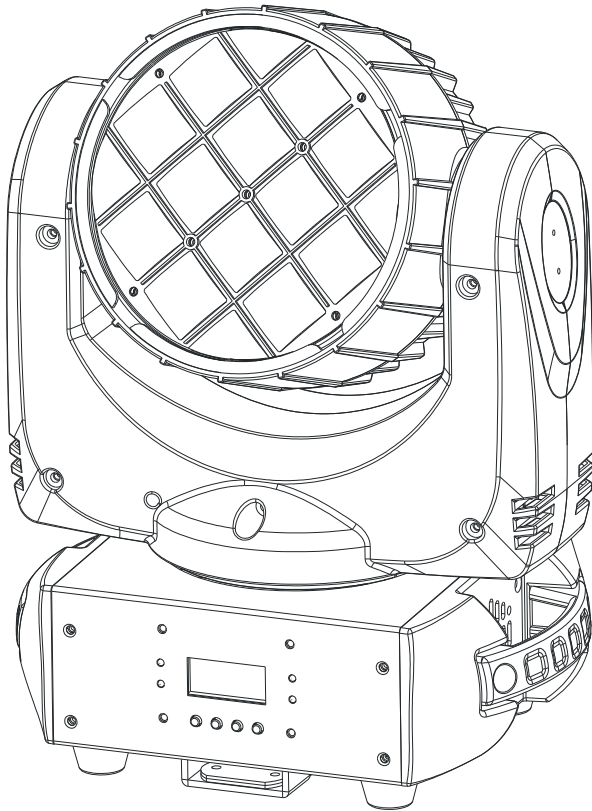




# VORTEX I200



## *User Instructions*



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Europe Energy Saving Notice  
Energy Saving Matters (EuP 2009/125/EC)  
Saving electric energy is a key to help protecting the 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!

## Vortex 1200

## Introduction

**Unpacking:** Thank you for purchasing the Vortex 1200 by ADJ Products, LLC. Every Vortex 1200 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 Vortex 1200 is a DMX intelligent, moving head, moonflower LED fixture, with zoom effect. This fixture is a great piece for nightclubs, bars, and stage productions. This unit can be used as a stand alone unit, or in a Master/Slave configuration. The unit has 3 operating modes; show mode, sound active, and DMX controlled. This fixture is suitable for theaters, studios, retail stores, and other similar locations.

**Customer Support:** ADJ Products, LLC 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.adj.com](http://www.adj.com) for any comments or suggestions. Service Hours are Monday through Friday 8:00 a.m. to 4:30 p.m. Pacific Standard Time.

Voice: (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 ADJ Products, LLC.

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

## Vortex 1200

## 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.

## Vortex 1200

## Features

- 4 DMX Modes; 14 Channel Mode, 15 Channel Mode, 17 Channel Mode, & 29 Channel Mode
- RGBW Color Mixing
- 12 x 10W High Output Quad Color LEDs
- 5 Selectable Dimmer Curves
- 23 Color Macros
- 33 Pan/Tilt Macros
- Pan/Tilt Inversion
- Electronic Dimming 0-100%
- Dimmer Curve
- DMX-512 protocol
- 3 Operating Modes - Sound Active, Show Mode, & DMX Control
- UC3 Control (Controller Not Included) See page 31 for Functions
- Power Cord Daisy Chaining (See section below)

## Vortex 1200

## Power Cord Daisy Chaining

**With this feature you can connect the fixtures to one another using the PowerCON input and output sockets. The quantity that can be connected is 4 fixtures maximum for 120V and 8 fixtures maximum for 240V. After the maximum fixtures has been reached you will need to use a new power outlet. They must be the same fixtures. DO NOT mix fixtures.**

## Vortex 1200

## Warranty Registration

The Vortex 1200 carries a 2 year (730 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 ADJ customer support for a R.A. number.

## Vortex 1200

## 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 33 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.

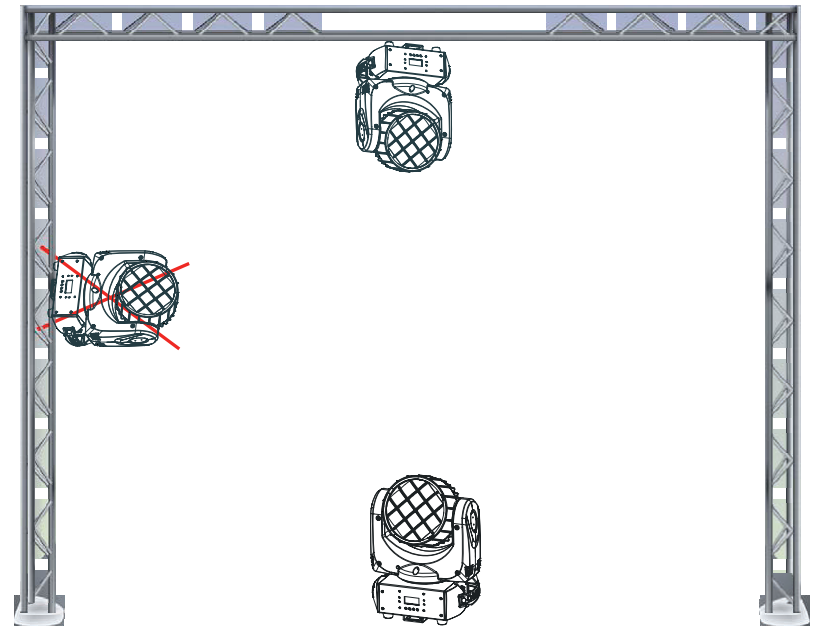
## Vortex 1200

## Installation

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight without any deformation. When installing the unit must be secured with a secondary safety attachment, e.g. and appropriate safety cable. Never stand directly below the unit when mounting, removing, or servicing the unit.

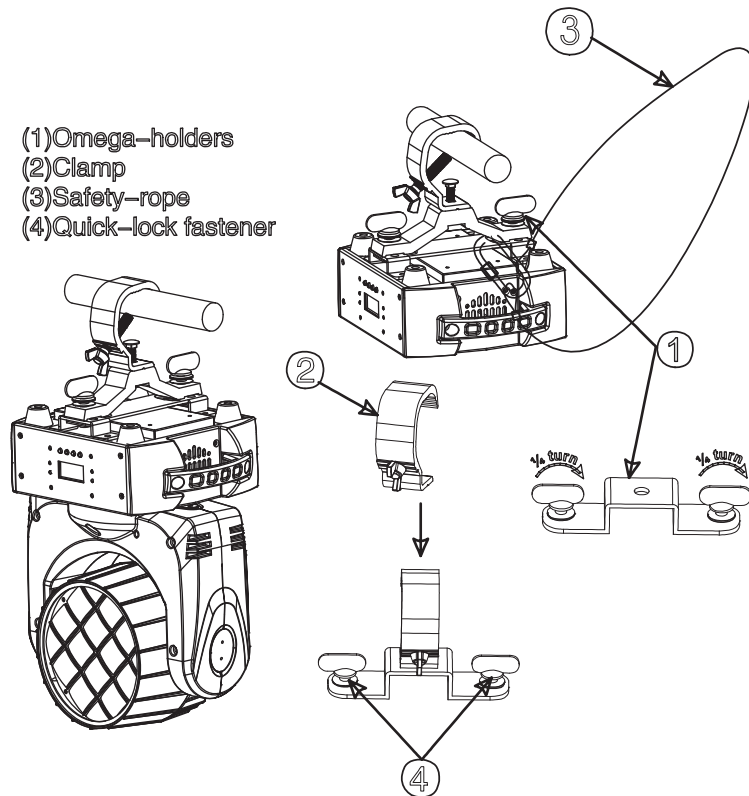
Overhead mounting requires extensive experience, including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and unit. If you lack these qualifications, do not attempt the installation yourself.

These installation should be checked by a skilled person once a year.



The Vortex 1200 is fully operational in two different mounting positions, hanging upside-down from a ceiling or set on a flat level surface. To avoid internal damage to the unit, never mount the unit on its side as illustrated above. Be sure this fixture is kept at least 0.5m away from any flammable materials (decoration etc.). Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails (see next page). Never use the carrying handles for secondary attachment.

**NOTICE:** The suitable environmental temperature for this lighting fixture is between  $-25^{\circ}\text{C}$  to  $45^{\circ}\text{C}$ . Do not place this lighting fixture in an environment where the temperatures are under or above the temperatures stated above. This will allow the fixture to run at its best and help prolong the fixture life.



Screw one clamp via a M12 screw and nut onto the Omega holder. Insert the quick-lock fasteners of the Omega holder into the respective holes on the bottom of the Vortex 1200. Tighten the quick-lock fasteners fully clockwise. Pull the safety-cable through the eyehole hook on the bottom of the base and over the trussing system or a safe fixation spot. Insert the end in the carabine and tighten the safety screw.

**Power Supply:** The ADJ Vortex 1200 contains a automatic voltage switch, which will auto sense the voltage when it is plugged into a 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 Vortex 1200 can be controlled via DMX-512 protocol. The Vortex 1200 4 DMX channel modes; 14 channel mode, 15 channel mode, 17 channel mode, & 29 channel mode. The DMX address is set on the front panel of the Vortex 1200. 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.

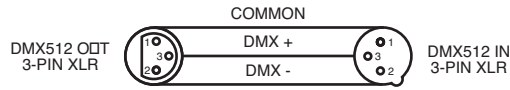


Figure 2

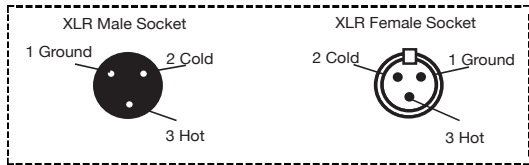


Figure 3

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

**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 90-120 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.

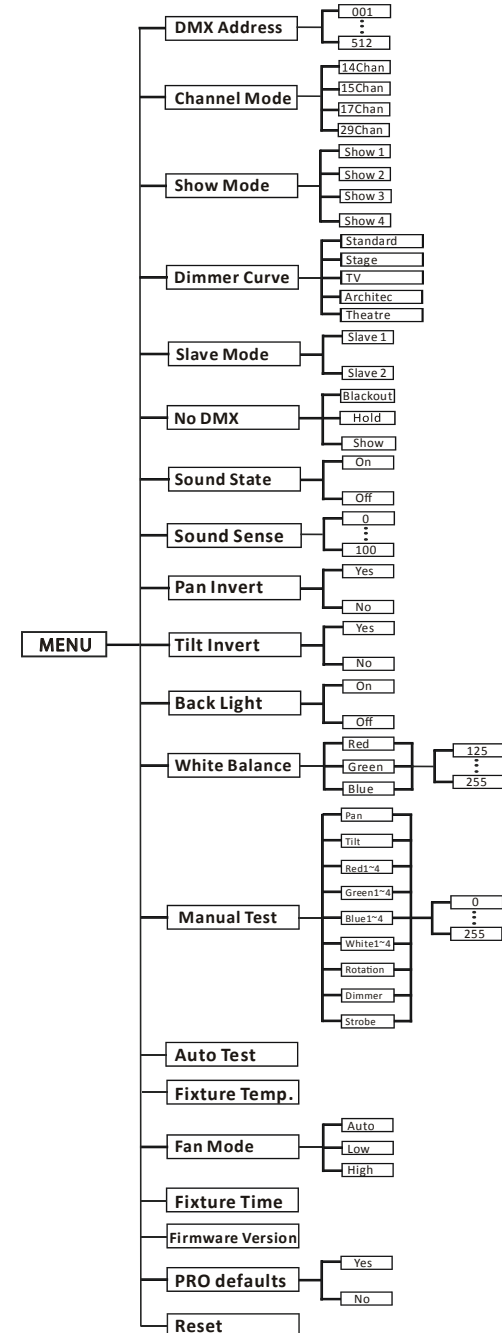


Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal. (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

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



**System Menu: When making adjustments press ENTER to confirm your setup then press and hold the MENU button for at least 3 seconds. To exit without making any adjustments press the MENU button. The display will lock after 30 seconds, press the MENU button for 3 seconds to unlock.**

### DMX Address - Set the DMX Address -

1. Press the MENU button until “DMX Address” is displayed, press ENTER.
2. “XXX” will now be displayed, “XXX” represents the displayed address. Press the UP or DOWN buttons to find your desired address.
3. Press ENTER to confirm, and then press and hold the MENU button for at least three seconds to assign.

### Channel Mode - This will let you select your desired DMX Channel mode.

1. Press the MENU button until “Channel Mode” is displayed, press ENTER.
2. “XXChan” will now be displayed, “XX” represents the displayed DMX channel mode. Press the UP or DOWN buttons to find your desired Channel mode.
3. Press ENTER to confirm.

### Show Mode - Show modes 1 - 4 (Factory Shows).

1. Press the MENU button until “Show Mode” is displayed, press ENTER.
2. “Show X” will now be displayed, “X” representing a number between 1-4. Press the UP or DOWN buttons to find your desired show and press ENTER to confirm. After pressing ENTER, press and hold the MENU button for at least 3 seconds to activate.

### Dimmer Curve - In this mode you can select the dimmer curve.

1. Press the MENU button until “Dimmer Curve” is displayed, press ENTER.
2. The current dimmer curve setting will be displayed.
3. Press the UP or DOWN buttons to find your desired dimmer curve and press ENTER to confirm. See the Dimmer Curve Chart on page 31.

### Slave Mode - This will let you set the unit as a slave in a master/slave configuration.

1. Press the MENU button until “Slave Mode” is displayed, press ENTER. Either “Slave 1” or “Slave 2” will be displayed.
2. Press the UP or DOWN buttons until your desired setting is displayed, press ENTER to confirm.

**NOTE:** In a Master/Slave configuration you can make one fixture the Master and then set the next fixture to “Slave 2”, the fixtures will now have contrast movement to each other.

### No DMX - This mode is used as a precaution mode. In case the DMX signal is lost, the operating mode chosen in the setup is the running mode the fixture will go into when the DMX signal is lost. You can also set this as the operating mode you would like the unit to return to when power is applied.

1. Press the MENU button until “No DMX” is displayed, press ENTER.
  2. Either “Hold”, “Blackout”, or “Show” will be displayed. Choose an operating mode you would like the unit to start up in when either power is applied or the DMX signal is lost.
- Blackout - If the DMX signal is lost or power is applied, the unit

will automatically go into stand by mode.

- Hold - If the DMX signal is lost the fixture will stay in the last DMX set up. If power is applied and this mode is set, the unit will automatically go into the last DMX set up.
  - Show - If the DMX signal is lost or power is applied, the unit will automatically go into Show mode.
3. Press ENTER to confirm your desired set up.

### **Sound State - In this mode the unit will run in sound active mode.**

1. Press the MENU button until “Sound State” is displayed, press ENTER.
2. Either “On” or “Off” will now be displayed. Use the UP or DOWN buttons to toggle between “On” and “Off”.
3. Press ENTER to confirm your selection, then press and hold the MENU button to activate.

### **Sound Sense - This function will let you adjust the sound sensitivity of the sound active mode.**

1. Press the MENU button until “Sound Sense” is displayed, press ENTER.
2. Press the UP or DOWN buttons to adjust the sensitivity level. The sensitivity level can be adjusted between 0 (least sensitive) and 100 (most sensitive).
3. Press ENTER to set your desired level.

### **Pan Invert - Pan Inversion**

1. Press the MENU button until “Pan Invert” is displayed, press ENTER. Either “Yes” or “No” will be displayed.
2. To activate the Pan inversion press the UP or DOWN buttons until “Yes” is displayed, press ENTER to confirm. To deactivate

Pan inversion, select “No” and press Enter.

### **Tilt Invert - Tilt Inversion**

1. Press the MENU button until “Tilt Invert” is displayed, press ENTER. Either “Yes” or “No” will be displayed.
2. To activate the Tilt inversion press the UP or DOWN buttons until “Yes” is displayed, press ENTER to confirm. To deactivate Tilt inversion, select “No” and press Enter.

### **Back Light - With this function you can make the LCD backlight automatically turn off after two minutes.**

1. Press the MENU button until “Back Light” is displayed, press ENTER.
2. Either “On” or “Off” will now be displayed. Press the UP or DOWN buttons to select “On” to keep the backlight on at all times, or “Off” to allow the backlight to turn off after 2 minutes. Press any button to turn the backlight on again.
3. Press ENTER to confirm.

### **White Balance - With this function you can adjust the RGB colors to make your desired color.**

1. Press the MENU button until “White Balance” is displayed, press ENTER.
2. Use the UP or DOWN buttons to find the color you wish to adjust.
3. Once you find the color you want to adjust press ENTER, and the displayed value will begin to flash. Use the UP or DOWN buttons to adjust the value. Once you have made your adjustment press ENTER.
4. Repeat steps 2-3 until satisfied.

### **Manual Test - With this function you can manually test the individual features.**

1. Press the MENU button until “Manual Test” is displayed, press ENTER.
2. Use the UP or DOWN buttons to find the functions that you wish to test.
3. Once you find a function you wish to test, press the ENTER button, and the displayed value will begin to flash. You can now adjust the values by pressing the UP and DOWN buttons. Once you have finished testing that function press the ENTER button.
4. To exit the manual test mode, press the MENU button.

### **Auto Test - This function will run a self test program.**

1. Press the MENU button until “Auto Test” is displayed, press ENTER.
2. The fixture will now run a self test. Press the MENU button to exit.

### **Fixture Temp. - With this function you can display the current temperature of the unit.**

1. Press the MENU button until “Fixture Temp.” is displayed, press ENTER.
2. The current temperature of the fixture will now be displayed. Press MENU to exit.

### **Fan Mode - With this function you can control the fan operation.**

1. Press the MENU button until “Fan Mode” is displayed, press ENTER.
2. Either “Auto”, “Low”, or “High” will now be displayed. Press

the UP or DOWN buttons to find your desired operating mode for the fans.

3. Press ENTER to confirm.

### **Fixture Time - With this function you can display the running time of the unit.**

1. Press the MENU button until “Fixture Time” is displayed, press ENTER.
2. The running time of the fixture will now be displayed. Press MENU to exit.

### **Firmware Version - This will display the software version**

1. Press the MENU button until “Firmware Version” is displayed. Press the ENTER button and the software version will be displayed.
2. Press the MENU button to leave this function.

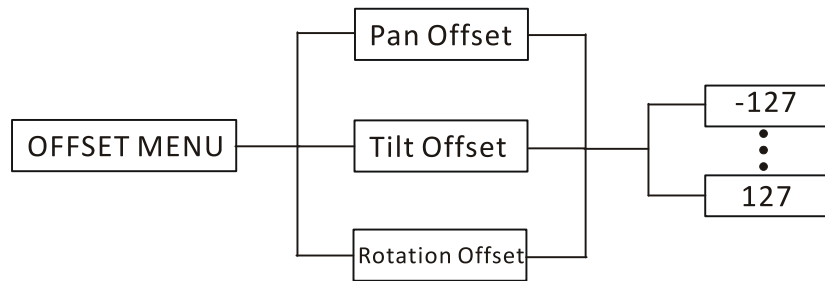
### **PRO Default - This function will restore the factory settings.**

1. Press the MENU button until “PRO Default” is displayed, press ENTER.
2. Either “YES” or “NO” will now be displayed. Press the UP or DOWN buttons to select “YES” to switch back to default settings, and press ENTER.

### **Reset - Use this function to reset the motors.**

1. Tap the MENU button until “Reset” is displayed, press ENTER.
2. The fixture will now reset the motors.





To enter the home adjustment submenu, press the ENTER button for at least 5 seconds. In this submenu you are able to adjust the original position (home position) of certain functions.

### Pan Offset - Adjustment of the pan home position.

1. Press the ENTER button for at least 3 seconds, then press the UP or DOWN buttons so that “**Pan Offset**” is displayed, press ENTER.
2. Use the UP and DOWN buttons to make your adjustments, and then press ENTER to confirm. Press the MENU button for one second to exit.

### Tilt Offset - Adjustment of the tilt home position.

1. Press the ENTER button for at least 3 seconds, then press the UP or DOWN buttons so that “**Tilt Offset**” is displayed, press ENTER.
2. Use the UP and DOWN buttons to make your adjustments, and then press ENTER to confirm. Press the MENU button for one second to exit.

### Rotation Offset - Adjustment of the rotating effects home position.

1. Press the ENTER button for at least 3 seconds, then press the UP or DOWN buttons so that “**Rotation Offset**” is displayed, press ENTER.
2. Use the UP and DOWN buttons to make your adjustments, and then press ENTER to confirm. Press the MENU button for one second to exit.

**Universal DMX Control:** This function allows you to use a universal DMX-512 controller to create unique programs tailored to your individual needs. The Vortex 1200 has 4 DMX modes; 14 DMX channels, 15 DMX channels, 17 DMX channels, and 29 DMX channels.

1. This function will allow you to control each individual fixture’s traits with a standard DMX 512 controller. See pages 18-31 for the DMX traits.
2. To control your fixture in DMX mode, follow the set-up procedures on pages 7-8 as well as the set-up specifications that are included with your DMX controller.
3. Use the controller’s faders to control the various DMX fixture traits. This will allow you to create your own programs.
4. Follow the instructions on page 10 to select your DMX channel mode and to set the DMX address.
5. For longer cable runs (more than a 100 feet) use a terminator on the last fixture.
6. For help operating in DMX mode consult the manual included with your DMX controller.

**Master-Slave Configuration:** This function will allow you to link up to 16 units together and operate without a controller. The units will be sound activated. In Master-Slave operation one unit will act as the controlling unit and the others will react to the controlling units programs. Any unit can act as a Master or as a Slave.

1. Using approved DMX data cables, daisy chain your units together via the XLR connector on the rear of the units. Remember 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. For longer cable runs we suggest a terminator at the last fixture.
2. Set the Master unit to your desired operating mode.
3. On the slave units press the MENU button until “Slave Mode” is displayed, and Press ENTER. Choose either “Slave 1” or “Slave 2” and press ENTER. See page 11 for more info.
4. The slave units will now follow the Master unit.

Vortex 1200		14 Channel Mode
Channel	Value	Function
1	0 - 255	PAN
2	0 - 255	TILT
3	0 - 255	RED 0% - 100%
4	0 - 255	GREEN 0% - 100%
5	0 - 255	BLUE 0% - 100%
6	0 - 255	WHITE 0% - 100%
7		COLOR MACROS
	0 - 19	OFF
	20 - 29	MACRO 1
	30 - 39	MACRO 2
	40 - 49	MACRO 3
	50 - 59	MACRO 4
	60 - 69	MACRO 5
	70 - 79	MACRO 6
	80 - 89	MACRO 7
	90 - 99	MACRO 8
	100 - 109	MACRO 9
	110 - 119	MACRO 10
	120 - 129	MACRO 11
	130 - 139	MACRO 12
	140 - 149	MACRO 13
	150 - 159	MACRO 14
	160 - 169	MACRO 15
	170 - 179	MACRO 16
	180 - 189	MACRO 17
	190 - 199	MACRO 18
	200 - 209	MACRO 19
	210 - 219	MACRO 20
	220 - 229	MACRO 21
	230 - 239	MACRO 22
	240 - 255	MACRO 23
8	0 - 255	COLOR MACRO SPEED SLOW - FAST

Vortex 1200		14 Channel Mode
Channel	Value	Function
9		EFFECT ROTATION
	0 - 127	INDEXING 0-360 DEGREES
	128 - 189	CLOCKWISE ROTATION FAST - SLOW
	190 - 193	STOP
	194 - 255	CLOCKWISE ROTATION SLOW - FAST
10		STROBING
	0 - 19	OPEN
	20 - 39	STROBING SLOW - FAST
	40 - 59	MACRO 1 STROBE
	60 - 79	MACRO 2 STROBE
	80 - 99	MACRO 3 STROBE
	100 - 119	MACRO 4 STROBE
	120 - 139	MACRO 5 STROBE
	140 - 159	STROBE EFFECT 1
	160 - 179	STROBE EFFECT 2
	180 - 199	STROBE EFFECT 3
	200 - 219	STROBE EFFECT 4
	220 - 255	OPEN
11	0 - 255	MASTER DIMMER
12		PAN/TILT MACROS
	0 - 7	NO FUNCTION
	8 - 15	MACRO 1
	16 - 23	MACRO 2
	24 - 31	MACRO 3
	32 - 39	MACRO 4
	40 - 47	MACRO 5
	48 - 55	MACRO 6
	56 - 63	MACRO 7
	64 - 71	MACRO 8
	72 - 79	MACRO 9
	80 - 87	MACRO 10
	88 - 95	MACRO 11
	96 - 103	MACRO 12
	104 - 111	MACRO 13

Vortex 1200		14 Channel Mode
Channel	Value	Function
12		PAN/TILT MACROS
	112 - 119	MACRO 14
	120 - 127	MACRO 15
	128 - 135	MACRO 16
	136 - 143	MACRO 17
	144 - 151	MACRO 18
	152 - 159	MACRO 19
	160 - 167	MACRO 20
	168 - 175	MACRO 21
	176 - 183	MACRO 22
	184 - 191	MACRO 23
	192 - 199	MACRO 24
	200 - 207	MACRO 25
	208 - 215	MACRO 26
	216 - 223	MACRO 27
	224 - 231	MACRO 28
	232 - 239	MACRO 29
	240 - 247	MACRO 30
	248 - 255	MACRO 31
13	0 - 255	PAN/TILT MACRO SPEED
14		SPECIAL FUNCTIONS
	0 - 69	NO FUNCTION
	70 - 79	BLACKOUT WHILE PAN/TILT MOVE
	80 - 89	NOTHING
	90 - 99	BLACKOUT WHILE RGBW CHANGE
	100 - 109	NOTHING
	110 - 119	EFFECT WHEEL MOTOR RESET
	120 - 199	PAN & TILT MOTOR RESET
	200 - 209	ALL MOTOR RESET
	210 - 249	NOTHING
	250 - 255	SOUND ACTIVE

Vortex 1200		15 Channel Mode
Channel	Value	Function
1	0 - 255	PAN
2	0 - 255	TILT
3	0 - 255	RED 0% - 100%
4	0 - 255	GREEN 0% - 100%
5	0 - 255	BLUE 0% - 100%
6	0 - 255	WHITE 0% - 100%
7		COLOR MACROS
	0 - 19	OFF
	20 - 29	MACRO 1
	30 - 39	MACRO 2
	40 - 49	MACRO 3
	50 - 59	MACRO 4
	60 - 69	MACRO 5
	70 - 79	MACRO 6
	80 - 89	MACRO 7
	90 - 99	MACRO 8
	100 - 109	MACRO 9
	110 - 119	MACRO 10
	120 - 129	MACRO 11
	130 - 139	MACRO 12
	140 - 149	MACRO 13
	150 - 159	MACRO 14
	160 - 169	MACRO 15
	170 - 179	MACRO 16
	180 - 189	MACRO 17
	190 - 199	MACRO 18
	200 - 209	MACRO 19
	210 - 219	MACRO 20
	220 - 229	MACRO 21
	230 - 239	MACRO 22
	240 - 255	MACRO 23
8	0 - 255	COLOR MACRO SPEED SLOW - FAST
9	0 - 127	EFFECT ROTATION INDEXING 0-360 DEGREES

Vortex 1200		15 Channel Mode
Channel	Value	Function
9		EFFECT ROTATION
	128 - 189	CLOCKWISE ROTATION FAST - SLOW
	190 - 193	STOP
	194 - 255	CLOCKWISE ROTATION SLOW - FAST
10		STROBING
	0 - 19	OPEN
	20 - 39	STROBING SLOW - FAST
	40 - 59	MACRO 1 STROBE
	60 - 79	MACRO 2 STROBE
	80 - 99	MACRO 3 STROBE
	100 - 119	MACRO 4 STROBE
	120 - 139	MACRO 5 STROBE
	140 - 159	STROBE EFFECT 1
	160 - 179	STROBE EFFECT 2
	180 - 199	STROBE EFFECT 3
	200 - 219	STROBE EFFECT 4
	220 - 255	OPEN
11	0 - 255	MASTER DIMMER
12		PAN/TILT MACROS
	0 - 7	NO FUNCTION
	8 - 15	MACRO 1
	16 - 23	MACRO 2
	24 - 31	MACRO 3
	32 - 39	MACRO 4
	40 - 47	MACRO 5
	48 - 55	MACRO 6
	56 - 63	MACRO 7
	64 - 71	MACRO 8
	72 - 79	MACRO 9
	80 - 87	MACRO 10
	88 - 95	MACRO 11
	96 - 103	MACRO 12
	104 - 111	MACRO 13
112 - 119	MACRO 14	

Vortex 1200		15 Channel Mode
Channel	Value	Function
12		PAN/TILT MACROS
	120 - 127	MACRO 15
	128 - 135	MACRO 16
	136 - 143	MACRO 17
	144 - 151	MACRO 18
	152 - 159	MACRO 19
	160 - 167	MACRO 20
	168 - 175	MACRO 21
	176 - 183	MACRO 22
	184 - 191	MACRO 23
	192 - 199	MACRO 24
	200 - 207	MACRO 25
	208 - 215	MACRO 26
	216 - 223	MACRO 27
	224 - 231	MACRO 28
	232 - 239	MACRO 29
	240 - 247	MACRO 30
248 - 255	MACRO 31	
13	0 - 255	PAN/TILT MACRO SPEED
14		SPECIAL FUNCTIONS
	0 - 69	NO FUNCTION
	70 - 79	BLACKOUT WHILE PAN/TILT MOVE
	80 - 89	NOTHING
	90 - 99	BLACKOUT WHILE RGBW CHANGE
	100 - 109	NOTHING
	110 - 119	EFFECT WHEEL MOTOR RESET
	120 - 199	PAN & TILT MOTOR RESET
	200 - 209	ALL MOTOR RESET
	210 - 249	NOTHING
250 - 255	SOUND ACTIVE	
15		DIMMER CURVES
	0 - 20	STANDARD
	21 - 40	STAGE
	41 - 60	TV

Vortex 1200		15 Channel Mode
Channel	Value	Function
15	61 - 80 81 - 100 101 - 255	DIMMER CURVES ARCHITECTURAL THEATRE DEFAULT TO UNIT CURVE SETTING

Vortex 1200		17 Channel Mode
Channel	Value	Function
1	0 - 255	PAN
2	0 - 255	PAN FINE
3	0 - 255	TILT
4	0 - 255	TILT FINE
5	0 - 255	RED 0% - 100%
6	0 - 255	GREEN 0% - 100%
7	0 - 255	BLUE 0% - 100%
8	0 - 255	WHITE 0% - 100%
9	0 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109 110 - 119 120 - 129 130 - 139 140 - 149 150 - 159 160 - 169 170 - 179 180 - 189	COLOR MACROS OFF MACRO 1 MACRO 2 MACRO 3 MACRO 4 MACRO 5 MACRO 6 MACRO 7 MACRO 8 MACRO 9 MACRO 10 MACRO 11 MACRO 12 MACRO 13 MACRO 14 MACRO 15 MACRO 16 MACRO 17

Vortex 1200		17 Channel Mode
Channel	Value	Function
9	190 - 199 200 - 209 210 - 219 220 - 229 230 - 239 240 - 255	COLOR MACROS MACRO 18 MACRO 19 MACRO 20 MACRO 21 MACRO 22 MACRO 23
10	0 - 255	COLOR MACRO SPEED SLOW - FAST
11	0 - 127 128 - 189 190 - 193 194 - 255	EFFECT ROTATION INDEXING 0-360 DEGREES CLOCKWISE ROTATION FAST - SLOW STOP CLOCKWISE ROTATION SLOW - FAST
12	0 - 19 20 - 39 40 - 59 60 - 79 80 - 99 100 - 119 120 - 139 140 - 159 160 - 179 180 - 199 200 - 219 220 - 255	STROBING OPEN STROBING SLOW - FAST MACRO 1 STROBE MACRO 2 STROBE MACRO 3 STROBE MACRO 4 STROBE MACRO 5 STROBE STROBE EFFECT 1 STROBE EFFECT 2 STROBE EFFECT 3 STROBE EFFECT 4 OPEN
13	0 - 255	MASTER DIMMER
14	0 - 7 8 - 15 16 - 23 24 - 31 32 - 39 40 - 47	PAN/TILT MACROS NO FUNCTION MACRO 1 MACRO 2 MACRO 3 MACRO 4 MACRO 5

Vortex 1200		17 Channel Mode
Channel	Value	Function
14		PAN/TILT MACROS
	48 - 55	MACRO 6
	56 - 63	MACRO 7
	64 - 71	MACRO 8
	72 - 79	MACRO 9
	80 - 87	MACRO 10
	88 - 95	MACRO 11
	96 - 103	MACRO 12
	104 - 111	MACRO 13
	112 - 119	MACRO 14
	120 - 127	MACRO 15
	128 - 135	MACRO 16
	136 - 143	MACRO 17
	144 - 151	MACRO 18
	152 - 159	MACRO 19
	160 - 167	MACRO 20
	168 - 175	MACRO 21
	176 - 183	MACRO 22
	184 - 191	MACRO 23
	192 - 199	MACRO 24
200 - 207	MACRO 25	
208 - 215	MACRO 26	
216 - 223	MACRO 27	
224 - 231	MACRO 28	
232 - 239	MACRO 29	
240 - 247	MACRO 30	
248 - 255	MACRO 31	
15	0 - 255	PAN/TILT MACRO SPEED
16		SPECIAL FUNCTIONS
	0 - 69	NO FUNCTION
	70 - 79	BLACKOUT WHILE PAN/TILT MOVE
	80 - 89	NOTHING
	90 - 99	BLACKOUT WHILE RGBW CHANGE
	100 - 109	NOTHING

Vortex 1200		17 Channel Mode
Channel	Value	Function
16		SPECIAL FUNCTIONS
	110 - 119	EFFECT WHEEL MOTOR RESET
	120 - 199	PAN & TILT MOTOR RESET
	200 - 209	ALL MOTOR RESET
	210 - 249	NOTHING
	250 - 255	SOUND ACTIVE
17		DIMMER CURVES
	0 - 20	STANDARD
	21 - 40	STAGE
	41 - 60	TV
	61 - 80	ARCHITECTURAL
	81 - 100	THEATRE
	101 - 255	DEFAULT TO UNIT CURVE SETTING

Vortex 1200		29 Channel Mode
Channel	Value	Function
1	0 - 255	PAN
2	0 - 255	PAN FINE
3	0 - 255	TILT
4	0 - 255	TILT FINE
5	0 - 255	RED 1 0% - 100%
6	0 - 255	GREEN 1 0% - 100%
7	0 - 255	BLUE 1 0% - 100%
8	0 - 255	WHITE 1 0% - 100%
9	0 - 255	RED 2 0% - 100%
10	0 - 255	GREEN 2 0% - 100%
11	0 - 255	BLUE 2 0% - 100%
12	0 - 255	WHITE 2 0% - 100%
13	0 - 255	RED 3 0% - 100%
14	0 - 255	GREEN 3 0% - 100%
15	0 - 255	BLUE 3 0% - 100%
16	0 - 255	WHITE 3 0% - 100%
17	0 - 255	RED 4 0% - 100%
18	0 - 255	GREEN 4 0% - 100%
19	0 - 255	BLUE 4 0% - 100%
20	0 - 255	WHITE 4 0% - 100%
21	0 - 19 20 - 29 30 - 39 40 - 49 50 - 59 60 - 69 70 - 79 80 - 89 90 - 99 100 - 109 110 - 119 120 - 129 130 - 139	COLOR MACROS OFF MACRO 1 MACRO 2 MACRO 3 MACRO 4 MACRO 5 MACRO 6 MACRO 7 MACRO 8 MACRO 9 MACRO 10 MACRO 11 MACRO 12

Vortex 1200		29 Channel Mode
Channel	Value	Function
21	140 - 149 150 - 159 160 - 169 170 - 179 180 - 189 190 - 199 200 - 209 210 - 219 220 - 229 230 - 239 240 - 255	COLOR MACROS MACRO 13 MACRO 14 MACRO 15 MACRO 16 MACRO 17 MACRO 18 MACRO 19 MACRO 20 MACRO 21 MACRO 22 MACRO 23
22	0 - 255	COLOR MACRO SPEED SLOW - FAST
23	0 - 127 128 - 189 190 - 193 194 - 255	EFFECT ROTATION INDEXING 0-360 DEGREES CLOCKWISE ROTATION FAST - SLOW STOP CLOCKWISE ROTATION SLOW - FAST
24	0 - 19 20 - 39 40 - 59 60 - 79 80 - 99 100 - 119 120 - 139 140 - 159 160 - 179 180 - 199 200 - 219 220 - 255	STROBING OPEN STROBING SLOW - FAST MACRO 1 STROBE MACRO 2 STROBE MACRO 3 STROBE MACRO 4 STROBE MACRO 5 STROBE STROBE EFFECT 1 STROBE EFFECT 2 STROBE EFFECT 3 STROBE EFFECT 4 OPEN
25	0 - 255	MASTER DIMMER
26	0 - 7	PAN/TILT MACROS NO FUNCTION

Vortex 1200		29 Channel Mode
Channel	Value	Function
26		PAN/TILT MACROS
	8 - 15	MACRO 1
	16 - 23	MACRO 2
	24 - 31	MACRO 3
	32 - 39	MACRO 4
	40 - 47	MACRO 5
	48 - 55	MACRO 6
	56 - 63	MACRO 7
	64 - 71	MACRO 8
	72 - 79	MACRO 9
	80 - 87	MACRO 10
	88 - 95	MACRO 11
	96 - 103	MACRO 12
	104 - 111	MACRO 13
	112 - 119	MACRO 14
	120 - 127	MACRO 15
	128 - 135	MACRO 16
	136 - 143	MACRO 17
	144 - 151	MACRO 18
	152 - 159	MACRO 19
	160 - 167	MACRO 20
	168 - 175	MACRO 21
	176 - 183	MACRO 22
	184 - 191	MACRO 23
	192 - 199	MACRO 24
	200 - 207	MACRO 25
	208 - 215	MACRO 26
	216 - 223	MACRO 27
	224 - 231	MACRO 28
	232 - 239	MACRO 29
	240 - 247	MACRO 30
	248 - 255	MACRO 31
27	0 - 255	PAN/TILT MACRO SPEED

Vortex 1200		29 Channel Mode
Channel	Value	Function
28		SPECIAL FUNCTIONS
	0 - 69	NO FUNCTION
	70 - 79	BLACKOUT WHILE PAN/TILT MOVE
	80 - 89	NOTHING
	90 - 99	BLACKOUT WHILE RGBW CHANGE
	100 - 109	NOTHING
	110 - 119	EFFECT WHEEL MOTOR RESET
	120 - 199	PAN & TILT MOTOR RESET
	200 - 209	ALL MOTOR RESET
	210 - 249	NOTHING
	250 - 255	SOUND ACTIVE
29		DIMMER CURVES
	0 - 20	STANDARD
	21 - 40	STAGE
	41 - 60	TV
	61 - 80	ARCHITECTURAL
	81 - 100	THEATRE
	101 - 255	DEFAULT TO UNIT CURVE SETTING

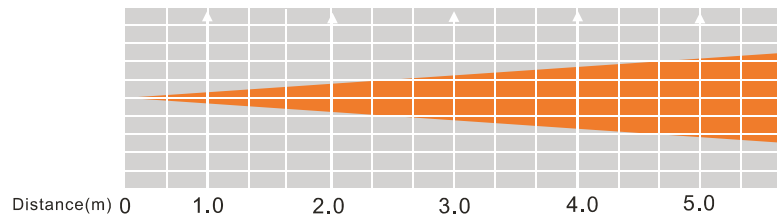
Vortex 1200		UC3 Control	
Stand By	Blackout the unit		
Function	1. Sync. Strobe 2. Two-light strobe 3. Sound Strobe	Select Show 1-4	1. Hold to change Master Pan position 2. Hold to change Master Tilt position 3. Hold to change Master Dimmer 4. Hold to change Slave Pan position 5. Hold to change Slave Tilt position 6. Hold to change Slave Dimmer
Mode	Sound (LED OFF)	LED ON	LED fast blinking



## Vortex 1200

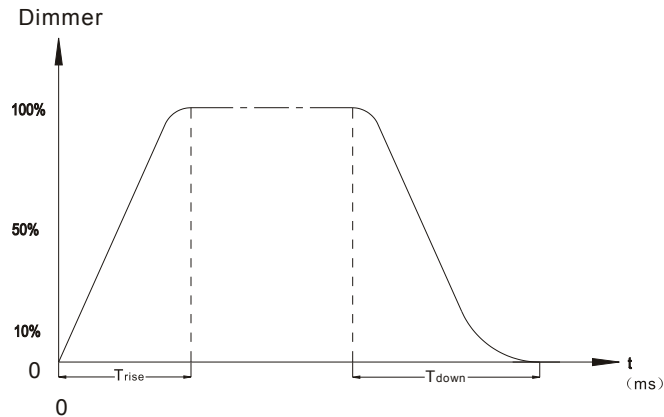
## Photometric Chart

Beam angle 5°	R	3000	2200	1500	1000	800	(Lux)
	G	9500	7200	6000	4500	3300	
	B	1200	950	340	150	92	
	W	13000	9600	8400	5760	3500	
	RGBW	20000	11000	7300	5200	3800	
	Spot Diameter	0.087	0.175	0.262	0.349	0.437	(M)



## Vortex 1200

## Dimmer Curve Chart



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

## Vortex 1200

## Fuse Replacement

Disconnect the unit from its power source. Locate the fuse holder on the rear panel of the unit. Using a phillips-head screw driver unscrew the fuse holder. Remove the bad fuse and replace with a new one. Screw the fuse holder back into the unit containing the new fuse.

## Vortex 1200

## Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses and mirror should be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew). In heavy club use we recommend cleaning on a monthly basis. Periodic cleaning will ensure longevity, and crisp output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Use a brush to wipe down the cooling vents and fan grill.
3. Clean the external optics with glass cleaner and a soft cloth every 20 days.
4. Clean the internal optics with glass cleaner and a soft cloth every 30-60 days.
5. Always be sure to dry all parts completely before plugging the unit back in.

## Vortex 1200

## Troubleshooting

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 the sound sensitivity level.

## Vortex 1200

## Warranty

### MANUFACTURER'S LIMITED WARRANTY

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. **For warranty service you must obtain a Return Authorization number (RA#) before sending back the product—please contact ADJ Products, LLC Service Department at 800-322-6337.** Send the product only to the ADJ Products, LLC factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in 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, nor for the safe return thereof.
- C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear indentifying marks to that effect.
- E. ADJ Products, LLC reserves the right to make changes in design and/or improvements upon 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 ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. The consumer's and/or Dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

This warranty is the only written warranty applicable to ADJ Products, LLC Products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

### MANUFACTURER'S LIMITED WARRANTY PERIODS:

- **Lighting Products = 1-year (365 days) 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 LED and lamps)
- **Laser Products = 1 Year (365 Days) Limited Warranty** (excluding laser diodes which have a 6 month limited warranty)
- **L.E.D. Products = 2-year (730 days) Limited Warranty** (excluding motors, PCB boards, and power supplies, which have a 1-year (365 day Limited Warranty) batteries which have a 180 day limited warranty). Only the L.E.D.s carry a 2-year warranty (excluding **StarTec Series which carries a 90 Day Limited Warranty**)
- **ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty** (excluding faders and tact switches)

## Vortex 1200

## Specifications

### SPECIFICATIONS:

Voltage:	100V-240V 50Hz/60Hz
LEDs:	12 x 10W Quad Color LEDs
Power Consumption:	174W
Beam Angle:	10 ~ 60 Degrees
Fuse:	7Amp
Power Cord Daisy Chain:	4 Fixtures Max. (120V) 8 Fixtures Max (230V)
Weight:	16 lbs./ 7.3Kgs.
Dimensions:	10.5" (L) x 6.75" (W) x 13" (H) 263 x 170 x 327mm
Colors:	RGBW Color Mixing
DMX Channels:	4 DMX Modes: 14 Channel Mode, 15 Channel Mode, 17 Channel Mode, & 29 Channel Mode
Working Position:	Any safe working position
Warranty:	2 Year (730 days)

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

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

ADJ Products, LLC  
6122 S. Eastern Ave. Los Angeles, CA 90040 USA  
Tel: 323-582-2650 / Fax: 323-725-6100  
Web: [www.adj.com](http://www.adj.com) / E-mail: [info@americandj.com](mailto:info@americandj.com)

A.D.J. Supply Europe B.V.  
Junostraat 2  
6468 EW Kerkrade  
Netherlands

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[service@adjgroup.eu](mailto:service@adjgroup.eu) / [www.adj.eu](http://www.adj.eu)  
Tel: +31 45 546 85 00 / Fax: +31 45 546 85 99