



ZQ02356 – 7x40W 4in1 Bee Eye Mover Unofficial Manual

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Technical Specs

Model:	ZQ02356
Shell Color:	Black
Material:	Aluminum alloy + Plastic Housing + Flame Retardant Materials
Voltage:	AC110V-240V 50/60Hz
Rated Power:	300W
Light Source:	7 x 25W RGBW LED
Lighting Angle:	4.5° to 45°
Color Temperature:	2800K-8500K
CRI Index:	Ra≥90
Best Projection Distance:	5 to 8m
Strobe:	1-60Hz
Focusing:	Electronic
Zooming Range:	4.5° to 45°
X-Axis:	540° with 16BIT Fine-Tuning
Y-Axis:	255° with 16BIT Fine-Tuning
Control Mode:	Automatic/Sound Activated/Master-Slave/DMX
Control Channel:	23CH/35CH/51CH
Protocol:	Standard DMX512 protocol, RDM protocol
Service life:	50000hrs
Data Connection:	3-Core XLR Input/Output
Power Connection:	Powercon Input/Output
Display:	LCD Digital Display
Protection Grade:	IP20
Working Environment:	-20°C to 40°C

Fixture Notes

Power Usage

Idle: 20W

Idle + Fan: 22W

Full RGBW: 164W

Red: 71W -- Minus Idle+Fan: 49W

Green: 83W -- Minus Idle+Fan: 61W

Blue: 83W -- Minus Idle+Fan: 61W

White: 82W -- Minus Idle+Fan: 60W

Running Each Colour Individually, total power per LED: 33W

Running all together, total power per LED: 20W

Sound Levels

Idle: 50dB

Fan Revved up: 52dB

RDM Notes

Device Model Description: ROATE

Manufacturer Label: Jiawei

Software Version Label: 10.05.00

Programming/DMX Notes

Have seen different models with the same model number, the DMX functions can be slightly different, particularly with the Dynamic Pixel Map (35CH - Channel 22) functions.

Menu Settings

Arrow Keys to move around

Middle Button to enter a menu, right arrow or middle button to select things. Up/Down to change settings.

Menu Item	Sub Menu	Options
Address	NA	DMX Address (001-512)
Set	Run Mode	DMX Sound Auto1 Auto2
	Channel (DMX)	23CH 35CH 51CH
	Invert Pan	On/Off
	Invert Tilt	On/Off
	Hall Crct	On/Off
	Encoder Crct	On/Off
	Signal Keep	On/Off
	Screensaver	On/Off
	Invert Screen	On/Off/Auto
	Update Slave	On/Off
	Language	En/CN
	Dimmer Curve	Curve1/Curve2/Curve3/Curve4
	Speed Mode	Normal/Fast (Only makes movement a little quicker)
	Load Default	
Manual	Manual Controls for Everything NOTE: The unit will move as soon as you enter this menu!	
Calibrate	Calibration Options	
Reset	Reset to Factory Defaults	
Note	System Information – Software/Hardware Versions etc	

DMX Channel List – 23 Channel

DMX Channel	Function	DMX Value	Description
1	Pan	0-255	0-540° Pan
2	Pan (Fine)	0-255	16 Bit Pan
3	Tilt	0-255	0-205° Tilt
4	Tilt (Fine)	0-255	16 Bit Tilt
5	Pan/Tilt Speed	0-255	Fast -> Slow
6	Zoom	0-255	4.5° to 45° Zoom
7	Lens Rotate	0-127	0-60° Lens Rotate
		128-191	Anticlockwise Fast -> Slow
		200-255	Clockwise Slow -> Fast
8	Dimmer	0-255	Intensity (Whole Fixture)
9	Strobe	0-3	Strobe Off
		4-200	Synchronous Strobe Slow -> Fast
		201-215	Random Strobe Slow
		216-234	Random Strobe Medium
		235-255	Random Strobe Fast
10	Red	0-255	Main Red Colour
11	Green	0-255	Main Green Colour
12	Blue	0-255	Main Blue Colour
13	White	0-255	Main White Colour
14	Colour Temperature	0-255	Colour Temperature (2800K to 8500K)
15	Colour	0-255	Random Colours (See “Colour Effect 1”)
16	Static Pixel Map	0-255	Assorted Static Effects (See “Colour Effect 2”)
17	Dynamic Pixel Map	0-255	Assorted Dynamic Pixel Map Effects
18	Dynamic Pixel Map Speed (17)	0-127	Forward Fast->Slow
		128-255	Backwards Slow->Fast
19	Background Red (16 or 17)	0-255	Effect Red Colour
20	Background Green (16 or 17)	0-255	Effect Green Colour
21	Background Blue (16 or 17)	0-255	Effect Blue Colour
22	Background White (16 or 17)	0-255	Effect White Colour
23	Reset	0-199	NA
		200-205	Reset after 5 Sec
		206-255	NA

DMX Channel List – 35 Channel

DMX Channel	Function	DMX Value	Description
1	Red	0-255	Main Red Colour
2	Red (Fine)	0-255	16 Bit Red Colour
3	Green	0-255	Main Green Colour
4	Green (Fine)	0-255	16 Bit Green Colour
5	Blue	0-255	Main Blue Colour
6	Blue (Fine)	0-255	16 Bit Blue Colour
7	White	0-255	Main White Colour
8	White (Fine)	0-255	16 Bit White Colour
9	Colour Temperature	0-255	Colour Temperature (2800K to 8500K)
10	Colour	0-255	Random Colours (See "Colour Effect 1")
11	Strobe	0-3	Off
		4-103	Synchronous Strobe (1-25HZ)
		104-107	On
		108-207	Divide Strobe (1-25HZ)
		208-212	On
		213-225	Random Strobe (Slow)
		226-238	Random Strobe (Mid)
		239-251	Random Strobe (Fast)
		252-255	On
12	Dimmer	0-255	Intensity (Whole Fixture)
13	Dimmer (Fine)	0-255	16Bit Intensity (Whole Fixture) - Doesn't work.
14	Pan	0-255	0-540° Pan
15	Pan (Fine)	0-255	16 Bit Pan
16	Tilt	0-255	0-205° Tilt
17	Tilt (Fine)	0-255	16 Bit Tilt
18	Unknown	0-255	(Labelled "Function" in manual - Does nothing)
19	Reset	0-199	NA
		200-205	Reset after 5 Sec
		206-255	NA
20	Zoom	0-255	4.5° to 45° Zoom
21	Lens Rotate	0-127	0-60° Lens Rotate
		128-191	Anticlockwise Fast -> Slow
		200-255	Clockwise Slow -> Fast
22	Dynamic Pixel Mask	0-255	Dynamic Pattern
23	Dynamic Pixel Mask Speed (22)	0-63	Steps Through Animation frame by frame
		64-159	Animate Speed Forward (Fast -> Slow)
		160-255	Anime Speed Backward (Slow -> Fast)
24	Dynamic Pixel Mask Fade (22)	0-255	Fades between frames of the animation
25	Background Red (22 or 32)	0-255	Effect Red Colour
26	Background Green (22 or 32)	0-255	Effect Green Colour
27	Background Blue (22 or 32)	0-255	Effect Blue Colour
28	Background White(22 or 32)	0-255	Effect White Colour

29	Foreground Intensity(22 or 32)	0-255	Foreground
30	Background Intensity(22 or 32)	0-255	Background
31	Pattern Transition (22 or 32)	0-255	Fades between Changing Dynamic Pixel Maps (Very subtle.)
32	Static Pixel Map	0-255	See Page: Colour Effect 2 Has no effect if Dynamic Pixel Mask (22) is on.
33	Foreground Strobe (22)	0-3	NA
		4-103	Foreground Strobe - Slow -> Fast
		109-251	Foreground Strobe - Slow -> Fast
34	Background Strobe (22)	0-3	NA
		4-103	Background Strobe - Slow -> Fast
		109-251	Background Strobe - Slow -> Fast
35	Background Selection	0-255	Changes the Dynamic Pixel Mask effect - Unpredictable.

DMX Channel List – 51 Channel

Same as the 23 Channel Mode, with the 7 LED's individually addressable (Note: Still needs master intensity up)

DMX Channel	Function	DMX Value	Description
1	Pan	0-255	0-540° Pan
2	Pan (Fine)	0-255	16 Bit Pan
3	Tilt	0-255	0-205° Tilt
4	Tilt (Fine)	0-255	16 Bit Tilt
5	Pan/Tilt Speed	0-255	Fast -> Slow
6	Zoom	0-255	4.5° to 45° Zoom
7	Lens Rotate	0-127	0-60° Lens Rotate
		128-191	Anticlockwise Fast -> Slow
		200-255	Clockwise Slow -> Fast
8	Dimmer	0-255	Intensity (Whole Fixture)
9	Strobe	0-3	Strobe Off
		4-200	Synchronous Strobe Slow -> Fast
		201-215	Random Strobe Slow
		216-234	Random Strobe Medium
		235-255	Random Strobe Fast
10	Red	0-255	Main Red Colour
11	Green	0-255	Main Green Colour
12	Blue	0-255	Main Blue Colour
13	White	0-255	Main White Colour
14	Colour Temperature	0-255	Colour Temperature (2800K to 8500K)
15	Colour	0-255	Random Colours (See "Colour Effect 1")
16	Static Effect	0-255	Assorted Static Effects (See "Colour Effect 2")
17	Dynamic Effect	0-255	Assorted Dynamic Effects
18	Dynamic Effect Speed	0-127	Forward Fast->Slow
		128-255	Backwards Slow->Fast
19	Effect Red	0-255	Effect Red Colour

20	Effect Green	0-255	Effect Green Colour
21	Effect Blue	0-255	Effect Blue Colour
22	Effect White	0-255	Effect White Colour
23	Reset	0-199	NA
		200-205	Reset after 5 Sec
		206-255	NA

LED's 1-7 (Repeat this 7x)

Channel Groups: 24-27, 28-31, 32-35, 36-39, 40-43, 44-47, 48-51

DMX Channel	Function	DMX Value	Description
24	Red	0-255	LED Red Colour
25	Green	0-255	LED Green Colour
26	Blue	0-255	LED Blue Colour
27	White	0-255	LED White Colour

Colour Effect 1

Channel 15 (23CH Mode)

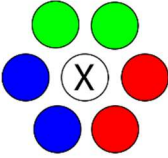
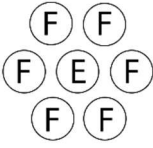
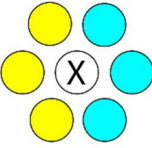
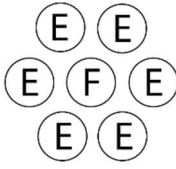
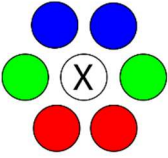
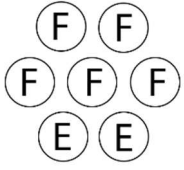
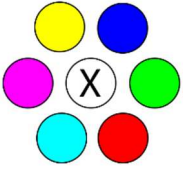
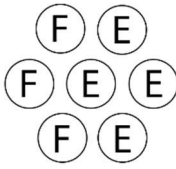
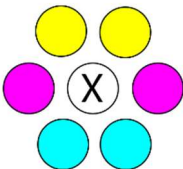
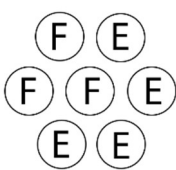
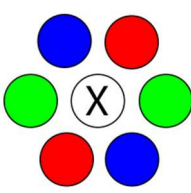
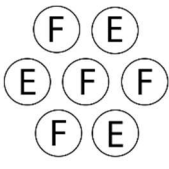
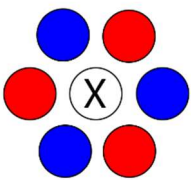
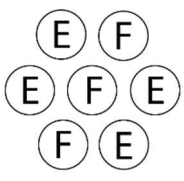
Changes through assorted colours, seems semi-random but in groups of similar colours.

DMX Value	Colour	DMX Value	Colour
0-10	Effect Off	110-124	Pinks/Reds
10-19	Random Colours	125-130	Blues
20-44	Yellow/Orange	131-190	Random
45-77	Whites/Oranges	191-206	Almost UV
78-99	Blues	207-255	White
100-109	Greens		

Colour Effect 2

Channel 16 (23CH Mode)

Colours individual pixels. Uses Foreground (F) and Effect (E) Colours. Note the Middle LED for a lot of the effects is kind of broken and will stick on whatever it was set to last (usually a foreground/effect colour... maybe).

DMX Value	Pattern	DMX Value	Pattern
0-29	Effect Off	135-149	
30-45		150-164	
46-59		165-179	
60-74		180-209	
75-89		210-224	
90-104		225-239	
105-119		240-254	
120-134		255	