Ovation®

Forever Innovation

P19

19 x 15W LED ZOOM PAR

USER MANUAL

CE

Table of contents

Caution!

Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching the wires!

Avoid looking directly into the light source!
Wear protective glasses and other PPE (personal protective equipment) when working on or near the fixture.

Always make sure you are connecting this product to the proper voltage in accordance with the specifications in this manual or on the product's specification label.Make sure it is grounded when using it!
Unplug mains lead before opening the housing!
Make sure that the power cord is never crimped or damaged by sharp edges. Check the fixture and the powercord from time to time.
Make sure to replace the fuse with another of the same type and rating.

For your own safety, please read this user manual carefully before you initial start-up.
Follow operating safety precautions and pay attention to warning signs methods and equipment on the user manual.

Warning! This symbol indicates a hot surface. Certain parts of the housing can become hot during operation. After use, wait for a cool-down period of at least 10 minutes before handling or transporting the device.

Indoor use only! To prevent risk of fire or shock, do not expose this product to rain or moisture. IP 20 rating.
The ambient temperature must always be between -5° C and +45° C.

Every person involved with the installation, operation and maintenance of this device has to
- be qualified
- follow the instructions of this manual
- consider this manual to be part of the total product
- keep this manual for the entire service life of the product
- pass this manual on to every further owner or user of the product
- download the latest version of the user manual from the Internet

Introduction

Thank you for having chosen P19. You will see you acquired a powerful and versatile device.
Unpack your item. Before you initial start-up, please make sure that there is no damage caused by transportation. Should there be any, consult your dealer and do not use the device.

Safety instructions

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 user manual. Always disconnect from the mains, when the device is not in use or before cleaning it. Keep away children and amateurs from the device! There are no serviceable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers.

Overview

Installation

Read ‘Safety information’ before installing the fixture.

The fixture is designed for indoor use only and must be used in a dry location with adequate ventilation. Ensure that none of the fixture’s ventilation slots are blocked.

Fasten the fixture to a secure structure or surface. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed in this user manual using a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

Fastening the fixture to a flat surface

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

Fasten the fixture securely. Do not stand it on a surface or leave it where it can be moved or fall over. If you install the fixture in a location where it may cause injury or damage if it falls, secure it as directed below with a securely anchored safety cable that will hold the fixture if the primary fastening method fails.

Mounting the fixture on a truss

The fixture can be clamped to a truss or similar rigging structure in any orientation. When installing the fixture hanging vertically down, you can use an open-type clamp such as a G-clamp. When installing in any other orientation, you must use a half-coupler clamp that completely encircles the truss chord.

To clamp the fixture to a truss:

1. Check that the rigging structure can support at least 10 times the weight of all fixtures and equipment to be installed on it.
2. Block access under the work area.
3. Fold the legs of the mounting bracket together and bolt a rigging clamp securely to the mounting bracket. The bolt used must be M10, grade 8.8 steel minimum. It must pass through both mounting bracket legs and be fastened with a self-locking nut.
4. Working from a stable platform, hang the fixture with its clamp on the truss and fasten the clamp securely.
5. Secure the fixture with a safety cable as directed below.

Securing with a safety cable

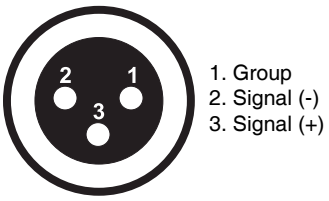
Secure the fixture with a safety cable (or other secondary attachment) that is approved for the weight of the fixture so that the safety cable will hold the fixture if a primary attachment fails.

Loop the safety cable through the eyebolt in the back of the fixture and around a secure anchoring point. Do not loop the safety cable around the fixture’s mounting bracket only, as this will leave the fixture unsecured if it separates from the bracket.

DMX-512 connection/connection between fixtures

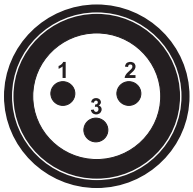
Occupation of the XLR-connection:

DMX OUT



1. Group
2. Signal (-)
3. Signal (+)

DMX IN



1. Group
2. Signal (-)
3. Signal (+)

If you are using controllers with this occupation, you can connect the DMX-output of the controller directly with the DMX-input of the first fixture in the DMX-chain. If you wish to connect DMX-controllers with other XLR-outputs, you need to use adapter-cables.

Building a serial DMX-chain:
Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.

DMX-512 connection with DMX terminator:
For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a 120 Ω resistor between Signal (–) and Signal (+) into a 3-pin XLR-plug and plug it in the DMX-output of the last fixture.

Power connection

Power Requirements
The P19 luminaire operates on 100 to 240 volts AC (+/- 10%, auto-ranging). The luminaire contains an auto-ranging power supply.

Power linking between fixtures:
The fixture with powercon in and out socket. Connect the power out to the power in socket in the next fixture till all are connected.

Caution: maximum power linking - 6 units.

Connection with the mains:
Connect the device to the mains with the enclosed power supply cable.

The occupation of the connection cables as below:

Cable color	Connection	International
Brown	Live	L
Blue	Neutral	N
Yellow/green	Earth(Ground)	⏚

Operation

The P19 can operate in three different modes. In each mode you can run the fixture as a stand alone fixture or in a master/slave confiugration. This next section will detail the differences in the operating

modes.

Addressing
All fixtures should be given a DMX starting address when using a DMX signal, so that the correct fixture responds to the correct control signals. This digital starting address is the channel number from which the fixture starts to listen to the digital control information sent out from the DMX controller. The allocation of this starting address is achieved by setting the correct number on the display located on the base of the device.

You can set the same starting address for all fixtures or a group of fixtures, or make different address for each fixture individually.

If you set the same address, all the units will start to listen to the same control signal from the same channel number. In other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set a different address, each unit will start to listen to the channel number you have set, based on the quantity of control channels of the unit. That means changing the settings of one channel will affect only the selected fixture.

In the case of the P19, which is 32/10/10/5/32 channels fixture. If you set, for example, the address in the 5 channel mode to channel 6, the device will use the channel 6 to 10 for control.

Universal DMX Control
This function allows you to use a universal DMX-512 controller to control the dimmer and strobe. A DMX controller allows you to create unique programs tailored to your individual needs.

Control Menu Map

Default seeting in bold.

Main Menu	Level 1	Level 2	Level 3	FUNCTION INSTRUCTION
Address	001-512			DMX address setting
RUN	DMX512			Control mode
	Auto1			
	Auto2			
	Sound1			
	Sound2			
DMX MODE	Mode1(32CH)			Channel mode 1 = 32CH
	Mode2(16CH)			Channel mode 2 = 16CH
	Mode3(10CH)			Channel mode 3 = 10CH
	Mode4(5CH)			Channel mode 4 = 5CH
	Mode5(32CH)			Channel mode 5 = 32CH
TEST	LED			Test mode
SET	Disp.Setting	Display	02-60m	Display shut off when no operation
		Key lock	ON/**OFF**	Buttons lock when no operation
		Flash	ON/**OFF**	
INFO	Time info	Power on	0001(Hours)	Fxiture information
		Ttl Life Hrs	0007(Hours)	
		Last Run Hrus	0002(Hours)	
	Software V.	V1.00		Software version
MANUAL	Functions	000-255		Manual setting on board
	Red	000-255		

	Green	000-255	
	Blue	000-255	
	White	000-255	
	Clours	000-255	
	Zoom	000-255	
	Strobe	000-255	
	Dimmer	000-255	
RESET	All reset	Yes/No	Reset

DMX Protocol

Mode1 (32 CH)	Value	Function
CH1		**Special functions**
	000-49	Reserved
	050-179	Reserved
	180-189	Zoom Reserved
	190-255	Reserved
CH2	000-255	Red(8bit)-zone 1 Red LEDs saturation control (0-100%)
CH3	000-255	Red fine (16 bit) - zone 1 Fine red LEDs saturation control
CH4	000-255	Green (8 bit) - zone 1 Green LEDs saturation control (0-100%)
CH5	000-255	Green fine (16 bit) - zone 1 Fine green LEDs saturation control
CH6	000-255	Blue (8 bit) zone 1 Blue LEDs saturation control (0-100%)
CH7	000-255	Blue (16 bit) zone 1 Fine blue LEDs saturation control)
CH8	000-255	White (8 bit) - zone 1 White LEDs saturation control (0-100%)
CH9	000-255	White (16 bit) - zone 1 Fine white LEDs saturation control
CH10	000-255	Red (8bit) - zone 2 Red LEDs saturation control (0-100%)
CH11	000-255	Red fine (16 bit) - zone 2 Fine red LEDs saturation control)
CH12	000-255	Green (8 bit) - zone 2 Green LEDs saturation control (0-100%)
CH13	000-255	Green fine (16 bit) - zone 2 Fine green LEDs saturation control
CH14	000-255	Blue (8 bit) - zone 2 Blue LEDs saturation control (0-100%)
CH15	000-255	Blue fine (16 bit) - zone 2 Fine blue LEDs saturation control
CH16	000-255	White (8 bit) - zone 2 White LEDs saturation control (0-100%)
CH17	000-255	White fine (16 bit) - zone 2 Fine white LEDs saturation control
CH18	000-255	Red (8 bit) - zone 3 Red LEDs saturation control (0-100%)
CH19	000-255	Red fine (16 bit) - zone 3 Fine red LEDs saturation control

Mode1 (32 CH)	Value	Function
CH20	000-255	Green (8 bit) - zone 3 Green LEDs saturation control (0-100%)
CH21	000-255	Green fine (16 bit) - zone 3 Fine green LEDs saturation control
CH22	000-255	Blue (8 bit) zone 3 Blue LEDs saturation control (0-100%)
CH23	000-255	Blue fine (16 bit) zone 3 Fine blue LEDs saturation control
CH24	000-255	White (8 bit) zone 3 White LEDs saturation control (0-100%)
CH25	000-255	White fine (16 bit) zone 3 Fine white LEDs saturation control
CH26		**Color temperature**
	000	No function
	001-255	Colour temperature correction from 20000K to 2700K(menu item “Colour Calibration Mode”=Off)
CH27		**Virtual Colour Wheel** For detailed description see “ Virtual colour wheel- colour mixing chart
	000	No function
	001-002	White 2700 K
	003	White 2700 K (Halogen lamp mode*)
	004-005	White 3200 K
	006	White 3200 K (Halogen lamp mode*)
	007-009	White 4200 K
	010-012	White 5600 K
	013-015	White 8000 K
	016	Blue (Blue=full, Red+Green+White=0)
	017-055	Red=0, Green->up,Blue =full, White=0
	056	Light Blue (Red=0, Green=full, Blue =full, White=0)
	057-095	Red=0, Green=full, Blue->down, White=0
	096	Green (Red=0, Green=full, Blue =0, White=0)
	097-134	Red->up, Green=full, Blue=0, White=0
	135	Yellow (Red=full, Green=full, Blue=0, White=0)
	136-174	Red=full, Green->down, Blue=0, White=0
	175	Red(Red=full, Green=0, Blue=0, White=0)
	176-214	Red=full, Green=0, Blue->up, White=0
	215	Magenta (Red=full, Green=0, Blue=full, White=0)
	216-246	Red -> down, Green=0, Blue=full, White=0
	247	Blue (Red=0, Green=0, Blue=full, White=0)
		Speed of the following effects can be controlled by the Shutter/Strobe channel (DMX values of 96-127)
	248	Rainbow effect (with fade time)
	249	Rainbow effect
	250-255	Zone effects
CH28	000-255	Zoom (8 bit) Zoom from min. to max. beam angle
CH29	000-255	Zoom fine (16 bit) Fine zooming from min. to max.
CH30		**Shutter/Strobe**
	000-031	Shutter closed
	032-063	Strobe effect from slow--> fast (zone 3 only)
	064-095	Strobe effect from slow--> fast (All zones together)

Mode1 (32 CH)	Value	Function
		Set value on Virtual colour wheel
	096-111	Zone effects+rainbow effects speed control, slow--> fast
	112-127	Zone effects+rainbow effects speed control, fast--> slow /opposite direction/
	128-143	Opening pulses in sequences from slow--> fast (All zones together)
	144-159	Closing pulses in sequences from fast--> slow (All zones together)
	160-175	Random strobe effect from slow--> fast (random zone)
	176-191	Random strobe effect from slow--> fast (random zone +random strobe)
	192-223	Random strobe effect from slow --> fast (All zones together)
	224-255	Shutter open
CH31	000-255	Dimmer (8 bit) Dimmer intensity from 0% to 100%
CH32	000-255	Dimmer fine (16 bit) Fine dimming

Mode 2 (16 CH)	Value	Function
CH1		**Special functions**
	000-049	Reserved
	050-179	Reserved
	180-189	Zoom Reserved
	190-255	Reserved
CH2	000-255	Red(8 bit)-all zones Red LEDs saturation control (0-100%)
CH3	000-255	Red fine(16 bit) - all zones Fine red LEDs saturation control
CH4	000-255	Green(8 bit)-all zones Green LEDs saturation control (0-100%)
CH5	000-255	Green fine(16 bit) - all zones Fine green LEDs saturation control
CH6	000-255	Blue(8 bit)-all zones Blue LEDs saturation control (0-100%)
CH7	000-255	Blue fine(16 bit) - all zones Fine blue LEDs saturation control
CH8	000-255	White(8 bit)-all zones White LEDs saturation control (0-100%)
CH9	000-255	White fine(16 bit) - all zones Fine White LEDs saturation control
CH10		**Color temperature**
	000	No function
	001-255	Colour temperature correction from 2000K to 2700K(menu item “Colour Calibration Mode”=Off)
CH11		Virtual Colour Wheel For detailed description see “ Virtual colour wheel- colour mixing chart
	000	No function
	001-002	White 2700 K
	003	White 2700 K (Halogen lamp mode*)
	004-005	White 3200 K
	006	White 3200 K (Halogen lamp mode*)

Mode 2 (16 CH)	Value	Function
	007-009	White 4200 K
	010-012	White 5600 K
	013-015	White 8000 K
	016	Blue (Blue=full, Red+Green+White=0)
	017-055	Red=0, Green->up,Blue =full, White=0
	056	Light Blue (Red=0, Green=full, Blue =full, White=0)
	057-095	Red=0, Green=full, Blue->down, White=0
	096	Green (Red=0, Green=full, Blue =0, White=0)
	097-134	Red->up, Green=full, Blue=0, White=0
	135	Yellow (Red=full, Green=full, Blue=0, White=0)
	136-174	Red=full, Green->down, Blue=0, White=0
	175	Red(Red=full, Green=0, Blue=0, White=0)
	176-214	Red=full, Green=0, Blue->up, White=0
	215	Magenta (Red=full, Green=0, Blue=full, White=0)
	216-246	Red -> down, Green=0, Blue=full, White=0
	247	Blue (Red=0, Green=0, Blue=full, White=0)
		Speed of the following effects can be controlled by the Shutter/Strobe channel (DMX values of 96-127)
	248	Rainbow effect (with fade time)
	249	Rainbow effect
	250-255	Zone effects
CH12	000-255	Zoom (8 bit) Zoom from min. to max. beam angle
CH13	000-255	Zoom fine (16 bit) Fine zooming from min. to max.
CH14		**Shutter/Strobe**
	000-031	Shutter closed
	032-063	Strobe effect from slow--> fast (zone 3 only)
	064-095	Strobe effect from slow--> fast (All zones together)
		Set value on Virtual colour wheel
	096-111	Zone effects+rainbow effects speed control, slow--> fast
	112-127	Zone effects+rainbow effects speed control, fast--> slow /opposite direction/
	128-143	Opening pulses in sequences from slow--> fast (All zones together)
	144-159	Closing pulses in sequences from fast--> slow (All zones together)
	160-175	Random strobe effect from slow--> fast (random zone)
	176-191	Random strobe effect from slow--> fast (random zone +random strobe)
	192-223	Random strobe effect from slow --> fast (All zones together)
	224-255	Shutter open
CH15	000-255	Dimmer (8 bit) Dimmer intensity from 0% to 100%
CH16	000-255	Dimmer fine (16 bit) Fine dimming

Mode 3 (10 CH)	Value	Function
CH1		**Special functions**
	000-049	Reserved
	050-179	Reserved
	180-189	Zoom Reserved

	190-255	Reserved
CH2	000-255	Red(8 bit)-all zones Red LEDs saturation control (0-100%)
CH3	000-255	Green(8 bit)-all zones Green LEDs saturation control (0-100%)
CH4	000-255	Blue(8 bit)-all zones Blue LEDs saturation control (0-100%)
CH5	000-255	White(8 bit)-all zones White LEDs saturation control (0-100%)
CH6		**Color temperature**
	000	No function
	001-255	Colour temperature correction from 2000K to 2700K(menu item “Colour Calibration Mode”=Off)
CH7		**Virtual Colour Wheel** For detailed description see “ Virtual colour wheel- colour mixing chart
	000	No function
	001-002	White 2700 K
	003	White 2700 K (Halogen lamp mode*)
	004-005	White 3200 K
	006	White 3200 K (Halogen lamp mode*)
	007-009	White 4200 K
	010-012	White 5600 K
	013-015	White 8000 K
	016	Blue (Blue=full, Red+Green+White=0)
	017-505	Red=0, Green->up,Blue =full, White=0
	056	Light Blue (Red=0, Green=full, Blue =full, White=0)
	057-095	Red=0, Green=full, Blue->down, White=0
	096	Green (Red=0, Green=full, Blue =0, White=0)
	097-134	Red->up, Green=full, Blue=0, White=0
	135	Yellow (Red=full, Green=full, Blue=0, White=0)
	136-174	Red=full, Green->down, Blue=0, White=0
	175	Red(Red=full, Green=0, Blue=0, White=0)
	176-214	Red=full, Green=0, Blue->up, White=0
	215	Magenta (Red=full, Green=0, Blue=full, White=0)
	216-246	Red -> down, Green=0, Blue=full, White=0
	247	Blue (Red=0, Green=0, Blue=full, White=0)
		Speed of the following effects can be controlled by the Shutter/Strobe channel (DMX values of 96-127)
	248	Rainbow effect (with fade time)
	249	Rainbow effect
	250-255	Zone effects
CH8	000-255	Zoom (8 bit) Zoom from min. to max. beam angle
CH9		**Shutter/Strobe**
	000-031	Shutter closed
	032-063	Strobe effect from slow--> fast (zone 3 only)
	064-095	Strobe effect from slow--> fast (All zones together)
		Set value on Virtual colour wheel
	096-111	Zone effects+rainbow effects speed control, slow--> fast
	112-127	Zone effects+rainbow effects speed control, fast--> slow /opposite direction/
	128-143	Opening pulses in sequences from slow--> fast (All zones together)

	144-159	Closing pulses in sequences from fast--> slow (All zones together)
	160-175	Random strobe effect from slow--> fast (random zone)
	176-191	Random strobe effect from slow--> fast (random zone +random strobe)
	192-223	Random strobe effect from slow --> fast (All zones together)
	224-255	Shutter open
CH10	000-255	Dimmer (8 bit) Dimmer intensity from 0% to 100%

Mode 4 (5 CH)	Value	Function
CH1		**Special functions**
	000-049	Reserved
	050-179	Reserved
	180-189	Zoom Reserved
	190-255	Reserved
CH2		**Virtual Colour Wheel** For detailed description see " Virtual colour wheel- colour mixing chart
	000	No function
	001-002	White 2700 K
	003	White 2700 K (Halogen lamp mode*)
	004-005	White 3200 K
	006	White 3200 K (Halogen lamp mode*)
	007-009	White 4200 K
	010-012	White 5600 K
	013-015	White 8000 K
	016	Blue (Blue=full, Red+Green+White=0)
	017-055	Red=0, Green->up,Blue =full, White=0
	056	Light Blue (Red=0, Green=full, Blue =full, White=0)
	057-095	Red=0, Green=full, Blue->down, White=0
	096	Green (Red=0, Green=full, Blue =0, White=0)
	097-134	Red->up, Green=full, Blue=0, White=0
	135	Yellow (Red=full, Green=full, Blue=0, White=0)
	136-174	Red=full, Green->down, Blue=0, White=0
	175	Red(Red=full, Green=0, Blue=0, White=0)
	176-214	Red=full, Green=0, Blue->up, White=0
	215	Magenta (Red=full, Green=0, Blue=full, White=0)
	216-246	Red -> down, Green=0, Blue=full, White=0
	247	Blue (Red=0, Green=0, Blue=full, White=0)
		Speed of the following effects can be controlled by the Shutter/Strobe channel (DMX values of 96-127)
	248	Rainbow effect (with fade time)
	249	Rainbow effect
	250-255	Zone effects
CH3	000-255	Zoom (8 bit) Zoom from min. to max. beam angle
CH4		**Shutter/Strobe**
	000-031	Shutter closed
	032-063	Strobe effect from slow--> fast (zone 3 only)
	064-095	Strobe effect from slow--> fast (All zones together)
		Set value on Virtual colour wheel
	096-111	Zone effects+rainbow effects speed control, slow--> fast

	112-127	Zone effects+rainbow effects speed control, fast--> slow /opposite direction/
	128-143	Opening pulses in sequences from slow--> fast (All zones together)
	144-159	Closing pulses in sequences from fast--> slow (All zones together)
	160-175	Random strobe effect from slow--> fast (random zone)
	176-191	Random strobe effect from slow--> fast (random zone +random strobe)
	192-223	Random strobe effect from slow --> fast (All zones together)
	224-255	Shutter open
CH5	000-255	Dimmer (8 bit) Dimmer intensity from 0% to 100%

Mode 5 (32 CH)	Value	Function
CH1		**Special functions**
	000-049	Reserved
	050-179	Reserved
	180-189	Zoom Reserved
	190-255	Reserved
CH2	000-255	Zoom (8 bit) Zoom from min. to max. beam angle
CH3	000-255	Zoom fine (16 bit) Fine zooming from min. to max.
CH4		**Shutter/Strobe**
	000-031	Shutter closed
	032-063	Strobe effect from slow--> fast (zone 3 only)
	064-095	Strobe effect from slow--> fast (All zones together)
		Set value on Virtual colour wheel
	096-111	Zone effects+rainbow effects speed control, slow--> fast
	112-127	Zone effects+rainbow effects speed control, fast--> slow /opposite direction/
	128-143	Opening pulses in sequences from slow--> fast (All zones together)
	144-159	Closing pulses in sequences from fast--> slow (All zones together)
	160-175	Random strobe effect from slow--> fast (random zone)
	176-191	Random strobe effect from slow--> fast (random zone +random strobe)
	192-223	Random strobe effect from slow --> fast (All zones together)
	224-255	Shutter open
CH5	000-255	Dimmer (8 bit) Dimmer intensity from 0% to 100%
CH6	000-255	Dimmer fine (16 bit) Fine dimming
CH7		**Color temperature**
	000	No function
	001-255	Colour temperature correction from 2000K to 2700K(menu item “Colour Calibration Mode”=Off)
CH8		**Virtual Colour Wheel** **For detailed description see “ Virtual colour wheel- colour mixing chart**

	000	No function
	001-002	White 2700 K
	003	White 2700 K (Halogen lamp mode*)
	004-005	White 3200 K
	006	White 3200 K (Halogen lamp mode*)
	007-009	White 4200 K
	010-012	White 5600 K
	013-015	White 8000 K
	016	Blue (Blue=full, Red+Green+White=0)
	017-055	Red=0, Green->up,Blue =full, White=0
	056	Light Blue (Red=0, Green=full, Blue =full, White=0)
	057-095	Red=0, Green=full, Blue->down, White=0
	096	Green (Red=0, Green=full, Blue =0, White=0)
	097-134	Red->up, Green=full, Blue=0, White=0
	135	Yellow (Red=full, Green=full, Blue=0, White=0)
	136-174	Red=full, Green->down, Blue=0, White=0
	175	Red(Red=full, Green=0, Blue=0, White=0)
	176-214	Red=full, Green=0, Blue->up, White=0
	215	Magenta (Red=full, Green=0, Blue=full, White=0)
	216-246	Red -> down, Green=0, Blue=full, White=0
	247	Blue (Red=0, Green=0, Blue=full, White=0)
		Speed of the following effects can be controlled by the Shutter/Strobe channel (DMX values of 96-127)
	248	Rainbow effect (with fade time)
	249	Rainbow effect
	250-255	Zone effects
CH9	000-255	Red(8bit)-zone 1 Red LEDs saturation control (0-100%)
CH10	000-255	Red fine (16 bit) - zone 1 Fine red LEDs saturation control
CH11	000-255	Green (8 bit) - zone 1 Green LEDs saturation control (0-100%)
CH12	000-255	Green fine (16 bit) - zone 1 Fine green LEDs saturation control
CH13	000-255	Blue (8 bit) zone 1 Blue LEDs saturation control (0-100%)
CH14	000-255	Blue fine(16 bit) zone 1 Fine blue LEDs saturation control)
CH15	000-255	White (8 bit) - zone 1 White LEDs saturation control (0-100%)
CH16	000-255	White fine(16 bit) - zone 1 Fine white LEDs saturation control
CH17	000-255	Red (8bit) - zone 2 Red LEDs saturation control (0-100%)
CH18	000-255	Red fine (16 bit) - zone 2 Fine red LEDs saturation control)
CH19	000-255	Green (8 bit) - zone 2 Green LEDs saturation control (0-100%)
CH20	000-255	Green fine (16 bit) - zone 2 Fine green LEDs saturation control
CH21	000-255	Blue (8 bit) - zone 2 Blue LEDs saturation control (0-100%)
CH22	000-255	Blue fine (16 bit) - zone 2 Fine blue LEDs saturation control

CH23	000-255	White (8 bit) - zone 2 White LEDs saturation control (0-100%)
CH24	000-255	White fine(16 bit) - zone 2 Fine white LEDs saturation control
CH25	000-255	Red (8 bit) - zone 3 Red LEDs saturation control (0-100%)
CH26	000-255	Red fine (16 bit) - zone 3 Fine red LEDs saturation control
CH27	000-255	Green (8 bit) - zone 3 Green LEDs saturation control (0-100%)
CH28	000-255	Green fine (16 bit) - zone 3 Fine green LEDs saturation control
CH29	000-255	Blue (8 bit) zone 3 Blue LEDs saturation control (0-100%)
CH30	000-255	Blue fine (16 bit) zone 3 Fine blue LEDs saturation control
CH31	000-255	White (8 bit) zone 3 White LEDs saturation control (0-100%)
CH32	000-255	White fine (16 bit) zone 3 Fine white LEDs saturation control

Fixture Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (I.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

To clean the fixture:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Vacuum or gently blow away dust and loose particles from the outside of the fixture with low-pressure compressed air.
3. Clean the surfaces by wiping gently with a soft, clean lint-free cloth moistened with a weak detergent solution. Do not rub glass surfaces hard: lift particles off with a soft repeated press. Dry with a soft, clean, lint-free cloth or low-pressure compressed air. Remove stuck particles with an unscented tissue or cotton swab moistened with glass cleaner or distilled water.
4. Check that the fixture is dry before reapplying power.

Fuse Replacement

This fuse is located in a fuseholder next to the MAINS OUT socket on the connections panel.
To replace a fuse:

1. Disconnect the fixture from power and allow it to cool for at least 10 minutes.
2. Unscrew the cap of the fuseholder and remove the fuse. Replace with a fuse of the same size and rating only.
3. Reinstall the fuseholder cap before reapplying power.

Troubleshooting

Listed below are a few common problems that you may encounter, with solutions.

The fixture does not work, no light

- Check the connection of power and main fuse. Be sure the external fuse has not blown.
- Measure the mains voltage on the main connector.

Technical specifications

Model	**P19**
Type	**LED ZOOM PAR**
Power supply:	AC100-240V, 50/60Hz
Light source:	19 x 15W RGBW LED
LED color:	RGBW LED
Zoom range:	15°~60°
Power connection:	PowerCON in&out
Signal connection:	3-pin XLR in&out(5-pin optional)
DMX channels:	32/16/10/5/32
Control mode:	DMX, Auto program, Sound, Master-slave
Housing:	Colour black, Aluminum
Size:	280 x 215 x 330mm(11 x 8.5 x 13in)
Package(carton):	280 x 280 x 390mm(11 x 11 x 15.4in)
N.W.:	4.5 kg(9.9lb)
G.W.:	5kg(10lb)
Enviroment:	IP20

Please note: All information is subject to change without prior notice. 30.06.2018