# <u>User manual</u>

# Ambiane RGBW

The unit generates colored light by means of high power LEDs. The product was designed for indoor use only.





### 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. Avoid looking directly into the LED light beam at close range! 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. Sufficient air accessing to the housing of the unit has to be ensured, there must not be any heat or anti-noise insulation within a 0.6m x 0.6m area around the unit (non-IC rated fixture). Resistance 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

standard for audio, video, audiovisual and entertainment lighting control apparatus for professional use. Part 2: Immunity.

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.



Suitable for fastening on non-flammable surfaces only



Unsuitable for covering by heat insulation material

Alvays switch off power suply of the unit before connecting or disconnecting the unit

## 2. Installation

- 1. Prepare a circular opening in the lower ceiling (1) as shown in the picture below.
- 2. Insert the Ambiane unit into the opening. Fasten the fixture by means of two spring fasteners (2) to the opening



To connect needed cables to the fixture, unscrew two screws (4) from the plastic cover (3) and chip needed plastic thin-walled covers (6) off in order to pass cables to the connection blocks (5).



The connection blocks (5) have the following wiring:



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

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 a trimmer.

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

DALI

The fixture is equipped with two DMX and DALI connection blocks for easy connection to DMX or DALI chain

(In/Out method).

<b>DMX</b> connection		connection	Powe	er connection					
	PCB	Function	PCB	Function					
	0V -	Shield	+	Power +					
	D+	Signal (+)	-	Power -					
	D-	Signal (-)							

# 3. DMX and DALI address setting and control

The DIP switch, located next to the connection blocks, allows you, run a test light and switch the fixture to the update mode in case of software update.



DIP 10 - if switched to ON=test light (the fixture lights at 3200K)

DIP 11 - has to be switched to OFF position to receive DMX 512 or DALI

DIP 12 - change from OFF to ON position switches the fixture to the update mode (switching to the update mode is not necessary If the Robe Uploader is used for fixture update).

#### 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 509. 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.

DIP 11 has to be set in OFF position.

Example of DMX addresses:



#### DALI control

Addressing of the fixture is made by means of an external DALI controller. The external DALI controller has to send activating command (8=ON) if you need to start the permanent control of the fixture (fixture will not respond to DMX commands) and deactivating command (0=OFF) to stop control of the fixture. DIP 11 has to be set in OFF position.

Note: If DIP 11=OFF (fixture is controlled by DMX or DALI), the first 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 coming DMX command 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.

# 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 and readout software version of the fixture.

## 5. Anti-glare ring installation

Insert the anti-glare ring (1) into the fixture until three locks (2) snap into slots (3).



# 6. Adapter ring installation

- 1.Remove both spring fasteners (2) by unscrewing the four screws M4x10 (1).
- 2. Slide the adapter ring (4) onto the housing of the fixture. Screw the new fasteners (3) on the housing. Use original screws M4x10 (1).



## 7. DMX protocol

Version 1.1

Mode 1 Channel	Mode 2 Channe	Mode 3 Channe	Value	Function	Type of control	
1	1	1	0-255	<b>Red</b> Red LEDs saturation control (0-100%)	proportional	
-	-	2	0-255	<b>Red Fine</b> Red LEDs saturation control from min>max.	proportional	
2	2	3	0-255	<b>Green</b> Green LEDs saturation control (0-100%)	proportional	
-	-	4	0-255	<b>Green Fine</b> Green LEDs saturation control from min>max.	proportional	
3	3	5	0-255	Blue Blue LEDs saturation control (0-100%)	proportional	
-	-	6	0-255	Blue Fine Blue LEDs saturation control from min>max.	proportional	
4	4	7	0-255	White White LEDs saturation control (0-100%)	proportional	
-	-	8	0-255	White Fine White LEDs saturation control from min>max.	proportional	
-	5	9	0-255	<b>Dimmer</b> Light intensity coarse 0%>100%	proportional	
-	6	10	0-255	<b>Dimmer Fine</b> Light intensity from min>max.	proportional	

### 8. Technical specifications

Input voltage: Protection class: Max. power consumption:

Beam angle: Control: DMX channels: Typical Lumen maintenance: Led life expectancy: Operating ambient temp. range: Operating temperature: Total heat dissipation: Cooling : Total heat dissipation: Housing: Weight: Installation method: IC rating: Power/DMX/DALI connection:

Max. distance between Ambiane and ArcPower for Ambiane: Protection factor:

24V DC CE: (Class III )

ETL: Class 2 or LVLE 40W 67°, 80°, with anti-glare ring DMX, DALI, RDM compatible 4 (Mode 1), 6 (Mode 2), 10 (Mode 3) 70%@ 50,000 hours minimum 50,000 hours -20°C/+45°C (-4F/+113F) 75°C @ Ambient +35°C (167°F @ Ambient +95°F) 136 BTU/h (calculated) convection 136 BTU/h (calculated) alluminium 1.8 kg via two spring fasteners non-IC rated screw connection block Degson DG306-5.0-02P (Wire range: 22-14AWG(UL), 1.5mm<sup>2</sup>(IEC))

1m (for 2 x 18AWG cable) IP 20 (without diffuser glass), IP20/IP54 (with Diffuser Glass) Ambiane without Diffuser Glass







# 9. Optional Accessories

ArcPower for Ambiane Anti-Glare Ring (P/N 10980386) Diffuser Glass Frosted (P/N 10980387) Adapter Ring (235-255mm) (P/N 10980388)

## 10. Maintenance

Keep the fixture clean, especially light source and the ribbed housing.

**11. Dimensions** mm [inch]



#### 12. Software update

Software update by means of the DSU file.



The following items are required in order to update software:

- PC running Windows or Linux or macOS
- DSU file
- Flash cable RS232/DMX (P/N13050624) or the Robe Universal Interface / Robe Universal interface WTX.

To update software in the fixture:

- DSU file is available from the ROBE web site at https://www.robe.cz/architectural/download/#software-updates. File with extension zip is intended for Windows (used and tested from XP to W10 on 32/64bit systems). File with extension tbz is intended for Linux (used and tested on Debian and Ubuntu 32/64bit). File with extension dmg is intended for macOS (used and tested on OSX up to Sierra) XQuartz required, install it from https://www.xquartz.org/ Save the download file to a folder on your computer.
- In case that you use windows, extract files in the zip file (e.g. DSU\_Ambiane\_18051040.zip)
- 2. Switch the fixture off and disconnect the fixture from DMX controller (If you use DALI control, switch off the DALI controller).
- 3. If you use the flash cable RS232/DMX, connect a serial port of your computer with DMX input of the fixture by means of this cable (probably you will need some USB to RS 232 converter if your computer has USB ports only).

If you use the Robe Universal Interface, connect a USB port of your computer with the Robe Universal Interface by means of the USB cable and DMX input of the fixture with the DMX output of the Robe Universal Interface via a DMX cable.

- 4. Switch the fixture on and switch it to the update mode (svitch the DIP 12 from OFF to ON position). We recommend to cancel all running programs on your computer before starting the software uploader.
- 5. Double-click the software uploader file (e.g. DSU\_Ambiane\_18051040.exe) in the extracted files. The Software Uploader program will start running.

🔷 Ambiane Software Uploader v4.0 – 🗆 🗙							
<u>F</u> ile					<u>H</u> elp		
ANOLIS	Clear Box	Info Box:					
COM Ports:	I						
COM 1							
C COM 2							
C COM 3							
C COM 4							
C Robe universal interface							
Connect							
Status: Disconected							
🔽 Incremental Update							
💐 Start Uploading							
Ready.							

- 6. Select correct "COM " number if you use a Flash cable RS232/DMX or select "Robe Universal Interface " if you use the Robe Universal Interface/Robe Universal Interface WTX and then click on the "Connect" button.
- 7. If the connection is OK, click the "Start Uploading" button to start software uploading. It will take several minutes to perform software update.

If the option "Incremental Update" is not checked, all processors will be updated (including processors with the same software version).

If you wish to update only processors with new version of software, check the "Incremental Update box".

Avoid interrupting the process. Update status is being displayed in the "Info Box" window. When the update is finished, the line with the text "Fixture is successfully updated" will appear in this window.

8. Switch the fixture off and set the DIP 12 to OFF position.

In case upload process is interrupted (e.g. power loss), the fixture stays in "Updating mode" and you will have to repeat the software update again.

#### Software update by means of the Robe Uploader

Another way, how to update software in the fixtures (especially large installation of fixtures) is to use the ROBE Uploader. It is a software for automatized software update of Robe and Anolis fixtures. It can take advantage of RDM support and Ethernet ports if present in the units.



The fixtures has 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 control PC should be connected to the Internet.



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

Note:

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, without need to switch the DIP 12 to ON position.

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