Squareled

USER MANUAL

Catalogue

1. Summary

> ## Summary

> Thank you for purchasing our Zoom Faible 12x15W. Please read these instructions carefully before begin and operate the fixtures according to these instructions to avoid any possible damages and accidents causes by misusage

> ## Product introduction

Zoom Faible 12x15W adopts high power 4-in-1 LED, which refers to single LED is made of R,G,B,W 4-IN-1 LED, And long life span, low consumption, good color mixing effect and high brightness are the most prominent features. Each kind of LED can be independently dimmed. The built-in program includes dimming, strobe, gradual change, fading and so on. It uses power switch, performs low weight and consumption, stable capability and long life. International standard DMX 512 signal is requested.

> ## Packing List

> > Zoom Faible 12x15W 1 PC

> > DMX Signal Cable   1 Set

> > Input power cable   1 PC

> > User Manual

> > Warranty Card

2. Safety Instruction

➢ Safety Notes

! Enquire the skilled people before any repair;

! Always make sure disconnect from the power source before setting up, serving and moving;.

! Avoid direct eye exposure to the fixture when it is on;

避免电击!

➢ Safety   instruction

● Make sure the power supply voltage are consistent with this lights，Ensure the use of voltage is in the range of the request technical parameter.

●Before the installation, please check the light's fasteners and mechanical structure have been received in good condition and appear no damage.

●This light is designed for indoor use; working temperature is lower than 40 degree.

●The fixtures maybe mounted in any position provided there is adequate room for ventilation. Make sure there are no inflammable and explosive items (ornaments) in 0.5 meters away.

●Yellow / green cabling earthling safety; no flicker when the fixture is working on.

3. Outside Size Picture
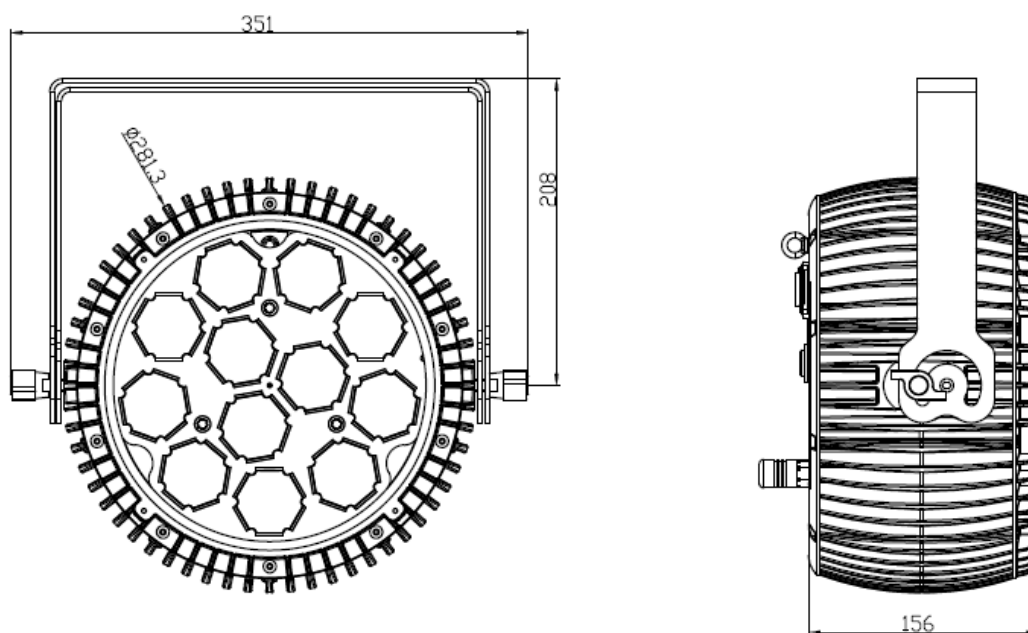
4. Main Function

➢ Input voltage: AC 100V-264V/47-63HZ

➢ Consume: 180W

➢ Lamp Type: 15W LED 4-in-1 R、G、B、W(12PCS)

- Life span: 50000~100000hours

- PWM Dimmer: 4300HZ(16666 grades)

- Control Signal: DMX512

- Zoom angle: 8-58 degree

- Control mode: stand alone/ Master/Slaver

- Channel: 11CH、7CH、5CH

- Function Effect: dimmer, strobe, gradual change, rainbow, self program running

- Built-in temperature control measurement function, when LED work overheated, intelligent reduce LED output power, current power output and temperature can be viewed.

- Cooling mode: Natural Convection

- Anti-electricity intension: 1.5KV

- Insulation Resistance:>2MΩ

- Protection: IP65

- Net weight:7.8Kg

5. DMX Control Function

DMX Channels

5CH	7CH	11CH	Value	Function
-	CH1	CH1	0-255	Master intensity
CH1	CH2	CH2	0-255	R
CH2	CH3	CH3	0-255	G
CH3	CH4	CH4	0-255	B

CH4	CH5	CH5	0-255	W
CH5	CH6	CH6	0-255	ZOOM
-	CH7	CH7	0-5	No strobe
			6-20	Not synchronous strobe(slow to fast)
			21-60	Synchronous strobe(slow to fast)
			61-100	Electronic Sine wave(slow to fast)
			101-140	Random Strobe(slow to fast)
			141-180	Opening pulse(slow to fast)
			181-220	Closing pulse(slow to fast)
			221-255	Electronic Square wave(slow to fast)
-	-	CH8(CH8 Prior to CH10)	0-5	No effect
			6-10	CT01(Call custom color in menu setting)
			11-15	CT02
			16-20	CT03
			21-25	CT04
			26-30	CT05
			31-35	CT06
			36-40	CT07
			41-45	CT08
			46-50	CT09
			51-55	CT10
			56-60	AUTO 1(R,G,B,RG,RB,GB)
			61-65	AUTO 2(R↑,R↓,G↑,G↓,B↑,B↓,W↑,W↓)
			66-70	AUTO 3(R↑G↑,R↓G↓,R↑B↑,R↓B↓,B↑G↑,B↓G↓)
			71-75	AUTO 4 (R↑G↑B↑W↑,R↓G↓B↓W↓)
			76-80	AUTO 5 (Rainbow effect: B,BG↑,BG,B↓G,G,GR↑,GR,G↓R,R,RB↑,RB,R↓B)
			81-220	Reserved
			221-225	CHASE1
			226-230	CHASE2
			231-235	CHASE3
			236-255	Reserved
-	-	CH9	0-255	Auto speed(fast->slow)
-	-	CH10		Virtual color wheel
			0-10	No effect
			11	Blue (Blue=full, Red+Green+White=0)(step)
			12-50	Red=0, Green->up,Blue =full, White=0(proportional)
			51	Light Blue (Red=0, Green=full, Blue =full, White=0)(step)
			52-90	Red=0, Green=full, Blue->down, White=0(proportional)
			91	Green (Red=0, Green=full, Blue =0,

				White=0)(step)
			92-130	Red->up, Green=full, Blue=0, White=0(proportional)
			131	Yellow (Red=full, Green=full, Blue=0, White=0)(step)
			132-170	Red=full, Green->down, Blue=0, White=0(proportional)
			171	Red(Red=full, Green=0, Blue=0, White=0)(step)
			172-210	Red=full, Green=0, Blue->up, White=0(proportional)
			211	Magenta (Red=full, Green=0, Blue=full, White=0)(step)
			212-250	Red -> down, Green=0, Blue=full, White=0(proportional)
			251-255	Blue (Red=0,Green=0,Blue=full,White=0)(step)
-	-	CH11	0-10	Use the dimmer mode which menu had set up
			11-20	Linear curve
			21-30	Square law curve
			31-40	Inverse square law curve
			41-50	S-curve
			51-60	Linear curve and smooth
			61-70	Square law curve and smooth
			71-80	Inverse square law curve and smooth
			81-90	S-curve and smooth
			91-254	Use the dimmer mode which menu had set up
			255	Reset fixture(at least 5S)

6. Display Operation instruction
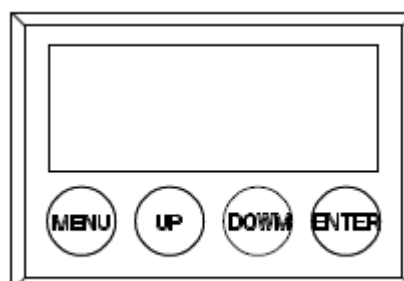
➢ MENU : access the menu or return to a previous menu option

➢ ENTER: select the current menu option

> UP: menu selection or parameter increments

> DOWN: menu selection or parameters decrease

Menu Tree

TAB	LEVEL1	LEVEL2	LEVEL3	LEVEL4
ADDR(Address)	001-512			
STAT(Static control)	R	0-255 *		
	G	0-255 *		
	B	0-255 *		
	W	0-255 *		
	ZOOM	0-255 *		
	SHUT	0-255 *		
SET(Set)	SIGN(DMX signal selection)	2.4G(wireless)/CABL(Cable)		
	WIRE(Wireless set)	REST(reset)	YES/NO	
		KEY		
	CAL(Calibration)	R	0-255	
		G	0-255	
		B	0-255	
		W	0-255	
		USE	YES/NO	
	CHMD(Channel mode)	11CH		
		7CH		
		5CH		
	DIM(Dimming mode)	LIN(linear)/SQR(square law)/ISQR(inverse square law)/SCUR(S-curve)/LIN.(linear smooth)/SQR.(square law smooth)/ISQR.(inverse square law smooth)/SCUR.(S-curve smooth)		
	DISY(Display set)	ON(Permanent on)		
		2 OFF (2 minutes off)		
	LOCK(Key 2 minutes lock)	YES/NO		
CTST(Custom color set)	CT01	R	0-255	

	.	G	0-255	
	.	B	0-255	
	.	W	0-255	
	CT10			
AUTO(Auto)	AT01	RUN.. *		
	.	RUN.. *		
	.	RUN.. *		
	.	RUN.. *		
	AT05	RUN.. *		
	ATSP(Auto speed)	0-255(S)		
	CHS1（Chase 1）	RUN.. *		
	CHS2（Chase 2）	RUN.. *		
	CHS3（Chase 3）	RUN.. *		
PROG（Program）	CHS1（Chase 1）	SC01（Scene 1）	R	0-255
	.	.	G	0-255
	.	.	B	0-255
	.	.	W	0-255
	.	.	ZOOM	0-255
	.	.	SHUT	0-255
	.	.	TIME	0-255(S)
	.	.	WAIT	0-25.5(S)
	.	.	USE	YES/NO
	.	SC25（Scene 25）		
	CHS3（Chase 3）			
INFO （Information）	SOFT(Software version)	Vx.x		
	POW(Power reduction)	xxx%		
	TEMP	xxxC		
LOAD(Load)	ST L（Setting load）	YES/NO		
	PR L（Program load）	YES/NO		
SEND(Send)	YES/NO			

Instructions:

When enter to the "*" position displayed on the LED, the light will automatically set as master and send data to external. Other fixtures can receive this data and will synchronously running without manually set as slave. When power cycle it will

jump to the "*" position and running again. And in these position it will not return

back to the default display after two minutes.

6.1 DMX ADDRESS SETTING

1) Press the 【ENTER】 button in 【ADDR】 menu, then enter to the DMX address setting.

2) Press the【UP/DOWN】button to select【1-512】numerical value.

3) Press the【ENTER】button to escape and save.

6.2 STATIC SETTING

1) Press the【ENTER】button in 【STAT】menu, then enter to the static setting.

2) Press the【UP/DOWN】 button to select 【RED】, 【GREEN】, 【BLUE】, 【WHITE】, 【ZOOM】, 【SHUT】.

3) Press the【UP/DOWN】button to set up the【0-255】numerical value.

4) Press the【ENTER】button to escape and save.

6.3 DMX signal selection setting (When no wireless ignore)

1) Press the【ENTER】button in【SIGN】menu, then enter to the DMX signal selection setting.

2) Press the【UP/DOWN】button to select【2.4G】,【CABLE】.

3) Press the【ENTER】button to escape and save.

6.4 Wireless set (When no wireless ignore)

1) Press the【ENTER】button in【WIRE】menu, then enter to the wireless set.

2)【RESET】the process of pressing power on after simulating wireless mode power off

3)【KEY】Similar to External button.

6.5 COLOR CAST CALIBRATION SETTING

1) Press the【ENTER】button in 【CAL】menu, then enter to the color cast calibration setting.

2) Press the【UP/DOWN】button to select 【RED】, 【GREEN】, 【BLUE】, 【WHITE】

3) Press the【UP/DOWN】button to set up the【0-255】numerical value.

4) On the【USE】interface, pressing【YES】button means valid,【NO】means invalid.

5) Press the【ENTER】button to escape and save.

Illustrations: When pressing the【YES】button which means valid on the【USE】interface, the actual output value of RED，GREEN，BLUE，WHITE is output in accordance with the percentage which the color cast calibration value divides 255.

6.6 CHANNEL MODE SETTING

1) Press the【ENTER】button in 【CHMD】menu, then enter to the channel mode setting.

2) Press the【UP/DOWN】button to select【11CH】，【7CH】，【5CH】

3) Press the【ENTER】button to escape and save.

6.7 DIMMING MODE SETTING

1) Press the【ENTER】button in【DIM】menu, then enter to the dimming mode setting.

2) Press the【UP/DOWN】button to select【LIN】，【SQR】，【ISQR】，【SCUR】，【LIN.】，【SQR.】，【ISQR.】and【SCUR.】.

3) Press the【ENTER】button to escape and save.

Illustrations: When setting【LIN.】，【SQR.】，【ISQR.】and【SCUR.】 in【DIM】menu, there will be added a little delay dimming effect for smooth..
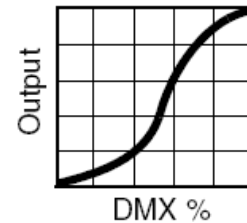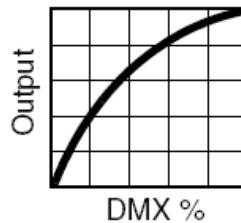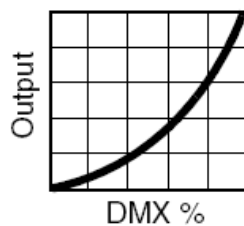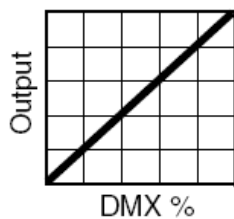
Dimming curve:

Linear curve: square law curve: Inverse Square law curve:

S-curve:

6.8 DISPLAY SETTING

1) Press the【ENTER】button in【DISY】menu, then enter to the display setting.

2) Press the【UP/DOWN】button to select【ON】，【2 MINITES OFF】

3) Press the【ENTER】button to escape and save.

6.9 AUTO LOCK KEY SETTING

1) Press the【ENTER】button in【LOCK】menu, then enter auto lock key setting.

2) Press the【UP/DOWN】button to select【YES】,【NO】

3) Press the【ENTER】button to escape and save.

Instructions:

When set to [YES], it will lock automatically after two minutes to prevent accidental triggering flood flushing. When in the order press MENU->UP->DOWN->ENTER three times to unlock，and the time between two keys be press down must within 2 seconds.

6.10 CUSTOM COLOR SETTING

1) Press the【ENTER】button in【CTST】menu, then enter to the custom color setting.

2) Press the【UP/DOWN】select【CT01】…【CT10】

3) Press the【UP/DOWN】button to select【RED】,【GREEN】,【BLUE】,【WHITE】

3) Press the【UP/DOWN】button to select【1-255】numerical value.

4) Press the【ENTER】button to escape and save.

6.11 AUTO RUN, SELF-PROGRAM RUN

1) Press the【ENTER】button in【AUTO】menu, then enter to the auto run,self-program run.

2) Press the【UP/DOWN】button to select【AT01】…【AT05】,【AUTO SPEED】,【CHASE01】…【CHASE03】

3) Press the【ENTER】button to start running.

6.12 EDIT SELF-PROGRAM

1) Press the【ENTER】button in【PROG】menu, then enter to the edit self-program.

2) Press the【UP/DOWN】button to select【CHASE01】…【CHASE03】

3) Press the【ENTER】button for confirmation and enter to the next menu.

4) Press the【UP/DOWN】button to select【SCENE01】…【SCENE25】

5) Press the【ENTER】button for confirmation and enter to the next menu.

6) Then press the【UP/DOWN】button to select【RED】…【SHUT】,【AUTO】,【ATSP】,【TIME】,【WAIT】,【USE】

7) Press the【UP/DOWN】button to set up the parameter which are needed.

8) Press the【ENTER】button t o escape and save.

Illustrations: When【USE】 is set to be【NO】, or the parameter of【TIME】 is 0, it will not run this scene.When 【WAIT】is set to be FADE time, the running process isas the following chart showing.
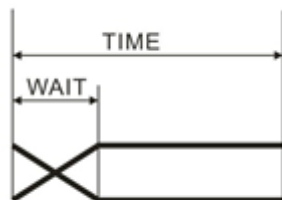
6.13 CHECK THE LIGHTING INFORMATION

1) Press the【ENTER】button in【INFO】menu, then enter to the checking the lighting information.

2) 【SOFT】button is for software version information.

3) 【POW】button is for the current information of power reduction..

4) 【TEM】button is for the current temperature of lamp.

6.14 LIGHTING SETTING PARAMETER RESET

1) Press the【ENTER】button in【ST L】menu, then enter to the lighting setting parameter reset.

2) Press the【UP/DOWN】button to select【YES】.

3) Press the【ENTER】button to escape and save.

Illustrations: "ADDR" "CTST" and "PROG" are not reset, the others reset to the underlined value of the word.

6.15 【PROG】SELF-PROGRAMMING PARAMETER RESET

1) Press the【ENTER】button in【PR L】menu, then enter to the【PROG】self-programming parameter reset.

2) Press the【UP/DOWN】button to select【YES】.

3) Press the【ENTER】button to escape and save.

6.16 LIGHTING PARAMETER DOWNLOADING EACH OTHER VIA DMX CABLE

1) Press the【ENTER】button in【SEND】menu, then enter to sending parameter to other lightings.

2) Press the【UP/DOWN】button to select【YES】.

3) Press the【ENTER】button to confirm sending.

Illustrations:

1) Please disconnect the connection of projector and DMX console before sending the parameter.

2) The information of【ADDR】can't be sent, can't be downloaded each other.

3) There will be an automatic reset of the other projectors after receiving parameter correctly.

7. Instruction for compatible Sweden DMX wireless module(when no wireless ignore)

1) There are 4 modes: compatible Sweden receive mode(green indicator), compatible Sweden transmit mode(blue indicator), normal mode(yellow indicator),custom mode(red indicator)

2) After 【RESET】, and then press【KEY】to switch above modes, select needed mode and press【KEY】 one second to confirm and save it.

3) Under compatible Sweden DMX receive mode, press 【KEY】 3 seconds to delete matching between light and transmitter.

4) Under compatible Sweden DMX transmit mode, press 【KEY】to match receive mode, press 3 seconds will delete matched mode.

5) Working in normal mode, indicator has 7 colors for option, when light and transmitter indicator are in the same color, can receive and transmit data.

6) User-defined function is not available.

7) Notice: compatible Sweden DMX mode in this lights has complete data for sending and receiving, but transmit function is not available here.

8. Operating Control Instruction

➢ **Master/Slave**

When the fixtures work in master mode it will send out the signal for the slave synchronous with it. To avoid the host signal and DMX512 signals interfere with each other, should cut off the DMX512 signals. The signal lines are longer than 60 meters (20 lamps), should increase a signal amplifier.
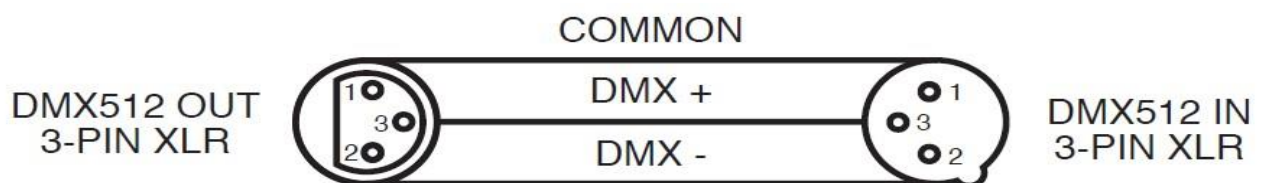
9. XLR cable connecting

➢ **XLR cable：**

The standard connection way of the XLR is: one end connects to the male plug, and the other connects to the female. As below: pin 1: ground, pin 2: negative signal, pin 3: positive signal

Noted: In order to avoid failures and interference signal

transmission，we connect a

Resistance 120Ω（1/4W）at the end of the DMX connecting as below:

Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

➢ The Conversion between 3 pin and 5 pin XLR

If the output cable of DMX512 controller is the 5PIN, please use 1pc 5PIN to 3PIN cable

3-Pin XLR to 5-Pin XLR Conversion

Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use

10. Trouble Shooting

PROBLEM	REASON AND ACTION
The lightin g can't be started normally	➢ Check the power connection is correct or not. ➢ Please detect the voltage. ➢ Power supply is damaged or incorrect connected. Call a qualified personnel to fix it. ➢ Connection of control board is not correct. Call a qualified personnel to fix it.
Out of console's control	➢ Please check the DMX connector and the power connection is connected correctly or not. It means having signal if it shows twinkling of the decimal point which in the lower right corner of the screen when exiting the screen saver. ➢ Please check the DMX address setting of lighting is correct or not. ➢ Check【CHMD】setting is correct or not. ➢ Please check whether the DMX line is near to

	the high voltage wire or not. In that case, it will damage or interfere the DMX electric circuit.
The beam appears dim ,the brightness declines obviously	➢ Check whether the【POW】is in over temperature protection situation or not, if yes, please take measures for ventilation.

Das Lichttechnikhaus Vertriebs GmbH

Rudolf-Diesel-Str. 3, D-89312 Günzburg

Telefon	+49 (0) 82 21 207 98-0
Fax	+49 (0) 82 21 207 98-69
E-Mail	info@lth-gmbh.de
Web	www.lth-gmbh.de