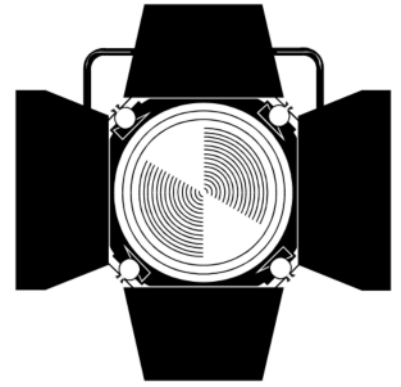


VIKING ***STAGE LIGHTING***



VK 1220 ***Orbit***

12 x 20w Rotating RGBW LED 3 Head
Effect Light with 6 LED Strips



User Manual

Technical Parameters

- **Power Supply:** AC100V-240V 50-60Hz
- **Total Power:** 250W
- **Light Source:** 12 pieces of 20W 4-in-1 leds, **plus** 117 pieces of 0.2W 5050 3-in-1 light strips
- **Lamp Bead Lifespan:** 50,000 hours
- **Beam Angle:** 3.5°
- **Control Methods:** DMX512, Sound Control, Auto-run, Master-slave
- **Horizontal Angle:** 360°, with non-polar function;
- **Three Y-axis Angles:** 360°, with non-polar function
- **Channel Modes:** 32CH / 73CH

Features

- Supports RDM function, each lamp bead can be controlled independently.
- Each Y-axis is surrounded by two upper and lower light strips; the light strips and main light LEDs form a variety of rich built-in chasing effects.
- **Display:** Chinese and English display, reversible display.
- **Strobe:** 1-25Hz; **Dimming:** 0-100% (16bit), with excellent dimming and no flicker.
- Equipped with an efficient intelligent heat dissipation system, with real-time temperature monitoring and automatic temperature adjustment protection to avoid lamp bead damage.
- Intelligently controls fan speed.

1. DMX Settings (DMX Address and Channel Settings)

This option is used to set the DMX communication address and channel mode. Press the "Enter" key to enter the settings. Press the "UP" key to increase the address number, and press the "DOWN" key to decrease the address number. After selecting the address, press "Enter" to save and exit. For channels, there are 32CH/73CH channel mode options.

2. Run Mode (Light Operation Mode Settings)

This option is used to set the light operation mode. Press the "Enter" key to enter the settings. Press the "UP" or "DOWN" key to select the operation mode. The operation modes are "DMX512", "Slow", "Fast", "Sound" and "Manual" in sequence. After selecting the operation mode, press "Enter" to save and exit.

- **DMX512:** Console operation mode.
- **Slow:** Slow auto-run mode.
- **Fast:** Fast auto-run mode.

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- **Sound:** Sound-controlled auto-run mode.
 - **Manual:** Manual mode, which allows scene settings and online operation.

3. Invert PAN/TILT (X/Y Axis Reverse Settings)

This option is used to set the reverse direction of the X/Y axis. Press the "Enter" key to enter the settings. Press the "UP" or "DOWN" key to select whether to reverse the X/Y axis. Select "Yes" to reverse the X/Y axis, and select "NO" to keep the X/Y axis direction unchanged. After selecting the direction, press "Enter" to save and exit.

4. Display Set (Display Screen Settings)

This option is used to set the liquid crystal font reversal, Chinese/English display and backlight of the display panel. Press the "Enter" key to enter the settings. Press the "UP" or "DOWN" key to turn the liquid crystal backlight on or off. Select "Yes" to keep the liquid crystal backlight on continuously, and select "NO" to turn off the backlight after 20 seconds of no key operation (the backlight will turn on again when a key is pressed). After completing the settings, press "Enter" to save and exit.

- **Invert Word:** Font reversal.
- **English/Chinese:** Chinese/English switch.
- **LCD Backlight on:** Liquid crystal backlight on setting.

5. Manual Set (Manual Mode Settings)

This option is used to set the light scene parameters. Press the "Enter" key to enter and save the settings, and online operation is allowed. The prerequisite is that the light's operation mode (Run Mode) must be set to "Manual" for this function to take effect. After power-off, the light will resume the previous startup state when it is turned on again.

6. Sound Sence (Sound Control Sensitivity Adjustment)

This option is used to set the sound control sensitivity of the light. Press the "Enter" key to enter the settings. Press the "UP" or "DOWN" key to select the sensitivity level from 0 to 100. After selecting the sensitivity, press "Enter" to save and exit.

7. System Set (System Parameter Settings)

- **System Information:**

The version: V1 (software version number)

Default Settings: Restore factory settings

Code Settings: Password channel

For the password channel, the user needs to enter the password to view and set the X/Y fine-tuning and lamp bead white balance parameters.

The password consists of 4 digits. Press the "UP" or "DOWN" key to input. The factory password is "DOWN DOWN UP UP".

- **PAN_INIT**: Large X-axis fine-tuning
- **X1_INIT**: X1-axis fine-tuning
- **X2_INIT**: X2-axis fine-tuning
- **X3_INIT**: X3-axis fine-tuning
- **SET_R**: Red current
- **SET_G**: Green current
- **SET_B**: Blue current
- **SET_W**: White current

8. Reset (Light Reset)

After the user selects reset, wait for 3 seconds, and the light will reset.

9. Master / Slave Operation

This unit can be set to Master / Slave easily. Daisy chain the 1st (Master) Light to the others with DMX cables and set the DMX address and channel mode to requirement. This must be copied on to all the slave units so they all have the same value.

There is no setting to select Master for the 1st Light - this is all automatic. You need to select the RUN mode of the Master to either SLOW or FAST or SOUND.

The Slave heads MUST be in DMX Run Mode and will then mimic the Master head in movement and colour.

10. WARNING : The VK1220 Orbit has a large footprint and needs at least a metre between the heads so the arms do not clash when the product opens the circle pattern. Any damage occurred to the arms will be chargeable.

Channel Table

32-Channel Table

Operation of this light requires either 32 or 73 channels of DMX and is set by selecting the appropriate number of channels in the DMX settings menu on the LCD Screen.

It must be understood that as the head requires many DMX channels that the limit to the Start address on the head has to be 480 (32 Channel Mode) or 439 (73 Channel Mode). This is to give a clear run of the full number of control channels on a single DMX cable. It is not possible to split this over multiple cables so care must be given in planning the DMX Addressing and if insufficient channels are available ON THE DMX CABLE , then an additional universe of DMX will be required.

Therefore:

Max DMX Address:

480 32 Channel Mode

439 73 Channel Mode

32-Channel	Function	DMX Value	Description
1	X-axis	0-255	Large X-axis rotation
2	X-axis Fine-tuning	0-255	Large X-axis fine-tuning
3	X-axis Non-polar	0-255	Large X-axis non-polar rotation
4	X-axis Speed	0-255	Large X-axis rotation speed (from fast to slow)
5	X123 Axis	0-255	X1, X2, X3 axis rotation
6	X123 Axis Fine-tuning	0-255	X1, X2, X3 axis fine-tuning

7	X123 Axis Non-polar	0-255	X1, X2, X3 axis non-polar rotation
8	X123 Axis Speed	0-255	X1, X2, X3 axis rotation speed (from fast to slow)
9	Total Dimming	0-255	Linear dimming (from dark to bright)
10	R1-12 Dimming	0-255	R1-R12 red dimming (from dark to bright)
11	G1-12 Dimming	0-255	G1-G12 green dimming (from dark to bright)
12	B1-12 Dimming	0-255	B1-B12 blue dimming (from dark to bright)
13	W1-12 Dimming	0-255	W1-W12 white dimming (from dark to bright)
14	Strobe	0-9	No function
		10-154	Synchronous strobe speed (from slow to fast, 1HZ-25HZ)
		155-204	Random strobe
		205-255	Thunder strobe
15	Colour Effect	0-9	No function
		10-255	Colour
16	Priority 3: Static Pattern Effect	0-9	No function
		10-29	Built-in dynamic effects (one effect per

			4 values)
		30-255	Built-in static pattern effects (the colour of static patterns can be controlled; one effect per 4 values; the colour of the main light effect is controlled by channels 8, 9, 10, 11; the background colour is controlled by channels 19, 20, 21, 22)
	Priority 2: Dynamic Effect	0-9	No function
		10-255	Built-in dynamic pattern effects (the colour of dynamic patterns can be controlled; one effect per 4 values; the color of the main light effect is controlled by channels 8, 9, 10, 11; the background color is controlled by channels 19, 20, 21, 22)
18	Effect Direction Adjustment	0-127	Dynamic pattern forward direction
		128-255	Dynamic pattern reverse direction
19	Effect Speed	0-255	Speed (from slow to fast)
20	Backlight Colour R	0-255	0-255, controls the backlight of channels 15 and 16

21	Backlight Colour G	0-255	0-255, controls the backlight of channels 15 and 16
22	Backlight Color B	0-255	0-255, controls the backlight of channels 15 and 16
23	Backlight Colour W	0-255	0-255, controls the backlight of channels 15 and 16
24	Auxiliary Light Total Dimming	0-255	Linear dimming (from dark to bright)
25	Auxiliary Light R Dimming	0-255	Auxiliary light red dimming (from dark to bright)
26	Auxiliary Light G Dimming	0-255	Auxiliary light green dimming (from dark to bright)
27	Auxiliary Light B Dimming	0-255	Auxiliary light blue dimming (from dark to bright)
28	Auxiliary Light Strobe	0-9	No function
		10-154	Synchronous strobe speed (from slow to fast, 1HZ-25HZ)
		155-204	Random strobe
		205-255	Thunder strobe
29	Auxiliary Light Dynamic Effect	0-9	No function
		10-255	Effect color
30	Auxiliary Light Effect	0-255	Speed (from slow to

	Speed		fast)
31	Priority 1: Macro Function	0-9	No function
		10-99	Auto-run 1
		100-199	Auto-run 2
		200-255	Light sound control
32	Reset	0-239	No function
		240-250	Light reset (valid for 3s)
		251-255	No function

73-Channel Table

73-Channel	Function	DMX Value	Description
1	X-axis	0-255	Large X-axis rotation
2	X-axis Fine-tuning	0-255	Large X-axis fine-tuning
3	X-axis Non-polar	0-255	Large X-axis non-polar rotation
4	X-axis Speed	0-255	Large X-axis rotation speed (from fast to slow)
5	X1 Axis	0-255	X1 axis rotation
6	X1 Axis Fine-tuning	0-255	X1 axis fine-tuning
7	X1 Axis Non-polar	0-255	X1 axis non-polar rotation

8	X2 Axis	0-255	X2 axis rotation
9	X2 Axis Fine-tuning	0-255	X2 axis fine-tuning
10	X2 Axis Non-polar	0-255	X2 axis non-polar rotation
11	X3 Axis	0-255	X3 axis rotation
12	X3 Axis Fine-tuning	0-255	X3 axis fine-tuning
13	X3 Axis Non-polar	0-255	X3 axis non-polar rotation
14	X123 Axis Speed	0-255	X1, X2, X3 axis rotation speed (from fast to slow)
15	RGBW Total Dimming	0-255	Linear dimming (from dark to bright)
16	R1 Dimming	0-255	R1 red dimming (from dark to bright)
17	G1 Dimming	0-255	G1 green dimming (from dark to bright)
18	B1 Dimming	0-255	B1 blue dimming (from dark to bright)
19	W1 Dimming	0-255	W1 white dimming (from dark to bright)
20	R2 Dimming	0-255	R2 red dimming (from dark to bright)
21	G2 Dimming	0-255	G2 green dimming (from dark to bright)
22	B2 Dimming	0-255	B2 blue dimming (from dark to bright)
23	W2 Dimming	0-255	W2 white dimming

			(from dark to bright)
24	R3 Dimming	0-255	R3 red dimming (from dark to bright)
25	G3 Dimming	0-255	G3 green dimming (from dark to bright)
26	B3 Dimming	0-255	B3 blue dimming (from dark to bright)
27	W3 Dimming	0-255	W3 white dimming (from dark to bright)
28	R4 Dimming	0-255	R4 red dimming (from dark to bright)
29	G4 Dimming	0-255	G4 green dimming (from dark to bright)
30	B4 Dimming	0-255	B4 blue dimming (from dark to bright)
31	W4 Dimming	0-255	W4 white dimming (from dark to bright)
32	R5 Dimming	0-255	R5 red dimming (from dark to bright)
33	G5 Dimming	0-255	G5 green dimming (from dark to bright)
34	B5 Dimming	0-255	B5 blue dimming (from dark to bright)
35	W5 Dimming	0-255	W5 white dimming (from dark to bright)
36	R6 Dimming	0-255	R6 red dimming (from dark to bright)
37	G6 Dimming	0-255	G6 green dimming (from dark to bright)

38	B6 Dimming	0-255	B6 blue dimming (from dark to bright)
39	W6 Dimming	0-255	W6 white dimming (from dark to bright)
40	R7 Dimming	0-255	R7 red dimming (from dark to bright)
41	G7 Dimming	0-255	G7 green dimming (from dark to bright)
42	B7 Dimming	0-255	B7 blue dimming (from dark to bright)
43	W7 Dimming	0-255	W7 white dimming (from dark to bright)
44	R8 Dimming	0-255	R8 red dimming (from dark to bright)
45	G8 Dimming	0-255	G8 green dimming (from dark to bright)
46	B8 Dimming	0-255	B8 blue dimming (from dark to bright)
47	W8 Dimming	0-255	W8 white dimming (from dark to bright)
48	R9 Dimming	0-255	R9 red dimming (from dark to bright)
49	G9 Dimming	0-255	G9 green dimming (from dark to bright)
50	B9 Dimming	0-255	B9 blue dimming (from dark to bright)
51	W9 Dimming	0-255	W9 white dimming (from dark to bright)
52	R10 Dimming	0-255	R10 red dimming

			(from dark to bright)
53	G10 Dimming	0-255	G10 green dimming (from dark to bright)
54	B10 Dimming	0-255	B10 blue dimming (from dark to bright)
55	W10 Dimming	0-255	W10 white dimming (from dark to bright)
56	R11 Dimming	0-255	R11 red dimming (from dark to bright)
57	G11 Dimming	0-255	G11 green dimming (from dark to bright)
58	B11 Dimming	0-255	B11 blue dimming (from dark to bright)
59	W11 Dimming	0-255	W11 white dimming (from dark to bright)
60	R12 Dimming	0-255	R12 red dimming (from dark to bright)
61	G12 Dimming	0-255	G12 green dimming (from dark to bright)
62	B12 Dimming	0-255	B12 blue dimming (from dark to bright)
63	W12 Dimming	0-255	W12 white dimming (from dark to bright)
64	Strobe	0-9	No function
		10-154	Synchronous strobe speed (from slow to fast, 1HZ-25HZ)
		155-204	Random strobe

		205-255	Thunder strobe
65	Auxiliary Light Total Dimming	0-255	Linear dimming (from dark to bright)
66	Auxiliary Light R Dimming	0-255	Auxiliary light red dimming (from dark to bright)
67	Auxiliary Light G Dimming	0-255	Auxiliary light green dimming (from dark to bright)
68	Auxiliary Light B Dimming	0-255	Auxiliary light blue dimming (from dark to bright)
69	Auxiliary Light Strobe	0-9	No function
		10-154	Synchronous strobe speed (from slow to fast, 1HZ-25HZ)
		155-204	Random strobe
		205-255	Thunder strobe
70	Auxiliary Light Dynamic Effect	0-9	No function
		10-255	Effect color
71	Auxiliary Light Effect Speed	0-255	Speed (from slow to fast)
72	Priority 1: Macro Function	0-9	No function
		10-99	Auto-run 1
		100-199	Auto-run 2

		200-255	Light sound control
73	Reset	0-239	No function
		240-250	Light reset (valid for 3s)
		251-255	No function