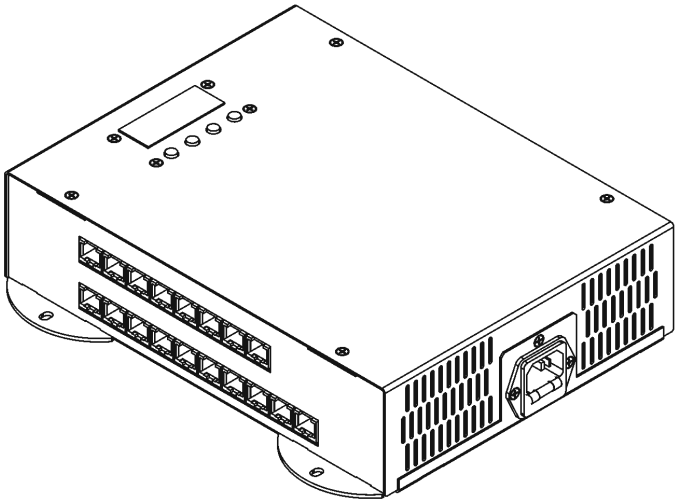
ArcPower 16x6



USER MANUAL

Version 1.9

ArcPower 16x6

Table of contents

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 qualilfied
- 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.

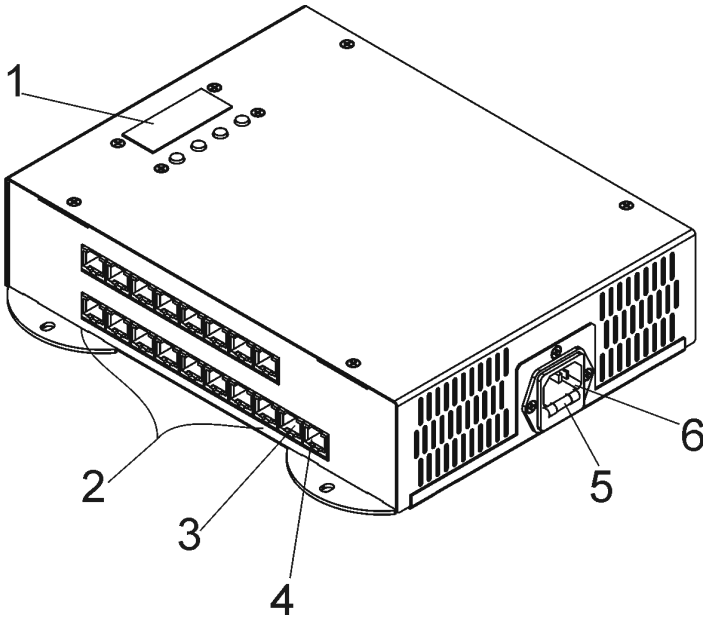
Only operate the unit after having checked that the housing is firmly closed and all screws are tightly fastened.

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!

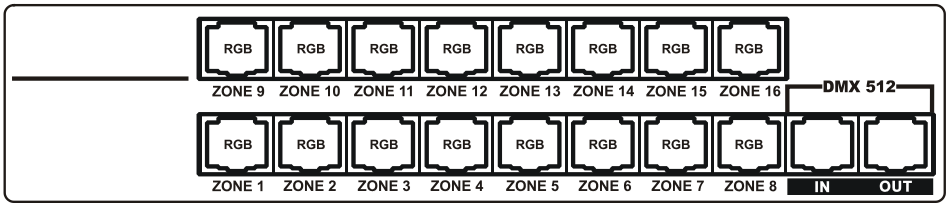
Please use the original packaging if the product is to be transported.
Please consider that unauthorized modifications on the unit are forbidden due to safety reasons!

3.Description of the ArcPower 16x6

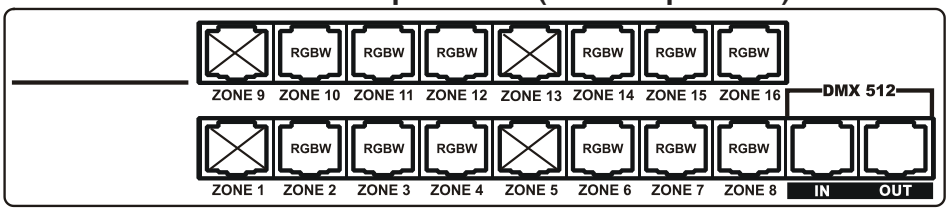


1 - Control board
2 - LED output zones
3 - DMX Input
4 - DMX Output
5 - Fuse holder
6 - Power cord

LED output zones (RGB operation)

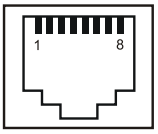


LED output zones (RGBW operation)



DMX Input,Output

RJ45 socket
Front view of the socket:



DMX IN

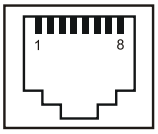
Pin 1: Not connected
Pin 2: +12V
Pin 3: Not connected
Pin 4: Not connected
Pin 5: Not connected
Pin 6: Data +
Pin 7: Data -
Pin 8: GND

DMX OUT

Pin 1: Not connected
Pin 2: Not connected
Pin 3: Not connected
Pin 4: Not connected
Pin 5: Not connected
Pin 6: Data +
Pin 7: Data -
Pin 8: GND

LED module Input

RJ45 socket
Front view of the socket:



Pin 1: Red LED +
Pin 2: Green LED +
Pin 3: Blue LED +
Pin 4: White LED +
Pin 5: Red LED -
Pin 6: Green LED -
Pin 7: Blue LED -
Pin 8: White LED -

4.Installation

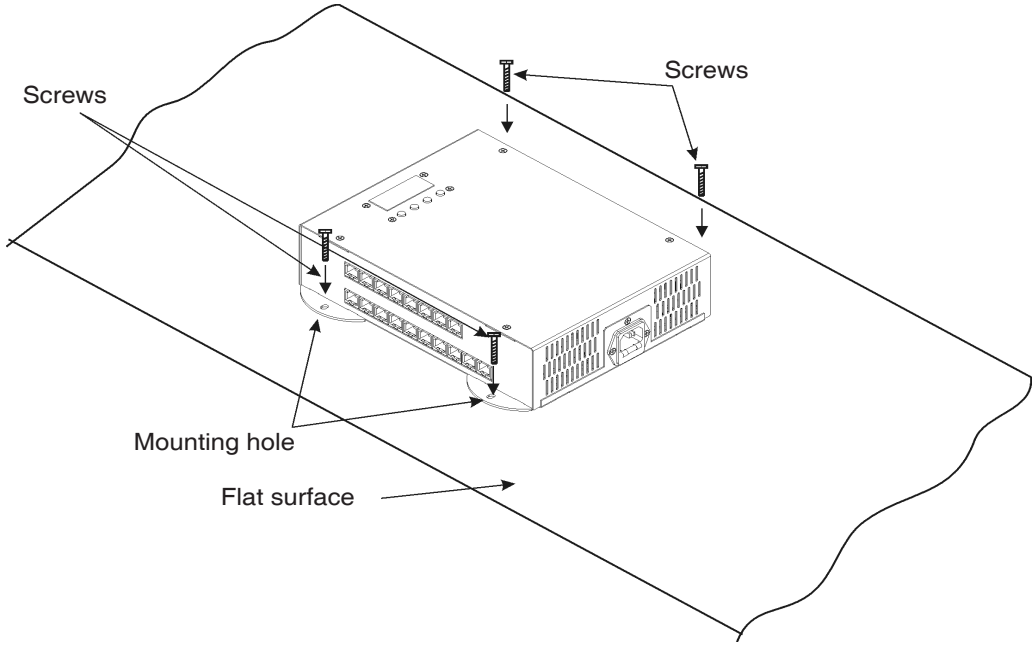
4.1.Connection to the mains:

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

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

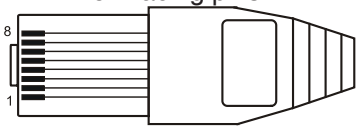
The ArcPower 16x6 should be be placed on a non-flammable flat surface in any orientation and fixed by the four screws.There are four mounting holes of a diameter 5 mm in housing of the driver. Ensure that installation place is enough ventilated.



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.

RJ45 plug
View facing pins



Pin 1: Not used
Pin 2: +12V
Pin 3: Not used
Pin 4: Not used
Pin 5: Not used
Pin 6: Data +
Pin 7: Data -
Pin 8: GND

DMX 512 XLR plug (male)
Front view of the plug

Pin 1: GND
Pin 2: Data -
Pin 3: Data +
Pin 4: Not used
Pin 5: Not used

Note: connect 12V if you need it.

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.

Pin 1: Not used	**Pin 1:** Not used
Pin 2: +12V	**Pin 2:** +12V
Pin 3: Not used	**Pin 3:** Not used
Pin 4: Not used	**Pin 4:** Not used
Pin 5: Not used	**Pin 5:** Not used
Pin 6: Data +	**Pin 6:** Data +
Pin 7: Data -	**Pin 7:** Data -
Pin 8: GND	**Pin 8:** GND

5 DMX operation

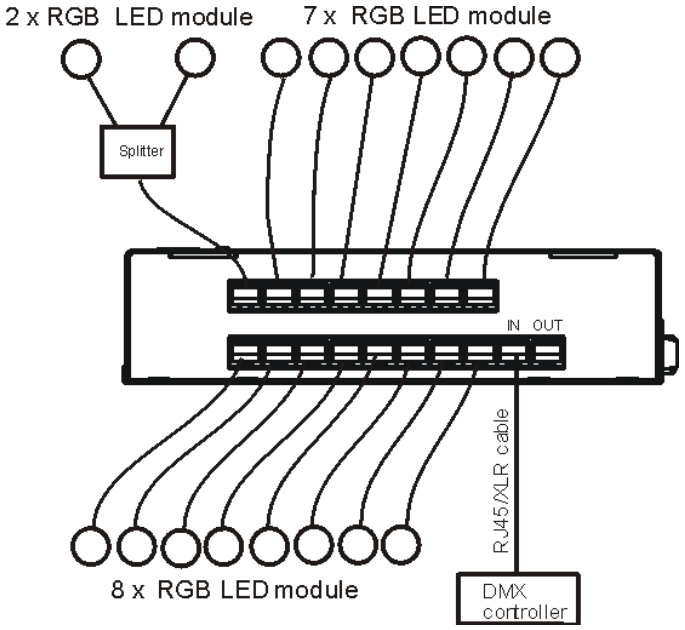
1.Unplug from the mains before installation.
2.Connect the LED modules to the fixture according to the operation (RGB or RGBW).
3.Connect DMX controller to the fixture
4.Connect the fixture to the mains
5.Set the DMX address on the control board of the fixture (see chapter "Control board").

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

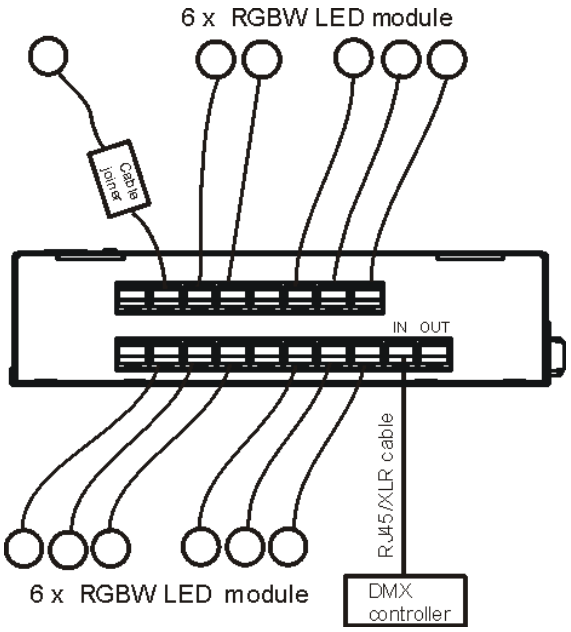


2. RGBW operation

The ArcPower 16x6 allows to operate 12 RGBW outputs (zones).

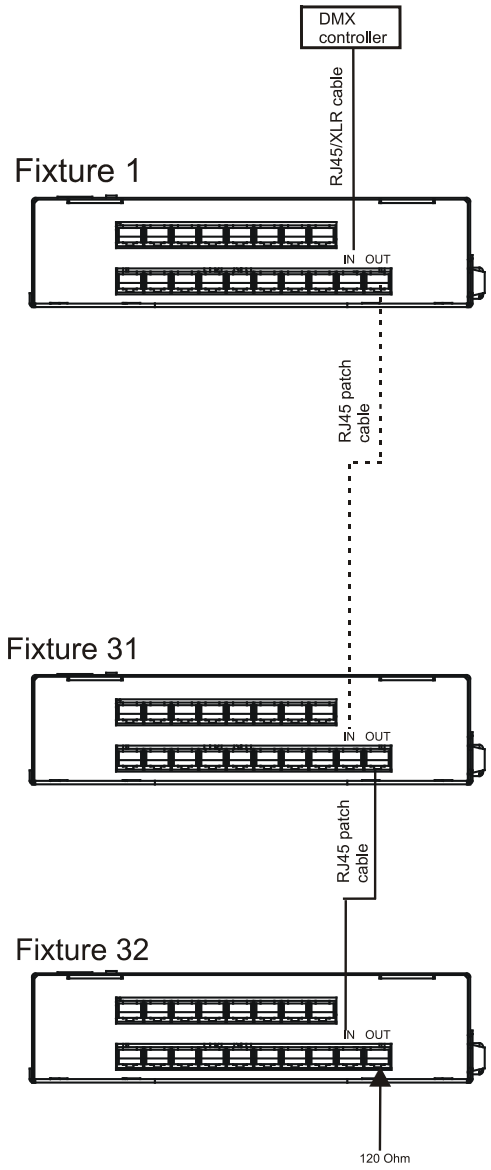
Note: Only 12 zones of the ArcPower 16x6 can be used for RGBW operation - see chapter 3 "Description of the ArcPower 16x6".

Max. load per LED output zone: 8x1W LED
Number of zones: 12



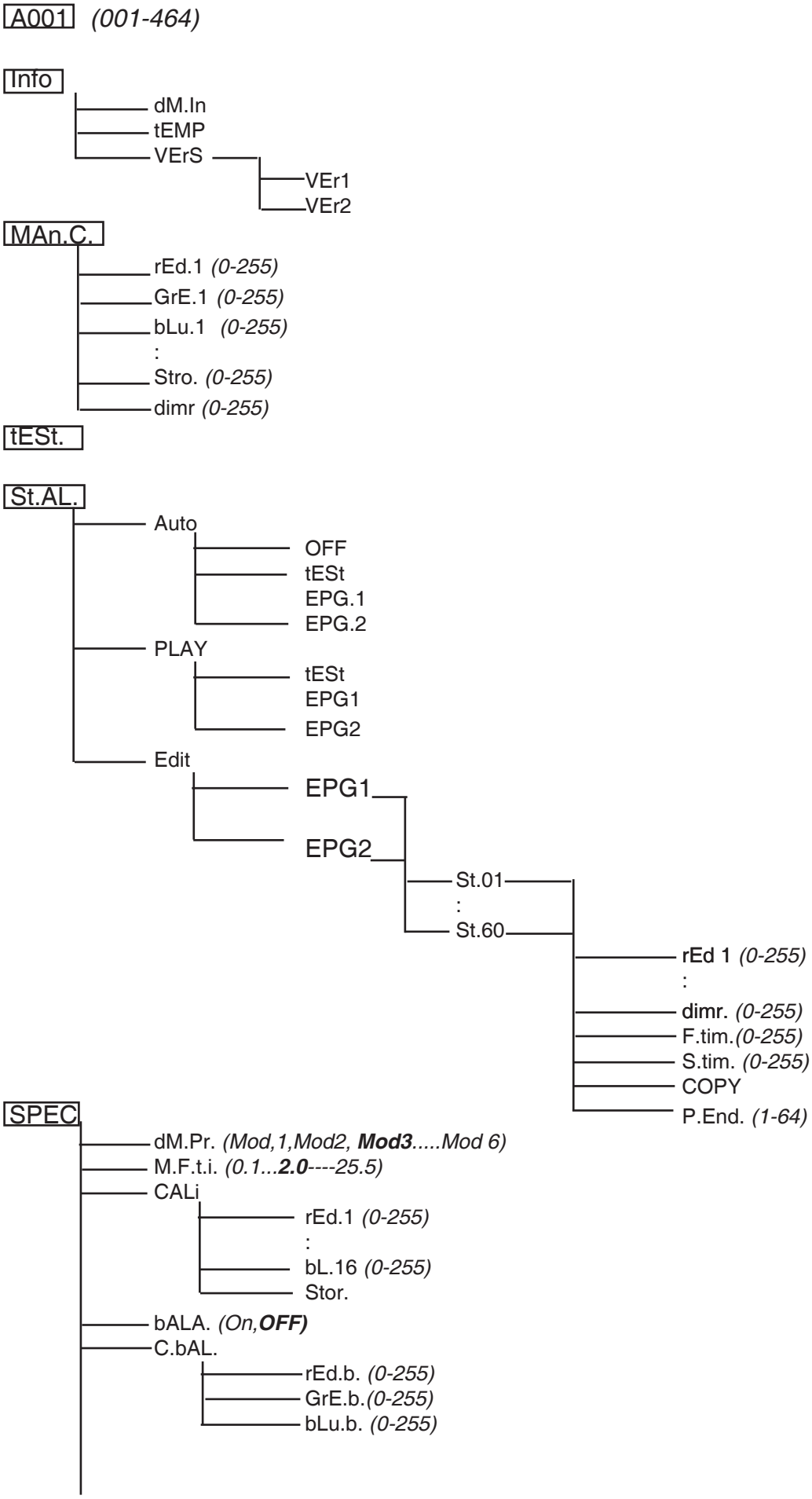
5.2 Multiple ArcPower 16x6 installation

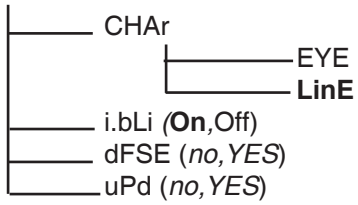
Connect the DMX output of the first ArcPower 16x6 with the DMX input of the next ArcPower 16x6. Always connect one output with the input of the next ArcPower 16x6 until all fixtures are connected.In this way,up to 32 fixtures can be chained together.
At the last ArcPower 16x6 the data link has to be terminated with a terminator. A termination plug is simply a RJ45 connector with a 120 Ω 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




CHAr
EYE
LinE
i.bLi (**On**,Off)
dFSE (*no,YES*)
uPd (*no,YES*)

7. ArcPower 16x6 - DMX protocol - version 1.4 (for software version 3.4 and higher)

RGB operation

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

Mode 1 Channel	Mode 2 Channel	Mode 3 Channel	Mode 4 Channel	Value	Function	Type of control
ZONE 9						
1	1	25	25	0-255	**Red LED 9** Red LED saturation control (0-100%)	proportional
2	2	26	26	0-255	**Green LED 9** Green LED saturation control (0-100%)	proportional
3	3	27	27	0-255	**Blue LED 9** Blue LED saturation control (0-100%)	proportional
ZONE 10						
1	1	28	28	0-255	**Red LED 10** Red LED saturation control (0-100%)	proportional
2	2	29	29	0-255	**Green LED 10** Green LED saturation control (0-100%)	proportional
3	3	30	30	0-255	**Blue LED 10** Blue LED saturation control (0-100%)	proportional
ZONE 11						
1	1	31	31	0-255	**Red LED 11** Red LED saturation control (0-100%)	proportional
2	2	32	32	0-255	**Green LED 11** Green LED saturation control (0-100%)	proportional
3	3	33	33	0-255	**Blue LED 11** Blue LED saturation control (0-100%)	proportional
ZONE 12						
1	1	34	34	0-255	**Red LED 12** Red LED saturation control (0-100%)	proportional
2	2	35	35	0-255	**Green LED 12** Green LED saturation control (0-100%)	proportional
3	3	36	36	0-255	**Blue LED 12** Blue LED saturation control (0-100%)	proportional
ZONE 13						
1	1	37	37	0-255	**Red LED 13** Red LED saturation control (0-100%)	proportional
2	2	38	38	0-255	**Green LED 13** Green LED saturation control (0-100%)	proportional
3	3	39	39	0-255	**Blue LED 13** Blue LED saturation control (0-100%)	proportional
ZONE 14						
1	1	40	40	0-255	**Red LED 14** Red LED saturation control (0-100%)	proportional
2	2	41	41	0-255	**Green LED 14** Green LED saturation control (0-100%)	proportional
3	3	42	42	0-255	**Blue LED 14** Blue LED saturation control (0-100%)	proportional
ZONE 15						
1	1	43	43	0-255	**Red LED 15** Red LED saturation control (0-100%)	proportional
2	2	44	44	0-255	**Green LED 15** Green LED saturation control (0-100%)	proportional
3	3	45	45	0-255	**Blue LED 15** Blue LED saturation control (0-100%)	proportional
ZONE 16						
1	1	46	46	0-255	**Red LED 16** Red LED saturation control (0-100%)	proportional
2	2	47	47	0-255	**Green LED 16** Green LED saturation control (0-100%)	proportional
3	3	48	48	0-255	**Blue LED 16** Blue LED saturation control (0-100%)	proportional

Mode 1	Mode 2	Mode 3	Mode 4	Value	Function	Type of control
Channel	Channel	Channel	Channel			
-	4	-	49		**Shutter/Strobe**	
				0-31	Shutter closed	step
				32-63	Shutter open	step
				64-95	Strobe-effect from slow to fast	proportional
				96-127	Shutter open	step
				128-143	Opening pulses in sequences slow--> fast	proportional
				144-159	Closing pulses in sequences fast --> slow	proportional
				160-255	Shutter open	step
-	5	-	50		**DImmer**	
				0-255	Dimmer intensity from 0% to 100%	proportional

RGBW operation

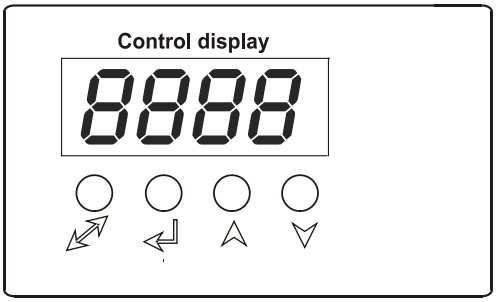
Mode 5	Mode 6	Mode 7	Mode 8	Value	Function	Type of control
Channel	Channel	Channel	Channel			
					ZONE 2	
1	1	1	1	0-255	**Red LED 1** Red LED saturation control (0-100%)	proportional
2	2	2	2	0-255	**Green LED 1** Green LED saturation control (0-100%)	proportional
3	3	3	3	0-255	**Blue LED 1** Blue LED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

Mode 5 Channel	Mode 6 Channel	Mode 7 Channel	Mode8 Channel	Value	Function	Type of control
ZONE 10						
1	1	25	25	0-255	**Red LED 7** Red LED saturation control (0-100%)	proportional
2	2	26	26	0-255	**Green LED 7** Green LED saturation control (0-100%)	proportional
3	3	27	27	0-255	**Blue LED 7** Blue LED saturation control (0-100%)	proportional
4	4	28	28	0-255	**White LED 7** White LED saturation control (0-100%)	proportional
ZONE 11						
1	1	29	29	0-255	**Red LED 8** Red LED saturation control (0-100%)	proportional
2	2	30	30	0-255	**Green LED 8** Green LED saturation control (0-100%)	proportional
3	3	31	31	0-255	**Blue LED 8** Blue LED saturation control (0-100%)	proportional
4	4	32	32	0-255	**White LED 8** White LED saturation control (0-100%)	proportional
ZONE 12						
1	1	33	33	0-255	**Red LED 9** Red LED saturation control (0-100%)	proportional
2	2	34	34	0-255	**Green LED 9** Green LED saturation control (0-100%)	proportional
3	3	35	35	0-255	**Blue LED 9** Blue LED saturation control (0-100%)	proportional
4	4	36	36	0-255	**White LED 9** White LED saturation control (0-100%)	proportional
ZONE 14						
1	1	37	37	0-255	**Red LED 10** Red LED saturation control (0-100%)	proportional
2	2	38	38	0-255	**Green LED 10** Green LED saturation control (0-100%)	proportional
3	3	39	39	0-255	**Blue LED 10** Blue LED saturation control (0-100%)	proportional
4	4	40	40	0-255	**White LED 10** White LED saturation control (0-100%)	proportional
ZONE 15						
1	1	41	41	0-255	**Red LED 11** Red LED saturation control (0-100%)	proportional
2	2	42	42	0-255	**Green LED 11** Green LED saturation control (0-100%)	proportional
3	3	43	43	0-255	**Blue LED 11** Blue LED saturation control (0-100%)	proportional
4	4	44	44	0-255	**White LED 11** White LED saturation control (0-100%)	proportional
ZONE 16						
1	1	45	45	0-255	**Red LED 12** Red LED saturation control (0-100%)	proportional
2	2	46	46	0-255	**Green LED 12** Green LED saturation control (0-100%)	proportional
3	3	47	47	0-255	**Blue LED 12** Blue LED saturation control (0-100%)	proportional
4	4	48	48	0-255	**White LED 12** White LED saturation control (0-100%)	proportional

Mode 5	Mode 6	Mode 7	Mode 8	Value	Function	Type of control
Channel	Channel	Channel	Channel			
-	5	-	49		**Shutter/Strobe**	
				0-31	Shutter closed	step
				32-63	Shutter open	step
				64-95	Strobe-effect from slow to fast	proportional
				96-127	Shutter open	step
				128-143	Opening pulses in sequences slow--> fast	proportional
				144-159	Closing pulses in sequences fast --> slow	proportional
				160-255	Shutter open	step
-	6	-	50		**DImmer**	
				0-255	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 Fixture information

Use this menu to read useful information about the fixture status.

To display desired information.

1. Use the UP/DOWN buttons to find the " InFo" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select the required menu item.
4. Press the ENTER button to confirm the choice.

DM.In.---DMX values. Select this function to read DMX values of each channel received by the fixture.

tEMP --- Fixture Temperature. Select this menu to read the temperature of the fixture:

VErS. ---Software Versions. Select this function to read the software version of each board in the fixture .

8.3 Manual mode

Use this menu for control the fixture without connected DMX console.

Man.C. --- Manual effect control. Select this menu to control all channels via buttons of the control board. To control fixture channels.

1. Use the UP/DOWN buttons to find " Man.C" menu.
2. Press the ENTER button.
3. Use the UP/DOWN buttons to select desired effect (channel).
   List of control channels:
   "rEd.1-rE.16" - red LEDs saturations
   "GrE.1.-Gr.16 " - green LEDs saturations
   "bLu.1-bL.16 " - blue LEDs saturations
   "Stro." - a strobe, shutter
   "dinr" - a dimmer
4. Press the ENTER button and use the UP/DOWN buttons to set value , press the ENTER button to confirm it.

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

Auto --- **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 two freely-programmable programs (EPG1-EPG2).

OFF --- The option disables "Auto" function.
tESt --- test program
EPG.1 --- program No.1
EPG.2 --- program No.2

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

tESt --- The option starts test program
EPG.1 --- The option starts editable program No.1
EPG.2 --- The option starts editable program No.2

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

Edit --- Editing a program. The fixture offers 2 freely editable programs (EPG.1, EPG.2) each up to 64 steps. Every program step includes a fade time-the time taken by the step´s channel status to reach the desired level and a step time-the total time occupied by the step in the program.

E.g. If "F.tim."=5 second and "S.tim."=20 second, effects will go to the desired position during 5 seconds and after that they will stay in this position for 15 seconds before going to the next prog. step

1. Use the UP/DOWN buttons to find " St.AL." menu and press the ENTER button.
2. Use the UP/DOWN buttons to select "Edit" menu and press the ENTER button.
3. Use the UP/DOWN buttons to select a program you want to edit (EPG.1, EPG.2) and press ENTER button.
4. Use the UP/DOWN buttons to select a desired program step ("St.01" - "St.64") and press ENTER button.
5. Use the UP/DOWN buttons to select a channel you want to edit and press the ENTER button.

List of editable items:

"P.End" - a total number of the program steps (value 1-64). This value should be set before start

Programming (e.g. if you want to create program with 10 steps, set P.End=10).
“rEd.1 - rE.16”- a red LEDs saturation (0-255)
“GrE.1 - Gr.16“ - a green LEDs saturation (0-255)
“bLu.1 - bL.16 “ -a blue LEDs saturation (0-255)
“Stro.“ - a strobe, shutter (0-255)
“dimr“ - a dimmer (0-255)
“F.tim.“ - a fade time, (0-25.5) seconds
“S.tim.“ - step time, value (0-25.5) seconds
“COPY“. – this item duplicates the current prog. step to the next prog. step. The item “P.End” is increased automatically.

6. Use the UP/DOWN buttons to set a DMX value of the channel and then press the ENTER button.
7. Use the UP/DOWN buttons to select next channel and press the ENTER button.
8. After having set all channels in the current program step, press the MODE button to go by one menu level back and select another program step.

8.6 Special functions

Use this menu for special services.

dM.Pr. --- **DMX presetting**.The function allows to select desired DMX mode.Use [UP] and [DOWN] buttons to select desired channel mode **(**“Mod.1-Mod.8”**)** and press [ENTER] to confirm.For detail description of all channels see DMX protocol.

M.F.ti. --- Max. fade time. Select this menu item to set a desired max. fade time (0-25.5 sec.). This adjusted fade time influences fade of RGB and dimmer during DMX operation:
If time between two receiving DMX values is > than fade time set in the item M.F.ti., the entire adjusted fade time will be used.
If time between two receiving DMX values is < than fade time set in the item M.F.ti., the adjusted fade time will be reduced to fill entire time between the two receiving DMX values.
e.g. M.F.ti.=2sec. and fixture has received Red=0 DMX, after 5 seconds will receive Red=255 DMX. It means, that red will go to full intensity during 2 seconds.
M.F.ti.=8 sec. and fixture has received Red=0 DMX, after 5 seconds will receive Red=255 DMX. It means, that red will go to full intensity during 5 seconds. (Max, fade time is reduced from 8 sec. to 5 sec.).

Note: the value adjusted in the item M.F. ti. will not influence fade time set in the program steps.

CALi. --- **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.

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.

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.

i.bLi. --- **Initial blink**. If this function is on, the ArcPower 16x6 makes auto-calibration (LED modules, one by one, lit on 100% for short time,) after switching it on. During this action the ArcPower 16x6 finds out the load connected to its LED outputs and makes auto-calibration. If the LED modules will not be changed (still the same LED modules connected), after first auto-calibration you can set "i.bLi" at Off, as autocalibration takes some time. In case, that some LED modules will be changed (even the same type) you should perform auto-calibration again.

In. Po. - Use the menu to set all effects to the desired positions at which they will stay after switching the fixture on without DMX signal connected.

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

uPd. --- **Software update** - The menu item allows you to update software in the fixture via either serial or USB port of PC.
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 (if you want to use a serial port of PC)
- Robe Universal Interface (if you want to use an USB port of PC)

Note1: Software update should execute a qualified person. If you lack qualification, do not attempt the update yourself and ask for help your ROBE distributor.
Note 2: DMX address, programs 1-2 and all items in the menu "SPEC" will be set to their default values.

To update software in the fixture:

I. Installation of the 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. Robe_Uploader) on your hard disk and download the software into it.
3. Unpack the program from the archive.

II.Fixture software updating.

1. Determine which of your port is available on your PC and connect it:
- with the DMX input of the fixture if you using the flash cable RS232/DMX
- with the DMX input of the Robe Universal Interface if you using the USB cable.

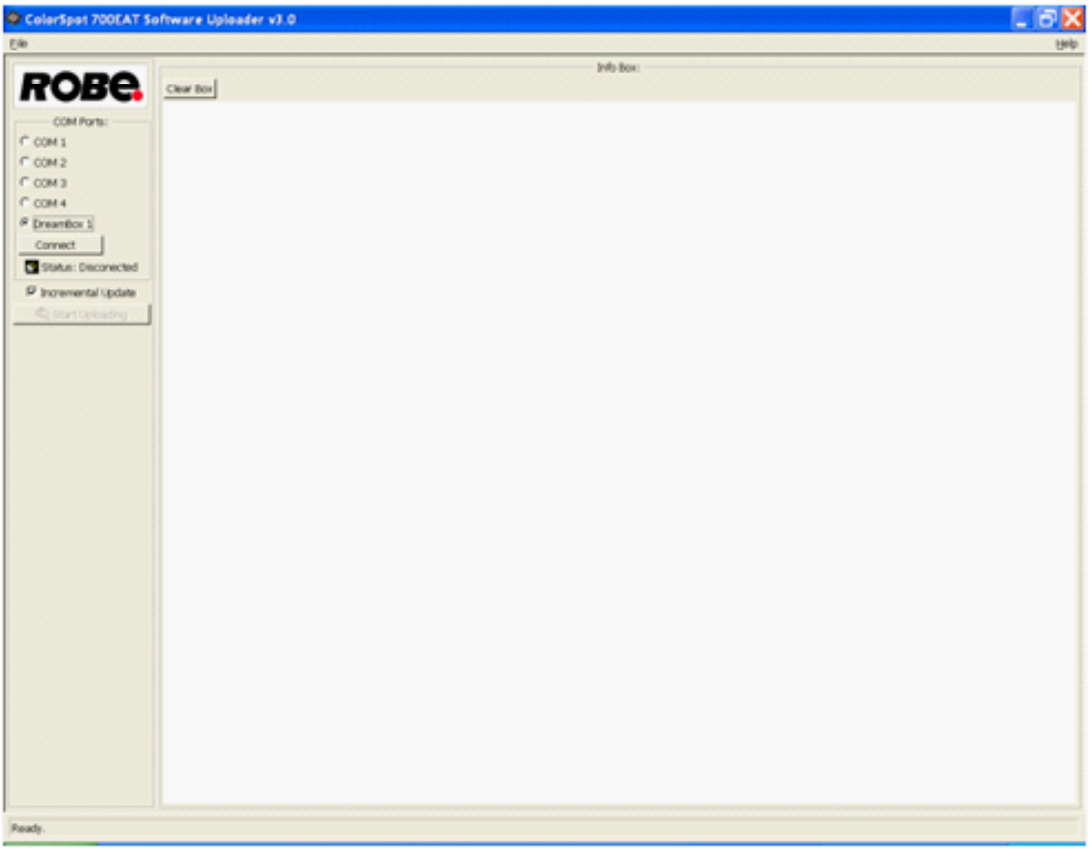
Disconnect the fixture from the other fixtures in a DMX chain. Turn both the computer and the fixture on. Make sure the lamp is switched off (only if the fixture involves a lamp).

2. Switch the driver to the updating mode:

1 Use the UP/DOWN buttons to find “SPEC.“ menu.
2 Press the ENTER button.
3 Use the UP/DOWN buttons to select “ uPd.“ item.
4 Press the ENTER button
5 Use the UP/DOWN buttons to select “ yES“ option
6 Press the ENTER button

Note: If you do not want to continue in software update, you have to switch off and on the fixture to escape from this menu.

3. We recommend to cancel all running programs before start of the Software Uploader.
4. Run the Software Uploader program. Select desired COM and then click on the Connect button.



If the connection is OK, click on the Start Uploading button to start 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 later versions of processors, 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 “The fixture is successfully updated‘will appear in this window and the fixture will reset with the new software.

Note: In the case of an interruption of the upload process (e.g. power cut), the driver keeps the updating mode and you have to repeat the software update again.

9.Technical Specifications:

Power supply:
Input Voltage: 100-240 V AC, 50-60 Hz
Fuse:T 2 A H
Max.Pover Consumption:120W
Panel connector: IEC C14
Power cord IEC C13 included

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

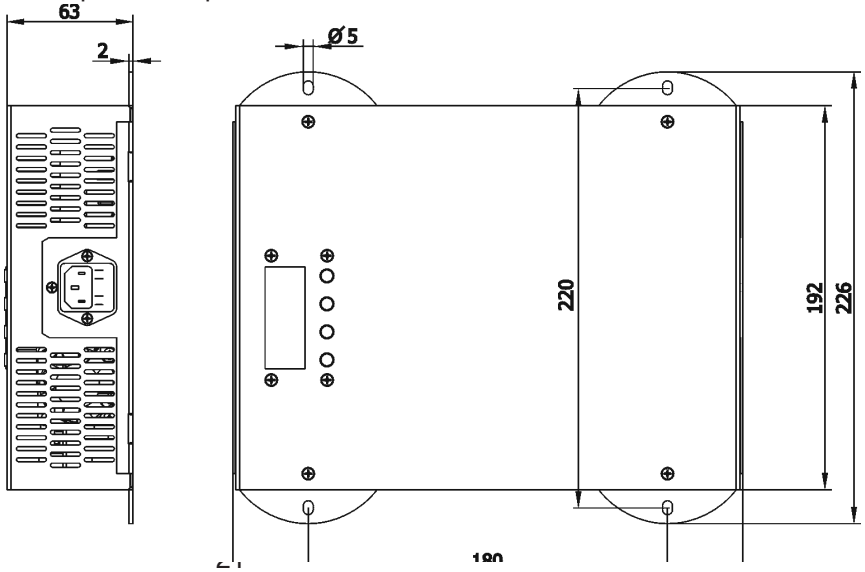
Max. total cable length between one zone of the Arcpower 16x6 and connected LED module:20 metres
Note: Sum of cable lengths between zones 1-8 must not exceed 80 metres.
Sum of cable lengths between zones 9-16 must not exceed 80 metres.

DMX channels:
Mode 1: 3
Mode 2: 5
Mode 3: 48
Mode 4: 50
Mode 5: 4
Mode 6: 6
Mode 7: 48
Mode 8: 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: 2 freely programmable, each up to 64 steps

Operating temperature:
-10°C/+40°C

Dimensions(mm):



Weight:
2 kg

Total heat dissipation
510 BTU/h (calculated)

Accessories:
Cable joiner (No.13050691).....16 pieces

Optional accessories:
Adapter cable RJ45/DMX 3 pin.....No.13050730
Adaptor cable RJ45/DMX 5 pin.....No.13050731

10. Replacing the fuse

1.Before replacing the fuse, unplug mains lead!
2.Push the fuse holder out from the supply socket on the rear side of the ArcPower 16x6.
3.Remove the old fuse from the fuse holder.
4.Install the new fuse in the fuse holder.
5.Push the fuse holder back into the power socket of the ArcPower 16x6.

Specifications are subject to change without notice.
May 6, 2016