

COB CANNON WASH ST
COB CANNON WASH PEARL
user manual



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DOCUMENT VERSION

An updated version of this document may be available online.

Please check www.adj.com for the latest revision/update of this document before beginning installation and use.

Date	Document Version	Notes
08/20/18	1	Initial release.
2/26/19	1	Update maximum multiple unit power linking.
5/15/20	1.2	ETL Approval Added

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.

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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GENERAL INFORMATION

INTRODUCTION

Please read and understand all instructions in this manual carefully and thoroughly before attempting to operate these products. These instructions contain important safety and use information.

UNPACKING

The products in this kit have been thoroughly tested and have 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 each unit included for damage and be sure all accessories necessary to operate the units have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this kit to your dealer without first contacting customer support at the number listed below. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

WARRANTY RETURNS

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 and included in the shipping container. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. Items returned without a R.A. number clearly marked on the outside of the package will be refused and returned at customer's expense. You may obtain a R.A. number by contacting customer support.

CUSTOMER SUPPORT

Contact ADJ Service for any product related service and support needs. Please visit forums.adj.com with questions, comments or suggestions.

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST
800-322-6337 | Fax 323-832-2941 | support@adj.com

ADJ SERVICE EUROPE - Monday - Friday 08:30 to 17:00 CET
+31 45 546 85 60 | Fax +31 45 546 85 96 | support@adj.eu

REPLACEMENT PARTS please visit parts.adj.com

LIMITED WARRANTY (USA ONLY)

- 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, or 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 service by anyone other than 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 warrant 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.
- F. 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.
- G. 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.

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** (excludes laser diodes which have 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**

SAFETY INSTRUCTIONS AND GUIDELINES

To guarantee a smooth operation, it is important to follow all instructions and guidelines in this manual. ADJ PRODUCTS LLC is not responsible for injury and/or damages resulting from the misuse of these devices due to the disregard of the information printed in this manual. Only qualified and/or certified personnel should perform installation of these devices and only the original rigging parts included with these devices should be used for installation. Any modifications to these devices and/or the included mounting hardware will void the original manufactures warranty and increase the risk of damage and/or personal injury.



PROTECTION CLASS 1 – DEVICES MUST BE PROPERLY GROUNDED



THERE ARE NO USER SERVICEABLE PARTS INSIDE THESE DEVICES. DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURES WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THESE DEVICES AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURES WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.



**DO NOT PLUG THIS UNIT INTO A DIMMER PACK!
DO NOT REMOVE THE COVER UNDER ANY CONDITIONS!
NEVER OPERATE THIS UNIT WITH THE COVER REMOVED!
UNPLUG POWER DURING LONG PERIODS OF NON-USE
NEVER TOUCH LIGHT DURING OPERATION, AS IT MAY BE HOT!
KEEP FLAMMABLE MATERIALS AWAY FROM THESE DEVICES!
DO NOT EXCEED OPERATING TEMPERATURES OF 185°F (85°C)!**



**INDOOR / DRY LOCATIONS USE ONLY!
DO NOT EXPOSE DEVICES TO RAIN AND/OR MOISTURE!**



**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
RETINA INJURY RISK - MAY INDUCE BLINDNESS!
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**

SAFETY INSTRUCTIONS AND GUIDELINES

DO NOT position devices close to any **FLAMMABLE MATERIALS** while operating.

DO NOT attempt installation and/or operation of devices without knowledge how to do so.

DO NOT permit operation by persons who are not qualified to operate these types of devices.

DO NOT shake devices, avoid brute force when installing and/or operating.

DO NOT operate these devices if the main power cord has become frayed, crimped and/or damaged. Replace any damaged power cords with a similar power rating.

DO NOT remove or break-off the ground plug from the device power cords.

DO NOT remove disassemble devices, there are NO user serviceable parts inside.

ALWAYS disconnect devices from main power source before performing any cleaning.

ALWAYS disconnect light from main power before replacing lamp.

ALWAYS be sure to install these devices in an area that will allow proper ventilation.

NEVER remove the ground prong from the power cable.

Power cords should be safely routed and secured so they are not likely pinched.

Disconnect power cords during long periods of non-use.

Only use recommended rigging hardware as described in this guide.

Use the original packaging and materials to transport these devices in for service.

These devices should be serviced by qualified service personnel when:

- The power cords or plugs have become damaged.
- Objects have fallen on and/or liquid has spilled into the devices.
- The devices have been exposed to rain and/or moisture.
- The devices do not operate normally or exhibit a marked change in performance.

MAINTENANCE GUIDELINES



DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

CLEANING

Frequent cleaning is recommended to insure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the device operates in: damp, smoky or particularly dirty environments can cause greater accumulation of dirt on the lens and/or light fixture optics. Clean the external housing of the fixture and the front lens of the light at least every 20 days with a soft cloth to avoid dirt/debris accumulation.

NEVER use alcohol, solvents, or ammonia-based cleaners.

MAINTENANCE

Regular inspections are recommended to insure proper function and extended life.

There are no user serviceable parts inside these devices, please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

Please refer to the following points during routine inspections:

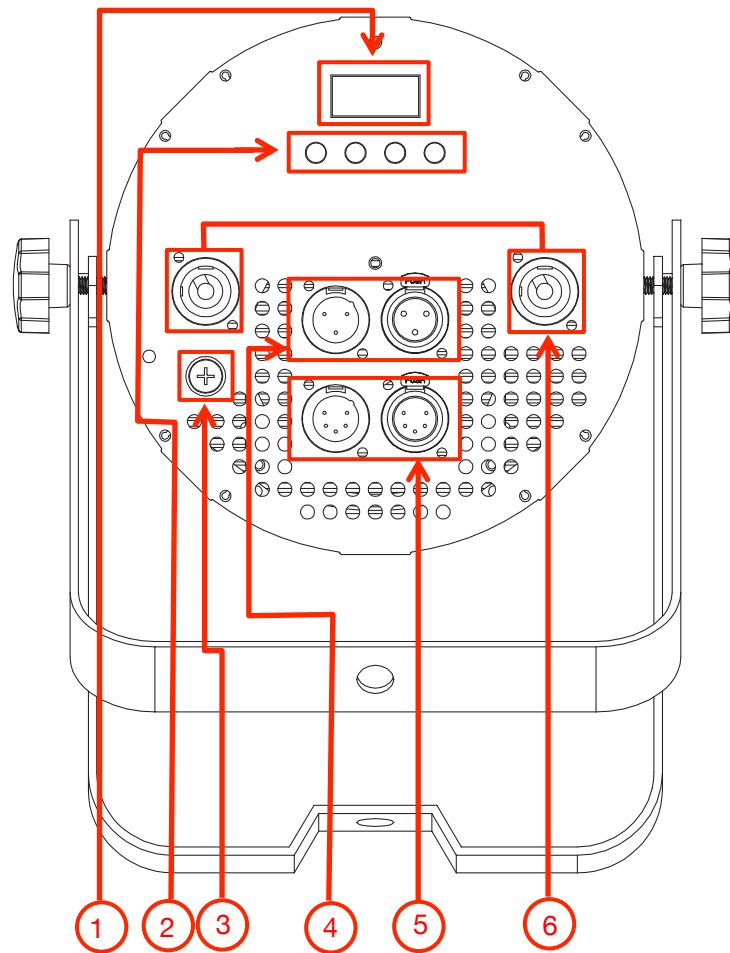
A detailed review by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.

Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation resulting in damage or injury as larger parts could fall.

Check for any deformations on the light, light housings, lenses, rigging hardware and rigging points (ceiling, suspension, trussing). Deformations could allow for dust to enter into the devices. Damaged rigging points or unsecured rigging could cause the devices to fall and seriously injure a person(s).

Electric power supply cables must not show any damage, material fatigue or sediments.

OVERVIEW



1 - Display: Show the various menus and the selected functions.

2 - Button:

MENU	To select the programming functions
SET UP	To go forward in the selected functions
UP	To go backward in the selected functions
DOWN	To go forward in the selected functions

3 - Fuse: 3 Amps.

4 - DMX Input/output: 3-Pin In/Out Connection

5 - DMX Input/output: 5-Pin In/Out Connection

6 - Mains Input/output: Use powerCON mains connection.

DMX SETUP

POWER SUPPLY

The COB Cannon Wash ST contains an 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 by most lighting and controller manufactures 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. Therefore, the first fixture controlled by the controller could be the last fixture in the chain. 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 AND MASTER/SLAVE OPERATION):

The COB Cannon Wash ST can be controlled via DMX-512 protocol. The COB Cannon Wash ST has three DMX channel modes (1 channel mode, 2 channel mode, & 3 channel mode). The DMX address is set electronically using the controls on the rear panel of the unit. Your unit and your DMX controller require an approved DMX-512 110 Ohm Data cable for data input and data output (Figure 1). We recommend AccuCable DMX cables. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable 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

DMX SETUP

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.

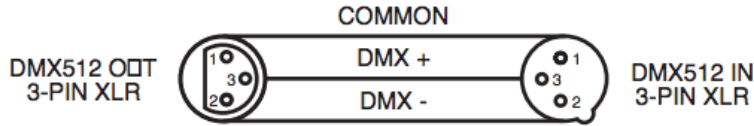


Figure 2

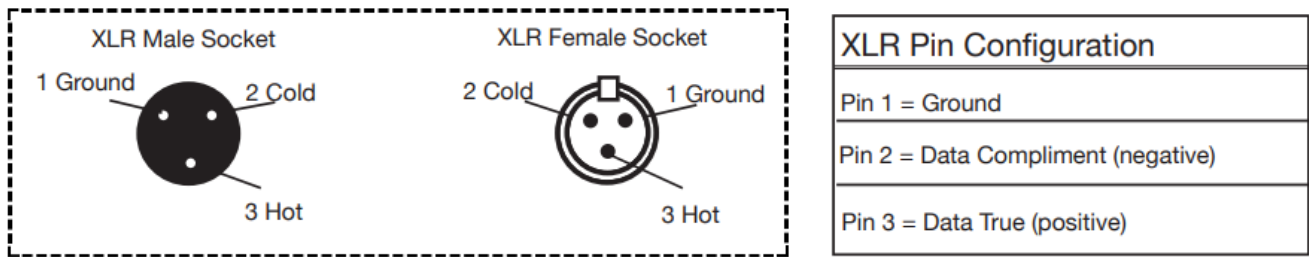


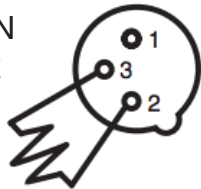
Figure 3

SPECIAL NOTE: LINE TERMININATION

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.

Figure 4

DMX512 IN
3-PIN XLR

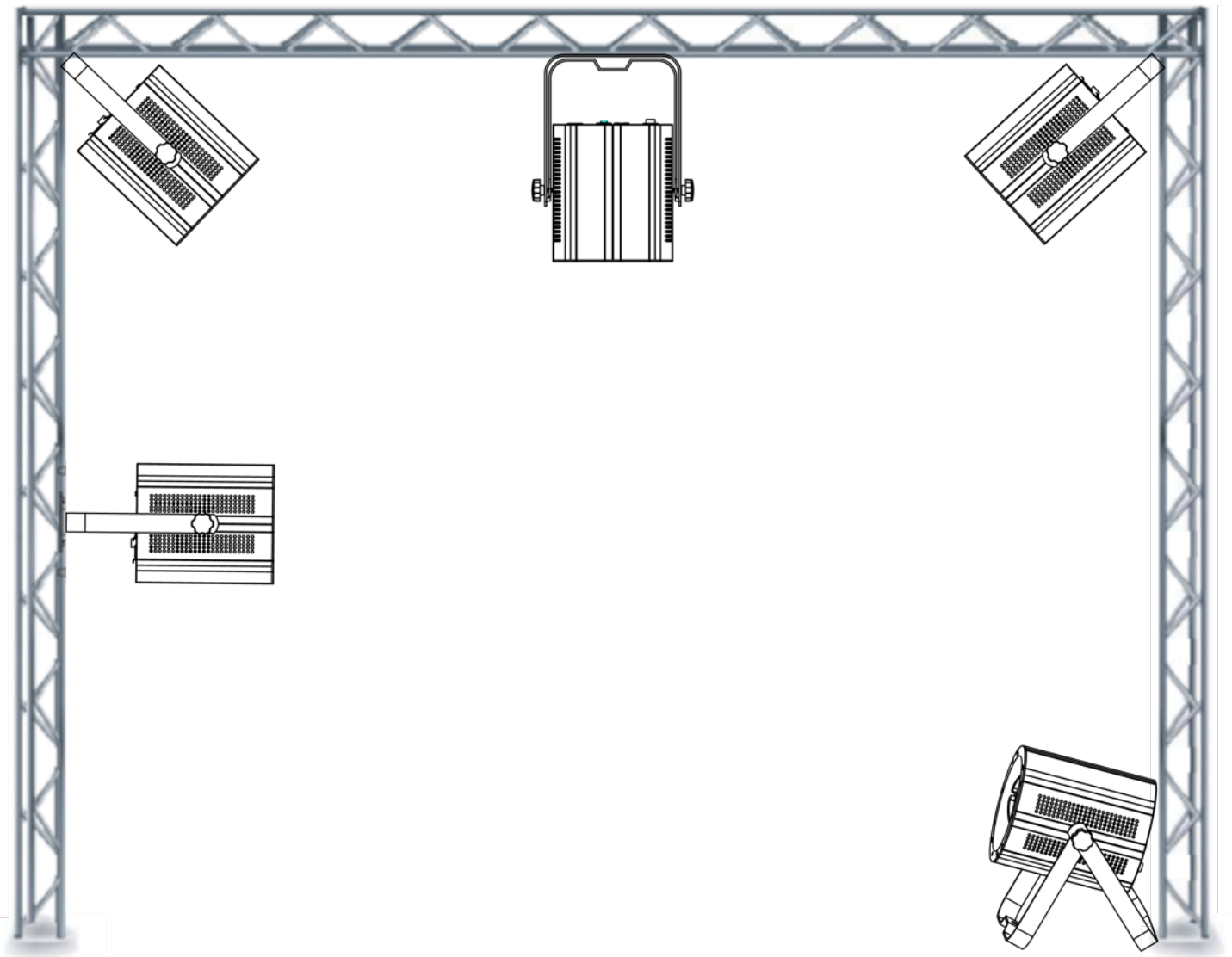


Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

INSTALLATION INSTRUCTIONS

INSTALLATION

This 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 the weight of ten (10) times the unit's weight and any mounting accessories. A safety cable (optional) is recommended when installing the fixture. It is also recommended that a professional installs the equipment and it must be installed in a place where it is out of the reach of people's grasp.




SYSTEM MENU

MODES

The COB Cannon Wash ST has 7 modes: DMX Mode, Slave Mode, Dimmer Mode, Sound Active Mode, Auto Run Program Mode, Static Color Select Mode and Other Mode.

During operation, the display will lock after 30 seconds. To unlock the display, press and hold down the **MODE** button for 3 seconds to unlock.

MODE manual	SET UP manual	UP/DOWN manual	Instruction
DMX MODE	Address	<i>d.001 ~ d.512</i>	Sets the DMX starting address
	Channels	<i>Ch03</i>	The unit occupies 3 DMX channels
		<i>Ch04</i>	The unit occupies 4 DMX channels
		<i>Ch06</i>	The unit occupies 6 DMX channels
		<i>Ch07</i>	The unit occupies 7 DMX channels
		<i>Ch08</i>	The unit occupies 8 DMX channels
		<i>Ch8A</i>	The unit occupies 8 DMX channels
		<i>Ch10</i>	The unit occupies 10 DMX channels
		<i>Ch11</i>	The unit occupies 11 DMX channels
	NO DMX mode	<i>BLAc</i>	When DMX signal is lost or interrupted, the unit will default to BLACKOUT option. It will switch all LED's off
<i>LAST</i>		When DMX signal is lost or interrupted, the unit will default to HOLD option. It will hold the last state before signal was lost.	
<i>Prog</i>		When DMX signal is lost or interrupted, the unit will default to AUTO. It will run the internal programs.	
Delay mode	<i>dr-0 ~ dr-5</i>	Select the unit delay mode	
SLAVE MODE	Slave mode	<i>SLAu</i>	Set the unit into slave mode
DIMMER MODE	Red dimmer	<i>r.000 ~ r.255</i>	Adjust the intensity of the red color
	Green dimmer	<i>G.000 ~ G.255</i>	Adjust the intensity of the green color
	Blue dimmer	<i>b.000 ~ b.255</i>	Adjust the intensity of the blue color
	Amber dimmer	<i>A.000 ~ A.255</i>	Adjust the intensity of the amber color
	Flash	<i>FS.00 ~ FS.15</i>	Adjust the flash speed, FS.00 is flash off, FS.01 is slowest, FS.15 is fastest

MODE manual	SET UP manual	UP/DOWN manual	Instruction
SOUND MODE	Mode select	<i>S001 ~ S01b</i>	Select the 16 built-in sound modes
	Sensitivity select	<i>SJ-1 ~ SJ-8</i>	Adjust the sensitivity of the sound-active, <i>SJ-1</i> is the lowest level, <i>SJ-8</i> is the highest level
AUTO RUN MODE	Dreaming mode set	<i>AF01 ~ AF1b</i>	Select the 16 built-in dreaming mode
	Jumping mode set	<i>AJ01 ~ AJ1b</i>	Select the 16 built-in jumping mode
	Auto Dreaming & Jumping mode	<i>A-JF</i>	Set the light in auto dreaming & jumping mode, the dreaming mode and jumping mode will run in a continuous cycle
	Speed set	<i>SP.01 ~ SP.1b</i>	Adjust the speed of the dreaming/jumping mode
STATIC COLOR SELECT MODE	Color select	<i>CL00 ~ CLb4</i>	Select the 64 static colors
	Flash	<i>F5.00 ~ F5.15</i>	Adjust the flash speed, <i>F5.00</i> is flash off, <i>F5.01</i> is slowest, <i>F5.15</i> is fastest
OTHER MODE	Display on/off	<i>don</i>	LED digital tube display always on
		<i>doFF</i>	LED digital tube display off
	IR remote function on/off	<i>iron</i>	IR remote function on
		<i>iroF</i>	IR remote function off
	Display normal / inverse	<i>Stnd</i>	LED digital tube display normal
			LED digital tube display inversion
Initialization mode	<i>dEFR</i>	Initialize the unit at the extra factory setting	

DMX Mode: Operating through a DMX controller gives the user the freedom to create their own programs tailored to their own individual needs. See pages 18-22 for each mode's DMX traits. Press the **MODE** button to select the DMX mode.

DMX Addressing and Channel Mode: This function will allow you to control each individual fixture's traits with a standard DMX 512 controller. (When a DMX Address is set, the LED display will flicker if there is no signal from the controller.)

1. To run your fixture in DMX mode press the **MODE** button until "d.XXX" is displayed. "XXX" represents the current displayed DMX address.
2. Use the **UP** or **DOWN** buttons to select your desired DMX address, then press the **SET UP** button to select your DMX Channel mode.
3. Use the **UP** or **DOWN** button to scroll through the DMX Channel modes (Ch03, Ch04, Ch05, Ch06, Ch07, Ch08, Ch8A, Ch10 and Ch11).

No DMX Setup: This mode allows the unit to default to one of three modes if the DMX signal is lost or interrupted.

1. Press the **SET UP** button to select your setting.
2. Press the **UP** or **DOWN** button to select one of the three options.
 - BLACKOUT = "bIAc". The unit will switch all LED's off if signal is lost.
 - HOLD = "LAST". The unit will hold the last state before the signal was lost.
 - AUTO = "ProG". The unit will run the default internal programs.

Delay Mode: Select the unit delay mode by pressing the **SET UP** button until "dr-X" is displayed. Press the **Up** or **Down** button to set the delay rate 0-5. After you have chosen your desired DMX Channel mode, plug in the fixture via the XLR connections to any standard DMX controller.

Slave Mode: Press the **MODE** button to select the Slave mode.

Slave mode will be displayed as "SLAV".

Note, while in Slave mode, the **SET UP**, **UP** and **DOWN** buttons will not function.

Manual Dimmer Color Mode: Press the **MODE** button to select the manual Dimer Color Select mode. The Color Red will be displayed as "r.XXX" with "XX" representing the dimming rate of 0-255.

1. Press the **SET UP** button to select a different color; green "GXXX", blue "bXXX" or amber "AXXX".
2. Press the **Up** or **Down** button to set the dimming rate 0-255.

Flash Speed Select: Press **MODE** button to select the Flash Speed Select mode.

Flash Speed will be displayed as "FS.XX" with "XX" representing the flash speed rate.

1. Press the **SET UP** button to adjust the desired flash speed.
2. Press the **Up** or **Down** button to set the speed between "FS.00" (flash off), "FS.01" (slowest flash) and "FS.15" (fastest flash).

Sound Active Mode: In this mode the COB Cannon Wash ST will react to sound, and chase through the different colors. Press **MODE** button to select the Sound Active mode

Sound Active mode will be displayed as “SoXX” with “XX” representing Sound Active mode (1-16).

1. Press the **SET UP** button to adjust the sound sensitivity. “SJ-X” should be displayed.
2. Press the **UP** or **DOWN** button to adjust the sensitivity level from 1 (off) to 8 (highest).

Auto Run Program 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.

Press the **MODE** button until “AFXX”, “AJXX”, or “A-JF” is displayed.

- Color Fade mode = “AFXX”, there are 16 Color Fade modes to choose from.
Use the **UP** or **DOWN** button to scroll through the different Auto Fade modes.
- Color Change mode = “AJXX”, there are 16 Color Change modes to choose from.
Use the **UP** or **DOWN** button to scroll through the different Auto Change modes.
- Both Color Fade and Color Change modes running = “A-JF”

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 Select Mode: Choose between 64 static colors and activate/deactivate strobe.

1. Press **MODE** button to select the Static Color Select mode.
2. Press the **SET UP** button until “CLXX” or “FSXX” is displayed.
 - Static Color Mode = “CLXX”. There are 64 static colors to choose from. Use the **UP** or **DOWN** button to select desired static color.
 - Flash Speed Select = “FS.XX”. Use the **UP** or **DOWN** button to adjust between “FS.00” (flash off), and “FS.01” (slowest flash) to “FS.15” (fastest flash).

Other Program Select Mode: There are 4 “Other” setup features to adjust. LED Display On/Off, IR Remote On/Off, Display Inversion and Initialization.

Press the **MODE** button until “doXX”, “lrXX”, “Stnd” or “dEFA” is displayed.

- **LED Display On/Off** = “doXX”. Set the LED display to turn off after 60 seconds by pressing **UP** or **DOWN** button to display “doff”. The display will turn off after 60 seconds and will reappear with the press of a button. Be advised that it will turn off again automatically after 60 seconds of inactivity. Selecting “don “ will set the LED display to On at all times.
- **IR Remote Function On/OFF** = “lrXX”. Press **UP** or **DOWN** button to display “Iron” to enable IR remote function or to “IroF” to disable IR remote function.
- **LED Display Inversion** = “Stnd”. Press **UP** or **DOWN** button to invert to display 180 degrees.
- **Initialization select mode** = “dEFR”. Press the **UP** and **DOWN** buttons simultaneously to restore all modes to default settings. Press the **MODE** button to exit.

DMX CHANNELS/VALUES/FUNCTIONS

DMX CHANNELS / VALUES / FUNCTIONS (11 DMX Channels)										
SUPPORTS SOFTWARE VERSION ≥ 1.0										
MODE / CHANNEL								VALUE	FUNCTION	
CH03	CH04	CH06	CH07	CH08	CH8A	CH10	CH11			
1							9		COLOR MACROS	
								0	OFF	
								1-4	Color Macro 01	
								5-8	Color Macro 02	
								9-12	Color Macro 03	
								13-16	Color Macro 04	
								17-20	Color Macro 05	
								21-24	Color Macro 06	
								25-28	Color Macro 07	
								29-32	Color Macro 08	
								33-36	Color Macro 09	
								37-40	Color Macro 10	
								41-44	Color Macro 11	
								45-48	Color Macro 12	
								49-52	Color Macro 13	
								53-56	Color Macro 14	
								57-60	Color Macro 15	
								61-64	Color Macro 16	
								65-68	Color Macro 17	
								69-72	Color Macro 18	
								73-76	Color Macro 19	
								77-80	Color Macro 20	
								81-84	Color Macro 21	
								85-88	Color Macro 22	
								89-92	Color Macro 23	
								93-96	Color Macro 24	
								97-100	Color Macro 25	
								101-104	Color Macro 26	
								105-108	Color Macro 27	
								109-112	Color Macro 28	
								113-116	Color Macro 29	
								117-120	Color Macro 30	
								121-124	Color Macro 31	
						125-128	Color Macro 32			

DMX CHANNELS / VALUES / FUNCTIONS (11 DMX Channels)

SUPPORTS SOFTWARE VERSION ≥ 1.0

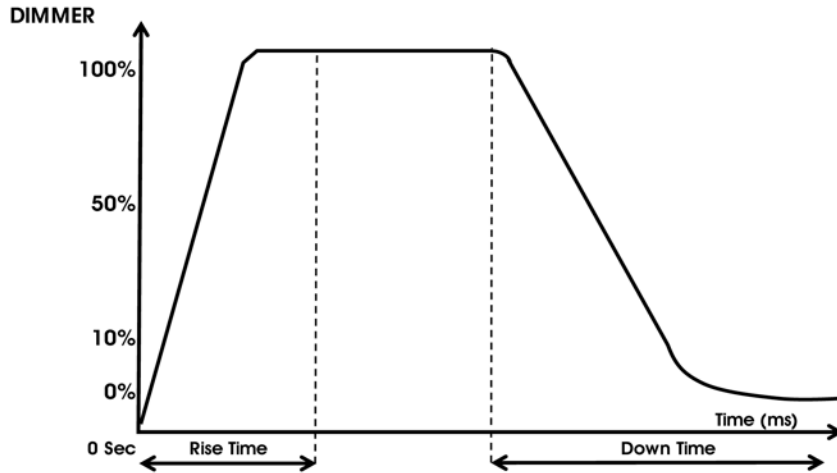
MODE / CHANNEL								VALUE	FUNCTION
CH03	CH04	CH06	CH07	CH08	CH8A	CH10	CH11		
1						9	9	129-132	Color Macro 33
								133-136	Color Macro 34
								137-140	Color Macro 35
								141-144	Color Macro 36
								145-148	Color Macro 37
								149-152	Color Macro 38
								153-156	Color Macro 39
								157-160	Color Macro 40
								161-164	Color Macro 41
								165-168	Color Macro 42
								169-172	Color Macro 43
								173-176	Color Macro 44
								177-180	Color Macro 45
								181-184	Color Macro 46
								185-188	Color Macro 47
								189-192	Color Macro 48
								193-196	Color Macro 49
								197-200	Color Macro 50
								201-204	Color Macro 51
								205-208	Color Macro 52
								209-212	Color Macro 53
								213-216	Color Macro 54
								217-220	Color Macro 55
								221-224	Color Macro 56
								225-228	Color Macro 57
								229-232	Color Macro 58
								233-236	Color Macro 59
								237-240	Color Macro 60
								241-244	Color Macro 61
								245-248	Color Macro 62
								249-252	Color Macro 63
								253-255	Color Macro 64

DMX CHANNELS / VALUES / FUNCTIONS (11 DMX Channels)									
SUPPORTS SOFTWARE VERSION ≥ 1.0									
MODE / CHANNEL								VALUE	FUNCTION
CH03	CH04	CH06	CH07	CH08	CH8A	CH10	CH11		
	1	1	1	1	1	1	1		RED
								0-255	0-100%
					2				RED FINE 16-BIT
								0-255	0-100%
	2	2	2	2	3	2	2		GREEN
								0-255	0-100%
					4				GREEN FINE 16-BIT
								0-255	0-100%
	3	3	3	3	5	3	3		BLUE
								0-255	0-100%
					6				BLUE FINE 16-BIT
								0-255	0-100%
	4	4	4	4	7	4	4		AMBER
								0-255	0-100%
					8				AMBER FINE 16-BIT
								0-255	0-100%
2			5	5		5	5		SHUTTER / STROBE
								0-31	LED OFF
								32-63	LED ON
								64-95	Strobe Effect SLOW to FAST
								96-127	LED ON
								128-159	Strobe Pulse SLOW to FAST
								160-191	LED ON
								192-223	Random Strobe SLOW to FAST
								224-255	LED ON
3		5	6	6		6	6		MASTER DIMMER
								0-255	0-100%
		6	7	7		7	7		MASTER DIMMER FINE 16-BIT
								0-255	0-100%
				8			11		DIMMING MODES
								0-20	STANDARD
								21-40	STAGE
								41-60	TV
								61-80	ARCHITECTURAL
								81-100	THEATER
								101-120	STAGE 2
								121-255	DEFAULT TO UNIT SETTING

DMX CHANNELS / VALUES / FUNCTIONS (11 DMX Channels)										
SUPPORTS SOFTWARE VERSION ≥ 1.0										
MODE / CHANNEL								VALUE	FUNCTION	
CH03	CH04	CH06	CH07	CH08	CH8A	CH10	CH11			
						8	8		CH9 MODES	
								0-51	STANDARD DIM MODE	
								52-102	ENGAGE CH9 COLOR MACRO MODE	
								103-153	ENGAGE CH9 COLOR JUMP MODE	
								154-204	ENGAGE CH9 COLOR DREAM MODE	
								205-255	ENGAGE CH 9 SOUND MODE	
						9	9		COLOR JUMP MODE	
								0-15	Color Jump 1	
								16-31	Color Jump 2	
								32-47	Color Jump 3	
								48-63	Color Jump 4	
								64-79	Color Jump 5	
								80-95	Color Jump 6	
								96-111	Color Jump 7	
								112-127	Color Jump 8	
								128-143	Color Jump 9	
								144-159	Color Jump 10	
								160-175	Color Jump 11	
								176-191	Color Jump 12	
								192-207	Color Jump 13	
								208-223	Color Jump 14	
								224-239	Color Jump 15	
								240-255	Color Jump 16	
						9	9		COLOR DREAM MODE	
								0-15	Color Dream 1	
								16-31	Color Dream 2	
								32-47	Color Dream 3	
								48-63	Color Dream 4	
								64-79	Color Dream 5	
								80-95	Color Dream 6	
								96-111	Color Dream 7	
								112-127	Color Dream 8	
								128-143	Color Dream 9	
								144-159	Color Dream 10	
								160-175	Color Dream 11	
								176-191	Color Dream 12	
								192-207	Color Dream 13	
								208-223	Color Dream 14	
								224-239	Color Dream 15	
								240-255	Color Dream 16	

DMX CHANNELS / VALUES / FUNCTIONS (11 DMX Channels)									
SUPPORTS SOFTWARE VERSION ≥ 1.0									
MODE / CHANNEL									
CH03	CH04	CH06	CH07	CH08	CH8A	CH10	CH11	VALUE	FUNCTION
									SOUND MODE
						9	9	0-15	Sound Active 1
								16-31	Sound Active 2
								32-47	Sound Active 3
								48-63	Sound Active 4
								64-79	Sound Active 5
								80-95	Sound Active 6
								96-111	Sound Active 7
								112-127	Sound Active 8
								128-143	Sound Active 9
								144-159	Sound Active 10
								160-175	Sound Active 11
								176-191	Sound Active 12
								192-207	Sound Active 13
								208-223	Sound Active 14
								224-239	Sound Active 15
								240-255	Sound Active 16
									SPEED / SENSIVITY
						10	10	0-255	COLOR JUMP/DREAM MODES SPEED -SLOW to FAST
								0-31	SOUND MODE SENSITIVITY = OFF
								32-255	SOUND MODE SENSITIVITY = HIGH to LOW

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
Stage 2	0	1100	0	1660

REMOTE OPERATING INSTRUCTIONS

Airstream IR (sold separately): The 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. After you have purchased the Airstream IR transmitter, 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 the IR Functions in the corresponding app page.

Works with App Page 1.

UC IR Remote: The UC IR Remote can only be used if “IR Remote Function” is set to “On” (see page 17 for instructions on enabling IR Remote Function).

- **STAND BY** - Pressing this button will blackout the fixture. Press the button again to return to the initial state.
- **FULL ON:** Press this button to fully light up the unit.
- **FADE/GOBO:** Press this button to switch between Color Fade, Color Change and Auto Run mode.
- **DIMMER +** and **DIMMER -:** Use the buttons to adjust the color output intensity when color mode is active.
- **STROBE:** Press this button for strobing, then press button ‘1’ to select slow strobe speed, button ‘2’ to select medium strobe speed, button ‘3’ to select fast strobe speed, button ‘4’ to select faster strobe speed.
- **COLOR:** Press this button to activate color mode. Use buttons 1-9 to select your desired color.
- **1-9 BUTTONS:** Use buttons 1-4 to select your desired strobe speed when strobe mode is active. Use buttons 1-9 to select your desired color when color mode is active or your desired show when show mode is active.
- **SOUND ON** and **SOUND OFF:** Use the buttons to activate and deactivate sound active mode.
- **SHOW 0:** Press this button to select Show mode. Then use buttons 1-9 to select Shows 1-9. Press the “Show 0” button twice to run Show #10, and press button ‘1’ twice to run show #11.



Multiple Unit Power Linking

With this feature you can connect the fixtures to one another using the power cable input and output sockets.

NOTE: USE CAUTION WHEN POWER LINKING OTHER FIXTURES AS THE POWER CONSUMPTION OF OTHER MODEL FIXTURES MAY EXCEED THE MAX POWER OUTPUT ON THIS FIXTURE! CHECK SILK SCREEN FOR MAX AMPS.

Master-Slave Setup

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 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. Set the “Master” unit to your desired mode of operation.
3. On the “Slave” units press the **MODE** button until “SLAu” is displayed. Each “Slave” unit must be set to the same setting.
4. Connect the first “Slave” unit to the “Master.” The “Slave” unit(s) should now start following the “Master” unit.

Optional Lens Change

The COB Cannon Wash ST comes with an 80-degree lens already attached. Included in the box are optional 40 & 50-degree lenses. To switch lenses simply remove the retainer ring located in front of the current lens. After the retainer ring has been removed carefully remove the lens, and attach your desired lens. Reinstall the retainer ring and the switch is complete. When reinstalling the retainer ring, make sure to insert 3 points of the retainer ring into the 3 notches located around the inside of the lens frame.

Fuse Replacement

Disconnect the unit from its power source. Remove the power cord from the unit. Once the cord has been removed, the fuse holder is located under the powerCON connection. Use a Phillips head screwdriver to remove the fuse holder. Remove the fuse located inside the fuse holder and replace with the new fuse. Install the fuse holder and new fuse and secure it.

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).

TROUBLE SHOOTING TIPS

Unit does not turn on:

1. Confirm the unit has AC power.
2. Check if circuit breaker that controls the AC outlet the light is plugged into is not tripped.
3. Confirm the AC power cord from the light is not damaged or cut.
4. Check the fuse and see if it needs to be replaced.
5. If none of these solutions work, please contact ADJ Customer Service.

Unit does not respond 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.

FREQUENTLY ASKED QUESTIONS

Listed below are a few answers to common questions users may have.

1. Can you use barn doors with the COB Cannon Wash ST?

Yes, barn doors (BAR001) are an optional accessory and can be purchased separately.

2. What is the light output in lux?

996 LUX @ 2M; 238 LUX @4M (80-degree), 1472 LUX @2M; 373 LUX @4M (50-degree), 1970 LUX @2M; 474 LUX @4M (40-degree).

3. Is the COB Cannon Wash ST flicker free?

Yes, the COB Cannon Wash ST features Flicker Free operation. At 1,000Hz, there should be no flickering on camera.

4. How many fixtures can be daisy chained together?

Up to 3 COB Cannon Wash ST units can be daisy chained together. (After 3 fixtures you will need to use a new power outlet. They must be the same fixtures. **DO NOT** mix fixtures!) Use caution when power linking other model fixtures as the power consumption of other model fixtures may exceed the max power output on this fixture. Check Silk Screen for Max Amps.

TECHNICAL SPECIFICATIONS

MODEL: COB Cannon Wash ST	
Power Draw:	150W, 1.2A @ 120V/60Hz 148W, 0.7A @ 220V/50Hz
Light Source:	150W RGBA 4 in 1 COB LED source
Voltage:	100V ~ 240V/50~60Hz
Beam Angle:	80 Degrees (Optional 40° & 50° Lenses Included)
Working Position:	Any safe working position
Power Cord Daisy Chain:	3 Fixtures Max.
Fuse:	3 Amp
Colors:	RGBA
DMX Channels:	8 DMX Channel Modes 3/4/6/7/8 and 8/10/11 Channels
Dimming:	0-100% Electronic Dimming
Strobe Flash Rate (Hz):	0.65Hz – 11Hz
Flicker Free:	Yes, 1,000Hz
IP Rating:	IP20 (Indoor Use Only)
Weight:	9.26 lbs./ 4.2Kgs.
Dimensions: (w/ bracket)	13" (L) x 10" (W) x 7.5" (H) 330 x 256 x 190mm
Dimensions: (w/out bracket)	8.75" (L) x 7.5" (W) x 7.5" (H) 218 x 190 x 190mm
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.

Specifications subject to change without any prior written notice.

OPTIONAL ACCESSORIES

Order Code	Description
AC5PDMX3	3' DMX cable with 5-pin male to 5-pin female connection.*
AC5PDMX3PRO	Pro Series 3' DMX cable with 5-pin male to 5-pin female connection.*
S-Cable/60	Safety Cable with 60-pound weight rating
O-CLAMP	360 degree clamp that wraps around truss tubing.
PRO-CLAMP	360 degree aluminum clamp with a max rating of 1100 lbs

*Additional lengths available at www.adj.com

DIMENSIONS

