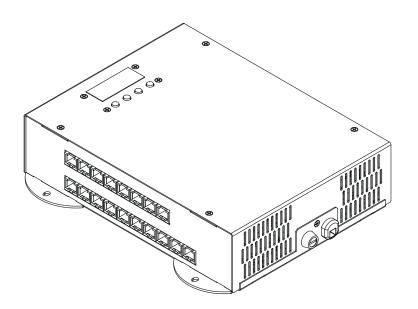


# ArcPower 16x6



**USER MANUAL** 

## **ArcPower 16x6**

## **Table of contents**

1. Safety instructions	
2. Operating determinations	3
3.Description of the ArcPower 16x6	4
4.Installation	
4.1.Connection to the mains:	
4.2.Mounting the ArcPower 16x6	5
4.3.Conection cables	
5 DMX operation	6
5.1 Single ArcPower 16x6 installation	
5.2 Multiple ArcPower 16x6 installation	
6.ArcPower 16x6 - Control menu map	8
7.ArcPower 16x6 - DMX protocol, version 1.1	9
8.Control board	
8.1 Addressing the ArcPower 16x6	
8.2 Program editing	
8.3 Manual mode	
8.4 Test sequences	
8.5 Stand-alone mode	
8.6 Special functions	17
9.Technical Specifications:	19
10. Replacing the fuse	20

## CAUTION! Unplug mains lead before opening the housing!

## FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOU INITIAL START - UP!

### 1. Safety instructions

Every person involved with installation and maintenance of this product has to:

- be qualified
- follow the instructions of this manual

#### **CAUTION!**

Be careful with your operations. With a high voltage you can suffer a dangerous electric shock when touching the wires inside the unit!

This product has left our premises in absolutely perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this manual.

To prevent from danger of accident ,the device has to be fixed on flat, non-flammable surface in compliance with the installing instruction included in this manual.

#### **Important:**

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the product.

Always ground the unit.

The electric connection, repairs and servicing must be carried out by a qualified employee.

Do not connect this unit to a dimmer pack.

Use a source of AC power that complies with local building and electrical rules.AC power has to have both overload and short circuit protection

## 2. Operating determinations

This product was designed for indoor use only.

If the unit has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your unit. Leave the unit switched off until it has reached room temperature.

Avoid brute force when installing or operating the unit.

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

Only operate the unit after having checked that the housing is firmly closed and all screws are tightly fas-

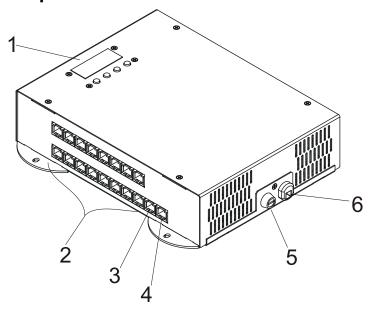
The maximum ambient temperature 40° C must never be exceeded.

Operate the unit only after having familiarized with its functions. Do not permit operation by persons not qualified for operating the unit. Most damages are the result of unprofessional operation!

Please use the original packaging if the product is to be transported.

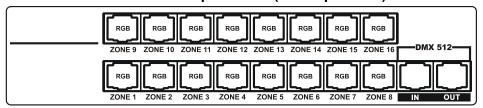
Please consider that unauthorized modifications on the unit are forbidden due to safety reasons!

## 3. Description of the ArcPower 16x6

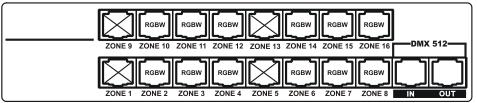


- 1 Control board
- 2 LED output zones
- 3 DMX Input
- 4 DMX Output
- 5 Fuse holder
- 6 Power cord

#### LED output zones (RGB operation)



#### LED output zones (RGBW operation)



#### **DMX Input, Output**

RJ45 socket

Front view of the socket:



Pin 1: Not connected

**Pin 5:** +5V Pin 6: Data + Pin 2: Not connected

Pin 3: Not connected

Pin 4: Not connected Pin 8: GND

Pin 7: Data -

#### **LED** module Input

RJ45 socket

Front view of the socket:



Pin 1: Red LED +

Pin 5: Red LED -

Pin 2: Green LED +

Pin 6: Green LED -

Pin 3: Blue LED +

Pin 7: Blue LED -

Pin 4: White LED +

Pin 8: White LED -

#### 4.Installation

#### 4.1. Connection to the mains:

The ArcPower 16x6 is equipped with auto-switching power supply that automatically adjusts to any 50/60Hz AC power source from 100-240 Volts.

Carefully prepare the end of the the supply cord and fit a suitable plug. A 3-prong grounding-type plug must be installed following the manufacturer's instructions. The earth has to be connected!

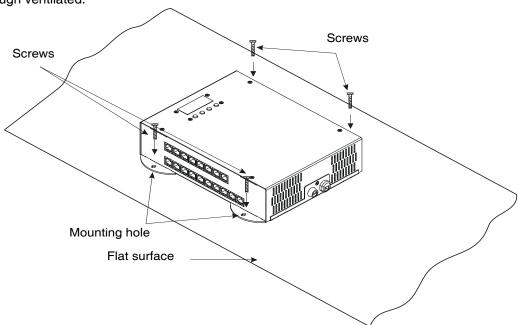
Cord plug connection:

Cable	Pin	International
Brown	Live	L
Light blue	Neutral	N
Yellow/Green	Earth	

This device falls under protection class I.Therefore the ArcPower 16x6 has to be connected to a mains socket outlet with a protective earthing connection.

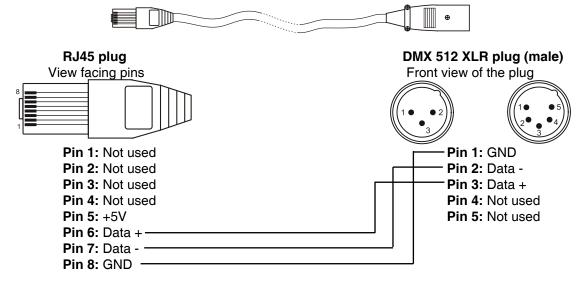
## 4.2. Mounting the ArcPower 16x6

The ArcPower 16x6 should be be placed on a non-flammable flat surface in any orientation and fixed by the four screws. There are four mounting holes of a diameter 5 mm in housing of the driver. Ensure that instalation place is enough ventilated.

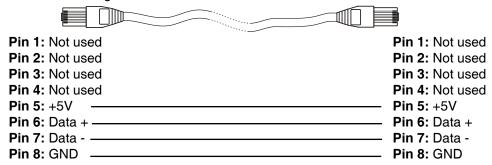


#### 4.3. Conection cables

**1.**The adapter cable RJ45/XLR connects the ArcPower 16x6 to the DMX controller.If your DMX controller has RJ45 socket for DMX output, use RJ45 patch cable for connection with the ArcPower 16x6.



**2.**RJ45 patch cables category 5 that connect the ArcPower 16x6 each other are wired 1:1,that is,pins with the same numbers are connected together.



## 5 DMX operation

- 1. Unplug from the mains before installation.
- 2.Connect the LED modules to the fixture according to the operation (RGB or RGBW).
- 3. Connect DMX controller to the fixture
- 4. Connect the fixture to the mains
- 5.Set the DMX address on the control board of the fixture (see chapter "Control board").
- 6.Run internal calibration of the fixture (menu path: SPEC-->CALi--->COMP.)

#### Warning!

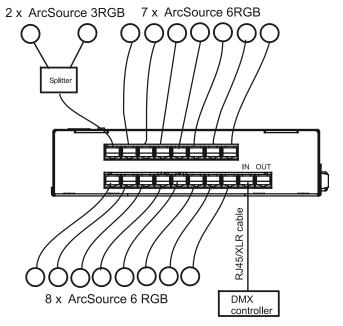
Accidental connection DMX 512 Input/Output to non-DMX 512 device (e.g. Ethernet network Hub) can damage the ArcPower 16x6.

Maximum total cable length between Arcpower 16x6 and all connected LED modules is 80 metres.

## 5.1 Single ArcPower 16x6 installation

#### 1. RGB operation

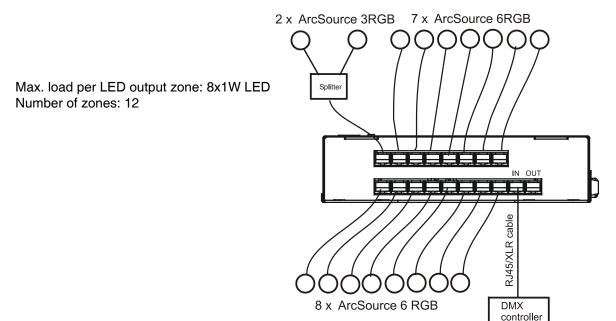
Max. load per LED output zone: 6x1W LED Number of zones: 16



#### 2. RGBW operation

The ArcPower 16x6 allows to operate 12 RGBW outputs (zones) and it is not necessary to change its menu setting. You can choose Mode1 for RGBW (up to DMX 48 channels) or Mode2 including the shutter (DMX=49) and dimmer (DMX=50) channel - see DMX protocol for RGBW operation.

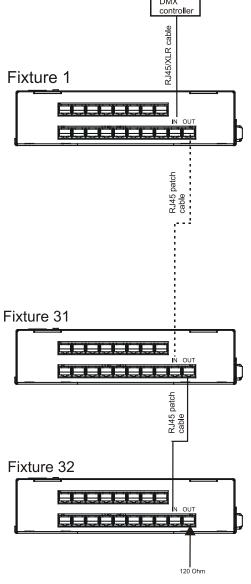
Note: Only 12 zones of the ArcPower 16x6 can be used for RGBW operation - see chapter 3 "Description of the ArcPower 16x6".



## 5.2 Multiple ArcPower 16x6 installation

Connect the DMX output of the first ArcPower 16x6 with the DMX input of the next ArcPower 16x6. Always connect one output with the input of the next ArcPower 16x6 until all fixtures are connected. In this way, up to 32 fixtures can be chained together.

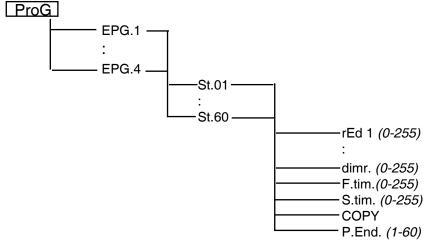
At the last ArcPower 16x6 the data link has to be terminated with a terminator. A termination plug is simply a RJ45 connector with a 120  $\Omega$  resistor between pins Data (–) and Data (+). Plug terminator in the DMX output of the last ArcPower 16x6.

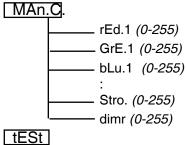


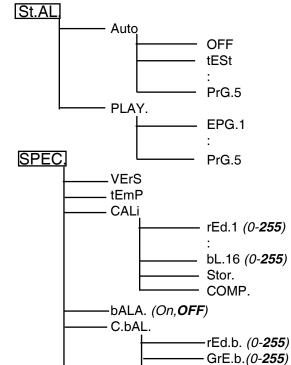
## 6.ArcPower 16x6 - Control menu map

### Default settings=Bold print

A001 (001-464)







-CHAr

dM.Pr.

i.bLi (**On**,Off) dFSE (*no*, *YES*) -uPd (*no*, *YES*)

bLu.b. (0-**255**)

**EYE** LinE

- **Mod.1** - Mod.2

## 7.ArcPower 16x6 - DMX protocol, version 1.1

#### **RGB** operation

Mode 1	Mode 2	V-1-	From all	Type of con-			
Channel	Value I Channel		Function	trol			
			ZONE 1	•			
1	1	0-255	Red LED 1 Red LED saturation control (0-100%)	proportional			
2	2	0-255	Green LED 1 Green LED saturation control (0-100%) proportio				
3	3 Blue LED 1 Blue LED saturation control (0-100%)						
			ZONE 2				
4	4	0-255	Red LED 2 Red LED saturation control (0-100%)	proportional			
5	5	0-255	Green LED 2 Green LED saturation control (0-100%)	proportional			
6	6	0-255	Blue LED 2 Blue LED saturation control (0-100%)	proportional			
			ZONE 3				
7	7	0-255	Red LED 3 Red LED saturation control (0-100%)	proportional			
8	8	0-255	Green LED 3 Green LED saturation control (0-100%)	proportional			
9	9	0-255	Blue LED 3 Blue LED saturation control (0-100%)	proportional			
			ZONE 4				
10	10	0-255	Red LED 4 Red LED saturation control (0-100%)	proportional			
11	11	0-255	Green LED 4 Green LED saturation control (0-100%) prop				
12	12	0-255	Blue LED 4 Blue LED saturation control (0-100%)	proportional			
			ZONE 5				
13	13	0-255	Red LED 5 Red LED saturation control (0-100%)	proportional			
14	14	0-255	Green LED 5 Green LED saturation control (0-100%)	proportional			
15	15	0-255	Blue LED 5 Blue LED saturation control (0-100%)	proportional			
			ZONE 6				
16	16	0-255	Red LED 6 Red LED saturation control (0-100%)	proportional			
17	17	0-255	Green LED 6 Green LED saturation control (0-100%)	proportional			
18	18	0-255	Blue LED 6 Blue LED saturation control (0-100%)	proportional			
			ZONE 7	1			
19	19	0-255	Red LED 7 Red LED saturation control (0-100%)	proportional			
20	20	0-255	Green LED 7 Green LED saturation control (0-100%)	proportional			
21	21	0-255	Blue LED 7 Blue LED saturation control (0-100%)	proportional			
			ZONE 8				
22	22	0-255	Red LED 8 Red LED saturation control (0-100%)	proportional			
23	23	0-255	Green LED 8 Green LED saturation control (0-100%)	proportional			
24	24	0-255	Blue LED 8 Blue LED saturation control (0-100%)	proportional			

Mode 1	Mode 2	Function	Type of con-				
Channel	Channel	Value	Function	trol			
	1		ZONE 9	•			
25	25	0-255	Red LED 9 Red LED saturation control (0-100%)	proportional			
26	26	0-255	Green LED 9 Green LED saturation control (0-100%)	proportional			
27	27	0-255	proportional				
	1		ZONE 10	1			
28	28	0-255	Red LED 10 Red LED saturation control (0-100%)	proportional			
29	29	0-255	Green LED 10 Green LED saturation control (0-100%)	proportional			
30	30	0-255	Blue LED 10 Blue LED saturation control (0-100%)	proportional			
			ZONE 11				
31	31	0-255	Red LED 11 Red LED saturation control (0-100%)	proportional			
32	32	0-255	Green LED 11 Green LED saturation control (0-100%)	proportional			
33	33	0-255	Blue LED 11 Blue LED saturation control (0-100%)	proportional			
			ZONE 12				
34	34	0-255	Red LED 12 Red LED saturation control (0-100%)	proportional			
35	35	0-255	Green LED 12 Green LED saturation control (0-100%) prop				
36	36	0-255	Blue LED 12 Blue LED saturation control (0-100%) proportional				
			ZONE 13				
37	37	0-255	Red LED 13 Red LED saturation control (0-100%)	proportional			
38	38	0-255	Green LED 13 Green LED saturation control (0-100%)	proportional			
39	39	0-255	Blue LED 13 Blue LED saturation control (0-100%)	proportional			
			ZONE 14	*			
40	40	0-255	Red LED 14 Red LED saturation control (0-100%)	proportional			
41	41	0-255	Green LED 14 Green LED saturation control (0-100%)	proportional			
42	42	0-255	Blue LED 14 Blue LED saturation control (0-100%)	proportional			
			ZONE 15				
43	43	0-255	Red LED 15 Red LED saturation control (0-100%)	proportional			
44	44	0-255	Green LED 15 Green LED saturation control (0-100%)	proportional			
45	45	0-255	Blue LED 15 Blue LED saturation control (0-100%)	proportional			
			ZONE 16				
46	46	0-255	Red LED 16 Red LED saturation control (0-100%)	proportional			
47	47	0-255	Green LED 16 Green LED saturation control (0-100%) propo				
48	48	0-255	Blue LED 16 Blue LED saturation control (0-100%) proportion				

Mode 1	Mode 2	Value	Function	Type of con- trol	
Channel	Channel	value	Function		
-	49	0-31 32-63 64-95 96-127 128-143 144-159 160-255	Shutter/Strobe Shutter closed Shutter open Strobe-effect from slow to fast Shutter open Opening pulses in sequences slow> fast Closing pulses in sequences fast> slow Shutter open	step step proportional step proportional proportional step	
-	50	0-255	Dimmer Dimmer intensity from 0% to 100%	proportional	

#### **RGBW** operation

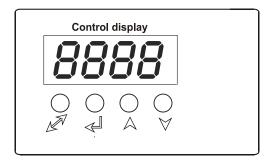
Mode 1	eration Mode 2			Type of con-				
Channel	Channel	Value	Function	trol				
Chamile	Chamilei		ZONE 2					
			Red LED 2					
4	4	0-255	Red LED saturation control (0-100%)	proportional				
5	5	0-255	Green LED 2 Green LED saturation control (0-100%) propor					
6	6	0-255	Blue LED 2 Blue LED saturation control (0-100%) proportion					
3	3	0-255	White LED 2 Blue LED saturation control (0-100%)	proportional				
			ZONE 3					
7	7	0-255	Red LED 3 Red LED saturation control (0-100%)	proportional				
8	8	0-255	Green LED 3 Green LED saturation control (0-100%)	proportional				
9	9	0-255	Blue LED 3 Blue LED saturation control (0-100%)	proportional				
2	2	0-255	White LED 3 Blue LED saturation control (0-100%)	proportional				
			ZONE 4	•				
10	10	0-255	Red LED 4 Red LED saturation control (0-100%)	proportional				
11	11	0-255	Green LED 4 Green LED saturation control (0-100%)	proportional				
12	12	0-255	Blue LED 4 Blue LED saturation control (0-100%)	proportional				
1	1	0-255	White LED 4 Blue LED saturation control (0-100%) proportion					
			ZONE 6					
16	16	0-255	Red LED 6 Red LED saturation control (0-100%)	proportional				
17	17	0-255	Green LED 6 Green LED saturation control (0-100%)	proportional				
18	18	0-255	Blue LED 6 Blue LED saturation control (0-100%)	proportional				
15	15	0-255	White LED 6 Blue LED saturation control (0-100%)	proportional				
			ZONE 7					
19	19	0-255	Red LED 7 Red LED saturation control (0-100%)	proportional				
20	20	0-255	Green LED 7 Green LED saturation control (0-100%)	proportional				
21	21	0-255	Blue LED 7 Blue LED saturation control (0-100%)	proportional				
14	14	0-255	White LED 7 Blue LED saturation control (0-100%)	proportional				
			ZONE 8	•				
22	22	0-255	Red LED 8 Red LED saturation control (0-100%)	proportional				
23	23	0-255	Green LED 8 Green LED saturation control (0-100%)	proportional				
24	24	0-255	Blue LED 8 Blue LED saturation control (0-100%)	proportional				
13	13	0-255	White LED 8 Blue LED saturation control (0-100%)	proportional				

Mode 1	Mode 2	Value	Function	Type of con-		
Channel	Channel	Value		trol		
	1		ZONE 10			
28	28	0-255	Red LED 10 Red LED saturation control (0-100%)	proportional		
29	29	0-255	Green LED 10 Green LED saturation control (0-100%)	proportional		
30	30	0-255	Blue LED 10 Blue LED saturation control (0-100%)	proportional		
27	27	0-255	White LED 10 Blue LED saturation control (0-100%)	proportional		
			ZONE 11			
31	31	0-255	Red LED 11 Red LED saturation control (0-100%)	proportional		
32	32	0-255	Green LED 11 Green LED saturation control (0-100%)	proportional		
33	33	0-255	Blue LED 11 Blue LED saturation control (0-100%)	proportional		
26	26	0-255	White LED 11 Blue LED saturation control (0-100%)	proportional		
			ZONE 12			
34	34	0-255	Red LED 12 Red LED saturation control (0-100%)	proportional		
35	35	0-255	Green LED 12 Green LED saturation control (0-100%)	proportional		
36	36	0-255	Blue LED 12 Blue LED saturation control (0-100%)	proportional		
12	12	0-255	White LED 12 Blue LED saturation control (0-100%)	proportional		
			ZONE 14			
40	40	0-255	Red LED 14 Red LED saturation control (0-100%)	proportional		
41	41	0-255	Green LED 14 Green LED saturation control (0-100%)	proportional		
42	42	0-255	Blue LED 14 Blue LED saturation control (0-100%)	proportional		
39	39	0-255	White LED 14 Blue LED saturation control (0-100%)	proportional		
			ZONE 15			
43	43	0-255	Red LED 15 Red LED saturation control (0-100%)	proportional		
44	44	0-255	Green LED 15 Green LED saturation control (0-100%)	proportional		
45	45	0-255	Blue LED 15 Blue LED saturation control (0-100%)	proportional		
38	38	0-255	White LED 15 Blue LED saturation control (0-100%)	proportional		
			ZONE 16			
46	46	0-255	Red LED 16 Red LED saturation control (0-100%)	proportional		
47	47	0-255	Green LED 16 Green LED saturation control (0-100%)	proportional		
48	48	0-255	Blue LED 16 Blue LED saturation control (0-100%)	proportional		
37	37	0-255	White LED 16 Blue LED saturation control (0-100%) proportion			

Mode 1	Mode 2	Value	Franchica	Type of con-
Channel	Channel	Value	Function	trol
-	49	0-31 32-63 64-95 96-127 128-143 144-159 160-255	Shutter/Strobe Shutter closed Shutter open Strobe-effect from slow to fast Shutter open Opening pulses in sequences slow> fast Closing pulses in sequences fast> slow Shutter open	step step proportional step proportional proportional step
-	50	0-255	Dimmer Dimmer intensity from 0% to 100%	proportional

#### 8.Control board

The control panel situated on the top cover of the ArcPower 16x6 allows DMX addressing and set the fixture's behaviour.



#### **Control elements:**

[ENTER] button- enters menu, confirms adjusted values and leaves menu.

[UP] button and[DOWN] button- moves between menu items on the the same level, sets values.

[ESCAPE] button- leaves the menu without saving value.

After switching on the ArcPower 16x6, the display shows the initial DMX address:



Use [UP],[DOWN] to browse through the menu. To select a function or submenu,press [ENTER].

## 8.1 Addressing the ArcPower 16x6



#### Setting the DMX start channel:

- 1. Connect the ArcPower 16x6 to the mains.
- **2.** Browse through the menu by pressing the [UP] and [DOWN] buttons until the display shows current addres "**A001**".Confirm by pressing [ENTER] button and "**A001**" will start to flash frequently.
- 3. Use the [UP] and [Down] buttons to select the desired address.
- 4. Confirm by pressing [ENTER].

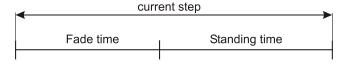
After having addressed ArcPower 16x6, you may now start operating ArcPower 16x6 via your DMX controller

## 8.2 Program editing



By entering this menu a complete overview of all editable programs is offered, from which the program to be edit can be selected by pressing [ENTER]. The fixture includes 4 free editable programs (EPG.1-EPG.4), each up to 60 steps.

Each program step has a Fade time-the time during which effects go to the current step and a Standing time-the time, during which effects last in the current step.



#### Programming procedure:

- 1. Enter "ProG." menu
- 2. Press [UP] or [DOWN] to select the desired program which you wish to edit and press [ENTER].
- 3. Press [UP] or [DOWN] to select the desired program step and press [ENTER].
- 4. Press [UP] or [DOWN] to select the desired item and press [ENTER]-button. Now you can edit by using [UP] or [DOWN] buttons the DMX value of the selected item:

"P.End" - a total number of the program steps (value 1-60). This value should be set before start programming (e.g. if you want to create program with 10 steps, set End=10).

"rED1" - a red LED 1 saturation, value 0-255

"GrE1"- a green LED 1 saturation, value 0-255

"bLu1"- a blue LED1 saturation, value 0-255

:

"rE16" - a red LED 16 saturation, value 0-255

"Gr16" - a green LED 16 saturation, value 0-255

"bL16"- a blue LED16 saturation, value 0-255

**"Str."** - a strobe, value 0-255

"dim." - a dimmer, value 0-255

"FA.t." - fade time, value 0-255 \*

"S.tl." - standing time,value 0-255 \*

"COPY" - copying the current prog. step to the next prog. step.

Press [ENTER]-button to confirm adjusted value .

5.Repeat steps 3 and 4 for next prog.step.lf you want to copy current prog. step to the next prog.step, select option "COPY"and confirm it by pressing [ENTER].

\*Both Fade time and Standing time use the same conversion table in order to convert DMX value to the time value:

DMX	Time [sec.]	DMX	Time [min.]	DMX	Time [min.]	DMX	Time [min.]	DMX	Time [min.]
1	0.1	50	4.2	105	18.4	160	42.7	215	77
2	0.4	55	5	110	20.2	165	45.4	220	80.7
5	2.5	60	6	115	22	170	48.2	225	84.4
10	10	65	7	120	24	175	51	230	88.2
15	22.5	70	8.2	125	26	180	54	235	92
20	40	75	9.4	130	28.2	185	57	240	96
25	62.5	80	10.7	135	30.4	190	60.2	245	100
30	90	85	12	140	32.7	195	63.4	250	104
35	122.5	90	13.5	145	35	200	66.7	255	108
40	160	95	15	150	37.5	205	70		
45	202.5	100	16.7	155	40	210	73.5		

Exact expression of the time value follows the formula: time[sec.]=(DMX value)<sup>2</sup>/10.

#### 8.3 Manual mode



This menu gives access to the control of the fixture channels by means of the control board buttons. Use [UP] and [DOWN] buttons until the display shows "MAn.C." menu.Press [ENTER] button and by using [UP] and [DOWN] buttons select desired effect,press [ENTER] and and by using [UP] and [DOWN] buttons adjust desired DMX value for selected effect.Confirm by [ENTER].

"rEd1" a red LED1 saturation

"GrE1." a green LED1 saturation

"bLu1." a blue LED1 saturation

"rE.16" a red LED16 saturation

"Gr.16" a green LED16 saturation

"bL.16" a blue LED16 saturation

"Str." a strobe, value 0-255

"dimr. a dimmer, value 0-255

#### 8.4 Test sequences



Use the item to run a demo-test sequences without an external controller, which will show you some possibilities of using the fixture.

#### 8.5 Stand-alone mode



Use this menu to run a program or to set a running program in the stand-alone operation - operation without connected DMX controller

<u>Auto</u> --- Presetting playback. This function allows you to select the program which will be played continuously in a loop after switching the fixture on. The fixture has four freely-programmable programs (EPG1-EPG4) and five built-in programs (PrG1-PrG5).

**OFF** --- The option disables "Auto" function.

tSt --- The option starts test program

EPG.1 --- The option starts editable program No.1

:

**EPG.4** --- The option starts editable program No.4

PrG. 1 --- The option starts built-in program No.1

:

PrG. 5 --- The option starts built-in program No.5

**PLAY** --- **Playing program**. Select this menu to run a desired program immediately.

**EPG.1** --- The option starts editable program No.1

EPG.4 --- The option starts editable program No.4

PrG. 1 --- The option starts built-in program No.1

:

PrG. 5 --- The option starts built-in program No.5

Select the program you wish and press [ENTER]. The selected program starts running. By Pressing [ENTER] again is possible to pause the program running.

### 8.6 Special functions



Use this menu for special services.

<u>VErS.</u> --- Software Version. Select this function to read the number of the fixture software version.

tEmP. --- Fixture temperature. This item indicates temperature inside of the ArcPower 16x6.

**bALA.** --- **Balance**. Select this function to enable (On) or disable (OFF) the white balance which is set in "White colour balance" menu below. If this function is set OFF, ArcPower 16x6 will use maximum value (255) of saturation for red, green and blue channels.

<u>CALi.</u> --- LED intensity calibration. The menu allows you to adjust the max. light intensity of individual LEDs (colour channels), e.g. the light intensity of all red LEDs connected to the channel 4. This action is suitable in case that adjacent LEDs (e.g. in LED array) have a different light intensity (but these LEDs have to be connected to the different zones of the ArcPower 16x6).

Use [UP] and [DOWN] buttons to select desired LED, press [ENTER] and adjust suitable light intensity (0-255) using [UP] and [Down] buttons, confirm by pressing [ENTER]. This adjusted light intensity is its maximum intensity which can be reached if dimmer=255 DMX. After calibration all LEDs, select **Stor.** to save adjusted values.

**COMP.**- Internal calibration. The function eliminates random light flashes during slow dimming. The calibration action lasts cca one minute.

#### The COMP function should be performed:

- once after connecting all LEDs to the fixture (after complete installation)
- if the load has been changed (e.g 6-LEDs modules have been replaced by 3-LEDs)
- after software upgrade or changing dimmer characteristic (SPEC--->CHAr)

#### **C.bAL.** --- White colour balance. Using this menu you can set white balance:

- 1. Set all red, green and blue channels on maximum saturation(255)
- **2.** Browse through the menu by pressing the [UP] and [DOWN] buttons until the display shows "C.bAL." menu.Press [ENTER] button and "rEd.b." will appear on the display.
- **3**.Press [ENTER] button again and use [UP] and [DOWN] buttons to adjust the new maximum value required for the red channel.Confirm your choice by pressing [ENTER].Use the [UP] and [Down] buttons to select next colour.

**4.**Repeat step 3 for green channel "**GrE.b.**" and for blue channel "**bLu.b**".

CHAr. --- Dimmer characteristic. The option allows selection from the 2 dimming curves:

EYE - The dimming curve takes into account a gamma curve

LinE - Linear running of the dimming curve.

Use [UP] and [DOWN] buttons to select desired dimmer characteristic and press [ENTER] to confirm.

<u>dM.Pr.</u> --- <u>DMX presetting</u>. The function allows to select desired DMX mode. Use [UP] and [DOWN] buttons to select desired channel mode ("Mod.1, Mod.2") and press [ENTER] to confirm. For detail description of all channels see DMX protocol.

<u>i.bLi.</u> --- Initial blink. If this function is on, ArcPower 16x6 makes auto-calibration (All LEDs lit on 100% for short time) after switching the ArcPower 16x6 on. If this function is set off, you have to set manually every colour channel on max.brightness after switching the driver on before starting regular operating. This action should last min. one second for each colour. During this action the ArcPower 16x6 finds out the load connected to its LED outputs and makes auto-calibration.

dF.SE. --- Default Settings .Select this option to reset all fixture personalities to the default values.

<u>uPd.</u> --- **Software update** - Using this function you can update software in the fixture via PC and serial link. The following are required in order to update software:

- PC running Windows 95/98/2000/XP or Linux
- DMX Software Uploader
- Flash cable RS232/DMX (No.13050624)

**Note1**:Software update should execute a qualified person. If you lack qualification, do not attempt the update yourself and ask for help your ANOLIS distributor.

Note 2:DMX address, programs and all settings will be set to their default values.

#### To update software in the fixture:

1.Installation of DMX Software Uploader:

- 1.DMX Software Uploader program is available from the ANOLIS web site at WWW.anolis.cz.
- 2.Make a new directory (e.g. ANOLIS\_Uploader) on your hard disk and download the software to it.
- **3**.Unpack the program from the archives. Program file has name:DSU\_name of corresponding fixture\_SoftwareID.SoftwareID describes the versions of fixture software included in DMX Software Uploader. Higher number means later software versions.

#### 2.Fixture software updating:

- 1.Determine which of your COM port is available on your PC and connect it with to the DMX input of the fixture using the Flash cable. Do not extend this cable! Disconnect the fixture from the other fixtures in DMX chain! Turn on the computer and the fixture.
- 2.Switch the fixture to the update mode by selecting the option Software update in menu Special Functions on the fixture control panel:SPEC-->UPd-->yES.(From this option you cannot return back to the main menu. If you do not want to continue in software update, you have to switch off and on the fixture to leave this option!)
- 3.It is recommended that you exit all programs before running the Software Uploader.
- **4**.Start the Software Uploader program. Select desired COM and then click Connect button. If the conection is OK, click Start Uploading button to start uploading. It will take several minutes to perform software update.All processors will be updated (including processors with the same software version).

If you wish to update only later versions of processors, enable the Incremental Update check box. Avoid interrupting the process. Update status is being displayed in the list window.

When the update is finished, the line with the text "The fixture is successfuly updated will appear in this window and the fixture will reset with the new software.

Note: In the case of interruption of the upload process (e.g. power cut), the fixture remains in the update mode and you have to repeat the software update again.

For example: The fixture was switched off before finishing software upload. After switching the fixture on again, the fixture is still in the update mode and the display is dark. Restart the Software Uploader program and repeat software update from your PC.

## 9. Technical Specifications:

Power supply:

Input Voltage: 100-240 V AC, 50/60 Hz

Fuse:T 2 A H

Max.Pover Consumption:170VA

Input:

Control:DMX 512 DMX connection:RJ45

**Output:** 

Max.Output Voltage:12V DC

Max.Output current per zone:350mA per colour

**RGB** operation

LED zones: 16

Max.load per zone: 6 x 1W LED Total max.load: 16x6 LEDs

**RGBW** operation

LED zones: 12

Max.load per zone: 8 x 1W LED Total max.load: 12x8 LEDs

Maximum total cable length between one zone of the Arcpower 16x6 and connected LED modules:

80 metres at max.load.

#### DMX channels:

Mode 1: 48 Mode 2: 50

#### **Control and programming:**

Protocol: USITT DMX-512

Operating modes:DMX,Stand-alone

Display:4 digit LED

White colour balance adjusting

Manual control of all DMX channels via control panel

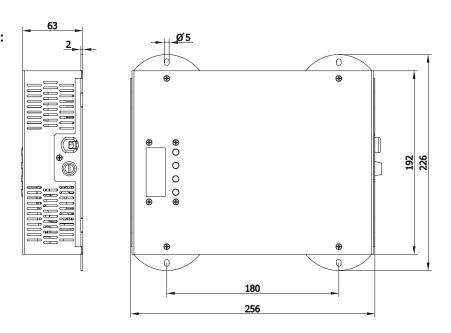
Programs:5 Built-in programs

4 Freely programmable programs

#### **Operating temperature:**

-10°C/+40°C

#### Dimensions(mm):



#### Weight:

2 kg

#### Optional accessories:

Adaptor RJ45/DMX 3 pin......No.13050730 Adaptor RJ45/DMX 5 pin.....No.13050731

## 10. Replacing the fuse

#### 1.Before replacing the fuse, unplug mains lead!

- **2.**Unscrew the fuse holder on the rear side of the ArcPower 16x6 with a fitting screwdriver from the housing (anti-clockwise).
- **3.**Remove the old fuse from the fuse holder.
- **4.**Install the new fuse in the fuse holder.
- **5.**Replace the fuse holder in the housing and fix it.