

Ultra Hex Bar 6 18 Channel - DMX Values & Functions		
Channel	Value	Function
1	0 - 255	RED 0% - 100% PIXEL 1 & 2
2	0 - 255	GREEN 0% - 100% PIXEL 1 & 2
3	0 - 255	BLUE 0% - 100% PIXEL 1 & 2
4	0 - 255	WHITE 0% - 100% PIXEL 1 & 2
5	0 - 255	AMBER 0% - 100% PIXEL 1 & 2
6	0 - 255	UV 0% - 100% PIXEL 1 & 2
7	0 - 255	RED 0% - 100% PIXEL 3 & 4
8	0 - 255	GREEN 0% - 100% PIXEL 3 & 4
9	0 - 255	BLUE 0% - 100% PIXEL 3 & 4
10	0 - 255	WHITE 0% - 100% PIXEL 3 & 4
11	0 - 255	AMBER 0% - 100% PIXEL 3 & 4
12	0 - 255	UV 0% - 100% PIXEL 3 & 4
13	0 - 255	RED 0% - 100% PIXEL 5 & 6
14	0 - 255	GREEN 0% - 100% PIXEL 5 & 6
15	0 - 255	BLUE 0% - 100% PIXEL 5 & 6
16	0 - 255	WHITE 0% - 100% PIXEL 5 & 6
17	0 - 255	AMBER 0% - 100% PIXEL 5 & 6
18	0 - 255	UV 0% - 100% PIXEL 5 & 6

**Ultra Hex Bar 6 Color Macro Chart**

0-3=Off	64-67=B+W	128-131=G+B+W	192-195=R+B+W+A
4-7=Red	68-71=B+A	132-135=G+B+A	196-199=R+B+W+UV
8-11=Green	72-75=B+UV	136-139=G+B+UV	200-203=R+B+A+UV
12-15=Blue	76-79=W+A	140-143=G+W+A	204-207=R+W+A+UV
16-19=White	80-83=W+UV	144-147=G+W+UV	208-211=G+B+W+A
20-23=Amber	84-87=A+UV	148-151=G+A+UV	212-215=G+B+W+UV
24-27=UV	88-91=R+G+B	152-155=B+W+A	216-219=G+B+A+UV
28-31=R+G	92-95=R+G+W	156-159=B+W+UV	220-223=G+W+A+UV
32-35=R+B	96-99=R+G+A	160-163=B+A+UV	224-227=B+W+A+UV
36-39=R+W	100-103=R+G+UV	164-167=W+A+UV	228-231=R+G+B+W+A
40-43=R+A	104-107=R+B+W	168-171=R+G+B+W	232-235=R+G+B+W+UV
44-47=R+UV	108-111=R+B+A	172-175=R+G+B+A	236-239=R+G+B+A+UV
48-51=G+B	112-115=R+B+UV	176-179=R+G+B+UV	240-243=R+G+W+A+UV
52-55=G+W	116-119=R+W+A	180-183=R+G+W+A	244-247=R+B+W+A=UV
56-59=G+A	120-123=R+W+UV	184-187=R+G+W+UV	248-251=G+B+W+A+UV
60-63=G+UV	124-127=R+A+UV	188-191=R+G+A+UV	252-255=R+G+B+W+A+UV

**Ultra Hex Bar 6 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.
- 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.

## Ultra Hex Bar 6

## Set Up

**Power Supply:** The ADJ Ultra Hex Bar 6 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 Ultra Hex Bar 6 can be controlled via DMX protocol. The Ultra Hex Bar 6 has 5 DMX channel modes, please see pages 7-8 for the different modes. 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 con-

## Ultra Hex Bar 6

## 12 Channel - DMX Values & Functions

Channel	Value	Function
10	91 - 101	PROGRAMS
	102 - 112	PROGRAM 8
	113 - 123	PROGRAM 9
	124 - 134	PROGRAM 10
	135 - 145	PROGRAM 11
	146 - 156	PROGRAM 12
	157 - 167	PROGRAM 13
	168 - 178	PROGRAM 14
	179 - 189	PROGRAM 15
	190 - 200	PROGRAM 16
	201 - 211	PROGRAM 17
	212 - 222	PROGRAM 18
	223 - 233	PROGRAM 19
	234 - 255	PROGRAM 20
11		SOUND ACTIVE PROGRAMS
	0 - 255	PROGRAM SPEED/SOUND SENSITIVE
	0 - 255	SLOW - FAST LEAST SENSITIVE - MOST SENSITIVE
12	0 - 20	DIMMER MODE
	21 - 40	STANDARD
	41 - 60	STAGE
	61 - 80	TV
	81 - 100	ARCHITECTURAL
	101 - 255	THEATRE DEFAULT DIMMER SETTING

When Channel 7 is being used, Channels 1-6 will not work.

When Channel 10 is between the values of 1-233, Channel 11 will control the program speed.

When Channel 10 is between the values of 234-255, Channel 11 will control the sound sensitivity.

Channel	Value	Function
1	0 - 255	RED 0% - 100%
2	0 - 255	GREEN 0% - 100%
3	0 - 255	BLUE 0% - 100%
4	0 - 255	WHITE 0% - 100%
5	0 - 255	AMBER 0% - 100%
6	0 - 255	UV
7	0 - 255	COLOR MACROS (See Color Macro Chart on page 19)
8	0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	STROBING OFF LED ON STROBING SLOW - FAST LED ON STROBE PULSE SLOW - FAST LED ON RANDOM STROBING LED ON
9	0 - 255	MASTER DIMMER 0% - 100%
10	0 1 - 24 25 - 35 36 - 46 47 - 57 58 - 68 69 - 79 80 - 90	PROGRAMS OFF PROGRAM 1 PROGRAM 2 PROGRAM 3 PROGRAM 4 PROGRAM 5 PROGRAM 6 PROGRAM 7

nect 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.

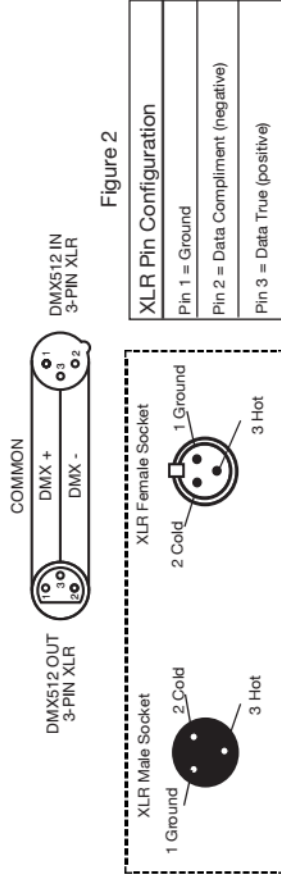


Figure 3

**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 Products, LLC 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

**Menu Lock:**

You can set the menu to lock after 30 seconds. When the menu is set to lock, press and hold the MODE button for at least 5 seconds to unlock and access the menu.

To set the menu to lock after 30 seconds, press the MODE button until "OTHER" is displayed. Press the SET UP button so that LOCK:XXX" is displayed. "XXX" represents either ON or OFF. Press the UP or DOWN buttons so that ON is displayed. Now the menu will lock after 30s.

**LED Display On/Off:**

To set the LED display light to turn off after 30 seconds, press the MODE button until "OTHER" is displayed. Press the SET UP button so that BLGT:XXX" is displayed. "XXX" represents either ON or OFF. Press the UP or DOWN buttons so that OFF is displayed. Now the display light will turn off after 30s. Press any button to turn the display on again.

**Operating Modes:**

The Ultra Hex Bar 6 has six operating modes:

- DMX control mode - This function will allow you to control each individual fixtures traits with a standard DMX 512 controller.
- RGBWA + UV Mode - Choose one of the six colors to remain static or adjust the intensity of each color to make your own color.
- Sound-Active mode - The unit will react to sound, chasing through the built in programs. There are 16 sound active modes.
- Program Mode - The unit will run 1 of 20 built-in programs.
- Auto Mode - The unit will run a auto program.
- Static Color Mode - There are 63 colors to choose from.

**DMX Mode:**

Operating through a DMX controller gives 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. The Ultra Hex Bar 6 has 5 DMX modes: 6 Channel mode, 7 Channel mode, 8 Channel mode, 12 Channel mode, and 18 Channel mode. See pages 15-19 for each mode's DMX traits.

1. This function will allow you to control each individual fixture's traits with a standard DMX 512 controller.

Channel	Value	Function
1	0 - 255	RED 0% - 100%
2	0 - 255	GREEN 0% - 100%
3	0 - 255	BLUE 0% - 100%
4	0 - 255	WHITE 0% - 100%
5	0 - 255	AMBER 0% - 100%
6	0 - 255	UV 0% - 100%
7	0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	STROBING OFF LED ON STROBING SLOW - FAST LED ON PULSE STROBING SLOW - FAST LED ON RANDOM STROBING LED ON
8	0 - 255	MASTER DIMMER 0% - 100%



Ultra Hex Bar 6		6 Channel - DMX Values & Functions
Channel	Value	Function
1	0 - 255	RED 0% - 100%
2	0 - 255	GREEN 0% - 100%
3	0 - 255	BLUE 0% - 100%
4	0 - 255	WHITE 0% - 100%
5	0 - 255	AMBER 0% - 100%
6	0 - 255	UV 0% - 100%

Ultra Hex Bar 6		7 Channel - DMX Values & Functions
Channel	Value	Function
1	0 - 255	RED 0% - 100%
2	0 - 255	GREEN 0% - 100%
3	0 - 255	BLUE 0% - 100%
4	0 - 255	WHITE 0% - 100%
5	0 - 255	AMBER 0% - 100%
6	0 - 255	UV 0% - 100%
7	0 - 255	MASTER DIMMER 0% - 100%

Ultra Hex Bar 6	Operating Instructions
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- To run your fixture in DMX mode press the MODE button until "DMX MODE: is displayed. Press the SET UP button so that ADDR: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.
- Use the UP or DOWN buttons to scroll through the DMX Channel modes. The Channel modes are listed below:
  - To run the 6 Channel Mode, press the MODE button until "CHAN:6" is displayed. This is the 6 Channel DMX Mode.
  - To run the 7 Channel Mode, press the MODE button until "CHAN:7" is displayed. This is the 7 Channel DMX Mode.
  - To run the 8 Channel Mode, press the MODE button until "CHAN:8" is displayed. This is the 8 Channel DMX Mode.
  - To run the 12 Channel Mode, press the MODE button until "CHAN:12" is displayed. This is the 12 Channel DMX Mode.
  - To run the 18 Channel Mode, press the MODE button until "CHAN:18" is displayed. This is the 18 Channel DMX Mode.
- Please see pages 15-19 for DMX values and traits.
- After you have chosen your desired DMX Channel mode plug in the fixture via the XLR connections to any standard DMX controller.

**RGBWA & UV Dimmer Mode:**

- Plug the fixture in and press the MODE button until "MANUAL" is displayed.
- When "RED: XXX" is displayed you are in Red dimming mode. Press the UP and DOWN buttons to adjust intensity. After you have finished adjusting the intensity, or if you would like to skip to the next color, press the SET UP button.
- When "GREN: XXX" is displayed you are in Green dimming mode. Press the UP and DOWN buttons to adjust intensity.
- When "BLUE: XXX" is displayed you are in Blue dimming mode. Press the UP and DOWN buttons to adjust intensity.
- When "WHIT: XXX" is displayed you are in White dimming mode. Press the UP and DOWN buttons to adjust intensity.
- When "AMBE: XXX" (Amber) is displayed you are in Amber dimming mode. Press the UP and DOWN buttons to adjust intensity.
- When "UV: XXX" is displayed you are in UV dimming mode. Press