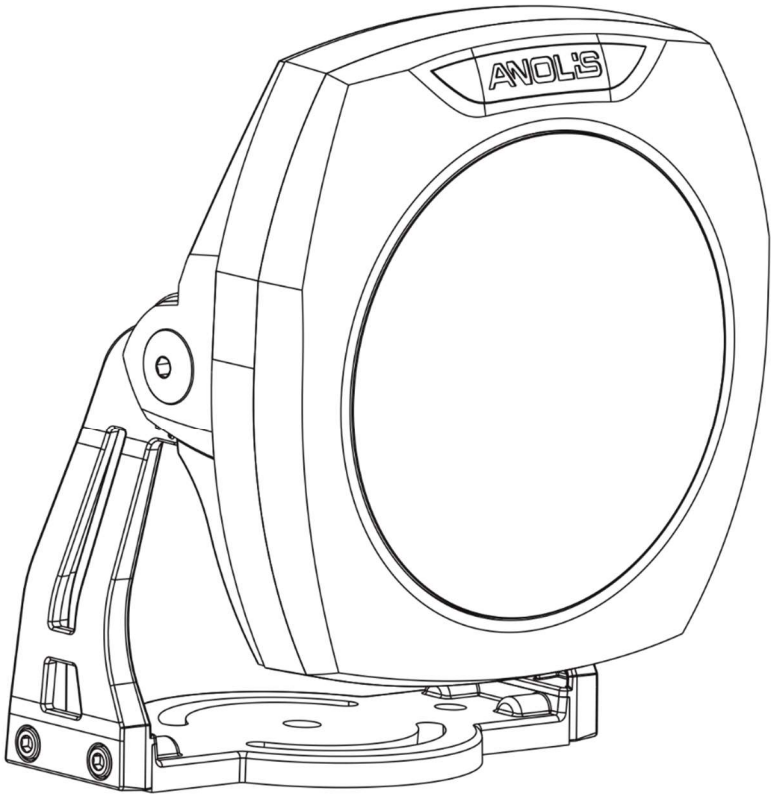
Anolis
A ROBE Business

Synodus™ M



QR code for user manual

USER MANUAL

Version 1.1 CE

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FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY
BEFORE POWERING OR INSTALLING YOUR Synodus M !
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

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

Always disconnect the device from power before servicing or installing it.

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

Do not allow anything to lie on the device.

Do not install the device near the naked flames.

Do not install the device near high inflammable liquids or materials.

Avoid using the device in locations subject to possible impacts.

The device is suitable for underwater installation up to depth of 10 m.

If the device is installed in in water, the water must not turn to ice.

Make sure the power cable of the device is not damaged by sharp edges.

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.

Provide advance notice that strobe lighting is in use.
Sensitive persons may suffer an epileptic shock.

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

The product (covers and cable) 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.

Warning for device with Harsh Environment Finish (HEF):
Handle with care!
Avoid any damage to the painted surface.
Damaging the paint may result in corrosion and loss of warranty.

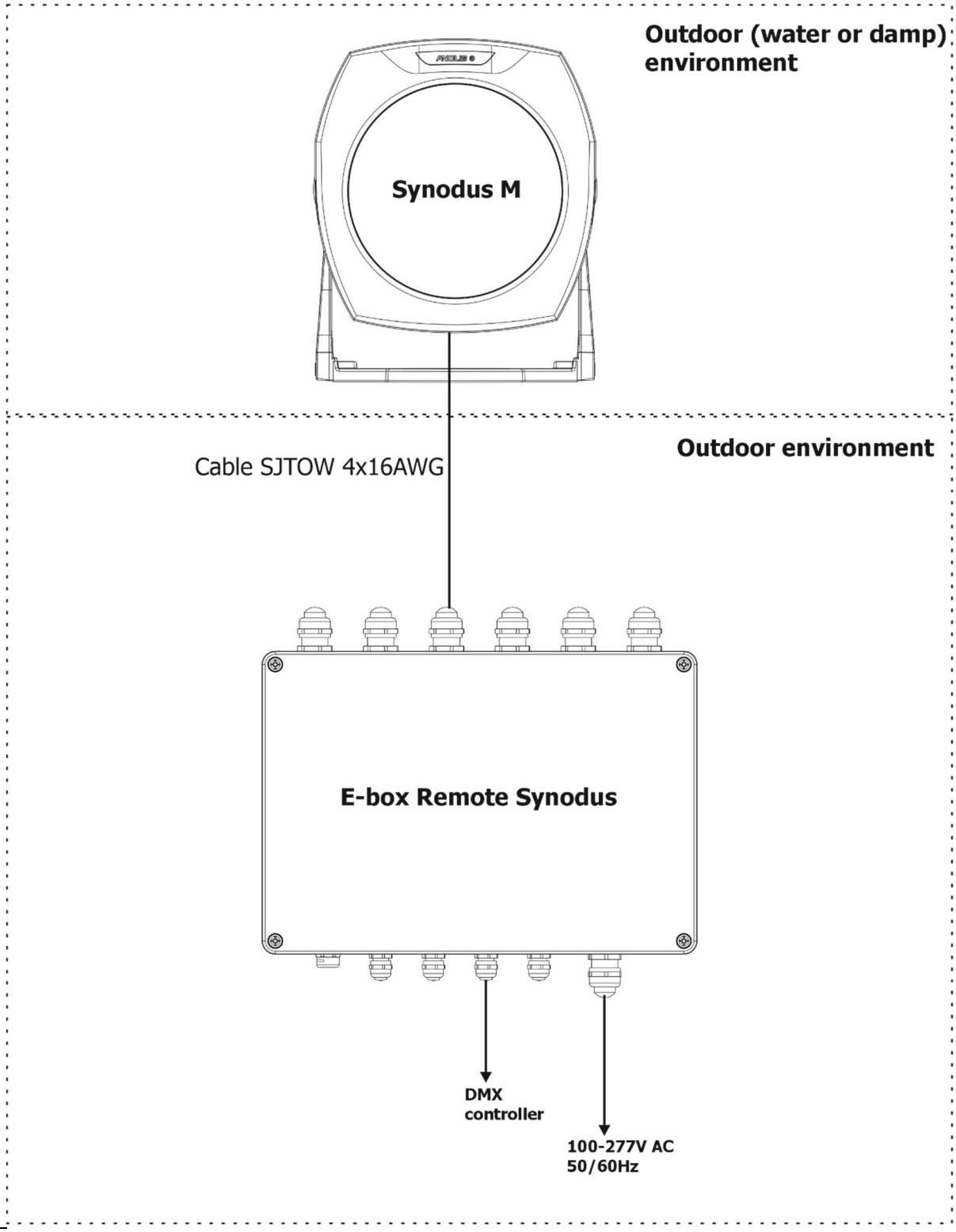
Potential air bubbles streaming from either the screw heads or the seam between the body and the LED face after immersing the device into water does not influence function of the device and does not subject to complaint.

2. Control and connection

The Synodus should be connected to the E-Box Remote Synodus via power cable.

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

Example of connection with E-box Remote Synodus.



The Synodus is equipped with power/data cable (open ended) for connection to the E-Box Remote Synodus.

Power/data cable SJTOW 4x16AWG (P/N 13053831) connection

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

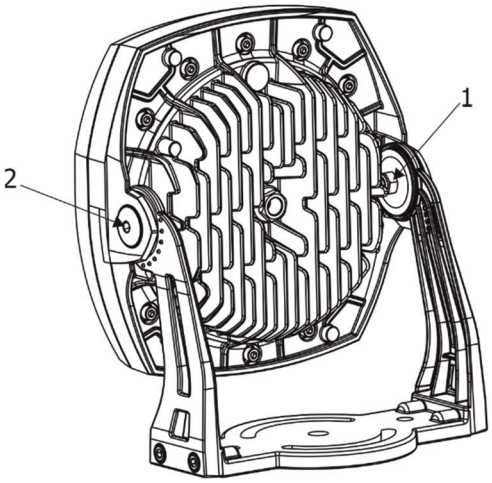
Max. distance between the E-box Remote Synodus and the Synodus depends on operating mode.

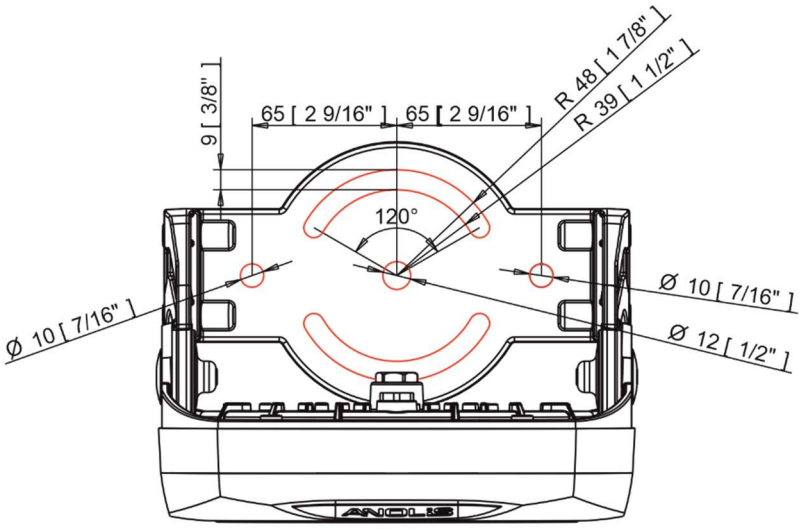
Minimum Mode	Medium Mode	Maximum Mode
100 m	70 m	55 m

To set desired operating mode, use the software RDM manager or REAP (ROBE Ethernet Acces Portal).

3. Mounting

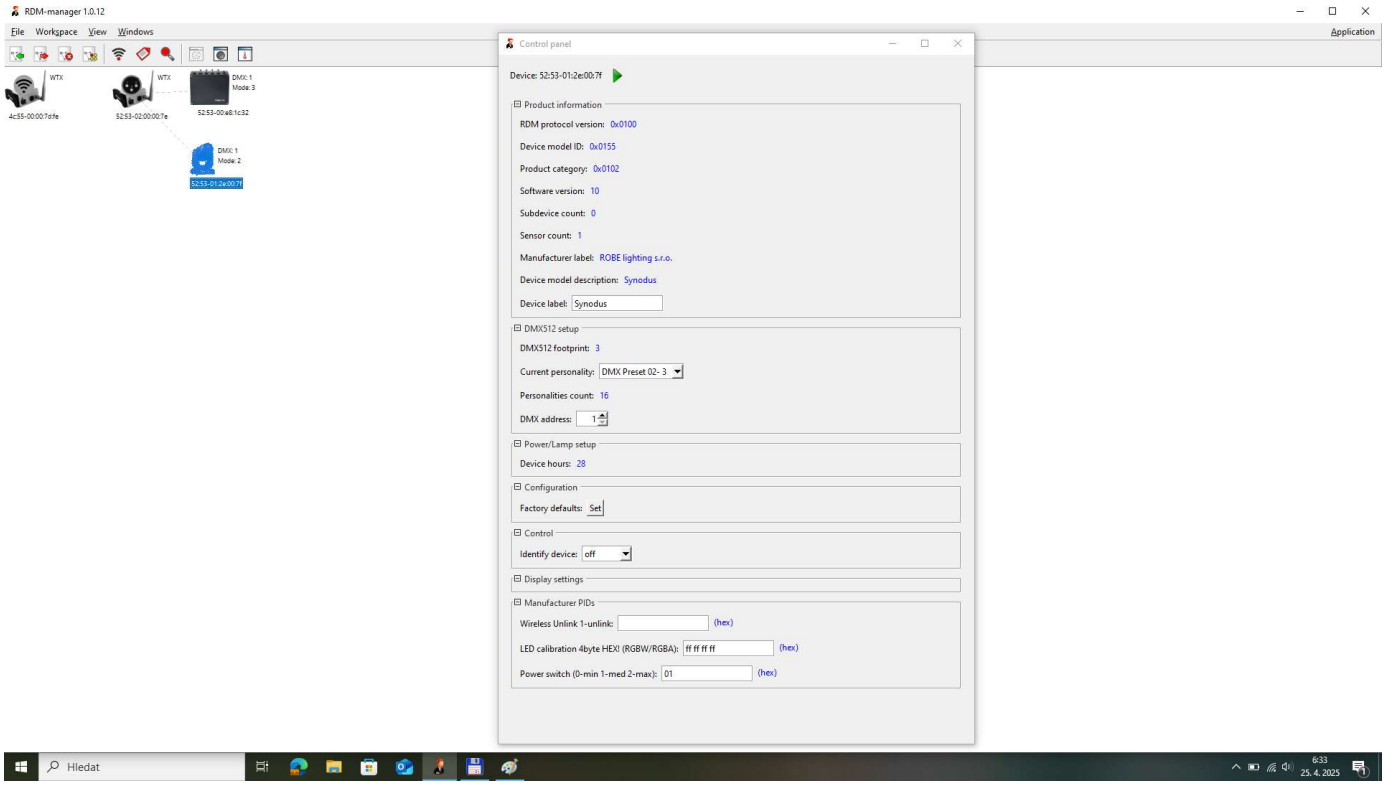
The Synodus can be arranged in any position orientation.
The LED module body is mounted on a bronze bracket for a “tilt” adjustment. Use a spanner no.13 for nuts (1) and Allen key no.6 for screws (2) to adjust desired tilt position of the LED module.
For fastening the Synodus to the flat non-flammable surface use either three holes or two semicircle slots in the bronze bracket which allow fine adjusting the Synodus in a "pan" direction.





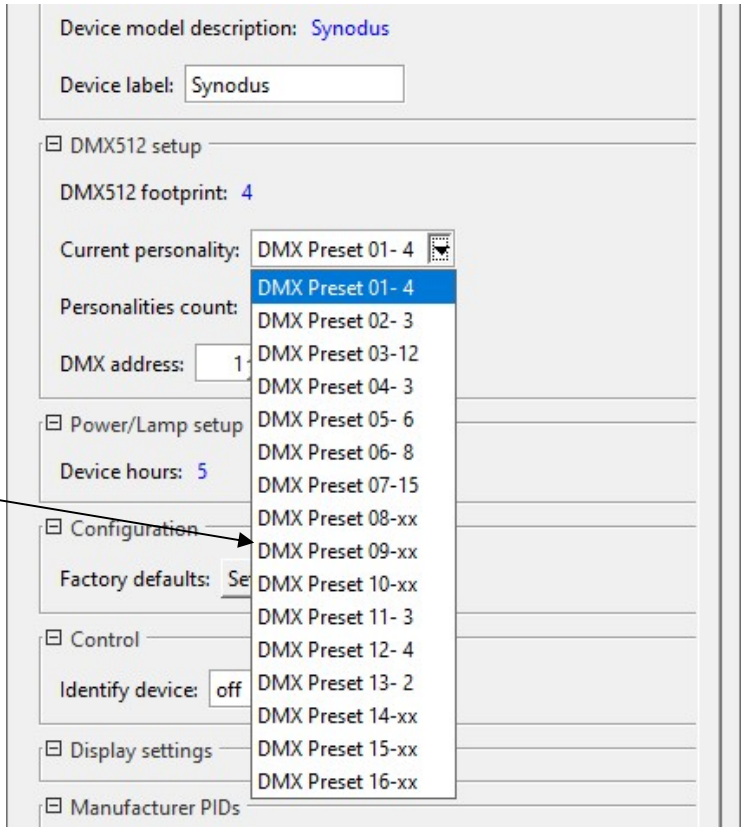
4. Example of Control panel in RDM manager

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



Note:

If some DMX Preset shows xx instead of number of channels, it means that DMX preset is reserved for future using (e.g. DMX Presets 8-10).



Detail of the control panel

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).

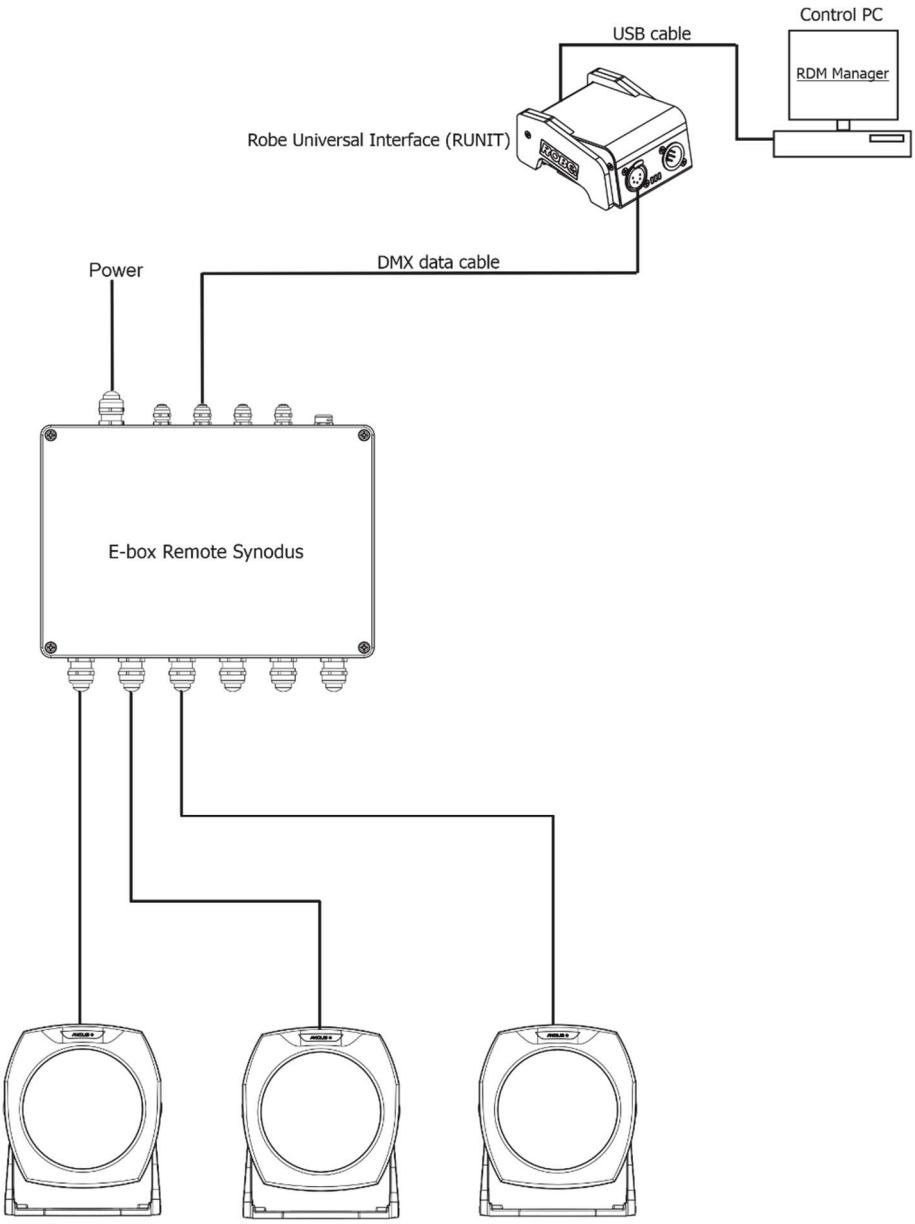
Warning!

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:

00- Minimum mode
01- Medium mode
02- Maximum mode

Example for RDM manager connection.



5. Software update

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

The Synodus has to be connected to the E-box Remote Synodus. For more information please see the E-box Remote Synodus user manual.

6. Technical specifications

Power supply

- Input voltage: 24 V DC
- Max. power consumption (without connected power/data cable): 23.5W (Minimum mode)
  49.4W (Medium mode)
  73W (Maximum mode)

Optical

- Light source: 6 high power LEDs
- Colour variants: RGBW (W - 6500 K), RGBA, PW (W - 3000K)
- Beam angle: 9°, 15°, 25°, 30°, 45°, 65°, 100°,
  10° x 30°, 30° x 10°, 10° x 60°, 60° x 10°, 15° x 45°, 45° x 15°, 15° x 90°, 90° x 15°, 30°x 60°; 60°x 30°, 30°x 90°, 90°x30°
- Projected Lumen Maintenance: L90B10 >90.000 hrs, Ta = 25°C / 77°F

Compatible driver

- E-box Remote Synodus

Mounting method

- Via yoke with mounting apertures

Housing

- Marine bronze
- Tempered glass

Cooling system

- Convection

Max. total heat dissipation

- 240 BTU/h (at maximum mode)

Protection factor

- CE: IP 68 10m rating
- US: Maximum depth of 10 m

Impact rating

- IK10

Operating ambient temperature range

- +-1°C /+45°C (+34°F /+113°F)

Operating temperature

- +65°C @ ambient +45°C (149°F @ambient 113°F)

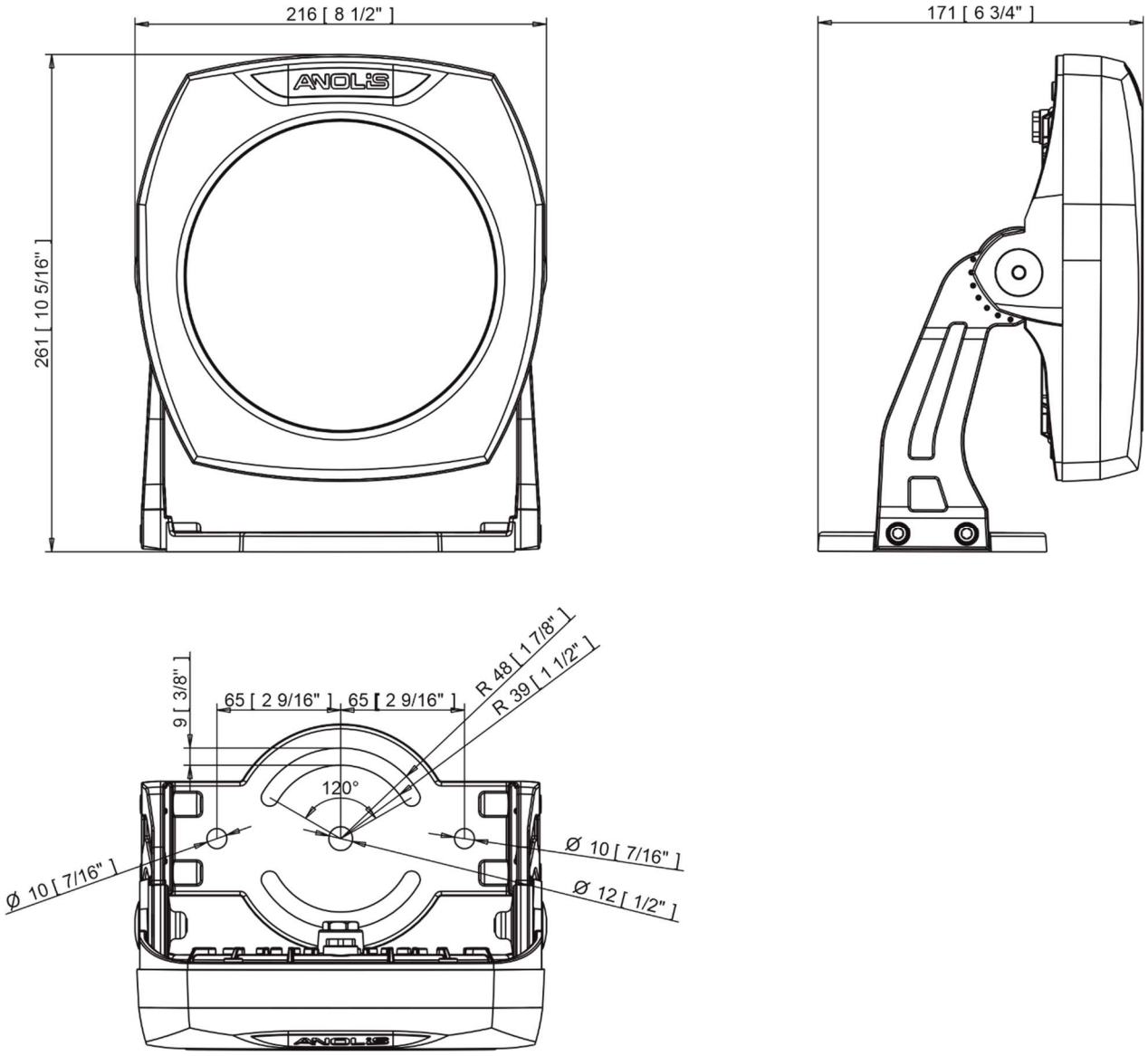
Connection

- Via E-box Remote Synodus
  Power/data cable: cable SJTOW 4x16AWG (P/N 13053831), open ended, custom length

Weight

- 7.42 kg (16.36 lbs)

Dimensions (All dimensions in mm [inch])



Included items

- 1 x Synodus
- 1 x User manual

Optional accessories

- E-box Remote Synodus (P/N 10069703)

7. Cleaning and maintenance

Disconnect from power before starting any maintenance 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 manual	Date of issue	Description of changes
1.1	26/01/2026	RDM manager-print screens added

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			
11	***12***	***13***	***14-16***
3	4	2	Reserved

TW Modes: Mode 11- White selection + Dimmer, Mode 12- WW + CW

PW Mode: Mode 13- Dimmer

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