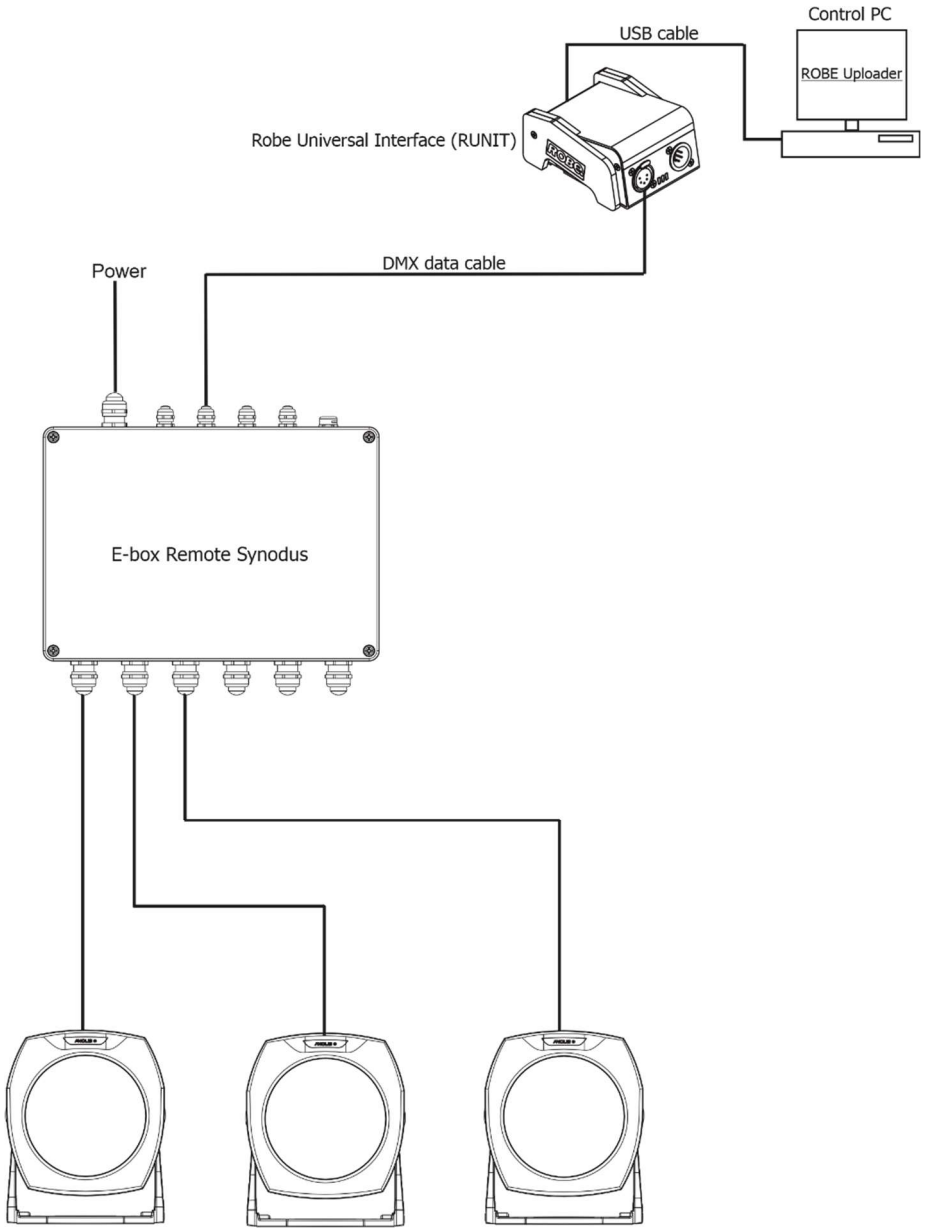
8. Software update

Software update of the E-box Remote Synodus and connected LED modules can be done via an Ethernet connection between a computer running a ROBE Uploader software and E-box Remote Synodus or using the Robe Universal Interface (Robe Universal Interface WTX), DMX connection and the ROBE RDM Uploader software. The ROBE Uploader is a software for automatized software update of ROBE fixtures. The ROBE Uploader switches E-box Remote Synodus and connected LED modules to the update mode automatically. Please see https://www.robe.cz/robe-uploader/ for more information about the ROBE Uploader.

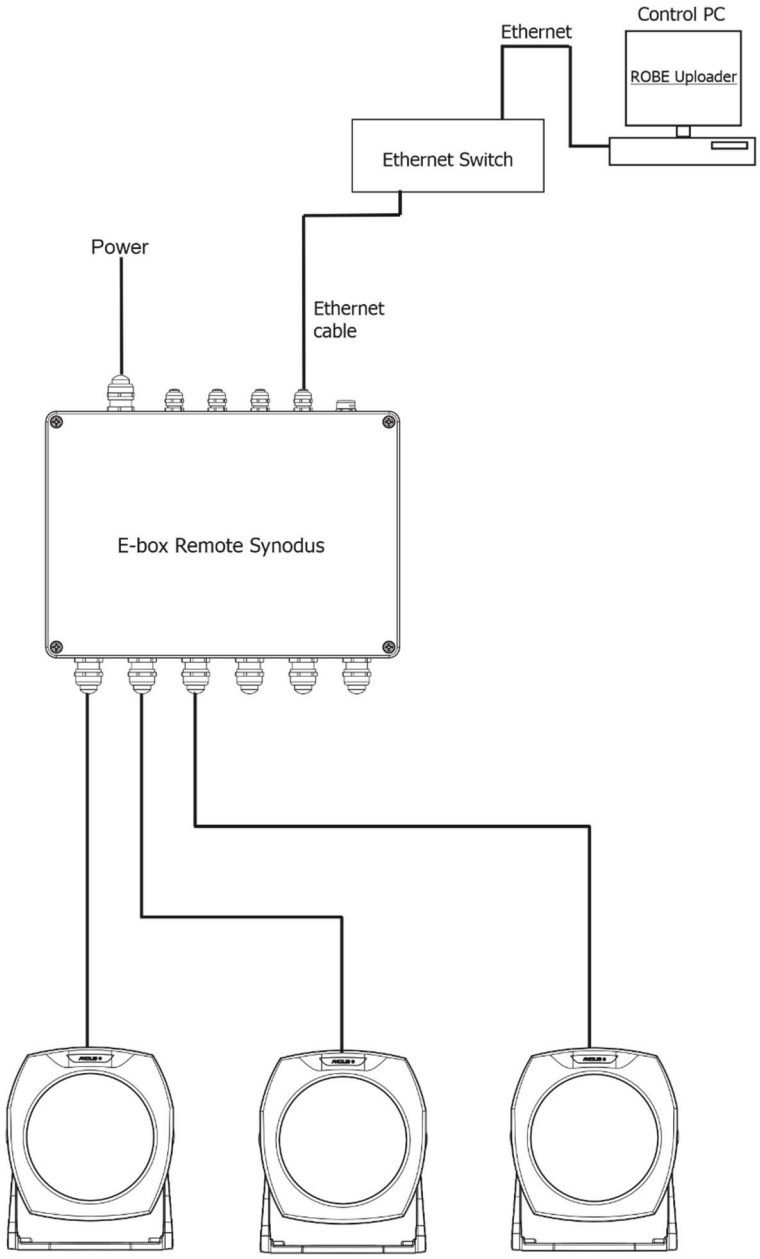
Option **"Standard"** should be selected from the menu "E-box mode".
The E-box Remote Synodus will be updated including connected LED modules. Only E-box Remote Synodus will be shown in the ROBE Uploader. You have to use the file EminereEbox.lib in the ROBE Uploader for this operating mode.

Note: File EminereEbox.lib includes software for E-box Daisy/Star/Lite, E-box Remote, E-box Remote Synodus, Emineres, Emineres UV, Emineres Remote, Emineres Remote UV and Calummas XS.

Example for DMX connection and the Robe Universal Interface



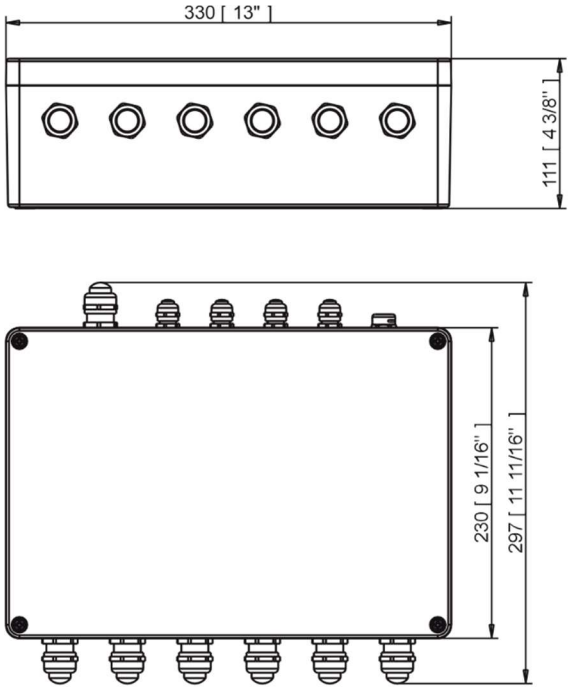
Example for Ethernet connection

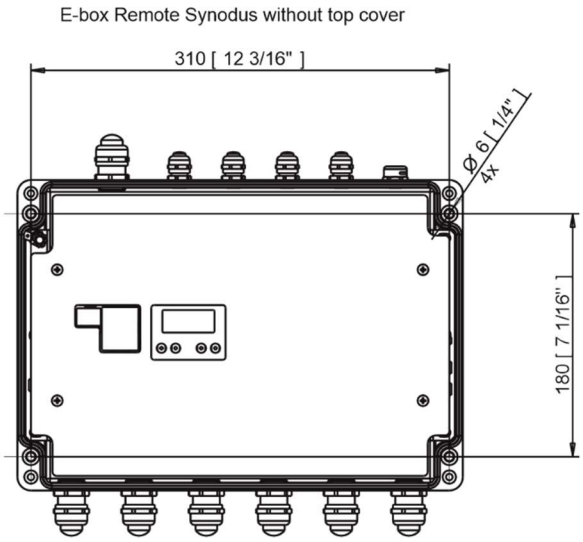


9.Technical specifications

Input voltage	120-277 V AC; 277V AC
Frequency	50/60Hz
Power consumption	660W
Inrush Current	COLD START 70A (twidth=1000µ s measured at 50% Ipeak) at 230VAC; Per NEMA 410
Fuse 1 at RB4120	T0.5A/500V AC
Fuse 1 at RB4132	T10A/500V AC
LED output	
Number of outputs	6
Voltage	24V DC
Max. output current	1000 mA (per LED colour branch)
Output power	100W max. per output
Total output power	600W max.
Control	2-row LCD display & 4 buttons
Supported protocols	USITT DMX 512, RDM, ArtNet, MA Net, MA Net2, sACN
Connection	
Power IN	terminal block
Ethernet IN/OUT	terminal blocks
DMX IN/OUT	terminal blocks
LED Outputs	terminal blocks
Operating ambient temperature range	-20/+40°C (-4°F / +104°F)
Cooling System	convection
Protection factor	IP66 (CE), Suitable for Wet Locations (US)
IK Rating	IK10
Weight	7.3 kg (16.1 lbs)

Dimensions
mm [inch]





Included items

- 1 x E-box Remote Synodus
- 1 x Reducing seal (P/N 13051388)
- 1 x User manual

9. 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.

10. Change Log

This section summarizes changes in the user manual.

Version of the manual	Date of issue	Description of changes
1.1	21/01/2026	Software upgrade changed

Made in CZECH REPUBLIC by ROBE LIGHTING s.r.o. Palackeho 416/20 CZ 75701 Valasske Mezirici

DMX protocol for Synodus - All sizes

Version: 1.0 (16 modes in total)

Mode/Channels 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 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

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

All Specifications subject to change without notice

DMX protocol for Synodus - All sizes

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