



# LED Master 64

Order code: BOTE04



## Manual

*Please read these instructions carefully before use*

### In the box:

- 1 x LED Master 64 DMX Controller
- 1 x Power adaptor
- 1 x Pair of 19" rack ears
- 1 x Manual

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## 1. Features

1. The LED Master 64 is a user-friendly LED controller
2. Designed to control all LED lighting fixtures with up to 8 channels
3. Control up to 64 channels of 8 LED groups
4. 8 individual buttons for selecting 8 groups of lighting fixtures
5. LED display for easy navigation
6. 8 colour pre-set buttons
7. 6 saved colours with 4 Banks
8. 8 chases, each with up to 32 steps
9. 4 operation modes: Auto Chase, Sound Chase, Manual Control and Fade
10. Optional Foot Controller (CA-8F) for ease of operation

*NOTE: Knowledge of DMX is required to fully utilise this unit.*

## 2. General Instruction

Please read this manual carefully, as it includes important information regarding the units operation, maintenance and technical data. Keep this manual with the unit for future consultation.

### WARNINGS !

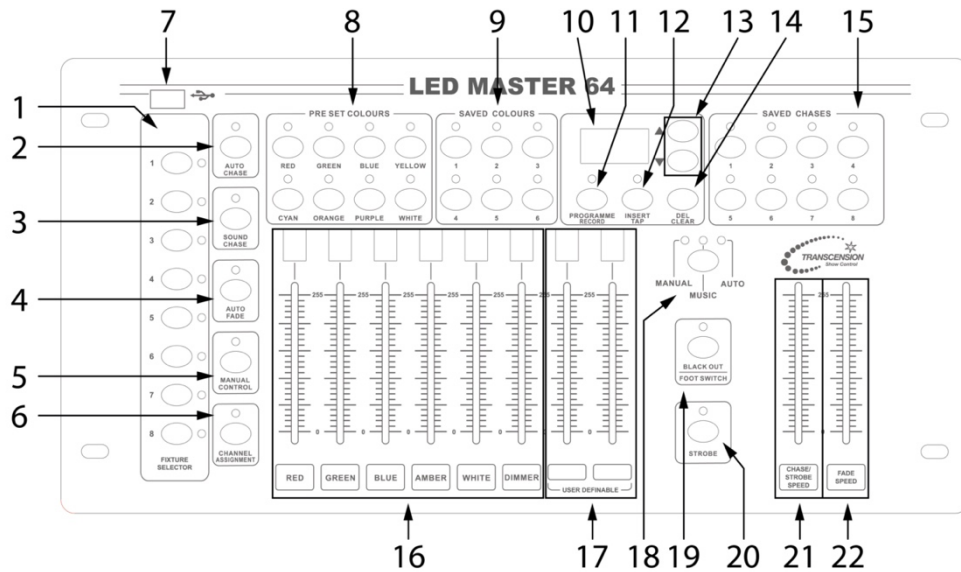
- Avoid any flammable liquids, water or metal objects entering the unit.
- Should any liquid be spilled on the unit, DISCONNECT the power supply to the unit immediately.
- STOP using the unit immediately in the event of serious operation problems and contact your local dealer to have the unit serviced.
- DO NOT open the unit - there are no user-serviceable parts inside.
- NEVER try to repair the unit yourself. Repairs undertaken by unqualified people could cause damage or malfunction.

### CAUTIONS !

- After removing the packing, check that the unit is NOT damaged in any way. If in doubt, DO NOT use the unit and contact the dealer where the item was purchased.
- Packaging material (plastic bags, polystyrene foam, staples, 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: excessive dryness or humidity (ideal conditions are between 35% and 80%), vibrations or bumps, or in places with a temperature of over 45°C/113°F or less than 2°C/35.6°F.
- DO NOT dismantle or modify the unit.

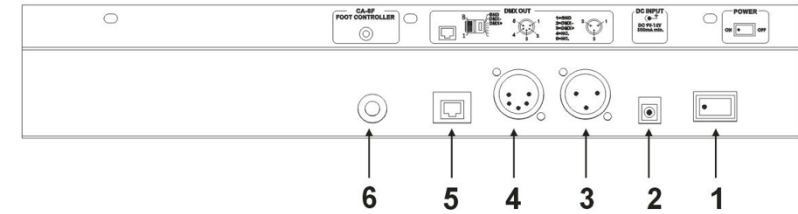
### 3. Overview

#### 3.1 Front View



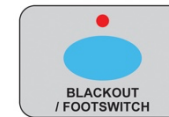
- |                         |   |
|-------------------------|---|
| 1. FIXTURE SELECTOR 1-8 | Use to select fixtures  |
| 2. AUTO CHASE           | Run the built-in chase  |
| 3. SOUND CHASE          | Run the built-in chase to the music   |
| 4. AUTO FADE            | Run the built-in fade   |
| 5. MANUAL CONTROL       | Press the button, for manual control  |
| 6. CHANNEL ASSIGNMENT   | For channel assignment, in programme mode   |
| 7. USB PORT             | Use to update software and connect a gooseneck lamp (not included)  |
| 8. PRE-SET COLOURS      | For instant recall of colours   |
| 9. SAVED COLOURS        | Select 24 colors by UP/DOWN button (4 banks of 6)   |
| 10. LED DISPLAY         | The operation values will show on the LED display   |
| 11. PROGRAMME/RECORD    | Enter or exit program/record mode   |
| 12. INSERT/TAP          | Insert one step/set up a tap speed for chases   |
| 13. UP/DOWN buttons     | Select bank, run chase manually, adjust the sound sensitivity and the speed of chase auto run                     |
| 14. DEL/CLEAR           | Delete preset color, chase or step/clear output   |
| 15. SAVED CHASES        | Use to select chase 1-8   |
| 16. FADER 1-6           | Adjust the output of 1-6 channels   |
| 17. USER DEFINED FADERS | For user-defined operation  |
| 18. MANUAL/MUSIC/AUTO   | When using the CA-8F to control, the corresponding LED will be on indicating Manual Mode, Sound Mode or Auto Mode |
| 19. BLACKOUT/FOOTSWITCH | Used for blackout and to activate CA-8F operation   |
| 20. STROBE              | Activates strobe on all fixtures  |
| 21. CHASE/STROBE SPEED  | Use to adjust the chase speed and set the strobe speed  |
| 22. FADE SPEED          | Use to adjust the fade speed as a percentage of the run time  |

#### 3.2 Rear View



- |                         |                       |
|-------------------------|-----------------------|
| 1 POWER SWITCH          | Power on/off the unit |
| 2 POWER IN              | 9-12DC min 300mA      |
| 3 3pin DMX Out          | 3pin DMX-512 output   |
| 4 5pin DMX Out          | 5pin DMX512 output    |
| 5 RJ45 CONNECTOR        | RJ 45 Cable port      |
| 6 CA-8F FOOT CONTROLLER | CA-8F connector       |

### 4. Operation Guide



When you turn on the power to the LED Master 64, it will continue running the last function/programme from when it was previously powered down.

#### 4.0 Enter Programming mode



To enter the programming mode: Hold **PROGRAM/REC** button for 3 seconds, when the LED display shows LOCK, you should press the **fixture selector button 6** six times to unlock. That means the code is "666666". Then the **PROGRAM/REC** button LED and the LED indicator above the saved colors button, as well as the saved chases button, will blink indicating programme mode is active.

#### 4.1 Channel Assignment

The ability to assign/patch the 8 channels of the LED Master 64 is one of its most powerful features. This gives you the option of customising the controller to the DMX channels of your lighting fixtures. For example: If you have a lighting fixture with the following channels:

- 1 – Master dimmer
- 2 – Red
- 3 – Green
- 4 – Blue

You can now assign/patch the controller in the following way:

Set the MASTER DIMMER fader of the controller to '1'

(If no dimmer channel is present, set to 'n')

Set the RED fader of the controller to '2'

Set the GREEN fader of the controller to '3'

Set the BLUE fader of the controller to '4'

Set all the remaining faders to 'Zero'

When this has been completed the master dimmer, red, green and blue faders will now control the fixture correctly.

Also, you will now be able to use the pre-set colours, auto chase, auto fade etc.

If the controller has been updated to V1.5 or later the user may now patch a virtual dimmer for any fixture that does not feature its own onboard dimmer channel(i.e. 3 DMX channel RGB fixtures). During the patch process please assign the MASTER DIMMER fader to display "n", this will activate the controllers virtual dimmer function. The virtual dimmer will then give control over intensity for all functions of control including manual colours, fades and chases.

*NOTE: If 2 or more channels are set to the same number during assignment they will flash to indicate an error. Please ensure all channels have a different number prior to saving.*

*The only exception to this is '0' or zero, as you can set multiple channels to zero (no DMX output).*



1. Enter programming mode
2. Press **CHANNEL ASSIGNMENT** button for 3 seconds, the

LED indicator above will light indicating the assignment mode is active.

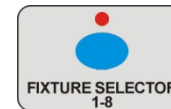


3. Press **FIXTURE SELECTOR 1-8** button to choose units.
4. Use **FADER 1-8** to assign the colour etc for each channel; at this point you can also set any unwanted channels to zero.



5. Press the **PROGRAM/REC** button, and all LED indicators will blink 3 times and then go out, indicating that any changes have been stored successfully.
6. Repeat steps 3-5 to assign all other channels for the remaining fixtures.
7. Hold **PROGRAM/REC** button for 3 seconds to exit programming mode.

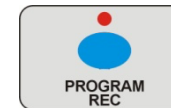
#### 4.2 Store Saved Colours



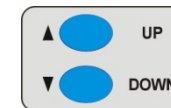
- 1 Enter programming mode.
- 2 Press **FIXTURE SELECTOR 1-8** button to choose units.



- 3 Use fader **FADER 1-8** to adjust the output.



- 4 Press **PROGRAM/REC** button once.



- 5 Press **UP/DOWN** button to choose bank 1-6 to store saved color (Jump this step if you have chosen a bank before).

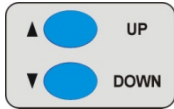


- 6 Press **SAVED COLOURS** button, and all LED indicators will blink 3 times and then go out, the corresponding LED will then be

blinking, indicating that it has stored successfully (when the LED indicator is off, this means there is no colour saved).

- 7 Repeat steps 2-6 to store more saved colours.
- 8 Hold **PROGRAM/REC** button for 3 seconds to exit programming mode, the LED indicator above **PROGRAM/REC** will go off.

#### 4.3 Delete Saved Colors



- 1 Enter programming mode.
- 2 Use **UP/DOWN** button to choose bank 1-6 to save the colour into (Jump this step if you have chosen bank before).



- 3 Hold **DEL/CLEAR** button, press **SAVED COLOURS 1-6**, all LEDs will blink 3 times and then go out, the corresponding LED will then go off, indicating the saved colour has been deleted successfully.



- 4 Repeat 2-3 steps to delete more colour presets.
- 5 Hold **PROGRAM/REC** button for 3 seconds to exit programming mode, the LED above **PROGRAM/REC** button will go off.

#### 4.4 Program Chase



- 1 Enter programming mode.
- 2 Press **CHASE 1-8** button to choose chase which you want to store in.



- 3 Press **FIXTURE SELECTOR 1-8** button to choose units, using fader 1-8 to adjust the light effect, or open a previously saved colour.

- 4 Press **PROGRAM/REC** button, all LEDs will blink 3 times and then go out indicating that one step has stored successfully (it will show 'NULL' and will not store if all outputs are '0').
- 5 Repeat steps 3-4 to store more steps, each chase can store 32 steps maximum, it will show "FULL" when up to 32 steps.
- 6 Repeat steps 2-5 to store more chases.
- 7 Hold **PROGRAM/REC** button for 3 seconds to exit programming mode, the LED indicator above **PROGRAM/REC** will go off.

**ATTENTION:** Before using any saved color or lighting effect, press **DEL/CLEAR** button to clear any output you set inadvertently, so that you can avoid storing any unwanted lighting effect.

#### 4.5 Insert Step to Chase



- 1 Enter programming mode.
- 2 Press **CHASE 1-8** button to choose the desired chase to insert step.



- 3 Press **INSERT/TAP** button, the LED indicator above it will go on, the present step will show on the display (for example, it will show 'ST00' when there is no step).

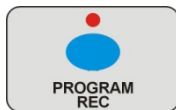


- 4 Use **UP/DOWN** button to select the position of inserted steps (If you want to insert a fifth step, you should set the present step to be 'ST05').



- 5 Press **FIXTURE SELECTOR 1-8** button to choose fixture, use **UP/DOWN** button to choose saved color or push the **FADER 1-8** to adjust the lighting effect.





- Press **PROGRAM/REC** button, all LEDs will blink 3 times and then go out indicating the new step was inserted correctly.

- Repeat steps 3-6 to insert more steps, 32 steps maximum, if this is exceeded it will show "FULL".

- Hold **PROGRAM/REC** button for 3 seconds to exit programming mode, the LED indicator above **PROGRAM/REC** will go off.

#### 4.6 Delete Step from Chase



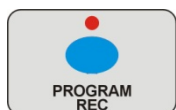
- Enter programming mode.
- Press **CHASE 1-8** button, to choose the chase whose step you desire to delete.
- Press **INSERT/TAP** button, the LED indicator above it will light up, the present step will show on the display (it will show "ST00" if no step has been stored).



- Press **UP/DOWN** button to choose the step desired to delete (If you want to delete the fifth step, set the present display to "ST05").



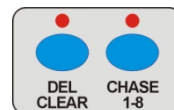
- Press **DEL/CLEAR** button, all LEDs will blink 3 times and then go out indicating it has been deleted successfully. (The steps behind it will move forward one step, for example, if you delete the fifth step, the sixth step will move to be the fifth step. If there is no step behind the step deleted, it will show the last step. Delete all steps, and then it will show "NULL".)



- Repeat steps 4-6 to delete more steps.
- Hold **PROGRAM/REC** button for 3 seconds to exit programming

mode, the LED indicator above **PROGRAM/REC** will go off.

#### 4.7 Delete Chase



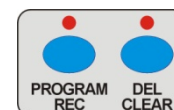
- Enter programming mode.
- Hold **DEL/CLEAR** button, and press one of the **CHASE 1-8** buttons. All LEDs will blink 3 times and then go out, the corresponding LED indicator will go off indicating the chase has been deleted successfully.



- Repeat steps 2-3 to delete more chases.
- Hold **PROGRAM/REC** button for 3 seconds to exit programming mode, the LED indicator above **PROGRAM/REC** will go off.

#### 4.8 Factory Reset

**Be careful, factory reset will delete all the settings!**



- Turn off the power.
- Press the **PROGRAM/REC** and **DEL/CLEAR** buttons at the same time, turn on the power, wait until all LEDs are blinking, release the buttons, the LEDs will stop blinking indicating the factory reset has been successful.

#### 4.9 Manual Mode



- Ensure the LED above the **BLACK OUT** button is off.
- Press **FIXTURE SELECTOR 1-8** button to choose units desired.



- Push **FADER 1-8** to adjust the effect.



#### 4.10 Run Saved Colours



- 1 Ensure the LED above the **BLACK OUT** button is off.
- 2 Use **UP/DOWN** button to choose BANK 1-6 to recall the SAVED COLOURS.
- 3 Press **saved colour1-6** button to recall the SAVED COLOURS in the bank selected.

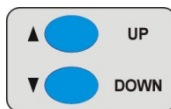
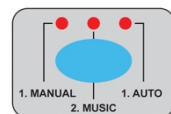
#### 4.11 Run CHASE



Be sure there are CHASES stored. Press **CHASE 1-8** buttons to run CHASE directly, the corresponding LED will be on. If you choose more than one CHASE at a time, then the first chase selected LED will be on and others will be blinking, all the CHASES will cycle through one by one.

There are three modes: Manual Mode, Sound Mode and Auto mode.

##### A. Manual mode



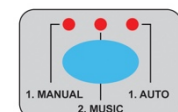
- 1 Ensure the LED above the **BLACK OUT** button is off.
- 2 Press **CHASE 1-8** button to run the CHASE, the display will show the present CHASE selected.
- 3 Press the **MANUAL/MUSIC/AUTO** button until the MANUAL LED is on indicated manual mode has been selected.
- 4 Press the **UP/DOWN** button to step through the chase scene by scene.

##### B. Sound Mode



- 1 Ensure the LED above the **BLACK OUT** button is off.
- 2 Press **CHASE 1-8** button to select the CHASE, the display will show the present CHASE.
- 3 Press **MANUAL/MUSIC/AUTO** button to select Sound Mode, the MUSIC LED will now be on indicating Sound Mode is selected.
- 4 Press **UP/DOWN** button to adjust the sound sensitivity, the CHASE will now run to the music.

##### C. Auto mode



- 1 Ensure the LED above the **BLACK OUT** button is off.
- 2 Press **CHASE 1-8** button, the display will show the selected CHASE.
- 3 Press the **MANUAL/MUSIC/AUTO** button to select Auto Mode, the AUTO LED will now be on indicating Auto Mode has been selected.
- 4 Use the **CHASE SPEED** fader to adjust the CHASE speed, or use **FADE SPEED** to adjust the fade time. Press **UP/DOWN** button to set the run time for CHASE (It's useful when running more than one CHASE at a time). You can also change the CHASE speed via **INSERT/TAP** button. When running the CHASE, press the **INSERT/TAP** button and the indicator will be blinking, then press the **INSERT/TAP** button and the indicator will go off, the blinking time will then be the CHASE speed.

#### 4.12 Run Pre-Set Colours

*NOTE: That before running the Pre-Set Colors ensure that the procedure 4.1 channel assignments have been completed, or it will result in random colours or no operation.*

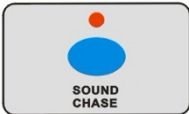
There are three modes: Auto Chase Mode, Sound Mode, Auto Fade. Before you choose the three modes, you should select fixtures 1-8 first, otherwise the modes will be unavailable.

##### A. Auto Chase Mode

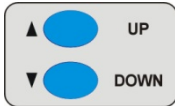


- 1 Ensure the LED indicator above the **BLACK OUT** button is off.
- 2 Press the **AUTO CHASE** button, the LED indicator above it will be on indicating that it is in Auto Mode.
- 3 Use the **CHASE SPEED** fader to adjust the CHASE speed.

##### B. Sound Mode



- 1 Ensure the LED indicator above the **BLACK OUT** button is off.
- 2 Press the **SOUND CHASE** button, the LED indicator will be on indicating that Sound Mode has been selected.



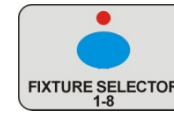
- 3 Press the **UP/DOWN** button to adjust the sound sensitivity, the CHASE will now run to the music.

##### C. Auto Fade mode

1. Ensure the LED indicator above the **BLACK OUT** button is off.
2. Press the **AUTO FADE** button, the LED indicator above it will be on indicating that the Auto Fade Mode has been selected.
3. Use the **FADE SPEED** to adjust the fade time.

#### 4.13 Manual control

Manually control this unit when running COLOUR PRESET, CHASE or FADE.



- 1 Ensure the LED indicator above the **BLACK OUT** button is off.

- 2 Select COLOUR PRESET or CHASE.

- 3 Press **FIXTURE SELECTOR 1-8** button to choose units.



- 4 Use **FADER 1-8** to adjust the lighting effect, the changes of the channel values are independent of the COLOUR PRESET or CHASE.



- 5 To revert back to normal, simply take down any sliders you adjusted in manual mode and press **DEL/CLEAR**.

#### 4.14 Strobe

Hold down the **Strobe** button, all the lights will strobe, and at this time you can adjust the strobe speed by adjusting the Strobe Speed Fader. When you release the strobe button, the speed will be saved in the memory.

#### 4.15 Blackout

Press the **Blackout** button, the LED indicator above it will light up, you have now entered the Blackout mode. When you hold the Blackout button for about 3 seconds, the LED indicator above it will blink, you have now entered into the Foot Switch (CA-8F) Mode. At this time, on the controller, only the Dimmer Fader can be used to adjust the total lighting intensity, any other button on the panel will deactivated. You can use the foot switch (CA-8F) to control the LED Master 64.

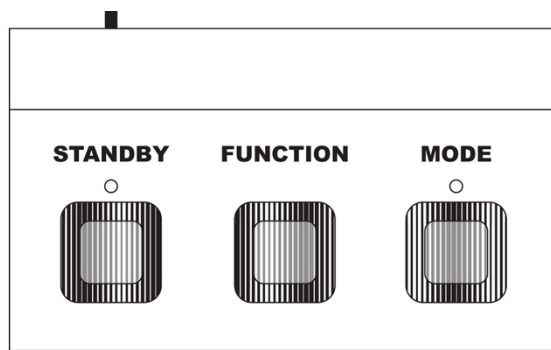
#### 4.16 Foot Switch (CA- 8F)

The LED Master 64 will work with the CA-8F, when the CA-8F is connected to the LED Master 64, hold the **BLACKOUT/FOOT SWITCH** button for 3 seconds and the



LED indicator above it is blinking the CA-8F has been activated.

1. **STANDBY** button used to activate the CA-8F or interrupt the connection.  
Hold it for about 2 seconds, the LED indicator will go out, then the CA-8F has been activated.
2. **MODE** button is used to change the mode. Pressing it when the LED indicator above is lit up but not flashing, means it has entered into the saved chase mode, pressing the **FUNCTION** button can change the chase.
3. When pressing the **MODE** button till the indicator above is lit up and flashing, means it has entered into the step mode, pressing the **FUNCTION** button will change the step and the number of steps will display on the screen.
4. When pressing the **MODE** button till the indicator above it is off and then press the **FUNCTION** button, all the fixtures' channels will be on 255, for full on/flood.



CA-8F Foot controller

#### 4.17 Update by USB drive

Power off the unit, and then insert the USB drive with the specific program in it. Hold **PROGRAM/REC** button, **DOWN** button and **MANUAL/MUSIC/AUTO** button simultaneously, then power on the unit, when all the lights light up, you can then release the button. The LED display will show 'USB-LINK'. The program will update automatically, after it has finished the update, the LED display will show 'UPDAP OK'. You can restart the unit and the unit has been updated successfully.

*NOTE: Please use memory stick of between 1GB-2GB. The format of the memory disk should be FAT16 or FAT32 and the memory disk should be clear before starting.*

#### 4.18 Upload files to USB memory stick

You can save the channel assignment data onto your memory stick in the following way:

1. Insert the USB memory stick into the controller.
2. Hold **BANK UP** and **MANUAL/MUSIC/AUTO** buttons at the same time, the LED display will then show 'UPF' (upload files). You can then press any of the fixture buttons that you have assigned to your fixtures the data will then be saved. When it has completed the display will show 'OK' and the controller will exit the upload mode.

#### 4.19 Downloading files to the controller from USB memory stick

1. Insert the USB memory stick into the controller.
2. Hold **BANK DOWN** and **MANUAL/MUSIC/AUTO** buttons at the same time, the LED display will then show 'DLF' (download files). If the memory stick has assignment data saved onto it, then the LEDs next to the fixture buttons will light up to show that data is available to download. Simply press any of the fixture buttons that are illuminated and that data will be downloaded. When the download has completed the display will show 'OK' and the controller will exit download mode.

*NOTE: If no data is saved onto the USB memory stick and you try to download, the display will show 'LOAD' and no transfer will take place.*

#### 4.19 DMX Address

Fixture Number	DMX Start Address
Fixture 1	1
Fixture 2	9
Fixture 3	17
Fixture 4	25
Fixture 5	33
Fixture 6	41
Fixture 7	49
Fixture 8	57

**Technical specifications:**

*Power Input:* 9-12 DC min 300mA

*DMX Output:* 3/5 pin DMX output and RJ45 port

*Dimensions:* 280 x 170 x 66 mm

*Weight:* 1.8kgs

EC Declaration of Conformity

We declare that our products comply with the following specification  
and bears the CE mark in accordance with the provision of the  
Electromagnetic Compatibility (EMC) Directive 89/336/EEC.

EN55103-1:199601-2; EN55103-2:1996;

EN61000-3-2:2000+A2:2005;

EN61000-3-3:1995+A1:2001+A2:2005.

&

Harmonized Standard

EN 60598-1: 2004

IEC 60598-1:2003+ corrigendum 2004

Part 1:General requirements and test

Following the provisions of the low voltage directive  
73/23/EEC and 93/68/EEC