

SM006

Controller

User's Manual

Thank you for choosing our product, please carefully read this manual and operate it obey the specification in order to make sure you can correct and safety installing、operating and maintaining it; We will not take any responsibility for the damage and body injury which caused by the abnormal operation.

NIGHTSUN PRO LIGHTING EQUIPMENT CO.,LTD.
Nightsun Industrial park, Guang Long Road,
Zhong Luo Tan Town, BaiYun Area, GuangZhou City, China
TEL: + 86-20- 87404000(over seas) 87408818 / 8838 / 8588 / 8788
FAX: + 86-20-87407453 HTP: www.nightsun.net
E-MAIL: overseas@nightsun.com.cn



Preface

This Manual includes the important information of installation and operation. Please install and operate the controller according to the instructions strictly. And it must be power off when open the controller or before repair.

A: Please read the complete contents of this manual (please keep this manual attach with the controller for any preview)

B: In order to make sure the correct and safety installation、 operation and maintenance, well know and follow to the instructions of Manual is necessary.

C: We will not take any responsibility to the controller damage、 property loss or body injure which caused by the incorrect installation、 operation and maintenance.

NOTICE: The data which inside the Manual maybe changed due to the continuous improvement, and we'll not make another notice. We will keep the right to any specification update during improvement.

●Packing Content

(accessories)

1: AC adapter (1PCS)

2: Signal Cable(1PCS)

3: User's manual (1PCS)

4: Maintenance Card(1PCS)

●Unpacking Instruction:

Please check if all the contents are completed after unpacking? then, check if the controller is undamaged? Please you can keep the original package and return to the factory if it's damaged

●**AC Power:** Check whether the voltage is accordance with the rated power.

●**Safety Specifications:** all the safety items of operation(includes installation)and before operating.

1. Unpacking the carton and take out all the accessories, and open the poly package, take out the light from the carton, and put it in a certain platform for operation.

2. The controller must keep dry and avoid to use under the Moist、 Overheat or Dusty surroundings. And keep it far away from the water or other liquid.

3. The installation、 operation and maintenance must be managed by the qualified professional, and make sure to operate it under the instruction of the Manual.

4. Please check if the voltage is accordance with the rated power before installing.

Notice: Please make sure it's power off before any installation、 repair and clean!

Introduction

● Controller Channels: 192 channels

● Display:

1. 4 digits LED display.

2. First digit of LED shows CHASES, the second digit of LED shows scenes.

3. Third and fourth digit of LED shows BANKS.

4. The second、 third、 fourth digit of LED show steps or 0–255 or TIME.

● Additional Function

1. 30 Banks each composed of 8 programmable scenes.

2. 8 fades adjusting output level.

3. Built in Microphone.

4. AUTO mode is controlled by TAP SYNC and SPEED controlled.

5. MIDI control through MIDI interface.

CHASE	117	TURN ON TURN OFF SCENE6
	118	TURN ON TURN OFF SCENE7
	119	TURN ON TURN OFF SCENE8
	120	TURN ON TURN OFF SCENE1
	121	TURN ON TURN OFF SCENE1
	122	TURN ON TURN OFF SCENE2
	123	TURN ON TURN OFF SCENE3
	124	TURN ON TURN OFF SCENE5
	125	TURN ON TURN OFF SCENE6
	126	BACKOUT

Maintenance

●Cleaning and Using Frequency of Product

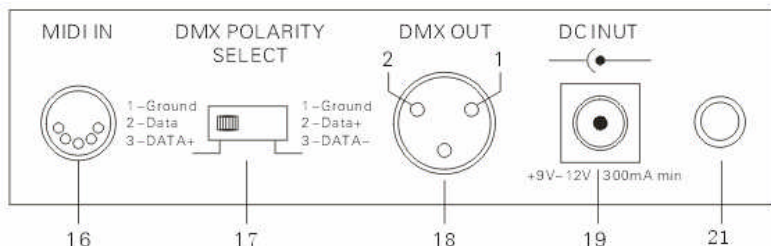
In the open the control stations or maintenance work before they begin to make sure the console power supply disconnected, the console's internal use vacuum cleaner at least once a year.

●Complain

1. The salesman will check the details of complained problem, included the item no. delivered quantity、 delivery time、 faulty and pictures, and the requirement of customer
2. QC and Technology department will analysis the complained problem, and give a final solution to customer.

Faulty Disposal

Faulty Description	Solution
control doesn't work	1. Check if the power is correctly connected? 2. Check if the +12V or +5V is short-circuited?
Single or multiple channel failure	1. check if the sliding potentiometer aging or damaged
Single or multiple keys failure	1. Check if the aging or keys damaged



● **SCANNERS**

DMX channel buttons as the following list:

Computer light	channel	Adjustable potentiometer control	LED
1	1-16	OFF	OFF
2	17-32	OFF	OFF
3	33-48	OFF	OFF
4	49-64	OFF	OFF
5	65-80	OFF	OFF
6	81-96	OFF	OFF
7	97-112	OFF	OFF
8	113-128	OFF	OFF
9	129-144	OFF	OFF
10	145-160	OFF	OFF
11	161-176	OFF	OFF
12	177-192	OFF	OFF

Computer light	channel	Adjustable potentiometer control	LED
1	1-16	ON	ON
2	17-32	ON	ON
3	33-48	ON	ON
4	49-64	ON	ON
5	65-80	ON	ON
6	81-96	ON	ON
7	97-112	ON	ON
8	113-128	ON	ON
9	129-144	ON	ON
10	145-160	ON	ON
11	161-176	ON	ON
12	177-192	ON	ON

adjust the sliding potentiometer different channel output state. When set to a satisfactory output state, click the MIDI / ADD button, and then click SCENE 1 button, this time all the lights flashing three indicated that they had programmed the first SCENE. Edit the same way as the other seven SCENES. c. Select store where one of the CHASE, for example, stored in CHASE1, press CHASE1 key, the first digital tube will display one. d. Through the ↓ key to select BANK-1, click the Music / Bank-copy button, then click the MIDI / ADD, this time all three said that it had flashing lights BANK-1 stored in Chase1. e. Through the ↑ key to select BANK-2, click the Music / Bank-copy button, then click the MIDI / ADD, this time all three said that it had flashing lights BANK-2 stored in Chase1. f. Hold down the keyboard and then press the Program at this time 2 seconds, the console from the Program state to Blackout state, while the first one shows a digital control will disappear, according to Blackout key to exit Blackout status. g. And press the Chase1, press Auto / Del button, the console will run is stored in the Chase1 in 16 SCENES.

- edit the address code of the lamp is running a different or the same scene in different procedures
- 1. set up two different address code of lamps, such as the address code is set to 001 and 017, respectively.
- 2. First, edit the address code to run the lamp for the 001 scenario. a. Click SCANNERS-1 key, making next to the green LED light. Then edit BANK-1 of 8 SCENES, adjust the sliding potentiometer different channel output state. When set to a satisfactory output state, click the MIDI / ADD button, and then click SCENE 1 button, this time all the lights flashing three indicated that they had programmed the first SCENE. Edit the same way as the other seven SCENES. b. Through the ↑ key to select BANK-2, and then edit the BANK-2 of 8 SCENES, adjust the sliding potentiometer different channel output state. When set to a satisfactory output state, click the MIDI / ADD button, and then click SCENE 1 button, this time all the lights flashing three indicated that they had programmed the first SCENE. Edit the same way as the other seven SCENES.
- 3. And then edit the address code to run the lamp for the 017 scenario. a. Click SCANNERS-2 buttons, making next to the green LED light. Through the ↑ key to select BANK-3, and then edit the BANK-3 of 8 SCENES, adjust the sliding potentiometer different channel output state. When set to a satisfactory output state, click the MIDI / ADD button, and then click SCENE 1 button, this time all the lights flashing three indicated that they had programmed the first SCENE. Edit the same way as the other seven SCENES. b. Through the ↑ key to select BANK-4, and then edit the BANK-4 of 8 SCENES, adjust the sliding potentiometer different channel output state. When set to a satisfactory output state, click the MIDI / ADD button, and then click SCENE 1 button, this time all the lights flashing three indicated that they had programmed the first SCENE. Edit the same way as the other seven SCENES.
- 4. Edit Address Code for the 001 and 017 of the lamp to run the same scenario. a. Respectively, Click SCANNERS-1, SCANNERS-2 button, making the green LED light next to the corresponding. Through the ↑ key to select BANK-5, and then edit the BANK-5 of the 8 SCENES, adjust the sliding potentiometer different channel output state. When set to a satisfactory output state, click the MIDI / ADD button, and then click SCENE 1 button, this time all the lights flashing three indicated that they had programmed the first SCENE. Edit the same way as the other seven SCENES. b. Through the ↑ key to select BANK-6, and then edit the BANK-6 of the 8 SCENES, adjust the sliding potentiometer different channel output state. When set to a satisfactory output state, click the MIDI / ADD button, and then click SCENE 1 button, this time all the lights

flashing three indicated that they had programmed the first SCENE. Edit the same way as the other seven SCENES.

5. All edited BANK stored in the Chase.

a. Select store where one of the CHASE, for example, stored in CHASE1, press CHASE1 key, the first digital tube will display a.

b. Through the ↓ key to select BANK-1, click the Music / Bank-copy button, then click the MIDI / ADD, this time all three said that it had flashing lights BANK-1 stored in Chase1. c. Through the ↑ key to select BANK-2, click the Music / Bank-copy button, then click the MIDI / ADD, this time all three said that it had flashing lights BANK-2 stored in Chase1. d. Through the ↑ key to select BANK-3, click the Music / Bank-copy button, then click the MIDI / ADD, this time all three said that it had flashing lights BANK-3 stored in Chase1. e. Through the ↑ key to select BANK-4, click the Music / Bank-copy button, then click the MIDI / ADD, this time all three said that it had flashing lights BANK-4 stored in Chase1. f. Through the ↑ key to select BANK-5, click the Music / Bank-copy button, then click the MIDI / ADD, this time all three said that it had flashing lights BANK-5 stored in Chase1. g. Through the ↑ key to select BANK-6, click the Music / Bank-copy button, then click the MIDI / ADD, this time all three said that it had flashing lights BANK-6 stored in Chase1. h. At this point press the Program button and then press and hold 2 seconds, the console from the Program state to Blackout state, while the first one shows a digital control will disappear, according to Blackout key to exit Blackout status. i. And press the Chase1, press Auto / Del button, the console will run is stored in the Chase1 in 48 SCENES.

MIDI channel set-up and operation.

● MIDI channel settings

1. Hold down the MIDI button 2 seconds, the third and fourth digital pipe flashing, press ↑ key and ↓ keys to select a MIDI channel (01-16).
2. and then hold down the MIDI button 2 seconds to end the MIDI channel settings, the new MIDI channel is stored, you can also press the ↑ key addition, ↓ keys away from any one of keys to come, the new MIDI channel will not be stored.

NOTE ON: Receive NOTE ON signals, implement the corresponding functions.

BANK	NOTE NUMBER	FUNCTION
BANK1	00	TURN ON TURN OFF SCENE1
	01	TURN ON TURN OFF SCENE2
	02	TURN ON TURN OFF SCENE3
	03	TURN ON TURN OFF SCENE4
	04	TURN ON TURN OFF SCENE5
	05	TURN ON TURN OFF SCENE6
	06	TURN ON TURN OFF SCENE7
BANK2	07	TURN ON TURN OFF SCENE8
	08	TURN ON TURN OFF SCENE1
	09	TURN ON TURN OFF SCENE2
	10	TURN ON TURN OFF SCENE3
BANK15	112	TURN ON TURN OFF SCENE1
	113	TURN ON TURN OFF SCENE2
	114	TURN ON TURN OFF SCENE3
	115	TURN ON TURN OFF SCENE4
	116	TURN ON TURN OFF SCENE5

6. Blackout master controlled by M annual or R emote.
7. CHASE programming and CHASE runnyng, manual control and remote control.
8. Fade Time control.
9. DMX polarity selects

● Appearance: use the streamline design

Technology Parameter

- AC adapter
Input Voltage: AC 100-240V, 60Hz/50Hz
Output Voltage and current : 9V , 1.0A
- Outline Size: 48.2 × 13.2 × 7cm
Packing Size: 57 × 17.5 × 9cm
- N/W: 2.4Kg
G/W: 3Kg

Installation

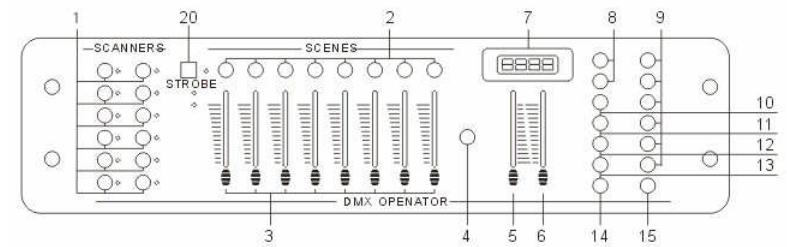
- Installation
First, put the controller on the special desk, and then connect the controller and the light through the signal line.
- Connection of AC adapter
The exclusive AC adapter should be used between the connection of controller and power, and please confirm if the rated voltage and frequency is accordance with the power supply. Parameter of Input Voltage and Frequency:

Voltage	AC100~240V	Frequency	60Hz/50Hz
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Operation

Production Introduction

1. There is 192 DMX channel adjusting output level in every SCENE.
 2. 8 SCENES are available to be programmed for each BANK. When SCENE running, all programmed SCENE of one BANK will be executed continuously in a cycle.
 3. Select bank using ↑ and ↓ button, Also you can select desired bank using MIDI signals through MIDI interface , there are totally 30 banks, once only one can be chose.
 4. SCENES can be executed automatically, and the duration is dependent on TAP SYNC/DISPLAY, scenes are executed under music or NOTE triggering, also press a scene buttons by hand to run scenes.
 5. There are total 6 chases, each contains 240 scenes. You can choose CHASES. Running one or more, and MIDI signal remote controlling.
- Pane button function introduction.



B. Not in AUTO mode, conversion 0–255 or 0–100

- Blackout button

Ban on all of the channel output. But does not affect a variety of operations, and then click the Blackout key to exit the Blackout mode

- MIDI input

Midi signal input

- DMX polarity select

Select DMX polarity of the output

- DMX output

DMX–512 signal output

- DC Power input

DC9–12V, 300mA min

- Flash control output interface

Hole down the flash control button, next to the red LED will blink 2/second

- Flash signal button

Through the audio signal lines and the audio jack of the flash connection

Appendix

SCENES Program

Press PROGRAM for 2 seconds, entre programming state, programming light flashes.

- SECNE PTOGRAMMING (the maximum is 8 SCENES of a BANK)

1. Press SCANNER key to select DMX channel. Choose 8 or more channels every time..

2. Select different channel to control several devices at the same time.

3. Regulator adjustable potentiometer to set the output state, when the output is set to a satisfactory state, turn off the adjustable potentiometer

4. Select and adjust output level continuously until all devices are set.

5. Press MIDI /ADD button.

6. Through ↑ / ↓ button to select the BANK you need

7. Press SCENE button to strobe the SCENE

- SCENES Edit

1. Select need to edit the scene of a BANK.

2. Use SCENE programming method to adjust to the requirement of device.

3. Press MIDI/ADD button'

4. Press SCENE button to strobe the SCENE, all indicated lights flash three time show that it had programmed, the same below.

- SCANNER COPY

Supposed a SCANNER had set, copy it to another SCANNER, and then hold down the SCANNER which need to copy and press another SCANNER.

- Copy a SCENE

1. select the SCENE which need to copy.

2. press Midi/add button.

3. select a BANK, and then press the one need to copy to SCENE button.

- Delete a SCENE (set the value of the ALL DMX CHANNEL of the SCENE to 0)

1. select the SCENE which need to delete.

2. Hold down Auto/Del button, and then press the SCENE which need to delete.

- Delete all of SCENE (ALL DMX CHANNEL value is set to 0)

1. turn off the power, press Program button and ↓ button at the same time.

2. closed the power.

- Copy a BANK

1. select the BANK which need to copy.

2. Press Music /Bank copy button.

- Delete a BANK

select the BANK which need to delete, press Auto/Del button and Music /Bank copy button at the same time.

CHASES PROGRAMM

- If the programming state, can be directly CHASE programming, if not programmed state, hold down the Program button 2 seconds to enter programming state, programmed indicator light flashes.

- Program a SCENE to CHASE

1. the maximum of a Chase is 240 SCENES (that is 240 STEPS) .

2. during running, first programmed SCENES run first.

3. select a Chase.

4. select the SCENES of a BANK (must have been programmed SCENE).

5. press Midi/add button.

- Copy a BANK to Chase (the maximum of a Chase is 30 BANK)

1. select a Chase to store BANK.

2. select a BANK press Music /Bank copy button.

3. press Midi/add button again, Chase adds the programmed SCENES of the BANK.

- Program a Chase

A. Add a step in Chase

1. convert the STEP display of the chase and BANK , and SCENE display, press Tapsync /Display button, show Chase and the programmed steps of the Chase, press Tapsync /Display button again, show SCENE and BANK of Chase.

2. Add a step in Chase, press Tapsync /Display, show the programmed steps of the Chas, if you have programmed 15 steps, add a step between step 9 and step 10 use ↑ or ↓ to select step 9, press Midi/add button the second digital tube display SCENE, the third, the fourth digital tube display BANK, select the desired SCENE, press Midi/add button, the selected SCENE has been added to step 10, while the original step 10 change to step 11, step 12 change to step 1, analogy.

B. Delete a step in Chase

Delete a step in Chase, select the delete step, if we delete the first step 10, use ? or ? key to select to the step 10, press Auto / Del button, the first step 10 has been deleted,

the f step 11 change into step 10 , step 12 become to 11 , analogy

- Delete a Chase

1. select the Chase need to delete

2. hold down Auto/Del button, press the Chase which has been deleted again, SCENES itself in the chase still exists.

- Delete all Chase (all the SCENE itself still exists.)

1. Turn off the power, press Auto/Del button and ↓ button at the same time.

2. Close power, all the lights flashing three times indicated they had been deleted at this time.

SCENES Running

● Turn the power on it is in manual running mode. Digital tube display 101, this time not in the programming state. To control the lamp, shall press Program button 2 seconds after the flashing light blink can be programmed. At this point adjust each channel potentiometer, lamp will be run accordingly.

? If in the programming state, press the Program button 2 seconds, programming lights off, Blackout indicator light, this time enter into the Blackout state. Press the Blackout button to exit Blackout state, and then press the Auto / Del button again, the console automatically run the program. If a BANK where without any programming SCENES, then SCENES will not run. the console only run the programmed SCENES of a BANK . If a channel controlled by the adjustable potentiometer, SCENES channel run will not be programmed value; if adjustable potentiometer control is prohibited (ie, the potentiometer putter is in the most bottom), then SCENE run the channel programmed value.

● MANUAL RUNNING

1. AUTO TRIGGER LED and MUISC TRIGGER LED lights are all off.
2. select a BANK (use ↑ or ↓ button, or through the Midi interface, use the Midi signal to select).
3. press SCENE button to run A SCENE.
4. use Midi signal to run SCENE.

● AUTO RUNNING

1. Press the Auto / Del button automatically trigger indicator light bright.
2. Press Auto / Del button again, exit automatic running mode.

● SOUND RUNNING

1. Press the Music / Bank-copy button, the sound triggers light bright, SCENES run by Sound Control.
2. choose the BANK to run, can be controlled by manually or the Midi signal .
3. click the Music / Bank-copy button again, exit the sound running mode.
4. MIDI RUNNING

Select BANK and SCENES to run by MIDI signal whenever it is in manual running, auto running or sound running.

● CHASE RUNNING

1. it has been programmed Chase, when the Chase running, SCENE automatically stop running.
2. Chase running also has auto running or sound running and Midi running.
3. you can also a Chase or multiple Chase to run, first selected the first run.
4. Press the Chase button, Chase is running, the first LED display the running Chase.

● OUTPUT DELAY ADJUST

Adjust FADE TIME potentiometer, the output follows changes.

Programming example

● edit the lamp to run the program more than 8 SCENES First, the address of the specified lamp code, such as the address code is 001. The console is programmed state, which is programmed in the flickering light. a. Click SCANNERS-1 key, making next to the green LED light. Then edit BANK-1 of 8 SCENES, adjust the sliding potentiometer different channel output state. When set to a satisfactory output state, click the MIDI / ADD button, and then click SCENE 1 button, this time all the lights flashing three indicated that they had programmed the first SCENE. Edit the same way as the other seven SCENES.

b. Through the ↑ key to select BANK-2, and then edit the BANK-2 of 8 SCENES,

Press SCANNER button, corresponding LED is lit ,and the output of continuous 8 channels is enabled to be adjusted, when SCENES are running ,if adjustable potentiometer control is OFF , channel output level is not affected by the potentiometer, if adjustable potentiometer control is ON, channel output is changed correspondingly with the adjustable potentiometer.

● SCENES button

Press one SCENE button to run scene or to store, and the second digital tube head display SCENES 1-8.

● Adjustable potentiometer

Regulator adjustable potentiometer to change the output range of the DMX channel, the minimum is 0 the maximum is 255 or from 0 to 100, adjustable potentiometer 1-8 control continuous 8 channels.

● Page/Selector button

Select Page A or Page B, Page A is the former 8-channel of each SCANNER; Page B is afterwards 8-channel of each SCANNER.

● SPEED SLIDER

Move the slider to adjust light speed.

● FADE TIME SIDER

Move the slider to adjust FADE TIME

● LED DISPLAY

● BANK button (↑ / ↓)

The third and fourth digital tube display BANKS (01-30), press the ?/? keys, BANK increase or decrease, the display SCENE is the SCENE of BANK.

● Chase1 Chase6 button

Used to Chases program or the choice of Chases operation

● Program button

Turn the power on ,it is in manual mode, press PROGRAM for 2 seconds, corresponding programming light flashes, SCENE and CHASE are ready to be programmed, press PROGRAM for 2 seconds once more, programming light goes out, return to run mode.

● Midi/add button

A. Press Midi button for 2s when running , the third and fourth digital tube flash, select channel by ↑ or ↑ , press Midi button for 2s again, end the settings options of the Midi channel, the Midi channel is stored. or any button can end the setting of Midi channel except ↑ or ↑ ,and do not store the selected Midi channel.

B. Used to program when under programming mode.

● Auto/Del button

A. In running mode, press Auto/Del button, automatically trigger indicator light, which indicates under automatic trigger mode, press Auto/Del button again, to withdraw automatic trigger mode, automatically trigger indicator light goes out.

B. Used to SCENE and Chase program when in programming mode.

● Music /Bank copy button

A. In running mode, press Music button, the sound triggers indicator light, the SCENES can be triggered by sound. press Music button again, the sound triggers the indicator light off, exit the sound trigger state.

B. Used to SCENE and Chase program under programming mode.

● Tapsync /Display button

A. In AUTO running mode, the running speed of scene is decided by the last pressing of Tapsync /Display button ,Max.10 minutes.