

American DJ® **Assembly Instructions**

Water Column/4™

SPECIFICATIONS:

MODEL - Water Column™

Weight: 16 lbs. Without water

Size: 53.5" x 11" x 10"

Lamps: EXN 12V 50W

Fuse: 3A

Supply Voltage: 120V

Tube capacity: Approx. 2.5 gal

Tube Dimensions: 48" X 3.25"

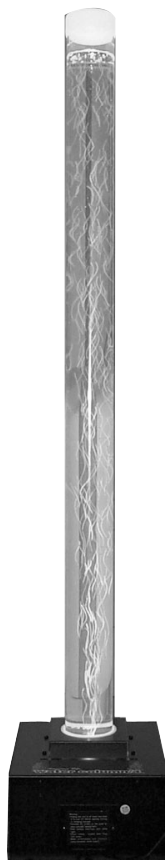
Colors: 8 plus White

CAUTION!

**Read instructions before installing
or plugging unit in.**

HALOGEN LAMP WARNING!

This fixture is fitted with halogen lamps which are highly susceptible to damage if improperly handled. Never touch lamp with bare fingers as the oil from your hands will shorten lamp life. Also, never move fixture until lamp has had ample time to cool. Remember, lamps are not covered under warranty conditions.



DMX-512



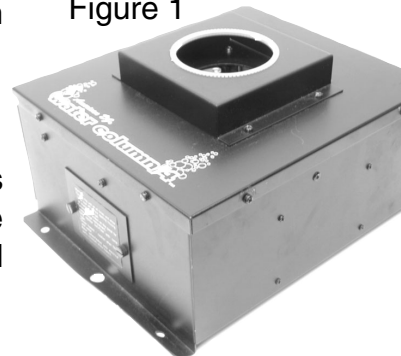
INTRODUCTION

Congratulations on your purchase of the American DJ Water Column/4™. This unique piece adds a dazzling effect to Clubs, Bars, Bowling Centers, and Roller Rinks. The Water Column/4™ is an intelligent color changer that can be operated with a standard DMX controller or in sound active and stand alone modes. This unit can be set to scroll through its 8 colors (plus white), or set to a particular color through the use of a standard DMX controller such as the American DJ DMX Operator™. This unit is sound active and the bubble intensity can be adjusted.

ASSEMBLY INSTRUCTIONS

The Water Column/4™ is shipped in two boxes, one (1) box contains the water tube and the other contains the water column base (see figure 1), warranty card, and owners manual. Carefully unpack the base and water tube from their respective boxes.

Figure 1



ASSEMBLY INSTRUCTIONS CONT.

Step 1

Begin assembly by removing the outer protective collar assembly. Remove the four (4) black, phillips screws from tube collar located on the top of water column base (see figures 2 and 3), to remove the collar. Remove the collar assembly.

Outer Collar Assembly

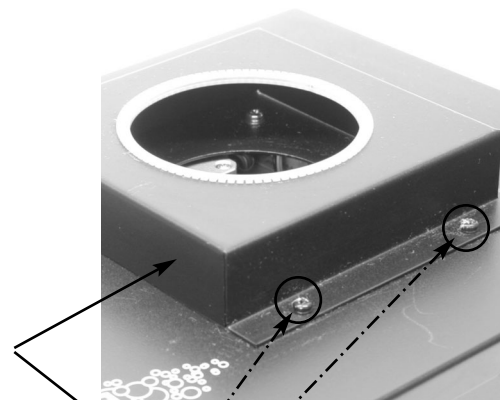


Figure 2

Remove Four (4) Screws

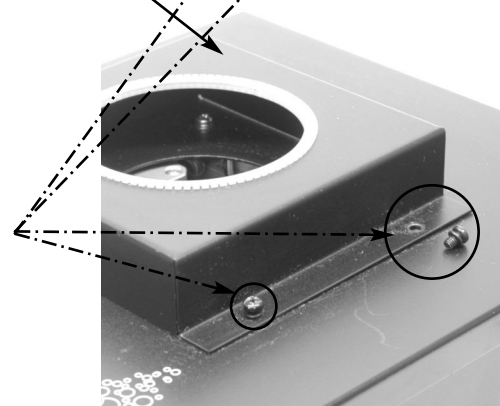


Figure 3

Step 2

Removing the collar will expose four (4) more brass screws that are used to secure the water tube to the base, remove these four (4) brass screws as well (see figure 4).

Remove Four (4) Screws

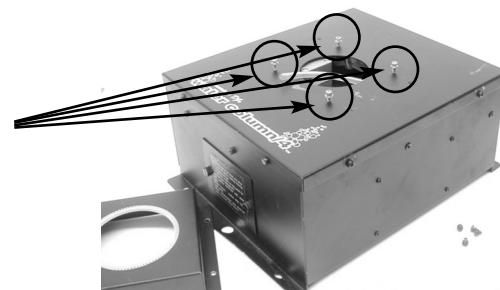


Figure 4

Step 3

When all the screws have been removed locate the plastic air tube located inside the center hole of the water base and pull it out. (see figure 5).



Figure 5

ASSEMBLY INSTRUCTIONS CONT.

Step 4

Connect the air hose to water column tube by inserting the rubber tube into the plastic nipple located on the bottom of the tube (see figure 6).



Figure 6

Step 5

Figure seven (7) shows a properly inserted rubber tube. Be sure that the rubber tube is seated completely unto the tube's plastic nipple.

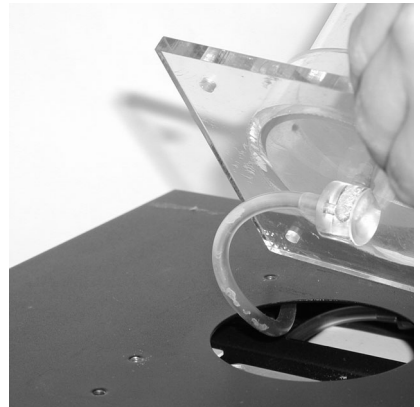


Figure 7

Step 6

After properly inserting the rubber tube in the the tubes plastic nipple, set the tube upright on the water tube base. Align the screw hole on the tube and the base to screw the base and the tube together. Be sure to use the same brass screws the were included with your fixture.

Caution: To avoid damage to your water tube be sure not to over tighten the securing screws.!

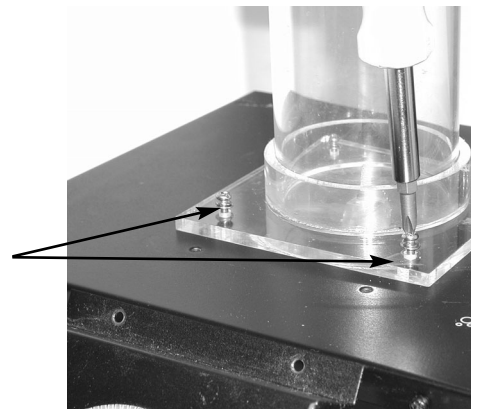


Figure 8

Step 7

Remove the water tube's protective white cover located on the top of the water tube to replace the tube assembly collar. Carefully replace the tube collar by sliding it through the top of tube.

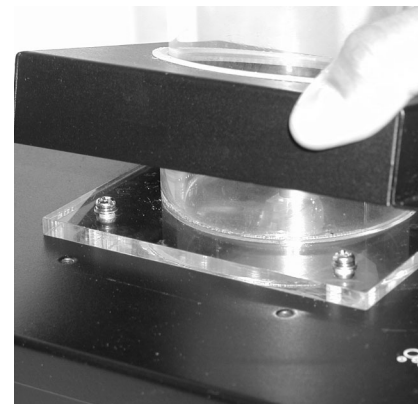


Figure 9

ASSEMBLY INSTRUCTIONS CONT.

Step 8

Secure the collar with the four (4) included black, phillips screws.

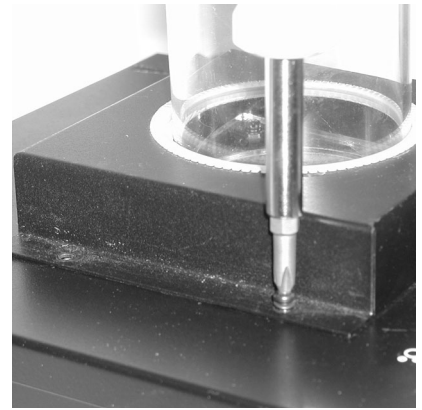


Figure 10

PROPER WATER INSTALLATION

Due to the excessive weight of water filled in the tube, we suggest that you place the water column in it's final position before filling the tube with water. This may avoid damage to the tube that may be caused by the strain of the excessive weight caused by the water in the tube.

Once you have placed your water column in your desired position, fill the water tube only with **dis-tilled** water to avoid water discoloration and odor. **DO NOT FILL the tube pass the maximum fill line level at the top of the tube, doing so may spurt water out caps breather hole.** Use algae tablets available where fish aquariums are sold is also highly recommended to avoid mildew and odor.

Once you have filled the tube replace the protective white cap. The cap has a breather hole punched out in the center of it, be sure never to restrict this hole to avoid possible damage to the unit's air pump.

If it becomes necessary to move your water column after it has been filled with water, be sure not to lift the assembly by the tube or you may crack the tube. Always move your water column by grasping the base of the unit.

POWER SUPPLY:

Before plugging your unit in be sure the voltage in your area matches the required voltage for your unit. The DMX Operator™ require a DC 9v 200mA power supply.

The DMX Operator™ is available in a 115v and 230v version. Because line voltage may vary from venue to venue, you should be sure to plug your power supply into a matching wall outlet before attempting to operate you controller.

OPERATING INSTRUCTIONS

Stand Alone (Sound Active):

This function allows you to operate an individual fixture to sound without the use of a controller. In this mode the unit scroll through its' internal programs to the beat of the music. When there is no sound source for a period of ten (10) seconds the fixture will automatically go into blackout mode. When there is no sound source for more than 30 seconds the fixture will automatically shut down the lamp output to prolong lamp life. The unit will continue to operate normally once a sound source has been reintroduced.

To run a fixture in this mode: Be sure the unit is powered down. Set dip switch number 10 to the on position and be sure that all others dip switches are set to the off position. Turn the power on. The unit will take about 10 seconds to reset and then begin to react to low frequencies of a sound source.

Master/Slave: This function allows you to connect up to eight (8) units together and run them to internal programs without the use of an external controller.

To run two (2) or more fixtures in this mode: Be sure all your units are powered down. Connect your units together using the XLR connectors on the rear of the unit via standard, high quality, balanced microphone cable. Be sure to daisy chain the fixture together. Do not try to “Y” or split your connections. The female XLR connector is the output connector and the male XLR connector is the input connector. Once you have connected your units together, follow the dip switch chart on page 7/diagram 1 to assign the proper values to your fixtures. When you have set all the dip switches according to the chart on page eight (8), turn all the power switches on. The units will all take about 10 seconds to reset. After resetting the units will begin to react to first unit’s (master unit) internal programs. Those programs in turn will be triggered by the low frequencies of a sound source.

When there is no sound source for a period of ten (10) seconds the fixture will automatically go into blackout mode. When there is no sound source for more than 30 seconds the fixture will automatically shut down the lamp output to prolong lamp life. The unit will continue to operate normally once a sound source has been reintroduced.

EL-1402/C Controller: The EL-1402/C is a 19 inch rackmount controller allows you to control several of the water columns function without the expensive of a multifunctional DMX controller. The EL-1402/C controller gives you several controller options; Blackout, Synchro Color, Random Color, Strobe, Sweep, Random, or Manual. Blackout will terminate all light output. Synchro Color will scroll the units to same color. Random Color will scroll individual units through different colors. Strobe will produce a variety of strobe effects automatically. Sweep will change all the units colors in a sequential order. Random will operate your units in all four (4) modes automatically, triggered by sound. You may also manually control your units to constantly maintain a specific color. When using the EL-1402/C controller follow the dip switch chart on page 7/diagram 2 to assign the proper values to your fixtures.

Please refer to the owners manual that is included with the EL-1402/C for a more detail description of the controller, set-up, and operating instructions.

DMX Mode: *Only Color may be controlled through DMX, not bubble flow.*

Operating through a DMX controller give the user the freedom to create his/her own programs tailored to their own individual needs. This function also allows you to use your fixtures as spot lights. This function will allow you to control each individual fixture’s traits with a standard DMX 512 controller such as the American DJ DMX Operator™ and Show Designer™. The Water Column/4™ uses one (1) DMX channel to operate. To run your fixture in DMX mode, plug in the fixture via the XLR connections to any standard DMX controller. - Follow the set-up specifications that come with your DMX controller. Follow the dip switch chart on page 7/diagram 2 to assign the proper DMX values for your first 16 fixtures.

Data Cable (DMX Cable) Requirements: Your fixture and your controller require a standard 3-pin XLR connector for data input and output. If you are making your own cables be sure to use standard two conductor shielded cable and follow the pin configuration as described in the charts below. 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 can not be “Y”ed or split.

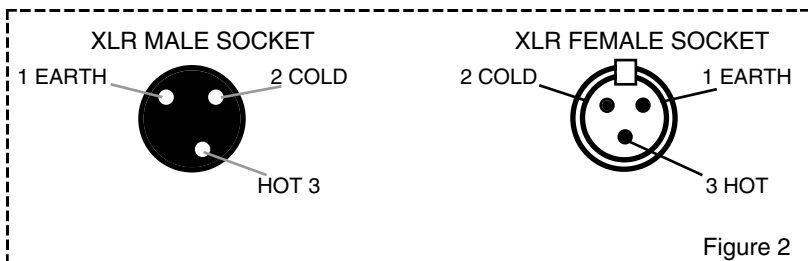


Figure 2

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

Notice: Do not use the ground lug on the XLR connector. Do not connect the shield conductor to the ground lug or allow the shield conductor to come in contact with XLR outer casing. Grounding the shield could cause a short circuit and erratic behavior.

Line Terminator: 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 90 - 120 ohm 1/4 watt resistor which is connected between pins 2 and 3 or 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. Terminators may be purchased or you can make one by soldering a 90-120 ohm 1/4 watt resistor between pins two (2) and three (3) of a male XLR Plug.

CAUTION: The base of the fixture will get hot if it is operated for a long period of time. For optimum performance, use a 30 min ON/ 10 min OFF duty cycle. Allow the unit to cool before attempting to replace the bulb. Never open the unit when it is in use. Always disconnect the main power before servicing or replacing lamp. Refer all service issue to authorized American DJ dealer.

Lamp replacement: Disconnect the units main power supply before attempting any type of service. Please allow ample time for the unit to cool down before handle the unit. With the power disconnected unscrew the two (2) thumb screw located on the rear of the unit. Gently pull out the lamp try. Remove and replace the lamp.

Remove Thumb Screws To Access Lamp

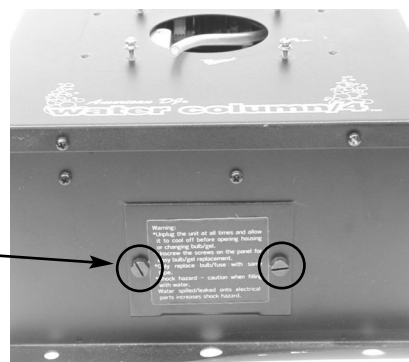


Figure 11

CAUTION: Always replace with the exact same type lamp and fuse unless otherwise specified by an authorized American DJ service technician.

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 for any comments or suggestions.

Service Hours Monday through Friday are 10:00 a.m. to 5:00 p.m. Pacific Time.

Voice (800) 322-6337

Fax (323) 582-2610

E-mail: support@americandj.com

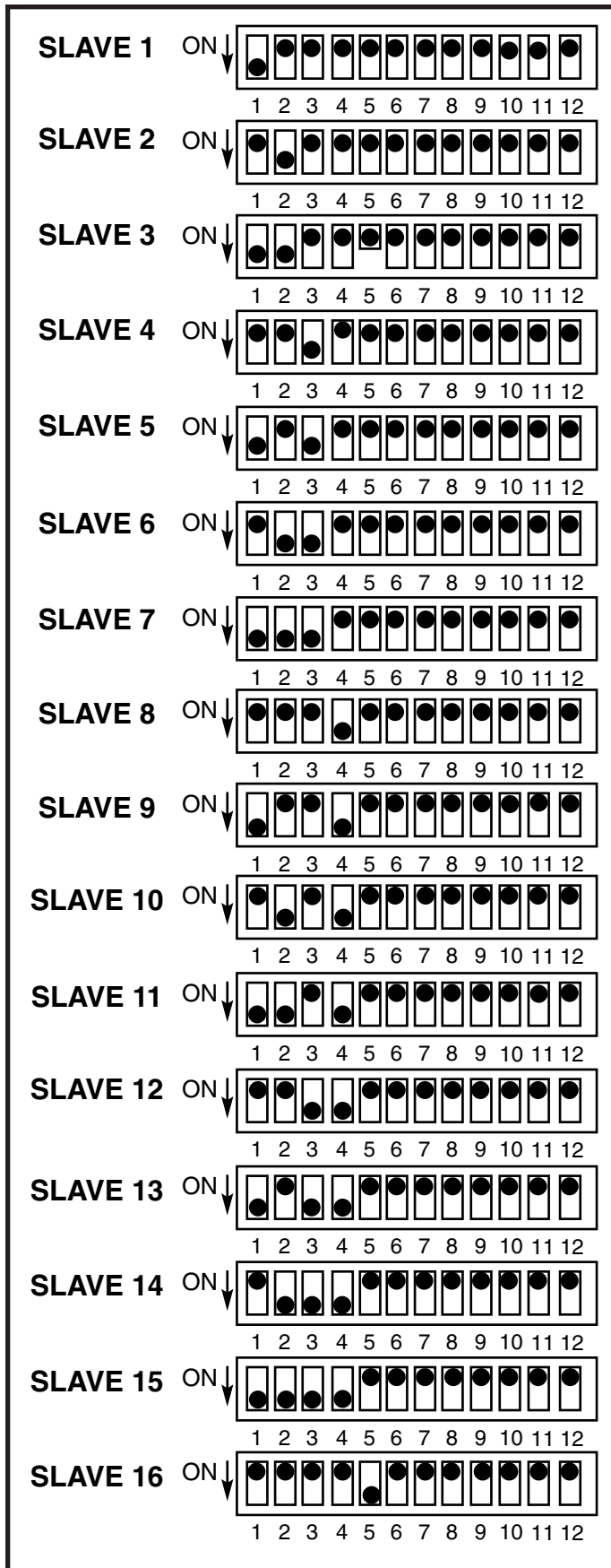
DMX Traits:

Figure 12 list the traits for each DMX value. Use this charts to select your desired color when using a DMX controller or programming.

WHITE	255
	254
COLOR CHANGE SPEED	160
FLASH SPEED	159
WHITE	86
MAGENTA	78
PINK	72
AMBER	60
GREEN	54
ORANGE	44
YELLOW	37
BLUE	26
LIGHT GREEN	18
WHITE	9
BLACKOUT	0

Figure 12

**Diagram 1 DMX & EL-1402/C Controller
Dip Switch Settings**



**Diagram 2 Stand Alone Master/Slave
Dip Switch Settings**

