



# **Queled Series**

# **USER MANUAL**

Thank you very much for choosing our product. For safety purpose, please read this manual carefully before your operation. This manual included installation and using information. Please install and operate it according to this manual.

QR CW4\_CW5\_UV5 -V1.0 05.08.2015

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# Part 1 Product

#### **1.1 Product introduction**

This product is designed for Indoor and outdoor (with necessary cover) use. Suitable applications include wash or effect lighting for architectural, stage or nightclub applications. This product can also be installed for use in signage and advertising using the dynamic functions available with DMX512 control. Direct input of DMX512 signal allows the units to be controlled from any DMX512 controller. This product can be operated as a single unit or in multiple units for large applications.

#### **1.2 Product Features**

\* Optical system: 1-256 grades electric adjustable, mini within 100ms

\*Strobe: 0-20Hz Adjustable speed

\*Color Marco: 9 preset colors, speed adjustable

#### \* Working mode:

Standard DMX512 signal (TOUR, UNO, Arc.2, ARCS, Ar2.d, Ar2.s, HSV - 7 modes) Auto-mode Master/Salve Mode

\* Display panel: 4 digital led display

#### \* White balance adjustable

\* Auto-mode:

\*\*10 preset color change programs, speed adjustable \*\*10 custom programs

#### **1.3 Technical Specifications**

Voltage: AC100-240V, 50/60Hz AC230V—1.2A, AC115V—2.4A (QR 4series) AC230V—1.3A, AC115V—2.6A (QR 5series)
Light Source: QR CW4 series - 36PCS \* RGBW 4in1 LED lamp QR CW5 series - 36PCS \* RGBWA 5in1 LED lamp QR UV5 series - 36PCS \* RGBW +UV 5in1 LED lamp
Beam Degree: D20, D30, D40, D60 (up to order)
LED Lifespan: around 30,000 ~ 50,000 hours (Rated by LED lamp factory)
Case: Die-casting aluminum
Net Weight: 10.56Kg (non-IP), 10.94kg (IP64) (Optional Barndoor & color filter holder up to order)
Size: 533 x 228 x 216mm

#### 1.4 Dimension









#### **1.5IMPORTANT:**

#### ALWAYS READ THE USER MANUAL BEFORE OPERATION. PLEASE CONFIRM THAT THE POWER SUPPLY STATED ON THE PRODUCT IS THE SAME AS THE MAINS POWER SUPPLY IN YOUR AREA.

- $\stackrel{}{\simeq}$  This product must be installed by a qualified professional.
- $\stackrel{\scriptstyle <}{\sim}$  Always operate the equipment as described in the user manual.
- $\Rightarrow$  A minimum distance of 0.5m must be maintained between the equipment and combustible surface.
- $\stackrel{\scriptstyle <}{\sim}$  The product must always be placed in a well ventilated area.
- $\stackrel{\scriptstyle }{\precsim}$  Always make sure that the equipment is installed securely.
- ☆ DO NOT stand close to the equipment and stare directly into the LED light source.
- $\Rightarrow$  Always disconnect the power supply before attempting and maintenance.
- $\stackrel{\star}{\asymp}$  Always make sure that the supporting structure is solid and can support the combined weight of the products.
- $\stackrel{\scriptstyle <}{\sim}$  The earth wire must always be connected to the ground.
- $\stackrel{\scriptstyle }{\precsim}$  Do not touch the power cables if your hands are wet.

#### ATTENTION:

- ☆ This product left the place of manufacture in perfect condition. In order to maintain this condition and for safe operation, the user must always follow the instructions and safety warnings described in this user manual.
- $\Rightarrow$  Avoid shaking or strong impacts to any part of the equipment.
- $\Rightarrow$  Make sure that al parts of the equipment are kept clean and free of dust.
- $\stackrel{\star}{\asymp}$  Always make sure that the power connections are connected correct and secure.

- $\Rightarrow$  If there is any malfunction of the equipment, contact your distributor immediately.
- $\Rightarrow$  When transferring the product, it is advisable to use the original packaging in which the product left the factory.
- ☆ Shields, lenses or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is impaired.
- $\stackrel{\star}{\approx}$  The lamp (LED) shall be changed if it has become damaged or thermally deformed.

#### POWER CONNECTIONS

 $AC200V \sim : 15$  units may be connected in same series  $AC100V \sim : 8$  units may be connected in same series

# PART 2 INSTALLATION

#### 2.1 Mounting:

#### 2.1-1 Hanging

The fixture can be mounted in a hanging position using the supporting bracket. The bracket should be secured to the mounting truss or structure using a standard mounting clamp. Please note that when hanging the unit a safety cable should also be used.

#### 2.1-2 Upright

The fixture can be mounted in an upright or sitting position using the supporting brackets.

#### NOTE:

The fixture can be mounted at any angle and in any position. It is possible to further adjust the angle of the fixture using the two adjustment knobs located on the side of the fixture.

#### 2.2 SETTING UP WITH A DMX512 CONTROLLER

#### 2.1-1 Connect to DMX512 controller

- $\Rightarrow$  Connect the DMX512 controller to the units in series.
- ☆ When set TOUR mode -10 dmx channel, each unit will has 10 DMX channels so the DMX Addresses should increase by increments of 10 (e.g. 1,11,21,31...)
- $\Rightarrow$  Each DMX Address may be used as many times as required.
- $\Rightarrow$  Any DMX address in the range from 001 to 512 may be used.

#### 2.2-2 DMX Channel instruction

CW5 UV5 Series	CW4 Series	Function & Effect	DMX Value	
DMX Mode 1- TOUR				
CH1	CH1	Master Dimmer 0~100%	0<==>255	
CH2	CH2	RED 0~100%, (or STEP TIME when CUS.01-CUS. 10 in CH8 is activated)	0<==>255	
СН3	CH3	GREEN 0~100%, (or FADE TIME when CUS.01-CUS. 10 in CH8 is activated)	0<==>255	
CH4	CH4	BLUE 0~100%	0<==>255	
CH5	CH5	WHITE 0~100%	0<==>255	
CH6		AMBER / UV 0-100%	0<==>255	
CH7	CH6	COLOR MACRO NO FUNCTION RED 100%/GREEN UP/BLUE 0% RED 00%/GREEN 100%/BLUE 0% RED 0%/GREEN 100%/BLUE UP RED 0%/GREEN 00%/BLUE 100% RED UP/GREEN 0%/BLUE 100% RED 100%/GREEN 0%/BLUE DOWN RED 100%/GREEN UP/BLUE UP RED 100%/GREEN UP/BLUE UP RED 100%/GREEN DOWN/BLUE 100% RGBW/(A)100 % White1: 3200k White2: 3400k White 3: 4200k White 4: 4900k	0 <=>5 11 <=>30 31 <=>50 51 <==>70 71 <==>90 91 <==>110 111 <==>130 131 <==>150 151 <==>170 171 <==>200 201 <==>205 206 <==>210 211 <==>215 216 <==>220	
СН8	CH7	White 5: 5600k White 6: 5900k White 7: 6500k White 8: 7200k White 9: 8000k White 10: 8500k White 11: 10,000k Strobe speed from slow to fast	221<=>225 226<=>230 231<=>235 236<=>240 241<=>245 246<=>250 251<=>255 0<=>10 No Function	

		1	
		AUTO PROGRAM	
		No Function	000<==>020
		AUTO 1	021<==>030
		AUTO 2	031<==>040
		AUTO 3	041<==>050
	CH8	AUTO 4	051<==>060
		AUTO 5	061<==>070
		AUTO 6	071<==>080
		AUTO 7	081<==>090
		AUTO 8	091<==>100
		AUTO 9	101<==>110
CH9		AUTO 10	111<==>120
		CUSTOM 1	121<==>130
		CUSTOM 2	131<==>140
		CUSTOM 3	141<==>150
		CUSTOM 4	151<==>160
		CUSTOM 5	161<==>170
		CUSTOM 6	171<==>180
		CUSTOM 7	181<==>190
		CUSTOM 8	191<==>200
		CUSTOM 9	201<==>210
		CUSTOM 10	211<==>220
		No Function	221<==>255
		Auto speed adjustment	
CH10	CH9	(Activated with AUTO 1-10 of CH8)	0<==>255
	СН10	Dimmer Speed	
		Preset speed from display menu	0<==>9
		Linear Dimmer	10<==>29
CH11		Non Linear dimmer 1 (Fastest)	30<==>69
		Non Linear dimmer 2	70<==>129
		Non Linear dimmer 3	130<==>189
		Non Linear dimmer 4 (Slowest)	190<==>255
DMX Mode 2 - UNO (UV5 is same as CW4 under this mode)			
СН1	CH1	Master Dimmer 0~100%	0<==>255

		Fixed Color as COLR menu	
		No function	0<==>3
		L008	4<==>6
		L027	7<==>13
		L075	14<==>20
		L101	21<==>27
		L106	28<==>34
		L111	35<==>41
		L113	42<==>48
		L116	49<==>55
		L117	56<==>62
		L118	63<==>79
		L119	70<==>76
		L124	77<==>83
		L126	84<==>90
		L127	91<==>97
		L134	98<==>104
		L135	105<==>111
		L136	112<==>118
CH2	CH2	L142	119<==>125
		L147	126<==>132
		L152	133<==>139
		L153	140<==>146
		L162	147<==>153
		L170	154<==>160
		L176	161<==>167
		L180	168<==>174
		L181	175<==>181
		L193	182<==>188
		L194	189<==>195
		L201	196<==>202
		L204	203<==>209
		L219	210<==>216
		L243	217<==>223
		L323	224<==>230
		L343	231<==>237
		L363	238<==>244
		L716	245<==>251
51.00		L770	252<==>255
DMX	Mode 3		
ARC.3	ARC.2		
CH1	CH1	RED 0~100%	0<==>255
CH2	CH2	GREEN 0~100%	0<==>255
CH3	CH3	BLUE 0~100%	0<==>255
CH4	CH4	WHITE 0~100%	0<==>255
CH5		AMBER / UV 0-100%	0<==>255
DMX	Mode 4	4 - ARCS	
CH1	CH1	RED 0~100%	0<==>255
CH2	CH2	GREEN 0~100%	0<==>255

CH3	СН3	BLUE 0~100%	0<==>255	
CH4	CH4	WHITE 0~100%	0<==>255	
CH5		AMBER / UV 0-100%	0<==>255	
CH6	CH5	STROBE 0-20Hz	0<==>255	
DMX Mode 5 - Ar2. d				
CH1	CH1	Master Dimmer 0~100%	0<==>255	
CH2	CH2	RED 0~100%	0<==>255	
СН3	СН3	GREEN 0~100%	0<==>255	
CH4	CH4	BLUE 0~100%	0<==>255	
CH5	CH5	WHITE 0~100%	0<==>255	
CH6		AMBER / UV 0-100%	0<==>255	
DMX Mode 6- Ar2. s				
CH1	CH1	Master Dimmer 0~100%	0<==>255	
CH2	CH2	RED 0~100%	0<==>255	
CH3	CH3	GREEN 0~100%	0<==>255	
CH4	CH4	BLUE 0~100%	0<==>255	
CH5	CH5	WHITE 0~100%	0<==>255	
CH6		AMBER / UV 0-100%	0<==>255	
CH7	CH6	STROBE 0-20Hz	0<==>255	
DMX Mode 7 - HSV				
CH1	CH1	HUE - 256 colors	0<==>255	
CH2	CH2	SATURATION 0-100%	0<==>255	
CH3	CH3	VALUE 0-100%	0<==>255	

#### 2.2-3 Basic instruction for DMX512 (TOUR mode) MASTER DIMMER

CH1 controls the intensity of the currently projected color.

When the slider is at the highest position (DMX Value 255), the intensity of the output is the maximum

#### **RED, GREEN, BLUE & WHITE COLOR SELECTION**

CH2, 3, 4, 5 control intensity of RED, GREEN, BLUE & WHITE each. When the slider is at the highest position (DMX Value 255), the intensity of the output is the maximum

#### COLOR MACROS

CH6 selects the required COLOR MACRO and has priority over CH2-5 CH1 is used to control the intensity of the COLOR MACRO

#### STROBE

CH7 controls the strobe of CH1 to CH6

#### AUTO

CH8 selects the preset AUTO programs AT.01-AT.10 or the custom AUTO programs CUS.01-CUS.10

When activating the custom AUTO programs CUS.01~10, it is possible to control the STEP TIME/FADE TIME using CH2 and CH3 respectively.

CH8 has priority over CH2-7.

#### DIMMER SPEED

CH10 is for selecting the dimmer mode and dimmer speed. When DIMMER is set to OFF, then RGBW and MASTER DIMMER are linear. The Dim 1/2/3/4 are different speed of non linear dimmer.

#### 2.2-4 Special construction for DMX connection.

- $\stackrel{\scriptstyle }{\bowtie}$  At last fixture, the DMX cable has to be terminated with a terminator to reduce signal errors. Solder a 120-ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.
- $\cancel{k}$  If the controller is 5-pin output, it's necessary to use an adaptor to transfer signal from 5-pin output to 3-pin XLR-plug or you can connect cables as following:

3-pin XLR Pin 1 – 5-pin XLR Pin 1 GND

3-pin XLR Pin 2 – 5-pin XLR Pin 2

5-pin XLR Pin4 & Pin 5 not used

Negative signal (-) Positive signal (+)

3-Pin XLR Pin 3 – 5-pin XLR Pin 3

# **PART 3 LED Display Panel Operation**

3.1 Basic instruction:



**MENU** -- menu selection or return to previous menu

**ENTER** -- Confirm & Ouit out current function setting

**UP** -- Press UP through the menu list to increase/change the value of the current function

**DOWN** -- Press DOWN through the menu list to decrease/change the value of the current function

#### 3.2 Display operation menu tree









- 3) When uploading the MASTER and SLAVE units will display YELLOW
- 4) If an error occurs when uploading the MASTER and/or SLAVE units will display RED
- 5) On successful uploading of the custom programs the MASTER and SLAVE units will display GREEN
- 6) In order to reset custom modes to default values select REST
- 7) COLOR is for activate/inactivate the color calibration functions.
- 8) Enter the CAL1 to select white color of different color temperature.
- There are 11 pre-programmed white colors can be edited by using Red, Green, Blue and White.
- 10) Enter Dim to select dimmer mode and dimmer speed. When DIMMER is set to OFF, then RGBW and MASTER DIMMER are linear. The Dim 1/2/3/4 are speed modes of the non linear dimmer. Dim 1 is the fastest, while Dim 4 is the slowest.
- 11) The factory default setting is Dim OFF
- 12) The dim setting here does not react on the TOUR mode.

#### **3.10 ACTIVATE THE PASSWORD**

The factory access password is UP+DOWN+UP+DOWN and then press ENTER to confirm the access when you want to UPLOAD setting

Phenomenon	Solution		
* The fixture does not work * No light out * No Display	<ul> <li>* Check main power fuse &amp; power cable connection</li> <li>* Measure main voltage on the main connector</li> </ul>		
* The fixture does not work	* Check connection of display PCB		
* No display	* Replace a new display		
Led module on but no control from	Display IC reverse install/damaged.		
display	Check display IC installation		
No responding to DMX controller	<ul> <li>* Check working mode setting on display is DMX mode or not</li> <li>* Check whether the unit be set as SLAVE</li> <li>* Check DMX address settings</li> <li>* Check DMX cable and it's connection</li> <li>* Try to use another DMX console</li> </ul>		
Signal error while use DMX	* Check whether DMX cables be connected well or not * Check whether the DMX cable has to be terminated with a terminator to reduce signal errors. If not, please Solder a 120- ohm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture		

### Part 4, Troubleshooting

# Part 5, Maintenance

The cleaning of internal must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulation of dirt on the fixture's optics.

- $\stackrel{\scriptstyle <}{\curvearrowright}$  Clean with soft cloth using normal glass cleaning fluid.
- $\cancel{k}$  Always dry the parts carefully.
- $\stackrel{\scriptstyle \wedge}{\rightarrowtail}$  Clean the external optics at least every 20 days.

 $\gtrsim$  Clean the internal optics at least every 30/60 days – Up to vary products. Please ask professional technical to clean waterproof products and make sure the fixture will be reassembled well for waterproof