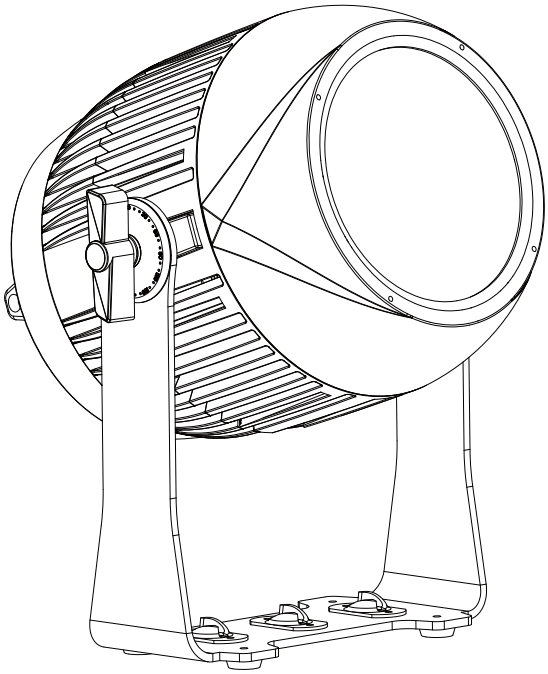
TYRA

MANUAL



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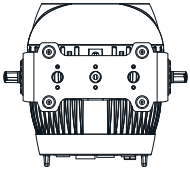
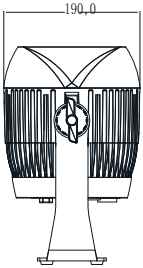
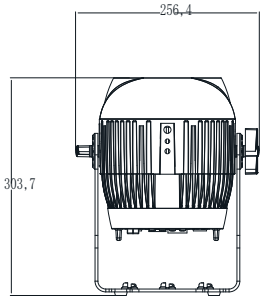
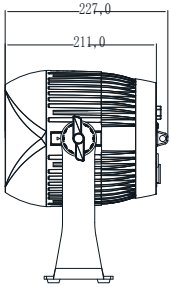
DIMENSIONS

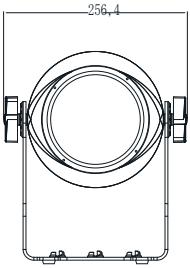
ALL DIMENSIONS ARE IN MILLIMETERS

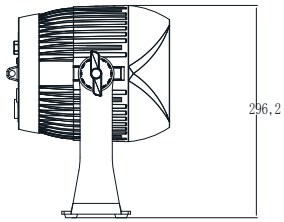












SAFETY INSTRUCTION

WARNING!

Read the safety precautions in this section before installing, powering, operating or servicing this product

The following symbols are used to identify important safety information on the product and in this manual:

DANGER!
Safety hazard.
Risk of severe injury or death.

DANGER!
Hazardous voltage. Risk of lethal or severe electric shock.

WARNING!
Fire hazard.

WARNING!
LED light emission. Risk of eye injury.

WARNING!
Burn hazard. Hot surface. Do not touch.

WARNING!
Wear protective eyewear.

WARNING!
Refer to user manual.

Warning! Risk Group 2 (Moderate-Risk) LED product according to EN 62471.
Do not look into the beam at short distance of the product.
Do not view the light output with optical instruments or any device that may concentrate the beam.

This product is for professional use only. It is not for household use.
This product presents risks of severe injury or death due to fire and burn hazards, electric shock and falls.
Read this manual before installing, powering or servicing the fixture, follow the safety precautions listed below and observe all warnings in this manual and printed on the fixture. If you have questions about how to operate the fixture safely, please contact your supplier.

PROTECTION FROM ELECTRIC SHOCK

- Disconnect the fixture from AC power before removing or installing any cover or part and when not in use.
- Always ground (earth) the fixture electrically.
- Use only a source of AC power that complies with local building and electrical codes and has both overload and ground-fault (earth-fault) protection.

- Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- Power input and throughput cables must be rated 16 A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5- 15 mm. Cables must be hard usage type (SJT or equivalent) and heat-resistant to 90° C minimum.
- Use only PowerCON TRUE 1® cable connectors to connect to power input sockets.
  Use only PowerCON TRUE 1® cable connectors to connect to power through put sockets.
- Isolate the fixture from power immediately if the power plug or any seal, cover, cable, or other component is damaged, defective, deformed,wet or showing signs of overheating. Do not reapply power until repairs have been completed.
- Refer any service operation not described in this manual to a qualified technician.
- Socket outlets used to supply fixtures with power or external power switches must be located near the fixtures and easily accessible so that the fixtures can easily be disconnected from power.

PROTECTION FROM BURNS AND FIRE

- The exterior of the fixture becomes hot during use. Avoid contact by persons and materials. Allow the fixture to cool for at least 5 minutes before handling.
- Keep all combustible materials (e.g. fabric, wood, paper) at least 100 mm away from the fixture.
- Keep flammable materials well away from the fixture.
- Ensure that there is free and unobstructed airflow around the fixture.
- Do not illuminate surfaces within 200 mm of the fixture.
- Do not attempt to bypass thermostatic switches or fuses.
- If you relay power from one fixture to another using power throughput sockets, do not connect more than ten fixtures in total to each other in an interconnected chain.
- Connect only other fixtures to fixture power throughput sockets.
- Do not connect any other type of device to these sockets.
- Do not stick filters, masks or other materials onto any optical component.
- Do not modify the fixture in any way not described in this manual.

PROTECTION FROM INJURY

- Do not look directly into the product's light output.
- Do not look at operating lamp. Eye injury may result.
- Do not look at the light output with magnifiers, telescopes, binoculars or similar optical instruments that may concentrate the light output.
- Ensure that persons are not looking directly into the front of the fixture when the product lights up suddenly. This can happen when power is applied, when the product receives a DMX signal, or when certain control menu items are selected.
- To minimize the risk of eye irritation or injury, disconnect the fixture from power at all times when the fixture is not in use and provide well-lit conditions to reduce the pupil diameter of anyone working on or near the fixture.
- Fasten the fixture securely to a fixed surface or structure when in use. The fixture is not portable when installed.
- Ensure that any supporting structure and/or hardware used can hold at least 10 times the weight of all the devices they support.
- Allow enough clearance around the head to ensure that it cannot collide with an object or another fixture when it moves.
- Check that all external covers and rigging hardware are securely fastened.
- Block access below the work area and work from a stable platform whenever installing, servicing or moving the fixture.
- Do not operate the fixture with missing or damaged covers, shields or any optical component.

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party.Responsible for compliance could void the user's authority to operate this equipment.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

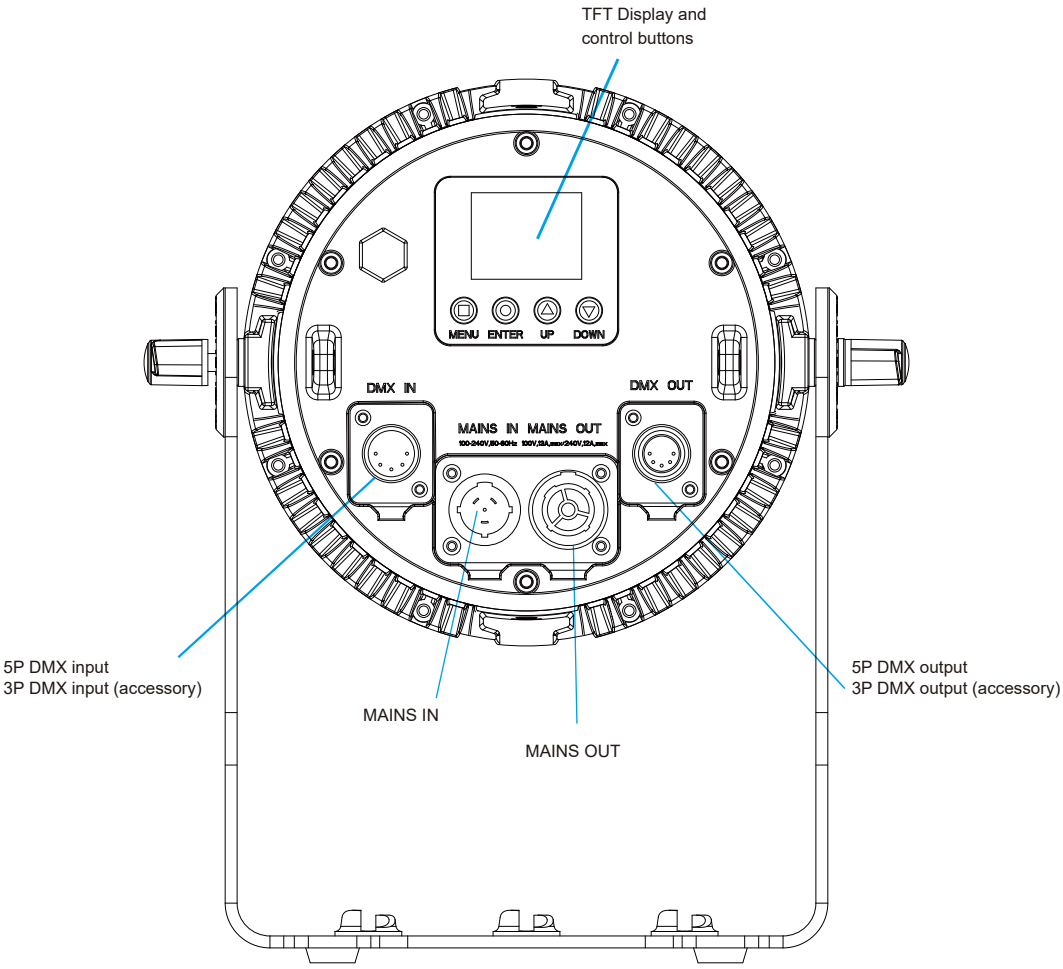
(1) This device may not cause harmful interference, and

(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Radiation Exposure Statement:

The equipment complies with FCC Radiation exposure limits set forth for uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator and your body.

FIXTURE OVERVIEW



INTRODUCTION

POWERFUL AND VERSATILE OUTDOOR LED WASH

- Compact design with powerful high-output RGBLA COB engine
- 16-bit technology for high-resolution colours and smooth dimming
- Optional APP or W-DMX controllable
- 50° beam & magnetic smart filter system
- CRI 96 & amber-drift blinder mode
- Easy to connect with other Tyra family members
- IP65 rating for dustproof and outdoor use

USING FOR THE FIRST TIME

Warning! Read "Safety Information" before installing, powering, operating or servicing the fixture. Before applying power to the fixture:

Check that the local AC mains power source is within the fixture's power voltage and frequency ranges.
See “Power cables and power plug” on page 6. Install a PowerCON TRUE 1 ® power input connector power cable

AC POWER

Warning! Read “Safety Information" starting on before connecting the fixtures to AC mains power.
Warning! For protection from electric shock, the fixture must be grounded (earthed). The power distribution circuit must be equipped with a fuse or circuit breaker and ground-fault (earth-fault) protection.
Warning! Socket outlets or external power switches used to supply the fixture with power must be located near the fixture and easily accessible so that the fixtures can easily be disconnected from power.

Important! Do not insert or remove PowerCON TRUE 1 ® connectors to apply or cut power, as this may cause arcing at the terminals that will damage the connectors.
Important! Do not use an external dimming system to supply power to the fixture, as this may cause damage to the fixture that is not covered by the product warranty.
The fixture can be hard-wired to a electrical installation if you want to install it permanently, or a power plug that is suitable for the local power outlets can be installed on the power cable.

POWER VOLTAGE

Warning! Check that the voltage range specified on the fixtures serial number label matches the local AC mains power voltage before applying power to the fixture.
The fixtures accepts AC mains power at 100-240 V nominal, 50/60 Hz. Do not apply AC mains power to the fixture at any other voltage than specified.

POWER CABLES

Power input and throughput cables must be rated 16A minimum, have three conductors 1.5 mm² (16 AWG) minimum conductor size and an outer cable diameter of 5- 15 mm. Cables must be hard usage type (SJT or equivalent) and heat- resistant to 90°C minimum. In the EU the cable must be HAR approved or equivalent.

If you install a power plug on the power cable, install a grounding-type (earthed) plug that is rated 16A minimum. Follow the plug manufacturer's instructions. Table 1 shows standard wire color-coding schemes and some possible pin identification schemes; if pins are not clearly identified.

Wire Color (EU models)	Wire Color (US models)	Conductor	Symbol
Brown	Black	Live	L
Blue	White	Neutral	N
Yellow/Green	Green	Ground (earth)	or

Table 1: Wire color-coding and power connections

RELAYING POWER TO OTHER DEVICES

Warning! Power can be relayed to another device via the PowerCON TRUE 1 ® throughput socket.

If you daisy chain the fixtures in a chain so that they all draw AC mains power via the first fixture, certain points must be respected:

- A heavy duty, three-conductor, 16 AWG or 1.5 mm2 cable with SJT or equivalent cable jacket must be used to connect the first fixture to AC mains power.
- PowerCON TRUE 1 ® connectors must be used to draw AC mains power from the fixtures power throughput sockets. PowerCON TRUE 1 ® connectors must be used to supply power at the fixture's power input sockets.
- When AC mains power voltage is 230V, do not connect more than six TYRA fixtures in total (including the first fixture) to AC mains power in one interconnected daisy chain using power input and through out connectors.
- When AC mains power voltage is 110V, do not connect other TYRA fixture in total to AC mains power in one interconnected daisy chain using power input and through out connectors.

DATA LINK

A DMX 512 data link is required in order to control a fixture via DMX. The fixture has 5-pin XLR connectors for DMX data input and output. The pin-out on all connectors is pin 1 = shield, pin 2 =cold (-), and pin 3 = hot (+) Pins 4 and 5 in the 5-pin XLR connectors are not used.

TIPS FOR RELIABLE DATA TRANSMISSION

To connect the fixture to data:

1.Connect the DMX data output from the controller to the 5-pin XLR connector of the nearest fixture.

2.Connect the DMX output of the fixture closest to the controller to the DMX input of the next fixture and continue connecting fixtures output to input.

PHYSICAL INSTALLATION

Warning! The fixture must be either fastened to a flat surface such as a stage or wall, or clamped to a truss or similar structure in any orientation using a rigging clamp.

Warning! If the fixture can cause injury or damage if it falls, attach an approved safety cable to one of the safety cable attachment points on the base (see "Fixture overview").

Check that all surfaces to be illuminated are minimum 200 mm. from the fixture, that combustible materials (wood, fabric, paper, etc.) are minimum 100 mm. from the fixture, that there is free airflow around the fixture and that there are no flammable materials nearby.

FASTENING THE FIXTURE TO A FLAT SURFACE

The fixture can be fastened to a fixed flat surface that is oriented at any angle. Check that the surface can support at least 10 times the weight of all fixtures and equipment to be installed on it.

Warning! The supporting surface must be hard and flat or cooling may be blocked, which will cause overheating. Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or can fall over. Attach a securely anchored safety cable to the safety cable attachment point (see “Fixture overview") if the fixture is to be installed in any location where it may fall and cause injury or damage if the primary attachment fails.

1. Block access under the work area. Working from a stable platform, hang the fixture on the truss with the arrow on the base towards the area to be illuminated. Tighten the rigging clamp.
2. Secure the fixture against clamp failure with a secondary attachment such as an approved safety cable that is rated for the weight of the fixture using one of the attachment points at the edges of the base (see "Fixture overview"). Do not use any other part of the fixture as a safety cable attachment point.

The installation of the fixture has to be built and constructed in a way that it can hold 10 times the weight for 1hour without any harming deformation.

The installation must always be secured with a secondary safety attachment, e.g. an appropriate catch net. This secondary safety attachment must be constructed in a way that no part of the installation can fall down if the main attachment fails.

When rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert after every four year in the course of an acceptance test.

The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

The fixture should be installed outside areas where persons may walk by or be seated.

IMPORTANT! OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE,including (but not limited to) calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but instead use a professional structural rigger.Improper installation can result in bodily injury or damage to property.The fixture has to be installed out of the reach of people.

If the fixture shall be lowered from the ceiling or high joists,professional trussing systems have to be used. The fixture must never be fixed swinging freely in the room.

Caution: Fixture may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the fixture!

Before rigging make sure that the Installation area can hold a minimum point load of 10 times the fixture's weight.

When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min.0.5 m.

Use an appropriate clamp to rig the fixture on the truss.

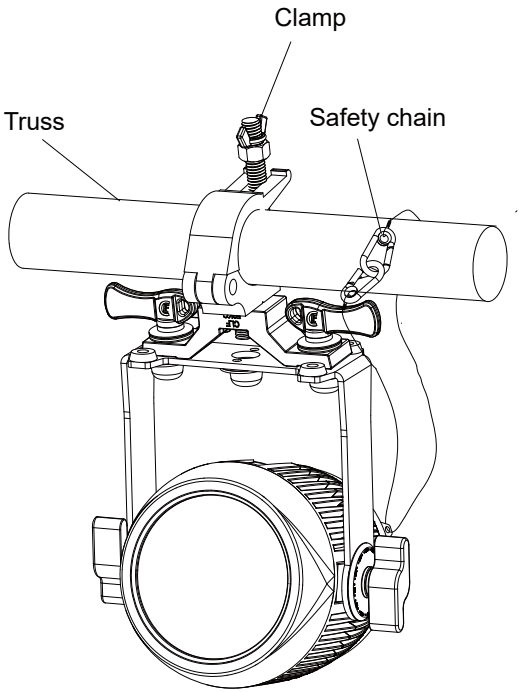
Follow the instructions mentioned at the bottom of the base.

Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixtures is secure.

The fixture can be placed directly on the stage floor or rigged on a truss without altering its operation characteristics.

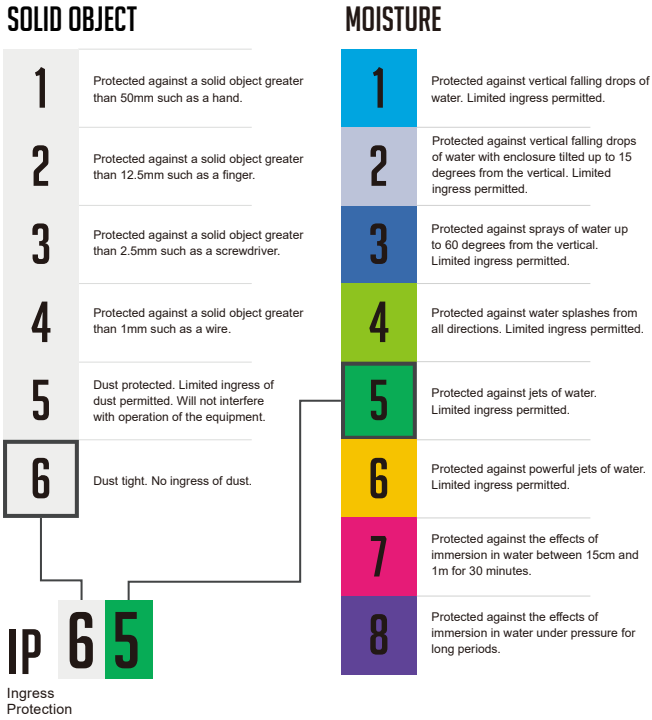
For securing the fixture to the truss, install a safety wire which can hold at least 10 times the weight of the fixture. Use only the safety wire with a snap hook with screw lock gate. Fasten the safety cable in the attachment point and around the truss as shown on the picture below.

RIGGING VIA OMEGA BRACKET:



OUTDOOR IP-RATED FIXTURES

CLF products are applied to official classified IP norm levels. For this product the IP rate is IP65 when using the covers for the chassis parts. IP65 means according classified norm: shielded against dust and pressurized water from any side. Typical use for outdoor rated stage events with normal weather acceptance. So no heavy rain, because then the water pressure over exceeds the IP norm.



CONDENSATION/MOISTURE INSIDE HOUSING

Because of high humidity levels during production condensation can occur inside the housing. This is mostly visible on the coldest parts of the fixture, like the front glass or display. To prevent this problem we work with special conditioned areas for outdoor fixtures. Because of the breathing air valves it is still possible to get humidity inside the fixture.This will evaporate slowly. Do not put wet fixtures in a flightcase, this will help humidity enter the fixture.

FIXTURES TEMPERATURE SPECIFICATION

Make sure the fixture is used within its working temperature range. Outside this range we cannot guarantee correct operation.

TEMPORARY USAGE:

Stage event equipment is designed with temporary use in mind. Our product purpose is for theatre, festival, (disco) clubs and indoor & outdoor concerts. Long term use is possible but keep in mind that it can bring damage to aging materials and affect the coated surface (i.e. stainless steel). Rubber sealings will be negatively affected after long-term UV exposure and should be checked by qualified service technicians over time.

Tighten screws too hard will also affect the IP-rating.

SETUP

Warning! Read "Safety Information" before installing, powering or operating the fixture.

CONTROL PANEL AND MENU NAVIGATION

The onboard control panel and backlit graphic display are used to set the fixture's DMX address, configure individual fixture settings (personality), read out data and execute service utilities. See "Onboard control menus" for a complete list of menus and commands.

Using the control buttons

- To ENTER the menu select [MENU].
- Press [UP] and [DOWN] to scroll within a menu or adjust values.
- To enter a menu, select a function or apply a selection, press [ENTER].
- To escape a function or move back one level in the menu structure, press [MENU].
- Hold [MENU]= highlight for 15 seconds
- Press [UP] and [DOWN] together to rotate display

DMX ADDRESS SETTING

The DMX address, also known as the start channel, is the first channel used to receive instructions from the controller. For independent control, each fixture must be assigned its to a separate channel. The DMX address can be configured as by using the DMX ADDRESS menu in the control panel. For setting the DMX address press [ENTER] before you can change the address.

- The main screen will show a 'dot' and the backlight will be switched off when a DMX signal is detected.
- The fixture is fully RDM ready. So when you are using a RDM ready console you can address the unit and read out its complete status.For RDM functions please refer to the ANSI/ESTA E1.20-2006 standard

W-DMX CONTROL (ONLY SHOWS UP WHEN W-DMX BOARD IS INSTALLED)

Go to the W-DMX section in the main menu, press the button "UP" to switch off Wireless DMX or disconnect with all connected Transmitters.

Press the button “DOWN’ to set the unit in the ”ready to connect with all not connected transmitters’ mode. If you press the mode button on the Wireless solution transmitter all the units in this mode will be connected.

If the unit is successfully connected display show the sign “ : VV ” .

If the unit is not connected to a transmitter the display show the sign “ :? ”.

If the unit WDMX is switched off the display show the sign “ : ”.

- Holding the **MENU** and **ENTER** button for more than 3 seconds, the wireless board will reset.
- Do not use Wireless DMX and Wired DMX at the same time because it will give unwanted interference

VISION CONTROL (ONLY SHOWS UP WHEN VISION BOARD IS INSTALLED)

Go to the main menu, press the UP or DOWN buttons to find Vision APP and then click the ENTER button.

Then the main interface shows the APP in a red "unlinked" state, and the fixture also emit red light simultaneously. This indicates that the fixtures aren't in a networked state.

Open the "Vision" APP, click on the "create network" function. After the network is successfully created, add Tyra to the network. The main page will display the APP in a green "linked" state.

When multiple Tyra fixtures are connected to form a network, the Tyra with the strongest signal will display a blue "Master" on the screen, indicating that it is the master. The "master" will then emit blue light.The rest of the Tyra will display a green "slave" status, which indicates a slave unit.

When Tyra needs to exit the network that has been created, it can find "Unlink" on the Vision App page in the menu, and then click the ENTER button. The Tyra page will display a red "unlinked", which indicates that the fixture isn't in the network state.

CONTROL MODE

DMX control mode is selected in the CONTROL MODE menu.The fixture can be controlled with 7 DMX control modes:

	1 CH	3 CH CTC	3 CH HSV	4CH basic	5CH Direct	12CH DWE + Strobe -> DEFAULT	19CH 16-bit
Red Shift (function setting)				✓		✓	✓
Dimmer Curve （Function setting)				✓		✓	✓
Dimmer response (function setting)				✓		✓	✓
Function set						✓	✓
Dimmer		✓				✓	✓
Dimmer fine							✓
Shutter						✓	✓
Halogen / WW	✓			✓		✓	✓
Halogen / WW fine							✓
Red					✓	✓	✓
Red fine							✓
Green					✓	✓	✓
Green fine							✓
Blue					✓	✓	✓
Blue fine							✓
Amber					✓		✓
Amber fine							✓
Lime					✓		✓
Lime fine							✓
CTC		✓				✓	
CTC Tint		✓				✓	
Hue			✓				
Saturation			✓				
Value			✓				

CONTROL PANEL

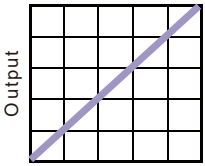
Here you can set all functions for the fixture.

PERSONALITY

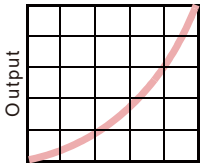
FANS	Regulated = power : Min 60%, FAN : variable Full = power : Min 60%, FAN : 4000RPM Silent 1 = power : Min 45%, FAN : 2400RPM Silent 2 = power : Min 35%, FAN : 2000RPM
Dimmer speed	“Normal" means select linear dimming, or choose dimmer 1-4 to control the dimming speed, dimming 1 of the fastest dimming curves, 4 for the most slowly dimming speed.
Dimmer curve	Linear / Square law / INV Square law/ S- Curve
WDMX Reset	Reset the Wireless Board
LED Calibration	Red 127~255 Green 127~255 Blue 127~255 Amber 127~255 Lime 127~255
CRI	High / Low
Refresh rate	Controls the flicker frequency of the fixture 1K/2K/3K/4K/5K/6K/7K/8K/9K/10K/11K/12K/13K/14K/15K/16K/17K/18K/19K/20K/21K/22K/23K/24K/25K HZ
DMX HOLD	DMX HOLD = The fixture will remember on last values when you disconnect DMX NO DMX HOLD = The fixture has no output when you disconnect DMX
Display	Rotate: Auto= Auto Display Flip Function enabled Normal= Auto Display Flip Function disabled Background Light: always on = Display background Light always on Auto off = Display deactivation after approximately 15second of inactivity BL blinking when no DMX : Yes = When there is no DMX, the DMX value will be blinking on main menu NO = When there is no DMX, the DMX value will be static on main menu
Indicator Light	Off = When the display is standby, no dot visible On= When the display is standby, there are 2 low brightness dots visible to show that the fixture is on and has DMX
KEY-Lock	Locks all the button functions. Standard unlocking password is （UP+DOWN+UP+DOWN+ENTER）
Redshift	ON/OFF

DIMMER MODE

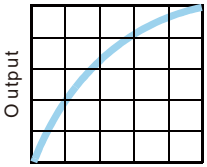
provides four dimming options (see picture below):



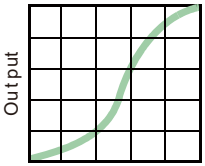
DMX %
LINEAR



DMX %
SQUARE LAW



DMX %
INVER SESQU ARE LAW



DMX %
S - CURVE

- **LINEAR** – the increase in light intensity appears to be linear as DMX value is increased.
- **SQUARE LAW** – light intensity control is finer at low levels and coarser at high levels.
- **INV Square law** – light intensity control is coarser at low levels and finer at high levels.
- **S-CURVE** – light intensity control is finer at low levels and high levels and coarser at medium levels.

Whichever DIMMER CURVE option you select, you can choose between NORMAL or SMOOTH 1/2/ 3/ 4 dimming settings:

- **NORMAL** is the default setting. it gives a virtually instantaneous reaction when you dim from one intensity to another, but dimming slowly from one intensity to another may appear slightly uneven.
- **The SMOOTH 1/2/3/4** setting gives smoother dimming during slow changes in intensity, but it limits the speed of dimming changes slightly. This makes it ideal for slow, smooth dimming, but a short time-lag may be noticeable if you try to dim quickly from one intensity to another.

ONBOARD CONTROL MENU

NO.	Main menu	Menu level 2	Menu level 3	Remark
1	DMX ADDRESS	Set DMX Address	<001>	Default : 001
			Wire	Default : wire
		Signal Mode (this function only shows up when W-DMX or VISION board is installed)	W-DMX (This function requires the support of the wireless module to work properly and display.)	
			APP (Vision) ---- (This function requires the support of the App module to work properly and display.)	
2	Control Mode	1CH	1.Halogen/WW	
		3CH CTC	1.Dimmer,2.CTC,3.CTC Tint	
		3CH HSV	1.Hue,2.Saturation,3.Value	
		4CH Basic	1.Red shift,2.Dimmer curve,3.Dimmer response,4.Halogen/WW	
		5CH Direct	1.Red,2.Green,3.Blue,4.Amber,5.Lime	
		12CH	1.Red shift,2.Dimmer curve,3.Dimmer response,4.Function set, 5.Dimmer,6.Shutter,7.Halogen/WW,8.Red,9.Green, 10.Blue,11.CTC,12.CTC Tint	Default : 12CH
		19CH 16-bit	1.Red shift,2.Dimmer curve,3.Dimmer response,4.Function set, 5.Dimmer,6.Dimmer fine,7.Shutter,8.Halogen/WW, 9.Halogen/WW fine,10.Red,11.Red fine,12.Green,13.Green fine, 14.Blue,15.Blue fine,16.Amber,17.Amber fine,18.Lime,19.Lime fine	
3	Vision App (this function only shows up when W-DMX or VISION board is installed)	App Info	State / Network Name / Signal Quality / UUID	
		Unlink	Confirm (Press the Enter key to proceed to the next step)	
4	Personality	FANS	Auto / Silent / Max Power	Default : Auto
		Dimmer Speed	Normal / Smooth 1/Smooth 2/ Smooth 3/ Smooth 4	Default : Normal
		Dimmer Curve	Linear / Square law / INV Square law / S-Curve	Default : Linear
		WDMX Reset (this function only shows up when W-DMX or VISION board is installed)	Reset the Wireless ?	
		Calibration	Red 127~255 Green 127~255 Blue 127~255 Amber 127~255 Lime 127~255	
		Refresh rate	1 KHz - 25 KHz	Default:2KHz
		DMX state	DMX hold / No DMX hold	Default:DMX Hold
		Display	Rotate — Off / On / Auto	Default : Default:Off
			Background Light — Always on / Auto off (15S)	Default:Auto off (15S)
			BL blinking when no DMX — Yes ~ no	Default : Yes
		Indicator Light (The function only works in DMX mode)	Off On ->Power + DMX	Default:Off
		Key Lock (Passcode up + down + up + down + Enter)	ON / OFF	Default:Off
		Redshift	ON / OFF	Default:Off
		CRI	High / Low	Default:Low

5	Editor	Program 1 / Program 2 / Program 3	Scene 1 / Scene 2 / Scene 3 / ... / Scene 30	Dimmer	0-255	Default : 255
				Red	0-255	Default : 000
				Green	0-255	Default : 000
				Blue	0-255	Default : 000
				Amber	0-255	Default : 000
				Lime	0-255	Default : 000
				Strobe	0-255	Default : 255
				Fade time(M)	0~10	Default : 000
				Fade time(S)	0~59	Default : 000
				Fade time(mS)	0~975(Gap 25)	Default : 000
				Wait time(M)	0~10	Default : 000
				Wait time(S)	0~59	Default : 000
		Load default option?	Yes / No	Wait time(mS)	0~975(Gap 25)	Default : 000
6	Static	Fixed color	R,G,B,A,L,RG,RB,GB,RGB,RGBAL			Default:R
		CCT	CCT (1800K - 20000K)	1800K - 6000K (Gap 100K) / 6000K - 10000K (Gap 250K) / 10000K - 20000K (Gap 1000K)		Default:1800K
			Tint	0~255		Default:0
		Lee filter	#E002 ~ #ESC60			Default:#E002
		Manual color	Red	0-255		Default : 000
			Green	0-255		Default : 000
			Blue	0-255		Default : 000
			Amber	0-255		Default : 000
			Lime	0-255		Default : 000
			Strobe	0-255		Default : 255
		Blinder	0 - 255			Default : 000
		Dimmer	0 - 255			Default : 255
7	Auto	Auto	1~10			Default:1
		Speed	0~255			Default:0
		Dimmer	0~255			Default:255
8	Slave	Master / Slave				Default:Slave

9	INFO	Hardware version: Main board Vx.xx; LED board Vx.xx Software version: Main board Vx.xx; Date Usage time: Total Xxxx hour; LED total: xxxxH; Power cycle: xxxxxTimes Temperature: Head xxx ℃; Base xxx ℃; Stored max:xx ℃; Stored min:-xx ℃ RDM.UID: 0x02Exxxxxxxxx Serial Number DMX LIVE: This function shows all received DMX data per chosen channel mode. ALL channels visible Error information: Running normally; Error information..... Wireless module (This function only shows up when W-DMX or VISION board is installed): Manufacturer: CRMX,; Name: Timo RX; HW version: x.x.x.x
10	Reset	Factory reset

DMX PROTOCOLS

1CH

1 CH	Function	Value	Setting	Remark
1	Halogen / WW	000 - 255	0 - 100%	

3CH CTC

3CH	Function	Value	Setting	Remark
1	Dimmer	000 - 255	0 - 100%	
2	CTC	000 - 255	Please see page 23 CCT chart	
3	CTC Tint	000 - 255	0 - 100%	

3CH HSV

3CH	Function	Value	Setting	Remark
1	Hue	000 - 255	0 - 100%	
2	Saturation	000 - 255	0 - 100%	
3	Value	000 - 255	0 - 100%	

4CH basic

4CH	Function	Value	Setting	Remark
1	Redshift	000 - 084	No function	
		085 - 170	OFF	
		171 - 255	ON	
2	Dimmer curve	000 - 051	No function	
		052 - 101	Linear	
		102 - 152	Square law	
		153 - 203	INV Square	
		204 - 255	S-Curve	
3	Dimmer speed	000 - 042	No function	
		043 - 084	Normal	
		085 - 126	Smooth 1	
		127 - 168	Smooth 2	
		169 - 210	Smooth 3	
		211 - 255	Smooth 4	
4	Halogen / WW	000 - 255	0 - 100%	

5CH Direct

5CH	Function	Value	Setting	Remark
1	Red	000 - 255	0 - 100%	
2	Green	000 - 255	0 - 100%	
3	Blue	000 - 255	0 - 100%	
4	Amber	000 - 255	0 - 100%	
5	Lime	000 - 255	0 - 100%	

12CH (DWE + Strobe)-> DEFAULT

12CH	Function	Value	Setting	Remark
1	Redshift	000 - 084	No function	
		085 - 170	OFF	
		171 - 255	ON	
2	Dimmer curve	000 - 051	No function	
		052 - 101	Linear	
		102 - 152	Square law	
		153 - 203	INV Square	
		204 - 255	S-Curve	
3	Dimmer speed	000 - 042	No function	
		043 - 084	Normal	
		085 - 126	Smooth 1	
		127 - 168	Smooth 2	
		169 - 210	Smooth 3	
		211 - 255	Smooth 4	
4	Function set	000 - 009	no function	
		010 - 014	Fan mode = Auto	
		015 - 019	Fan mode = Silent	
		020 - 024	Fan mode = Max Power	
		025 - 029	no function	
		030 - 034	Dimmer Speed = Normal	
		035 - 039	Dimmer Speed = Smooth 1	
		040 - 044	Dimmer Speed = Smooth 2	
		045 - 049	Dimmer Speed = Smooth 3	
		050 - 054	Dimmer Speed = Smooth 4	
		055 - 059	no function	
		060 - 064	Dimmer curve = Linear	
		065 - 069	Dimmer curve = Square law	
		070 - 074	Dimmer curve = INV Square law	
		075 - 079	Dimmer curve = S-Curve	
		080 - 084	no function	
		085 - 089	WDMX Reset	
		090 - 094	no function	
		095 - 099	Refresh rate = 1KHz	
		100 - 104	Refresh rate = 2KHz	
		105 - 109	Refresh rate = 4KHz	
		110 - 114	Refresh rate = 6KHz	
		115 - 119	Refresh rate = 25KHz	
		120 - 124	no function	
		125 - 129	DMX state = DMX hold	
		130 - 134	DMX state = No DMX hold	
		135 - 139	no function	
		140 - 144	Rotate = Off	
		145 - 149	Rotate = On	
		150 - 154	Rotate = Auto	
		155 - 159	no function	
		160 - 164	Background light = Always on	
		165 - 169	Background light = Auto off (15s)	
		170 - 174	no function	
		175 - 179	BL blinking when DMX	
		180 - 184	BL blinking when no DMX	
		185 - 189	no function	
		190 - 194	Indicator light = Off	

		195 - 199	Indicator light = On
		200 - 204	no function
		205 - 209	Key lock = Off
		210 - 214	Key lock = On
		215 - 219	no function
		220 - 224	Redshift = Off
		225 - 229	Redshift = On
		230 - 234	no function
		235 - 239	CRI = Low
		240 - 244	CRI = High
		245 - 249	no function
		250 - 255	LCD on
5	Dimmer	000 - 255	0-100%
6	Shutter	000 - 019	No function
		020 - 024	Shutter open
		025 - 064	Strobe 1 (fast - slow)
		065 - 069	Shutter open
		070 - 084	Strobe 2: opening pulse (fast - slow)
		085 - 089	Shutter open
		090 - 104	Strobe 3: closing pulse (fast - slow)
		105 - 109	Shutter open
		110 - 124	Strobe 4: random strobe (fast - slow)
		125 - 129	Shutter open
		130 - 144	Strobe 5: random opening pulae (fast slow)
		145 - 149	Shutter open
		150 - 164	Strobe 6: random closing pulse (fast - slow)
		165 - 169	Shutter open
		170 - 184	Strobe 7: burst pulse (fast - slow)
		185 - 189	Shutter open
		190 - 204	Strobe 8: random burst pulse (fast - slow)
		205 - 209	Shutter open
		210 - 224	Strobe 9: sine wave (fast - slow)
		225 - 229	Shutter open
		230 - 244	Strobe 10: burst (fast - slow)
		245 - 255	Shutter open
7	Halogen /WW	000 - 255	0-100%
8	Red	000 - 255	0-100%
9	Green	000 - 255	0- 100%
10	Blue	000 - 255	0-100%
11	CTC	000 - 255	Please see page 23 CCT chart
12	CTC Tint	000 - 255	0-100%

19CH 16-bit

19CH	Function	Value	Setting	Remark
1	Redshift	000 - 084	No function	
		085 - 170	OFF	
		171 - 255	ON	
2	Dimmer curve	000 - 051	No function	
		052 - 101	Linear	
		102 - 152	Square law	
		153 - 203	INV Square	
		204 - 255	S-Curve	
3	Dimmer speed	000 - 042	No function	
		043 - 084	Normal	
		085 - 126	Smooth 1	
		127 - 168	Smooth 2	
		169 - 210	Smooth 3	
		211 - 255	Smooth 4	
4	Function set	000 - 009	no function	
		010 - 014	Fan mode = Auto	
		015 - 019	Fan mode = Silent	
		020 - 024	Fan mode = Max Power	
		025 - 029	no function	
		030 - 034	Dimmer Speed = Normal	
		035 - 039	Dimmer Speed = Smooth 1	
		040 - 044	Dimmer Speed = Smooth 2	
		045 - 049	Dimmer Speed = Smooth 3	
		050 - 054	Dimmer Speed = Smooth 4	
		055 - 059	no function	
		060 - 064	Dimmer curve = Linear	
		065 - 069	Dimmer curve = Square law	
		070 - 074	Dimmer curve = INV Square law	
		075 - 079	Dimmer curve = S-Curve	
		080 - 084	no function	
		085 - 089	WDMX Reset	
		090 - 094	no function	
		095 - 099	Refresh rate = 1KHz	
		100 - 104	Refresh rate = 2KHz	
		105 - 109	Refresh rate = 4KHz	
		110 - 114	Refresh rate = 6KHz	
		115 - 119	Refresh rate = 25KHz	
		120 - 124	no function	
		125 - 129	DMX state = DMX hold	
		130 - 134	DMX state = No DMX hold	
		135 - 139	no function	
		140 - 144	Rotate = Off	
		145 - 149	Rotate = On	
		150 - 154	Rotate = Auto	
		155 - 159	no function	
		160 - 164	Background light = Always on	
		165 - 169	Background light = Auto off (15s)	
		170 - 174	no function	
		175 - 179	BL blinking when DMX	
		180 - 184	BL blinking when no DMX	
		185 - 189	no function	
		190 - 194	Indicator light = Off	

		195 - 199	Indicator light = On
		200 - 204	no function
		205 - 209	Key lock = Off
		210 - 214	Key lock = On
		215 - 219	no function
		220 - 224	Redshift = Off
		225 - 229	Redshift = On
		230 - 234	no function
		235 - 239	CRI = Low
		240 - 244	CRI = High
		245 - 249	no function
		250 - 255	LCD on
5	Dimmer	000 - 255	0-100%
6	Dimmer fine	000 - 255	0-100%
		000 - 019	No function
		020 - 024	Shutter open
		025 - 064	Strobe 1 (fast - slow)
		065 - 069	Shutter open
		070 - 084	Strobe 2: opening pulse (fast - slow)
		085 - 089	Shutter open
		090 - 104	Strobe 3: closing pulse (fast - slow)
		105 - 109	Shutter open
		110 - 124	Strobe 4: random strobe (fast - slow)
		125 - 129	Shutter open
7	Shutter	130 - 144	Strobe 5: random opening pulae (fast slow)
		145 - 149	Shutter open
		150 - 164	Strobe 6: random closing pulse (fast - slow)
		165 - 169	Shutter open
		170 - 184	Strobe 7: burst pulse (fast - slow)
		185 - 189	Shutter open
		190 - 204	Strobe 8: random burst pulse (fast - slow)
		205 - 209	Shutter open
		210 - 224	Strobe 9: sine wave (fast - slow)
		225 - 229	Shutter open
		230 - 244	Strobe 10: burst (fast - slow)
		245 - 255	Shutter open
8	Halogen / WW	000 - 255	0-100%
9	Halogen / WW fine	000 - 255	0-100%
10	Red	000 - 255	0- 100%
11	Red fine	000 - 255	0-100%
12	Green	000 - 255	0-100%
13	Green fine	000 - 255	0-100%
14	Blue	000 - 255	0-100%
15	Blue fine	000 - 255	0-100%
16	Amber	000 - 255	0-100%
17	Amber fine	000 - 255	0-100%
18	Lime	000 - 255	0-100%
19	Lime fine	000 - 255	0-100%

CCT CHART

CCT		
26	28	1800K
29	31	1900K
32	34	2000K
35	37	2100K
38	40	2200K
41	43	2300K
44	46	2400K
47	49	2500K
50	52	2600K
53	55	2700K
56	58	2800K
59	61	2900K
62	64	3000K
65	67	3100K
68	70	3200K
71	73	3300K
74	76	3400K
77	79	3500K
80	82	3600K
83	85	3700K
86	88	3800K
89	91	3900K
92	94	4000K
95	97	4100K
98	100	4200K
101	103	4300K
104	106	4400K
107	109	4500K
110	112	4600K
113	115	4700K
116	118	4800K
119	121	4900K
122	124	5000K
125	127	5100K
128	130	5200K

CCT		
131	133	5300K
134	136	5400K
137	139	5500K
140	142	5600K
143	145	5700K
146	148	5800K
149	151	5900K
152	154	6000K
155	157	6250K
158	160	6500K
161	163	6750K
164	166	7000K
167	169	7250K
170	172	7500K
173	175	7750K
176	178	8000K
179	181	8250K
182	184	8500K
185	187	8750K
188	190	9000K
191	193	9250K
194	196	9500K
197	199	9750K
200	202	10000K
203	205	11000K
206	208	12000K
209	211	13000K
212	214	14000K
215	217	15000K
218	220	16000K
221	223	17000K
224	226	18000K
227	229	19000K
230	255	20000K

SPECIFICATIONS

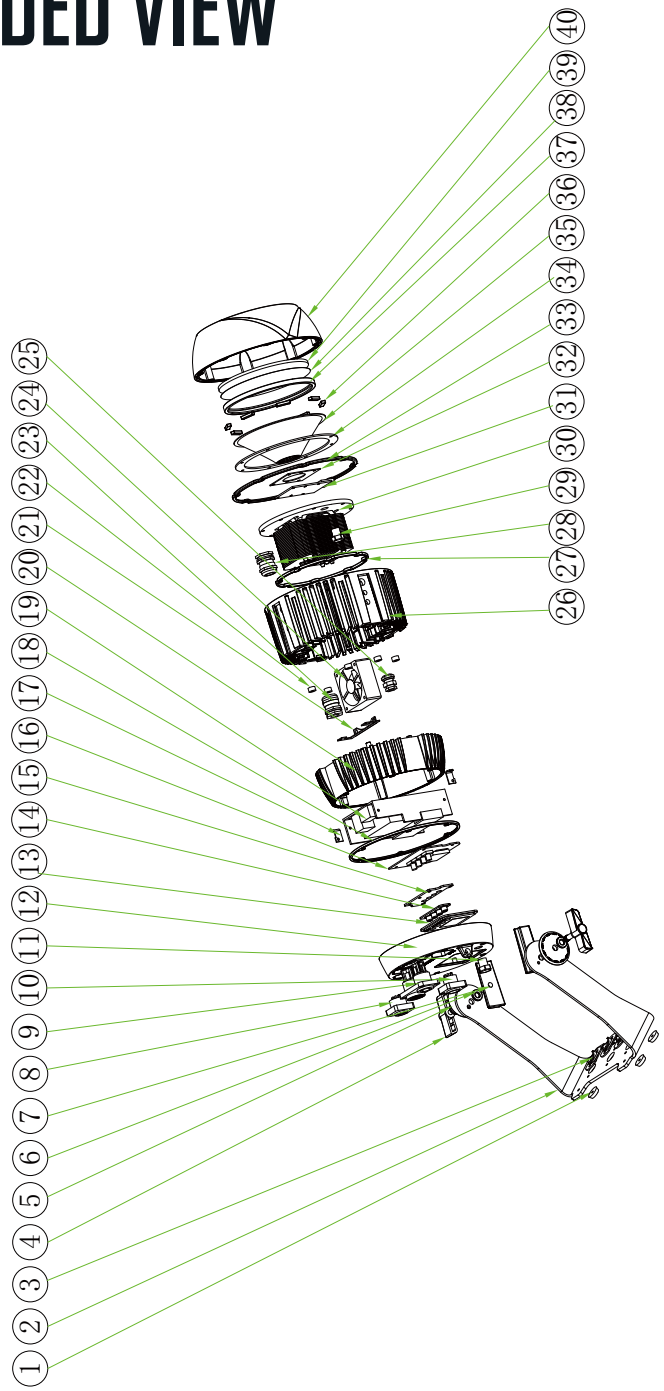
Power	
Input voltage & rate	100-240V，50/60Hz
Standby power	10W
MAX. Power(at nominal voltage 230V)	385W
Stable power(at nominal voltage 230V)	300W
Typical current (at nominal voltage 230V)	5A
Power Factor	0.95
Power plug type	Seetronic PowerCon True
Configuration	
LED color	RGBLA
LED color temperature	1800K - 20000K
Quantity of LED	1*400W RGBLA
Dimming frequency	1K - 25K Hz
Dimmer resolution	16bit
Optical	
Beam angle	Beam angle 50° (50%) Field angle 87° (10%)
Photometric	
Output @1M	9350 lux
Output @5M	510 lux
Heat management	
Cooling type:	Forced air (temperature-regulated, low noise)
MAX. Ambient temp (Ta max)	40°C
MIN. Ambient temp (Ta min)	-25°C

Menu	
Auto program	Yes
Static color	Yes
Manual calibration	Yes
Factory calibration	No
Strobe speed	0 - 20Hz
Random strobe	Yes

* PF = power factor. Measurements made at nominal voltage with all LEDs at full intensity. Allow for a deviation of +/- 10%.

Control	
Control protocol	USITT DMX512/1990
DMX channel range	1CH / 3CH (CTC) / 3CH (HSV) / 4CH / 5CH / 12CH / 19CH
RDM	Yes
RDM compliance	ANSI/ESTA E.120
CRMX	Optional (Wireless Solution from Lumenradio)
Vision APP	Optional
ACN	None
DMX input connection	DMX 5P in & out (3 pin possible with optional chassis part)
Data input (artnet, SACN)	None
Hardware	
Interface	Backlit TFT display
Software upload method	XLR via special box
Installation	
IP rating	IP65
Housing	
Safety attachment point	Yes
Physical	
Net product weight	4.7 kg
Machine dimensions - Length	257mm
Machine dimensions - Width	190mm
Machine dimensions - Height	304mm
Accessories	
Included items	Power cable，manual
Approvals	
Approved certifications	CE/ROHS

EXPLODED VIEW



NO.	Description	Part Number
1	CLF | black rubber feet | Tyra	CLF-30-001
2	CLF | bracket | Tyra	CLF-30-002
3	CLF | quick lock washer | Tyra	CLF-30-003
4	CLF | knob | Tyra	CLF-30-004
5	CLF | knob ring support | Tyra	CLF-30-005
6	CLF | Knob nylon ring | Tyra	CLF-30-006
7	CLF | bracket sliding block | Tyra	CLF-30-007
8	CLF | waterproof 5 pin male DMX socket | Tyra	CLF-30-008
9	CLF | waterproof Powercon true input & output | Tyra	CLF-30-009
10	CLF | waterproof 5 pin female D MX socket | Tyra	CLF-30-010
11	CLF | breathing valve | Tyra	CLF-30-011
12	CLF | base back panel | Tyra	CLF-30-012
13	CLF | base display cover acrylic | Tyra	CLF-30-013
14	CLF | base buttons acrylic | Tyra	CLF-30-014
15	CLF | base display cover rubber | Tyra	CLF-30-015
16	CLF | display board | Tyra	CLF-30-016
17	CLF | powersupply fixing plate | Tyra	CLF-30-017
18	CLF | base cover waterproof sealing rubber | Tyra	CLF-30-018
19	CLF | power supply | Tyra	CLF-30-019
20	CLF | head outside radiator | Tyra	CLF-30-020
21	CLF| fan fixing plate | Tyra	CLF-30-021
22	CLF | head middle section rubber support | Tyra	CLF-30-022
23	CLF | head cable gland (to head) | Tyra	CLF-30-023
24	CLF | head fan | Tyra	CLF-30-024

NO.	Description	Part Number
25	CLF | head cable gland (to LED) | Tyra	CLF-30-025
26	CLF | Head inner radiator | Tyra	CLF-30-026
27	CLF | Radiator rubber seal head | Tyra	CLF-30-027
28	CLF | head cable gland (from fan) | Tyra	CLF-30-028
29	CLF | Breathing valve head | Tyra	CLF-30-029
30	CLF | Copper tube (part of radiator) | Tyra	CLF-30-030
31	CLF | led PCB | Tyra	CLF-30-031
32	CLF | LED pcb cover plate | Tyra	CLF-30-032
33	CLF | head rubber seal ring | Tyra	CLF-30-033
34	CLF | Reflector supporting plate | Tyra	CLF-30-034
35	CLF | Reflector | Tyra	CLF-30-035
36	CLF | Magnet (for filters) | Tyra	CLF-30-036
37	CLF | front glass sealing rubber | Tyra	CLF-30-037
38	CLF | front glass frost film | Tyra	CLF-30-038
39	CLF | Front glass | Tyra	CLF-30-039
40	CLF | front cover head | Tyra	CLF-30-040

NOTES

NOTES

TYRA