Acue®Lighting

PROFESSIONAL STAGE LIGHTING

FLEX 200ip

USER MANUAL

1. <u>INTRODUCTION</u>

Thank you for choosing the Acue Lighting Flex 200 IP. To use this product correctly and safely, please read the instructions carefully before installing and using this product. This manual contains important installation and operation information. Make sure to strictly follow the instructions when installing and operating this product. Retain this manual in a safe place for future reference.

The Flex 200 IP uses a high temperature & moisture resistant Aluminum body giving it an IP rating of 65. IP65 is a classification given to devices that are dust, water, and moisture resistant. This product is designed and produced in strict accordance with CE standards and conforms to the international standard of DMX512 signal protocol. It can be controlled manually from the display or by DMX using the built in 3-pin IP65 rated XLR in/out connectors. This fixture has multiple DMX channel modes to choose from. It is suitable for various types of indoor or outdoor concerts, indoor/outdoor events, indoor/outdoor installations, and other like environments.

2. SAFETY INSTRUCTIONS

● Please keep this User Manual for future reference. All users of this fixture must read the user manual thoroughly.

● Unpack and check contents carefully to make sure there is no damage caused by shipping before using the unit.

● Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.

● It's important to properly ground the fixture to avoid electric shock.

● The unit is designed for indoor or outdoor use. It is alright to leave outdoors in rain or sun but do not submerse in water or block ventilation fans. Do not point fixture directly into sunlight. Make sure main power connector is connected to an outlet that is not near water or moisture. Even though the fixture is IP65 rated, the main power connections are not.

● The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.

● Disconnect main power before moving fixture.

● Make sure there are no flammable materials close to the unit while operating, as it is fire hazard.

● Use safety cable when mounting this unit.

● Do not connect this product to other dimmers.

● Maximum ambient operating temperature is 40˚C. Do not operate if the temperature is higher than this.

● Unit surface temperature may reach up to 85˚C. Do not touch the housing bare-handed during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.

● In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled individuals can lead to further damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type of parts.

3. Maintenance and Installation

3.1 Maintenance

- To reduce the risk of electrical shock or fire, do not expose the power connector of this unit to rain or moisture.
- Intermittent usage will extend this fixtures service life.
- Please clear the fan, fan net, and optical lens of any dust or obstructions in order to keep the fixture in a proper working state.
- Do not use alcohol or any other organic solvent to wipe the shell.

3.2 Statement

All fixtures have been tested thoroughly before leaving the factory. In order to keep the product in good condition and ensure safe operation, users should follow the safety precautions and warnings in this manual.

Important: **Damages caused by not following the guidelines in this user manual are not covered under warranty. The manufacturer is not responsible for product issues caused by misuse.**

3.3 Safety Precaution

- In order to guarantee the product's life expectancy, do not store or use in environments over 60℃.
- Always mount this unit in a safe and stable manner. Mounting system must be able to withstand 10x that of the fixture's weight. A safety cable must always be used as a secondary source for securing the fixture.

- Installation of this fixture may only be carried out by skilled individuals.
- This product can be used in the voltage range of 90-240V and is an indoor/outdoor product. Please make sure that the power mains voltage used is not higher/or lower than what the product can withstand! The power plug must be inserted into a protected Class I socket and must be grounded properly.
- In order to make sure the product is used properly, please read this manual carefully.

3.4 Cable connection (DMX)

Make sure to use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24 AWG, Low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using IP65-rated XLR type 3 pin male/female connectors. A terminating plug must be inserted into the last fixture with a resistance of 120 Ohm (minimum 1/4 W) between terminals 2 and 3.

IMPORTANT: The wires must not make contact with each other or with the metal casing of the connectors. The casing itself must be connected to the ground of the connector plugs.

4. Display Operation

*The schematic diagram of the fixture's front control panel is shown in Figure 3 fir reference***Error! Reference source not found.**

1) Signal light: When the blue DMX signal light is illuminated it means the fixture is connected to a DMX controller. No light means there is no DMX input into the fixture. When the fixture has an error, the red error light will be illuminated.

2) Temperature: As shown in Figure 1, the temperature of the LED chip is 30 ℃; if the temperature shows * * ℃, the temperature of the LED chip is outside of its working temperature range. It may break the temperature control connection line. If the temperature shows 99℃, and the difference from the ambient temperature is too large, it may be a temperature control cable short circuit. Need professionals to repair and troubleshoot, before normal use.

Temperature and power: When the temperature reaches 75 degrees, the power drops to 80 degrees, directly turn the light off. After the drop power, the temperature is below 75 degrees (excluding 75 degrees).

Temperature and fan: When the fan starts on for 15 seconds, the air will be detected all the time; when the temperature reaches 46℃ and stops below 43℃ degrees.

3) Address code: Display range 001-512, the address code is 001.

4) DMX mode: DMX 512 mode.

5) Press the button: UP: press up

MENU: Return to the previous level menu
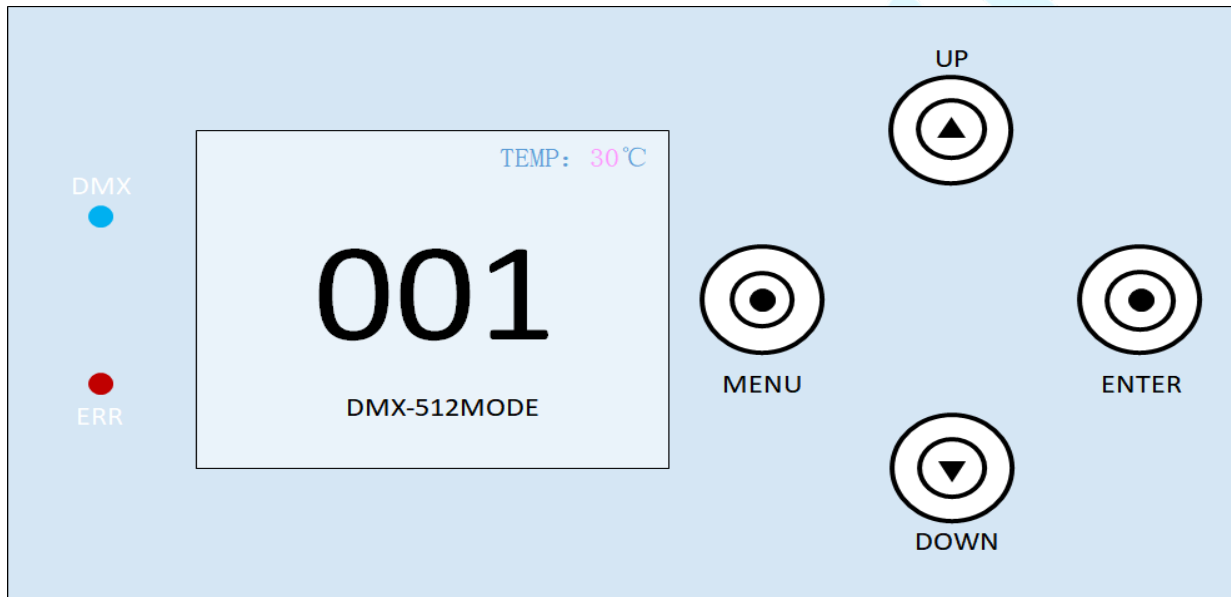
ENTER: as determined

DOWN: down

Figure 1: Schematic diagram of the front control panel

4.1 Menu Interface

The first interface of the menu contains 6 sub-menus. Select the corresponding sub-menu using the "UP" key and "DOWN" key, and click the "ENTER" key to enter the corresponding sub-menu interface. The first interface of the menu is shown in Figure 2:

1) Address: Click to enter the DMX address setting. The value of the DMX address can be increased or decreased by using the "UP" and "DOWN" keys. At this time, the address code displayed on the display panel of the fixture will be updated synchronously.

2) Settings: Click to enter the system Settings to change the operating mode, working parameters and panel display settings of the fixture.

3) Manual: Click to enter the manual mode to control the functions of the fixture manually. For the specific content, see the channel table.

4) Calibration: Click and input password to enter the calibration interface. This mode allows user to adjust the fixture's power options, motor stroke, sound control sensitivity and other parameters.

5) Reset: Click to enter the system reset mode.

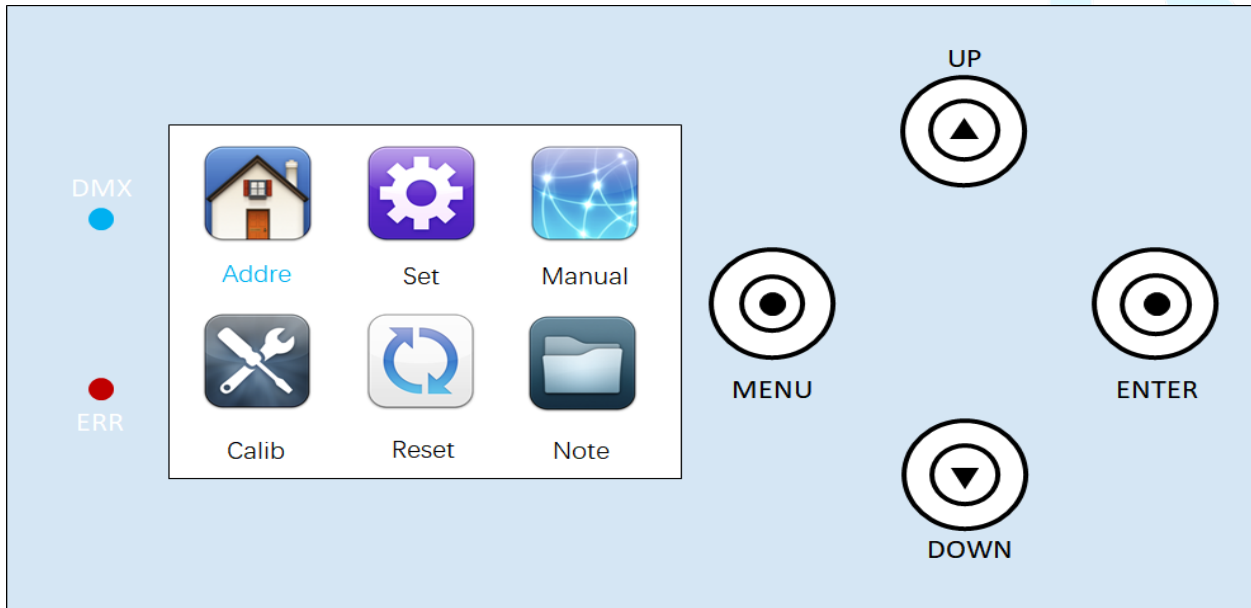6) <u>Information:</u> Click to see the system error report, hardware and software versions and other information.

Figure 2: Sub-Menu Categories

4.2 System Settings

Figure 3: System Settings

   The system setting interface is shown in **Figure 3**. To enter the system settings, click "ENTER" to select the settings to be modified, then select the option you would like to change using the "UP" and "DOWN", then press the "ENTER" button to confirm and change the desired function, working parameters and settings of the display panel. The details are shown in table below.

Options	Description		
Operating Mode	Fixture run mode: DMX / Sound / Auto 1/ Auto 2/ Auto 3		
	DMX mode	DMX console mode, receives DMX signal	
	Auto 1	The lamps run automatically according to the built-in auto program 1	
	Auto 2	The lamps run automatically according to the built-in auto program 2	
	Auto 3	The lamps run automatically according to the built-in auto program 3	
	Sound	The fixture automatically runs a scene according to the built-in program, otherwise it keeps the last scene depending on sound pickup.	
Channel mode	14CH		
Invert Pan	Set the X-axis inversion		
	Off	Regular	
	On	Inverted	
Invert Tilt	Set the Y-axis inversion		
	Off	Regular	
	On	Inverted	
Hall Error Correction	Detect if any functions such as gobo wheel or color wheel are out of sync and correct them		
	Off	No position correction after loss of step	
	On	Automatically correction of position after losing step	
Encoder Error Correction	Detect whether X/Y is out of sync and correct it		
	Off	Position is not corrected after a missed step	
	On	Position is automatically corrected after loss of step	
Signal Keep	Select if to hold last signal or go to home position when DMX signal is lost		
	Off	Goes back to home position when DMX signal is lost	
	On	Keeps last signal when DMX signal is lost	
Screen Saver	Choose if to turn screen off when operating or keep it on		
	Off	Always on	
	On	Screen turns off after 15 seconds of inactivity	
Invert Screen	Set the display orientation of the screen		
	Off	Regular display orientation	
	On	Reverse display orientation	
	Auto	The system can automatically invert the screen according to the position	
Update Slave	Synchronize the setting parameters or calibration parameters of multiple lamps		
	Off	Only edit single fixture	
	On	Connect multiple fixtures with DMX cables, and the information can be updated synchronously in the setting interface and calibration interface of all fixtures.(Note: Remove the DMX signal cable connected to the console)	
Language	Select display language		
	CH	Chinese	
	EN	English	
Screen Lock	Set automatic display lock to avoid accidental setting changes		
	Off	Display will not lock after display goes to sleep	
	On	Display will lock after display goes to sleep	
MIC sensitivity	Adjust the voice control sensitivity, the adjustment range is 0-255, the default value is 20		
	0	The lowest voice control sensitivity	
	255	The highest voice control sensitivity	
Load Default	Return all settings to the factory default settings		

	Cancel	Exit
	OK	Restore all setting to factory defaults

4.3 System Calibration

Figure 4: System Calibration Interface

Press "6 xxx" to enter the system calibration interface. Modify the values using the "UP" key and "DOWN" key for motor position, sound control sensitivity and other parameters. The system calibration interface is shown in Figure 6 above.
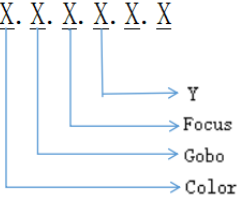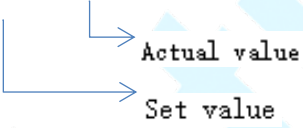
4.3 System Information

Figure 5: System Information Interface

Press the "ENTER" key directly to enter the system information interface, select the "UP" keys and "DOWN", and then click "ENTER" to view the corresponding content. The system calibration interface is shown in Figure 8, and the details are shown in table below.

Options	Description
Reset Error Message	If the red ERR indicator light is on, the fixture has detected a problem.
	1) IC1 communication failure (motor and display board communication failure)
	2)X/Y optocoupler error
	3)Motor reset failure of color disk, gobo, etc
DMX Data monitoring	This function allows you to view incoming DMX data

Sensor Information	1) Code Description: X. X. X. X. X. X → Y → Focus → Gobo → Color 2）Sensor: X, Y sensor: XXXX--XXXX → Actual value → Set value
Hardware version number	Fixture hardware information XX ↓ . XX . XX ↓ Display board version. Motor board version
Software version number	Fixture software version XX ↓ . XX . XX ↓ Display board version. Motor board version

5. DMX Channel Chart

14 channels	Channel function	Numeric value	Effect
1	X-axis	0-255	X-Axis Control 540°
2	X-axis fine	0-255	X-Axis Fine Adjust
3	Y-axis	0-255	Y-Axis Control 270°
4	Y-axis fine	0-255	Y-Axis Fine Adjust
5	X/Y speed	0-255	from fast to slow
6	Dimmer	0-255	Dimming (from dark to bright)
7	Strobe	0-3	Closed
		4-99	Synchronous strobe
		100-149	Pulse strobe
		150-199	Strobe

		200-249	Random strobe
		250-255	Open
8	Color wheel	0-6	White
		7-11	Red
		12-16	Green
		17-21	Blue
		22-26	Yellow
		27-31	Magenta
		32-36	Lime
		37-41	UV
		42-46	Pink
		47-51	Orange
		52-56	Aqua
		57-61	5K
		62-66	6K
		67-71	4K Warm White
		72-75	White light + color 1
		76-79	Color 1+Color 2
		80-83	Color 2 + Color 3
		84-87	Color 3+Color 4
		88-91	Color 4+Color 5
		92-95	Color 5+Color 6
		96-99	Color 6+Color 7
		100-103	Color 7+Color 8
		104-107	Color 8+Color 9
		108-111	Color 9+Color 10
		112-115	Color 10+Color 11
		116-119	Color 11+Color 12
		120-123	Color 12+Color 13
		124-127	Color 13+ white light
		128-189	Rotation - counterclockwise from fast to slow
		190-193	Stop
		194-255	Rotation - clockwise from slow to fast
9	Static Gobo	0-2	Open
		3-6	Gobo 1
		7-10	Gobo 2
		11-14	Gobo 3

		15-16	Gobo 4
		19-22	Gobo 5
		23-26	Gobo 6
		27-30	Gobo 7
		31-34	Gobo 8
		35-38	Gobo 9
		39-42	Gobo 10
		43-46	Gobo 11
		47-50	Gobo 12
		51-54	Gobo 13
		55-58	Gobo 14
		59-62	Gobo 15
		63-66	Gobo 16
		67-70	Gobo 17
		71-77	Gobo 1 shake from slow to fast
		78-84	Gobo 2 shake from slow to fast
		85-91	Gobo 3 shake from slow to fast
		92-98	Gobo 4 shake from slow to fast
		99-105	Gobo 5 shake from slow to fast
		106-112	Gobo 6 shake from slow to fast
		113-119	Gobo 7 shake from slow to fast
		120-126	Gobo 8 shake from slow to fast
		127-133	Gobo 9 shake from slow to fast
		134-140	Gobo 10 shake from slow to fast
		141-147	Gobo 11 shake from slow to fast
		148-154	Gobo 12 shake from slow to fast
		155-161	Gobo 13 shake from slow to fast
		162-168	Gobo 14 shake from slow to fast
		169-175	Gobo 15 shake from slow to fast
		176-182	Gobo 16 shake from slow to fast
		183-189	Gobo 17 shake from slow to fast
		190-221	Rotation - counterclockwise from fast to slow
		222-223	Stop rotation
		224-255	Rotation - clockwise flow from slow to fast
10	Rainbow Filter	0-127	Rainbow color filter off
		128-255	Rainbow color filter on
11	Prism	0-127	Prism off

		128-255	Prism on
12	Prism Rotation	0-127	Indexing 0˚ - 400˚
		128-190	Counterclockwise rotation from fast to slow
		191-192	Stop rotation
		193-255	Clockwise rotation from fast to slow
13	Focus	0-255	0-100% from far to near
14	Reset	0-199	No Function
		200-205	Reset all (hold 5 seconds)
		206-255	No Function

6. Technical Specifications

- **Input Voltage:** AC100-240V, 50-60Hz
- **Max Power Draw:** 350W
- **Light Source:** 200W White LED module
- **Operating Modes:** DMX, Auto (4 modes) Sound Active, Master/Slave
- **Gobos:** 17 gobos + open with two-way rotation, variable speed shake control
- **Color Wheel:** 13 colors + open, two-way variable speed rotation control
- **Special Effect:** 6 color rainbow color filter w/ color wheel stacking
- **Prism:** 24 facet (16 + 8) prism can be rotated in two directions with variable speed
- **X/Y:** Magnetic coding - precise positioning w/auto repositioning
- **X-Axis:** 540 ˚+ fine adjustment
- **Y-Axis:** 270 ˚+ fine adjustment
- **Beam Angle:** 1.6 ˚
- **DMX Channels:** 14CH
- **Dimming:** 0-100% linear dimming control
- **Strobe:** 1-25Hz, random pulse and various strobes
- **Waterproof Grade:** IP65 outdoor use rated
- **Lifespan:** 50,000 hours, low power consumption, energy saving and environmental protection.
- **Screen Language:** English and Chinese

7. Troubleshooting

The Flex 200 IP contains a microcomputer circuit board, high voltage power supply and other professional components, for your safety and product life, do not open this fixture on your own. All maintenance and repairs must be carried out by an authorized repair center. Warranty will be void if fixture is opened without prior authorization by manufacturer.

- **_LED chip does not turn on:_**
  Check and make sure the fixture is set to correct DMX address. If DMX address is correct and the fixture is functioning properly other than the LED chip contact your nearest authorized repair center.

- **_The light output looks dimmed:_**
  Check if the optical components are clean, and whether there is dust accumulation on the lens. The front lens should be cleaned and maintained regularly to maximize the light output. If this doesn't fix the dim output contact your nearest authorized repair center.

- **_The projected gobo is not focused:_**
  Check if the electronic focus channel values are appropriate for the current projection distance.

- **_The light fixtures works intermittently:_**
  Check whether the fan is running normally or if it is dirty/clogged. This will cause the temperature inside the lamp to rise and go into protection mode.

  Check display for temperature reading. If it is outside of the normal working temperature, the fixture will go into protection mode. If the temperature on the display normal and the fan is running properly without obstruction contact your nearest authorized repair center.

- **_The fixture is not responding to DMX input:_**
  Possible cause: signal line failure or DMX parameter set incorrectly:

  Check the starting DMX address and the connection of DMX signal line (check that the signal cable is not damaged and the connector is properly inserted into the correct socket)

  Add a signal amplifier or a 120 ohm DMX terminator;

  Check all cables for damages and make sure the fixture profile is patched correctly on DMX console.

- **_The fixture does not turn on:_**
  Check main power cable if it is connected properly and not damaged.

  Check power outlet where the fixture is connected to and see if there is power running into it and if it is the correct voltage.

  If everything is connected properly and there is power in the outlet, disconnect the fixture and contact your nearest authorized repair center.

8. Warranty

This product carries a 1-year manufacturer's warranty which covers factory defects or internal issues not caused by the owner/operator of the fixture. Misuse, physical damage, or any other issues caused by misuse by the customer are not covered under manufacturer's warranty. All warranty claims must be handled directly through the manufacturer and not the dealer. Original sales receipt required for all warranty claims. Submit all claims to Info@Acueligthing.com.

For more information about this product as well as all our other products please visit:

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