

CX-5

DMX Intelligent Lighting Controller

【User Manual】



Lite-Puter Enterprise Co., Ltd.

Website: <http://www.liteputer.com.tw>

E-mail: litecom@ms2.hinet.net

Index:

Chapter 1. The main function of CX-5

1-1 The features of CX-5.....	3
1-2 Power	4
1-3 Signal input/output	4
1-4 Introduction of the functions	5

Chapter 2. How to select different scanners

2-1 How to set different scanners.....	7
2-2 How to define the format of lighting fixtures by user	8

Chapter 3. SCENE

3-1 How to set a SCENE.....	9
3-2 How to store a SCENE	9
3-3 How to load a PATTERN by program	10
3-4 How to store a PATTERN into SCENE 301-306	10
3-5 How to load a SCENE	10
3-6 How to delete a SCENE	10
3-7 How to load a SCENE by "P1...P12"(HOT KEY).....	11
3-8 How to correspond SCENE 1...306 to "P1...P12" (HOT KEY).....	11

Chapter 4. CHASE

4-1 How to edit a CHASE.....	13
4-2 How to load a CHASE.....	14
4-3 How to load a CHASE by "P1...P12"(HOT KEY)	14
4-4 How to corresponding CHASE 1...50 to "P1...P12"(HOT KEY).....	14
4-5 How to delete a STEP from a CHASE.....	15
4-6 How to insert a STEP into a CHASE.....	17

Chapter 5. MACRO

5-1 How to edit and store a MACRO.....	19
5-2 How to load a MACRO.....	20
5-3 How to load a MACRO by "P1...P12"(HOT KEY)	20
5-4 How to corresponding MACRO1...50 to "P1...P12"(HOT KEY).....	20
5-5 How to delete a STEP from a MACRO	21
5-6 How to insert a STEP into a MACRO	23

Chapter 6. LEARN

6-1	How to edit and store a LEARN	25
6-2	How to load a LEARN	26
6-3	How to correspond LEARN 1...50 to "P1...P12"(HOT KEY)	26
6-4	How to load a LEARN by "P1...P12" (HOT KEY)	27
6-5	How to set Xfader speed in a LEARN.....	28

Chapter 7. BLACK, FINE

BLACK.....	29
FINE.....	29

Chapter 8. How to select the start address

.....	30
-------	----

Chapter 9. MIDI

9-1	Introduction of MIDI.....	31
9-2	Set up MIDI channel of CX-5	32
9-3	How to store 24 different "SCENE" in MIDI memory.....	33

Chapter 10. How to call out pattern built in the program

10-1	Explanation of the pattern built in the program.....	34
10-2	Preview the pattern built in the program, and save it to any one of SCENE 301 ~ 306.....	35
10-3	Call out the pattern built in the program by the use of number buttons under the function SCENE	36
10-4	Call out the pattern built in the program by the use of hot key "P1...P12" under the function "SCENE"	36

Chapter 11. Main lamp setting

11-1	How to setting main lamp.....	38
------	-------------------------------	----

Chapter 12. Foresee of FNC Key

.....	39
-------	----

Chapter 13. Appendix

Appendix-1	How to make a "SCENE".....	41
Appendix-2	Call out the saved scene to amend any of the channels.	42
Appendix-3	When you use P1...P12 to choose the light you want to control.....	42

Chapter 1. The main function of CX-5

1-1 The features of CX-5

- **Easy operation:**

There is a “LED” indicator beside every function key for reminding users to know to current condition and for following operation.

- **Compatibility:**

CX-5 can control any kind of lighting fixtures and has a data bank of more than 100 famous fixtures inside.

NOTE: Please make sure the protocol of your scanner is DMX signal, 8 bit and not over 14 channel first.

- **1M byte memory, for storing the following data:**

<1>. SCENE : 306 sets of “SCENE” memory .

Each set of “SCENE” has independent **Xfader SPEED** (Time for one scene to next one) and **Chase SPEED** (Time for one scene to next one plus delay time) time for setting .

Each “SCENE” is namable by 10 characters.

6 built in “SCENE” from 301 to 306.

<2>. CHASE : 50 sets “CHASE” memory .

Each set of “CHASE” has 60 STEP , each CHASE STEP means a “SCENE” memory.

Each CHASE STEP allow to defined both the **Xfader SPEED** and **Chase SPEED** .

Each “CHASE” is namable by 10 characters.

<3>. MACRO : 50 sets of “MACRO” memory .

Each set of “MACRO” has 60 STEP , each **MACRO STEP** can be a set of “SCENE” memory of a set of “CHASE” memory.

Each “MACRO” is namable by 10 characters.

<4>. LEARN : 50 sets of “LEARN” memory .

Each set of “LEARN” memory is corresponding to any set of

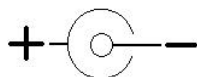
“CHASE” memory. A “LEARN” memory can perform different effects after the memory is stored accompany with music temple. The Xfader SPEED of each “LEARN” can be defined as 0.2 Sec., or Chase SPEED .

Each “LEARN” is nameable by 10 characters.

- **Date management:**
Every memory has a name which is easier to management than number.
- **Green Earth :**
No battery inside. The date is stored by **FLASH MEMORY**.
- **Easy for user to create effects:**
There are 12 sets of “HOT KEY” for “SCENE” 、 ”CHASE” 、 ”MACRO” and “LEARN” functions which provide users an immediate control.

1-2 Power

- There is a DC POWER JACK (inside diameter 2) on real panel, for 15V/1A DC input.
- Turn on the power switch.
- The definition of DC POWER JECK: inside 『 - 』 、 outside 『 + 』
DC : 9V / 1A



1-3 Signal input /output

- Audio : Internal and external audio input (100mV)
- MIDI : MIDI IN / MIDI OUT
- DMX output : Standard DMX-512 output, control channel 1 to channel 168.

LAMP NO.	1	2	3	4	5	6
USE CH.	1-14	15-28	29-42	43-56	57-70	71-84
LAMP NO.	7	8	9	10	11	12
USE CH.	85-98	99-112	113-126	127-140	141-154	155-168

1-4 Introduction of functions

- **SCENE :**
 - 306 sets and all are namable.

- **CHASE :**
 - (1) 50sets of namable memories.
 - (2) Each CHASE has 60 STEP(a STEP can be a SCENE)

- **MACRO :**
 - (1) 50 sets of namable memories.
 - (2) Each MACRO has 60 STEP(a STEP can be a SCENE or a CHASE)

- **LEARN :**
 - (1) 50sets of namable memories.
 - (2) Each LEARN has 60 STEP(a STEP can be a SCENE)
 - (2) The time between STEP and STEP is adjustable by a previous setting of user.

- **“FINE” KEY :** For a limited range adjustment in a SCENE.

- **“BLACK” KEY :** One key to turn off all the LAMP.

- **“A.” KEY :**
 - For switch between **“RUN MODE”** and **“EDIT MODE”**
 - It means **“RUN MODE”** when the LED is bright. (P1..P12 is Hot key)
 - It means **“EDIT MODE”** when the LED is dark. (P1..P12 is the on / off switch of the lighting fixtures.)

- **“P1 ... P12” (HOT KEY) : IMPORTANT !**
 - (1) In **“EDIT MODE”** , **“P1...P12”** means the **“ON”** or **“OFF”** switch of LAMP1...12
 - (2) In **“RUN MODE”** , **“P1...P12”** means :

<a>. at **SCENE** function :

“P1...P12” can load any set of data from SCENE 1...306

(A preset of manufacturer : **P1 = SCENE 1 ...P12 = SCENE 12**)

. at **CHASE** function :

“P1...P12” can load any set of data from CHASE 1...50

(A preset of manufacturer: **P1 = CHASE 1 ... P12 = CHASE 12**)

<c>. at **MACRO** function:

“P1...P12” can load any set of data from MACRO 1...50

(A preset of manufacturer: **P1= MACRO 1... P12= MACRO 12**)

<d>. at **LEARN** function:

“P1...P12” can load any set of data from LEARN 1...50

(A preset of manufacturer: **P1 = LEARN 1 ... P12 = LEARN 12**)

Chapter 2. How to select different scanners

2-1 How to select different scanners

STEP-1 : Press "FNC" then press "981"

STEP-2 : Use " ◀ -" or "+ ▶ " to find the brand of you scanner, then press "ENTER"

1 : LITE PUTER
Press ' ◀ ' or ' ▶ ' key

STEP-3 : Use " ◀ -" or "+ ▶ " to find your scanner and press "ENTER"

LITE PUTER SCAN
Press ' ◀ ' or ' ▶ ' key

2-2 To define the format of lighting fixtures by user

STEP-1: User can define the format by himself if the fixtures are not in the data bank.

EX. We take the Leo scanner as an example,

CH1=PAN, CH2=TILT, CH3=COLOR / GOBO, CH4=SHUTTER, CH5-CH14=OFF.

STEP-2: Press “FNC”, then press “988”,

```
USER DEFINE LAMP
PAN =CHANNEL ?
```

(Please key in the channel number for Pan.)

STEP-3: Press “+ ▶” key to define Tile.

```
USER DEFINE LAMP
TILT =CHANNEL 4_
```

STEP-4: Press “ENTER” to confirm.

```
USER DEFINE LAMP
TILT =CHANNEL 4_
```

This function simply defines the pan and tile to the joystick.

STEP-5: Press “FNC 981” and select “1: ANY COMPANY” after the fixture was set.

Chapter 3. SCENE

3-1 How to set a SCENE

STEP-1 : Make sure "A." is at "EDIT MODE"
 (The LED of "A." is dark at "EDIT MODE")

STEP-2 : Select the right format for your LAMP (See chapter 7.)
 ("P1...P12" means the On/Off switch of LAMP1...LAMP12 at "EDIT MODE".
 Make sure the LED below the "P1" is bright when setting the LAMP 1.)

STEP-3 : Use the "VR" in CH1-CH12 to create a SCENE. (Move the VR up to top and
 down to button before adjusting.)

STEP-4 : Use joystick to adjust. (Move the joystick alongside the edge then adjusting)

STEP-5 : Use "FINE" key to adjust in a limited range if necessary.

3-2 How to store a SCENE

STEP-1 : Press "PROG" when the desired scene is created

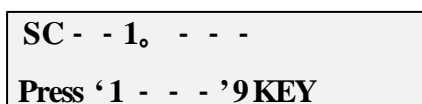


STEP-2 : Key in "SCENE" number (No. 1...300) , and press "ENTER"



(LCD LINE2 : will reveal the name of the SCENE , EMPTY SCENE or "LP xx" which means the last scene you programmed)

STEP-3 : Use "1...9" to key in the name of the SCENE



(Use "0" (Sel.) KEY to confirm when a character was selected, than key in the following characters

by the same way.)

STEP-4 : Press "ENTER" when a SCENE is named, than adjust the VR of "Xfader SPEED" and "Chase SPEED" to set the output time(from 0.1 ... 25.4 Second).

SC - 1, XFD - 0.5Sec
Adj SPEED VR .

STEP-5 Press "ENTER" for storing the SCENE

3-3 How to load a pattern by program

Please reference 10-2, Step1 ~Step5. All the patterns must be stored into Scene 301-306.

3-4 How to store a pattern into SCENE 301~306

Please reference 10-2, Step6 ~Step7

3-5 How to load a SCENE

STEP-1 : Press "SCENE" and key in the SCENE number (from 1...306)

SCENE
Keyin Number .

STEP-2 : Press "GO"

3-6 How to delete a SCENE

STEP-1 : Press "SCENE"

STEP-2 : Press "DEL." and key in SCENE number (from 1...306)

SCENE _ DEL. NO.YES
Keyin Number .

STEP-3 : Press "YES", the SCENE is deleted

3-7 How to load a SCENE by "P1...P12"(HOT KEY)

STEP-1 : Press "SCENE" and make sure the LED of SCENE is bright.

STEP-2 : Press "A.", make sure you are at "RUN MODE"
(the LED of "A." is bright)

STEP-3 : Press "P1...P12" for a speedy load of a SCENE .
(A previous setting of manufacturer: P1= SCENE 1 P12= SCENE 12,
Use "FNC" + "2" (FAVORITE SCENE) to change the setting f"P1...P12")

3-8 How to correspond SCENE 1...306 to "P1...P12" (HOT KEY)

STEP-1 : Press "SCENE" and make sure the LED of SCENE is bright.

STEP-2 : Press "FNC."

FUNCTION: Keyin Number

('FNC' + '981 ... 9' See Chapter 12 for the table of FNC KEY.)

STEP-3 : Press number key "982"

FAVORITE SCENE P 1 = SCENE 1

(LCD vernier flashing at "P 1")

STEP-4 : Use " + ▸ " to mover the vernier to "SCENE 1", and key in the SCENE number

You are going to correspond to "P 1" (from 1...306)

FAVORITE SCENE P 1 = SCENE 23

(for example, we key in “2” , “3” , means “P1 = SCENE 23”)

STEP-5 : Use “ ◀ - “ and “ + ▶ ” to move vernier , and do the same step for changing the setting.

STEP-6 : Then move the vernier to “SCENE” and press “ENTER”, the setting of the correspondence between SCENE and HOT KEY has been changed.

Chapter 4. CHASE

4-1 How to edit a CHASE

STEP-1 : Press "CHASE" , than "PROG"

CH -
Keyin Number .

STEP-2 : Use '0...9' to select a "CHASE" number (from 1...50) , then press "ENTER"

CH - - 1
EMPTY CHASE

(LCD LINE 2 will reveal the name of the "CHASE" , or "EMPTY CHASE" , if the CHASE is occupied, press "YES" to overwrite or "NO" to give up.)

STEP-3 : Use number key "1...9" to name the "CHASE"

CH - - 1. AB_
Keyin ENGLISH

(Use "0" (Sel.) KEY to confirm when a character was selected, than key in the following characters by the same way.)

STEP-4 : Press "ENTER" when a "CHASE" is named

CH - - 1. CHS - 0.5Sec
STEP - - - 1,SCENE - -

(The vernier is flashing at "STEP 1")

STEP-5: Use " + ▶ " to move the vernier to "SCENE ?" , and key in the "SCENE" number (from 1...306) that "STEP 1" is corresponding , adjust the "Xfader SPEED" and

"Chase SPEED" (from 0.1 ... 25.4 Second)

CH - - 1. CHS - 0.5Sec
STEP - - 1,SCENE - 12

(for example, key in "1" , "2" , means "CHASE 1"的"STEP 1 = SCENE 12")

STEP-6 : Use " ◀ - " and " + ▶ " to move vernier , and key in the "SCENE" number you are going to correspond to.

STEP-7 : Move the vernier to “SCENE” , and press “ENTER” key to store the “CHASE” and stop editing.

4-2 How to load a CHASE

STEP-1 : Press ”CHASE” , and key in ”CHASE” number (from 1...50)

CH - 1. GO A

(LCD LINE2 will reveal the name of the ”CHASE”)

STEP-2 : Press ”GO” to load the ”CHASE 1”

4-3 How to load a CHASE by “P1...P12”(HOT KEY)

STEP-1 : Press “CHASE” and make sure the LED of CHASE is bright .

STEP-2 : Press ”A.” , and make sure you are at ”RUN MODE“

(The LED of “A.” is bright)

STEP-3 : Press ”P1...P12” for speed load of a CHASE .

(A previous setting by manufacturer: P1= CHASE 1 P12= CHASE 12)

User can change the setting by press “FNC” + “2” (FAVORITE CHASE)

4-4 How to correspond the CHASE 1...50 to “P1...P12”(HOT KEY)

STEP-1 : Press ”CHASE” and make sure the LED of ”CHASE“ is bright

STEP-2 : Press ”FNC.”

FUNCTION Keyin Number

(‘FNC’ + ‘981 ...9 ‘ Please see Chapter 12.)

STEP-3 : Press number key ”982”

FAVORITE CHASE

P 1 = CHASE 1

(the LCD vernier is flashing at “P 1”)

STEP-4 : Use “ + ▶ ” to move the vernier to “**CHASE ?**” , and key in the “**CHASE**” number (from **1...50**) .that is going to be corresponded to “**P 1**”

FAVORITE CHASE

P 1 = CHASE 23

(for example, key in “**2**” , “**3**” means 即 “**P1 = CHASE 23**”)

STEP-5 : Use “ ◀ - “ and “ + ▶ ” to move the vernier, and key in the “**CHASE**” number (from **1...50**) you are going to be corresponded to.

STEP-6 : Move the vernier to “**CHASE**” and press “**ENTER**” to confirm the change of correspondence to HOT KEY.

4-5 How to delete a STEP from a CHASE

STEP-1 : Press ”**CHASE**” and ”**PROG**”

CH - - - . - - - -

Keyin Number .

STEP-2 : Use ‘**0...9**’ to select ”**CHASE**” number (from **1...50**) , then press ”**ENTER**”

(for example, **CHASE 1** has the following steps:

STEP 1	SCENE 1
STEP 2	SCENE 2
STEP 3	SCENE 3
STEP 4	SCENE 4
STEP 5	SCENE 5
STEP 6	SCENE 6

CH - - 1 . - - - -

ABC

(LCD LINE 2 will reveal the name of “**CHASE**” , if it is not an empty CHASE, press ”**YES**” to overwrite)

STEP-3 : Use number key "1...9" to key in the name of the "CHASE"

CH - - 1. AB_
Keyin ENGLISH

(Use "0" (Sel.) KEY to confirm when a character was selected, than key in the following characters by the same way.)

STEP-4 : Press "ENTER" when the "CHASE" is named

CH - - 1. CHS - 0.5Sec
STEP - - - 1, SCENE - - -

(The vernier is flashing at "STEP 1")

STEP-5 : Use "◀ -" and " + ▶" to move the vernier to the "SCENE" number you are going to delete, and press "DEL.", not the LED of "YES" and "NO" is flashing, press "YES" to confirm..

CH - - 1. NO, YES
STEP - - 2, SCENE - - 2

STEP-6 : The SCENE 2 in CHASE STEP 2 has been deleted after "YES" key is pressed.

STEP-7 : Use "◀ -" or " + ▶" to move the vernier to the last STEP (SCENE number) of the CHASE STEP .

CH - - 1. CHS - 0.5Sec
STEP - - 5, SCENE - - 6

STEP-8 : Make sure the vernier has been moved to the "SCENE" number and press "ENTER" to store the date.

CHASE 1 : (There are 5 STEP)

STEP 1 SCENE 1
STEP 2 SCENE 3 (SCENE 2 is deleted and replaced by SCENE 3)
STEP 3 SCENE 4
STEP 4 SCENE 5
STEP 5 SCENE 6

4-6 How to insert a STEP into a CHASE

STEP-1 : Press "CHASE" then "PROG"

CH - - - . - - - - -
Keyin Number .

STEP-2 : Use number key '0...9' to select the "CHASE" number (from 1...50) , then press "ENTER"

(for example, CHASE 2 has the following date :

STEP 1 SCENE 4
STEP 2 SCENE 3
STEP 3 SCENE 2
STEP 4 SCENE 1

CH - - 2. - - - -
DEF

(LCD LINE 2 will reveal the name of the "CHASE" , Press "YES" to overwrite the CHASE if it is not an empty chase.

STEP-3 : Use the number key "1...9" to key in the name of the "CHASE"

CH - - 2. DE_
Keyin ENGLISH

(Use "0" (Sel.) KEY to confirm when a character was selected, than key in the following characters by the same way.)

STEP-4 : Press "ENTER" when the "CHASE" is named

CH - - 2. CHS - 0.5Sec
STEP - - - 1,SCENE - -

(now the vernier is flashing at "STEP 1")

STEP-5 : Move the vernier to the "SCENE" member by "◀ - " or " + ▶ " key and key in the number (from 1...306), Finally press "INS.", you will see the LED of "YES" , "NO" key is flashing , press "YES"

CH - - 2. NO,YES
STEP - - 3,SCENE - 10

(for example, key in "1" , "0" means to insert SCENE 10 into the STEP 3 of CHASE 2)

STEP-6 : You can insert a STEP in **CHASE STEP 2** after “**YES**” key is pressed.

(for example, move the vernier to the “**SCENE**” number and press “**INS.**” , you had inserted **SCENE 10** into **CHASE STEP 3**.)

STEP-7 : Move the vernier to the last **CHASE STEP** by “ ◀ - “ or “ + ▶ ” key to revise **CHASE STEP**.

CH - - 1, CHS - 0.5Sec
STEP - - - 5, SCENE - - 1

(For example, to increase up to **CHASE STEP 5**) by “ ◀ - “ or “ + ▶ ” key.

STEP-8 : Make sure the vernier has been moved to the “**SCENE**” number , then press “**ENTER**” to store the data.:

CHASE 2 : (There are 5 STEP)

STEP 1 SCENE 4

STEP 2 SCENE 3

STEP 3 SCENE 10 (The SCENE 10 is inserted)

STEP 4 SCENE 2

STEP 5 SCENE 1

Chapter 5. MACRO

5-1 How to edit and store a MACRO

STEP-1 : Press "MACRO" and then "PROG"

```
MA - - - . - - - -
Keyin Number .
```

STEP-2 : Use number key '0...9' to select the "MACRO" number (from 1...50) , then press "ENTER"

```
MA - - 1 . - - - -
EMPTY MACRO
```

(LCD LINE 2 will reveal the name of "MACRO", or EMPTY MACRO , Press "YES" to overwrite the date if it is not an empty CHASE)

STEP-3 : Key in the name of the "MACRO" by number key "1...9"

```
MA - - 1. AB_
Keyin ENGLISH
```

(Use "0" (Sel.) KEY to confirm when a character was selected, than key in the following characters by the same way.)

STEP-4 : Press "ENTER" when the "MACRO" is named

```
MA - - 1 . STEP 1
SC .
```

(the vernier is flashing at "STEP 1")

STEP-5 Move the vernier to "SC _" by "+" key. ("SC _", means MACRO STEP 1, you can define any date of SCENE 1...306). You may press "CHASE" key which means to define CHASE 1...50 as MACRO STEP 1.

```
MA - - - 1 . STEP 1
CH 2.
```

LCD display:
 "SC _" means "SCENE"
 "CH " means "CHASE".

(for example, press "CHASE", then key in "2" , means "MACRO 1" "STEP 1 = CHASE 2")

STEP-6 : Use “ ◀ - “ “ + ▶ ” key to move the vernier , and key in the corresponding “SCENE” or “CHASE” number step by step .

STEP-7 : Finally, move the vernier to the second line of the LCD “SC _”(or “CH _”) , then press “ENTER” to finished and stored the edit of “MACRO”.

5-2 How to load a MACRO

STEP-1 : Press ”MACRO” , and key in the number of ”MACRO” (from 1...50)

MACRO 1 ‘GO’
AA

(LCD LINE2 will reveal the name of the ”MCARO”)

STEP-2 : Press ”GO” to load the ”MACRO 1”

5-3 How to load a MACRO by ”P1...P12”(HOT KEY)

STEP-1 : Press “MACRO” and make sure you are in “MACRO”

STEP-2 : Press ”A.” , make sure you are at ”RUN MODE“
(The LED of “A.” is bright)

STEP-3 : Press ”P1...P12” to load the MACRO .
(A previous setting by manufacturer: P1= MACRO 1 P12= MACRO 12)
User may use “FNC” + “2” (FAVORITE MACRO) to reset .

5-4 How to correspond the date of MACRO 1..50 to “P1..P12”(HOT KEY)

STEP-1 : Press ”MACRO” , and make sure you are in”MACRO“

STEP-2 : Press ”FNC.”

FUNCTION

Keyin Number

(‘FNC’ + ‘981 ... 9’ Please see Chapter 12.)

STEP-3 : Key in ”982”

FAVORITE MACRO
P 1 = MACRO 1

(now the LCD is flashing at “P 1”)

STEP-4 : Use “+ ▶ ” to move the vernier to “**MACRO ?**”, and key in the MACRO number that “P 1” is going to corresponded (from 1...50).

FAVORITE MACRO
P 1 = MACRO 12

(for example, key in “1” , “2” , means “P1 = MACRO 12”)

STEP-5 : Use “◀ - “ or “ + ▶ ” to move the vernier , and key in the corresponding “MACRO” number (from 1...50).

STEP-6 : Finally move the vernier to “MACRO” , and press “ENTER”.

5-5 How to delete a STEP in a MACRO

STEP-1 : Press ”MACRO” , then ”PROG”

MA
Keyin Number .

STEP-2 : Use number key ‘0...9’ to select the ”MACRO” number (from 1...50), then press ”ENTER”

(for example, MACRO 1 has the following date:

STEP 1 SCENE 1
STEP 2 CHASE 1
STEP 3 SCENE 2
STEP 4 CHASE 2
STEP 5 SCENE 3
STEP 6 CHASE 3

MA - - 1. - - - - -

ABC

(LCD LINE 2 will reveal the name of "MACRO". Press "YES" to overwrite)

STEP-3 : Use number key "1...9" to key in the name of the "MACRO"

MA - - 1. AB_

Keyin ENGLISH

(Use "0" (Sel.) KEY to confirm when a character was selected, than key in the following characters by the same way.)

STEP-4 : Press "ENTER" when the "MACRO" is named

MA - - - 1. STEP 1

SC 1 .

(now the vernier is flashing at "STEP 1")

STEP-5 : Use "◀ - " or " + ▶ " key to move the vernier to the number of "SC 1" and press "DEL.", the LED of "YES", "NO" LED is flashing. Press "YES" to delete.

MA - - 1. NO,YES

SC 1.

STEP-6 : The date SCENE 1 in CHASE STEP 1 is deleted after "YES" key is pressed.

(for example, move the vernier to the number of "SC _" at CHASE STEP 1 then press "YES" key to delete SCENE 1 from CHASE STEP 1.)

STEP-7 : use "◀ - " or " + ▶ " key to move the vernier to revise MACRO STEP .

MA - - - 1. STEP 5

CH 3.

(for example, use "◀ - " or " + ▶ " to increase up to MACRO STEP 5)

STEP-8 : Make sure the vernier has been moved to very end of LCD Line 2 , press "ENTER" to store the date :

MACRO 1 : (There are 5 STEP)

STEP 1 CHASE 1 (SCENE 1 is deleted and replaced by CHASE 1)

STEP 2 SCENE 2

STEP 3 CHASE 2

STEP 4 SCENE 3

STEP 5 CHASE 3

5-6 How to insert a STEP to a MACRO

STEP-1 : Press "MACRO" then "PROG"

MA - - - . - - - -
Keyin Number .

STEP-2 : Use number key '0...9' to select the "CHASE" number (from 1...50) , then press "ENTER" (for example, the CHASE 2 has the following data:

STEP 1 SCENE 3
STEP 2 SCENE 2
STEP 3 CHASE 2
STEP 4 SCENE 1

MA - - 2 . - - - - -
DEF

(LCD LINE 2 will reveal the name of the "MACRO" , press "YES" to overwrite)

STEP-3 : Use number key "1...9" to key in the name of the "MACRO"

MA - - 2. DE_
Keyin ENGLISH

(Use "0" (Sel.) KEY to confirm when a character was selected, than key in the following characters by the same way.)

STEP-4 : Press "ENTER" when the "MACRO" is named

MA - - - 2. STEP 1
SC 3.

(now the vernier is flashing at "STEP 1")

STEP-5 : Use "◀ - " or " + ▶ " to move the vernier to the number of "SC 2",

MA - - - 2. STEP 2
SC 2 .

STEP-6 : Press "CHASE" ,and key in "3" , then key in the CHASE number (from 1...50) ; and press "INS." ., the LED of "YES" , "NO" is flashing, press "YES"

MA - - 2. NO,YES
CH 3 .

STEP-7: Use “ ◀ - “ or “ + ▶ ” to move the vernier to increase the **MACRO STEP** .

MA - - 2. STEP 5
SC 1 .

(for example, use “ ◀ - “ or “ + ▶ ” to increase up to **MACRO STEP 5**)

STEP-8: Make sure the vernier has been moved to “**SC 1**”, press “**ENTER**” to store the data :

MACRO 2 : (There are 5 STEP)

STEP 1 SCENE 3

STEP 2 CHASE 3 (The SCENE 10 is inserted to STEP 3)

STEP 3 SCENE 2

STEP 4 CHASE 2

STEP 5 SCENE 1

Chapter 6 LEARN

6-1 How to edit and store a LEARN

STEP-1 : Press "LEARN" then "PROG"

LN - - - . - - - -
Keyin Number .

STEP-2 : Use number key '0...9' to select "LEARN" number (from 1...50) , then press "ENTER"

LN - - 1 . - - - -
EMPTY CHASE

(LCD LINE 2 will reveal the name of the "LEARN" or EMPTY CHASE ,
Press "YES" to overwrite the CHASE)

STEP-3 : Key in the name of the "LEARN" by number key "1...9"

LN - - 1. AB_
Keyin ENGLISH

(Use "0" (Sel.) KEY to confirm when a character was selected, than key in the following characters by the same way.)

STEP-4 : Press "ENTER" when the "MACRO" is named

LN - - 1. AB
MAPING CHASE 0

(now the vernier is flashing at the "MAPING CHASE 0" of the LCD)

STEP-5:: Key in the "MAPING CHASE" number by number key "0...9" and press "ENTER"

LN - - 1 . AB
MAPING CHASE 2

(for example, press "MAPING CHASE 2" means "LEARN 1" is corresponded to "CHASE 2")

If the CHASE 2 has the followig date :

STEP 1 SCENE 4 ; CHASE SPEED 0.5 SCE ; Xfader SPEED 1.0 SEC

- STEP 2** SCENE 3 ; CHASE SPEED 1.0 SCE ; Xfader SPEED 0.5 SEC
- STEP 3** SCENE 10 ; CHASE SPEED 2.0 SCE ; Xfader SPEED 1.5 SEC
- STEP 4** SCENE 2 ; CHASE SPEED 3.0 SCE ; Xfader SPEED 2.5 SEC
- STEP 5** SCENE 1 ; CHASE SPEED 5.0 SCE ; Xfader SPEED 3.0 SEC

STEP-6 : The "GO" LED is flashing and please press "GO"

STEP-7 : The LCD will reveal in Line 1 about how many **SCENE STEP** is included in "LEARN 1" and how many STEP and the aggregate time in Line 2 (from 0.1...25.4 second)

LN 1 -----> 05 STEP
STEP 1 = 2.0 Sec

STEP-8 : Press "GO" , **Chase SPEED = 2.0 SECOND** is stored into STEP 1 (**SCENE 4**)

STEP-9 : Press "GO" to create the CHASE SPEED of the other sets.

6-2 How to load a LEARN

STEP-1 : Press "LEARN" , and key in the "LEARN" number (from 1...50)

LEARN 1 'GO'
AA

(LCD LINE2 will reveal the name of the "LEARN")

STEP-2 : Press "GO" to load "LEARN 1"

6-3 How to correspond LEARN 1.50 to "P1.P12" (HOT KEY)

STEP-1 : Press "LEARN" , and make sure you are in "LEARN"

STEP-2 : Press "FNC"

FNCTION
Keyin Number

('FNC' + '981...9' Please read Chapter 12)

STEP-3 : Press number "2"

" FAVORITE LEARN "
P1 =LEARN 1

(now the vernier is flashing at "P 1")

STEP-4 : Use " + ▶ " to move the vernier to "LEARN ?" ,and key in the "LEARN" (from 1...50) which is going to corresponded to "P 1"

(now the vernier is flashing at "P 1")

6-4 How to load a LEARN by "P1...P12"(HOT KEY)

" FAVORITE LEARN "
P1 =LEARN 1

STEP-1 : Press "LEARN" , and make sure you are in "LEARN"

STEP-2 : Press "FNC."

FUNCTION
KEYIN NUMBER

('FNC' + ' 981..9' Please read Chapter 12.)

STEP-3 : Press number "2"

" FAVORITE LEARN "
P 1 =LEARN 1

(now the vernier is flashing at "P 1")

STEP-4 : Use " + ▶ " to move the vernier to "LEARN 1" ,and key in the "LEARN" (from 1...50) which is going to corresponded to "P 1"

" FAVORITE LEARN "
P1 =LEARN 12

(for example, key in “1”, “2” means “P1 = LEARN 12”)

STEP-5 : Use “ ◀ - “ or “ + ▶ ” to move the vernier to corresponding “LEARN” step by step.

STEP-6 : Finally move the vernier to “LEARN” , and press “ENTER” to finish.

6-5 How to set Xfader SPEED in a LEARN

STEP-1 : Press ”FNC.”

FUNCTION KEYIN Number

(‘FNC’ + ‘ 981 ... 9 ‘ Please read Chapter 12)

STEP-2 : Press number ”3”

LEARN Xfader < > XFD SPD = 0.2 SEC ‘

STEP-3 : Press ” ◀ - “ or “ + ▶ ” , LCD will reveal “XFD SPD = 0.2 SEC” or “XFD SPD = CHS SPD”

STEP-4 : Press ”ENTER” to finish the setting of LEARN Xfader.

(XFD SPD = 0.2 SEC means Xfadre SPEED = 0.2 SECOND

XFD SPD = CHS PSD means Xfadre SPEED =Chase SPEED)

Chapter 7. BLACK, FINE

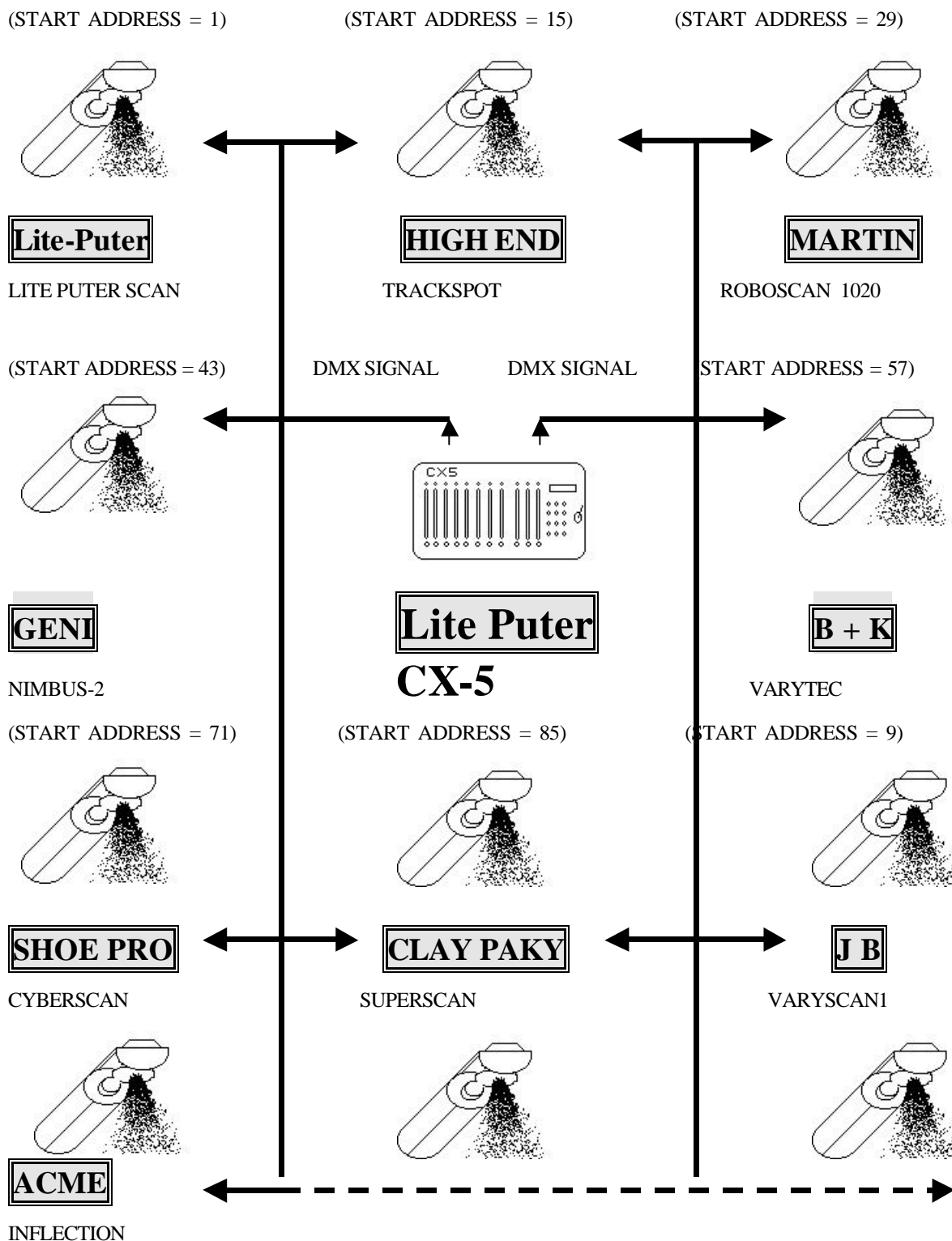
BLACK :

to stop the output of "LAMP1...LAMP12" temporarily until the "BLACK" key is off

FINE :

To adjust in a limited range while setting a Scene or operating a main lamp.

Chapter 8. How to select the start address



CX-5 can control different scanner at the same time, please set the correct start address for every scanner.

Chapter 9. MIDI

9-1 Introduction of MIDI

“**MIDI**” is an abbreviation for “Music Instrument Digital Interface”. MIDI interface will carry out a string of digital code while users play the keyboard.

Basic MIDI format include :

【CHANNEL】 (For different kind of musical instrument)
【NOTE】 (From 0 to 127)
【VELOCITY】 (From 0 to 127)

The function “**MIDI IN**” of **CX-5** can call out the 24 data saved in “**SCENE**” according to the first two data- **【CHANNEL】** and **【NOTE】** .

MIDI interface can send out 16 different kinds of musical effect by installing different value on **CHANNEL** (1-16). As a result of that, the **MIDI-CHANNEL** in **CX-5** has to be corresponding to the **CHANNEL** of **MIDI** interface, then **CX-5** can receive the data which **MIDI** interface sends out correctly.

【NOTE】 can send 128 different kinds of digital code to **CX-5**. **CX-5** would divide the 128 note into 24 team of **MIDI MEMORY**, and each one of that represents a “**SCENE**”.

CORRESPONDING TABLE of MIDI NOTE NUMBER & MIDI MEMORY IN CX-5

Midi Note Number	CX-5 MIDI MEMORY	SCENE NO.
0, 24, 48, 72, 96, 122	= 1	1-306 any one
1, 25, 49, 73, 97, 123	= 2	1-306 any one
2, 26, 50, 74, 98, 124	= 3	1-306 any one
3, 27, 51, 75, 99, 125	= 4	1-306 any one
4, 28, 52, 76, 100, 126	= 5	1-306 any one
5, 29, 53, 77, 101, 127	= 6	1-306 any one
6, 30, 54, 78, 102,	= 7	1-306 any one
:	:	:
:	:	:
:	:	:
21, 45, 69, 93, 119	= 22	1-306 any one
22, 46, 70, 94, 120	= 23	1-306 any one
23, 47, 71, 95, 121	= 24	1-306 any one

9-2 Set up MIDI channel of CX-5

STEP-1 Check the value of CHANNEL of MIDI interface.

STEP-2 Press the button “FNC”

FUNCTION
Keyin Number

STEP-3 Press the button “986” and make sure you are at **MIDI CHANNEL SETTING** of **CX-5**

MIDI CH. SETTING
MIDI CHANNEL=1

STEP-4 Press the buttons “◀ – “ and “+ ▶ ” that are flashing at this time to change the value of “MIDI CHANNEL”

MIDI CH. SETTING
MIDI CHANNEL = 2

← In this case, the user has pressed the button

STEP-5 When “LCD” displays the value of MIDI CHANNEL & KEYBOARD OF MIDI is the same, press the button “ENTER” and complete the setting of MIDI CHANNEL.

9-3. How to store 24 different “SCENE” in MIDI memory.

STEP-1 Please press the button “FNC” and make sure you are at MIDI MEMORY.

FUNCTION	
Keyin	Number

STEP-2 Press the button “985” and make sure you are at MIDI MEMORY.

FAVORITE MIDI
MEM 1 = SCENE



*”MEM 1” means MIDI
MEMORY #1*

STEP-3 Press the button “◀ –” and “+ ▶” to move the cursor to “=SCENE”, then enter a number (1~306) to number SCENE.

FAVORITE MIDI
MEM 1=SCENE 1

STEP-4 Use the button “◀ –” and “+ ▶” to enter SCENE number corresponding to MIDI MEMORY one by one, then press the button “ENTER” to save the data in memory.

Chapter 10.

How to call out pattern built in the program

10-1 Explanation of the pattern built in the program

- (1) There are 3 different pattern (circle. Vertical. line. horizontal line) and four pattern combinations (V2.X edition) built in CX-5.
- (2) Users can preview pattern built in the program by press “FNC” + “984”.
- (3) In the function “Preview Of Pattern Built In The Program”, users can select 4 different kinds of pattern combinations by keying in number “1~4”.
- (4) After the pattern has been decided, users can move the control stick whose location represents the center of the pattern.
- (5) Users can change the radius of the movement of the pattern by move “MASTER”.
- (6) Users can change the speed of the movement of the pattern by move “CHASS SPEED VR”.
- (7) Table of 4 pattern combination

	PATTERN 1	PATTERN 2	PATTERN 3	PATTERN 4
LAMP 1	Circle	vertical line	horizontal line	circle
LAMP 2	Circle	vertical line	horizontal line	vertical line
LAMP 3	Circle	vertical line	horizontal line	horizontal line
LAMP 4	Circle	vertical line	horizontal line	circle
LAMP 5	Circle	vertical line	horizontal line	vertical line
LAMP 6	Circle	vertical line	horizontal line	horizontal line
LAMP 7	Circle	vertical line	horizontal line	circle
LAMP 8	Circle	vertical line	horizontal line	vertical line
LAMP 9	Circle	vertical line	horizontal line	horizontal line
LAMP 10	Circle	vertical line	horizontal line	circle
LAMP 11	Circle	vertical line	horizontal line	vertical line
LAMP 12	Circle	vertical line	horizontal line	horizontal line

- (8) The 12 lamps must be the same type and manufactured by the same manufacturer when running the above function.

10-2 Preview the pattern built in the program, and save it to any one of SCENE 301~306

The six data buffer, **SCENE 301~306**, are designed specially for the pattern built in the program. Users can set up the “pattern”, ”radius” and “speed” wanted under the function “Preview The Pattern Built In The Program”, then press the button ”**PROG**” to save the data into any one of “**SCENE 301~306**”.

STEP-1 Press the button “**FNC**” and key in “**984**”.

```
GRAPHIC FUNCTION
GRAPHIC DISABLE
```

STEP-2 Press the buttons “ ◀ -“ & “ + ▶ ” and make the second line on **LCD** show “**GRAPHIC ENABLE**”

```
GRAPHIC FUNCTION
GRAPHIC ENABLE
```

STEP-3 Then press “**ENTER**” and enter the function “Preview the pattern built in the program”

```
GRAPHIC FUNCTION
GRAPHIC MODE =1
```

← *GRAPHIC MODE =1*

means that you have selected a pattern combination (LAMP1~12 are circles)

STEP-4 Use “**CH1 ~CH12**” **VR** change the pattern of intelligent light.

STEP-5 Move “**MASTER**” **VR** & “**CHASE SPEED**” **VR** to the proper state by moving the joystick.

STEP-6 Press the button “**PROG**”, then the **LCD** will show as below.

```
GRAPHIC FUNCTION
PROGRAM SC 301
```

← “*SC 301*” means “*SCENE 301*”.

STEP-7 Users can select 6 different **SCENE** memories “**SCENE 301~SCENE 306**” by pressing “ ◀ -” & “ + ▶ “.

GRAPHIC FUNCTION
PROGRAM SC 303

← *Users have pressed “ + ▶ ”, so the SCENE memories change to SCENE 303.*

STEP-8 Pressing “ENTER” when all the “pattern”, the “center” and the “speed” are decided, then the data of the pattern will be saved in SCENE 303.

(SCENE 301~SCENE 306 cannot control different types of scanners at one time.)

10-3 Call out the pattern built in the program by the use of number buttons under the function SCENE”

STEP-1 After saving the pattern built in the program in SCENE 301~ 306, users can press the button “SCENE” and enter the function “SCENE”.

STEP-2 Press “3”、 “0”、 “1” and “GO” to call out the pattern saved in SCENE 301.

STEP-3 Press “3”、 “0”、 “6” and “GO” to call out the pattern saved in SCENE 306 .

10-4 Call out the pattern built in the program by the use of hot key “P1~P12” under the function “SCENE”

STEP-1 Press “SCENE” to enter the function “SCENE” .

STEP-2 Press “FNC” + “982” to enter the edit model “FAVORITE SCENE”.

FAVORITE SCENE
P1 = SCENE

STEP-3 Set up P1~P12 according to the description in Chapter 2-6 and save them in the memory.

P1=SCENE 306

P2=SCENE 305

P3=SCENE 304

P4=SCENE 1

P5=SCENE 302

:

STEP-4 Press the key “A” and enter “SCENE RUN MODE” ,then users can call out the data show in **STEP-3** by using **P1~P12**.

Chapter 11. Main Lamp Setting

When users enter the function “CHASE”, “MACRO”, “LEARN”, all the lamps will be controlled by the program. But if users press “FNC” + “987” and enter the function “MAIN LAMP SETTING”, they can choose a main lamp “LAMP 1....12” by using “ ◀ -” & “+ ▶ “.

After the main lamp have selected, the main lamp won’ t change the output as the program changes with running of “CHASE”, “MACRO”, “LEARN”, but users can change its output and position by controlling of the joystick controller VR.

11-1 How to setting main lamp

STEP-1 Press “FNC” + “987” .

SELECT MAIN LAMP
MAIN LAMP = OFF

← *Means that LAMP1 ~ LAMP12 all are controlled by program*

STEP-2 Use “ ◀ -” & “+ ▶ “. Assign main lamp.

SELECT MAIN LAMP
MAIN LAMP = 1

← *MAIN LAMP =1
Means press “ + ▶ “*

STEP-3 After make sure the MAIN LAMP, press “ENTER“. LAMP 1 will be assigned "MAIN LAMP"

Chapter 12 Foresee of FNC Key

‘FNC’ + ‘981’

The function to set up the manufacturers and types of scanner.

‘FNC’ + ‘982’

The setting up of P1.....P12 (HOT KEY) is as below:

Under “SCENE”: “P1...P12” can correspond to any data in “SCENE1...306”

Under “CHASE”: “P1...P12” can correspond to any data in “CHASE1...50”

Under “MACRO”: “P1...P12” can correspond to any data in “MACRO1...50”

Under “LEARN”: “P1...P12” can correspond to any data in “LEARN1...50”

‘FNC’ + ‘983’

Set up **Xfader SPEED** of the function “LEARN” as **0.2 SECOND** or **CHASE SPEED**.

‘FNC’ + ‘984’

Use “ ◀ - ” & “ + ▶ ” to select 4 different kinds of pattern.

‘FNC’ + ‘985’

Set up **24** sets of **MIDI MEMORY** (please refer to Chapter 9-3)

(1) Each of the **128** different **MIDI NOTE NUMBER** is correspond to **24** different sets of **MIDI MEMORY**

(please refer to **Chapter 9-1 –Corresponding Table of MIDI NOTE NUMBER & MIDI MEMORY In CX-5**).

(2) Each set of **MIDI MEMORY** can correspond to any one of **SCENE 1...306”**.

(3) After **MIDI MEMORY** are set as **SCENE 1~306**, users can call out **24** different **SCENE** by **MIDI KEY**.

‘FNC’ + ‘986’

Set up **MIDI CHANNEL** of **CX-5**.(please refer to **Chapter9-2**)

(1) Outside **MIDI** interface can set up **16** different **CHANNEL** (1~16).

(2) The value of **CHANNEL** inside **CX-5** has to correspond to those of the **MIDI** interface , so that **CX-5** can receive the **MIDI** signal from **MIDI** interface.

“FNC” + “987”

Set up **MAIN LAMP** of **CX-5** (please refer to **Chapter 11**).

Users can select one of **“MAIN LAMP 1...12”** as **MAIN LAMP** or **“MAIN LAMP OFF”** by pressing **“ ◀ - ” & “ + ▶ ”**.

“FNC” + “988”

For user define the channel of **Pan and Tile**.

“FNC” + “989”

For selecting **“chase control by program”** or **Manual override**.

STEP-1 : Press **“FNC”+“989”**

**CHASE CONTROLER
CTL. BY PROGRAM**

STEP-2 : Press **“ENTER”**, it means chase controlled by program.

STEP-3 : If you want manual override, use **“ ◀ - ”** or **“ + ▶ ”** to select

**CHASE CONTROLER
CTL. BY USER**

“FNC “ + “971 “

For Chase Steps Preview. Select the chase you want to preview and press **“GO”** to go to next step.

“FNC “ + “972 “

For selecting the moving speed under **CHASE** mode. It can be controlled by program or user.

STEP-1 : Press **“FNC” + “972”**

**CHASE SPD. CTL.
CTL. BY SPEED VR**

STEP-2 : Press **“ENTER”**, user can control chase time by adjusting VR.

STEP-3 : If you want it be controlled by program, use **“ ◀ - ”** or **“ + ▶ ”** to select

**CHASE SPD. CTL.
CTL. BY PROGRAM**

STEP-4 : Press **“ENTER”** to confirm.

Chapter 13 Appendix

Appendix-1:

How to make a " SCENE "

- STEP-1:** Press the "SECNE" key to be in the "SCENE MODE" situation.
- STEP-2:** To make sure the led which is beside "A" function key is "OFF" situation
(Led "OFF" means into "EDIT", the user can control 1...12 intelligent lights through P1...P12.)
- STEP-3:** Press any key from P1...P12, and choose the intelligent lights you want to control.)
- STEP-4:** Push the CH1 VR to the top first, then pull it down to the bottom, and move it to the right position to change the channel corresponding with the CH1 VR. The data in the other channels will be unchanged.)
- STEP-5:** Push the crank handle to right first, then push it to left, and move it to the right position to change the data of PAN. The data in the other channel will be unchanged.
- STEP-6:** Push the crank handle to the top first, then pull it down to the bottom, and move it to the right position to change the data of TILT. The data in the other channels will be unchanged.)
- STEP-7:** You can change the data of the channels corresponding with CH1 VR by step1...step6, the data of the other channels which have not been operated by the steps of pushing VR will not change with the changed position of VR.
- STEP-8:** The data of selected intelligent lights can be changed by pushing VR just like the step4...step6, then you can use "PROG" key to save the output data in "SCENE" memories.

Appendix-2:

Call out the saved scene to amend any of the channels.

STEP-1: Press the "SCENE" key to be in the " SCENE MODE ".

Set the channels of 1...12 intelligent lights as follows:

CH1 VR = COLOR

CH2 VR = GOBO

STEP-2: Press the SCENE NO.(range 1...300) via digital "0...9", then press

"ENTER" to call out the scene you want.

Example: the data of the called scene is:

Intelligent light 1 —▶the red round.

Intelligent light 2 —▶the red round.

Intelligent light 3 —▶the red round.

STEP-3: Press P1, P2, P3 to light their leds.

STEP-4: Push CH1 VR to choose the color you want. If you want to change round to other shapes, please push CH2 VR.

STEP-5: Use "PROG" key to save the output data in "SCENE" memories.

Appendix-3:

Something important you have to know

when you use P1..P12 to choose the light you want to control.

After pressing P1...P12 to choose the intelligent lights you want to control, you must repush the VR up and down to change its data.