AVALON400ZOOM

400W outdoor LED Gobo projector **with** zoom

USER MANUAL

1. Introduction

4 MODES：DMX mode, Manual mode , Slave Mode, Auto run mode

DMX Channels：13 channels

Main functions: dimming, color, rotating gobo wheel, focus, zoom, gobo flutter, prism

4 menu buttons: Long press MODE+SET for 3 seconds to unlock, press MODE+SET in other interface to quickly lock

MODE	Menu/Back to previous menu
SET	Confirm the selection function
UP	Select the previous option
DOWN	Select the next option

2. Menu

Menu 1	Menu 2	Menu 3	Menu 4
1)DMX Address	001-512		
2)Auto Mode	Auto Run		
	Scene Edit	Scene1-Scene7	1. Dimming: 0-255
			2. Strobe: 0-255
			3. Color: 0-255
			4. Color_F: 0-255
			5.Gobo: 0-255
			6. GoboR: 0-255
			7. Gobo_F: 0-255
			8. Focus: 0-255
			9. Zoom： 0-255
			10. Flutter： 0-255
			11. Prism： 0-255
			12. Prism R: 0-255
			13.Time: 0-255
3. Slave Mode			
4. Manual Control	1. Dimmer: 0-255		
	2. Strobe: 0-255		
	3. Color: 0-255		
	4. Color_F: 0-255		
	5. Gobo: 0-255		
	6. GoboR: 0-255		
	7. Gobo_F: 0-255		
	8. Focus: 0-255		
	9. Zoom： 0-255		
	10. Flutter： 0-255		
	11. Prism： 0-255		
	12. PrismR: 0-255		
5. Settings	1. Curve Select	1.Linear	

		2.Square Law	
		3.InvSquareLaw	
		4.S-Curve	
	2.DMX Fail	Off	
		Hold	
	3.Display	Normal	
		Inverted	
	4.Key Lock	Lock after 30s	
		Unlocked	
	5.Back Light	Off after 60s	
		Always On	
	6.Reset	No	
		Yes	
	7.Default	No	
		Yes	
6. Calibrations	Password	1. Color: 0-255	
		2. Gobo: 0-255	
		3. GoboR: 0-255	
		4. Focus: 0-255	
		5. Zoom： 0-255	
		6. Flutter: 0-255	
		7. Prism: 0-255	
		8. Default	
7.Information	Version and UID		

Menu description:

1. DMX Address
   - Press the UP/DOWN button to set the initial address code (001 ~ 512). After setting the address code, press the SET button to confirm the save and automatically exit to return to the main menu. The fixture is in DMX mode after this operation.

2. Auto Mode
   - Select the Auto Mode menu, there are two menus for option, one is Auto Mode, another is Scene Edit with 8 scenes for editing. Each scene can be edited independently, and also includes all the DMX channels function and time-keeping function, but no Reset function. The editing process is the same as Manual Control, exit to save.
   This fixture has a maximum of 8 gobos, so it can set 8 scenes. If you need less than 8 scenes, set the scene time-keeping to "0". The unit of time is seconds.

3. Slave Mode
   - Select the Slave Mode menu, press the SET button to enter Slave Mode, then it will receive the signal from the master and keep the same state as the master. The fixture in Auto Mode or Manual mode is the master.

- In the screensaver, it will switch to DMX mode in response to the channel sent from the console whenever the master or slave receives the DMX512 signal.

4. Manual Control
- Select the Manual Control menu, Press the UP/DOWN button to select which function to operate. The right number after pressing the SET button is selected. Then press the UP/DOWN button to modify the value, long press to continuously modify, and press the SET button to change the options on the left. Press the MODE button to exit and return to the main menu. It will not exit the manual mode in this state. It's need to enter other modes for switching. For example, if you set the DMX address, then will enter the DMX mode.

5. Settings
   1) Curve Select
- To choose one of linear dimming/square curve dimming/inverse square curve dimming/S-curve dimming. The characteristic of linear dimming is that the light output brightness maintains a linear relationship with the channel value; square curve dimming is relatively linear dimming, and the channel value range occupied in the low brightness area is more, that is the low brightness area is more abundantly adjusted; the low brightness area occupies few channels. When the channel value increases from 0 to up, the brightness quickly becomes very bright, and it allocates more channel value ranges in the high brightness area; the S-shaped curve is in the low brightness area Both the high-brightness area and the high-brightness area are allocated, and the medium-brightness area is few.

   2) DMX Fail
- "OFF" (No DMX, lighting is off.), "HOLD" (No DMX, lighting keeps the original state).

   3) Display
- The display reverse is used when the fixture is upside down.

   4) Key Lock
- When using the key lock function, not key operation after 30 seconds, the key is locked. Pressing the key in the locked state is invalid. It needs to press the MODE+SET key combination for 3 seconds to unlock.

   5) Back Light
- Select always on or 60S off if no operation

   6) Reset
- In order to verify whether the motor is working normally, and whether to save it after modifying the parameters, it can be perform a reset operation, like re-powering on.

   7) Default

- Restore the DMX address and parameters into factory values. The default address is 1, and the gray background option in the menu table is the default.

6. Calibrations
   - Enter 088 on the Password interface and press SET to enter the Calibrations menu. When the option on the left is selected, press the UP/DOWN button to select which function to operate. After pressing the SET button, the number on the right is in the selected state. At this time, press the UP/DOWN button to modify the value. Long press can be modified continuously. After pressing the SET button again, it changes back to the left option as the selected state. Press the SET button on the Default option to restore the default value.

7. Information
   - Display the fixture software version and UID code of RDM.

DMX channels

Function	DMX Value	Setting	13 Channels
Dimmer	000-255	0~100%	1
Strobe	0-10	Always on	2
	11-127	Random strobe slow to fast	
	128-255	Linear strobe slow to fast	
Color	0~7	White	3
	8~15	Color1	
	16~23	Color2	
	24~31	Color3	
	32~39	Color4	
	40~47	Color5	
	48~55	Color6	
	56~63	Color7	
	64~71	White+ Color 1	
	72~79	Color 1+ Color 2	
	80~87	Color 2+ Color 3	
	88~95	Color 3+ Color 4	
	96~103	Color 4+ Color 5	
	104~111	Color 5+ Color 6	
	112~119	Color 6+ Color 7	
	120~127	Color 7+ White	
	128~191	Clockwise rotation: fast to slow	
	192~255	Counterclockwise rotation: slow to fast	
Color_F	0-255	Fine adjustment of color wheel (corresponding to a color change)	4
Gobo	0~8	Gobo 1 (or White circle)	5
	9~17	Gobo 2	

	18~26	Gobo 3	
	27~35	Gobo 4	
	36~44	Gobo 5	
	45~53	Gobo 6	
	54~62	Gobo 7	
	63~71	Gobo 7 shake from slow to fast	
	72~80	Gobo 6 shake from slow to fast	
	81~89	Gobo 5 shake from slow to fast	
	90~98	Gobo 4 shake from slow to fast	
	99~107	Gobo 3 shake from slow to fast	
	108~116	Gobo 2 shake from slow to fast	
	117~127	Gobo 1 shake from slow to fast	
	128~191	Clockwise rotation fast to slow	
	192~255	Counterclockwise rotation slow to fast	
GoboR	0~127	Static rotation by a certain angle	6
	128~191	Clockwise rotation fast to slow	
	192~255	Counterclockwise rotation slow to fast	
GoboF	0-255	Gobo positioning fine-tuning	7
Focus	0~255	Focusing	8
Zoom	0~255	Zooming	9
Flutter	0~127	No action	10
	128-255	Gobo flutter slow to fast	
Prism	0~31	Prism close	11
	32~255	Prism open	
PrismR	0~127	No rotate	12
	128~191	Clockwise rotation fast to slow	
	192~255	Counterclockwise rotation slow to fast	
Reset	0~9	No action	13
	10~19	All reset after three seconds	
	20-255	No action	

4. RDM Supported   Parameters

Readable	Writable	RMD instruction	value	description	customize
		DISC_UNIQUE_BRANCH	0x0001	search	
		DISC_MUTE	0x0002	Lock	
		DISC_UN_MUTE	0x0003	Unlock	
√		SUPPORTED_PARAMETERS	0x0050	Supported instruction list	

				Custom instruction description	
√		PARAMETER_DESCRIPTION	0x0051	Custom instruction description	
√		DEVICE_INFO	0x0060	Device Information	
√		DEVICE_MODEL_DESCRIPTION	0x0080	Product model description	
√		MANUFACTURER_LABEL	0x0081	manufacturer	
√	√	DEVICE_LABEL	0x0082	Device label	
√	√	FACTORY_DEFAULTS	0x0090	Factory defaults	
√		SOFTWARE_VERSION_LABEL	0x00C0	Software version description	
√	√	DMX_START_ADDRESS	0x00F0	starting address	
√		SENSOR_DEFINITION	0x0200	Sensor definition	
√	√	SENSOR_VALUE	0x0201	Sensor value	
	√	RECORD_SENSORS	0x0202	Record sensor value	
√	√	DISPLAY_INVERT	0x0500	Display reversed	
√	√	IDENTIFY_DEVICE	0x1000	Identify device	
	√	RESET_DEVICE	0x1001	Reset device	
	√	CAPTURE_PRESET	0x1030	Capture preset	
√	√	PRESET_PLAYBACK	0x1031	Preset playback	
√	√	FAC_RUN_MODE	0xD320	Lamp operation mode	√
	√	FAC_SAVE_RUN_MODE	0xD321	Save operating mode	√

*Instructions of lamp operation mode: data is 1 byte unsigned number, 0 means DMX mode, 1 means manual control mode, 2 means Auto run mode, 3 means slave mode.

*Save operation mode description: The 0xD320 instruction is only a temporary modification of the operation mode. You need to use the 0xD321 instruction to save, write 1 to save the current operation mode, and write 0 to restore the previously stored operation mode.