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# DMX48

24 Channel DMX controller



## User's instruction manual

This manual contains important information about the safe installation and use of this product  
Please read this instruction manual carefully before installing or operating  
Please keep these instructions in a safe place for future reference



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Please note that as part of our ongoing commitment to continuous improvement and product development, the specifications in this manual are subject to change without notice. Whilst every care has been taken in the preparation of this manual we reserve the right to change specifications in the course of product improvement.

## WHAT IS INCLUDED

- DMX48
- Input 100-240V; Output 12V, 1.25A
- Manual with warranty card

## SAFETY INSTRUCTIONS

- Always make sure that you are connecting to the proper voltage and that the line voltage you are connecting to is not higher than that stated on the rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating..
- In the event of serious operating problem, stop using the unit immediately. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- Don't connect the device to a dimmer pack.
- Make sure power cord is never crimped or damaged.
- Never disconnect power cord by pulling or tugging on the cord.

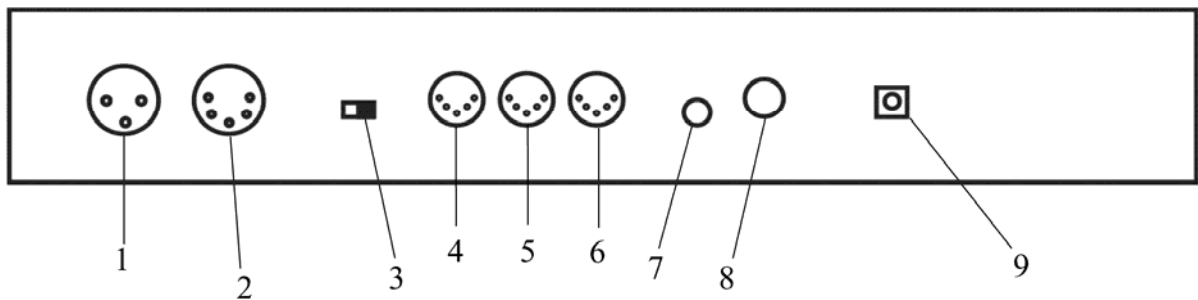
### CAUTION:

**There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself**

# FEATURES

- Universal DMX-512 controller
- Controls up to 48 DMX channels
- 8 pages of 12 playbacks faders,
- 6 sets of chases containing 240 scenes
- Program fade and speed time into each step
- Reversible sliders
- Re-assignable channels
- Sequential linking of chases
- Fog & strobe control buttons
- Grab any fixture on the fly
- Beat activation, tap-sync and auto run
- 6 space (6U) 19" rack mount
- MIDI compatible

## Product Overview (rear panel)



ITEM	BUTTON OR FADER	FUNCTION
1	3-pin DMX output connector	DMX control signal
2	5-pin DMX output connector	DMX control signal
3	Polarity switch	Used to select DMX polarity
4	MIDI Thru	MIDI port for connecting to a sequencer or MIDI device
5	MIDI Out	MIDI port for connecting to a sequencer or MIDI device
6	MIDI In	MIDI port for connecting to a sequencer or MIDI device
7	Audio Input	This jack accepts a line level audio input signal ranging from 100mV to 1Vpp
8	Remote Input	Blackout and Full On may be controlled by a remote control using a standard ¼" jack
9	DC Input	DC 12-20V, 500mA Min.

# OPERATION INSTRUCTIONS

## SETUP:

### SETTING UP THE SYSTEM

- 1) Place the DMX48 on a level surface. Note! DMX48 can also be rack mounted, occupying six rack spaces (6U).
- 2) Plug the AC to DC power supply into the system back panel and into the mains outlet.
- 3) Plug in your DMX cable(s) to your intelligent lighting as described in the respective fixture's manual. For a quick overview of DMX see the "DMX Primer" on page 19.
- 4) Reset the system using the instructions on page 11 under **ERASE ALL SCENES**.

### PHYSICAL FADER ASSIGNMENT (OPTIONAL SETUP)

Use this feature to combine or unify fixture control attributes for different fixtures. For example; if you were controlling 4 moving mirrors and 4 moving yokes, the color, gobo and dimmer channels may not line up ideally on the physical faders. Use this function to re-assign the dimmer, color and gobo channels to faders 1, 2 and 3. From now on you will be able to control the same attributes on all fixtures using the same fader location. This is also most useful when needing to combine all colors together.

### ACTION

1. Press and hold **RECORD** button.
2. While holding the Record button, press the Flash button #6 (3) times.
3. Press the Flash button that you wish to assign the DMX channel output to.
4. While holding Record, press the Flash button corresponding to the DMX output that you wish to assign the Fader to.
5. Repeat steps 2 ~ 3 as often as necessary.
6. Press and hold Record & Rec Exit to exit the mode.

*For example: you wish to assign Fader #1 to output to DMX channel #5.*

- 1) Hold the Record button & press Fader#6 (3) times.
- 2) Press the Flash button #1.
- 3) While holding the Record button, press the Flash button #5.

## SWITCHING BETWEEN PAGE AND PAGE B (CHANNELS 1-24 AND 25-48)

### ACTION

- 1) Press and hold **Record** & press **Page A\_B** button. If you are on Page A, then this will bring you to Page B. If you are on Page B, then this will bring you to Page A.

# PROGRAMMING

## ENTERING PROGRAM MODE (RECORD ENABLE)

1. While holding the **RECORD** button, tap the Flash buttons 1-5-6-8 in sequence.
2. Release the **RECORD** button. The Record LED lights up;

## CREATE A SCENE

A scene is a static lighting state. Scenes are stored in the temporary memory, until they are transferred to one of the playback faders. You may create a single scene or a succession of up to 999 steps per Scene.

### ACTION

- 1) **Record** enable.
- 2) Select the 1-24 Single mode by tapping the **Mode Select** button. This will give you control of all 24 channels of the first page.
- 3) Compose a look by moving the **FADERS**. (Changes in fixture attribute such as colors and gobos, or simply dimmer values).
- 4) Press **Record** to save the look into the temporary memory.
- 5) Repeat steps 2 ~ 4 until you have your desired scene.
- 6) Adjust the **Speed** and **Fade** sliders to achieve the desired amount of time a scene will be held in a chase (speed) and the amount of time allowed for the fixtures to move from one scene to the next (fade).
- 7) Select a Scene master to store your scene. Tap the Page button to select a page (1-4).
- 8) Press and hold the Record button & tap the Flash button for the scene that you wish to store it to. All LEDs will flash indicating the scene has been programmed into memory.
- 9) You can continue programming or exit. To exit program mode, press and hold the Record button & tap the Rec Exit button.

## **EDIT ENABLE**

### **ACTION**

- 1) Record enable.
- 2) Use the **Page** button to select the page the program you wish to edit is on.
- 3) Tap the Mode Select button to select **Chase ◀▶ Scenes**.
- 4) Press and hold the **Edit** button & tap the **Flash button** (13-24) of the **Scene** you wish to edit.
- 5) Release the **Edit** button. The relevant **Scene** Led should light, indicating you are in **Edit** mode.

## **ERASE A PROGRAM**

### **ACTION**

- 1) Record enable.
- 2) Use the **Page** button to select the page the **Scene** you wish to erase is on.
- 3) Press and hold the **Edit** button & tap the Flash button (13-24) twice of the Scene you wish to erase.
- 4) Release the 2 buttons. The LED for the corresponding program should light, indicating that it has been selected.
- 5) Press the **Delete** button. All LEDs should light, indicating the program is erased.

## **ERASE ALL SCENES**

### **ACTION**

- 1) Record enable
- 2) Press and hold **RECORD**.
- 3) While holding Record button, tap the flash buttons in the following sequence: 1-3-2-3. Release the Record button.
- 4) All LEDs should light, indicating all programs have been erased.
- 5) Press and hold **RECORD & REC EXIT** to exit the mode.

### **Warning:**

This will reset the controller to its factory defaults.  
This will erase all programs and settings.

## RECORD CLEAR

### ACTION

- 1) Record enable.
- 2) Record a scene with 1 or more steps.
- 3) If you are not satisfied with the scene, you may press and hold the **Record** button & tap the **Page/REC CLR** button. All LEDs will flash, indicating the scenes have been cleared.

## DELETE A STEP OR STEPS

### ACTION

- 1) Enter the **EDIT** mode.
- 2) Tap the **Step** button to scroll to the step you wish to delete.
- 3) Tap the **Delete** button when you reach the step you wish to delete. All LEDs will light, indicating the deletion of the step.
- 4) Repeat steps 2 and 3 until all of the unwanted steps have been deleted.
- 5) Press and hold the **Record & Rec Exit** button. The **Scene** button LED will turn off, indicating that the Edit mode has been exited.

## INSERT A STEP OR STEPS

### ACTION

- 1) Record a scene or scenes you wish to insert.
- 2) Be sure you are in **Chase ◀▶ Scene** and enter the **EDIT** mode.
- 3) Tap the **Step** button to scroll to the step which you wish to insert the step before. You may read the step from the display.
- 4) Tap the **Insert** button to insert the step you've created before.
- 5) Exit **EDIT** mode.

## MODIFY A STEP OR STEPS

### ACTION

- 1) Enter **EDIT** mode.
- 2) Press and hold the **Up** button if you want to raise the intensity. Press the **Down** button if you want to lower the intensity.
- 3) Tap the **Step** button to scroll to the step which you wish to insert the step before. You may read the step from the display.
- 4) While holding the **Up** or **Down** button, tap the **Flash** button corresponding to the DMX channel of the **Scene** you wish to modify until you reach the desired intensity value read from the display. Then, you may tap the **Flash** buttons until you are satisfied with the new **Scene**.
- 5) Repeat steps 2, 3, and 4 until all the steps have been modified.
- 6) Exit **EDIT** mode.

# PLAYBACK

This controller uses the Channel Faders and Channel Flash buttons for multiple uses. In this occurrence, Channel Faders 13-24 (37-48) are used for the playing back of Scenes already recorded. This is only when the controller is in the **Chase ◀▶ Scene** mode. In this instance, **Master Fader A** will control the manual fader controls, while **Master Fader B** will control the Scenes being played back.

## PLAYING A SCENE

### ACTION

- 1) Tap the Mode Select button to select **Chase ◀▶ Scene** mode.
- 2) Tap the **Page** button to select the correct page the program you wish to run is located.
- 3) Push master Slider B to its maximum position (fully down).
- 4) Move the desired **Channel** slider (13-24) to its maximum, and the **Scene** will fade in depending upon current fade time.
- 5) Move the channel slider to adjust the output of the current program.

## PLAYING A SCENE TO AUDIOTRIGGERING

### ACTION

- 1) Select your **Scene** as described in the above section.
- 2) Tap the **Audio** button until its LED lights, indicating **AUDIO** mode is active.
- 3) Use the **Audio Level** slider to adjust the sensitivity.
- 4) To return to normal mode, tap the **Audio** button a second time, causing its LED to go out. **AUDIO** mode is disengaged.

## PLAYING A SCENE WITH THE SPEED SLIDER

### ACTION

- 1) Select your Scene as described in the above sections.
- 2) Move the Speed slider to SHOW MODE position (fully down).
- 3) Press and hold the Rec Speed button & tap the corresponding Flash button (13-24). The Scene tapped will no longer run with the standard beat.
- 4) Now, you may move the Speed slider to select your desired speed.



## PLAYING A SCENE WITH THE STANDARD BEAT

### ACTION

- 1) Tap the Mode select button to select Chase ◀▶ Scene mode.
- 2) Tap the Park button to select Mix Chase mode. The LED lights, indicating the selection.
- 3) Select your Scene as described in the previous sections.
- 4) Move the Speed slider until the display reads your desired value.
- 5) Press and hold Rec Speed button & tap the Flash button (13-24) to store the Scene. The Scene will now run with the set time or beat when engaged.
- 6) Repeat steps 4 & 5 to set a new beat time.

## CHANGE SPEED MODE BETWEEN 5 & 10 MINUTES

### ACTION

- 1) Press and hold the Record button.
- 2) Tap the Flash button 5 or 10 ( ) times while holding down the Record button.
- 3) The 5min or 10min Led should light, indicating the Speed the slider is set to run.

## AUXILIARY CONROLS

This is the process of assigning the Auxiliary controls. These will act as shortcuts and are most commonly used for DMX strobe lights or DMX fog machines. However, they are not limited to these functions, such as Pan/tilt control-very useful for remote followspot controls.

### ACTION

- 1) Press & hold RECORD & tap the Flash button 7 or 8 (3) times. The display should indicate activation of the mode.
- 2) There are 3 functions. **FUNC 1** states that the Auxiliary control is not assigned to any channel. **FUNC 2** refers o the auxiliary controls working much like the channel fader along with the flash buttons. **FUNC 3** is somewhat different. The rotary knob acts to set the total output of the flash button below it.
- 3) While holding down the **RECORD** button, select the function you wish for the auxiliary control by pressing **Flash** button 1, 2, or 3. Release the buttons.
- 4) To assign the auxiliary to a channel, press the **Flash** button for the channel you wish to assign the auxiliary control to. This sets the channel assignment. The corresponding Led above the channel will light, indicating that the channel has ben assigned.
- 5) Record exit.

## MIDI OPERATION

The controller will only respond to MIDI commands on the MIDI channel that it is assigned to. All MIDI control is performed using Note on commands. All other MIDI instructions are ignored. To stop a chase, send the **blackout on** note.

### SETTING MIDI IN

#### ACTION

- 1) While holding down the **RECORD** button, simultaneously tap Flash button #1 three times. The display reads MIDI CHANNEL IN to indicate channel setup is available.
- 2) Select the MIDI control channel (1~16) by tapping Flash buttons 1~16. The relevant channel LED lights indicating MIDI IN channel is set.
- 3) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.

MIDI NOTE	FUNCTION (TURN ON/OFF)
27-69	Turn on or off program 1-48
70-93	Activate Channel 1-24
94	FULL-ON
95	DARK (momentary blackout)
96	HOLD
97	Turn on or off AUDIO
98	MODE: CHASE ◀ ▶ SCENE
99	MODE: 1-12A 1-12B
100	MODE: 1-24A
101	Step
102	BLACKOUT

### SETTING MIDI OUT

#### ACTION

- 1) While holding down the **RECORD** button, simultaneously tap Flash button #2 three times. The display reads MIDI CHANNEL OUT to indicate channel setup is available.
- 2) Select the MIDI control channel (1~16) by tapping Flash buttons 1~16. The relevant channel LED lights indicating MIDI OUT channel is set.
- 3) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.

## RECEIVING MIDI FILE DUMP

### ACTION

- 1) While holding down the **RECORD** button, simultaneously tap Flash button #3 three times. The display reads MIDI FILEDUMP RECVING 000% when the device is in the correct mode.
- 2) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.

## SENDING MIDI FILE DUMP

### ACTION

- 1) While holding down the **RECORD** button, simultaneously tap Flash button #4 three times. The display reads MIDI FILEDUMP SENDING 000% when the device is in the correct mode.
- 2) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.

## SENDING MIDI FILE DUMP

### ACTION

- 3) While holding down the **RECORD** button, simultaneously tap Flash button #4 three times. The display reads MIDI FILEDUMP SENDING 000% when the device is in the correct mode.
- 4) While holding down **RECORD**, tap the **REC EXIT** button to exit MIDI setting.



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