

QR code for user manual



USER MANUAL

Table of contents

1. Attention	
2. Fixture exterior view	
3. Installation	∠
3.1. DMX and DALI address setting and control	g
3.2 0-10V control	10
4. RDM	11
5. DMX protocols	12
6. Technical specifications	14
7. Cleaning and maintenance	
7.1 Software update	16
7.2 Disposing of the product	18

1. Attention

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

The unit was designed for indoor use only.

Do not install the unit near highly inflammable liquids or materials.

Do not allow anything to rest on the unit.

Do not install the unit near an open flame.

Do not install the unit in dirty, dusty or badly ventilated location.

Avoid looking directly into the light beam at close range!

A ceiling (structure) intended for installation of the unit(s) must safely hold at least 5 times the weight of the unit(s) fastened on it.

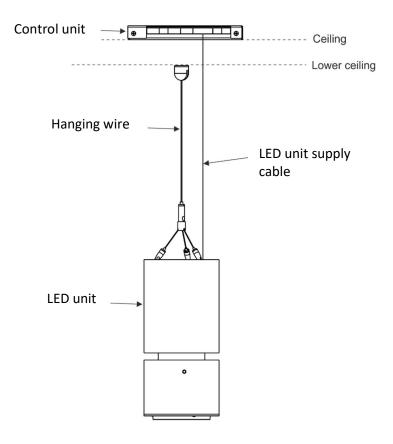
Immunity of the equipment is designed for electromagnetic environments E1, E2, E3 according to the standard EN55103-2 ed.2 Electromagnetic compatibility. Product family standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use. Part 2: Immunity.

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.

2. Fixture exterior view



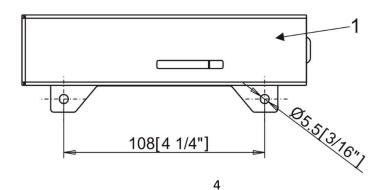
3. Installation

The Ambiane HP111 Pendant Remote must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulations.

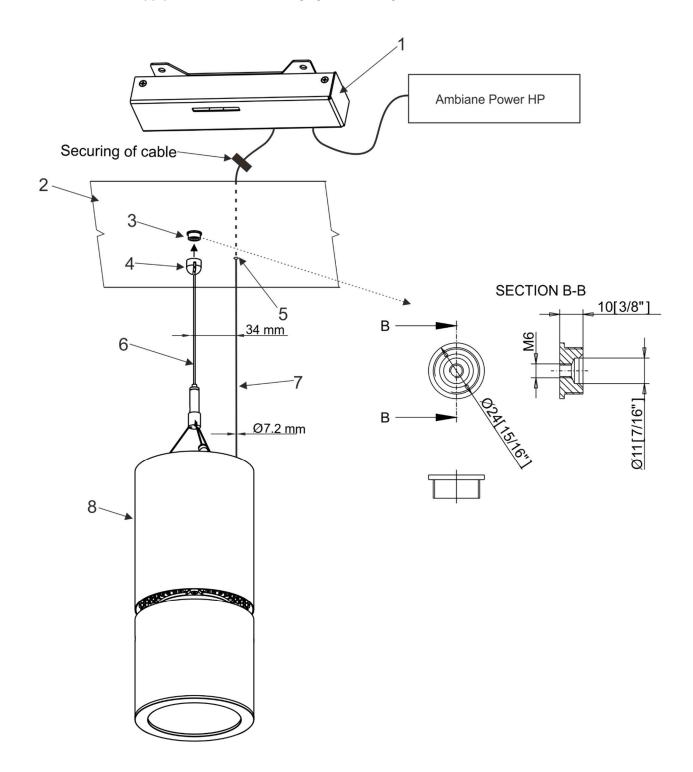
Always switch off power supply of the control unit before connecting or disconnecting the control unit or the light unit.

The lower ceiling (or another structure) intended for installation of the Ambiane(s) HP111 Pendant Remote must safely hold at least 5 times weight of the Ambiane(s) HP111 Pendant Remote placed on it.

1. Fasten the control unit (1) on the ceiling by means of two holes in the housing of the control unit.

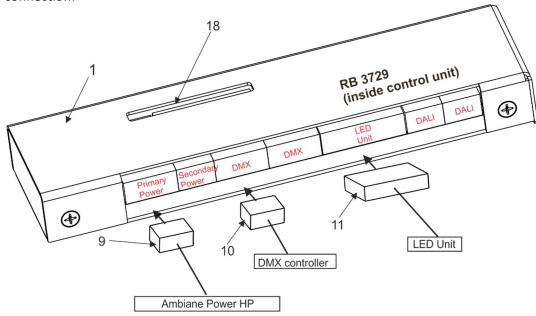


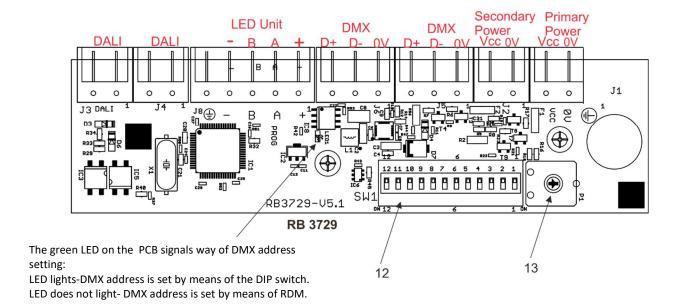
- 2. Fasten the ceiling plate M6i (3) to the lower ceiling.
- 3. Screw the spherical cap (4) with the hanging wire (6) to the ceiling plate M6i (3).
- 4. Drill the hole (diameter of 8mm) in the lower ceiling for the LED unit supply cable (7). If you wish to have the LED unit supply cable (7) parallel with the hanging wire (6), the distance between the hanging wire and the LED unit supply cable should be 34 mm.
- 5. Secure the LED unit supply cable (7) above ceiling against loosing from the control unit (1).



- 7. Install the terminal block (10) on the DMX cable and connect it to the PCB RB 3729 of the control unit (1).
- 8. Install the terminal block (11) on the LED unit cable (7) and connect it to the to the PCB RB 3729 of the control unit (1).
- 9. Install another terminal blocks on cables according to requirements of current installation.

Example of connection:





Note: The trimmer (13) allows you to set a light intensity (for secondary power only). This trimmer is accessible by aperture (18) in the cover of the control unit (1).

LED unit connection

Connector	Connector +		В	-
Function	LEDs +	Data A	Data B	LEDs -
Colour of wire	Red	White	Blue	Black

Primary power connection

Connector	Vcc	0V
Function	Power +	Power -

Secondary power connection

Connector	Vcc	0V
Function	Power +	Power -

Recommended diameters of conductors with respect to distance between the Control unit and the power supply (e.g. Ambiane Power HP):

Distance/cable length	25 m 50 m		75 m	100 m
Diameters of conductors	0.5 mm ²	1 mm ²	1.5 mm ²	2 mm ²

DMX connection

Connector	onnector D+ D-		ov
Function	Data +	Data-	Data ground(shielding)

0-10V connection

Connector	D+	0V
Function	+10V	0V

DMX connectors are used for 0-10V control

The primary power input serves for a standard power (e.g. Ambiane Power HP).

The secondary power input serves for a backup power (in case that primary power failed).

If both power inputs are under voltage, the primary power has a priority and the secondary power is disabled. In case of primary power loss, the secondary power is enabled.

If the fixture is supplied via the secondary power, the light output of the fixture is a white colour (3200K) and its light intensity can be set by the trimmer (13) accessible by aperture (18) in the cover of the control unit (1).

10. Set the DIP switch (12) according to your operation mode. This DIP switch is accessible by aperture (18) in the cover of the control unit (1).

The fixture can be controlled by one of the following methods: DMX 512

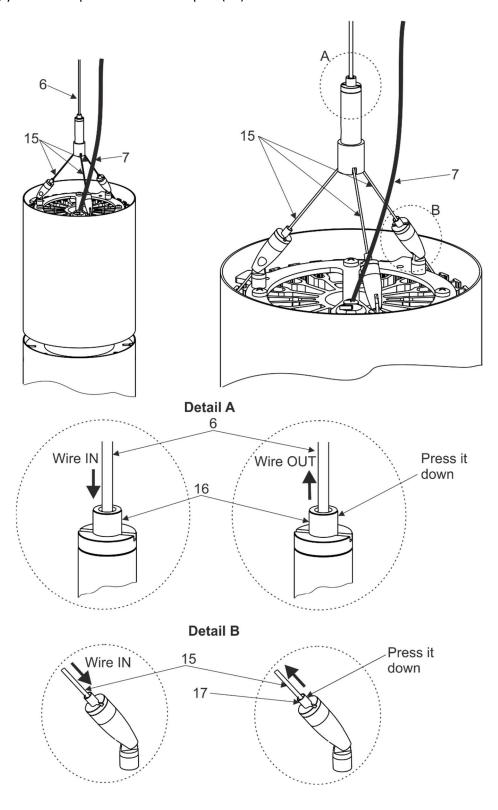
DALI

0-10V (PW or TD version only)

The fixture is equipped with two DMX and DALI connection blocks (on the PCB RB 3729) for easy connection to a DMX or DALI chain (In/Out method).

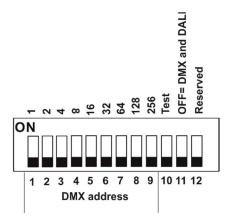
11. Set desired position of the LED unit by means of the hanging wire (6). If you need to pull the hanging wire (6) out of the wire lock, you have to press and hold the part (16) of the wire lock.

If you need to align the LED unit, use the three locks on the hanging wires (15). To pull the hanging wire (15) out of the wire lock, you have to press and hold the part (17) of the wire lock.



3.1. DMX and DALI address setting and control

The DIP switch on the control PCB (RB3729) allows you to set DMX address and run a test light.



DIP 10 - if it is switched to ON=test light (the fixture lights at 3200K (for RGBW and TW version))
DIP 11 - has to be switched to OFF position to receive DMX 512 and DALI, position ON=0-10V control

Note: If DIP 11=OFF (fixture is controlled by DMX and DALI), the last coming command switches the fixture to the corresponding operation mode (DMX operation by a DMX command, DALI operation by a DALI command). E.g. the fixture stays in a DALI operation and last coming command is a DMX command which switches the fixture to DMX operation. Next command is a DALI command and switches the fixture to the DALI operation etc.

If you need the permanent DALI operation, you have to send a DALI command 8 to the fixture.

DMX control

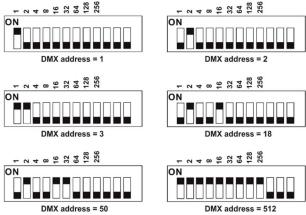
The DMX start address, is the first channel used to receive instructions from the DMX controller. The address may be any channel from 1 to 512. DMX address can be set either by DIP switch or by RDM. DMX address set by RDM overwrites address set by DIP switch and vice versa. The green LED on PCB signals way of DMX address setting:

LED lights-DMX address is set by means of the DIP switch.

LED does not light-DMX address is set by means of RDM.

The DIP 11 has to be set to OFF position.

Example of DMX addresses:



DALI control

Addressing of the fixture has to be made by means of an external DALI controller.

If you need to start the permanent DALI control of the fixture (fixture will not respond to DMX commands), the external DALI controller has to send activating command (8=ON).

If you need to stop the permanent DALI control of the fixture, the external DALI controller has to send deactivating command (0=OFF).

3.2 0-10V control

DIP 11 has to be set in ON position. 0-10V operation has priority to DALI and DMX commands. The option is applicable for the PW and TD version of the Ambiane HP111 Pendant Remote only.

4. RDM

This fixture supports RDM operation. RDM (Remote Device Management) is a bi-directional communication protocol for use in DM X512 control systems, it is the new open standard for DMX512 device configuration and status monitoring.

RDM allows you to set a DMX address, select DMX mode, readout software version of the fixture etc. It is also used for fixture software update by means of the Robe Uploader.

RDM model ID for the Ambiane HP111 Pendant Remote is: 0x0114.

Parameter ID	Discovery command	SET command	GET command
DISC_UNIQUE_BRANCH	*		
DISC_MUTE	*		
DISC_UN_MUTE	*		
DEVICE_INFO			*
SUPPORTED_PARAMETERS			*
SOFTWARE_VERSION_LABEL			*
DMX_START_ADDRESS		*	*
IDENTIFY_DEVICE		*	*
DEVICE_MODEL_DESCRIPTION			*
MANUFACTURER_LABEL			*
DEVICE_LABEL		*	*
DMX_PERSONALITY		*	*
DMX_PERSONALITY_DESCRIPTION			*
RESET_DEVICE		*	
SENSOR_VALUE		*	*
SENSOR_DEFINITION			*
SLOT_INFO			*
SLOT_DESCRIPTION			*
DEFAULT_SLOT_VALUE			*
PARAMETER_DESCRIPTION			*

5. DMX protocols

Variant RGBW, version 1.1

Mode 1 Channel	Mode 2 Channel	Mode 3 Channel	Mode 4 Channel	Mode 5 Channel	DMX value	Function	Type of control
1	1	1	_	1		Red	
-	_	_		_	0-255	Red LEDs saturation control (0>100%)	proportiona
-	-	2	-	-	0 =00	Red Fine	
		_			0-255	Red LEDs saturation control (0>100%)	proportiona
2	2	3	-	2		Green	
					0-255	Green LEDs saturation control (0-100%)	proportion
-	-	4	-	-		Green Fine	
					0-255	Green LEDs saturation control (0>100%)	proportion
3	3	5	-	3		Blue	
					0-255	Blue LEDs saturation control (0>100%)	proportion
-	-	6	-	-		Blue Fine	
					0-255	Blue LEDs saturation control (0>100%)	proportion
4	-	7	-	4		White	
					0-255	White LEDs saturation control (0>100%)	proportion
-	-	8	-	-		White Fine	proportion
			4		0-255	White LEDs saturation control (0>100%)	proportion
-	-	9	1			Green correction	step
					0	Uncorrected white	proportion
					1-127	Minus green> uncorrected white	step
					128 129-	Uncorrected white (128=default)	proportion
					255	Uncorrected white> Plus green	
_	_	10	2		233	Colour temperature correction (CTC)	
			_		0	No function (0=default)	step
					1-10	Tungsten dimming 2700 K	step
					11-20	Tungsten dimming 3200 K	step
					21-255	Colour temperature changing 2700 K> 6500 K	proportion
-	-	11	3	5		Dimmer	
					0-255	Light intensity coarse (0>100%)	proportion
-	-	12	-	6		Dimmer Fine	
					0-255	Light intensity fine (0>100%).	proportion

DMX mode has to be set by RDM.

Variant TW, version 1.2

Mode 1	Mode 2	Mode 3	Mode 4	DMX	Function	Type of
Channel	Channel	Channel	Channel	value		control
1	-	1	-		White colour selection	
				0-255	White from 2700K>4000K	proportional
-	1	-	1		Warm White	
				0-255	Warm white LEDs saturation control (0>100%)	proportional
-	2	-	2		Cool White	
				0-255	Cool white LEDs saturation control (0>100%)	proportional
2	3	2	3		Dimmer	
				0-255	Light intensity (0>100%)	proportional
-	-	3	4		Dimmer Fine	
				0-255	Light intensity fine (min>max)	proportional

Variant TD, PW version 1.1

Mode 1	Mode 2	DMX	Function	Type of
Channel	Channel	value		control
1	1		Dimmer	
		0-255	Light intensity coarse (0>100%)	proportional
-	2		Dimmer Fine	
		0-255	Light intensity (0>100%)	proportional

6. Technical specifications

Nominal input voltage: 48V DC
Input voltage range: 44-50V DC
Max. power consumption: 75W

Light source: High Power LED module

Beam angle: 20°, 40°,60°, 80°

Projected Lumen Maintenance: L90B10 >90.000 hrs, $Ta = 25^{\circ}C / 77^{\circ}F^{\circ}F$)

Colour Variants: RGBW (W - 2700K or 4000K), PureWhite, Tunable White, Tungsten

Dim

Colour Temperature of White: PW 2700 K or 4000K, TW 2700 - 4000K, TD 3200K

CRI: 90+

Control: DMX, DALI 2 , RDM, 0-10V

Settings/Addressing: DIP Switch, RDM

DMX channels (RGBW variant): 4 (Mode 1), 3 (Mode 2), 12 (Mode 3), 3 (Mode 4), 6 (Mode 5)

DMX channels (TW variant): 2 (Mode 1), 3 (Mode 2), 3 (Mode 3), 4 (Mode 4)

DMX channels (TD, PW variant): 2 (Mode 1), 2 (Mode 2)

Power supply (CE): Ambiane Power HP (48V/100W), Ambiane Power Rack
Power supply (US): Ambiane Power HP (48V/100W), Ambiane Power Rack US

Operating ambient temp. range: $-20 \,^{\circ}\text{C} / +40 \,^{\circ}\text{C} (-4 \,^{\circ}\text{F} / +104 \,^{\circ}\text{F})$

Operating Temperature (LED unit): +75 °C @ Ambient +40 °C (167 °F @ Ambient 104 °F)

Total heat dissipation: 191 BTU/h (calculated)

Cooling: convection

Housing: High Pressure Die-Cast Aluminium Body

Weight (without control unit):

Ambiane HP111 Pendant Remote 20° 2.6 kg/ 5.7 lbs Ambiane HP111 Pendant Remote 40° 3.1 kg/ 6.8 lbs Ambiane HP111 Pendant Remote 60° 2.5 kg/ 5.5 lbs Ambiane HP111 Pendant Remote 80° 2.5 kg/ 5.5 lbs

Mounting Method: Pendant with 1 adjustable hanging wire

IC rating:Non-IC ratedPower connectionConnectorsDMX connection:ConnectorsDALI connection:ConnectorsLED unit connection:Connector

Protection factor (CE): IP20

Protection factor (US): Dry location only

Dimensions

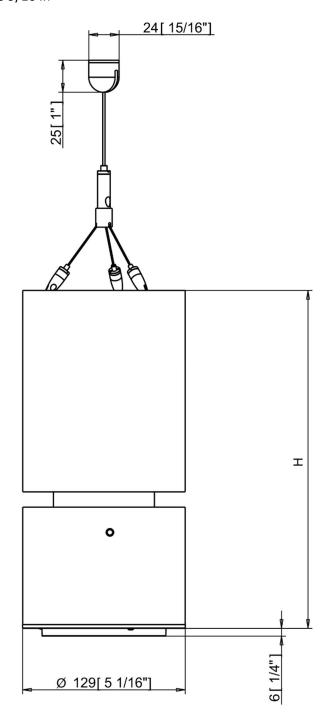
mm [inch]

Ambiane HP 20° H = 302 mm [11 7/8 in.]

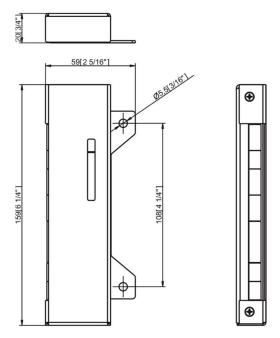
Ambiane HP 40° H = 298 mm [11 3/4 in.]

Ambiane HP 60° H = 285 mm [11 1/4 in.]

Ambiane HP 80° H = 268 mm [10 9/16 in



Control unit



Included items

- 1 x Ambiane HP111 Pendant Remote
- 1 x Control unit
- 1 x Set of cable connectors
- 1 x User manual

Optional accessories

Ambiane Power HP (MeanWell ELG-100-48-3Y) (P/N 10064073) Ambiane Power Rack (P/N 10063951), black colour Ambiane Power Rack US (P/N 10063873), black colour

7. Cleaning and maintenance

Disconnect from the mains before starting any maintenance work

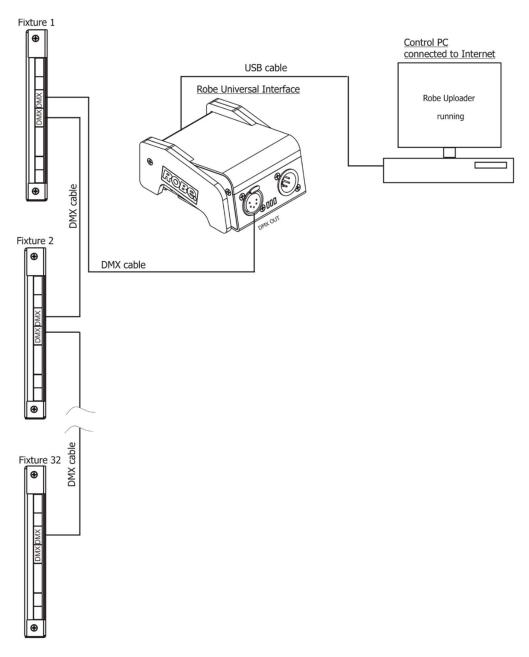
Keep the fixture clean, especially light source and the ribbed ribbed heat sink. Maintenance and service operations are only to be carried out by a qualified person. Should you need any spare parts, please use ROBE OEM parts.

7.1 Software update

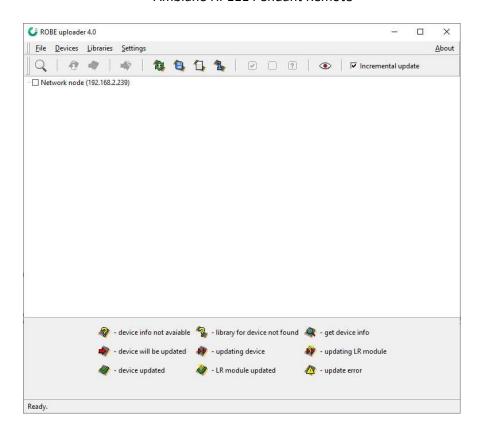
The fixture has to be connected to power during software update.

Software update by means of the Robe Uploader

The ROBE Uploader is a software for automatized software update of Robe and Anolis fixtures. It can take advantage of RDM support.



The fixtures have to be connected in a daisy-chain (max. 32 fixtures) and via the Robe Universal Interface/Robe Universal Interface WTX and a USB cable connected to the control PC with the Robe Uploader running. The fixtures have to be connected to power. The control PC should be connected to the Internet.



The Robe Uploader software and user manual is available at https://www.robe.cz/robe-uploader/

If you do the software update by means of the Robe Uploader, switching fixtures to the update mode (and from the update mode) is made automatically.

Note: The Robe Uploader software cannot be used if fixtures are connected by means of DALI connection.

7.2 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.

March 29, 2023
Copyright © 2022-2023 Robe Lighting - All rights reserved
All Specifications subject to change without notice
Made in CZECH REPUBLIC by ROBE LIGHTING s.r.o. Palackeho 416/20 CZ 75701 Valasske Mezirici