

USER MANUAL

Version 1.6_US

Table of contents

1. Safety instructions	3
2. Fixture exterior view	5
3. Installation	5
3.1 Mounting the fixture	5
3.2 Connection to the mains	6
3.3 Installation of the barn-doors	8
3.4 Setting and control	9
3.5 DMX 512 connection	10
3.6 Master/slave connection	10
3.7 Stand-alone operation	10
4. ArcPad 48 US Integral (RGBCW) - DMX protocol	11
5. Control menu map	12
6. Fixture menu	14
6.1 Fixture Address	15
6.2 Fixture information	16
6.3 Personality	17
6.4 Manual mode	18
6. 5 Test sequences	18
6.6 Stand-alone setting	18
6.7 Special functions	19
7. RDM	21
8. Error and information messages	22
9. Technical specifications	23
10. Cleaning and maintenance	26

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE POWERING OR INSTALLING YOUR ArcPad 48 US Integral!

Save it for future reference.

This device 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.

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

Please consider that damages caused by manual modifications to the device are not subject to warranty.

1. Safety instructions

DANGEROUS VOLTAGE CONSTITUTING A RISK OF ELECTRIC SHOCK IS PRESENT WITHIN THIS UNIT!

Make sure that the available voltage is not higher than stated on the rear panel of the fixture. This fixture should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied, consult your authorized distributor or local power company.

Always disconnect the fixture from AC power before cleaning, removing or installing the fuses, or any part.

Do not overload wall outlets and extension cords as this can result in fire or electric shock.

Make sure that the power/data cord is never crimped or damaged by sharp edges. Check the fixture and the power/data cord from time to time.

Do not install the unit near naked flames.

During the operation the housing becomes hot (up to 80°C)

Refer servicing to qualified service personnel.

This fixture falls under protection class I. Therefore this fixture has to be connected to a mains socket outlet with a protective earthing connection.

Do not connect this fixture to a dimmer pack.

LED light emission. Risk of eye injury.

Do not look straight at the fixture's LEDs during operation. The intense light beam may damage your eyes.

Keep compustible materials at least 20 cm away from the fixture.

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

Avoid brute force when installing or operating the fixture.

The fixture was designed for outdoor use. This fixture must not be used for underwater installation.

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

Avoid using the unit in locations subject to possible impacts.

The fixture body never must be covered with cloth or other materials.

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

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

Do not block the front objective LEDs with any object when the fixture is under operation.

The fixture becomes very hot during operation. Allow the fixture to cool approximately 30 minutes prior to manipulate with it.

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

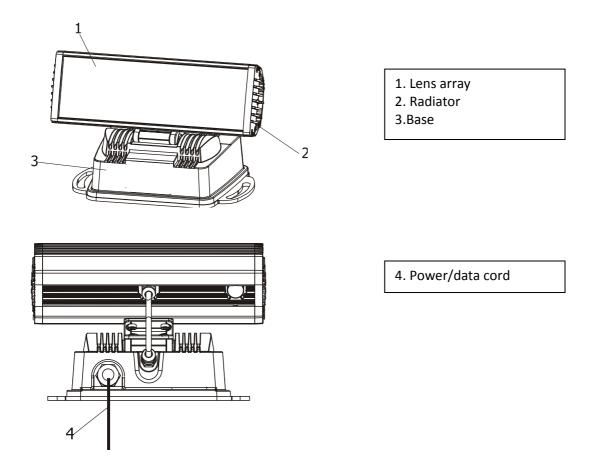
Do not attempt to dismantle or modify the unit.

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

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

If this device will be operated in any way different to the one described in this manual, the product may suffer damages and the guarantee becomes void. Furthermore, any other operation may lead to dangers like short-circuit, burns, electric shock etc.

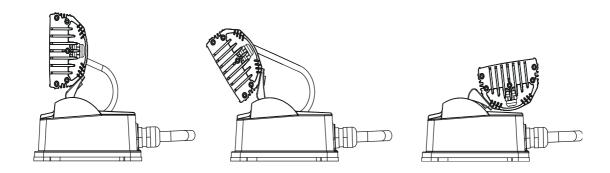
2. Fixture exterior view



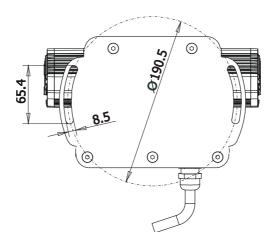
3. Installation

3.1 Mounting the fixture

The ArcPad 48 US Integral can be arranged in any position orientation. The ArcPpad 48 US Integral's radiator with LEDs is mounted on an adjustable bracket for "tilt" adjustment into many positions:



Two slots (8.5mm wide) in the fixture base serve for mounting on the non-flammable flat surface:



Ensure that the structure to which you are attaching the fixture is secure

Caution: Overhead installation requires experience. Fixtures may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the device and consult installation with an expert.

3.2 Connection to the mains

Fixtures must be installed by a qualified electrician in accordance with all national and local electrical and construction codes and regulation.

The ArcPad 48 US Integral is equiped with with a 5-cored power/data cable. The 3 cores serve for the power supply and next 2 shielded cores are intended for DMX connection.

The power cores are coloured according to the following table.

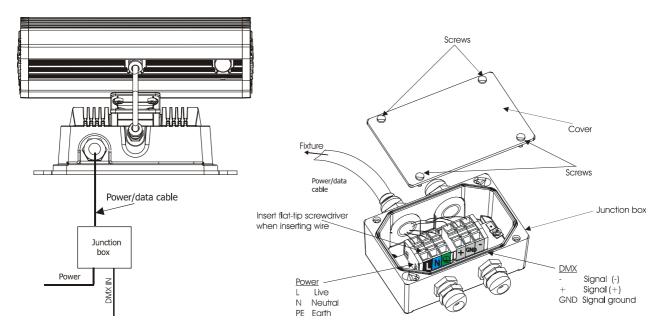
Core	Connection	Plug Terminal Marking
Black	Live	L
Blue	Neutral	N
Yellow/Green	Earth	

This device falls under class one and must be grounded!

The data cores (DMX) are coloured according to the table:

Core	Connection
Brown	Data +
White	Data -
Shielding	Data ground

The power/data cable is connected to a junction box as shown on the picture below.

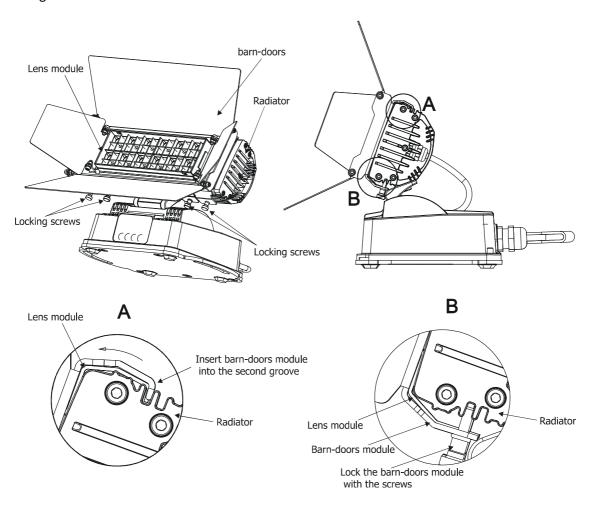


3.3 Installation of the barn-doors

You can install the barn-doors to better define illuminated surface.

To install the barn-door module:

- 1. Disconnect the fixture from the mains.
- 2. Put the top edge of the barn-doors module into the second groove on the top side of the radiator (detail A) and the bottom edge into the second groove on the bottom side of the radiator and tighten four locking screws M2 to secure this barn-doors module on the radiator.



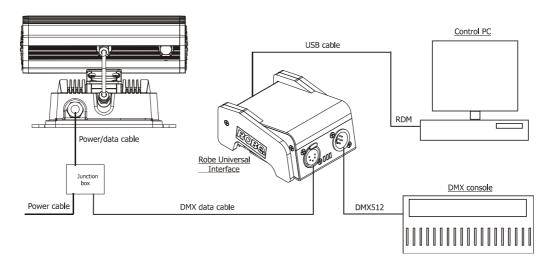
Never close the barn-doors during fixture operation

3.4 Setting and control

For setting DMX address, selecting DMX mode and for another settings you need either Robe Universal Interface or the RDM Communicator. Please see the Robe Universal Interface or RDM Communicator user manuals to get more information about this products. The way, how to connect these interfaces to the DMX data link is figured below

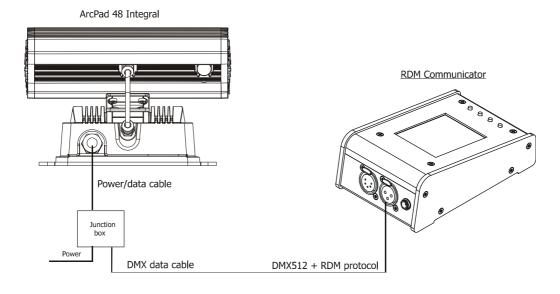
NOTE: never connect the RDM communicator and the The Robe Universal Interface to the fixture at the same time.

1.Robe Universal Interface



2. RDM Communicator

Note: DMX controller has to be disconnected from the fixture when the RDM communicator is operated.



3.5 DMX 512 connection

To build a DMX chain

- 1. Connect the DMX output of the controller directly with the DMX input of the first fixture in the DMX chain.
- 2. Connect the DMX output of the first fixture in the DMX chain with the DMX input of the next fixture.
- 3. Always connect the DMX output with the input of the next fixture until all fixtures are connected. Do not overload the link. Max. 32 fixtures may be connected on a DMX link.

Caution: Terminate the output of the last fixture with a 120 Ohm resistor wired betwen data (+) and data (-) in order to ensure the proper transmission on the data link.

3.6 Master/slave connection

To build a master/slave-chain:

Connect the DMX output of the master fixture in the data chain with the DMX input of the first slave. Always connect output with the input of the next slave until all slaves are connected (up to 32 fixtures).

Caution: It is necessary to terminate the input of the master fixture and the output of the last slave with a 120 Ohm resistor in order to ensure the proper transmission on the data link.

3.7 Stand-alone operation

The fixtures on a data link are not connected to the controller but can execute pre-set programs which can be different for every fixture. To set the program to be played, see the "Stand-alone setting" (menu "St.AL."). "Stand-alone operation" can be applied to the single fixture or to multiple fixtures operating synchronously. Synchronous operation of multiple fixtures requires that they must be connected on a data link and one of them is set as a master (master mode) and the rest as the slaves (slave mode).

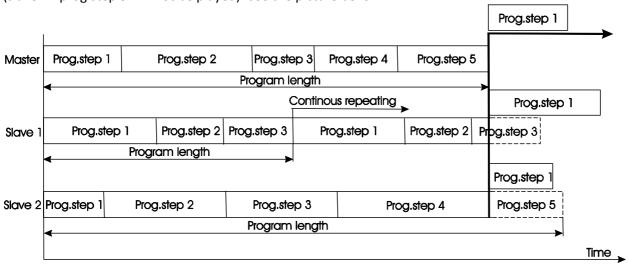
To set the fixture as the master or slave, see the "Fixture Address" (menu "A001").

Only one fixture can be set as the master.

The master fixture starts simultaneous program start in the other slave fixtures. All fixtures have a definite, synchronized starting point when playing back their programs. The number of running program is the same in all slaves and depends on the master's choice (menu "St.AL."). Every fixture runs its program repeatedly, starting the program step No.1 when requested by the master.

Example:

If the slave fixture has a shorter program length, it will continuously repeat its program until the master fixture finishes its own program and restarts its program running (slave 1- prog.step 3 will not be finished). If the slave fixture has a longer program length, it will restart at prog. step 1 before it completes all its prog.steps (slave 2 - prog.step 5 will not be played)- see the picture bellow.



Note: Disconnect the fixtures from the DMX controller before master/slave operating, otherwise data collisions can occur and the fixtures will not work properly!

4. ArcPad 48 US Integral (RGBCW) - DMX protocol

Version 1.1

—	Mode/Channel					
1	2*	3	4	Value	Function	Type of control
-	1	1	1	0 - 255	Red LEDs Red LEDs saturation control (0-100%)	proportional
-	2	2	2	0 - 255	Green LEDs Green LEDs saturation control (0-100%)	proportional
-	3	3	3	0 - 255	Blue LEDs Blue LEDs saturation control (0-100%)	proportional
-	-	4	4	0 - 255	White LEDs White LEDs saturation control (0-100%)	proportional
1			5	0 1-15 16 17-55 56 57 - 95 96 97 - 134 135 136 - 174 175 176 - 214 215 216 - 254 255	Colour macros (255 values) No function (for DMX mode 4) White (for DMX mode 1) White tones (cool→warm) Blue (Blue=full, Red+Green+White=0) Red=0, Green→up,Blue =full, White=0 Light Blue (Red=0, Green=full, Blue =full, White=0) Red=0, Green=full, Blue→down, White=0 Green (Red=0, Green=full, Blue=0, White=0) Red→up, Green=full, Blue=0, White=0 Yellow-green (Red=full, Green=full, Blue=0, White=0) Red=full, Green→down, Blue=0, White=0 Red(Red=full, Green=0, Blue=0, White=0) Red=full, Green=0, Blue=full, White=0 Magenta (Red=full, Green=0, Blue=full, White=0) Red→down, Green=0, Blue=full, White=0) Blue (Red=0, Green=0, Blue=full, White=0)	step proportional step
2	-	-	7	0-31 32-63 64-95 96-127 128-143 144-159 160-191 192-223 224-255	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 Random strobe-effects from slow to fast Shutter open Dimmer	step step proportional step proportional proportional step proportional step
-	-	-	8	0 - 255 0 - 255	Dimmer intensity from 0% to 100% Dimmer fine Fine dimmer intensity from low to high	proportional proportional

^{*}White LEDs lit proportionally when Red+Green+Blue LEDs are saturated together.

5. Control menu map

Default settings=Bold print

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
A001	dM.Ad.	001-512			
	MA.SL.	d.AbL			
		MASt.			
		SLA			
InFo	Poti.	FuLL	totL		
			rSEt		
		EcO	totL		
			rSEt		
	DM.In.	rEd1	0-255		
		:			
		F.dim	0-255		
	tEMP.	Cur.t.			
		Hi.tE.			
		rSEt			
	VErS.	IC1			
PErS	dM.Pr.	Mod.1			
		Mod.2			
		Mod.3			
		Mod.4			
	dISP.	d.On	On, Off		
		d.Int.	30,60, 100		
		turn			
	tEM.U.	°C , °F			
	bALA	On, Off			
	C.bAL.	rEd	0 200 255		
		GrEn	0 255		

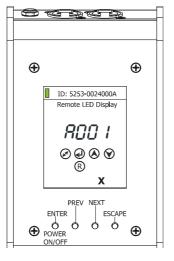
Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
		bLuE	0 237 255		
		Stor			
	LOAd	FuLL			
		EcO			
	In.Po.	rEd1	0-255		
		:			
		F.dim	0-255		
		Stor.			
	dFSE				
MAn.M.	PrE.C.	rEd1	rE.01rE.03		
		:			
		dimr	di.01di.06		
	Man.C.	rEd1	0-255		
		:			
		F.dim	0-255		
tESt					
St.AL.	Auto	Off			
		tESt			
		PrG.1			
		:			
		PrG.3			
	PLAY	tESt			
		PrG.1			
		:			
		PrG.3			
	Edit	PrG.1	St.01	P.End	1-68
		:	:	rEd1	0-255
		PrG.3	St.68	:	:

Menu Level 1	Menu Level 2	Menu Level 3	Menu Level 4	Menu Level 5	Menu Level 6
				S.tim.	0-25.5 sec
				СоРҮ	
SPEC.	rdML				
	rdMH				
	Adj.	DMH	rEd1		
			:		
			F.dim		
		CaL.U.	rEd1		
			:		
			Wh1		
			Stor.		
	uPd.M.				

6. Fixture menu

RDM communicator:

Connect the RDM communicator to the fixture and from the menu "Control" select the "Remote LED display" item. The fixture's control display with the four control buttons will appear on the screen of the RDM communicator.



The control buttons have the following functions:

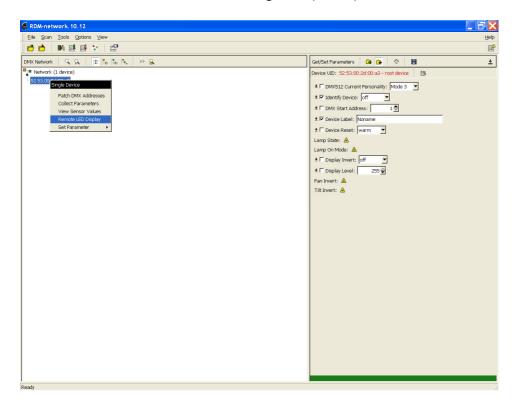
- ESCAPE button-leaves menu without saving changes.

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

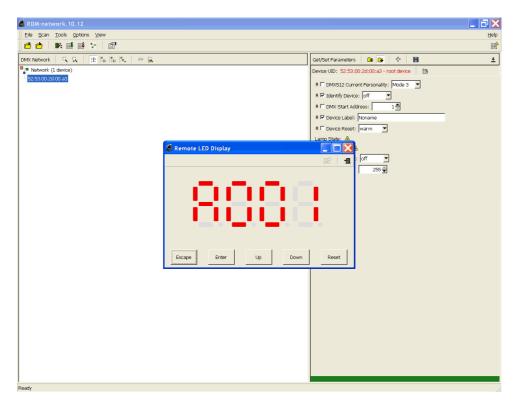
A - UP and **Y** - **DOWN** buttons - move between menu items on the same level, sets values.

Robe universal Interface:

Click with the right button of the mouse on the fixture (or a manufacturer icon) and select the **Remote LED display** option from the menu list as shown below.



The Remote LED Display window will appear. Now you can fullly control the fixture using the **UP**, **Down**, **Enter**, **Escape** and **Reset** buttons.



6.1 Fixture Address



Use this menu to set the DMX address of the fixture or set the fixture as a Master (Slave). **dM.Ad.** --- **DMX addressing**. Select this submenu to set a DMX start address.

To set a DMX address.

- 1. Use the UP/DOWN buttons to find "A001" menu.
- 2. Press the ENTER button.
- 3. Use the UP/DOWN buttons to select desired start address.
- 4. Press the ENTER button to confirm the choice.

<u>MA.SL.</u> --- Master/slave addressing. Select this submenu to set the fixture as a master or slave. Option "d.AbL" deactivates master/slave setting.

To set a fixture as a master or slave.

- 1. Use the UP/DOWN buttons to find "A001" menu.
- 2. Press the ENTER button.
- 3. Use the UP/DOWN buttons to select "MA.SL." item.
- 4. Press the ENTER button.
- 5. Use the UP/DOWN buttons to select either master (MASt) or slave (SLA)
- 6. Press the ENTER button to confirm the choice.

Note: After switching on, the ArcPad 48 US Integralwill automatically detect whether DMX 512 data is received or not.

If there is no data received at the DMX input, the display will start to flash with actually set address.

6.2 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.

<u>Po.ti.</u> --- <u>Power On Time.</u> Use the menu item to read the number of operation hours for each LEDs operating mode.

<u>Full</u>---Max light output from the fixture.

totL - the function shows the total number of the operation hours in the "FuLL" mode since the ArcPad 48 US Integral has been fabricated.

<u>rESEt</u> - the function shows the number of the operation hours that the ArcPad 48 US Integral has been powered on in the "FuLL" mode since the counter was last reset. In order to reset this counter to 0 you have to press and hold the UP and DOWN buttons and at the same time press the ENTER button.

EcO---Economical mode.

totL - the function shows the total number of the operation hours in the "EcO" mode since the ArcPad 48 US Integral has been fabricated.

<u>rESEt</u> - the function shows the number of the operation hours that the ArcPad 48 US Integral has been powered on in the "EcO" mode since the counter was last reset. In order to reset this counter to 0 you have to press and hold the UP and DOWN buttons and at the same time press the ENTER button.

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

<u>tEMP</u> ---**_Fixture Temperatures.** Select this menu to read the temperatures of the fixture:

<u>Cur.t.</u> --- the current temperature of the fixture inside.

Hi.tE. - the menu item shows the max. temperatures of the fixture inside since

the ArcPad 48 US Integral has been fabricated.

<u>rSEt</u> --- the menu item shows the maximum temperatures of the fixture inside since the counter was last reset. In order to reset this counter to 0 you have to press and hold the UP and DOWN buttons and at the same time press the ENTER button.

Note: The ambient temperature should not exceed 40°C.

The temperatures can be displayed in either °C or °F units - see option "tEM.U" in the menu "Pers".

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

6.3 Personality



Use this menu to modify the ArcPad 48 US Integral operating behaviour.

<u>DM.Pr.</u> --- **DMX preset**. Select this menu item to set a desired DMX mode. Please refer to the chapter "DMX protocol" for detail description of each DMX mode.

<u>Disp.</u> --- Display adjusting. This function allows you to change the display settings.

d.On --- this function allows you to keep the display on or to turn off automatically 2 minutes after last pressing any button on the control panel.

d.Int. --- select this function to adjust the display intensity (30-min.,100-max.).

turn --- select this function to turn the display by 180°.

tEM.U. --- Temperature Unit. Use this menu in order to display the fixture temperatures in desired units: °C or °F.

<u>bALA</u> --- Balance. Use this menu item to enable (On) or disable (Off) the white balance which is set in the "White colour balance" menu below. If this function is set off, the ArcPad 48 US Integral will use maximum values (255) of saturation for red, green and blue colour. This function has to be set on before adjusting a white balance.

C.bAL. --- **White Colour Balance.** The menu gives access to the setting of the white balance.

To set white colour balance.

- 1. Use a DMX controller or the "Man.C." menu to set all LEDs on max. saturation.
- 2. Use the UP/DOWN buttons to find the "Pers." menu.
- 3. Press the ENTER button.
- 4. Use the UP/DOWN buttons to select the "C.bAL"menu.
- 5. Press the ENTER button and the "rEd" item will appear on the display.
- 6. Press the ENTER button and use the UP/DOWN buttons to set new max. value for the red LEDs.
- 7. Press the ENTER button to confirm the choice.
- 8. Use the UP/DOWN buttons to select next colour, the "GrEn".
- 9. Repeat steps 6-7 for this channel.
- 10. Use the UP/DOWN buttons to select the last colour, the "bLuE" and repeat steps 6-7 for this colour.

<u>LoAd</u> --- Load of LEDs. The menu allows to choose 2 different operating modes for fixture.

<u>Full</u>--- Maximum light output.

EcO. --- The light output is decreased by 25%.

<u>In.Po.</u> --- Init effect positions. Use this function to set all effects to the desired positions to which they will move after switching the fixture on (if DMX is not being received).

Note. If DMX mode 1 is selected, only values set at items "MACr" (macro) and dinr (dimmer) will be accepted.

dF.SE. --- Default Settings . The menu item sets all fixture parameters to the default (factory) values.

6.4 Manual mode



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

PrE.C. --- Preset effects control. Select this menu to call up preset positions of the channel effects.

<u>Man.C.</u> --- 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:

"rEd1" - red LEDs saturations

"GrE1" - green LEDs saturations

"bLu1" - blue LEDs saturations

"Whi1" - white LEDs saturations

"MACr" - colour macros

"Stro." - a strobe, shutter

"dimr" - a dimmer

"F.dim" a fine dimmer

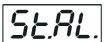
4. Press the ENTER button and use the UP/DOWN buttons to set value, press the ENTER button to confirm it.

6. 5 Test sequences



Use this menu to run demo-test sequences without an external controller, which will show you some possibilities of using the ArcPad 48 US Integral.

6.6 Stand-alone setting



The fixtures on a data link are not connected to the controller but can execute pre-set programs which can be different for every fixture. "Stand-alone operation" can be applied to the single fixture or to multiple fixtures operating synchronously.

Synchronous operation of multiple fixtures requires that they must be connected on a data link and one of them is set as a master ("MASt") and the rest as the slaves ("SLA"). Up to 32 fixtures can be connected in a master/slave chain. Only one fixture can be set as the master.

Note: Disconnect the fixtures from the DMX controller before master/slave operating, otherwise data collisions can occur and the fixtures will not work properly. See the chapters "Stand-alone operation" and "Master/slave connection".

<u>Auto.</u> --- Automatic playback. This function allows you to select the program which will be played after switching the fixture on. Selected program will be played continuously in a loop.

- 1. Use the UP/DOWN buttons to find "St.AL." menu.
- 2. Press the ENTER button.
- 3. Use the UP/DOWN buttons to select "Auto" item.
- 4. Press the ENTER button.
- 5. Use the UP/DOWN buttons to select desired program.
- 6. Press the ENTER button to confirm the choice.

<u>PLAY</u> --- Playing program. By enter to this menu a complete overview of all programs is offered, from which the program to be run can be selected.

- 1. Use the UP/DOWN buttons to find "St.AL." menu.
- 2. Press the ENTER button.
- 3. Use the UP/DOWN buttons to select desired program.
- 4. Press the ENTER button. The selected program runs in a loop.

<u>Edit</u> --- Editing a program. The fixture offers 3 freely editable programs (EPG.1-EPG.3) each up to 68 steps. Every program step includes a <u>fade time</u>-the time taken by the step's channel status to reach the desired level and a <u>step time</u>-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. 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 (PrG.1-PrG.3 and press ENTER button.
- 4. Use the UP/DOWN buttons to select a desired program step ("St.01" "St.68") 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 1-68). This value should be set before start Programming (e.g. if you want to create program with 10 steps, set P.End=10).

"rEd1" - a red LEDs saturation (0-255)

"GrE1" - a green LEDs saturation (0-255)

"bLu1" -a blue LEDs saturation (0-255)

"Whi1" - "Whi4" - a white LEDs saturation (0-255)

"MACr"- colour macros (0-255)

"Stro." - a strobe, shutter (0-255)

"dimr" - a dimmer (0-255)

"F.dim" - a fine 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.

6.7 Special functions



<u>rdML</u> --- Code. This menu item shows the first part of the RDM identification code.

<u>rdMH</u> --- Code. This menu item shows the second part of the RDM identification code.

AdJ --- **Effect Adjustment.** The menu allows calibration of each LEDs array.

dMH --- **DMX Values.** The menu item enables to control all LEDs before calibrating each LEDs array. **CAL.U** --- **Calibrating unit.** The menu serves for fine current calibration of LEDs during fixture burn-in at a factory. Users should not change the setting.

uPd.M. --- **Updating mode**. 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 1-3 and all items in the menu "PErS" will be set to their default values.

To update software in the fixture:

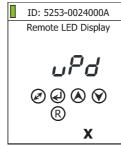
I. Installation of the DMX Software Uploader.

- 1. DMX Software Uploader program is available from the Anolis web site at WWW.anolis.cz.
- 2. Make a new directory (e.g. Anolis_Uploader) on your hard disk and download the software into it.
- **3**. Unpack the program from the archive.

II. Fixture software updating.

If you use the RDM Communicator:

- **1.** Disconnect the fixture from other fixtures in a DMX link.
- 2. Connect the RDM communicator to the fixture and switch this fixture to the update 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. Disconnect the RDM communicator from the fixture.
- **4.** Connect serial port of your PC with a DMX input of the fixture if you using the flash cable RS232/DMX.

If you use the Robe Universal Interface:

- 1. Disconnect the fixture from other fixtures in a DMX link.
- 2. Connect the Robe Universal Interface to the fixture and switch this fixture to the update mode:
 - 1. Run the RDM-Network and select menu item "Remote LED Display"
 - 2. Use the UP/DOWN buttons to find "SPEC." menu.
 - 3. Press the ENTER button.
 - 4. Use the UP/DOWN buttons to select "uPd." item.

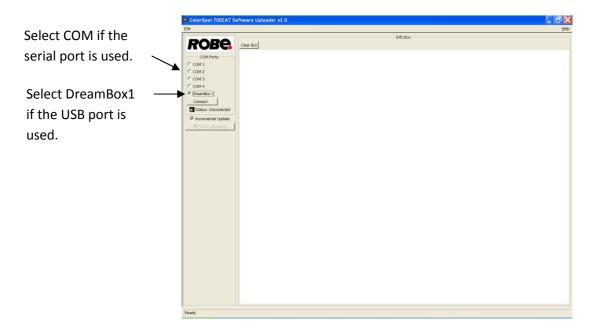


- 5. Press the ENTER button
- 6. Use the UP/DOWN buttons to select "yES" option
- 7. Press the ENTER button

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.

8. After switching the fixture to the update mode cancel the RDM-Network program.

Run the Software Uploader program. Select desired COM and then click on the Connect button. Note: we recommend to cancel all running programs before starting the Software Uploader.



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 the latest 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.

7. RDM

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

The RDM protocol allows data packets to be inserted into a DMX512 data stream without adversely affecting existing non-RDM equipment. By using a special "Start Code," and by complying with the timing specifications for DMX512, the RDM protocol allows a console or dedicated RDM controller to send commands to and receive messages from specific moving lights.

RDM allows explicit commands to be sent to a device and responses to be received from it.

The list of commands for ArcPad 48 US Integralis the following.

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	*	*
SENSOR_DEFINITION		*
SENSOR_VALUE		*
DISPLAY_LEVEL	*	*
DEVICE_RESET	*	
DMX_PERSONALITY	*	*
DMX_PERSONALITY_DESCRIPTION		*
STATUS_MESSAGES		*
STATUS_ID_DESCRIPTION		*
DEVICE_HOURS		*

Please, see the Robe Universal Interface user manual for detail description of RDM operation.

8. Error and information messages

t.M.Er. (Temperature measuring error)

The message informs you that the LED module temperature sensor is defective.

MA.Er. (Master error)

The fixture is set as a master and DMX console is connected to the fixture.

9. Technical specifications

Power supply

• Electronic auto-ranging

• Input voltage: 120 - 277V AC, 50-60 Hz

• Power consumption:

Power mode	Max. power consumption (All LED channels at full)	Typical power consumption (2 LED Channels at full)	Ambient Temperature
Full mode	60W	60W	25°C
Eco mode	40W	40W	

Optic & Effects

• Light source: 48 Luxeon Rebel LEDs (RGBW)

• Available optical systems: 12°, 25°, 45° and 45°x 15°

• RGBW colour mixing

• Built-in colour macros

• Adjustable strobe sequences

• White colour balance adjusting

•Lumen maintenance:

Channels @	Power	L ₇₀
full intensity	mode	
One LED	Full mode	90,000
channel	Eco mode	102,000
Two LED	Full mode	85,000
channels	Eco mode	96,000
Three LED	Full mode	85,000
channels	Eco mode	96,000
All LED	Full mode	85,000
channels	Eco mode	96,000

 L_{70} = 70% maintenance of initial lumen output in hours

Electronics

• Control: USITT DMX 512, RDM

• DMX protocol modes: 4 (2,3,4,8 control channels)

• Operations modes: DMX, Stand-alone, Master/Slave

• Manual control of all effects via RDM communicator

• 3 user editable programs each up to 68 steps.

Strobe

• Strobe effect with variable speed (max. 20 flashes per second)

• Pre-programmed random strobe pulse-effects

Dimmer

• Smooth 16-bit dimming from 0 - 100 %

Connection

• Power/data cable: Li9YCHY Cable 3xAWG16+1x (2xAWG24 Shielded and Jacketed)

• junction box

Rigging

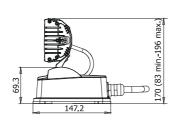
• Via two slots in the fixture base

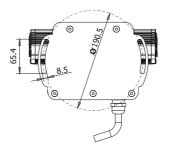
Temperatures

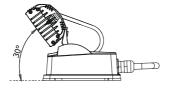
Maximum ambient temperature: 40° C
Maximum housing temperature: 80° C

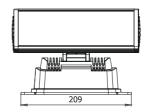
Dimensions (mm)

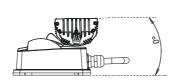
ArcPad 48 US integral

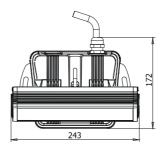




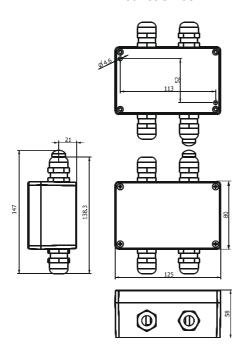








Junction box



Weight

• 3 kg

Protection factor

• suitable for wet location

Included items

- 1 x ArcPad 48 US Integral
- 1 x Junction box (No.99012672)
- 1 x User manual
- 1 x Gasket of cable grommet M20, PF ½ (P.N. 1305 1388)

Optional accessories

- 1 x Barn-doors module in silver colour (No. 10980090)
- Eggcrate top hat module without lenses (No. 10980091)
- Flash cable RS232/DMX (No. 13050624)

Note: By reason of the fast-moving development of LED technology, newer products may have better light parameters than previous products.

10. Cleaning and maintenance

DANGER!

Disconnect from the mains before starting any cleaning or maintenance work

Rinse off loose dirt with low pressure water spray. Wash the housing with a soft brush or sponge and a mild, non-abrasive washing detergent. Rinse it.

There are no serviceable parts inside the device.

Maintenance and service operations are only to be carried out by a qualified person.

Should you need any spare parts, please use genuine parts.

Specifications are subject to change without notice.