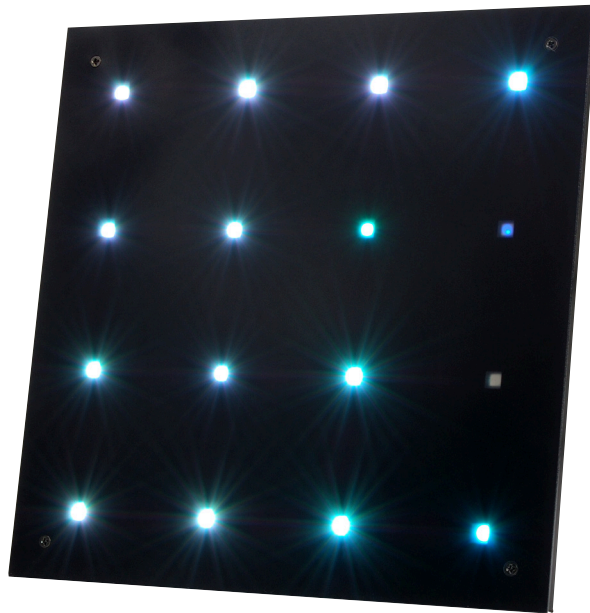




# FLASH PANEL 16



## User Instructions

### Flash Panel 16

### Introduction

**Unpacking:** Thank you for purchasing the Flash Panel 16 by American DJ®. Every Flash Panel 16 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 Flash Panel 16 is part of American DJ's continuing pursuit for creating high quality affordable intelligent LED fixtures. The Flash Panel 16 is a DMX intelligent LED Panel. This LED panel can be controlled via DMX or via the optional CF card controller (Model: FP CFC). Dynamic effects can be played on it, which makes it a great system for DJ's and night clubs. This unit can be used as a stand alone or linked together.

**Customer Support:** American DJ® provides a toll free 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.americandj.com](http://www.americandj.com) for any comments or suggestions. Service Hours are Monday through Friday 9:00 a.m. to 4:30 p.m. Pacific Standard Time.

Voice: (800) 322-6337

Fax: (323) 582-2941

E-mail: [support@americandj.com](mailto:support@americandj.com)

To purchase parts online visit <http://parts.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 American DJ®.

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

## Flash Panel 16

## General Instructions

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.

## Flash Panel 16

## Features

- Multi-Colors
- 22 Different Programs with Speed Adjustment
- 4 Operating Modes; Sound Active, Auto Run, Program Select, & DMX Control.
- Built in Microphone
- Optional FP CFC Control (Not Included)
- Uses 48 DMX Channels
- Daisy Chain Units Together in DMX Mode

## Flash Panel 16

## Warranty Registration

The Flash Panel 16 carries a 1 year (365 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase and warranty. You may also register your product online at [www.americandj.com](http://www.americandj.com). All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. If the unit is under warranty you must provide a copy of your proof of purchase invoice. Please contact American DJ® customer support for a R.A. number.

## Flash Panel 16

## Safety Precautions

- 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.
- Be sure that the local power outlet match that of the required voltage for 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 11 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.

## Flash Panel 16

## DMX Set Up

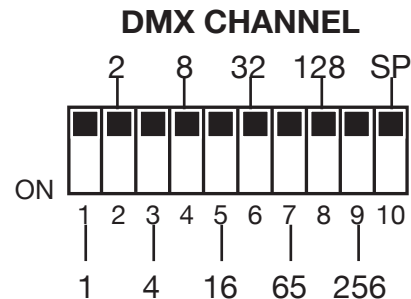
**Power Supply:** The American DJ® Flash Panel 16 contains an electronic ballast, which will auto sense the voltage when it is plugged into the power source. With the electronic ballast you do not need to worry about wall voltage, this unit can be plugged in anywhere.

**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 manufacturers 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.

**Dip-switches in DMX mode:** This unit uses dipswitches to assign a DMX address. Each dipswitch represents a binary value.

Dipswitch 1 address equals 1  
Dipswitch 2 address equals 2  
Dipswitch 3 address equals 4  
Dipswitch 4 address equals 8  
Dipswitch 5 address equals 16  
Dipswitch 6 address equals 32  
Dipswitch 7 address equals 64  
Dipswitch 8 address equals 128  
Dipswitch 9 address equals 256  
Dipswitch 10 - Some units omit dipswitch 10. When a unit does include dipswitch 10 it is used for special functions such as sound activation.



Each dipswitch has a preset value. A specific DMX address is set by combining the dipswitches that sum your desired value. For example:

## Flash Panel 16

## DMX Set Up

To achieve a DMX address of 21, combine dipswitches 1, 3, and 5. Sense dipswitch 1 has a value of 1, dipswitch 3 has a value of 4, and dipswitch 5 has a value of 16, the combination of the create a DMX value of 21.

Set DMX address 21:

Dipswitch # 1 = 1  
Dipswitch # 3 = 4  
Dipswitch # 5 = 16  
= 21

Set DMX address 201:

Dipswitch # 1 = 1  
Dipswitch # 4 = 8  
Dipswitch # 7 = 64  
Dipswitch # 8 = 128  
= 201

### Data Cable (DMX Cable) Requirements (For DMX Operation):

The Flash Panel 16 can be controlled via DMX-512 protocol. The Flash Panel 16 is a 48 channel DMX unit. The DMX address is set on the back panel of the Flash Panel 16. Your unit and your DMX controller require a approved DMX-512 110 Ohm Data cable 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 professional sound and 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.

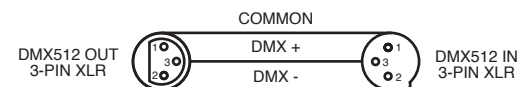


Figure 2

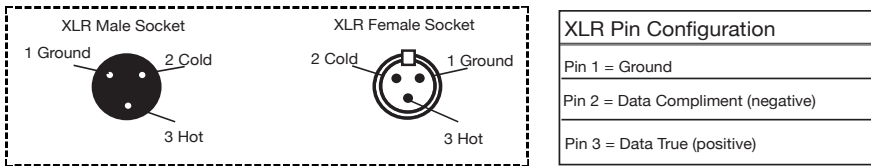


Figure 3

**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 XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors 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

### Operating Modes:

You can use the Flash Panel 16 in four ways:

- Sound-Active mode - The unit will react to sound, chasing through the built in programs.
- Auto Mode - The unit will automatically chase through the different colors.
- Program Select - Choose 1 of 22 programs.
- DMX control mode - This function will allow you to control each individual fixtures traits with a standard DMX 512 controller such as as the Elation® Show Designer™.

### Sound Active Mode:

In this mode the Flash Panel 16 will react to sound, and chase through the different colors.

1. Plug the fixture in and put dipswitch 9 in the “ON” position.
2. The fixture will now change via sound.

### Auto Mode:

1. Plug the fixture in and put and put all dipswitches in the OFF position.
2. Adjust the speed by putting dipswitches 6, 7, & 8 in the ON position. Example put dipswitch 6 in the ON position and the Auto Mode will run a little faster then normal.

### Program Select:

1. Select 1 of 22 programs. Some programs are static colors others are moving programs. See page 11 for the programs and dip-switch settings.
2. The speed of the moving programs can be adjusted using dipswitches 6-8.

### DMX Mode:

Operating through a DMX controller give the user the freedom to create their own programs tailored to their own individual needs. This function also allows you to use your fixtures as spot lights.

1. This function will allow you to control each individual fixture’s traits with a standard DMX 512 controller such as the Elation® Show Designer™ or the Elation® DMX Operator™

**Flash Panel 16****Operating Instructions**

2. The Flash Panel 16 uses 48 DMX channels to operate, see the next page for the DMX traits.
3. To run your fixture in DMX mode, set your desired DMX address using the dipswitches. You must also have dipswitch 10 in the ON position.
4. Plug in the fixture via the XLR connections to any standard DMX controller. following the set-up specifications that come with your DMX controller.

**Master-Slave Operation:**

This function will allow 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 microphone cables to link your 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. You will also have to link the power cords to each other, as you did with the XLR cables.
3. Using the Master unit, choose your desired mode or program and connect the "Slave" unit or units. For the slave units put dipswitches 1 and 10 in the ON position.

**Flash Panel 16****DMX Values & Functions**

Channel	Value	Function
1	1 - 255	RED 1 0% - 100%
2	1 - 255	GREEN 1 0% - 100%
3	1 - 255	BLUE 1 0% - 100%
4	1 - 255	RED 2 0% - 100%
5	1 - 255	GREEN 2 0% - 100%
6 ↓	1 - 255	BLUE 2 0% - 100%
43	1 - 255	RED 15 0% - 100%
44	1 - 255	GREEN 15 0% - 100%
45	1 - 255	BLUE 15 0% - 100%
46	1 - 255	RED 16 0% - 100%
47	1 - 255	GREEN 16 0% - 100%
48	1 - 255	BLUE 16 0% - 100%

Flash Panel 16					Programs & Dipswitch Settings
Dip1	Dip2	Dip3	Dip4	Dip5	Program
1	0	0	0	0	Red
0	1	0	0	0	Green
1	1	0	0	0	Yellow
0	0	1	0	0	Blue
1	0	1	0	0	Purple
0	1	1	0	0	Cyan
1	1	1	0	0	White
0	0	0	1	0	Half Red & Half Green
1	0	0	1	0	Half Red & Half Blue (1)
0	1	0	1	0	Half Green & Half Purple (1)
1	1	0	1	0	Half Red & Half Blue (2)
0	0	1	1	0	Half White & Half Off
1	0	1	1	0	Half Red & Half Off
0	1	1	1	0	Half Red & Half Blue (3)
1	1	1	1	0	Half Green & Half Purple (2)
0	0	0	0	1	Seven Color Dreaming
1	0	0	0	1	Seven Color Holistic Flow
0	1	0	0	1	Seven Color Flow Direction 1
1	1	0	0	1	Seven Color Flow Direction 2
0	0	1	0	1	Seven Color Double Flow
1	0	1	0	1	Seven Color Trailing Flow (1)
0	1	1	0	1	Seven Color Trailing Flow (2)

1=On

0=Off

Dipswitches 6-8 will control the speed of the moving programs.

## Flash Panel 16 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).

## Flash Panel 16 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. Check your dipswitch settings.

*If problems are not resolved; Contact American DJ® for service.  
1-800-322-6337*

## MANUFACTURER'S LIMITED WARRANTY

A. American DJ, Inc. hereby warrants, to the original purchaser, American DJ and American Audio 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. Contact American DJ, Inc. Service Department at 800-322-6337. Send the product only to the American DJ, Inc. factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, American DJ, Inc. 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, American DJ, Inc. 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 American DJ, Inc. concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the American DJ, Inc. factory unless prior written authorization was issued to purchaser by American DJ, Inc.; 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, American DJ, Inc. 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 American DJ, Inc. under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of American DJ. All products covered by this warranty were manufactured after January 1, 1990, and bear identifying marks to that effect.

E. American DJ, Inc. 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 American DJ, Inc. 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 American DJ, Inc. 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 American DJ and American Audio Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

## MANUFACTURER'S LIMITED WARRANTY PERIODS:

- All American Audio Products = 1-year (365 day) Limited Warranty (except V-Plus Series Amplifiers)
- All American Audio V-Plus Series Amplifiers = 3-year (1095 day) Limited Warranty
- American DJ Lighting and American DJ Branded Products = 1-year (365 day) Limited Warranty (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobos, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding Laser Products, lamps, and Star Tec Series)
- American DJ Laser Products and Star Tec Products = 90-Day Limited Warranty
- American DJ L.E.D. Products = 3-year (1095 day) Limited Warranty (excluding motors which have a 1-year (365 day Limited Warranty)

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**Model: Flash Panel 16****SPECIFICATIONS:**

LEDs:	16 x 0.164W 3-in-1 LEDs
Working Position:	Any safe working position
Voltage:	90~240V, 60/50Hz
Power Draw:	6W Max.
Weight:	3lbs./ 1.4Kgs.
Dimensions:	9.8" (L) x 9.8" (W) x 1.85" (H) 250 (L) x 250 (W) x 47 (H) mm
Colors:	RGB Color Mixing
DMX Channels:	48 Channels
Warranty:	3 Year (1095 days)

**Auto Sensing Voltage:** *This fixture contains a electronic ballast, 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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