PRO AUDIO SERIES

612804

40-Watt MOVING LED
Beam Stage Light (RGBW)
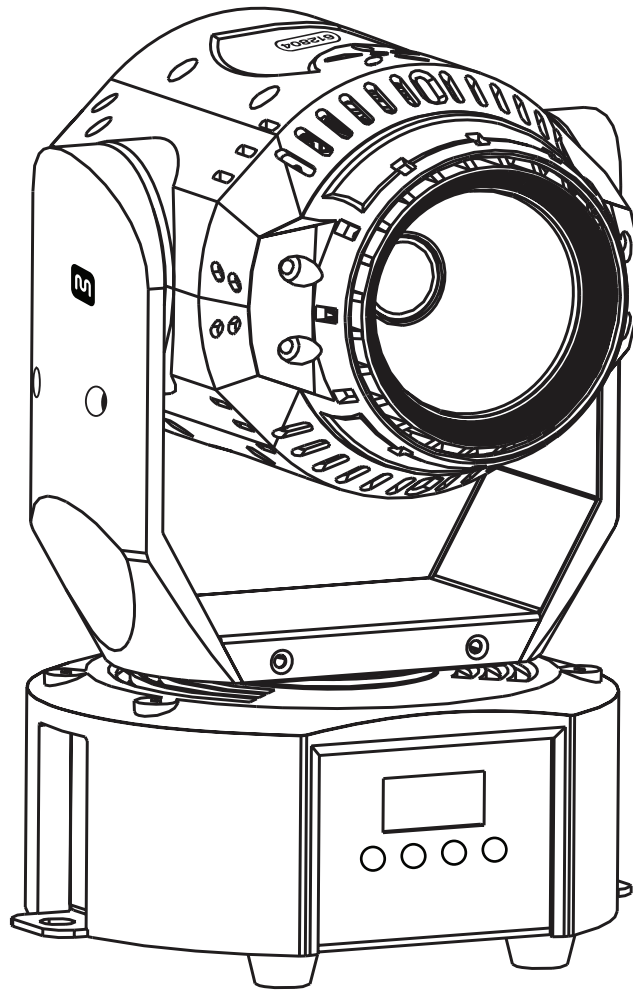
USER'S MANUAL

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SAFETY WARNINGS AND GUIDELINES

Do not expose this device to water or moisture of any kind. Do not place drinks or other containers with moisture on or near the device. If moisture does get in or on the device, immediately unplug it from the power outlet.

This device is intended for indoor use only.

This device uses a grounded power cord and requires a ground connection for safe operation. Ensure that the power source has a proper ground connection. Do not modify the plug or use a "cheater" plug to bypass the ground connection.

Ensure that the power outlet used to connect this device does not exceed the rated maximum voltage, listed on the back panel of the device.

Ensure that power is turned off and disconnected before making any electrical connections.

Disconnect from the power source during lightning storms or when not in use.

Take care to prevent damage to the power cord. Do not allow it to become crimped, pinched, walked on, or become tangled with other cords.

When disconnecting the power cord do not pull on the cord itself. Instead, grasp the plug connector head to disconnect it from the power socket.

The power cord uses the US standard color coding with green for ground.

This device has no user serviceable parts. Do not attempt to open, service, or modify this device.

Do not use chemical cleaners or solvents to clean the cabinet. Use only a soft dry cloth. For stubborn dirt, moisten the cloth with warm water.

This device ventilates excessive heat through the slots and openings in the case. Do not block or cover these openings. Ensure that the device is in an open area where it can get sufficient airflow to keep from overheating.

Ensure that there are no flammable materials within 0.5m (20 inches) of the light.

INTRODUCTION

Thank you for purchasing the Monoprice 612804 40-watt Moving LED Beam Stage Light! Please read this manual before attempting to operate the light.

This light accepts 100 ~ 240 VAC and consumes 60 watts of power. It features a sound activation mode, so it can automatically respond to musical content, as well as several predefined automatic modes. It uses 9 and 12-channel DMX modes.

PACKAGE CONTENTS

After receiving the product, please inventory the contents to ensure you have all the proper parts, as listed below. If anything is missing or damaged, please contact Monoprice Customer Service for a replacement.

    1x 40-watt Moving LED Beam Stage Light

    1x AC power cable (IEC 60320 C13 to NEMA 5-15)

    1x User's manual

FEATURES

- DMX512, Sound Activated, and Master/Slave control modes
- 540-degree pan range
- 220-degree tilt range
- 9 and 12-channel DMX modes
- Eight automatic modes
- M10 load-bearing mounting point for suspended installations
- Cooling fan
- Static operating modes

PRODUCT OVERVIEW
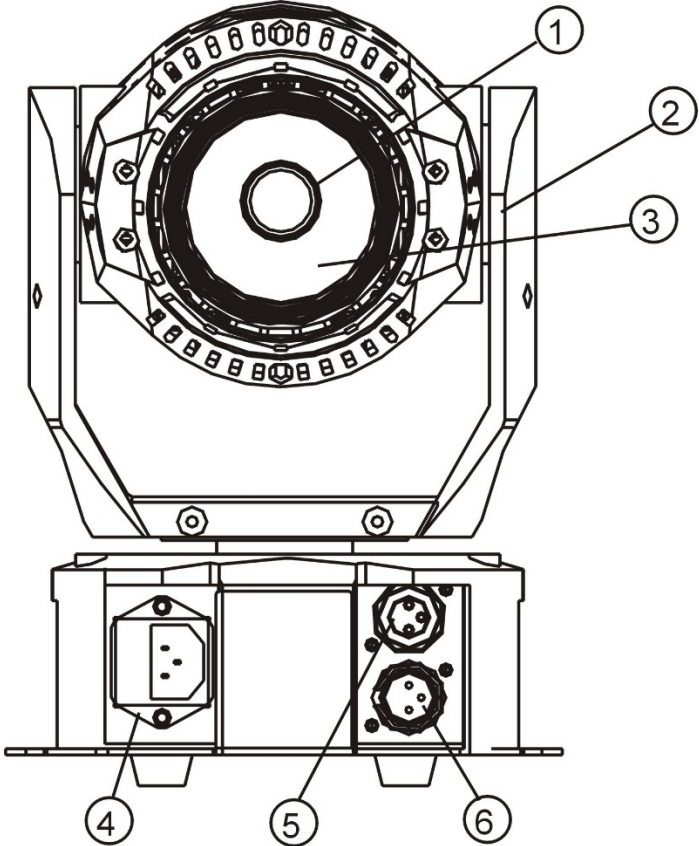
① Led

② Yoke

③ Led Lens

④ Power in

⑤ DMX in

⑥ DMX out

⑦ Fan

⑧ LED-Display

⑨ Enter-button

⑩ Down-button
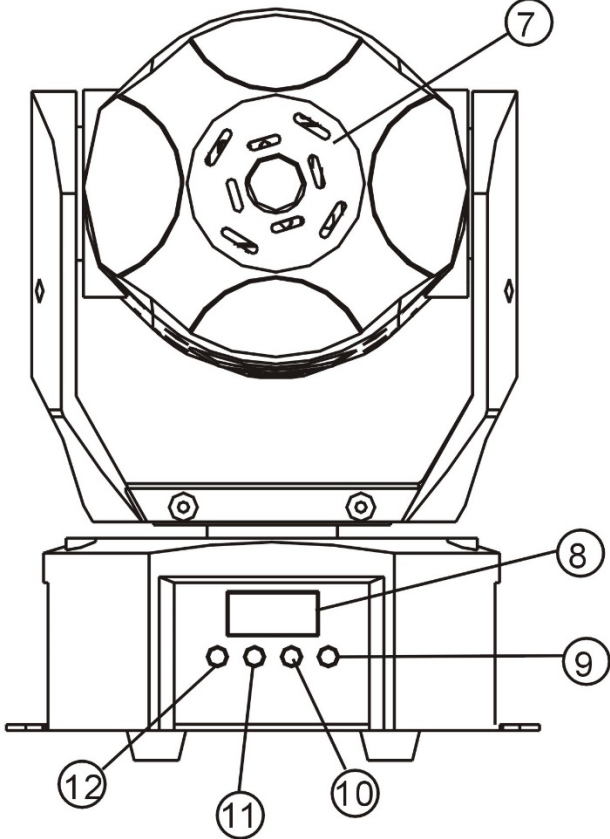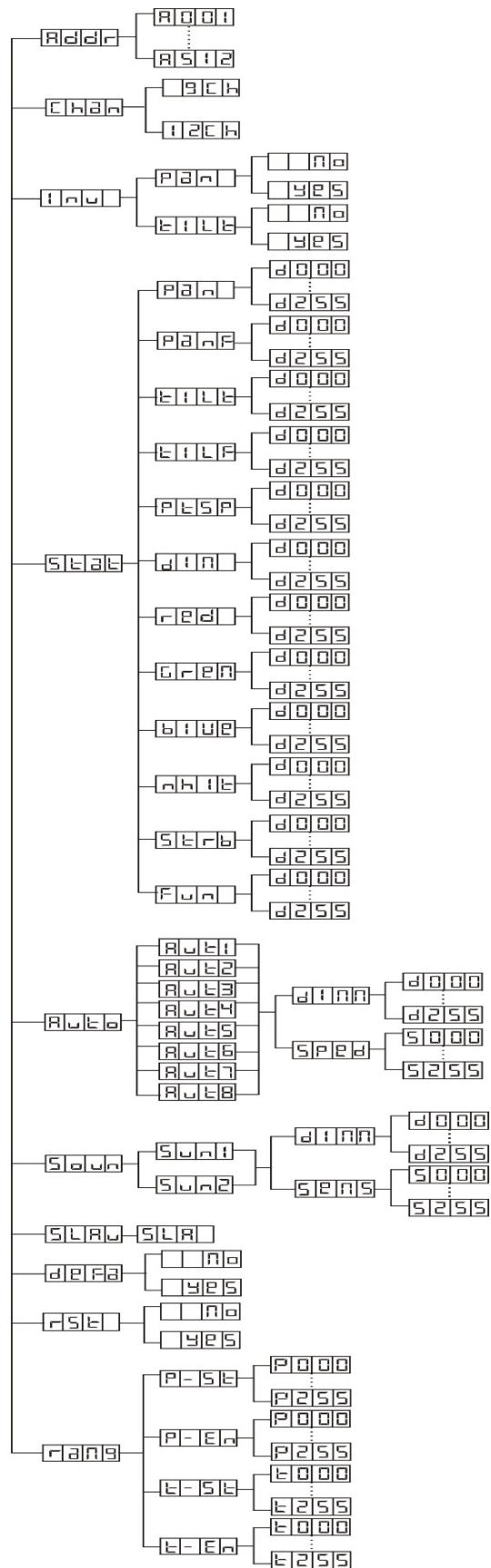
⑪ UP-button

⑫ Mode/Esc-button

MENU MAP

```
Addr ─┬─ A001
      └─ A512

Chan ─┬─ 9CH
      └─ 12CH

inv ──┬─ Pan ──┬─ no
      │        └─ yes
      └─ tilt ─┬─ no
               └─ yes

Stat ─┬─ Pan ──┬─ d000
      │        └─ d255
      ├─ PanF ─┬─ d000
      │        └─ d255
      ├─ tilt ─┬─ d000
      │        └─ d255
      ├─ tilF ─┬─ d000
      │        └─ d255
      ├─ PtSP ─┬─ d000
      │        └─ d255
      ├─ dim ──┬─ d000
      │        └─ d255
      ├─ red ──┬─ d000
      │        └─ d255
      ├─ Gren ─┬─ d000
      │        └─ d255
      ├─ blue ─┬─ d000
      │        └─ d255
      ├─ whit ─┬─ d000
      │        └─ d255
      ├─ Strb ─┬─ d000
      │        └─ d255
      └─ Fun ──┬─ d000
               └─ d255

Auto ─┬─ Aut1
      ├─ Aut2
      ├─ Aut3 ──── dimm ──┬─ d000
      ├─ Aut4             └─ d255
      ├─ Aut5 ──── SPed ──┬─ S000
      ├─ Aut6             └─ S255
      ├─ Aut7
      └─ Aut8

Soun ─┬─ Sun1 ──── dimm ──┬─ d000
      │                   └─ d255
      └─ Sun2 ──── SenS ──┬─ S000
                          └─ S255

SLAv ──── SLA

defa ─┬─ no
      └─ yes

rSt ──┬─ no
      └─ yes

rang ─┬─ P-St ─┬─ P000
      │        └─ P255
      ├─ P-En ─┬─ P000
      │        └─ P255
      ├─ t-St ─┬─ t000
      │        └─ t255
      └─ t-En ─┬─ t000
               └─ t255
```

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MENU SYSTEM

Use the four buttons under the LED display to set the mode in which the light will operate. The buttons perform the following functions:

MENU: Accesses the menu system or backs out of editing an entry.
Repeatedly pressing the Menu button selects the next mode down in the menu map.

UP: Selects the next mode down in the Menu Map or increases the value of the selected mode.

DOWN: Selects the previous mode up in the Menu Map or decreases the value of the selected mode.

ENTER: Selects the currently displayed mode for editing or accepts the edited value.

MENU DETAILS

DMX Address Setup

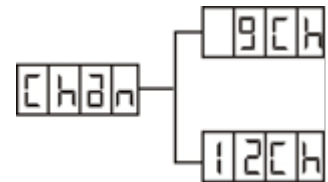Use this menu option to set the starting DMX address.

1. Press the **MENU** button until **Addr** is displayed.
2. Press **ENTER** to select the entry for editing.
3. Use the **UP** and **DOWN** buttons to set the address value.
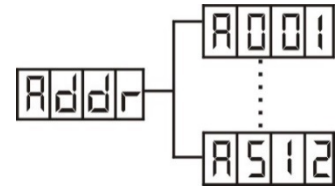
DMX Channel Selection

Select the number of DMX channels to use. See the DMX Control section for details on the two channel modes.
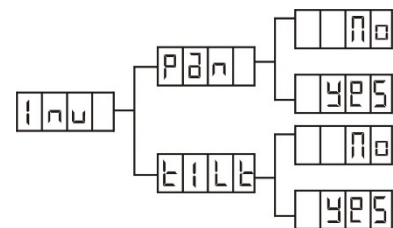
1. Press the **MENU** button until **Chan** is displayed.
2. Press **ENTER** to select the entry for editing.
3. Use the **UP** and **DOWN** buttons to select the number of DMX channels to use.

Motion Inversion

You can independently invert the pan and/or tilt motion for inverted operation or to mirror the motion of lights on the other side of the stage.

1. Press the **MENU** button until **Inu** is displayed.
2. Press **ENTER** to select the entry for editing.
3. Use the **UP** and **DOWN** buttons to select either **Pan** or **tILt**.
4. Press **ENTER** to select the entry for editing.
5. Use the **UP** and **DOWN** buttons to select either **yes** or **no**.
6. Press **ENTER** to confirm the selection.
7. Press the **MENU** button to back out to the previous submenu.
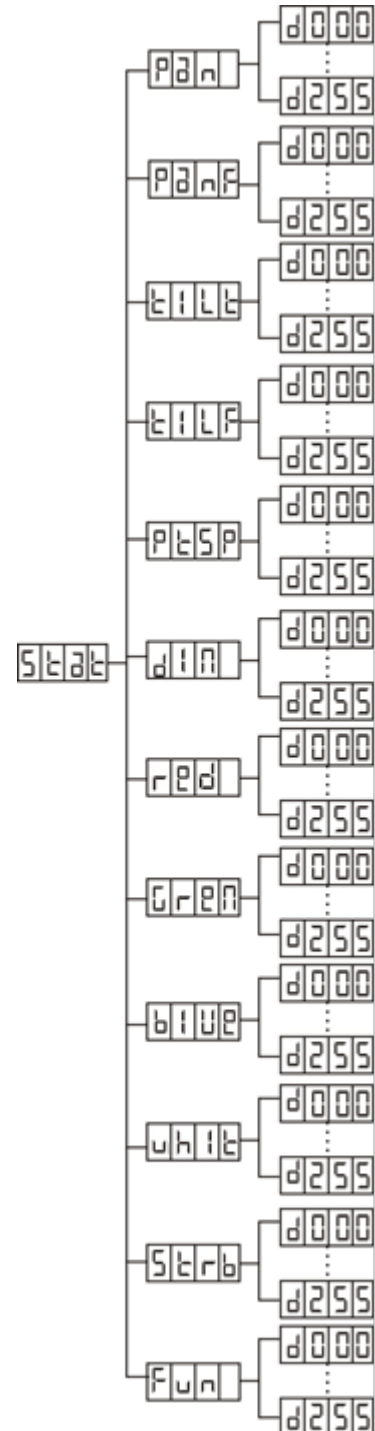8. Repeat steps 3-7 as needed.

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Static Modes

Use the Static functions to manually set the light to a fixed display mode or to select a predefined function.

1. Press the **MENU** button until **Stat** is displayed.

2. Press **ENTER** to select the entry for editing.

3. Use the **UP** and **DOWN** buttons to select one of the entries.

4. Press **ENTER** to select the entry for editing.

5. Use the **UP** and **DOWN** buttons to set the desired value.

6. Press **MENU** to back out to the submenu.

7. Repeat steps 3-6 as desired for the other available entries. All entries are cumulatively active, except the **Fun** entry, which bypasses all except the **dIn** (dimmer) entry.

   *Note that the **Fun** entry mirrors the functionality of the channel 9 or channel 12 controls. The **dIn** entry must be set to a value greater than 000 for any light to be visible.*

Legend

Pan   = Pan control

PanF = Pan fine control (16-bit)

tILt   = Tilt control

tILF   = Tilt fine control (16-bit)

PtSP = Pan/tilt speed control

dIn   = Master dimmer

red   = Red dimmer

Gren = Green dimmer

blue   = Blue dimmer

uhIt   = White dimmer

Strb = Strobe speed control

Fun   = Function (mirrors channel 9/12 functionality)

Menu tree (Stat):

- Pan — d000 ⋮ d255
- PanF — d000 ⋮ d255
- tILt — d000 ⋮ d255
- tILF — d000 ⋮ d255
- PtSP — d000 ⋮ d255
- dIn — d000 ⋮ d255
- red — d000 ⋮ d255
- Gren — d000 ⋮ d255
- blue — d000 ⋮ d255
- uhIt — d000 ⋮ d255
- Strb — d000 ⋮ d255
- Fun — d000 ⋮ d255

Auto Mode

The automatic modes combine motion with light action.

1. Press the **MENU** button until **Auto** is displayed.

2. Press **ENTER** to select the entry for editing.

3. Use the **UP** and **DOWN** buttons to select one of the automatic modes.

4. Press **ENTER** to select the desired automatic mode.
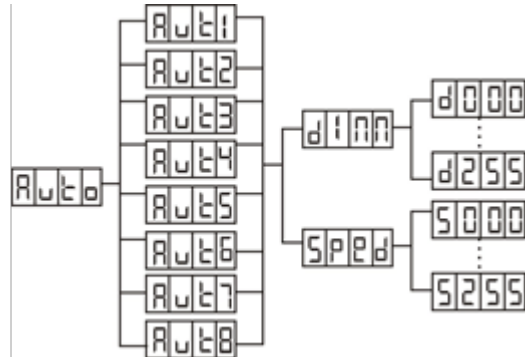
5. Use the **UP** and **DOWN** buttons to select **dInn**. The **dInn** entry controls the brightness of the selected automatic mode.

6. Press **ENTER** to select the entry for editing.

7. Use the **UP** and **DOWN** buttons to set the desired brightness.

8. Press the **MENU** button to back out to the previous submenu.

9. Use the **UP** and **DOWN** buttons to select **Sped**. The **Sped** entry controls the speed of execution of the automatic mode's actions.

10. Press **ENTER** to select the entry for editing.

11. Use the **UP** and **DOWN** buttons to set the desired speed.

Legend

Note that all automatic modes include motion.

Aut1 = White

Aut2 = White + color fading

Aut3 = Color flashing

Aut4 = White + color flashing

Aut5 = White + slow color fading

Aut6 = White + slow color fading with strobing

Aut7 = White + color fading in/out

Aut8 = Color flashing with strobing

Sound Activation Mode

There are two different sound activated functions.

1. Press the **MENU** button until **Soun** is displayed.
2. Press **ENTER** to select the entry for editing.
3. Use the **UP** and **DOWN** buttons to select which of the two sound modes to use.
4. Press **ENTER** to continue editing.
5. Use the **UP** and **DOWN** buttons to select **dInn**. The **dInn** entry controls the brightness of the selected automatic mode.
6. Press **ENTER** to select the entry for editing.
7. Use the **UP** and **DOWN** buttons to set the desired brightness.
8. Press the **MENU** button to back out to the previous submenu.
9. Use the **UP** and **DOWN** buttons to select **SenS**. The **SenS** entry controls the sensitivity of the light to sound volume.
10. Press **ENTER** to select the entry for editing.
11. Use the **UP** and **DOWN** buttons to set the desired sensitivity.
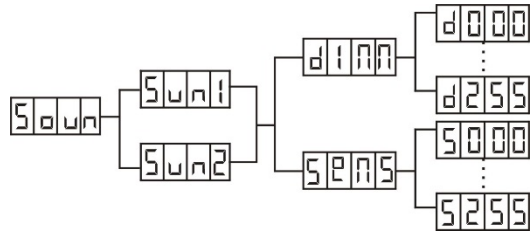
Legend

Sun1 = All colors with strobing

Sun2 = Color flashing

Slave Mode

Only one fixture in each DMX chain can be the Master. All others must be set to Slave.

1. Press the **MENU** button until **SLAu** is displayed.
2. Press **ENTER** to select Slave mode. The display will read **SLA**.

Reset to Factory Defaults

This function will reset all of the light's settings to the factory default values.

1. Press the **MENU** button until **deFa** is displayed.
2. Press **ENTER** to select the entry for editing.
3. Use the **UP** and **DOWN** buttons to select **yes**.
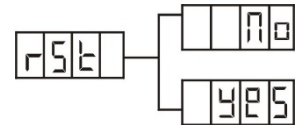4. Press **ENTER** to perform the reset.
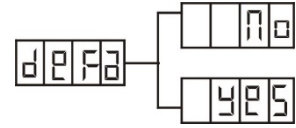
Reset to Setup

This function will reset the light's motion to ensure that it follows the commands given. This will not clear any of the settings in memory.

1. Press the **MENU** button until **rSt** is displayed.
2. Press **ENTER** to select the entry for editing.
3. Use the **UP** and **DOWN** buttons to select **yes**.
4. Press **ENTER** to perform the reset.

Pan/Tilt Range Control

This function is only for Slave lights. It allows you to individually set the minimum and maximum pan and tilt angles to be different from the Master light. A value of 000 means that the Slave will have the same limits as the Master.

1. Press the **MENU** button until **rang** is displayed.
2. Press **ENTER** to select the entry for editing.
3. Use the **UP** and **DOWN** buttons to display one of the entries.
4. Press **ENTER** to select the entry for editing.
5. Use the **UP** and **DOWN** buttons to set the value.
6. Press the **MENU** button to back out to the previous submenu.
7. Repeat steps 3-7 as desired.
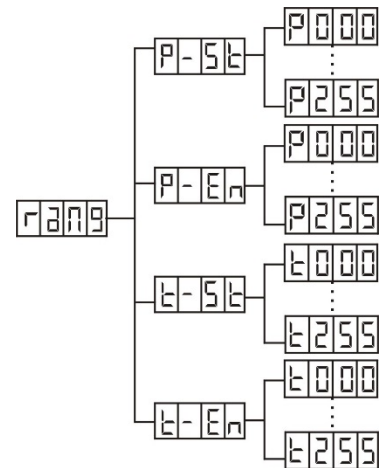
Legend

P-St   = Pan start limit

P-En = Pan end limit

t-St   = Tilt start limit

t-En   = Tile end limit

MASTER/SLAVE MODE

Whenever the light is set to a mode other than a DMX address or Slave mode, it is considered to be in Master mode. For example, when set to the Sound Activated operation, it is in a Master mode.

When the light is the Master, it will send DMX instructions to other connected lights. Those other lights must be set to Slave mode (SLAu) to receive and execute the instructions sent by the Master light.

Note: Only one light in any DMX Universe can be the Master. All other lights in the chain must be set to Slave mode (SLAu).

DMX CONTROL

When the light is set to a DMX address it will respond to signals from a DMX controller. The number and complexity of the signals it can respond to correspond directly to the number of channels selected. The following tables show the functions and values for each channel in the two channel modes (9 or 12).

9CH Mode

Channel	Value	Function
1	0-255	Pan 0-540°
2	0-255	Tilt 0-220°
3	0-255	Master dimmer 0-100%
4	0-255	Red 0-100%
5	0-255	Green 0-100%
6	0-255	Blue 0-100%
7	0-255	White 0-100%
8	0-9	No function
	10-255	Strobe 0-20Hz (slow to fast)
9	0-5	No function
	6-15	Red 100%, Green Up, Blue 0%
	16-25	Red Down, Green 100%, Blue 0%
	26-35	Red 0%, Green 100%, Blue UP
	36-45	Red 0%, Green Down, Blue 100%
	46-55	Red Up, Green 0%, Blue 100%
	56-65	Red 100%, Green 0%, Blue Down
	66-75	Red 100%, Green Up, Blue Up
	76-85	Red Down, Green Down, Blue 100%
	86-95	Red 100%, Green 100%, Blue 100%, White 100%
	96-110	Auto1: White + color fading (slow to fast)
	111-125	Auto2: Color flashing slow (slow to fast)
	126-140	Auto3: Color flashing fast (slow to fast)
	141-155	Auto4: Color fading fast (slow to fast)
	156-170	Auto5: Color fading slow (slow to fast)
	171-185	Auto6: White strobing (slow to fast)
	186-200	Auto7: White solid (slow to fast)
	201-215	Auto8: Color flashing with strobing (slow to fast)
	216-230	Sound1 Sensitivity: White strobing (low to high)
	231-245	Sound2 Sensitivity: Color flashing (low to high)
	246-254	No function
	255	Hold for 5 seconds to perform a Reset to Setup

Note that when Channel 9 is used, Channel 3 is the Master Dimmer and Channels 4-7 are inactive.

12CH Mode

Channel	Value	Function
1	0-255	Pan 0-540°
2	0-255	Pan fine control
3	0-255	Tilt 0-220°
4	0-255	Tilt fine control
5	0-255	Pan/tilt speed (fast to slow)
6	0-255	Master Dimmer 0-100%
7	0-255	Red 0-100%
8	0-255	Green 0-100%
9	0-255	Blue 0-100%
10	0-255	White 0-100%
11	0-9	No function
	10-255	Strobe 0-20Hz (slow to fast)
12	0-5	No function
	6-15	Red 100%, Green Up, Blue 0%
	16-25	Red Down, Green 100%, Blue 0%
	26-35	Red 0%, Green 100%, Blue UP
	36-45	Red 0%, Green Down, Blue 100%
	46-55	Red Up, Green 0%, Blue 100%
	56-65	Red 100%, Green 0%, Blue Down
	66-75	Red 100%, Green Up, Blue Up
	76-85	Red Down, Green Down, Blue 100%
	86-95	Red 100%, Green 100%, Blue 100%, White 100%
	96-110	Auto1: White + color fading (slow to fast)
	111-125	Auto2: Color flashing slow (slow to fast)
	126-140	Auto3: Color flashing fast (slow to fast)
	141-155	Auto4: Color fading fast (slow to fast)
	156-170	Auto5: Color fading slow (slow to fast)
	171-185	Auto6: White strobing (slow to fast)
	186-200	Auto7: White solid (slow to fast)
	201-215	Auto8: Color flashing with strobing (slow to fast)
	216-230	Sound1 Sensitivity: White strobing (low to high)
	231-245	Sound2 Sensitivity: Color flashing (low to high)
	246-254	No function
	255	Hold for 5 seconds to perform a Reset to Setup

Note that when Channel 12 is used, Channel 6 is the Master Dimmer and Channels 7- 10 are inactive.

DMX TERMINATION

As with all DMX devices, the last unit in any chain must have a DMX terminator connected to the DMX output. If using just a single light, connect a DMX terminator to the DMX output.

A DMX terminator is a DMX plug with a 120-ohm, 1/4-watt resistor soldered between pins 2 and 3.

SAMPLE WIRING DIAGRAM

The following diagram shows a sample wiring chain using multiple lights. Note that as with all DMX chains, the last unit must have a DMX terminator connected to the DMX output.
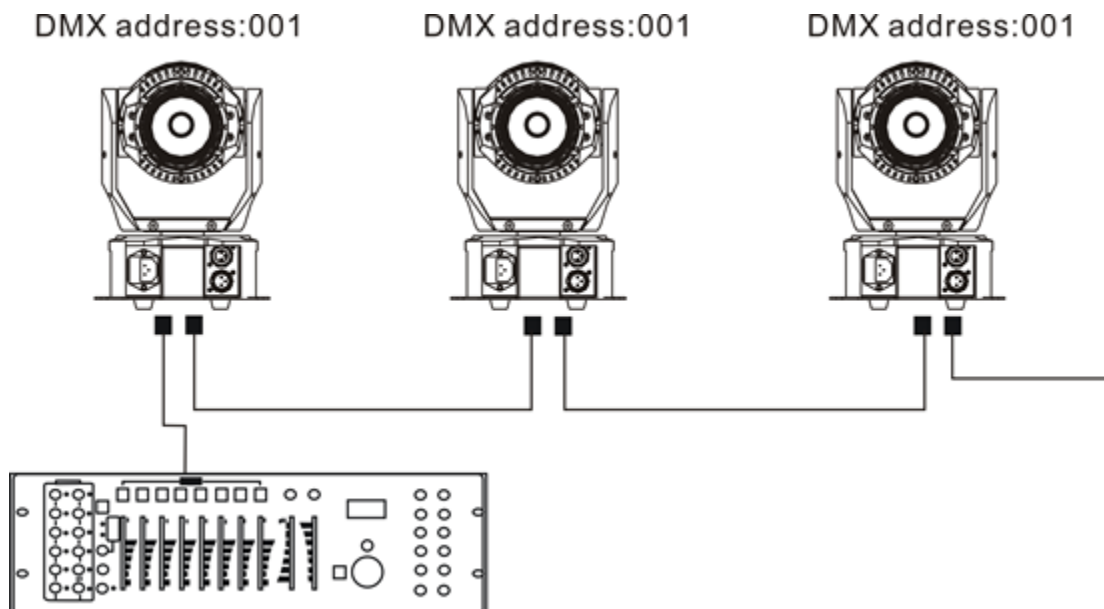
TECHNICAL SUPPORT

Monoprice is pleased to provide free, live, online technical support to assist you with any questions you may have about installation, setup, troubleshooting, or product recommendations. If you ever need assistance with your new product, please come online to talk to one of our friendly and knowledgeable Tech Support Associates. Technical support is available through the online chat button on our website **www.monoprice.com** during regular business hours, 7 days a week. You can also get assistance through email by sending a message to **tech@monoprice.com**

TROUBLESHOOTING

Following are some sample problems and potential solutions to those problems.

Q1: The light does not turn on and the menu will not display.

> **A1:** Check the power cable to ensure it is properly plugged in. Check the source power outlet by plugging in a different device.

Q2: The light will not turn on, but the menu does display.

> **A2:** Using the menu, ensure that the master and color dimmers are not all set to 000.

Q3: The light does not respond to DMX commands.

> **A3:** Ensure that the light is set to DMX mode with a valid DMX address. Check for address conflicts with other devices. Check the cabling to ensure that there is continuity between the light and the DMX controller. Verify that there is a terminator at the end of the chain. Verify that the DMX controller is operating properly with another DMX device.

SPECIFICATIONS

Model	612804
Light Source	4-in-1 40-watt RGBW LED
DMX Channels	9 or 12
Beam Angle	3°
Input Voltage	100 ~ 240 VAC, 50/60 Hz
LED Drive Current	2A each (RGBW)
Power Consumption	60 watts maximum
Fuse	125V, 2A or 250V, 1A
IP Rating	IP20
Operating Temperature	-4 ~ +104°F (-20 ~ +40°C)
Dimensions	11.4" x 5.8" x 7.1" (289 x 147 x 180)
Packaging Dimensions	13.8" x 9.3" x 9.3" (350 x 235 x 235 mm)
Net Weight	6.8 lbs. (3.1kg)

DIMENSIONS DIAGRAM