STECHNICS

LEADER 200

IP20 t_a 40°C t_c 150°C

User Manual

KEEP THIS MANUAL FOR FUTURE NEEDS

1 SAFETY INSTRUCTIONS

CAUTION

Becareful with your operations.With a dangerous voltage you cansuffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

IMPORTANT

Damages caused by the disregard of this user manual are not subject to warranty.
The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

The device shall only be used with rate voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

8 MAINTENANCE AND CLEANING

The following points have to be considered during the inspection:
1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.

CAUTION

Disconnect from mains before starting maintenance operation.

In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.
1) Clean the inside and outside lens each week to avoid the weakeness of the lights due to accumulation of dust.
2) Clean the fan each week.
3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint- free cloth. Never use alcohol or solvents.
There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".
Should you need any spare parts, please order genuine parts from your local dealer.

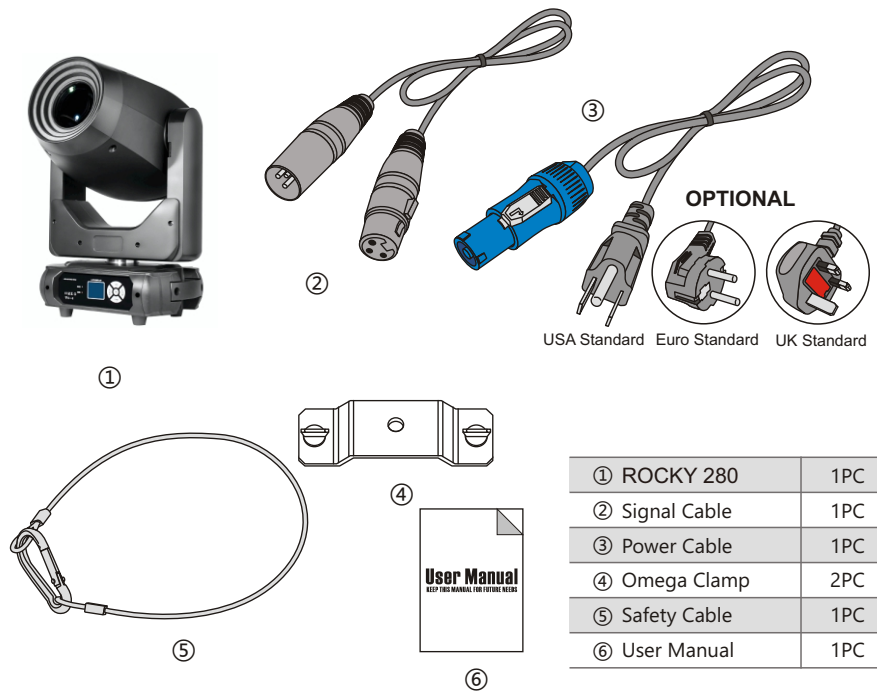
CH16	**CH16**	Frost	0-127	No function
			128-255	Frost
CH17	**CH17**	Zoom	0-255	
CH18	**CH18**	Focus	0-255	
CH19	**CH19**	Focus fine	0-255	
CH20	**CH20**		0-49	No function
		Auto	50-127	Auto
		Reset	128-255	Reset after 6 second
CH21	**CH21**	3 Rings strob	0-255	from slow to fast
CH22	**CH22**	3 Rings dimmer	0-255	Dimmer 0-100%
CH23	**CH23**	3 Rings macro speed	0-255	from slow to fast
CH24	**CH24**	3 Rings basic color	0-255	10 colors
CH25	**CH25**	3 Rings dynamic color	0-255	10 colors
CH26	**CH26**	3 Rings macro	0-255	20 effects
CH27		big Rings basic color	0-255	10 colors
CH28		big Rings dynamic color	0-255	10 colors
CH29		big Rings macro	0-255	20 effects
CH30		middle Rings basic color	0-255	10 colors
CH31		middle Rings dynamic color	0-255	10 colors
CH32		middle Rings macro	0-255	20 effects
CH33		small Rings basic color	0-255	10 colors
CH34		small Rings dynamic color	0-255	10 colors
CH35		small Rings macro	0-255	20 effects

2 UNPACKING

The LEADER 200 is an intelligent LED BSW moving head designed with 3 magic NEON rings in front head. It comes with smooth and linear zoom from 5°-30°. The fixture features a new high intensity and efficiency cool white 280W LED engine (8000K) delivering high lumens for ultra high light output through a set of high resolution and precise optics that helps to provide extremely clear and even spot coverage. The 3 rings neon light delivers magic lighting effect that created by 135*0.3W 3-IN-1 SMD RGB LEDs. This amazing light offers a full complement of other professional characteristics, rotating gobo wheel, static gobo wheel, color wheel, 2 rotating prisms, frost filter, focus, smooth dimming, variable speed shutter/strobe, full color 180°reversible TFT display with 4 control buttons, etc. The LEADER 200 supports DMX, RDM (Remote Device Management).

The fixture's exterior housing is beautifully balanced design with supremely harmonious interior structure for remarkable control. The sculpted body of the LEADER 200 achieves more than just a striking look.

It's fast and quiet operation LED moving head. The fixture is tuned with proper LED refresh rate for flicker free operation for TV and FILM. It's a perfect option for large scale live concerts, TV productions, road shows, theatre, etc.



① ROCKY 280	1PC
② Signal Cable	1PC
③ Power Cable	1PC
④ Omega Clamp	2PC
⑤ Safety Cable	1PC
⑥ User Manual	1PC

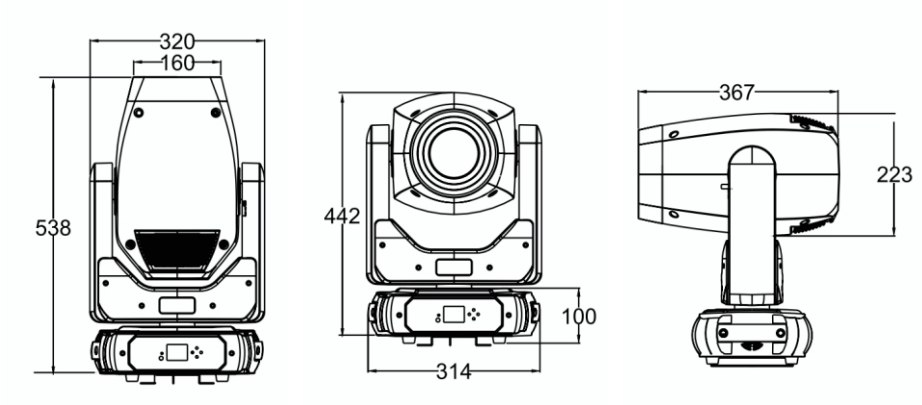
3 FEATURES & SPECIFICATIONS

Features

1*280W White LED+135*0.5W 3-IN-1 RGB LEDs
Color Temperature: 8000K (customizable)
CRI: ≥75 (customizable)
Flicker free operation for broadcast TV and FILM
Life Span: 50000H
A set of high resolution and precise optics
5°-30°Smooth and quiet linear motorized zoom
Smooth and precise linear focus
Fine control for zoom and focus
PAN movement: 540°(8/16 bit)
TILT movement: 270°(8/16 bit)
Fast, quiet, smooth and precise 3-Phase motors
Smooth, fast and precise resolution for PAN/TILT movement with low noise operation
Scan position memory, auto reposition after unexpected movement
PAN/TILT reversible
1 Color wheel with 9 dichroic colors plus open
Variable direction rainbow effect with speed adjustable
Fine control for color wheel
3 Rings with 20 built-in macro effects (variable speed control), 10 forground colors and 10 background colors
Each ring controllable individually with 20 built-in macro effects (variable speed control), 10 forground colors and 10 background colors
1 Rotating gobo wheel with 7 rotatable and interchangeable glass gobos plus open with speed adjustable, stream effect, dithering effect and rotatable clockwise or anticlockwise
Gobo indexing available
Gobo size 20.5mm (external)/18mm (inner)
1 Static gobo wheel with 9 gobos plus open
Gobo overlay (gobo morphing)
Fine control for rotating gobo wheel
6-Facet linear prism with variable speed and direction
8-Facet prism with variable speed and direction
16 Built-in prism macro effects
Prism indexing
0-25Hz LED shutter/strobe effect with variable speed
Preset variable/random strobe and dimming pulse effect
26/35 DMX channels USITT DMX-512
DMX512, master-slave, or auto operation
DMX recorder and edit function integrated
RDM available (Remote Device Management)
Shielded input signal protection for stable signal without interference
3-Pin and 5-pin XLR DMX connectors IN/OUT
Electronic supply with active PFC
AC100-240V 50/60Hz
PowerCON IN/ OUT with power switch and fuse
300W Power consumption
Operating positions: all (device on floor or fixed to a support)
-25℃ to 45℃ ambient temperature
IP20 protection rating
N.W.: 15.3kg
G.W.: 17kg
Product Dimensions: 223(D)*314(W)*538(H)mm
Packing Dimensions: 430(D)*580(W)*430(H)mm

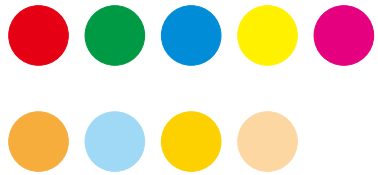
			40-49	Gobo 4
			50-59	Gobo 5
			60-69	Gobo 6
			70-79	Gobo 7
			80-89	Gobo 1 shake from slow to fast
			90-99	Gobo 2 shake from slow to fast
			100-109	Gobo 3 shake from slow to fast
			110-119	Gobo 4 shake from slow to fast
			120-129	Gobo 5 shake from slow to fast
			130-139	Gobo 6 shake from slow to fast
			140-149	Gobo 7 shake from slow to fast
			150-200	Forwards gobo rotation from slow to fast
			201-204	STOP
			205-255	Backwards gobo rotation from slow to fast
CH12	**CH12**	Gobo Rot	0-127	Rotation from 0-400degree
			128-190	Forwards gobo rotation from fast to slow
			191-192	Stop
			193-255	Backwards gobo rotation from slow to fast
CH13	**CH13**	Gobo rot fine	0-255	
CH14	**CH14**	prism	0-127	No function
			128-187	Prism 1
			188-195	Prism 2
CH15	**CH15**	Prism rot	0-127	Rotation from 0-400 degree
			128-187	Forwards rotation from fast to slow
			188-195	Stop
			196-255	Backwards rotation from slow to fast

			221-255	Forwards rainbow effect from fast to slow
			201-255	Backwards rainbow effect from slow to fast
CH9	**CH9**	**Color fine**	0-255	
CH10	**CH10**	Fix Gobo	0-9	Open
			10-19	Gobo 1
			20-29	Gobo 2
			30-39	Gobo 3
			40-49	Gobo 4
			50-59	Gobo 5
			60-69	Gobo 6
			70-79	Gobo 7
			80-89	Gobo8
			90-99	Gobo 9
			100-109	Gobo 1 shake from slow to fast
			110-119	Gobo 2 shake from slow to fast
			120-129	Gobo 3 shake from slow to fast
			130-139	Gobo 4 shake from slow to fast
			140-149	Gobo 5 shake from slow to fast
			150-159	Gobo 6 shake from slow to fast
			160-169	Gobo 7 shake from slow to fast
			170-179	Gobo 8 shake from slow to fast
			180-189	Gobo 9 shake from slow to fast
			190-221	forwards gobo rotation from slow to fast
			222-223	stop
			224-255	Backwards gobo rotation from slow to fast
CH11	**CH11**	Rot Gobo	0-9	Open
			10-19	Gobo 1
			20-29	Gobo 2
			30-39	Gobo 3



Static gobos

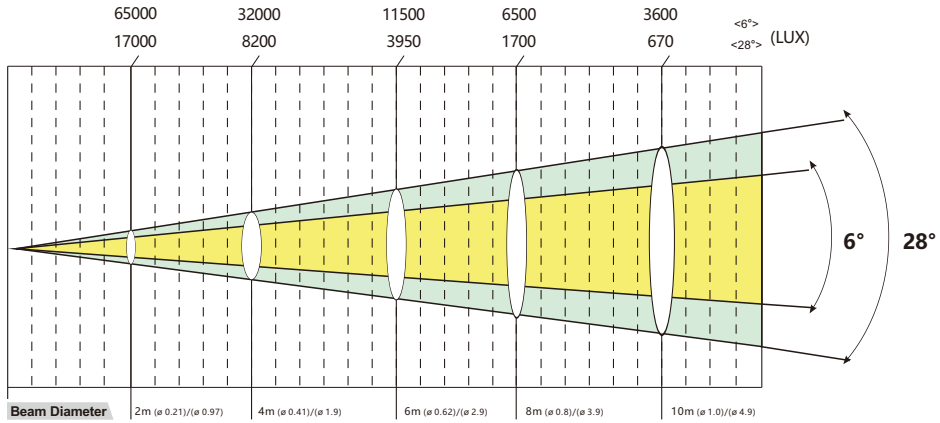
Colors



rotating gobo

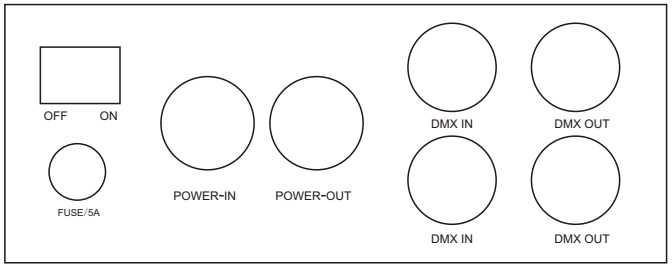
4 PHOTOMETRIC DATA

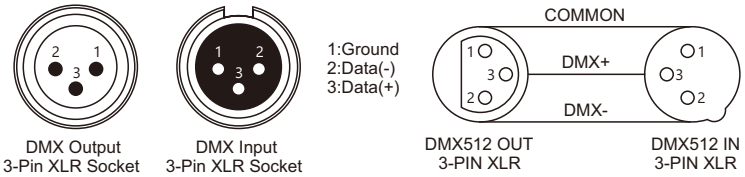
Photometric Beam Angle Data *6°~28°Beam Angle LUX × 0.0929=FC*



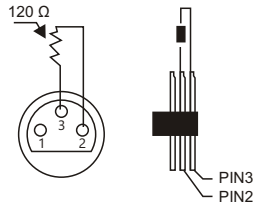
5 DMX-512 CONTROL CONNECTIONS

Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the moving head. You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.
DMX-512 connection with DMX terminator





For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120 Ω resistor connected between pins 2 and 3,which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



7 DMX CHANNELS

35CH	26CH	Function	Value	Description
CH1	**CH1**	Pan	0-255	0-540 degree
CH2	**CH2**	Pan Fine	0-255	0-2 degree
CH3	**CH3**	Tilt	0-255	0-270 degree
CH4	**CH4**	Tilt Fine	0-255	0-1 degree
CH5	**CH5**	Pan/Tilt speed	0-255	From fast to slow
CH6	**CH6**	Dimmer	0-255	Dimmer 0-100%
CH7	**CH7**	**Strobe**	0-3	No function
			4-127	Strobe at linearly variable frequency from slow to fast
			128-191	Pulsation at linearly variable speed
			192-251	Random strobe
			252-255	No function
CH8	**CH8**	**Color**	0-127	Open/White
			128-134	white
			135-140	Color 1
			141-145	Color 2
			146-150	Color 3
			151-155	Color 4
			156-160	Color 5
			161-165	Color 6
			166-170	Color 7
			171-175	Color 8
			176-180	Color 9
			181-216	Color auto changing from fast to slow
			217-220	stop

- GOBO: range for 0 to 255;
- PRISM: range for 0 to 255;
- FROST: range for 0 to 255;;
- STROBE: range for 0 to 255;。

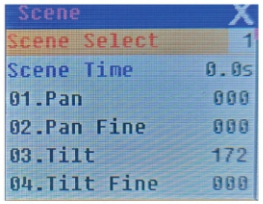


Figure 7 page of Test

7 Set light run parameter

Enter the page as shown in fugure 8 , set the parameter of light:

- Pan Invert: Reverse PAN move.
- Tilt Invert: Reverse TILT mover.
- Rectify enable：set as 'OFF', PAN or TILT will disable position rectify function. As 'ON', when PAN or TILT lose steps, light will rectify auto.
- Pan Offset: Set PAN original position.
- Tilt Offset: Set TILT original position.
- Lamp up when: Select lamp on mode, includes 3 mode: power on, after reset done and manual;
- Factory setting: restore all parameter to factory setting.

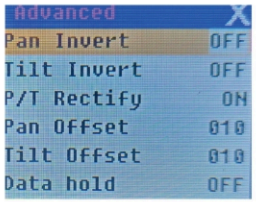


Figure 8 page of display

8 View status

Enter the page as shown in figure 3 ,

- View light current status, version;
- DMXClr: Click to clear all DMX data to '0'.
- SysRst：Click to reset light.

6 MENU OPERATIONS

1. Sub Menu（Parameter）

Chick item of main menu, enter corresponding sub menu, shown in Figure , total 6 sub menu, includes class of parameter and status:

- ADDRESS：Set light DMX address.
- WORKMOD：Set light work mode, master or slave mode when in auto run mode.
- DISPLAY： Set display parameter, eg. select language.
- TEST：Used for test light, modify DMX channel data to test function， the corresponding function of reference channel function table.
- ADVANCE：Set light running parameter.
- STATUS：view light current status.

Figure 3 Parameter menu

2 Operation and parameter instruction

Via following operation, enter sub menu(parameter menu) shown in Figure

- In main menu, click [UP] [DOWN] [RIGHT] [OK] button into corresponding parameter menu.

3 Set DMX Address

Click and select the "ADDR", can enter the page of DMX address

setting, range from 1 to 512, the address code shouldn't is not greater than (512- channels quantity), otherwise the light will not been controlled. Following is the operation:

Enter the page of DMX address, as shown in

Figure , click [UP] OR [DOWN] chose the address code area,click [OK] key confirm and then click [UP] and [DOWN] again to modify value, then click 'ENTER' to confirm and save DMX address code.

Figure 4 page of DMX Address

4 Set Light work mode

Enter the page of 'WORK MOD' as shown in Figure and modify setting. Can set light work mode, control lamp and DMX channel mode..

Light includes 3 work mode: DMX MODE, AUTO RUN and SOUND MODE, Parameter definition as following:

- **DMX Mode：** Under this mode, the light receive data from the DMX controller and move.
- **AUTO RUN：** Under this mode, light will run with inside code(data), ignore data from DMX controller.
- **SOUND Ctrl：** Under this mode, light ignore data from DMX controller., When there is a strong sound in stage, the light will run a scene, otherwise it will keep the last scene.
- **M/S Choose：** 'M/S Choose' is available when light just in 'AUTO RUN' or 'SOUND Ctrl' mode. If this item is set as 'OFF', the light don't send data to other light via DMX Cable. When 'ON', the data will send to other slave light immediately.

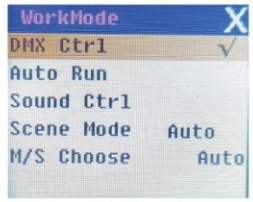


Figure 5 page of work mode

5 Set display

Light support 2 language, rotation display，Enter page as shown in figure 6 to set parameter following:

- **Language：** Select display as simplified Chinese or English.
- **Screen Saver：** when panel is idle(these is no operation in 10 second), displayer will enter saver status. When set as 'mode 1'，saver status is close display, as 'mode 2' saver status will display DMX address code(DMX MODE) or display LOGO(AUTO RUN or SOUND CTRL). As 'OFF', keep light up displayer and show main menu。
- **Screen Rotation：** rotate displayer.
- **Touch enable：** Disable or enable touch function, when disable, use encoder to operate light and set parameter.
- **Touch adjust：** adjust touch function, normally, not enter this item.

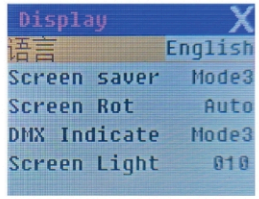


Figure 6 page of display

6 Test light

Enter the page as shown in figure 7, Light will into test mode, in this mode, the light does not receive the data for DMX controller.:

- PAN: range for 0 to 255;
- TILT: range for 0 to 255;
- FOCUS: range for 0 to 255;
- COLOR: range for 0 to 255;