ZP18

ZOOM LED PAR CAN

Item ref: 154.018UK

User Manual

⚠	Caution: Please read this manual carefully before operating Damage caused by misuse is not covered by the warranty

Introduction

Thank you for choosing the ZP18 zoom PAR can as part of your stage lighting equipment. This product is designed to provide bright illumination and vivid colours in various beam angles for stage and theatre shows. Please read these instructions fully in order to gain the best results from this item and avoid damage to the unit through misuse.

Unpacking

Your ZP18 should reach you in good condition and should be supplied with IEC mains lead(s)
If there are any signs of damage or items missing from the packaging, contact your dealer immediately.

Warning

To prevent risk of fire or electric shock, do not expose electrical parts to rain or moisture.
If any liquids are spilled on the ZP18, allow it to dry out and have it checked by qualified service personnel before further use.
Avoid any impact, dropping or extreme pressure to the housing.
No user serviceable parts inside - do not open the case.
Allow the ZP18 to acclimatize to room temperature before operating.
Refer all servicing to qualified service personnel.

Safety Symbol and Message Conventions

⚡	**CAUTION** **RISK OF ELECTRIC SHOCK** **DO NOT OPEN**	**AVIS** **RISQUE DE CHOC ELECTRIQUE** **NE PAS OUVRIR**	⚠

⚡	**This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit**

⚠	**This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.**

Safety

- Check for correct mains voltage and condition of the IEC lead before connecting to a power outlet
- Check the condition of DMX control leads before connecting to a controller
- This unit can produce very bright output. Do not look directly into the LEDs whilst powered up.

⏚ This unit must be earthed

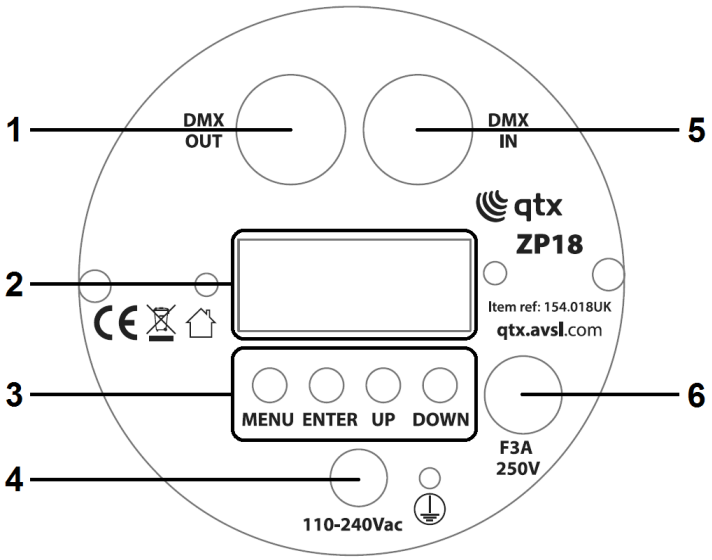
Cleaning

- Use a soft dry or slightly damp to clean the casing
- Do not use strong solvents for cleaning the unit

Placement

The ZP18 has a built-in dual "U" bracket, which can allow the can to be free standing or fixed to trussing.
If free standing, ensure that the ZP18 is positioned on a stable, non-slip surface.
If mounted at height onto a truss or stand, it is advised to use a drop wire for additional safety.
Allow adequate space for access to the controls and to avoid straining cables and connections.

Rear Panel



1. DMX out XLRF connector
2. LED digit display
3. Control panel
4. Mains inlet wire (terminates to IEC male)
5. DMX in XLRM connector
6. Mains fuse 5 x 20mm F3A 250V

Setting Up

The ZP18 has a hard-wired lead with an in-line IEC plug for mains power connection (4)
Connect to a mains outlet using the supplied IEC mains lead, ensuring that the voltage and current capacity are correct for powering the ZP18.

The ZP18 can operate as a stand-alone item from internal programs or from DMX512 signal.

Standalone modes are shown below.

Mode	Details	
STAT	Static colour with strobe and zoom options	
AUTO	AT01-AT10	Built-in auto preset sequences
	PR01-PR10	Stored user programmable sequences
SOUd	2 sound-activated modes	
RUN	DMX enables control from a DMX512 signal	
	SLAV sets the fixture to mimic a standalone ZP18 connected to the DMX input	

The setup of the fixture is accessed via the onboard menu as shown on the next page.

Onboard Menu

The various modes of operation of the ZP18 can be set using the control panel (2) and digital LED display (3)

MODE	ENTER	Function	UP/DOWN	ENTER
STAT	R	Red	000-255	
	G	Green	000-255	
	B	Blue	000-255	
	W	White	000-255	
	ST	Strobe	000-255	
	M	Zoom	000-255	
AUTO	AT**	Auto programs	AT01-AT10	
	PR**	User programs	PR01-PR10	
SOUd	Mod*	Sound mode	MOd1-MOd2	
RUN	****	Control mode	dMX-SLAV.	
dMX	d.001	Start address	001-255	
PERS		DMX personality (channel mode)	STAG	13 channel Stage mode
			ARC.1	5ch architectural RGB
			AR1.d	6ch architectural RGB + dimmer
			ARC.2	6ch architectural RGBW
			AR2.d	7ch architectural RGBW + dimmer
			AR2.S	8ch architectural RGBW + strobe
			HSV	Hue/Sat/Level mode
Id	Id.**	Fixture ID number	Id01 – Id66	ID number for group DMX control
TEMP	CURR	Current temperature	*** (°C)	Displays current temperature
	TOP	Max temp (before cut-out)	020-150 (°C)	Fixture will cut out at max temperature
EDIT	PR01-PR10	Edit programs Scenes SC00 to SC30	R.000 - R.255	Red level
			G.000 - G.255	Green level
			B.000 - B.255	Blue level
			W.000 - W.255	White level
			ST.00 - ST.20	Strobe frequency (0-20Hz)
			T.000 - T.255	Time duration
			F.000 - F.255	Fade time
			M.000 - M.255	Zoom (10°-60°)
SET		Upload	UPLd	Enter passcode to upload PR01-10
		Restore/Reset	REST	Enter passcode to reset the fixture
		ID mode	ID	ON (ch11 in STAG mode) - OFF (normal)
		RGBW mode	RGBW	ON (levels set by CAL2) - OFF (normal)
		Power output mode	POW	HIGH-NORM
		Dimmer curves mode	dIM	OFF/dIM1-4
CAL1	WT.01-WT.11	Calibrate white colour temperatures for STAG mode ch.6	R.000 - R.255	
			G.000 - G.255	
			B.000 - B.255	
			W.000 - W.255	
CAL2	RGBW	Calibrate RGBW limits	R.000 - R.255	
			G.000 - G.255	
			B.000 - B.255	
			W.000 - W.255	
KEY		Lock display after 30s inactivity	ON/OFF	ON (locked after 30s) – OFF (unlocked)

DMX operation

If the ZP18 is to be operated by DMX512, connect the signal from the controller to the DMX input XLR (1). Continue the DMX signal onto further lighting fixtures from the DMX output XLR (5)

To control from DMX512, it is necessary to set the DMX start address via the control panel and display (2 & 3) Press the MENU button until the display shows "dMX", then press the ENTER button.
The display will show "d." followed by a number from 1 to 512, as shown below…

In the example shown above, the DMX start address would be "001".

There are 7 different DMX channel modes in total, which are selected in the "PERS" (DMX personality) menu, Details of these are shown below. It is important to select the most appropriate DMX channel mode depending on how the ZP18 is to be controlled and how many DMX channels it can occupy.

STAG mode

Ch	Value	Function
1	000-255	Master dimmer
2	000-255	Red (or step time if PR01-PR10 active)
3	000-255	Green (or fade time if PR01-PR10 active)
4	000-255	Blue
5	000-255	White
6	000-005	No function
	006-020	High Power (only when in Normal Power mode)
	021-030	No function
	031-255	Colour (see colour list below)
7	000-010	No function
	011-255	Strobe function (slow to fast)
8	000-020	No function
	021-120	AT01-AT10 (each +10 value increments preset by 1)
	121-220	PR01-PR10 (each +10 value increments program by 1)
	221-255	No function
9	000-255	Auto program speed (only for Auto 1 - 10 presets)
10	000-009	Preset dimmer speed from display menu
	010-029	Linear dimmer
	030-069	Dimming curve 1 (fast)
	070-129	Dimming curve 2 (medium-fast)
	130-189	Dimming curve 3 (medium-slow)
	190-255	Dimming curve 4 (slow)
11	000-009	No function
	010-209	ID01 - ID20 (each +10 value increments ID by 1)
	210-255	ID21 - ID66 (each +1 value increments ID by 1)
12	000-255	Zoom 10° to 60°
13	000-255	Zoom speed (slow to fast)

HSV mode

Ch	Value	Function
1	000-255	Hue (colour)
2	000-255	Saturation (0-100%)
3	000-255	Value (brightness)
4	000-255	Zoom
5	000-255	Zoom speed (slow to fast)

ARC.1 mode

Ch	Value	Function
1	000-255	Red
2	000-255	Green
3	000-255	Blue
4	000-255	Zoom
5	000-255	Zoom speed (slow to fast)

AR1.d mode

Ch	Value	Function
1	000-255	Master dimmer
2	000-255	Red
3	000-255	Green
4	000-255	Blue
5	000-255	Zoom
6	000-255	Zoom speed (slow to fast)

ARC.2 mode

Ch	Value	Function
1	000-255	Red
2	000-255	Green
3	000-255	Blue
4	000-255	White
5	000-255	Zoom
6	000-255	Zoom speed (slow to fast)

AR2.d mode

Ch	Value	Function
1	000-255	Master dimmer
2	000-255	Red
3	000-255	Green
4	000-255	Blue
5	000-255	White
6	000-255	Zoom
7	000-255	Zoom speed (slow to fast)

AR2.S mode

Ch	Value	Function
1	000-255	Master dimmer
2	000-255	Red
3	000-255	Green
4	000-255	Blue
5	000-255	White
6	000-010	No function
	011-255	Strobe (slow to fast)
7	000-255	Zoom
8	000-255	Zoom speed (slow to fast)

Colour List (for ch.6 in STAG mode)

031-050	R 100% / G↑ / B 0% / W 0%
051-070	R↓ / G 100% / B 0% / W 0%
071-090	R 0% / G 100% / B↑ / W 0%
091-110	R 0% / G ↓ / B 100% / W 0%
111-130	R↑ / G 0% / B 100% / W 0%
131-150	R 100% / G 0% / B ↓ / W 0%
151-170	R 100% / G↑ / B↑ / W 0%
171-190	R ↓ / G↓ / B 100% / W 0%
191-200	R 100% / G 100% / B 100% / W 100%
201-255 Colour temperature (adjustable by CAL1)	
201-205	3200K
206-210	3400K
211-215	4200K
216-220	4900K
221-225	5600K
226-230	5900K
231-235	6500K
236-240	7200K
241-245	8000K
246-250	8500K
251-255	10000K

Note: In STAG mode, channel 6 controls colour via a single fader with 11 different white colour temperatures available. The RGBW values of these white shades can be adjusted in the CAL1 calibration menu.

Programming User Sequences

PR01-PR10 are user sequences that can be programmed in the EDIT menu and stored onboard the ZP18.
Press MENU until EDIT is displayed and select the program to be edited.
Starting at SC01, set values for RGBW, strobe, time, fade and zoom, move onto the next scene and repeat the process.
Escape the EDIT menu by pressing the MENU key and the sequence will be stored internally.
Programs PR01-PR10 can be played back via the AUTO menu.

Master/Slave Operation

Connect a DMX lead from a standalone ZP18 unit to further slave units and set each slave to "SLAV" in the RUN menu. The slave units will now mimic the standalone "master" ZP18 fixture.

Passcode Key and SET menu functions

The KEY setting in the menu sets a lock for the display. When set to "ON", the display will lock after 30s of inactivity. To unlock the display, enter the passcode – UP-DOWN-UP-DOWN-ENTER
The passcode is also used for UPLd and REST functions in the SET menu as shown below.

UPLd	Enter passcode (UP-DOWN-UP-DOWN-ENTER) to upload PR01-10 programs to a connected slave fixture
REST	Enter passcode (UP-DOWN-UP-DOWN-ENTER) to reset the fixture
ID	When set to "ON", allows fixture to be controlled in groups in STAG mode determined by the ch11 setting
RGBW	When set to "ON", the max levels of R, G, B, W outputs are set by CAL2 to achieve balanced white output
POW	Determines whether the output is set to Normal or High power
dIM	4 dimming curves can be set to vary the fading profile of

Specifications

Power supply	110-240Vac, 50/60Hz (IEC)
Power consumption	150W
Fuse rating	F3A, 250V
LED type	18 x 8W (4-in-1 quad colour)
Beam angle	10° - 60°
DMX channels	Dimmer, R, G, B, W, Zoom, Strobe
DMX connection	XLRM in, XLRF out
Dimensions	263 x 215 x 250mm
Weight	2.85kg
LED safety standard	BSEN62471:2008

Troubleshooting

No light output and no display	Check mains voltage is correct and socket is switched on
	Check IEC lead is OK and connected properly
	Check mains fuse on rear panel and fuse in plug top
	If fuse blowing repeatedly, refer to qualified service personnel
Display on but no light output	Check operation mode (DMX, standalone)
	Check static and colour settings are not all set to zero or slow fade
	For DMX operation, check the appropriate Personality mode is set
	Check if a static or user program is set with zero light output
No response to DMX	Check that XLR leads are connected properly
	Check that DMX signal is OK by testing on other equipment
	Check that correct address is set in the menu
	Ensure that mode is set to DMX and not Slave

Disposal: The "Crossed Wheelie Bin" symbol on the product means that the product is classed as Electrical or Electronic equipment and should not be disposed with other household or commercial waste at the end of its useful life. The goods must be disposed of according to your local council guidelines

Errors and omissions excepted.