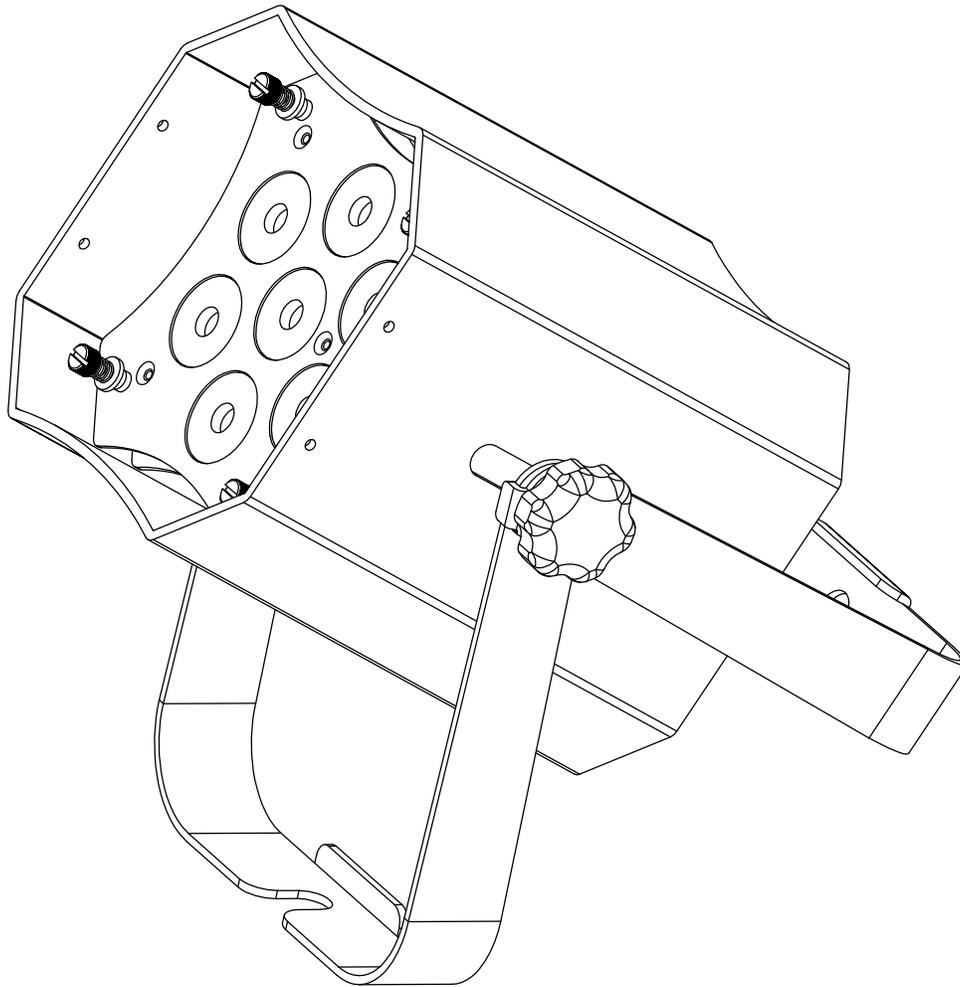




# MOD TW100



## *User Instructions*



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#### **FCC STATEMENT**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **FCC RADIO FREQUENCY INTERFERENCE WARNINGS & INSTRUCTIONS**

This product has been tested and found to comply with the limits as per Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This device uses and can radiate radio frequency energy and, if not installed and used in accordance with the included instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this device does cause harmful interference to radio or television reception, which can be determined by turning the device off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

- Reorient or relocate the device.
- Increase the separation between the device and the receiver.
- Connect the device to an electrical outlet on a circuit different from which the radio receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

## **DOCUMENT VERSION**

Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check [www.adj.com](http://www.adj.com) for the latest revision/update of this manual before beginning installation and/or programming.

<b>Date</b>	<b>Document Version</b>	<b>Software Version ≥</b>	<b>DMX Channel Mode</b>	<b>Notes</b>
01/19/18	1	1.00	3/4/5/8/9	Initial Release
03/20/19	1.2	1.01	No Change	IR Remote Functions Updated

Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

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**Unpacking:** Thank you for purchasing the MOD TW100 by ADJ Products, LLC. Every MOD TW100 has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit has arrived intact. In the case damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

**Introduction:** The ADJ MOD TW100 is a DMX intelligent, high powered LED par fixture. This fixture seven be used in a stand alone set up or connected in a Master/Slave set up. The MOD TW100 has seven operating modes: Sound Active mode, Auto Run mode, Color Change mode, Color Fade mode, CW/WW/Amber Dimmer mode, Static Color mode, and DMX controlled. To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

**Customer Support:** Contact ADJ Service for any product related service and support needs. Also visit [forums.adj.com](http://forums.adj.com) with questions, comments or suggestions.

**Parts:** To purchase parts online visit <http://parts.americandj.com>

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**Warning!** To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

**Caution!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact ADJ Products, LLC.

***PLEASE recycle the shipping carton when ever possible.***

## MOD TW100

## Features

- Seven Operating Modes
- Electronic Dimming 0-100%
- Built in Microphone
- DMX-512 protocol
- Locking 3-Pin & 5-Pin XLR Connections In/Out
- Five DMX Modes: 3 Channel Mode, 4 Channel Mode, 5 Channel Mode, 8 Channel Mode, and 9 Channel Mode.
- ADJ UC IR compatible and Airstream IR compatible
- Multiple Unit Power Linking (See page 26)

### INCLUDED:

- 1 x Scissor Yoke
- 1 x Locking Power Cable
- 3 x Frost Filters (20/40/60 Degrees)

### OPTIONAL ACCESSORIES:

MOD Kit Pearl White Housing Case (Order Code: MOD510)

## MOD TW100

## Warranty Registration

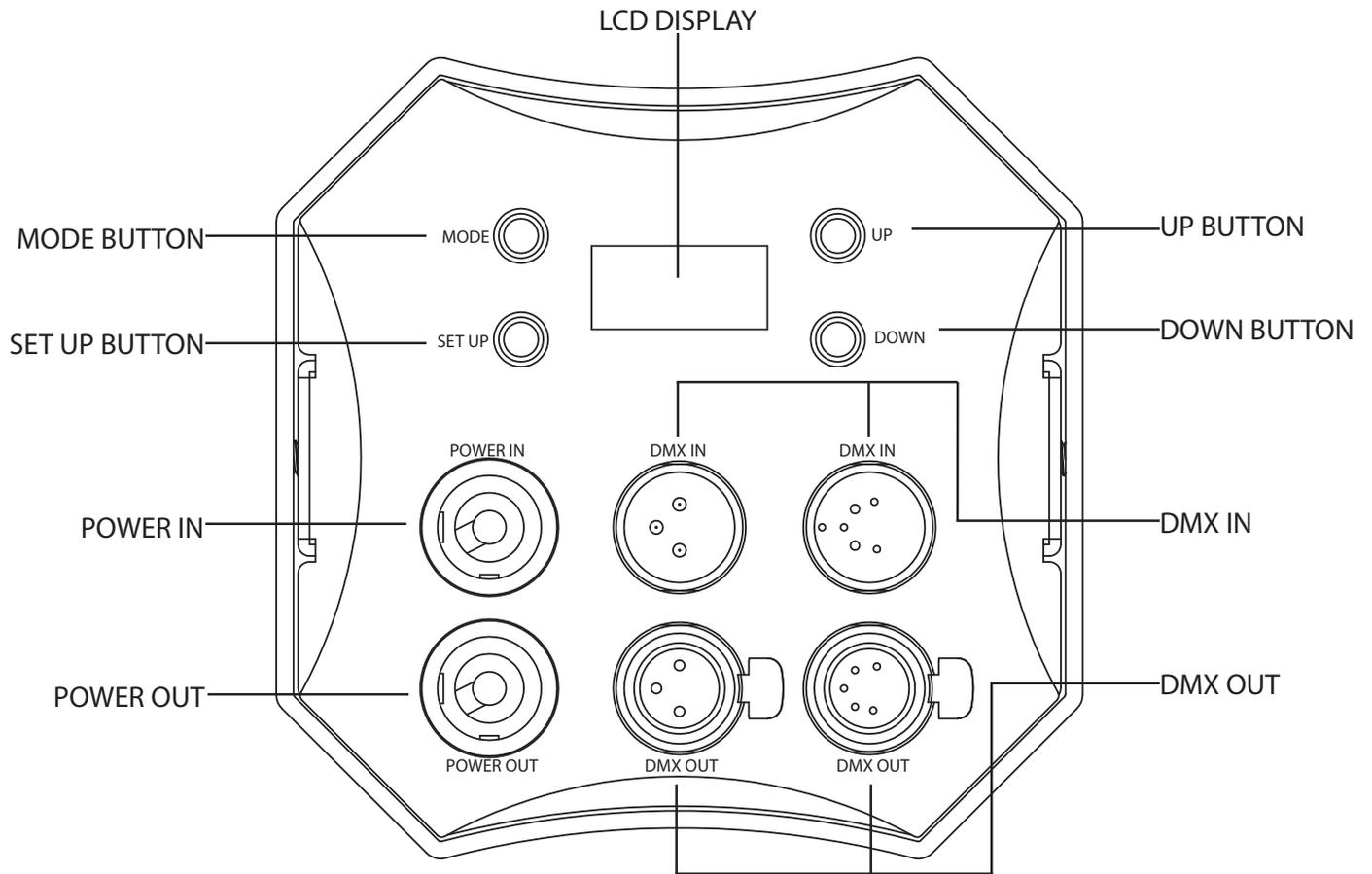
The MOD TW100 carries a 2 year limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain a R.A. number by contacting our customer support team on our customer support number. All packages returned to the service department not displaying a R.A. number on the outside of the package will be returned to the shipper.

## MOD TW100

## Installation

The unit should be mounted using a mounting clamp (not provided), affixing it to the mounting bracket that is provided with the unit. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. Always ensure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times the unit's weight. Also, always use a safety cable that can hold 12 times the weight of the unit when installing the fixture. The equipment must be installed by a professional, and it must be installed in a place where it is out of the reach of people's grasp.

- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- Do not spill water or other liquids into or on to your unit.
- Do not attempt to operate this unit if the power cord has been frayed or broken. Do not attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- Disconnect from main power before making any type of connection.
- Do not remove the cover under any conditions. There are no user serviceable parts inside.
- Never operate this unit when it's cover is removed.
- Never plug this unit in to a dimmer pack
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- Do not attempt to operate this unit, if it becomes damaged.
- This unit is intended for indoor use only, use of this product outdoors voids all warranties.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the point they exit from the unit.
- Cleaning -The fixture should be cleaned only as recommended by the manufacturer. See page 26 for cleaning details.
- Heat -The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug has been damaged.
  - B. Objects have fallen, or liquid has been spilled into the fixture.
  - C. The fixture has been exposed to rain or water.
  - D. The fixture does not appear to operate normally or exhibits a marked change in performance.
  - E. The fixture has fallen and/or subjected to extreme handling.



**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA “IN” and DATA “OUT” XLR terminals located on all DMX fixtures (most controllers only have a DATA “OUT” terminal).

**DMX Linking:** DMX is a language allowing all makes and models of different manufactures to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, when using several DMX fixtures try to use the shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

**Data Cable (DMX Cable) Requirements (For DMX Operation):** The MOD TW100 can be controlled via DMX-512 protocol. The MOD TW100 has 5 DMX channel modes. The DMX address is set on the rear panel of the MOD TW100. Your unit and your DMX controller require a standard 3-pin XLR connector for data input and data output (Figure 1). We recommend Accu-Cable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all pro lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.



Figure 1

**Notice:** Be sure to follow figures two and three when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable’s shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR’s outer casing. Grounding the shield could cause a short circuit and erratic behavior.

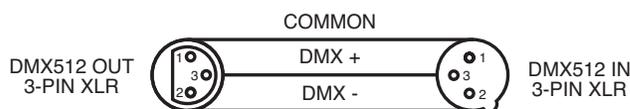


Figure 2

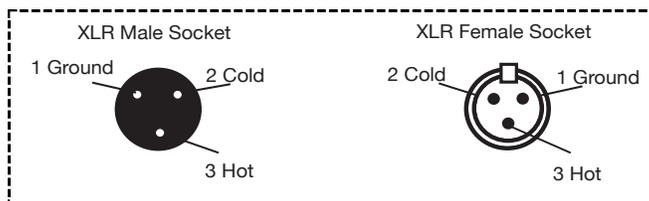
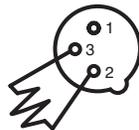


Figure 3

XLR Pin Configuration
Pin 1 = Ground
Pin 2 = Data Compliment (negative)
Pin 3 = Data True (positive)

**Special Note: Line Termination.** When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the possibilities of erratic behavior.



Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

Figure 4

**5-Pin XLR DMX Connectors.** Some manufactures use 5-pin DMX-512 data cables for DATA transmission in place of 3-pin. 5-pin DMX fixtures may be implemented in a 3-pin DMX line. When inserting standard 5-pin data cables in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The chart below details a proper cable conversion.

<b>3-Pin XLR to 5-Pin XLR Conversion</b>		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use

All fixtures should be given a DMX starting address when using a DMX controller, so the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to “listen” to the digital control signal sent out from the DMX controller. The assignment of this starting DMX address is achieved by setting the correct DMX address on the digital control display on the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture. Setting all fixtures to the same DMX address will cause all fixtures to react in the same way, in other words, changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to “listen” to the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

In the case of the MOD TW100, when in 5 Channel you should set the starting DMX address of the first unit to 1, the second unit to 6 (5 + 1), the third unit to 11 (6 + 5), and so on. (See chart below for more details.)

Channelmode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
3 channels	1	4	7	10
4 channels	1	5	9	13
5 channels	1	6	11	16
8 channels	1	9	17	25
9 channels	1	10	19	28

<b>MOD TW100</b>		<b>3 Channel Mode</b>
<b>Channel</b>	<b>Value</b>	<b>Function</b>
1	0 - 255	COOL WHITE 0% - 100%
2	0 - 255	WARM WHITE 0% - 100%
3	0 - 255	AMBER 0% - 100%

<b>MOD TW100</b>		<b>4 Channel Mode</b>
<b>Channel</b>	<b>Value</b>	<b>Function</b>
1	0 - 255	COOL WHITE 0% - 100%
2	0 - 255	WARM WHITE 0% - 100%
3	0 - 255	AMBER 0% - 100%
4	0 - 255	MASTER DIMMER 0% - 100%

<b>MOD TW100</b>		<b>5 Channel Mode</b>
<b>Channel</b>	<b>Value</b>	<b>Function</b>
1	0 - 255	COOL WHITE 0% - 100%
2	0 - 255	WARM WHITE 0% - 100%
3	0 - 255	AMBER 0% - 100%
4	0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	STROBING LED OFF LED ON STROBING SLOW - FAST LED ON PULSE STROBING SLOW - FAST LED ON RANDOM STROBING SLOW - FAST LED ON
5	0 - 255	MASTER DIMMER 0% - 100%

<b>Channel</b>	<b>Value</b>	<b>Function</b>
1	0 - 255	COOL WHITE 0% - 100%
2	0 - 255	WARM WHITE 0% - 100%
3	0 - 255	AMBER 0% - 100%
4	0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	STROBING LED OFF LED ON STROBING SLOW - FAST LED ON PULSE STROBING SLOW - FAST LED ON RANDOM STROBING SLOW - FAST LED ON
5	0 - 255	MASTER DIMMER 0% - 100%
6	0 - 51 52 - 102 103 - 153 154 - 204 205 - 255	PROGRAM SELECTION MODE DIMMING MODE COLOR MACRO MODE COLOR CHANGE MODE COLOR FADE MODE SOUND ACTIVE MODE

8 CHANNEL MODE DMX TRAITS CONTINUED ON THE NEXT PAGE

Channel	Value	Function
7	0 - 255  0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255  0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255  0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	COLOR MACROS/PROGRAMS COLOR MACRO MODE SEE THE COLOR MACRO CHART ON PAGE 16 COLOR CHANGE PROGRAMS COLOR CHANGE 1 COLOR CHANGE 2 COLOR CHANGE 3 COLOR CHANGE 4 COLOR CHANGE 5 COLOR CHANGE 6 COLOR CHANGE 7 COLOR CHANGE 8 COLOR FADE PROGRAMS COLOR FADE 1 COLOR FADE 2 COLOR FADE 3 COLOR FADE 4 COLOR FADE 5 COLOR FADE 6 COLOR FADE 7 COLOR FADE 8 SOUND ACTIVE PROGRAMS SOUND ACTIVE MODE 1 SOUND ACTIVE MODE 2 SOUND ACTIVE MODE 3 SOUND ACTIVE MODE 4 SOUND ACTIVE MODE 5 SOUND ACTIVE MODE 6 SOUND ACTIVE MODE 7 SOUND ACTIVE MODE 8
8	0 - 255 0 - 255	PROGRAM SPEED/SOUND SENSITIVITY PROGRAM SPEED SLOW - FAST SOUND SENSITIVITY LEAST - MOST SENSITIVE

<b>Channel</b>	<b>Value</b>	<b>Function</b>
1	0 - 255	COOL WHITE 0% - 100%
2	0 - 255	WARM WHITE 0% - 100%
3	0 - 255	AMBER 0% - 100%
4	0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	STROBING LED OFF LED ON STROBING SLOW - FAST LED ON PULSE STROBING SLOW - FAST LED ON RANDOM STROBING SLOW - FAST LED ON
5	0 - 255	MASTER DIMMER 0% - 100%
6	0 - 51 52 - 102 103 - 153 154 - 204 205 - 255	PROGRAM SELECTION MODE DIMMING MODE COLOR MACRO MODE COLOR CHANGE MODE COLOR FADE MODE SOUND ACTIVE MODE

9 CHANNEL MODE DMX TRAITS CONTINUED ON THE NEXT PAGE

Channel	Value	Function
7	0 - 255  0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255  0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255  0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	COLOR MACROS/PROGRAMS COLOR MACRO MODE SEE THE COLOR MACRO CHART ON PAGE 16 COLOR CHANGE PROGRAMS COLOR CHANGE 1 COLOR CHANGE 2 COLOR CHANGE 3 COLOR CHANGE 4 COLOR CHANGE 5 COLOR CHANGE 6 COLOR CHANGE 7 COLOR CHANGE 8 COLOR FADE PROGRAMS COLOR FADE 1 COLOR FADE 2 COLOR FADE 3 COLOR FADE 4 COLOR FADE 5 COLOR FADE 6 COLOR FADE 7 COLOR FADE 8 SOUND ACTIVE PROGRAMS SOUND ACTIVE MODE 1 SOUND ACTIVE MODE 2 SOUND ACTIVE MODE 3 SOUND ACTIVE MODE 4 SOUND ACTIVE MODE 5 SOUND ACTIVE MODE 6 SOUND ACTIVE MODE 7 SOUND ACTIVE MODE 8
8	0 - 255 0 - 255	PROGRAM SPEED/SOUND SENSITIVITY PROGRAM SPEED SLOW - FAST SOUND SENSITIVITY LEAST - MOST SENSITIVE

<b>Channel</b>	<b>Value</b>	<b>Function</b>
9	0 - 20	DIMMER CURVES
	21 - 40	STANDARD
	41 - 60	STAGE
	61 - 80	TV
	81 - 100	ARCHITECTURAL
	101 - 255	THEATRE
		DEFAULT TO UNIT SETTING

**When Channel 6 is between the values of 0-51, Channels 1-3 are used, and Channel 4 will control strobing.**

**When Channel 6 is between the values of 52-102, Channel 7 is in Color Macros Mode, and Channel 4 will control strobing.**

**When Channel 6 is between the values of 103-153, Channel 7 is in Color Change Mode, and Channel 8 will control the color change speed.**

**When Channel 6 is between the values of 154-204, Channel 7 is in Color Fade Mode, and Channel 8 will control the color fade speed.**

**When Channel 6 is between the values of 205-255, Channel 7 is in Sound Active Mode, and Channel 8 will control the sound sensitivity.**

Color No.	DMX VAULE	WW/CW/A COLOR INTENSITY		
		WW	CW	A
Color1(off)	0	0	0	0
Color2	1-7	255	206	143
Color3	8-15	254	177	153
Color4	16-23	254	192	138
Color5	24-31	254	165	98
Color6	32-39	254	121	0
Color7	40-47	176	17	0
Color8	48-55	96	0	11
Color9	56-63	234	139	171
Color10	64-71	254	5	97
Color11	72-79	175	77	173
Color12	80-87	119	130	199
Color13	88-95	147	164	212
Color14	96-103	88	2	163
Color15	104-111	0	38	86
Color16	112-119	0	142	208
Color17	120-127	52	148	209
Color18	128-135	1	134	201
Color19	136-143	0	145	212
Color20	144-151	0	121	192
Color21	152-159	0	129	184
Color22	160-167	0	83	115
Color23	168-175	0	97	166
Color24	176-183	1	100	167
Color25	184-191	0	40	86
Color26	192-199	209	219	182
Color27	200-207	42	165	85
Color28	208-215	0	46	35
Color29	216-223	8	107	222
Color30	224-231	107	156	231
Color31	232-239	165	198	247
Color32	240-247	0	0	189
Color33	248-255	165	35	1

<b>MENU</b>	<b>DESCRIPTION</b>
DMX MODE ADDR:001~512	Sets the DMX starting address
DMX MODE CHAN:3/4/5/8/9	Set the unit DMX channels
DMX MODE NO:BLACK	When DMX signal is lost or interrupted,the unit will default to BLACKOUT option.It will switch all LED's off
DMX MODE NO:HOLD	When DMX signal is lost or interrupted,the unit will default to HOLD option.It will hold the last state before signal was lost.
DMX MODE NO:AUTO	When DMX signal is lost or interrupted,the unit will default to AUTO option.It will run the internal programs.
DMX MODE NO:MANUA	When DMX signal is lost or interrupted,,the unit will default to the manual color setting
DMX MODE DELAY:0~4	Select the unit delay mode
SLAVE MODE	Set the unit into slave mode
MANUAL CW:000~255	Adjust the intensity of the cool white
MANUAL WW:000~255	Adjust the intensity of the warm white
MANUAL AMBE::000~255	Adjust the intensity of the amber white
MANUAL STROB:00~15	Adjust the flash speed,00 is flash off,01 is slowest,15 is fastest
SOUND PRO:01~08	Select the 8 sound active modes
SOUND SENS:00~08	Adjust the sound active sensitivity level,00 is sound active off,01 is the lowest level,8 is highest level.
JUMP RUN SNAP:01~08	Select the 8 color change modes
JUMP RUN SPEED:01~16	Adjust the speed of the color change mode
FADE RUN SNAP:01~08	Select the 8 color dreaming modes
FADE RUN SPEED:01~16	Adjust the speed of the color dreaming mode
AUTO RUN FAD+SNAP	Select the auto run mode
AUTO RUN SPEED:01~16	Adjust the speed of the auto run mode
CLR MACS COLOR:00~32	Select the 32 static colors
CLR MACS STROB:00~15	Adjust the strobe speed,00 is strobe off,01 is slowest,15 is fastest
OPTION BLGT:ON	LCD backlight always on
OPTION BLGT:OFF	LCD backlight will be off after 20 seconds
OPTION IR:ON	IR remote function on
OPTION IR:OFF	IR remote function off
OPTION SYSRESET	Initialize the unit at the extra factory setting

***The control panel will lock up after 5 seconds of inactivity. Press the MODE button for at least 5 seconds to unlock the control panel.***

### ***LCD Backlight On/Off:***

To set the LCD backlight to turn off after 20 seconds, press the MODE button until “OPTION BLGT: XX” is displayed. “XX” represents the current state. Press the UP or DOWN buttons to set the backlight to turn “OFF” after 20 seconds or “ON” to stay on at all times.

### ***Operating Modes:***

The MOD TW100 has seven operating modes:

- CW/WW/Amber Dimmer Mode - Choose one of the three colors to remain static or adjust the intensity of each color to make your desired color.
- Color Change mode - There are 8 color change modes to choose from. In color change mode the unit will change through the various colors depending on the color change mode that is chosen. The color change running speed is adjustable.
- Color Fade mode - There are 8 color fade modes to choose from. In color fade mode the unit will fade through the various colors depending on the color fade mode that is chosen. The fade running speed is adjustable.
- Auto Run Mode - In Auto Run Mode, the fixture will run a combination of color change and color fade. The running speed is adjustable.
- Sound Active mode - The unit will react to sound, chasing through the built in programs. There are 8 sound active modes.
- Static Color Mode - There are 32 colors to choose from.
- DMX control mode - This function will allow you to control each individual fixtures traits with a standard DMX 512 controller.

### ***DMX Mode:***

Operating through a DMX controller gives the user the freedom to create their own programs tailored to their own individual needs. The MOD TW100 has 5 DMX modes: 3 channel mode, 4 channel mode, 5 channel mode, 8 channel mode, and 9 channel mode. See pages 10-15 for each modes DMX traits.

1. This function will allow you to control each individual fixture’s traits with a standard DMX 512 controller.
2. To run your fixture in DMX mode press the MODE button until “DMX MODE: XXX” is displayed. “XXX” represents the current displayed DMX address. Use the UP or DOWN buttons to select your desired DMX address, then press the SETUP button to select your DMX channel mode.
3. Use the UP or DOWN buttons to scroll through the DMX channel modes. The channel modes are listed below:
  - “CHAN: 03” is 3 Channel DMX Mode.
  - “CHAN: 04” is 4 Channel DMX Mode.
  - “CHAN: 05” is 5 Channel DMX Mode.
  - “CHAN: 08” is 8 Channel DMX Mode.
  - “CHAN: 09” is 9 Channel DMX Mode.
4. Please see pages 10-15 for DMX values and traits.
5. After you have chosen your desired DMX Channel mode plug in the fixture via the XLR connections to any standard DMX controller.

**Cool White/Warm White/Amber Dimmer Mode:**

1. Plug the fixture in and press the MODE button until “MANUAL” is displayed. Press the SET UP button to cycle through the CW/WW/Amber colors.
2. When “CW” is displayed you are in Cool White dimming mode. Use the UP and DOWN buttons to adjust intensity.
3. When “WW” is displayed you are in Warm White dimming mode. Use the UP and DOWN buttons to adjust intensity.
4. When “AMBE” is displayed you are in Amber dimming mode. Use the UP and DOWN buttons to adjust intensity.
5. After you have adjusted the colors to make your desired color you can then activate strobing by pressing the SET UP button to enter strobing.
6. “STROB” will be displayed, this is strobing mode. The strobing can be adjusted between “00” (strobing off) to “15” (fastest strobing).

**Color Change Mode:**

1. Plug the fixture in and press the MODE button until “JUMP RUN SNAP: XX” is displayed. “XX” represents a number between 01-08.
2. Use the UP and DOWN buttons to find your desired color change mode.
3. Press the SET UP button and “SPEED: XX” will be displayed. Use the UP and DOWN buttons to adjust the speed of the color change. The speed can be adjusted between “01” (slowest) to “16” (fastest).

**Color Fade Mode:**

1. Plug the fixture in and press the MODE button until “FADE RUN SNAP: XX” is displayed. “XX” represents a number between 01-08.
2. Use the UP and DOWN buttons to find your desired color fade mode.
3. Press the SET UP button and “SPEED: XX” will be displayed. Use the UP and DOWN buttons to adjust the speed of the color fade. The speed can be adjusted between “01” (slowest) to “16” (fastest).

**Auto Run Mode:**

1. Plug the fixture in and press the MODE button until “AUTO RUN FAD+SNAP” is displayed.
2. Press the SET UP button and “SPEED: XX” will be displayed. Use the UP and DOWN buttons to adjust the speed of the Auto Run. The speed can be adjusted between “01” (slowest) to “16” (fastest).

**Sound Active Mode:**

1. Plug the fixture in and press the MODE button until “SOUND PROG: XX” is displayed. “XX” represents a number between 01-08.
2. Use the UP and DOWN buttons to find your desired sound active program.
3. Press the SET UP button and “SENS: XX” will be displayed. Use the UP and DOWN buttons to adjust the sound sensitivity. The sensitivity can be adjusted between “00” (least sensitive) to “08” (most sensitive).

**Static Color Mode:**

1. Plug the fixture in and press the MODE button until “CLR MACS COLOR: XX” is displayed. “XX” represents a number between 00-32.
2. Use the UP and DOWN buttons to scroll through the 32 colors and find you desired color. After you have found your desired color you can activate strobing by pressing the SET UP button to enter the strobe mode.
3. “STROB: XX” will be displayed, this is strobe mode. The strobing can be adjusted between “00” (flash off) to “15” (fastest flash).

**System Reset:**

This will return the fixture to its factory settings.

1. Plug the fixture in and press the MODE button until “OPTION” is displayed.
2. Press the SET UP button until “SYSRESET” is displayed.
3. Press the UP and DOWN buttons simultaneously to reset or press the MODE button to exit.

**Dimmer Curve:**

This is used to set the dimming curve used with DMX mode. See page 23 for the different dimming curves.

1. Plug the fixture in and press the MODE button until “DMX MODE ADDR: XXX” is displayed.
2. Press the SET UP button until “DELAY: X” is displayed. “X” represents the displayed dimmer curve (0-4).
  - 0 - Standard
  - 1 - Stage
  - 2 - TV
  - 3 - Architectural
  - 4 - Theatre
3. Press the UP or DOWN buttons to scroll through and select your desired dimming curve.

**DMX State:**

This mode can be used as a precaution mode, that in case the DMX signal is lost, the operating mode chosen in the setup is the running mode the fixture will go into when the DMX signal is lost. You can also set this as the operating mode you would like the unit to return to when power is applied.

1. Plug the fixture in and press the MODE button until “DMX MODE ADDR: XXX” is displayed.
2. Press the SET UP button until “DMX MODE NO” is displayed. The current DMX state will be displayed.
  - “BLACK” (Blackout) - If the DMX signal is lost or interrupted, the unit will automatically go into stand by mode.
  - “HOLD” (Last State) - If the DMX signal is lost or interrupted, the fixture will stay in the last DMX set up.
  - “AUTO” (Auto Run) - If the DMX signal is lost or interrupted, the unit will automatically go into Auto Run mode.
  - “MANUA” (Manual) - if the DMX signal is lost or interrupted, the unit will automatically go into the last color set up in manual dimmer mode.
3. Press the UP or DOWN buttons to scroll through and select your desired DMX state.

***ADJ UC IR & Airstream:***

This function is used to activate and deactivate the infrared sensor. When this function is activated the unit can be controlled using the ADJ UC IR or Airstream IR app. Please see page 22 for remote controls and functions.

1. Plug the fixture in and press the MODE button until "OPTION" is displayed.
2. Press the SET UP button until "IR: XX" is displayed.
3. Press the UP or DOWN buttons to either activate the remote function (On) or deactivate it (Off).

***Master-Slave Configuration:***

This function will allow the user to link units together to run in a Master-Slave set-up. In a Master-Slave set up, one unit will act as the controlling unit and the others will react to the controlling units running mode. Any unit can act as a Master or as a Slave, however, only one unit can be programmed to act as the "Master."

***Master-Slave Connections and Settings:***

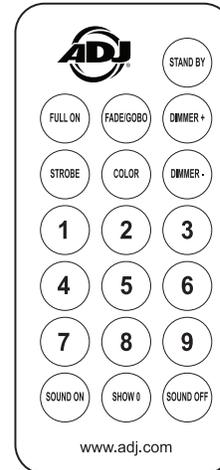
1. Daisy chain the units via the XLR connectors on the bottom of the unit. Use standard XLR data cables to link the units together. Remember that the Male XLR connector is the input and the Female XLR connector is the output. The first unit in the chain (master) will use the female XLR connector only. The last unit in the chain will use the male XLR connector only.
2. Connect the first "Slave" unit to the "Master."
3. Set the "Master" unit to a desired mode of operation. On the "Slave" unit's press the MODE button until "SLAVE MODE" is displayed. The "Slave" unit(s) will now follow the "Master".

The body of the MOD TW100 can easily be adjusted to create a Snoot Effect to eliminate side glare. Loosen the bracket knobs and slide the innards up and down using the bracket. Find your optimal setting and tighten the bracket knobs to lock the body in place.

The **UC IR** infrared remote gives you control of various functions (See below). To control the fixture you must aim the remote at the front of the fixture and be no more than 30 feet away. To use the ADJ UC IR you must first activate the fixtures infrared sensor, to activate the sensor please see the instructions on page 21.

The **Airstream IR** remote transmitter plugs into the headphone jack of your iOS phone or tablet. To control your IR fixture you must raise the volume to the maximum on your iOS phone or tablet and aim the transmitter at the fixture sensor and be no more than 15 feet away. The app is a free download from the app store for your iOS phone or tablet. The app comes with 3 pages of control depending on the fixture you are using. Please see below for IR functions including the corresponding app page.

		Stand by
Full ON	Fade/Gobo	
Strobe	Color	
1	2	3
4	5	6
7	8	9
SoundOn	Show 0	SoundOff



**Works with App page 1**

**STAND BY** - Pressing this button will blackout the fixture. Press the button again to return to the initial state.

**FULL ON** - Press this button down to fully light up the unit. Press any button to exit this mode..

**FADE/GOBO** - ~~Press this button to switch between Color Change Mode, Color Fade Mode, and Auto Run Mode. Use buttons 1-9 to select your desired show. Press this button twice for show 10. Press button “1” twice for show 11.~~

**UPDATE WITH SOFTWARE VERSION 1.01:** This button can activate color change mode, color fade mode, or combination color change and fade mode (Auto Run). Each press of the button will switch through the 3 different modes. Use the numeral buttons 1-9 to select the program number within your desired mode. Use the dimmer buttons to adjust the output intensity. **Note:** Running speed is not adjustable using the IR control functions.

**Example:** In color change mode (Jump Run), press the numeral buttons “1+3” to run color change program “13”. In color fade mode (Fade Run), press the numeral button “7” to run color fade program “7”.

**Note:** Color change and fade combination (Auto Run) mode has only one program.

**“DIMMER +” and “DIMMER -”** - Use these buttons to adjust the output intensity when either color macro mode, color change mode, color fade mode is active.

**STROBE** - Press this button to activate strobing. Use buttons 1-4 to adjust the strobe speed. “1” being the slowest, “4” being the fastest. Press this button again to stop strobing.

**COLOR** - Press this button to activate color macro mode. Use the numeral buttons 1-9 to select your desired color. Use the dimmer buttons to adjust the output intensity.

**Example:** Press the numeral buttons “1+3” to activate color macro “13”.

**Numerical Buttons 1-9** - Use buttons 1-9 to select your desired color in static color mode, or your desired program in color fade mode and color change mode.

Use buttons 1-4 to select a desired strobe rate when strobing is active.

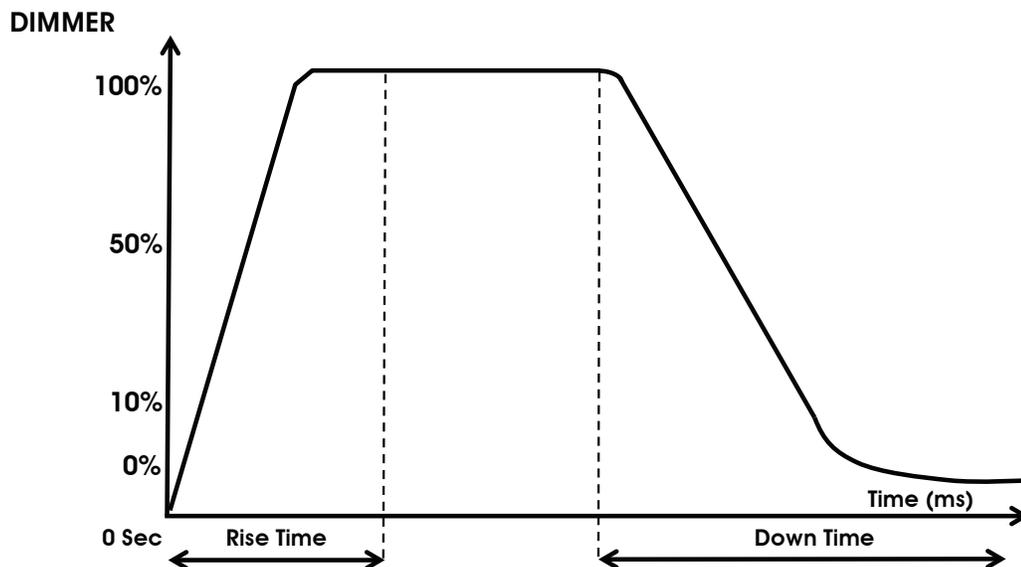
**SOUND ON & OFF** - Use the buttons to activate and deactivate sound active mode. When activated sound sensitivity is at the highest. When SOUND OFF is pressed sensitivity is at its lowest.

**SHOW 0** - Press this button to activate color fade mode. Use buttons 1-9 to select your desired show. Press this button twice for show "10". Press button "1" twice for show "11".

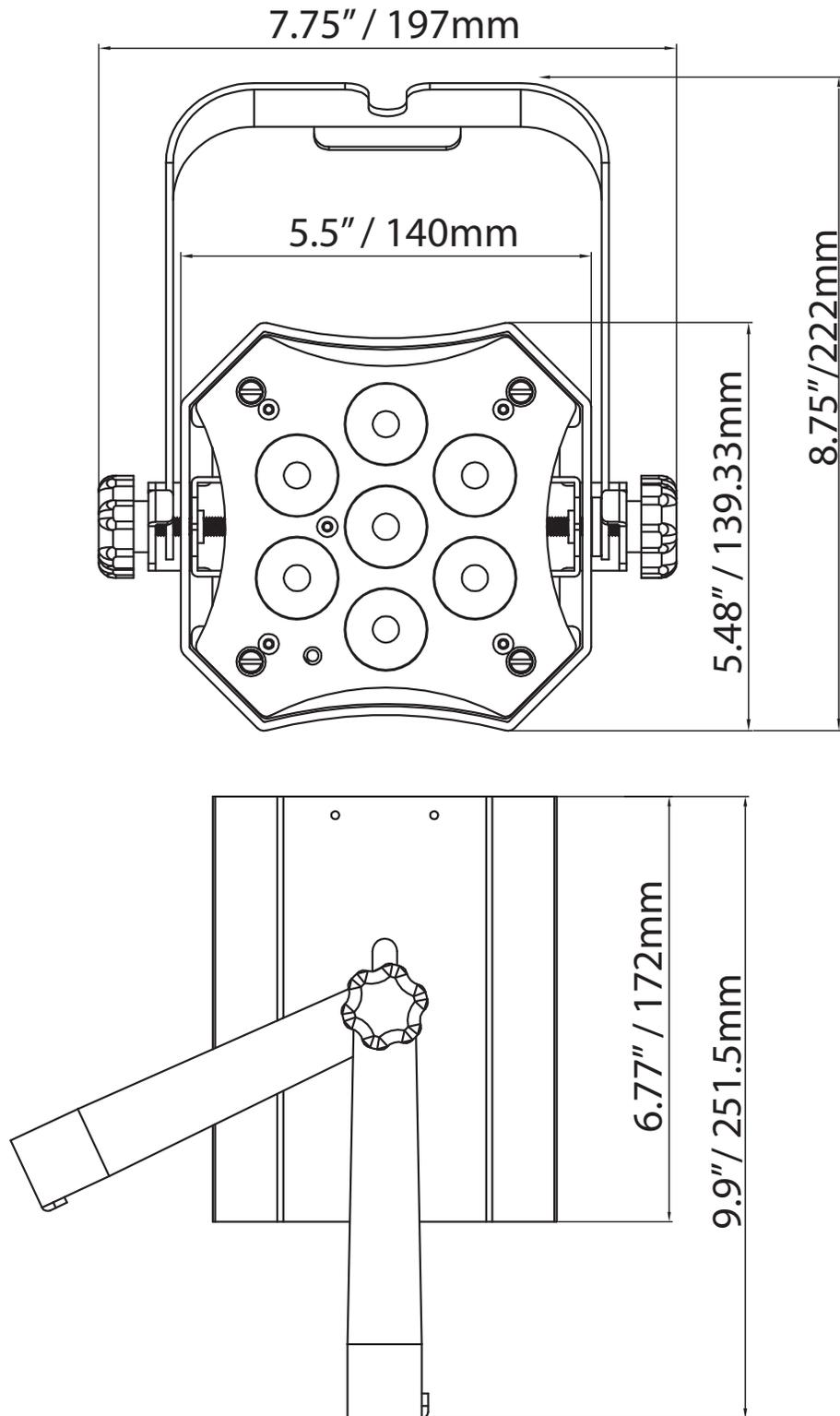
**UPDATE WITH SOFTWARE VERSION 1.01:** This button is invalid for this fixture.

**MOD TW100**

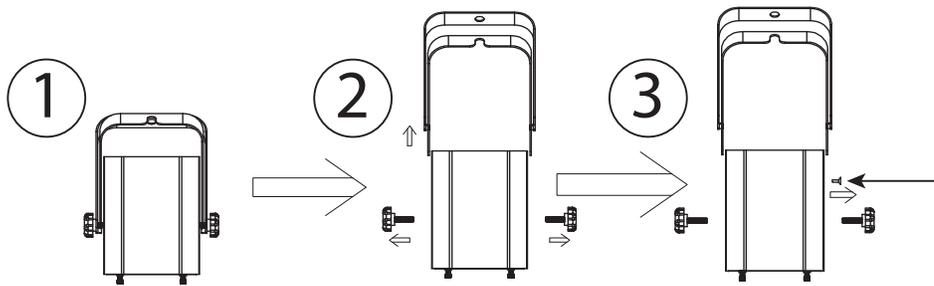
**Dimmer Curve Chart**



Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
	Rise Time (ms)	Down Time (ms)	Rise Time (ms)	Down Time (ms)
Standard (default)	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280

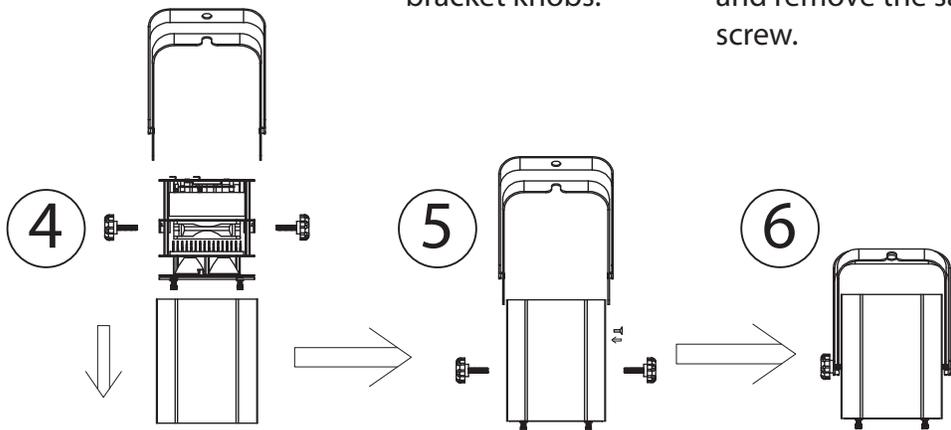


The MOD units housing is interchangeable. You can purchase the white housing kit through ADJ. Changing the housing is very simple process. Follow the instructions below to change the housing. For more help contact ADJ Customer Support.



Start by unscrewing and removing the bracket knobs.

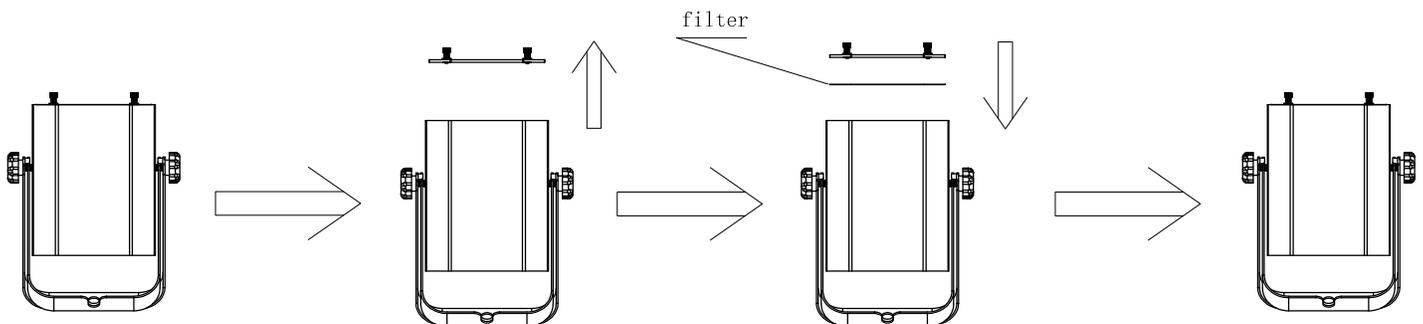
Once the knobs and bracket have been removed, unscrew and remove the safety cable screw.



When the screw has been removed the and safety cable is disconnected you are able to remove the innards through the top of the unit.

You are now able to switch shells by carefully lowering the innards into the new case and reassemble. Reconnect the safety cable and attache the bracket and knobs.

The MOD TW100 comes with 3 interchangeable frost filters. To install the frost filter unscrew the four thumb screws holding lens in place. Remove the lens and install the filter inside the unit. Line up the thumb screw holes on the edges of filter with screw holes of the unit. Screw the thumb screws back into place securing the lens. For help contact ADJ Customer Support.



## MOD TW100

## Multiple Unit Power Linking

*With this feature you can connect the fixtures to one another using the power input and output sockets. The maximum that can be connected is 5 fixtures @ 120V and 9 fixtures @ 240V. After the maximum connected fixtures you will need to use a new power outlet.*

***NOTE: USE CAUTION WHEN POWER LINKING OTHER FIXTURES TO THE MOD TW100 AS THE POWER CONSUMPTION OF OTHER LIGHTING FIXTURES WILL VARY!***

## MOD TW100

## Trouble Shooting

Listed below are a few common problems the user may encounter, with solutions.

### ***Unit not responding to DMX:***

1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is “hot”; on some other DMX devices pin 2 may be ‘hot’). Also, check that all cables are connected to the right connectors; it does matter which way the inputs and outputs are connected.

### ***Unit does not respond to sound:***

1. Quiet or high pitched sounds will not activate the unit.
2. Make sure that Sound Active mode is activated.

## MOD TW100

## Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

**MANUFACTURER'S LIMITED WARRANTY**

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service you must obtain a Return Authorization number (RA#) before sending back the product—please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured.

No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

**MANUFACTURER'S LIMITED WARRANTY PERIODS:**

- **Non L.E.D. Lighting Products = 1-year (365 days) Limited Warranty** (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding LED and lamps)
- **Laser Products = 1 Year (365 Days) Limited Warranty** (excluding laser diodes which have a 6 month limited warranty)
- **L.E.D. Products = 2-year (730 days) Limited Warranty** (excluding batteries which have a 180 day limited warranty). **Note: 2 Year Warranty only applies to purchases within the United States.**
- **StarTec Series = 1 Year Limited Warranty** (excluding batteries which have a 180 day limited warranty).
- **ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty**

**Model: MOD TW100**

Voltage:	100V ~ 240V/50~60Hz
LEDs:	7 x 15W 3-in-1 LED's
Working Position:	Any safe working position
Power Draw:	105W
Power Linking:	5 Fixtures Max. @ 120V 9 Fixtures Max. @ 240V
Weight:	6 lbs./ 2.7 Kgs.
Dimensions:	10.37" (L) x 7.71" (W) x 8.75" (H) 263.4 x 196 x 222mm
Colors:	Cool White/Warm White/Amber Color Mixing
DMX Channels:	5 DMX Modes: 3/4/5/8/9
Warranty:	2 Year (730 days)

**Please Note:** Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.