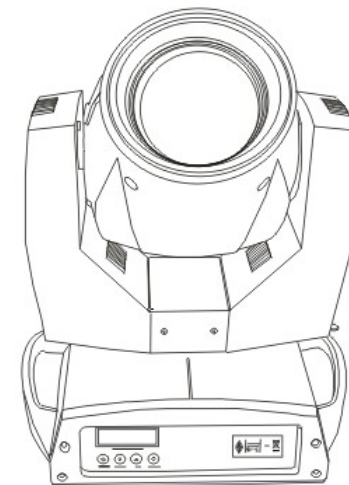# 230W MOVING HEAD LIGHT

BEAM MOVING HEAD LIGHT

MJ-1016A

User manual

====== PROFESSIONAL STAGE LIGHTING =======

Thank you for choosing our beam moving head light. For the sake of your safety, Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

Catalogue

☆Important notice:

‧ In this instruction for use contains about the installment and the use aspect important information of the beam moving head. When installing and using, you need to look this usage instruction strictly.

‧ Before open the beam moving head and if you want to do the repair work, please make sure the power source is at the separation condition.

‧ Every unit is tested completely and packed properly by the manufacturer. Please make sure the packing and the unit are in good condition before installation and use. Should there be any damage caused by transportation, consult your dealer and do not use the unit. Any damage caused by improper use will not be assumed by the manufacturer or dealer.

Attention: Unceasingly carries on the product improvement about our company the policy, in this instruction booklet carries the data will have the possibility to be able to change in the future, when no longer separate notice change matters concerned. Our company retains when the product improvement changes the related specification the authority.

Technical Parameters:

Voltage : 100~240V/50-60Hz
Power consumption:380W@(220V)
Bulb: OSRAM 7R230 230W lamp
Lamp : OSRAM 7R230W
Color temperature : 8500K
Color: 14 color + blank color wheel
Gobo: 17 fixed gobo + blank gobo
Prism : 1 rotation 16-face prism, Bilateral rotation .
Frost: frost function
Dimmer : 0-100% linear adjustment ,Strobe(0.5-9 times/ second)
Beam angle : parallel beam angel 0 – 4°
Channel : 16CH
Control mode : Standard DMX512, Automatic,Sound and Master/slave mode
Pan: X axis 540°automatically accurate positioning
Tilt:Y axis 270°automatically accurate positioning
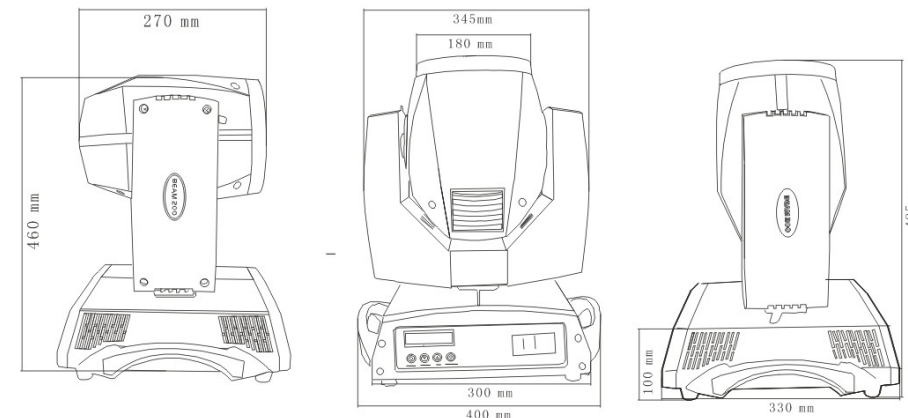**Control Panel:** Colorful LCD display panel with buttons
Protection grade:IP20
Net weight:16KG
Gross Weight: 18.5 kg
Package Size: 450 x 430x 530cm
Light Size(see it below)

CH5 (Prism)	0~31	No function
	32~255	Prism
CH6 (Prism Rotation)	0~127	No function
	128~191	reversion (Fast~slow)
	192~255	veering (slow~Fast)
CH7 (Gobo shake)	0	No function
	1~191	Gobo shake(Slow~Fast)
	192~255	No function
CH8	0~255	Frost
CH9	0~255	Focus
CH10	0~255	Pan
CH11	0~255	Pan fine
CH12	0~255	Tilt
CH13	0~255	Tilt fine
CH14	0~255	Pan/ Tilt speed (Fast~slow)
CH15	0~254	No function
	255	Reset
CH16 (The lamp control)	0~100	No function
	100~105	Delay closing
	106~199	No function
	200~205	Delay open
	206~255	No function

SAFE USAGE OF THE PRODUCT

When unpacking and before disposing of the carton, check there is no transportation damage before using the product. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.
The product is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other liquids.
The product is not designed or intended to be mounted directly on to inflammable surfaces
The product is only intended for installation, operation and maintenance by professional person.
The product must be installed in a location with adequate ventilation, at least 50cm from adjacent wall surfaces. Be sure that no ventilation slots are blocked.
Do not product the beam onto inflammable surfaces, minimum distance is 12m.
Avoid direct exposure to the light from the lamp. The light is harmful to the eye.
Do not attempt to dismantle or modify the projector in any way.
Electrical connection must only be carried out by qualified personnel.
Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector.
It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.
Do not connect this device to any other types of dimmer apparatus.
Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.
Keep the light clean. Do not touch the light glasss with bare hands.
The product should always be installed with a secondary safety fixing. On the projector base brink, there is a hole for the safety cord provided. It should be attached as shown in "installing the projector" section.
The lamp used in this projector is a discharge lamp. After switching off don't attempt to restart the projector until lamp has cooled, this will require approx 15 minutes. Switching the lamp on and off at short intervals will reduce the life of both the lamp and the projector. But occasional breaks will prolong the life of the lamp and projector. Never run the projector without a lamp.
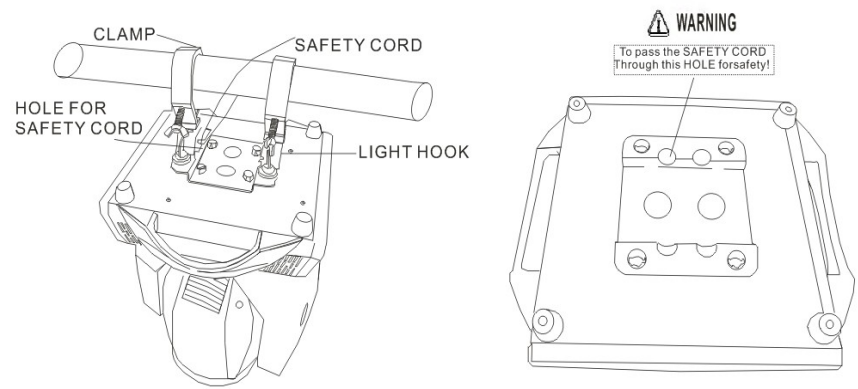The light shall be changed if it has become damaged or thermally deformed or reached its life limit.
Shields and lens shall be changed if they have become visibly damaged to such an extent than their effectiveness is impaired, for example by cracks or deep scratches.
Exterior surface temperatures of the luminaire after 5 minutes operation is 70° 。, when steady state is achieved 140° 。
There is no user serviceable parts inside the projector, do not open the housing and never operate the product with the covers removed.
If you have any questions, don't hesitate to consult your dealer or manufacturer.

★**Always disconnect from the mains, when the device is not in use or before cleaning it or before attempting any maintenance work !**

Install The Equipment:

Use 2pcs clamp and 1safety cord(need to purchase).Use clamp fix with light hook which in the packing box with light, then use screw install to the bottom of lamp. Hang the fixture on the structure and fasten the screws attached to each clamp. Make sure the light is installed reliable, and confirm the light which you fixed is strong enough for hanging the light. Base on safety reason, please according to the above picture using safety wire cross the light to make it strong enough again.

Warning!

1. Unlock the PAN and TILT before the 1st application of the light for safety.
2．Hook and clamp only use for hanging the light. Do not use clamp as a tool to move fixtures.
3．Base on safety reason, please use the safety cord which can afford the weight ten times of lamp through Insurance hole for auxiliary hanging.
4．Don't use the handle of the moving head light to fixed or lift!

Fitting The Lamp：

.Loosen 4 fast-fit screws and remove the back cover, when fitting/replacing the lamp.
.Do not touch the bulb of the new lamp with bare hand so as not to influence the beam output.
.Do not harm the sticking out point of the lamp during its installation.
.Fit new lamp and close the back cover by fastening 4 fast-fit screws when finished lamp installation.

	0	Off
CH2 (Strobe)	1~50	Turn on
	51~240	Strobe Speed (slow~Fast)
	241~255	Turn on
CH3 (Dimming)	0~255	OFF~ON
CH4 (Gobo)	0~6	White
	7~13	Gobo 1
	14~20	Gobo 2
	21~27	Gobo 3
	28~34	Gobo 4
	35~41	Gobo 5
	42~48	Gobo 6
	49~55	Gobo 7
	56~62	Gobo 8
	63~69	Gobo 9
	70~76	Gobo 10
	77~83	Gobo 11
	84~90	Gobo 12
	91~97	Gobo 13
	98~104	Gobo 14
	105~111	Gobo 15
	112~118	Gobo 16
	119~127	Gobo 17
	128~191	Gobo veering (slow~Fast)
	192~255	Gobo effect with inversion (slow~Fast)

Equipment and Appendix:

☆   Beam 230W Moving Head Light   1pcs
☆   Power Cable   1pcs
☆   XLR connector   1unit
☆   Light Hook   2pcs
☆   The Product of Instruction   1pcs

Channel List: **(16CH MODE)**

Channel	Value	Function
CH1 (Color)	0~3	White
	4~11	Color1
	12~19	Color 2
	20~27	Color 3
	28~35	Color 4
	36~43	Color 5
	44~51	Color 6
	52~59	Color 7
	60~67	Color 8
	68~75	Color 9
	76~83	Color 10
	84~91	Color 11
	92~99	Color 12
	100~107	Color 13
	108~115	Color 14
	116~191	Rainbow effect with veering(slow~Fast)
	192~255	Rainbow effect with inversion (slow~Fast)

.Lamp work will reach a very high temperature, Vapor discharge lamp can not continue to supply this physical characteristics, therefore, the power completely cool for 10 minutes before on the operation. Failure to do so will lead to a high-pressure discharge and short circuit burned out the computer's control panel components.

Notes:Unplug the light from power before lamp installation or replacement and wait for it to cool.

Power Code Connection:
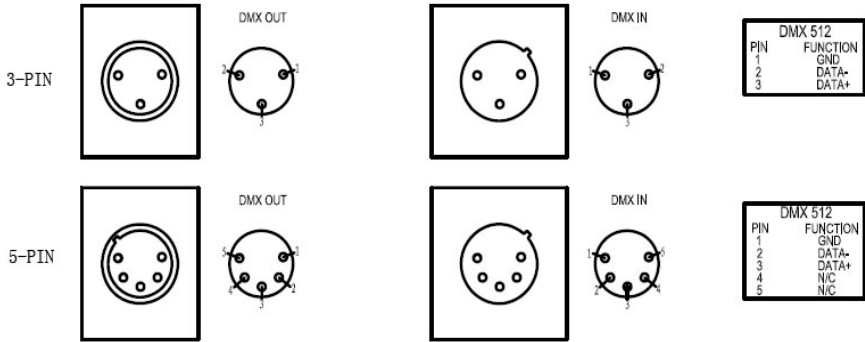
Connect the power cord as follows:
   L (live) =brown
   E (earth) =yellow/green
   N (neutral) =blue
Use the plug provided to connect the mains power to the projector paying attention to the voltage and frequency marked on the panel of the projector. It is recommended that each projector be supplied separately so that they may be individually switched on and off.
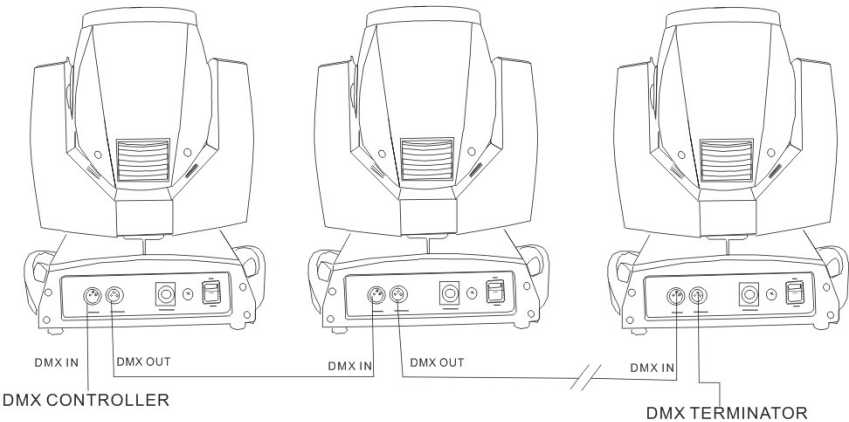
★**It is essential that each projector is correctly earthed and the electrical installation conforms to all relevant standards.**
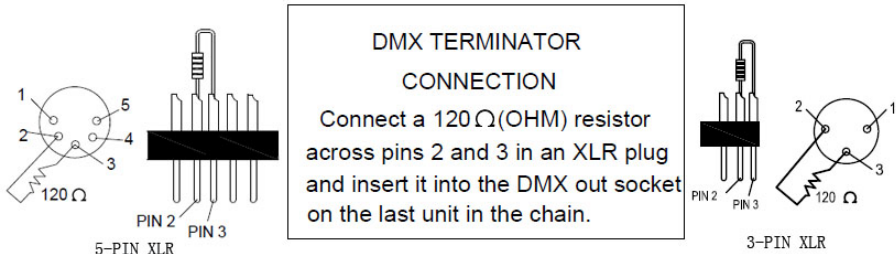
DMX Connection:

Connection between the controller and a projector and between one projector and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Connection to and from the projector is via cannon 3 pin (which are included with the projector) XLR plugs and sockets. The XLR's are connected as shown in the figure above.

Note: Care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. The body of the plug is not connected in any way. The XLED 590 accepts digital control signals in protocol DMX512 (1990).

Connect the controller's output to the first fixture's input, and connect the first fixture's output to the second fixture's input and connect the rest fixtures in the same way. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below.

DMX Terminator:

In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This prevents electrical noise from disturbing and corrupting the DMX control signals.

The DMX terminator is simply an XLR connector with a 120Ω (ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.

DMX TERMINATOR CONNECTION
Connect a 120Ω(OHM) resistor across pins 2 and 3 in an XLR plug and insert it into the DMX out socket on the last unit in the chain.

Keeping The Product Clean:

To ensure the reliability of the projector, it should be kept clean. It is recommended that the fans should be cleaned every 15 days. The lens and dichroic colour filters should also be regularly cleaned to maintain an optimum light output.

Do NOT use any type of solvent on dichroic colour filters.

Cleaning frequency depends on the environment in which the fixture operates: damp, smoke or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. A soft cloth and typical glass cleaning products should be used for cleaning. It is recommended to clean the external optics at least once every 15 days and clean the internal optics at least once every 60 / 90 days.

☆**Do not use any organic solvent, e.g. alcohol, to clean housing of the apparatus.**

Trouble Shooting:

Problem	Answer
The moving head light doesn't switch on.	Check the fuse the power socket Replace the lamp
Although shines, but the moving head lamp doesn't accept the instruction of the controller.	Check the digital start address and also check the connection situation of the communication control line
The moving head lamp only can work intermittently.	Inspect the power supply and voltage is whether normal. Make sure the fan is working well or fans and their filters not blocked
Defective projection	Make sure the lamp is within its life limit Remove dust or grease from the lenses.
The beam appears dim	heck the optics is clean or the lens in good condition(not cracked) Replace with a new lamp of the specified type and rating.

☆**Other maintain work should by the specialist which has the experience to carry on.**
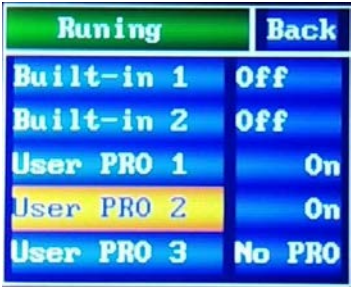
9.Read and re-edit program:

As shown below, select the PRO1--PRO4 that needs to be read, click the step button, and press the "Down" button till showing "Read". Press the enter button at this time to read the selected program. The value displayed after reading is the maximum step value of the current program. If the program is empty, it will be displayed as "empty" or "No"

At this point, you can re-edit the program that has been read. After editing, press "Save" to overwrite the current program, or select another PRO1--PRO4 space to save.

10.Program running:

If you need to run the program that has been programmed and saved, please return to the "Perform" menu. Click to select the corresponding user program, and switch to "On".

Maintenance:

To prolong the life of the projector, some maintenance work has to be done to ensure the optical system in good condition. If the projector does not function, check the fuses on the power socket of the projector, they should only be replaced by fuses of the same specification. Should these be damaged, call a qualified technician before replacement. The projector has thermal protection device that will switch off the projector in case of overheating. Should either of these operate, check that the fans are not blocked, and if they are dirty, clean them before switching on the projector again. Check that the fans are operational, if not, call a qualified technician.

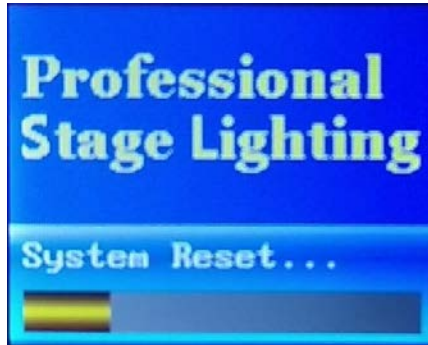☆**Any maintenance work should only be carried out by qualified technicians.**

Menu Function Set:

1.   The main board as shown below:

DMX	DMX signal indicator
AUDIO	Indicator light when activated by sound control
Up	Menu up selection
Down	Menu down selection
Left	Menu left selection/return
Right	Menu right selection
ENTER	Confirm button
Time on the left of screen	Total system usage time
Time on the right of screen	Total power-on time (can be turned off in the standard settings)
Vertical signal at the top of screen	Signal strength of current DMX signal connection. Red: No signal. White: Current signal strength
Square icon in the upper right corner of the screen	Green : Normal, no error
	Red: There is an error (click the icon or "Info Menu/Error info/View" to check for errors.

2.System starting as shown below:

A. After power on, shown as below, system reset and test. If any errors, a red square will be in the upper right corner after resetting. Error messages can be viewed on "Info Menu/Error info/View". Green means normal.

B . After resetting, shown as below, select different UI styles and colour at standard setting.

Blue

Golden

Green

Gray

3.Step of Delete:

If there are too many programming steps, you can delete the following steps. Select the step button, press the "Down" button, and return to the unneeded step. The number of the step is displayed ">0XX". Press and hold the enter button for 3 seconds, and the following steps can be deleted. The display changes to "=0XX".

4.Step of Copy:

Press the copy button to copy all the channel values of the current step and temporarily store them in the memory pasteboard.

5.Step of Paste:

After finishing copy, you can select any step, to paste the channel value of the pasteboard into the currently selected step channel.

6.Step of Zero:

Press the zero button to clear the channel value of the current step.

7.Console programming:

This device provides a more convenient console input programming function, and can also use this function to input the program of the console step by step, and realize the function of copying the finished program of the console.
As shown below, select the manual/console input mode to CONS.

At this time, all the channel values are input by the DMX console, which is invalid in manual, in paste, in zero. And all channel values display the DMX value in real time.
At this time, the program only needs to be input by the console, or run the programmed steps via console, that is, input the console program. This device only needs to click the value of "next step" and press the up arrow to implement the programming.

8.Program saving:

This programming can be saved after inputting all programmed steps by manual or console. Please confirm the selected store position PRO1--PRO4. Please note the length of save step is equal to the step value of "=0XX", but not the step value of ">0XX". Please delete the following extra steps, referring to "delete step", and then save.

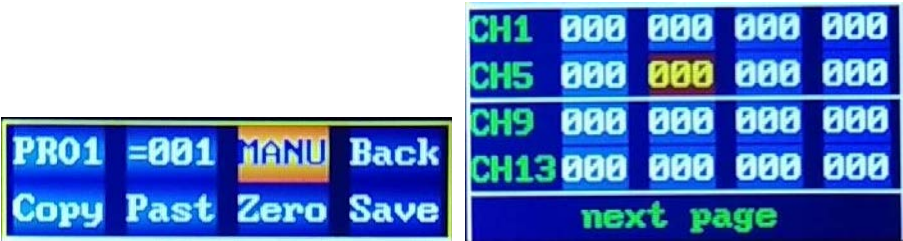## Description of manual control or programming function:

This function can program up to 4 user programs. 4 programs can run in series. That means after programming, in the "Perform" setting, 4 programs can be switched to " ON" at the same time. While programs running, program 1 at first, then program 2, program 3, program 4, back to program 1, and so on. Also, single running is available.

Operation content of programming button:
Select program, read program, select, delete, manual or console input, copy current, paste to selection, clear current, save to selected program space.

1.Manual control:

Manual/Console press the buttons of up, down, left or right and enter to select the "MANU". Then operate the buttons of up, down, left or right and enter to change the corresponding channel in red colour. After above operations, press the up and down buttons to manual control.
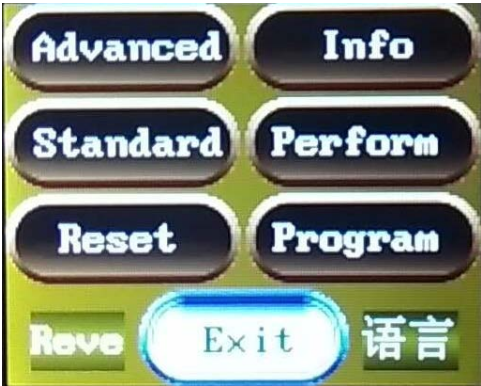

2.Manual control programming:

Select the PRO1-4 which need to be saved, set the channel value by manual control, click the step (as above photo, the number button is step), press the up and down buttons to the next step. Then manually set the channel value, and so on.

Operation Menu:(Press any key to enter the system menu, as shown below)

1. Description of system menu:

Reve	Screen display reversely
Exit	Exit to the main menu
语言/Language	Choose Chinese or English
Standard	Address code and some common function settings
Advanced	Settings of main debugging parameter
Info	Error, software version, etc.
Program	Manual control, or edit the user program
Perform	Automatic running or sound controlled running built-in program, user program
Reset	System reset to initial position

2. Menu Structure chart:

Manual Program	(Detailed on next page)
System Reset	System reset to initial position

Standard settings	Default set	Enter?	Restore default parameters
	Address	001-512	Set address code
	DMX mode	Mode1 Mode2 Mode3 Mode4	Choose DMX control mode
	Effect mode	No/Yes	The effect disk automatically finds the shortest distance for rotation
	Started lamp	Off/on	"turn on" or "turn off" the lamp when starting.
	Switch lamp	Off/on	Turn on the lamp manually
	No signal	Clear/Hold	Maintain DMX value or clear DMX channel value when no DMX signal
	UI Color	Green Blue Golden Gray	Choose display menu color
	Show time	No/Yes	Display the running timer on the main interface
	Brightness	000-255	Adjust screen brightness
	Screen saver	Off/on	Turn off the screen when there is no touching and button operation
	XY encoder	No/Yes	Cancel or use XY auto error recovery
	X inversion	No/Yes	X axis forwarding or reversing
	Y inversion	No/Yes	Y axis forwarding or reversing
	Focus inversion	No/Yes	Focus axis forwarding or reversing
	Zoom inversion	No/Yes	Zoom axis forwarding or reversing
Advanced settings	As the main parameter settings, permission is required.		

System information	Error List	No error/View	To check the errors.
	System ver	Vxxxxxxx	System Version Info
	Serial NO.	xxxxxxxx	Serial number
	SYS timer	00000.0H	Total system running time(hours)
	Run timer	000:00	Current running time after power-on (hours)
	Lamp timer	00000.0H	Total working time of the lamp (hours)
	Equip TEMP	000	Temperature of the main parts of equipment (if equipment supported)
	Head TEMP	000	Temperature of the lamp (if equipment supported)
	FAN 1 Speed	0000 RPM	Fan 1 speed (If equipment supported)
	FAN 2 Speed	0000 RPM	Fan 2 speed (If equipment support)
Testing perform	Run mode	Auto/Sound	Auto or sound control running
	Run speed	255	Set the speed of auto running
	Run cross	255	Set the slide for automatic or sound control running (If equipment supported)
	Built-in 1	Off/on	Built-in test program 1
	Built-in 2	Off/on	Built-in test program 2
	User PRO 1	Off/on	User-programmed program 1
	User PRO 2	Off/on	User-programmed program 2
	User PRO 3	Off/on	User-programmed program 3
	User PRO 4	Off/on	User-programmed program 4
	Circle shape	Off/on	(reserved)
	Square shape	Off/on	(reserved)
	Shape range	000	(reserved)
	Sound DB	000	Adjust the sound sensitivity