

CT-Mobile 16

USER'S MANUAL

BLANK

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Features

Thank you for your purchase. This product features include:

- 16 DMX channels
- 30 fixed patterns(31-60)
- 30 programmable patterns(01-30)
- Each programmable pattern consists of a maximum of 99 scenes
- The chase of patterns with Manual/Chase/Audio/Cross
- Built-in microphone for Music triggering
- MIDI control over patterns, scenes, Full On and Stand By
- Power failure memory
- DMX polarity select

General Instructions

Read the instruction in this manual carefully and thoroughly, as they give important information regarding safety during use and maintenance. Keep this manual with the unit, in order to consult it in the future. If the unit is sold or given to another operator, make certain that it always has its manual, to enable the new owner to read about its operation and relative instructions.

Warnings

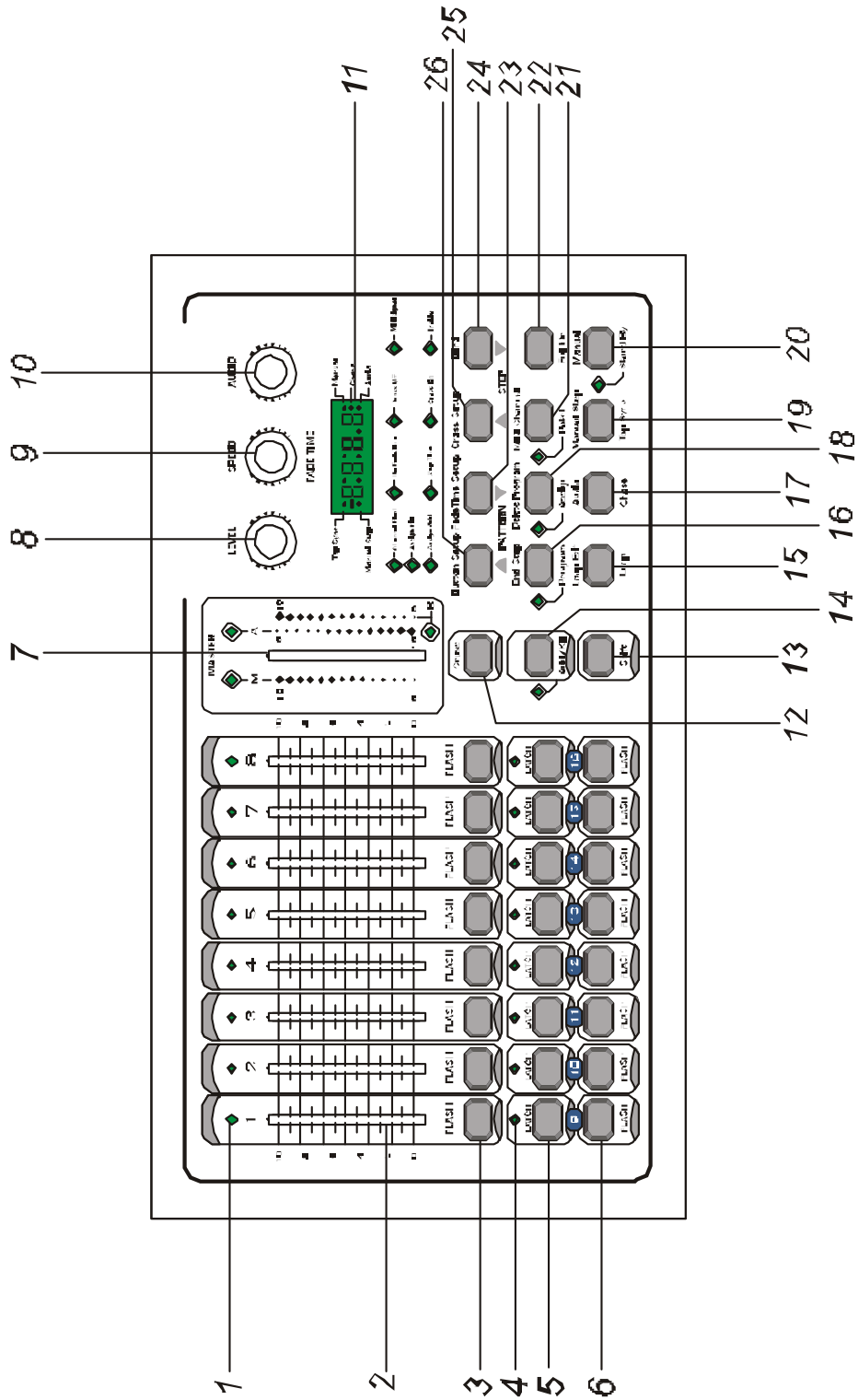
- **DO NOT** make any inflammable liquids, water or metal objects enter the unit.
- Should any liquid be spilled on the unit, **DISCONNECT** the power supply to the unit immediately.
- **STOP** using the unit immediately In the event of serious operation problems and either contact your local dealer for a check or contact us directly.
- **DO NOT** open the unit--there are no user serviceable parts inside.
- **NEVER** try to repair the unit yourself. Repairs by unqualified people could cause damage or faulty operation. Contact your nearest dealer.

Cautions

- This unit is **NOT** intended for home use.
- After having removed the packaging check that the unit is **NOT** damaged in any way. If in doubt, **DON'T** use it and contact an authorized dealer.
- Packaging material (plastic bags, polystyrene foam, nails, etc.) **MUST NOT** be left within children's reach, as it can be dangerous.
- This unit must only be operated by adults. **DO NOT** allow children to tamper or play with it.
- **NEVER** use the unit under the following conditions:
 - In places subject to excessive humidity.
 - In places subject to vibrations or bumps.
 - In places with a temperature of over 45°C/113°F or less than 2°C/35.6°F.Protect the unit from excessive dryness or humidity (ideal conditions are between 35% and 80%).
- **DO NOT** dismantle or modify the unit.

1. Overview

1.1 Front View



1. Overview

1.1 Front View

- 1. Channel LEDs 1-8** Show the current intensity of the relevant channel numbered from 1 to 8.
- 2. Channel Sliders** These 8 sliders are used to control the intensity of channels 1 to 8.
- 3. Flash Buttons 1-8** These buttons are used to bring an individual or a group of channels to full intensity.
- 4. Channel LEDs 9-16** Show the current intensity of the relevant channel numbered from 9 to 16.
- 5. Latch Buttons 9-16** These 8 buttons are used for activating any of the 8 programmed scenes or programs.
- 6. Flash Buttons 9-16** These buttons are used to bring an individual or a group of channels to full intensity.
- 7. Master Slider** This slider controls the output of channels 1-8, the M LED shows the current intensity.
This slider is also used to advance the programs step by step, the A & B LEDs show the activity of the program.
- 8. Level Knob** This knob controls the output of programs activated by the Latch buttons.
- 9. Speed/Fade Time Knob** This knob controls the speed at which the programs chase. This knob also sets the initial fade in or out of programmed scenes.
- 10. Audio Knob** This knob controls the sensitivity of the audio input.
- 11. Segment Display** This 4-digit Segment Display shows the current programming or function state.
- 12. Cross Button** Activates Cross mode for the chase of the programs. A second tap will deactivate this function.
- 13. Shift Button** This button doesn't work when not used with other buttons.

1. Overview

1.1 Front View

- 14. Add/Kill Button** This button is used to change between Add and Kill mode. In Add mode, multiple scenes or Flash buttons are enabled to be on at a time. In Kill mode, pressing any Flash button will kill any other scenes or programs. The LED lights when Kill mode is active.
- 15. Loop/Loop Exit Button** Activates Loop mode for the chase of programs. Keep pressing the Shift button, tap this button to leave Loop mode.
- 16. Program/End Step Button** This button is used to activate Program mode. In Program mode, keep pressing the Shift button, tap the button to determine the end step of the program.
- 17. Chase/Audio Button** This button is used to activate Chase mode. This button is also used to activate Audio mode when pressing the Shift button.
- 18. Assign/Delete Program Button** This button is used to activate Assign mode. This button is also used to delete the program when used with the Shift button.
- 19. Tap Sync/ Manual Step Button** This button is used to set the chase speed by tapping the button several times. This button is also used to manual run the programs step by step when used with the Shift button.
- 20. Stand By/ Manual Button** This button is used to kill all output except those from Flash buttons. This button is also used to activate Manual mode when used with the Shift button.
- 21. Patch/ MIDI Channel Button** This button is used to activate Patch mode. This button is also used to activate the setup of MIDI channel when used with the Shift button.
- 22. Full On Button** This button is used to bring a group of channels 1-8 to full intensity regardless of the Stand by button.

1. Overview

1.1 Front View

23. Pattern Down/ Fade Time Setup

This button is used to select the program in the order of 60-1.

This button is also used to activate the setup of Fade Time when used with the Shift button.

24. Step Down/ Blind button

This button is used to select the step of the program.

This button is also used to activate Blind mode when used with the Shift button.

25. Step Up/ Cross Setup

This button is used to select the step of the program.

This button is also used to activate the setup of Cross when used with the Shift button.

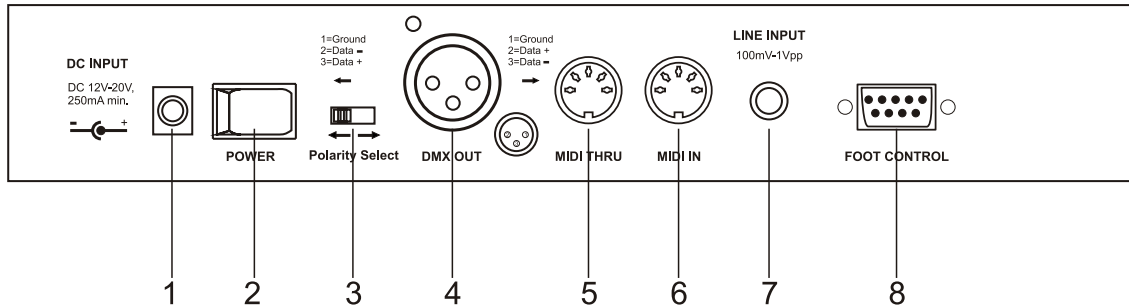
26. Pattern Up/ Button Setup

This button is used to select the program in the order of 1-60.

This button is also used to activate the functions in the following order; Channel Flash, Assign Kill and Assign Add.

1. Overview

1.2 Rear View



1. DC Input

DC 12-20V, 250 mA min.



2. Power Switch

This switch controls the turning on or off of the power.

3. DMX Polarity Select

Move to select DMX polarity.

4. DMX Output

This connector sends DMX signal to the fixture.

5. MIDI Thru

This connector sends MIDI signal to the MIDI sequencer.

6. MIDI In

This connector receives MIDI signal.

7. Audio Input

This jack accepts a line level audio input signal ranged from 100mV to 1Vpp.

8. Foot Controller

Provides Full On, Stand By and so on via the Foot Controller(sold separately).

2. Operation Guide

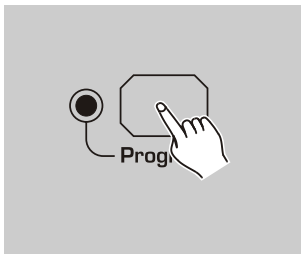
2.1 Programming

2.1.1 Programmable Patterns

30(01-30) programmable patterns may be programmed using the Channel sliders 1-8 or Latch buttons 9-16.

1. Press the Program button until its LED lights indicating Program mode is active.
2. Tap the **Pattern** Up/Down button to select the pattern you want to program, the Segment Display shows the pattern you select.
3. Create a desired scene using the Channel sliders 1-8 or Latch buttons 9-16.
4. Once the scene is satisfactory, tap the Program button to program this scene into memory.
5. Repeat steps 3-4 until the desired number of steps are programmed.
6. Tap the Step Down button once.
7. Keep pressing the Shift button, tap the End Step button to determine the end step of the pattern, now you've programmed this pattern.

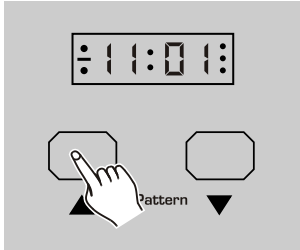
EXAMPLE: Program a pattern with channels 1-16 fully on in sequence into the 11th programmable pattern.



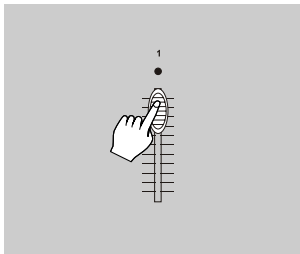
1. Press the Program button until its LED lights indicating Program mode is active.

2. Operation Guide

2.1.1 Programmable Patterns



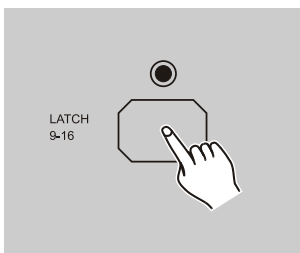
2. Tap the Pattern Up/Down button to select the 11th pattern, the Segment Display shows your selection.



3. Move the Channel slider 1 to the top position and Channel sliders 2-8 to the bottom.



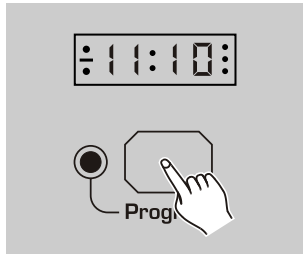
3. Tap the Program button to program this scene into memory, the Segment Display shows the next step.



5. Tap the Latch button 9 until its LED lights.

2. Operation Guide

2.1.1 Programmable Patterns

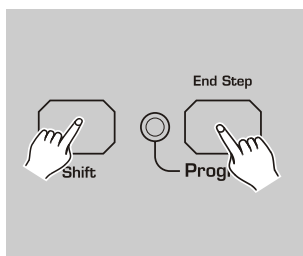


6. Tap the Program button to program this step.

7. Repeat steps 5-6 until all Latch buttons are programmed, the Segment Display shows "11:17".



8. Tap the Step Down button once, the Segment Display shows "11:16".



9. Keep pressing the Shift button, tap the End Step button to determine the end step of this pattern.

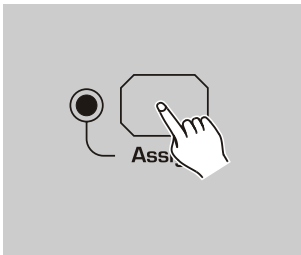
2. Operation Guide

2.1.2 Assign Programming

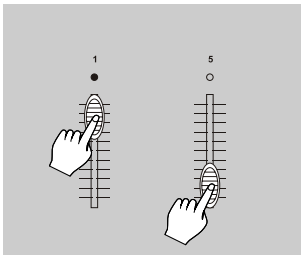
The Flash buttons can be used to assign the programming of patterns.

1. Press the Assign button until its LED lights.
2. Create a desired scene using the Channel sliders 1-8 or Latch buttons 9-16.
3. Keep pressing the Assign button, tap the Flash button you wish to assign programming of the pattern, all channel LEDs will flash briefly.

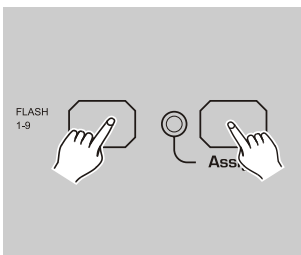
EXAMPLE: Program channels 1-4 fully on and channels 5-16 fully off into the Flash 1 button.



1. Press the Assign button until its LED lights.



2. Move the Channel sliders 1-4 to top and the other Channel sliders to bottom.



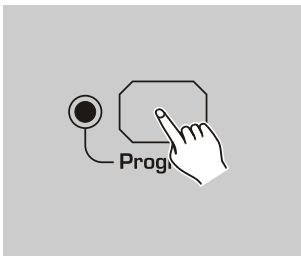
3. Keep pressing the Assign button, tap the Flash button 1 to assign programming of the pattern.

2. Operation Guide

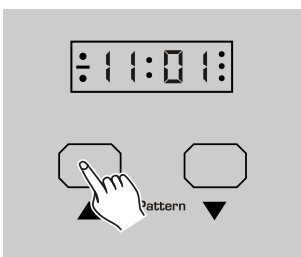
Run Assigned Program

1. Put the Master Fader at Full (100%)
2. Push and Hold the SHIFT key then tap the "BUTTON SETUP" key twice. The ASSIGN ADD led will be lit.
3. Push "FLASH 1" and channels 1-4 will now be active. This is the program previously assigned.

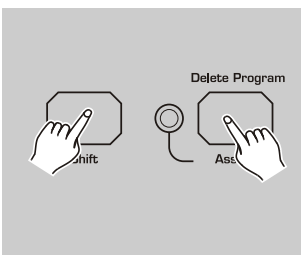
2.1.3 Delete a Pattern



1. Press the Program button until its LED lights indicating Program mode is active.



2. Tap the Pattern Up/Down button to select the pattern you wish to delete, the Segment Display shows your selection.

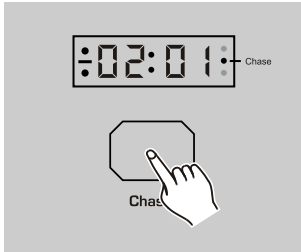


3. Keep pressing the Shift button, tap the Delete Program button to delete this pattern.

2. Operation Guide

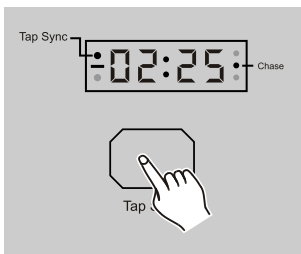
2.2 Running

2.2.1 Chase Mode



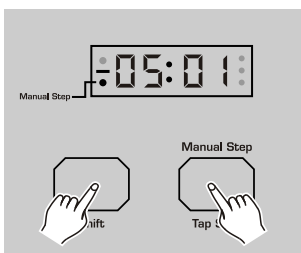
Tap the Chase button, the Chase indication in the Segment Display lights indicating Chase mode is active.

In Chase mode, the pattern will chase automatically once the pattern is selected. You can control the chase of pattern using the Level knob or Speed/Fade Time knob.



In Chase mode, repeatedly tapping the Tap Sync button establishes the chase speed. The last two taps determine the speed with a maximum of 5 minutes and the Tap Sync indication in the Segment Display lights. Tap Sync will override any previous setting of the Speed/Fade Time knob unless you adjust the Speed/Fade Time knob again.

2.2.2 Manual Mode

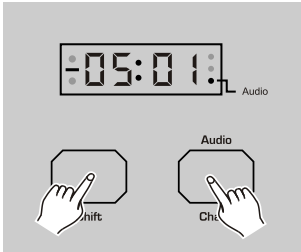


Keep pressing the Shift button, tap the Manual Step button, the Manual Step indication in the Segment Display lights indicating Manual mode is active.

In Manual mode, you can manually run the pattern using the Step Up/Down buttons.

2. Operation Guide

2.2.3 Audio Mode



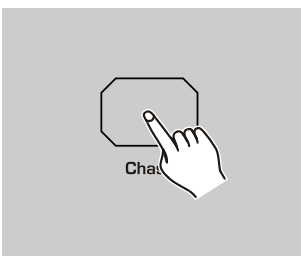
Keep pressing the Shift button, tap the Audio button, the Audio indication in the Segment Display lights indicating Audio mode is active.

In Audio mode, the chase of patterns will be controlled by the external music rhythms.

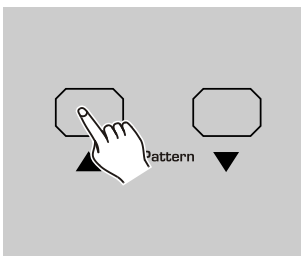
2.2.4 Loop Mode

In Chase mode, the Loop button allows you to continue the chase of several patterns in sequence.

EXAMPLE: Continue the chase of pattern 31, 41 and 51 in sequence.



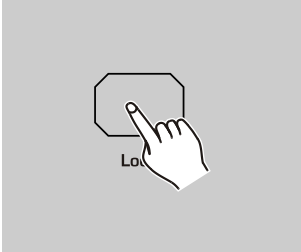
1. Tap the Chase button to activate Chase mode.



2. Tap the Pattern Up/Down button to select pattern 31.

2. Operation Guide

2.2.4 Loop Mode



3. Tap the Loop button.

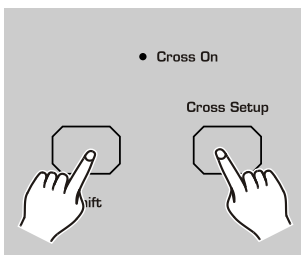
4. Repeat steps 2-3 to select pattern 41 and 51.

Wait for about 10 seconds, the three patterns you've selected will continuously chase in sequence.

2.2.5 Cross Mode

In Chase mode, the scenes of pattern may fade in or out subsequently using the Master Slider.

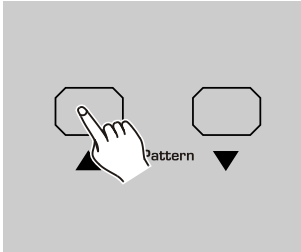
EXAMPLE: Chase the pattern with channels 1-8 to fade in sequentially.



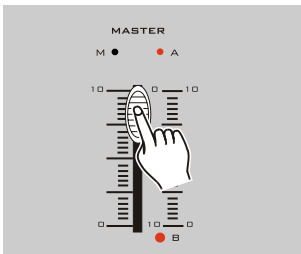
1. Keep pressing the Shift button, tap the Cross Setup button until the Cross On LED lights.

2. Operation Guide

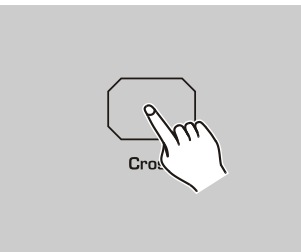
2.2.5 Cross Mode



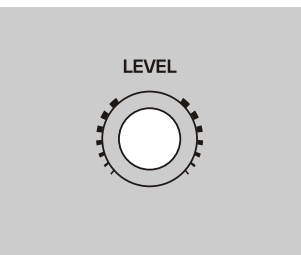
2. Tap the Pattern Up/Down button to select the pattern you wish to run.



3. Move the Master Slider to top, the M LED lights at full intensity.



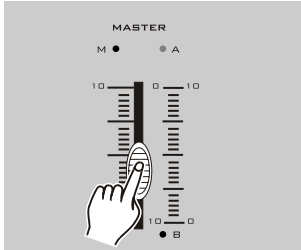
4. Tap the Cross button to activate Cross mode.



5. Turn the Level knob to maximum causing A LED lights at full intensity.

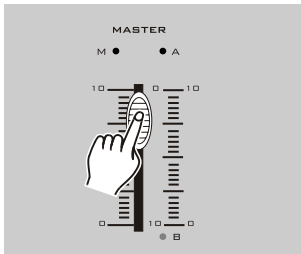
2. Operation Guide

2.2.5 Cross Mode



6. Move the Master Slider slowly down, the A LED fades out and the B LED fades in, the channel 8 fades down and the channel 1 fades up.

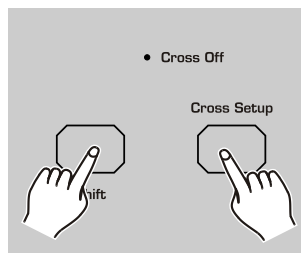
When the Master Slider is fully down, the channel 8 is fully off and the channel 1 is fully on.



7. Move the Master Slider slowly up, the A LED fades in and the B LED fades out, the channel 1 fades down and the channel 2 fades up.

When the Master Slider is fully up, the channel 1 is fully off and the channel 2 is fully on.

8. Repeat steps 6-7 to manually run the pattern step by step.



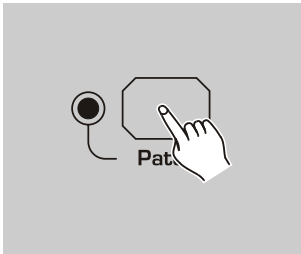
9. Keep pressing the Shift button, tap the Cross Setup button until the Cross Off LED lights indicating Cross is deactivated.

2. Operation Guide

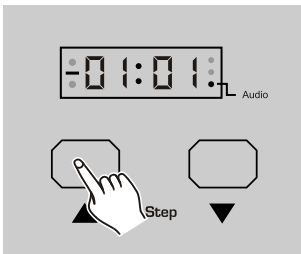
2.3 Patch Mode

In Patch mode, you may easily allocate the outgoing channels(1-16) to your light fixtures(DMX channels 1-96), zero output or full output.

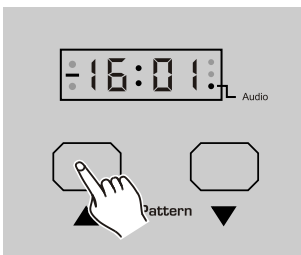
EXAMPLE: Reverse outgoing channels 1-16 with DMX channels 16-1.



1. Press the Patch button until its LED lights indicating Patch mode is active.



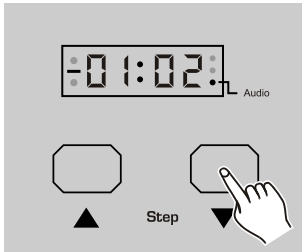
2. Tap the Step Up/Down button until the Segment Display shows "01" in the right two characters.



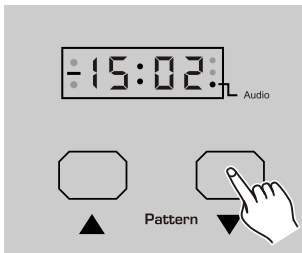
3. Tap the Pattern Up/Down button until the Segment Display shows "16" in the left two characters.
The channel 16 is allocated to the DMX channel 1.

2. Operation Guide

2.3 Patch Mode

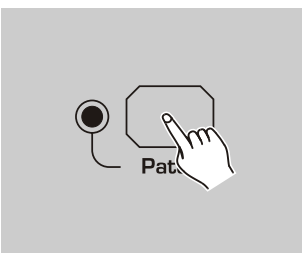


4. Tap the Step Up/Down button until the Segment Display shows "02" in the right two characters.



5. Tap the Pattern Up/Down button until the Segment Display shows "15" in the left two characters.
The channel 15 is allocated to the DMX channel 2.

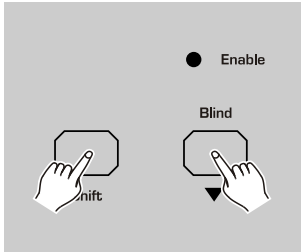
6. Repeat steps 4-5 until channel 1 is allocated to DMX channel 16.



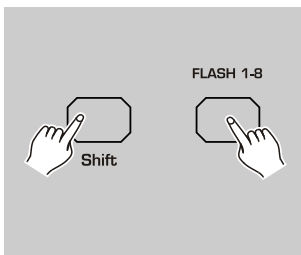
7. Press the Patch button until its LED goes out indicating Patch mode is deactivated.

2. Operation Guide

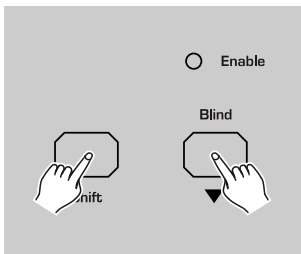
2.4 Blind Mode



1. Keep pressing the Shift button, tap the Blind button until the Enable LED lights indicating Blind mode is active.



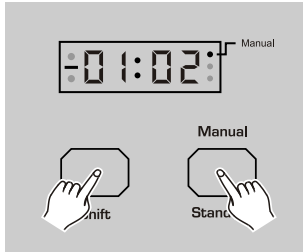
2. Keep pressing the Shift button, tap the desired Flash button, the corresponding channel will be off regardless of the chase of any pattern.



3. Keep pressing the Shift button, tap the Blind button again causing the Enable LED goes out, Blind is deactivated.

2. Operation Guide

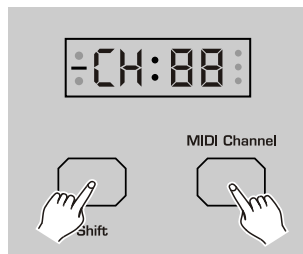
2.5 Manual Operation



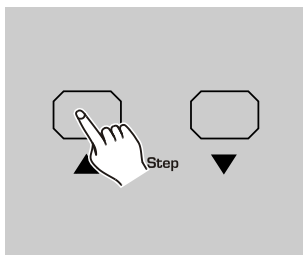
Keep pressing the Shift button, tap the Manual button until the Manual indication in the Segment Display lights indicating Manual is active. Now you can control the channel output temporarily using the Channel sliders, Flash buttons or Latch buttons.

2.6 MIDI Operation

2.6.1 MIDI Channel Setting



1. Keep pressing the Shift button, tap the MIDI Channel button until the Segment Display shows "CH:XX".



2. Tap the Step Up/Down button to select MIDI channel.

3. Press both the Shift and MIDI Channel buttons again until the Segment Display doesn't show "CH" indicating this unit is out of MIDI Channel setting.

2. Operation Guide

2.6.2 MIDI Implementation

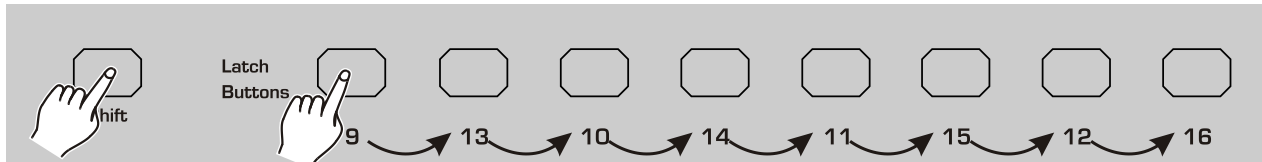
1. During receiving MIDI data, MIDI data will be dumped and the MIDI Signal LED will go out if there is no response within 10 minutes.
2. Be sure to make a MIDI Channel adjustment according to the setting of the MIDI storage unit.
3. All the patterns turned on by MIDI will chase synchronously and not controlled by the Level knob.
4. This unit receives Note On/Off signals according to the following table:

Note NO.	Velocity	Functions
22-81	Pattern Master	Turn On/Off patterns 1-60
82-97	Channel Intensity	Flash Buttons
99		Full On
101		Step
102		Stand By

2. Operation Guide

2.7 Initialization

When malfunction or mess occurs, you may make a initialization to dump the memory.



Keep pressing the Shift button, tap the Latch buttons 9, 13, 10, 14, 11, 15, 12 and 16 in sequence, all LEDs and the Segment Display will go out indicating this unit is initialized. Several latter, this unit recovers normal condition, now you can program the pattern again.

NOTE: This operation does harm to the memory.

Technical Specifications

Power Input	DC 12-20V, 250 mA min.
DMX Output	3 pin female XLR
MIDI Signal	5 pin standard interface
Audio Input	By built-in microphone
Audio Signal	100mV-1Vpp
Dimensions	482x178x73mm
Weight(appro.)	2.3 kg

BLANK