

TG24 / 48

LIGHTING CONTROLLER

USER MANUAL

(Version: 2.0)

Net.DO LIGHTING CONTROL EQUIPMENT CO.,LTD

<http://www.netdo.com.cn>

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1 Summary

1.1 Function

- DMX512/1990 standard, 24/48 DMX channels, output with optical isolated.
- 24/48 dimming channels.
- 24 preset fader, 12 submaster fader.
- 96 Scenes (8 page).
- 24 Chases, up to 120 Steps each.
- Trigger mode selectable: Music synchronously, Auto.
- LCD display with backlight.
- Power supply: AC 100-240V / 50-60Hz

1.2 Specification parameter

	TG24	TG48
DMX512/1990 OUTPUT SIGNAL	Yes	Yes
CONTROLLABLE DMX512 CHANNEL	24	48
DIMMING CHANNEL	24	48
MAX SCENE	96	96
MAX CHASE	24	24
CHASE SPEED RANGE	0.03s~180s	
CHASE TRIGGER MODE	Auto, Music	
CHASE DIRECTION CONTROL	Forward / Inversion	
LCD MONITOR	Yes	
MUSIC SIGNAL INPUT	Unbalanced line level input (1/4" Monophonic audio input) / MIC input	
DMX512 OUTPUT PORT	Optical isolated output port	
ELECTRIC POWER SOURCE	Switch mode power, voltage range: 100~240VAC, frequency: 50/60, short-circuit protection & overload protection	
POWER	5W	
SIZE	482mm x 310mm x 95mm	

2 Installation

TG24/48 lighting controllers' packing chest contents items as following:

- One TG24/48 lighting controller:
Ps: to confirm the model of the controller, please check the model number and software version number displayed on the LCD monitor when run the controller.
- One feed cable; one user's guide.

The controller is of international 19" construction standard of installation. It can be in board installed or installed on the 19" stander or machine cabinet.

2.1 Safety caution

- The controller must be connected with the protective groundwire to ensure safety.
- The intelligent Fixtures controller is sophisticated electronics. Please mind the dust and moist.

2.2 Connect the power

Please check the supply power, ensure it in the suitable voltage range of the controller. The plug must connect with the protective groundwire to ensure the safety.

2.3 Connect digital dimmer

- There are two DMX512 XLR-D5F output sockets on the rear panel of the Controller, Pin 1 for signal ground, Pin 2 for negative, and Pin 3 for positive.
- DMX512 cable is screened twist wire. Each end of the cable should be joined to XLR plug by user. Pin 1 of XLR plug is connected to the screen net of the cable. Two wires of twist (distinguished by different colors) are connected to Pin 2 and Pin 3 of the plug respectively. Please do not confuse.

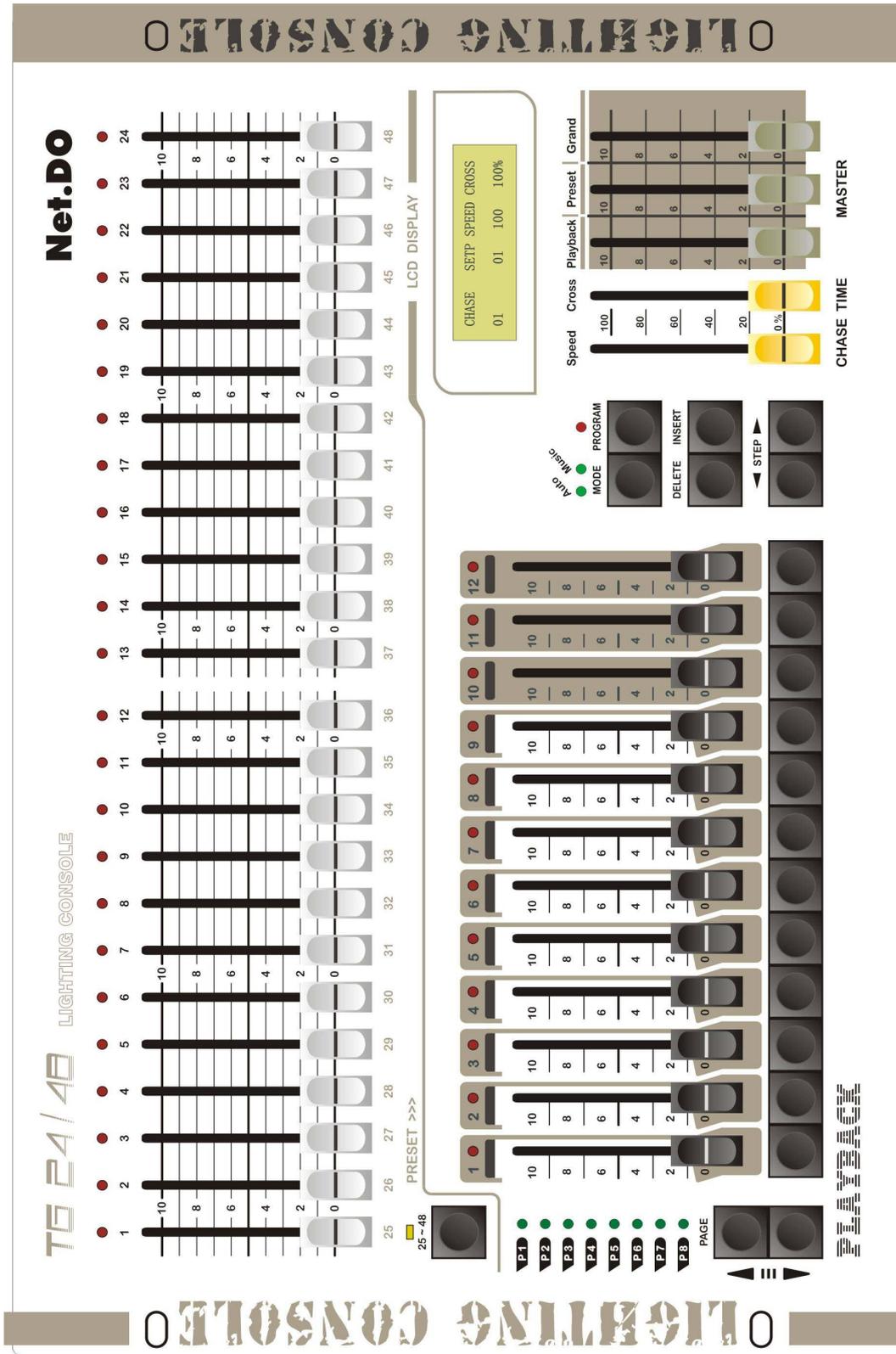
Pin number	Cable conductor
1	Shield
2	Negative pole
3	Positive pole
4	Null
5	Null

2.4 Audio signal source

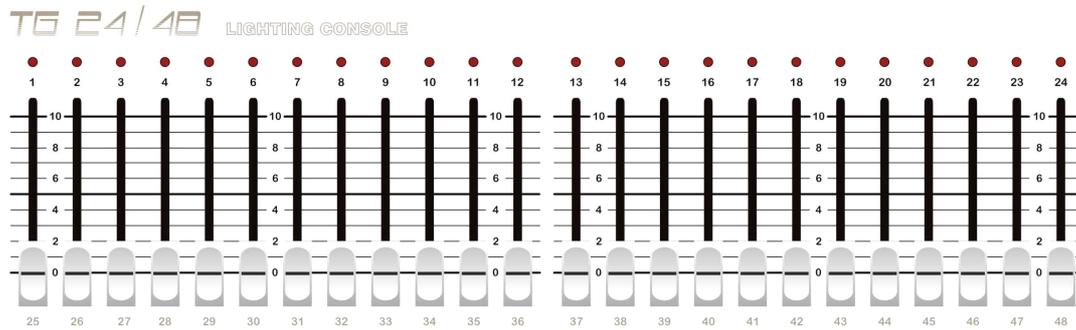
- The audio signal can select from sound mixing console and line level output of other audio devices, or MIC selection. The controller can automatically pick the part of low-frequency swing as the music trigger signal of Chase program.
- One unbalanced monophonic audio input locates in the back board, the range of line level input is: -10dB ~ +10db. When audio device is plug in, the audio source is line level input. When there nothing plug in, the audio source is MIC selection.

3 Operation Guide

3.1 Panel Plot



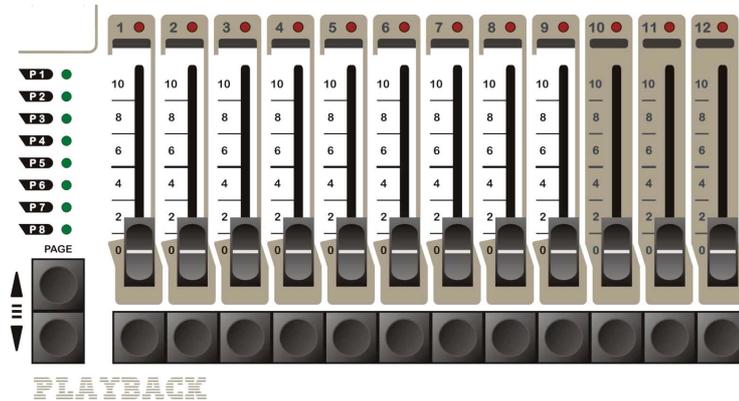
3.2 Fader



- **CH1~CH24 PRESET FADER:**

Use **25-48** key can be used to control fader switch 1~24 or 25~48 channels.

- **SUBMASTER FADER:**



1. SUBMASTER 1~9 can only be used to playback scene.
2. SUBMASTER 10~12 can be used to playback scene or chase.

PAGE key:

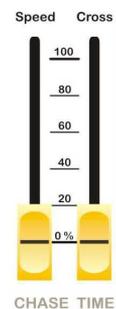
Using the PAGE-up and PAGE-down keys to turn pages, P1-P8 LED display page numbers.

FLASH key:

Each SUBMASTER with a flash-key, To achieve SUBMASTER flash.

- **SPEED FADER:**

This fader is used to control the speed of chase when it is auto mode, ranges from 0-100%, 0% most slowly and 100% fastest.

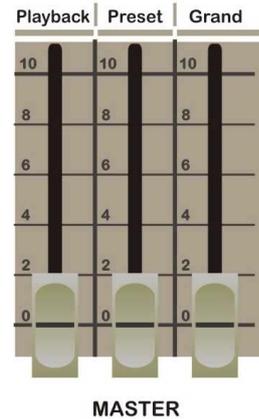


- **CROSS FADER:**

This fader is used to control the fade of chase-step, ranges from 0-100%, 0% most slowly and 100% fastest.

● **MASTER FADER** (A total of 3 master fader)

1. Playback Master Fader
2. Preset Master Fader
3. Grand Fader



3.3 Key

MODE Key --- Trigger mode of chase.

The chase has 2 trigger mode.

Auto: The speed of chase is controlled by SPEED% and CROSS%.

Music: The chase running with music.

Press the **MODE** key continuously and the chase mode will be changed as circulation.

PROGRAM Key

Press this key to enter programming state, The LED flash.

Press the Key again to exit programming state.

INSERT(+), DELETE Key

In programming mode, the two keys can be used to achieve CHASE-STEP increase, insert, delete operations.

◀ **STEP** ▶ Key

In chase operation, use this key to change the chase direction.

In the programming state, is used to select Chase-step.

3.4 Introduction to back board port

- The controller adopts two DMX512 output modules with optical isolated and the same output.
- The audio input socket is 1/4" monophonic socket, with input line level 0dB. When audio device is plug in, the audio source is line level input. When there nothing plug in, the audio source is MIC selection.



↑
AC Power Input

↑ ↑
DMX512 Output Audio Input

4 Record and Running

4.1 Manual Control

1. Push the **GRAND MASTER** and **PRESET MASTER** Fader to the maximum.
2. Push **PRESET** Fader to change the value of channel.

4.2 Record And Edit

SUBMASTER Fader 1~9 only can record scene, 10~12 can record Scene or Chase.

4.2.1 RECORD SCENE

1. Push **GRAND** and **PLAYBACK MASTER** Fader to the maximum.
2. Push **PRESET** Fader to change the value of channel.
3. Hold down the **INSERT(+)** key and press the **SUBMASTER** key, the present light effect will be recorded in the scene.

4.2.2 DELETED SCENE

Hold down the **DELETE** key and press the **SUBMASTER** key to delete.

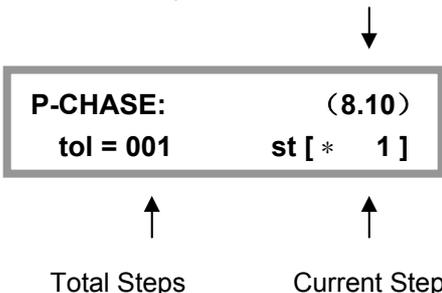
4.2.3 EDIT CHASE

1. Press the **PROGRAM** key to enter program, the LED will flash;

PROGRAM ...
Select chase

2. Press the **SUBMASTER** key to select Chase number;
Eg: Edit Page 8, chase 10 ----, Turn to Submaster Page 8 and press **SUBMASTER** key 10.

3. Press **INSERT(+)** to add a Chase-step;



4. Push **PRESET** Fader to change the value of channel;
5. Repeat Step 3~4 to edit next Chase-step;
6. Press **PROGRAM** key to quit. (Or repeat Step 2~4 to edit another Chase.)

Tips:

- Press the **DELETE** key to delete Chase-step.
- Use **◀ STEP ▶** key to select Chase-step.
- Press **INSERT(+)** key to add Chase-step.
- If the Chase-step is the last, it displays *.
(Eg: 10 is the last Chase-step, the LCD will displays *10)

4.3 Running

Push the **SUBMASTER** Fader on to Running relevant scene and chase.

4.3.1 RUNNING SCENE

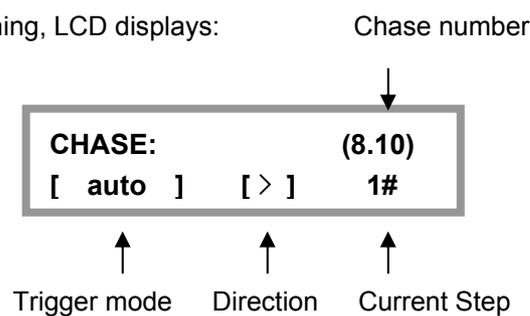


If the SUBMASTER is not recorded, LCD displays:



4.3.2 RUNNING CHASE

When Chase Running, LCD displays:



Eg: Running the 10th Chase of Page 8.

1. Press **PAGE** key to turn to Page 8;
2. Push the **SUBMASTER** Fader 10 to running Chase 10.

Tips:

- Press the Submaster key to flash-running the Scene or Chase.
- Press the Submaster key or push the Submaster fader to convert the Chase to the

current control.

- Trigger mode of the current Chase. (The chase has 2 Trigger mode)
 - Auto:** The speed of chase is controlled by SPEED% and CROSS%.
 - Music:** The chase running with music.
Press the **MODE** key continuously and the chase mode will be changed as circulation.
- The Auto mode of current chase: **SPEED%** and **CROSS%**
 1. This **SPEED%** fader is used to control the speed of current Chase, ranges from 0-100%, 0% most slowly and 100% fastest.
 2. This **CROSS%** fader is used to control the fade of Chase-step, ranges from 0-100%, 0% most slowly and 100% fastest.

5 Initialization of data

Steps:

1. Hold down **PROGRAM** key and switch on the power till LCD screen displays “**=== PASSWORD ===**”
2. Press **number keys 1, 2, 3, 12** at the same time.
3. The system will restart automatically after initialization.

Special function

Notice: Please keep this paper. If you forget the password, please contact with the retail store to ask for help.

(A) The steps of using password to start:

1. Hold down **PROGRAM** key and switch on the power.
till LCD screen displays “**=== PASSWORD ===**”
2. Press **number keys 1, 2, 11, 12** at the same time.

(B) The steps of canceling the starting password:

Repeat the above two steps.

- When the password is enabled, every time when the controller is started the password is needed:
Press number keys 1, 2, 11, 12 at the same time.