# **T-760 User Manual**



### I. Features of T-760

- 1. Support 8 output ports, each can carry a maximum of 1024 pixels (TTL and DMX512).
- 2. The port outputs two types of signal protocols: ①DMX512/1990 international standard protocol and DMX512 extension protocol; ② SPI/TTL serial port protocol.
- 3. Load DMX512 lamps, with the output rate of 250K/500K/750Kbs.
- 4. When controller with Madrix software, each port can load 1/2/3/4/5/6 Univ of lamps (one Univ = 170 point light sources).

#### **II. General features:**

- 1. The output port of the controller is provided with three layers of protection to ensure that the controller output ports are not damaged in case of short circuit, reverse connection, etc. of the controller lamps.
- 2. The controller ID can be automatically or manually set. Multiple controllers can be set together or individually.
- 3. The controller has built-in effects to test the loading lamps (both RGB and RGBW lamps).
- 4. The controller has DMX512 address writing and testing functions. It can write address for DMX512 IC loaded on single port or all ports, and test the address.
- 5. The communication between controllers adopts the international standard TCP/IP network protocol, with transmission rate of 100-BASE / 1000-BASE adaptive optional, therefore enjoying more stable and faster transmission speed. The maximum transmission distance between each two controllers is up to 100m. If the transmission distance exceeds 100m, switches or optical fibers can be used for long-distance transmission.
- 6. The controller provides LCD to display the controller model, ID and working status.
- 7. With our online video software LedPlayer for computer control, the connection status of the controller can be monitored in real time on the computer side. Using online video software LedPlayer for computer control can realize: program timing play, program clip selection, effect brightness adjustment, white balance online adjustment, program play speed adjustment, display text, picture cycle play, etc., which greatly meet the various needs of customers in application and debugging; the online video software LedPlayer also comes with Gamma correction, which can make color display more delicate and vivid.
- 8. The controller supports to set the IP address when connecting with the computer to play effect. It supports integrated online and offline control, in which the online control has the highest priority. If there is no online signal, it will automatically switch to the offline effect.
- Note 1: The loading DMX/1903 IC can be controlled by MADRIX software. Each port of the controller can support up to 6- Univ lamps, i.e. 6\*170 pixels; if multiple controllers are used, the system can support up to 2048 Univ.
- Note 2: The controller support rack-type installation. If required, please contact the relevant sales personnel before placing an order.

## III. Support IC: (the software chooses T-700K-B)

Support IC	Maximum number of loading lamp	Remarks
International standard DMX512 (such as UCS512, SM512, TM512, and GS512)	4096 pixels	Suggest to load 2400 pixels
UCS19**, UCS29**, UCS89**, UCS1603, UCS5603 (UCS whole series of TTL/SPI signal IC)	8192 pixels	Suggest to load 4096 pixels
SM16703,09,12,SM16716,16726 (SM whole series of TTL/SPI signal IC)	8192 pixels	
TM18** series, TM19** series	8192 pixels	
WS28** (WS whole series of TTL/SPI signal IC)	8192 pixels	
GS8205,8206,8208	8192 pixels	
P9813,9823,9883	8192 pixels	
APA102	8192 pixels	
SK6812	8192 pixels	
MY9231	8192 pixels	
GW6205	8192 pixels	
INK1003	8192 pixels	
LX1003, 1103, 1203, etc.	8192 pixels	
Note: More ICs are not covered here. For details, please refer to the loading chip our sales or technical personnel.	ps on software LEDEd	it of host computer or consult

### **IV. Product diagram**

T-760 front view



#### T-760 side view 1



T-760 side view 2



1. LCD screen	2. Power indicator	3. Status indicator			4. Cascade input port		
5. Cascade output port	6. SET key	7. MODE key			8. SPEED+ key		
9.SPEED- key	10. OFF/ON	11. AC100-240V power		12. Output ports		ports	
		interface		OUT1-OUT8			

### V. Definition of indicators and keys

### 1. Indicators

Power	Power indicator (always on after powering on)
Status	Status indicator (always on in normal operation/flash when writing address)

### 2. Cascade signal input/output port

	a mpan oarpar por			
(	Cascade signal	Remarks		
INPUT	Cascade signal input	The output of the upper	INPUT indicator. Frequently flash when	
	port	controller is connected to IN	there is a signal input	
OUTP	Cascade signal	and OUT of the next controller	OUTPUT indicator. Frequently flash	
UT	output port		when there is a signal output	

### 3. Signal output port

	Port definition Signal type	1	2	3	4
OUT1OUT 8	Signal output (TTL/SPI signal)	GND (negative electrode)	DAT data		CLK clock
	Signal output (DMX512 signal)	GND (negative electrode)	A/DAT+ Signal+	B/DAT- Signal-	ADDR writing line

### 4. Key function

	SET	MODE	SPEED+	SPEED-
Play/Normal	/	/	/	/
Mode				
Set ID Mode	ID start key	/	Digit+	Digit-
Parameter	Parameter	Item selection	Parameter+	Parameter-
Settings	setting/enter			
Madrix Control	Chip selection	Mode selection	Speed+	Speed-
Settings				
Remarks	The controller enters the normal mode if powered on normally, and pressing the keys will not work	Press "SET" to power on the controller and enter the Parameter Settings/Functio n Settings	Press "+" to start up and enter the <b>Madrix Control</b> <b>Settings</b> interface.	Press "-" to start up and enter the <b>Set ID</b> <b>Mode</b> .

### 5. Display definition:

Display Definition
--------------------

ID: 001 A PLAY >>> ID: 001 A STOP >>>	Play Mode	ID: 001 (set ID as 1) PLAY >>> Online/master controller play STOP >>> Online/master controller play stop
ID:0002 GE A T-730 ID:0003 GE C T-730	Normal Mode	ID: 001 (set ID as 1) A/C: Auto/manual ID setting T-790 controller model
ID: 001	Set ID Mode	ID: *** Start ID
CHIP:DMX 3 MOD:1/4 SPD:14	Built-in effect Play	CHIP: Chip 3: Lamp channel MOD: Built-in effect SPD: Play speed
Art-n:0001 1Univ Univ:(0001-0008)	Madrix Control Settings	For the detailed description, refer to 8. Madrix Control Mode of this file

# VI. Wiring diagram

1. Online wiring diagram of computer



2. Offline wiring diagram of master controller



### 3. Integrated online/offline wiring diagram



### 4. Wiring diagram of controller signal output ports

①. General lamp wiring diagram ②. Wiring diagram of DMX512 differential signal line



(3). Wiring diagram of DMX512 single signal line



(4). Wiring diagram of DMX512 differential signal line (AB line for address

? X



Internet 协议版本 4 (TCP/IPv4) 属性

◎ 自动获得 IP 地址(0)

IP 地址(I):

子网掩码 ①:

默认网关 (2):

● 使用下面的 IP 地址(S):

自动获得 DNS 服务器地址(B)
 使用下面的 DNS 服务器地址(B):

首选 DNS 服务器 (P): 备用 DNS 服务器 (A):

退出时验证设置(L)

如果网络支持此功能,则可以获取自动指派的 IP 设置。否则,您需要从网络系统管理员处获得适当的 IP 设置。

192 168 60 2

确定

高级(2).

取消

255 .255 .255 . 0

常规

#### 5. Controller - Online Mode - Computer IP Address Settings

- 1. Click Computer Network and Sharing Center;
- 2. Click "Change Adapter Setting";

TAG

**GND** 

- 3. Right click "Local Area Connection" -"Properties";
- 4. Click "Internet Protocol version 4 (TCP/IPv4)";
- 5. Change IP

writing)

IP address: 192.168.60.2

Subnet mask: 255.255.255.0

6. Click "OK" to complete the IP address settings.

Note: The IP settings are applicable to both regular online and Madrix software controls

### VII. Set T-760 ID

T-760 has three ID setting methods: Set by computer (recommended), set master ID, and set slave ID.

### 1. Set controller (computer software) ID

- 1.1 The computer and controller are connected with network cables (adopt international standard TCP/IP network protocol, and the network cable crimping method is 568B direct connection)
- 1.2 Open the software LedPlayer-k and click "Project Configuration" as shown in Figure 1
- 1.3 Click "Online ID", as shown in Figure 2
- 1.4 Set the Start ID of controller, and click Online ID button to start setting, as shown in Figure 3



Figure 1

Figure 2 1.5 Complete online writing and check the controller IDs. Figure 3

📑 Bian Ma				- 0	1	👩 BianMa				0 0 0
	Start ID:	(U	(1-202)				Start ID:	I.	(1-202)	
		Onlin	10			Coding cong	plete "Surce	ordine	ncodeil 31.4st co e Set ID	utroller manher 13

### 2. Controller (master operation) ID setting function

The master controller and slave controller (T-760) are connected with network cables (adopt international standard TCP/IP network protocol, and the network cable crimping method is 568B direct connection).

2.1 Press and hold the "SPEED-" key on the master controller to power on, and press the "MODE" key to select "Set Slave ID", as shown in the following figure:



2.2 Press "SET" to enter the "Writing" interface, and use the "SPEED+"/"SPEED-" keys to adjust the Start Slave ID, as shown in the following figure:



2.3 After setting the ID, press "SET" to start writing;



2.4 Setting of controller ID will first count the total number of slave controllers and display in "Write OK:003" (taking 3 slave controllers as an example);



2.5 After writing, the master controller will display: "Write Num: 003", i.e. writing number for 3 slave controllers, as shown in the figure below:



First ID: 0001 Second ID: 0002

Third ID: 0003

2.6 Check the controller ID. If it needs to be rewrote, press and hold the "SPEED-" key to restart writing. If rewriting is not required, press any key to restart the master controller and return to the play mode.



Note 1: When setting the controller ID, the cascade ports must be connected strictly in order as prompted by the marking (IN/OUT). The maximum slave controller ID is 203.

### 3. Controller (T-760 slave controller) ID

The T-760 controllers are connected with network cables (adopt international standard TCP/IP network protocol, and the network cable crimping method is 568B direct connection)

• 3.1 Press and hold the "SPEED-" key on the first T-760 controller to power on it and enter the manual ID setting mode, as shown in the following figure, which displays "ID: 0001", that is, the current ID of the controller is 1; and press "SPEED+"/"SPEED-" to adjust the start ID.

	I	0001		
Key marking	SET	MENU	SPEED+	SPEED-
Key function	ID start key	/	Digit+	Digit-
Remarks	In "Set ID" mode, "N	AENU" key is invalid	Press "-" to start u	p and enter the "Set ID" mode.

3.2 After set the start ID, press "SET" to write the start ID, which displays "Writing..."



3.3 The controller detects the number of connected controllers (the number of connected controllers) during the writing process, as shown in the figure, 003 indicates that a total of 3 controllers are detected.

Write Num: 003

3.4 After writing, the first controller will display: "Write Num: 003", i.e. 3 controller are searched "Last ID: 003" The ID of last controller is 3

Write	Num:	003	
Last	ID:	003	

Other controllers display: as shown in the figure:

"ID:0002 A"; ID:0002 indicates that the controller ID is 2, and A: indicates that the ID is automatically generated



3.5 Check if the ID of each controller is correct. If you need to rewrite, press and hold the "**SPEED**-" key on the first T-760 controller to return to manual writing; after writing, press any key to exit and **restart** the first T-760 controller to return to normal playback mode.



Note: When setting the controller IDs, the cascade ports must be connected strictly in order as prompted by the marking (INPUT/OUTPUT).

### VIII. T-760 parameter settings and function operations

Press "**SET**" to power on the controller and enter the <u>Parameter Settings/Other Functions</u> interface.

PLAY Built-in effect play
 WRITE ADDRESS Write address mode
 TEST DMX ADDR Lamp address test mode
 RGB,RGBW Lamp channel selection mode
 100-BASE Transmission rate selection mode



**1. Built-in effect mode** (support RGB/RGBW channel lamps)

1.1 Press "**SET**" to power on the controller and enter the <u>Parameter Settings/Other Functions</u> interface, as shown in the following figure



1.2 Press "**MODE**" to move the arrow and select "**PLAY**"; and press "**SET**" to enter the <u>Play Built-in</u> <u>Effect</u> interface, as shown in the figure below:

- (1). CHIP Chip model (see the IC model list)
- (2). **3** Channel selection (3/4)



- ③. MOD Built-in effect (see the built-in effect list)
- (4). SPD Play speed (see the correspondence table between speed and frame)

Note: When playing built-in effects, the supporting lamp channel is set by "Lamp Channel Selection Mode".

1.3 Key function table

Key marking	SET	MODE	SPEED+	SPEED-		
Function	Chip selection	Mode selection	Speed+	Speed-		
Remarks	Press "SET" to start up and enter the Built-in Effect Mode.					

#### 1.4 Press "**SET**" to switch the IC model

IC model list					
1	DMX 250K	5	TM1803		
2	UCS1903	6	GS8205		
3	SM16703	7	DMX 500K		
4	WS2811	8	DMX 750K		

1.5 Press "**MODE**" to switch the built-in effect

Built-in effect list				
1	Colorful jump	3	Colorful shift	
2	Colorful ramp	4	White ramp	

#### 1.6 Press "**SPEED**+"/"**SPEED**-" to switch the speed:

Frame f	Frame frequency list of speed level:						
	Frame		Frame		Frame		Frame
Speed	frequency	Speed	frequency	Speed	frequency	Speed	frequency
	/sec		/sec		/sec		/sec
1	4 frames	5	8 frames	9	14 frames	13	23 frames
2	5 frames	6	9 frames	10	16 frames	14	25 frames
3	6 frames	7	10 frames	11	18 frames	15	27 frames
4	7 frames	8	12 frames	12	20 frames	16	30 frames

1.7 After playing the built-in effect, restart the controller and return to the normal mode.

### 2. DMX512 IC address writing mode and test

2.1 Press "**SET**" to power on the controller and enter the <u>Parameter Settings/Other Functions</u> interface, as shown in the Figure 1.

2.2 Press "**MODE**" to move the arrow and select "**WRITE ADDRESS**", as shown in the following figure:



2.3 Press "**SET**" to select "**WRITE ADDRESS**" and enter the <u>Write Address</u> interface, as shown in the following figure:

#### 1). START CH: Start channel

(The start address ranges from 0 to 512, usually 001)

**②. CH MODE:** Interval channel

(The interface channel ranges from 0-255)

③. IC : IC model

(See the DMX512 IC list)

(4). **PORT NUM:** Address writing port

(See the port list)

(5). **RETURN** Return to the main interface



2.4 Press "**MODE**" to move the arrow and select the corresponding item, and press "**SPEED**+"/"**SPEED**-" to set the START CH/CH MODE/IC/PORT NUM.

1. DMX512 IC list			
UCS512A&B	WS2821	DMX512AP	UCS512-C
SM1651*-3	SM1651*-4	UCS512D*	UCS512-E
SM17512	SM1752*	UCS512-F	TM512
GS8512	SM17500	Hi512D	SM1852**
UCS512-G/H	Hi512A0		

2. Port code table						
1	OUT1	5	OUT5			
2	OUT2	6	OUT6			
3	OUT3	7	OUT7			
4	OUT4	8	OUT8			
ALL OUT1-8						
Note: The cor	Note: The controller supports write addresses for all ports or single port					

2.5 After completing settings, press "**SET**" to start writing address; at this time, the screen displays "**Writing Addr...**", and the port indicator flashes.



2.6 After writing, the controller automatically goes to the "Test Address" function, and the screen displays:

- ①. AC: \*\*\*\* Automatic test
- 2. MC: \*\*\*\* Manual test
- ③. ALL All ports OUT1-8

(4). **CH MODE:** Channel (interval channel cannot be adjusted)

Note: The address writing port is set by PORT NUM.



2.7 Press "**MODE**" to enter "**AC**" test mode and the lamps automatically light up; the controller displays as shown in the following figure:



2.8 Press "**MODE**" again to enter the "**MC**" test mode, and "**SPEED**+"/"**SPEED**-" to adjust the pixel (press and hold "SPEED+" or "SPEED-" to rapidly increase or decrease), and lamps will light up one by one; the controller display is as shown in the following figure:



2.9 After completing the test, press "SET" to exit the channel test; return to the "Write Address" interface



- 2.10 After completing writing address, restart the controller and return to the normal mode.
- **3. Lamp address test mode** (test the loading lamps of all ports of the controller)

3.1 Press "SET" to power on the controller and enter the Parameter Settings/Other Functions interface 1.

3.2 Press "**MODE**" to move the arrow and select "**TEST DMX ADDR**", as shown in the following figure:



- 3.3 Press "SET" to enter the Lamp Test Mode interface, as shown in the figure below:
  - ①. AC: \*\*\*\* Automatic test
  - ②. MC: \*\*\*\* Manual test
  - ③. ALL: All ports
  - ④. **CH Num:** Interval channel (can be selected manually)
- 3.4 First press "**MODE**" to start the test, as shown in the figure below:



003

3.5 Press the "MODE" key to switch the test channel options (1-99);

Press "SET" to switch between MC and AC;

Press "SPEED+"/"SPEED-" keys to adjust the lamp number in MC mode;

MC:	0014	4	ALL
CH	Num:	003	

Description of lamp testing content					
Auto mod	de: AC	Definition	Manual mode: MC	Definition	
AC: ****	ALL	Channel 3 AC	MC: **** ALL	Channel 3 MC	

CH Num: 003		CH Num: 003	
AC: **** ALL	Channal 4 A C	MC: **** ALL	Channal 4 MC
CH Num: 004	Channel 4 AC	CH Num: 004	Channel 4 MC
AC: **** ALL	99-channel auto	MC: **** ALL	99-channel manual
CH Num: 099	test	CH Num: 099	test

- Note 1: Switch between auto and manual test mode: AC is auto test mode, and MC is manual test mode, which can be switched by pressing "SET";
- Note 2: Lamp channel switching. 001 is single-color single-channel lamp; 002 is dual-color dual-channel lamp; 003 is RGB lamp; 004 is RGBW lamp, which can be switched by pressing "MODE";
- Note 3: \*\*\*\* is lamp number. In auto test, the number will restart from 0001 for testing after automatically increasing to the maximum value; in manual test, the number is adjusted by pressing "SPEED+"/"SPEED-".
- 3.6 After completing the test, restart the controller and it will enter the normal mode.
- 4. Lamp channel selection mode (built-in play effect supports RGB/RGBW IC channel)
  - 4.1 Press "SET" to power on the controller and enter the <u>Parameter Settings/Other Functions</u> interface 1.
  - 4.2 Press "MODE" to move the arrow and select "RGB,RGBW".



- 4.3 Press "SET" to enter the Lamp Channel Selection Mode interface, as shown in the figure below:
  - ①. RGB Three-channel lamps
    - ②. RGBW Four-channel lamps

->RGB RGBW	
	and the second

4.4 Press "**SPEED**+"/"**SPEED**-" keys to move the arrow up and down and select RGB/RGBW channels.

4.5 Press "**MODE**" to confirm the selection. The two settings are displayed as shown in the following figures:



4.6 After completing the channel selection, press "SET" to exit the interface and return to the Home interface

### **5. Transmission rate selection mode** (100-BASE/1000-BASE)

- 5.1 Press "SET" to power on the controller and enter the <u>Parameter Settings/Other Functions</u> interface 1.
- 5.2 Press "MODE" to move the arrow and select "100-BASE".



5.3 Press "SET" to enter the Signal Transmission Rate Selection Mode interface, as shown in the figure

below:

① 100-BASE 100 megabit rate

② 1000-BASE Gigabit speed



5.4 Press "**SPEED**+"/"**SPEED**-" keys to move the arrow up and down and select 100-BASE /1000-BASE.

5.5 Press "**MODE**" to confirm the selection. The two settings are displayed as shown in the following figures:



5.6 After completing the channel selection, press "**SET**" to exit the interface and return to the <u>Home</u> interface.

5.7 The controller displays: GE 1000-BASE / FE 100-BASE during regular program mode, as shown in the figure below:



### IX. T-760 controller - Madrix settings

There are two ways to set this software:

- 1. Set by the computer software LedEdit-K/LedPlayer-K (recommended)
- 2. Set by controller manually

### 1. Set Madrix parameters with LedEdit-k /LedPlayer-K software

1.1 Open LedEdit-k V6.2/LedPlayer\_K\_v6.0 or above versions.





1.2 Click "Project Configuration" - "Set Madrix Parameters"



1.3 Enter the "Parameter Settings" interface

Madrix:	Turn ON	<b>•</b>	
Univ:	1	•	
IC;	DMX		
Send		Close	

1.4 Parameter settings

โurn On/ off Madrix
Unit selection (1-6
Chip selection

(1) Turn on/off Madrix function

Click the drop-down arrow to select Turn ON/OFF Madrix mode.

(2) Univ settings

Click the drop-down arrow to select 1/2/3/4/5/6 Univ, i.e. the number of loading lamp Univ for the controller.

Note 1: If each port of the controller is set to load 1 Univ, then 8 ports occupy 8 Univs; Controller 1 occupies 1-8 Univs, as shown in the figure:



Controller 2 occupies 9-16 Univs, as shown in the figure:

West Manual	<ul> <li>RIGID<sup>12</sup></li> </ul>	11 best un
HPC-N	0002	
Univ	(8883-	00167

And so on.

Note 2: If each port of the controller is set to load 2 Univs, then 8 ports occupy 16 Univs; controller 1 occupies 1-16; controller 2 occupies 17-32; and controller 3 occupies 33-48, and so on.

Note 3: If each port of the controller is set to load 3 Univs, then 8 ports occupy 24 Univs; controller 1 occupies 1-24; controller 2 occupies 25-48; and controller 3 occupies 49.-72, and so on.

Note 4: The control system supports a maximum output of 2048 Univs, 170 pixels per Univ.

③ Select loading lamp IC

Click the drop-down arrow and select **DMX / UCS1903 / DMX 500K / DMX 750K**, that is, DMX512 IC lamp or UCCS1903 IC lamp/DMX512 IC (500K/750K).

(4) After completing settings, click "**SEND**" to send the parameters to the controller.

### 2. Set Madrix parameters with T-760 controller

Press "**SPEED**+" to power on the controller and enter the <u>Madrix Settings</u> interface, as shown in the following figure

1	SEI	Г MAD	RIX Turn on/off Madrix
(2) SI	ET	Univ	Set number of loading lamps
(3) SI	ET	IC	Select loading IC



**(4)** Send Mrx Param Send Madrix parameters

Note: Set parameters in the order of 1, 2, 3 and 4, and then restart the controller.

### 2.1 Turn on/off Madrix function

1. Press "SPEED+" to power on the controller and enter the <u>Madrix Settings</u> interface

2. Press "**MODE**" to move the arrow and select "**SET MADRIX**" to turn on/off Madrix, as shown in the following figure:



3. Press "SET" to enter the Turn On/Off Madrix interface as shown in the figure:

1. Turn on Madrix function

2. Turn off Madrix function



4. Press "SPEED+"/"SPEED-" keys to move the arrow up and down and select Turn On/Off.

5. Press "MODE" to confirm the selection, as shown in the following figure:

Close MADRIX Set OK!

6. After completing the selection, press "**SET**" to exit the interface and return to the <u>Madrix Settings</u> interface.

### 2.2 Set number of Univ for loading lamps

1. Press "SPEED+" to power on the controller and enter the <u>Madrix Settings</u> interface.

2. Press "**MODE**" to move the arrow and select "**SET Univ**" to set the number of loading lamps, as shown in the following figure:



- 3. Press "SET" to enter the <u>Set Number of Loading Lamps</u> interface, as shown in the figure below:
  - 1) Univ 1 1 Univ (170 pixels)
  - (2) Univ 2 2 Univs (340 pixels)
  - (3) Univ 3 3 Univs (510 pixels)
  - (4) Univ 4 4 Univs (680 pixels)
  - (5) Univ 5 5 Univs (850 pixels)
  - (6) Univ 6 6 Univs (1020 pixels)

Univ: 1	
Univ: 2	17
Univ: 3	

4. Press "SPEED+"/"SPEED-" keys to adjust the numbers and select the number of loaded Univ.

5. Press "MODE" to confirm the selection, as shown in the following figure:



6. After completing the selection, press "**SET**" to exit the interface and return to the <u>Madrix Settings</u> interface.

### 2.3 Loading IC selection

1. Press "SPEED+" to power on the controller and enter the Madrix Settings interface

2. Press "**MODE**" to move the arrow and select "**SET IC**" to set the loading IC model, as shown in the following figure:



3. Press "**SET**" to enter the <u>Set Loading Lamp IC</u> interface, as shown in the figure below:

- ① DMX 250K DMX512 IC lamp rate of 250K
- ② UCS1903 UCS1903 IC lamp
- DMX512 IC lamp rate of 500K ③ DMX 500K
- ④ DMX 750K DMX512 IC lamp rate of 750K



⑦ UCS9812 <sup>(5)</sup> UCS5603 © UCS8904 **®** TM1914 9 TM1814 <sup>(IIII)</sup> WS2816 <sup>①</sup> SM16714 <sup>1</sup> SM168\*\*

4. Press "SPEED+"/"SPEED-" keys to move the arrow up and down and select IC.

5. Press "MODE" to confirm the selection, as shown in the following figure:



6.After completing the selection, press "SET" to exit the interface and return to the Madrix Settings interface.

#### 2.4 Send Mrx Param (used to set same parameters for multiple slave controllers)

1. Press "SPEED+" to power on the controller and enter the Madrix Settings interface.

2. Press "MODE" to move the arrow and select "Send Mrx Param"; press "SET" to view the set parameters: Switch, Chip, Loading Univ, as shown in the following figure:



3.After confirming the settings, press "MODE" to send to other slave controllers, and the screen will display "Set OK" and restart the controller.

Note 1: If each port of the controller is set to load 1 Univ, then 8 ports occupy 8 Univs; Controller 1 occupies 1-8 Univs, as shown in the figure:



And so on.

- Note 2: If each port of the controller is set to load 2 Univs, then 8 ports occupy 16 Univs; controller 1 occupies 1-16; controller 2 occupies 17-32; and controller 3 occupies 33-48, and so on.
- Note 3: If each port of the controller is set to load 3 Univs, then 8 ports occupy 24 Univs; controller 1 occupies 1-24; controller 2 occupies 25-48; and controller 3 occupies 49.-72, and so on.

Note 4: The control system supports a maximum output of 2048 Univs, 170 pixels per Univ.

### X. Product parameters

Operating temperature:  $-20^{\circ}C \sim 75^{\circ}C$ 

Operating power: AC 100-240V input

Power consumption: 10W

Weight: 1.5Kg

Output type: 4pin terminal block

Cascade port: Network port (TCP/IP)

Overall dimensions: L310 \* W152 \* H42

Outer packaging: (4pin terminal block \*8; power cable \*1; carton box \*1)



### **XI. Precautions:**

- 1. Every two nodes, including between controllers, between controller and master controller, and between controller and computer, can be connected with CAT5 network cables of up to 100m. If the cascading distance exceeds 100m, switches or optical fibers can be added for long-distance transmission.
- 2. The crimping method of network cable is 568B direct connection.



