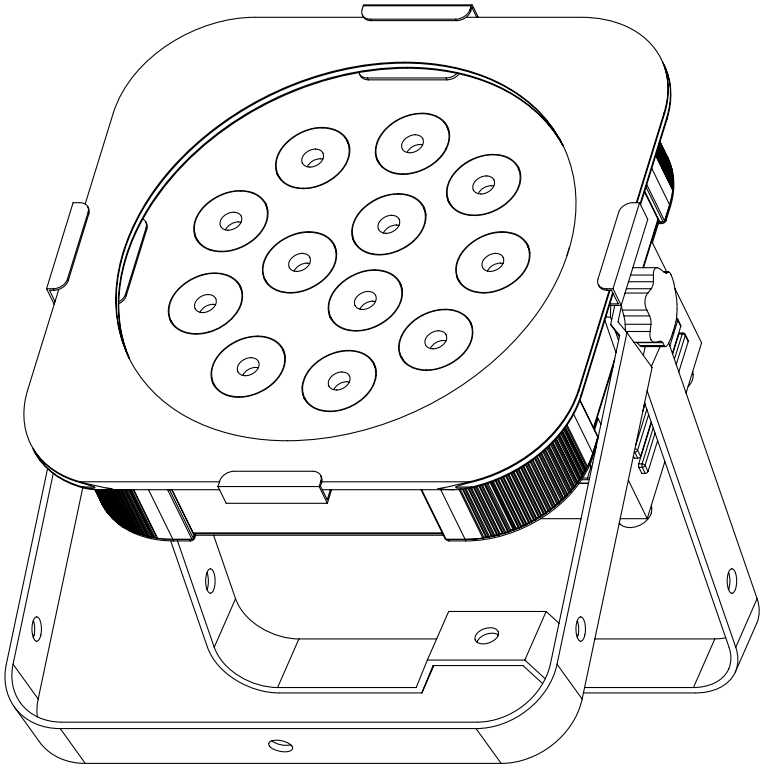
FLAT PAR TW12



User Instructions

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Europe Energy Saving Notice
Energy Saving Matters (EuP 2009/125/EC)
Saving electric energy is a key to help protecting the enviroment. 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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Flat Par TW12 Introduction

Unpacking: Thank you for purchasing the Flat Par TW12 by ADJ Products, LLC. Every Flat Par TW12 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 Flat Par TW12 is part of a continuing pursuit to create high quality intelligent lighting. The Flat Par TW12 is a DMX intelligent, high powered LED par fixture. This fixture can be used in a stand alone mode or connected in a Master/Slave configuration. This wash has five operating modes: Sound Active mode, Auto Run mode, WW/CW/A Dimmer mode, Static Color mode, and DMX control mode. 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: ADJ Products, LLC provides a customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.adj.com for any comments or suggestions. Service Hours are Monday through Friday 8:00 a.m. to 4:30 p.m. Pacific Standard Time.

Voice: (323) 582-3322
Fax: (323) 582-3108
E-mail: support@americandj.com

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.

Flat Par TW12 Features

- Mulit-Colors
- Five Operating Modes
- Electronic Dimming 0-100%
- Built in Microphone
- DMX-512 protocol
- 3-Pin DMX Connection
- 6 DMX Modes: 2 Channel Mode, 3 Channel Mode, 4 Channel Mode, 5 Channel Mode, 8 Channel Mode, and 9 Channel Mode.
- ADJ LED RC compatiable (Not Included)
- Power Cord Daisy Chain (See page 21)

Flat Par TW12 Warranty Registration

The Flat Par TW12 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.

Flat Par TW12 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 out` doors 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 21 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 appliance.
  C. The appliance has been exposed to rain or water.
  D. The appliance does not appear to operate normally or exhibits a marked change in performance.

Power Supply: The ADJ Flat Par TW12 contains a automatic voltage switch, which will auto sense the voltage when it is plugged into the power source. With this switch there is no need to worry about the correct power voltage, this unit can be plugged in anywhere.

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 Flat Par TW12 can be controlled via DMX-512 protocol. The Flat Par TW12 has 6 DMX channel modes, please see pages 7-8 for the different modes. The DMX address is set on the back panel of the Flat Par TW12. 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.

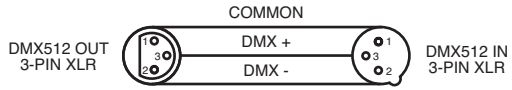


Figure 2

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

Figure 3

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.

3-Pin XLR to 5-Pin XLR Conversion		
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

The display will lock after 30 seconds, press the MENU button for 3 seconds to unlock.

LED Display On/Off:

To set the LED display to turn off after 10 seconds, press the MODE button until "don" is displayed, press the UP button to display "doff". Now the display will disappear after 10s. Press any button to turn the display on again. Be advised though that the display will turn off automatically after 10 seconds.

To set the display press the MODE button until "dXX" is displayed. "XX" represents either "on" or "oFF" Use the UP or DOWN buttons to select either:

"don" = LED display on at all times.

"doFF" = LED display shuts off after 10 seconds.

LED Display Inversion:

Follow these instructions to flip the display 180° so that the display can be read upside down.

1. Plug the fixture in and press the MODE button until "dXX" is displayed. "XX" represents either "on" or "oFF".
2. Press the SET UP button until "Stnd" is displayed.
3. Press the UP or DOWN buttons to reverse the display 180°.

Operating Modes:

The Flat Par TW12 has five operating modes:

- Sound-Active mode - The unit will react to sound, chasing through the built in programs.
- Static Color Mode - There are 32 colors to choose from.
- Auto Run Mode - There are 3 Auto Modes to choose from.
- WW/CW/A Dimmer Mode - Choose one of the three colors to remain static or adjust the intensity of each color to make your desired color.
- 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 Flat Par TW12 has 6 DMX modes: 2 Channel mode, 3 Channel mode, 4 Channel mode, 5 Channel mode, 8 Channel mode, and a 9 Channel mode.

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 "d.XXX" is displayed. "XXX" represents the current displayed 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:
   - To run the 2 Channel Mode, press the MODE button until "Ch02" is displayed. This is the 2 Channel DMX Mode.
   - To run the 3 Channel Mode, press the MODE button until "Ch03" is displayed. This is the 3 Channel DMX Mode.
   - To run the 4 Channel Mode, press the MODE button until "Ch04" is displayed. This is the 4 Channel DMX Mode.
   - To run the 5 Channel Mode, press the MODE button until "Ch05" is displayed. This is the 5 Channel DMX Mode.
   - To run the 8 Channel Mode, press the MODE button until "Ch08" is displayed. This is the 8 Channel DMX Mode.
   - To run the 9 Channel Mode, press the MODE button until "Ch09" is displayed. This is the 9 Channel DMX Mode.
4. See pages 14-19 for the DMX values and traits of each channel mode.
5. After you have chosen your desired DMX Channel mode plug in the fixture via the XLR connections to any standard DMX controller.

WW/CW/A Dimmer Mode:

1. Plug the fixture in and press the MODE button until:
2. When "H.XXX" is displayed you are in Warm White dimming mode. Press the UP and DOWN buttons to adjust intensity.
3. When "C.XXX" is displayed you are in Cool White dimming mode. Press the UP and DOWN buttons to adjust intensity.
4. When "A.XXX" is displayed you are in Amber dimming mode. Press 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 the strobe mode.
6. "S.XXX" will be displayed, this is strobing mode. The strobing can be adjusted between "S.000" (strobe off) to "S.015" (fastest strobe).

Sound Active Mode:

In this mode the Flat Par TW12 will react to sound, and chase through the different colors.

1. Plug the fixture in and press the MODE button until "So-X" is displayed. "X" represents the sound active mode (1-8) currently displayed.
2. The fixture will now change via sound.
3. To adjust the sound sensivity, press the SET UP button. "SJ-X" will be displayed. Use the UP or DOWN buttons to adjust the sensitivity. "SJ-1" is the least sensitive, "SJ-8" is the most sensitive.

Auto Run Mode:

There are 3 types of Auto Run Modes to choose from; Color Fade, Color Change, and both modes running together. The running speed is adjustable in all 3 modes.

1. Plug the fixture in and press the MODE button until either "AF-X", "AJ-X", or "A-JF" is displayed.
   - AF-X = Color Fade mode, there are 8 Color Fade modes to choose from. Use the UP or DOWN buttons to scroll through the different Auto Fade modes.
   - AJ-X = Color Change mode, there are 8 Color Change modes to choose from. Use the UP or DOWN buttons to scroll through the different Auto Change modes.
   - A-JF = Both Color Fade and Color Change modes running.
2. After you have chosen your desired running mode press the SET UP button until "SP.XX" is displayed. When this is displayed you can adjust the running speed of your desired program. Use the UP or DOWN button to adjust the speed between "SP.01" (slowest) and "SP.16" (fastest). Once you have set your desired running speed, press the SET UP button to return to your desired Auto Run Mode.

Static Color Mode:

1. Plug the fixture in and press the MODE button until "CLXX" is displayed.
2. There are 32 colors to choose from. Select your desired color by pressing the UP and DOWN buttons. After you have selected your desired color you can activate strobing by pressing the SET UP button to enter the strobe mode.
3. "S.XXX" will be displayed, this is strobing. The strobing can be adjusted between "S.000" (strobe off) to "S.015" (fastest strobe).

Default Running Mode:

This is a default running mode. When this mode is activated all modes will return to their default settings.

1. Plug the fixture in and press the MODE button until “dXX” is displayed. “XX” represents either “on” or “oFF”.
2. Press the SET UP button until “dEFA” is displayed.
3. Press the UP and DOWN buttons simultaneously. Press the MODE button to exit.

ADJ LED RC3:

This function is used to activate and deactivate the ADJ LED RC3 (Remote Control). When this function is activated you can control the fixture using the ADJ LED RC3. Please see the next page for ADJ LED RC3 controls and functions.

1. Plug the fixture in and press the MODE button until “dXX” is displayed. “XX” represents either “on” or “oFF”.
2. Press the SET UP button until “IrXX” is displayed. “XX” represents either “on” or “oF”.
3. Press the UP or DOWN buttons to either activate the remote function (On) or deactivate it (Off).

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. Press the MODE button until the DMX address is displayed.
2. Press the SET UP button until “No-X” is displayed. “X” represents a number between 0-2.
3. Use the UP or DOWN buttons to operating mode you would like the unit to start up in when power is applied or the DMX signal is lost.

• “N0-0” (BLACKOUT) - If the DMX signal is lost or power is applied, the unit will automatically go into stand by mode.

• “N0-1” (HOLD) - If the DMX signal is lost the fixture will stay in the

last DMX set up. If power is applied and this mode is set, the unit will automatically go into the last DMX set up.

• “N0-2” (FADE PROGRAM) - If the DMX signal is lost or power is applied, the unit will automatically run the fade program.

Dimmer Curve:

This is used to set the dimmer curve used with DMX mode. See the Dimmer Curve chart on page 18 for more information.

1. Plug the fixture in and press the MODE button until the DMX address is displayed.
2. Press the ENTER button until “dr-X” is displayed. “X” represents the current dimming mode.
3. Use the UP and DOWN buttons to find your desired dimmer curve. Press SET UP when you are finished.
   - dr-0 - Standard
   - dr-1 - Stage
   - dr-2 - TV
   - dr-3 - Architectural
   - dr-4 - Theater

Master-Slave Configuration:

This function will allows you to link units together to run in a Master-Slave mode. In Master-Slave operation one unit will act as the controlling unit and the others will react to the controlling units built-in programs. 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 your units via the XLR connector on the rear of the unit. Use standard XLR data cables to link your units together. Remember that the Male XLR connector is the input and the Female XLR connector is the ouput. 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 your desired mode of operation. For the “Slave” unit(s) press the MODE button until “SLAv” is displayed. The “Slave” unit(s) will now follow the “Master”.

The **ADJ LED RC3** infrared remote (sold seperately) has many differnet functions and gives you complete control of your Flat Par TW12. To control the your desired fixture you must aim the controller at the front of the fixture and be no more the 30 feet away. To use the ADJ LED RC3 you must first activate the fixtures infrared receiver, to activate the receiver please see the instructions on page 10.

BLACKOUT - Pressing this button will blackout the fixture.

AUTO RUN - Pressing this button will cycle through the auto run mode, color fade mode, and color change. You can control the speed of the 3 modes by pressing the SPEED button first and then pressing the "+" and "-" buttons. In color fade and color change mode, press the "+" and "-" buttons to scroll through the 8 modes.

PROGRAM SELECTION - Pressing this button activates static color mode. Use the "+" or "-" to scroll through the 32 colors. Press Flash to activate/deactivate strobing. Use the "+" and "-" buttons to adjust the strobe speed.

DMX MODE - Press this button to cycle between DMX Channel mode selection, DMX addressing, DMX State, and dimming curve selection. Each press of this button will change to the next mode.

• In DMX State mode press the the "+" and "-" buttons to scroll through the DMX state modes. See DMX State on page 10-11 for more info.

• In DMX address mode press the the "+" and "-" buttons to adjust the DMX address.

• In dimmer curve setting press the the "+" and "-" buttons to scroll through the dimmer curves. See Dimmer Curves on page 11 for more info.

• In DMX Channel selection press the the "+" and "-" buttons to scroll through the different DMX Channel modes. See DMX mode on pages 7-8 for more info. The info below and on the next page will help identify which channel mode you are in.

• If the Warm White LED's glow you are in 2 Channel Mode.
• If the Cool White LED's glow you are in 3 Channel Mode.
• If the Amber LED's glow you are in 4 Channel Mode.
• If the Warm & Cool White LED's glow you are in 5 Channel

Mode.
• If the Warm White & Amber LED's glow you are in 8 Channel Mode.
• If Cool White & Amber LED's glow you are in 9 Channel Mode.

SOUND ACTIVE - This button activates sound active mode. Use the "+" and "-" buttons to scroll through the 8 sound active modes. Press the Speed button and use the "+" and "-" buttons to adjust the sound sensitivity level.

SLAVE - This designates the fixture as a slave fixture in a master/slave configuration.

SET ADDRESS - Press this button to set the DMX address. Press this button first, then press the numbers to set the address.
Note: When setting the DMX address each time a number is pressed a LED color will glow, when you have set the DMX address correctly all LED's will flash 2-3 times.
Example: Set DMX Address 1 Press "S-0-0-1"
Set DMX Address 245 Press "S-2-4-5"

WW CW A - Press either one of these buttons and the press the "+" or "-" to adjust the output intensity. Press Flash to activate/deactivate strobing. Use the "+" and "-" buttons to adjust the strobe speed.

Flat Par TW12		2 Channel Mode
Channel	**Value**	**Function**
1	0 - 255	COLOR MACROS (See the Color Macro chart on page 19)
2	0 - 255	DIMMER 0% - 100%

Flat Par TW12		3 Channel Mode
Channel	**Value**	**Function**
1	0 - 255	WARM WHITE 0% - 100%
2	0 - 255	COOL WHITE 0% - 100%
3	0 - 255	AMBER 0% - 100%

Flat Par TW12		4 Channel Mode
Channel	**Value**	**Function**
1	0 - 255	WARM WHITE 0% - 100%
2	0 - 255	COOL WHITE 0% - 100%
3	0 - 255	AMBER 0% - 100%
4	0 - 255	MASTER DIMMER 0% - 100%

Flat Par TW12		5 Channel Mode
Channel	**Value**	**Function**
1	0 - 255	WARM WHITE 0% - 100%
2	0 - 255	COOL WHITE 0% - 100%
3	0 - 255	AMBER 0% - 100%
4	0 - 255	MASTER DIMMER 0% - 100%
5	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

Flat Par TW12		8 Channel Mode
Channel	**Value**	**Function**
1		WARM WHITE
	0 - 255	0% - 100%
2		COOL WHITE
	0 - 255	0% - 100%
3		AMBER
	0 - 255	0% - 100%
4		MASTER DIMMER
	0 - 255	0% - 100%
5		STROBING
	0 - 31	LED OFF
	32 - 63	LED ON
	64 - 95	STROBING SLOW - FAST
	96 - 127	LED ON
	128 - 159	PULSE STROBING SLOW - FAST
	160 - 191	LED ON
	192 - 223	RANDOM STROBING SLOW - FAST
	224 - 255	LED ON
6	0 - 255	COLOR MACROS
		(See the Color Macro chart on page 19)
7		PROGRAMS
	0 - 127	NO PROGRAM
	128 - 135	COLOR FADE 1
	136 - 143	COLOR FADE 2
	144 - 151	COLOR FADE 3
	152 - 159	COLOR FADE 4
	160 - 167	COLOR FADE 5
	168 - 175	COLOR FADE 6
	176 - 183	COLOR FADE 7
	184 - 191	COLOR FADE 8
	192 - 199	COLOR CHANGE 1
	200 - 207	COLOR CHANGE 2
	208 - 215	COLOR CHANGE 3
	216 - 223	COLOR CHANGE 4
	224 - 231	COLOR CHANGE 5

Flat Par TW12		8 Channel Mode
Channel	**Value**	**Function**
7		PROGRAMS
	232 - 239	COLOR CHANGE 6
	240 - 247	SOUND ACTIVE MODE 1
	248 - 255	SOUND ACTIVE MODE 2
8		PROGRAM SPEED/SOUND SENSITIVE
	0 - 255	PROGRAM SPEED SLOW - FAST
	0 - 255	SOUND SENSITIVITY MIN - MAX

When channel 6 is being used, channels 1-3 will cannot be used.

When channel 7 is between the values of 128-239, channel 8 will control the program speed.

When channel 7 is between the values of 240-255, channel 8 will control the sound sensitivity.

Flat Par TW12		9 Channel Mode
Channel	**Value**	**Function**
1		WARM WHITE
	0 - 255	0% - 100%
2		COOL WHITE
	0 - 255	0% - 100%
3		AMBER
	0 - 255	0% - 100%
4		MASTER DIMMER
	0 - 255	0% - 100%
5		STROBING
	0 - 31	LED OFF
	32 - 63	LED ON
	64 - 95	STROBING SLOW - FAST
	96 - 127	LED ON
	128 - 159	PULSE STROBING SLOW - FAST
	160 - 191	LED ON
	192 - 223	RANDOM STROBING SLOW - FAST
	224 - 255	LED ON
6	0 - 255	COLOR MACROS
		(See the Color Macro chart on page 19)
7		PROGRAMS
	0 - 127	NO PROGRAM
	128 - 135	COLOR FADE 1
	136 - 143	COLOR FADE 2
	144 - 151	COLOR FADE 3
	152 - 159	COLOR FADE 4
	160 - 167	COLOR FADE 5
	168 - 175	COLOR FADE 6
	176 - 183	COLOR FADE 7
	184 - 191	COLOR FADE 8
	192 - 199	COLOR CHANGE 1
	200 - 207	COLOR CHANGE 2
	208 - 215	COLOR CHANGE 3
	216 - 223	COLOR CHANGE 4
	224 - 231	COLOR CHANGE 5

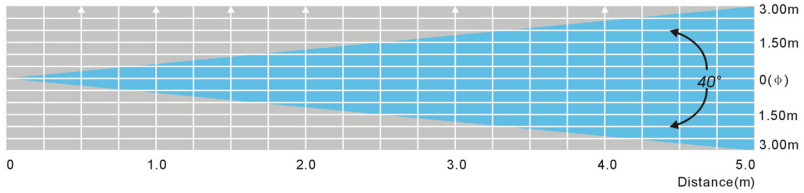
Flat Par TW12		9 Channel Mode
Channel	**Value**	**Function**
7		PROGRAMS
	232 - 239	COLOR CHANGE 6
	240 - 247	SOUND ACTIVE MODE 1
	248 - 255	SOUND ACTIVE MODE 2
8		PROGRAM SPEED/SOUND SENSITIVE
	0 - 255	PROGRAM SPEED SLOW - FAST
	0 - 255	SOUND SENSITIVITY MIN - MAX
9		DIMMER CURVES
	0 - 20	STANDARD
	21 - 40	STAGE
	41 - 60	TV
	61 - 80	ARCHITECTURAL
	81 - 100	THEATRE
	101 - 255	DEFAULT TO UNIT CURVE SETTING

* Channels 1, 2, and 3 will not work, when Channel 6 is being used.
* When using Channel 7 values 128-239, Channel 8 will control the speed of the programs.
* When using Channel 7 values 240-255, Channel 8 will control the sound sensitivity.

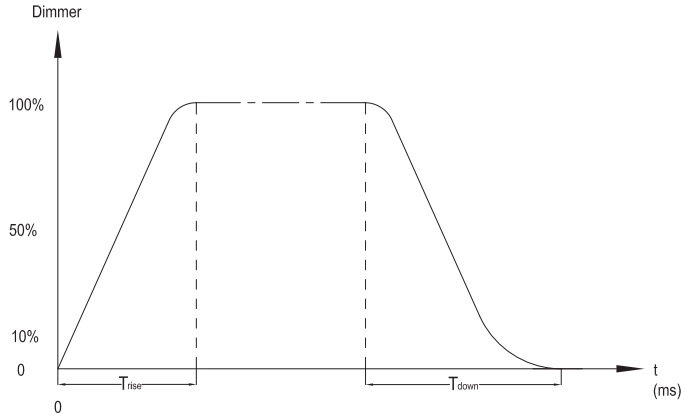
Flat Par TW12									Color Macro Chart
Color No.	DMX VAULE	WW/CW/A COLOR INTENSITY			Color No.	DMX VAULE	WW/CW/A COLOR INTENSITY		
		WW	CW	A			WW	CW	A
Color1 (off)	0	0	0	0	Color18	128-135	1	134	201
Color2	1-7	255	206	143	Color19	136-143	0	145	212
Color3	8-15	254	177	153	Color20	144-151	0	121	192
Color4	16-23	254	192	138	Color21	152-159	0	129	184
Color5	24-31	254	165	98	Color22	160-167	0	83	115
Color6	32-39	254	121	0	Color23	168-175	0	97	166
Color7	40-47	176	17	0	Color24	176-183	1	100	167
Color8	48-55	96	0	11	Color25	184-191	0	40	86
Color9	56-63	234	139	171	Color26	192-199	209	219	182
Color10	64-71	254	5	97	Color27	200-207	42	165	85
Color11	72-79	175	77	173	Color28	208-215	0	46	35
Color12	80-87	119	130	199	Color29	216-223	8	107	222
Color13	88-95	147	164	212	Color30	224-231	107	156	231
Color14	96-103	88	2	163	Color31	232-239	165	198	247
Color15	104-111	0	38	86	Color32	240-247	0	0	189
Color16	112-119	0	142	208	Color33	248-255	165	35	1
Color17	120-127	52	148	209					

Flat Par TW12 — Photometric Chart

WW	D40	2530	600	216	137.6	88.5	lux
CW	D40	3220	796	350	196	128	
Amber	D40	2020	507	218	123	79	
WW/CW/A	D40	6760	1650	733	393	253	



Flat Par TW12 — Dimmer Curve Chart



Ramp Effect	0 255 0S (Fade Time)		0 255 1S (Fade Time)	
	T_{rise} (ms)	T_{down} (ms)	T_{rise} (ms)	T_{down} (ms)
Standard	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280

Flat Par TW12 — Power Cord Daisy Chain

With this feature you can connect the fixtures to one another using the IEC input and output sockets. The quantity that can be connected is 10 fixtures maximum. After 10 fixtures you will need to use a new power outlet. They must be the same fixtures. DO NOT mix fixtures.

Flat Par TW12 — Fuse Replacement

Disconnect the unit from its power source. Remove the power cord from the unit. Once the cord has been removed, you will find that the fuse holder is located inside the power socket. Insert a flat-head screw driver into the power socket and gently pry out the fuse holder. Remove the bad fuse and replace with a new one. The fuse holder also has a holder for a spare fuse.

Flat Par TW12 — 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.

Flat Par TW12 — 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 it's 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 indentifying marks to that effect.

E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon it's 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. This warranty was revised after December 1, 2012.

MANUFACTURER'S LIMITED WARRANTY PERIODS:

- **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 LEDs and lamps)
- **Laser Products = 90-Day Limited Warranty**
- **L.E.D. Products = 2-year (730 days) Limited Warranty** (excluding motors, PCB boards, and power supplies, which have a 1-year (365 day Limited Warranty) and batteries which have a 180 day limited warranty).

Flat Par TW12 Notes

Model: Flat Par TW12

Voltage:	100V ~ 240V/50~60Hz
LEDs:	12 x 5W 3-in-1 Tri LED's
Beam Angle:	40 Degrees
Working Position:	Any safe working position
Power Draw:	61W
Power Cord Daisy Chain:	10 Fixtures Max.
Fuse:	2A
Weight:	7lbs./ 3.25Kgs.
Dimensions:	13" (L) x 11" (W) x 4" (H) 328 x 280 x 105mm
Colors:	Warm White, Cool White, & Amber
DMX Channels:	6 DMX Modes: 2 Channel Mode, 3 Channel Mode, 4 Channel Mode, 5 Channel Mode, 8 Channel Mode & 9 Channel Mode
Warranty:	2 Year (730 days)
Color Temperature	
Variable:	2700-6500
Cool White:	>6500°K
Warm White:	>2700°K
Amber (Wavelength):	590-595NM
CRI Values	
Cool White:	70-80
Warm White:	70-80
Amber:	None

Auto Sensing Voltage: *This fixture contains a automatic voltage switch, which will auto sense the voltage when it is plugged into the power source.*

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

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