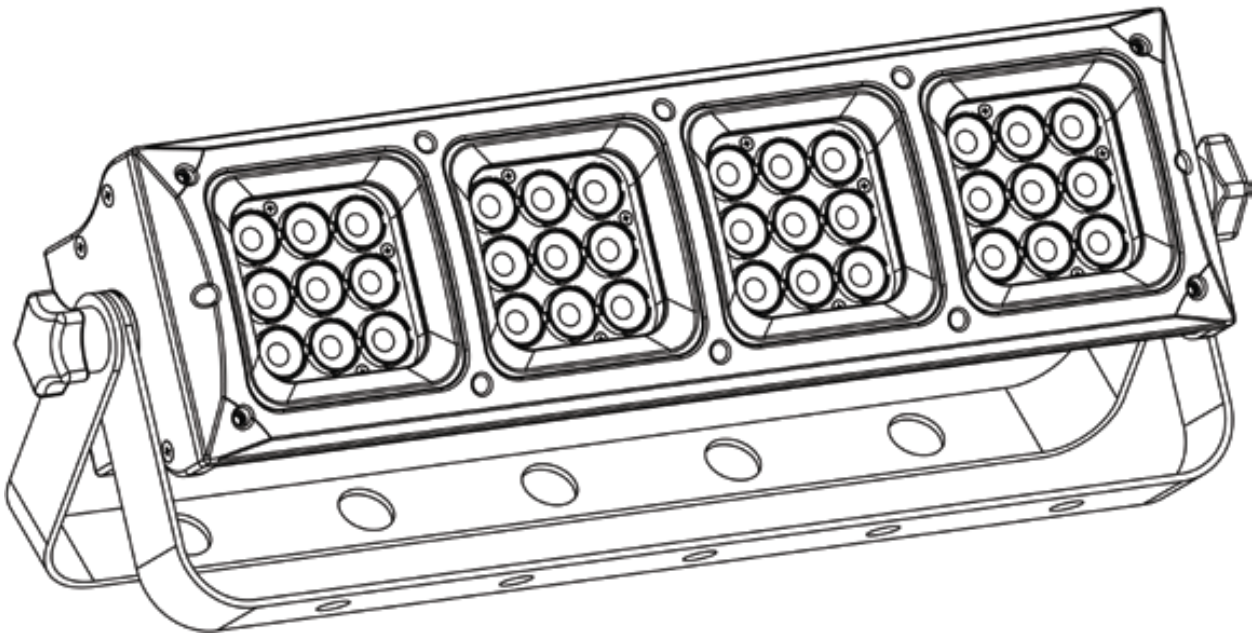
COLORdash™ Quad

User Manual

Snapshot

Use on Dimmer	⊘
Outdoor Use	⊘
Sound Activated	⊘
DMX512	✓
Master/Slave	✓
Autoswitching Power Supply	✓
Replaceable Fuse	✓
User Serviceable	⊘
Duty Cycle	⊘



CHAUVET® PROFESSIONAL

TABLE OF CONTENTS

1. BEFORE YOU BEGIN

What is Included

- Ø 1 x COLORdash™ Quad
- Ø 1 x Power cable with plug
- Ø 1 x 6 ft (2 m) power linking cable
- Ø 1 x Warranty Card
- Ø 1 x User Manual

Unpacking Instructions

Immediately upon receiving a fixture, carefully unpack the carton, check the contents to ensure that all parts are present, and have been received in good condition. Notify the shipper immediately and retain packing material for inspection if any parts appear damaged from shipping or the carton itself shows signs of mishandling. Save the carton and all packing materials. In the event that a fixture must be returned to the factory, it is important that the fixture be returned in the original factory box and packing.

Manual Conventions

CHAUVET manuals use the following conventions to differentiate certain types of information from the regular text.

CONVENTION	MEANING
[10]	A DIP switch to be configured.
<Menu>	A key to be pressed on the fixture's control panel
1 ~ 512	A range of values
Settings	An option shown on the display not to be modified (for example, showing the operating mode/current status)
MENU > Settings	A sequence of menu options to be selected
ON	A value to be entered or selected
"Appendix"	A section of the manual

Icons

This manual uses the following icons to indicate information that requires special attention on the part of the user.

ICONS	MEANING
	This paragraph contains critical installation, configuration or operation information. Failure to comply with this information may render the fixture partially or completely inoperative, cause damage to the fixture or cause harm to the user or technician.
	This paragraph contains important installation or configuration information. Failure to comply with this information may prevent the fixture from functioning correctly.
	This paragraph reminds you of useful, although not critical, information.

Safety Instructions

Please read these instructions carefully because they include important information about the installation, usage and maintenance of this product.

There are no user serviceable parts inside the unit. Any reference to servicing the unit you may find from now on will only apply to properly certified technicians. Do not open the housing or attempt any repairs unless you are one of them.

In the unlikely event that your unit may require service, please contact CHAUVET at (954) 929-1115.

- Keep this Manual for future consultation. If you sell the unit to another user, make sure that they also receive this Manual.
- Always make sure that you are connecting the unit to the proper voltage, as per the specifications.
- Always disconnect from power source before servicing or replacing fuse and be sure to replace with same fuse type.
- This product is for indoor use only! To prevent risk of fire or shock, do not expose fixture to rain or moisture.
- Secure fixture to fastening device using a safety chain.
- Maximum ambient temperature (Ta) is 104° F (40° C). Do not operate the fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately!
- Never connect the device to a dimmer pack.
- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.
- Do not daisy chain power to more than 15 units @ 120 V, or 30 units @ 230 V.

Please refer to all applicable local codes and regulations for proper installation of this fixture.

LED Expected Lifespan

LEDs gradually decline in brightness over time. HEAT is the dominant factor that leads to the acceleration of this decline. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal or singular optimum conditions. For this reason when all color LEDs are used at their fullest intensity, life of the LEDs is significantly reduced. It is estimated that a viable lifespan of 40,000~50,000 hrs will be achieved under normal operational conditions. If improving on this lifespan expectancy is of a higher priority, place care in providing for lower operational temperatures. This may include climatic-environmental and the reduction of overall projection intensity.

2. INTRODUCTION

Features

- 3, 4, 10 or 12 channel DMX 512 LED linear wash light (with ID addressing)
- Operating modes
  - 3-channel RGB
  - 4-channel RGB, Dimmer
  - 10-channel RGB, ID, Dimmer, Macro, Strobe, Automatic, Custom, Module Select
  - 12-channel RGB control of each block
- RGB color mixing with or without DMX controller
- 10 Built in Automated programs via master/slave or DMX
- Program and recall custom programs via master/slave or DMX

Additional Features

- High Power, 1 W (350 mA) LEDs
- Variable fan speed
- Includes 6.6 ft (2 m) power extension cable
- LCD display with password protection
- Transfer custom programs between fixtures
- Double-bracket yoke doubles as floor stand
- 3 or 5-pin DMX
- Multiple mounting options (linear or array) with included brackets

Options

- COLORado™ Controller (COLOR-CON)
- Optical Systems 15° (CL20X15), 30° (CLENS3009), 25x6° (installed)

DMX Channel Summary

The COLORdash™ Quad has a total of four DMX channel configurations, referred to as “Personalities” in this manual and in the fixture onboard control panel. The four personalities are: STAGE 1, BLOCK, ARC 1, and ARC 1 + D. Each of the different personalities may be accessed from the control panel. Please see section on “Control Panel Functions” on a description on how to accomplish this.

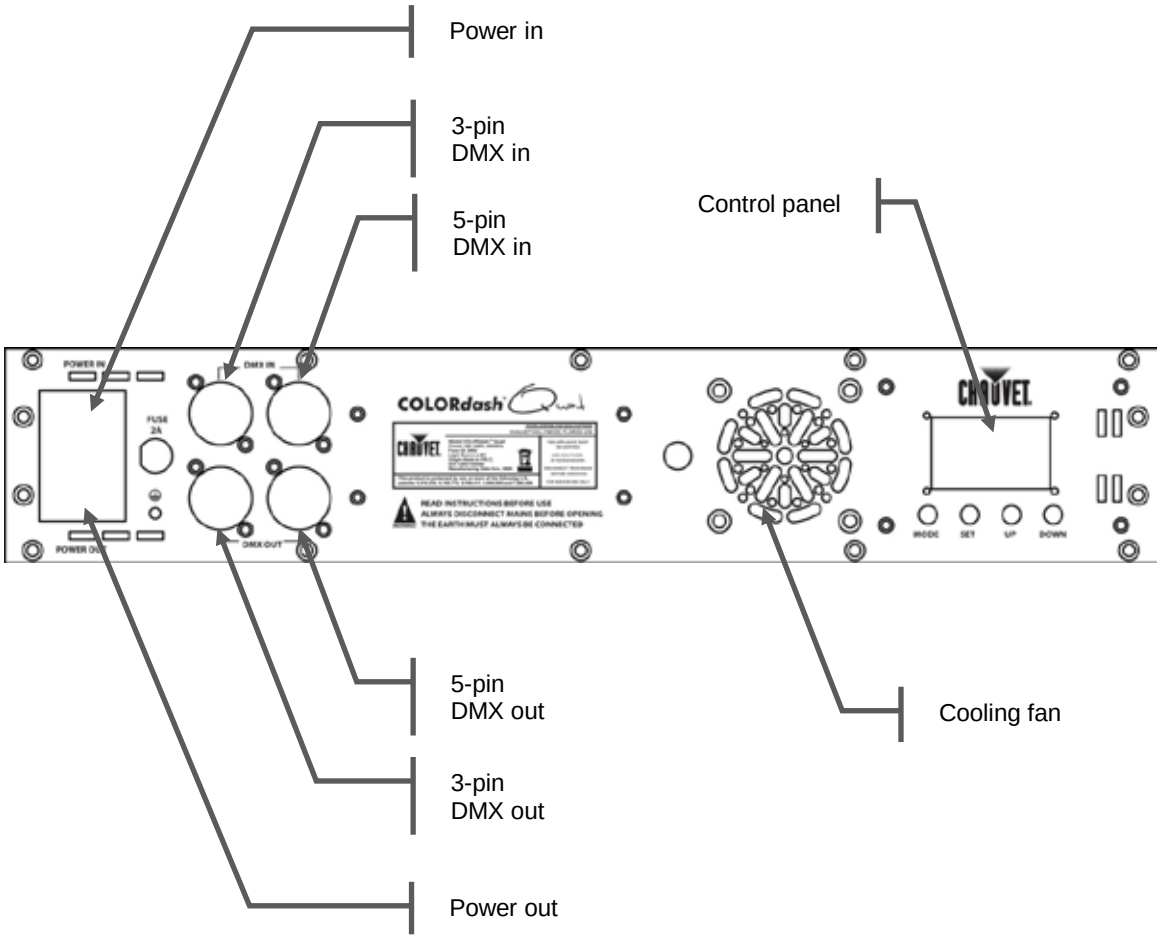
[STAGE 1]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red
	3	Green
	4	Blue
	5	Color Macro
	6	Strobe
	7	Auto & Custom Programs
	8	Auto Speed Adjustment
	9	ID Address Selection
	10	Block Selection

[BLOCK]	CHANNEL	DESCRIPTION
	1	Red 1
	2	Green 1
	3	Blue 1
	4	Red 2
	5	Green 2
	6	Blue 2
	7	Red 3
	8	Green 3
	9	Blue 3
	10	Red 4
	11	Green 4
	12	Blue 4

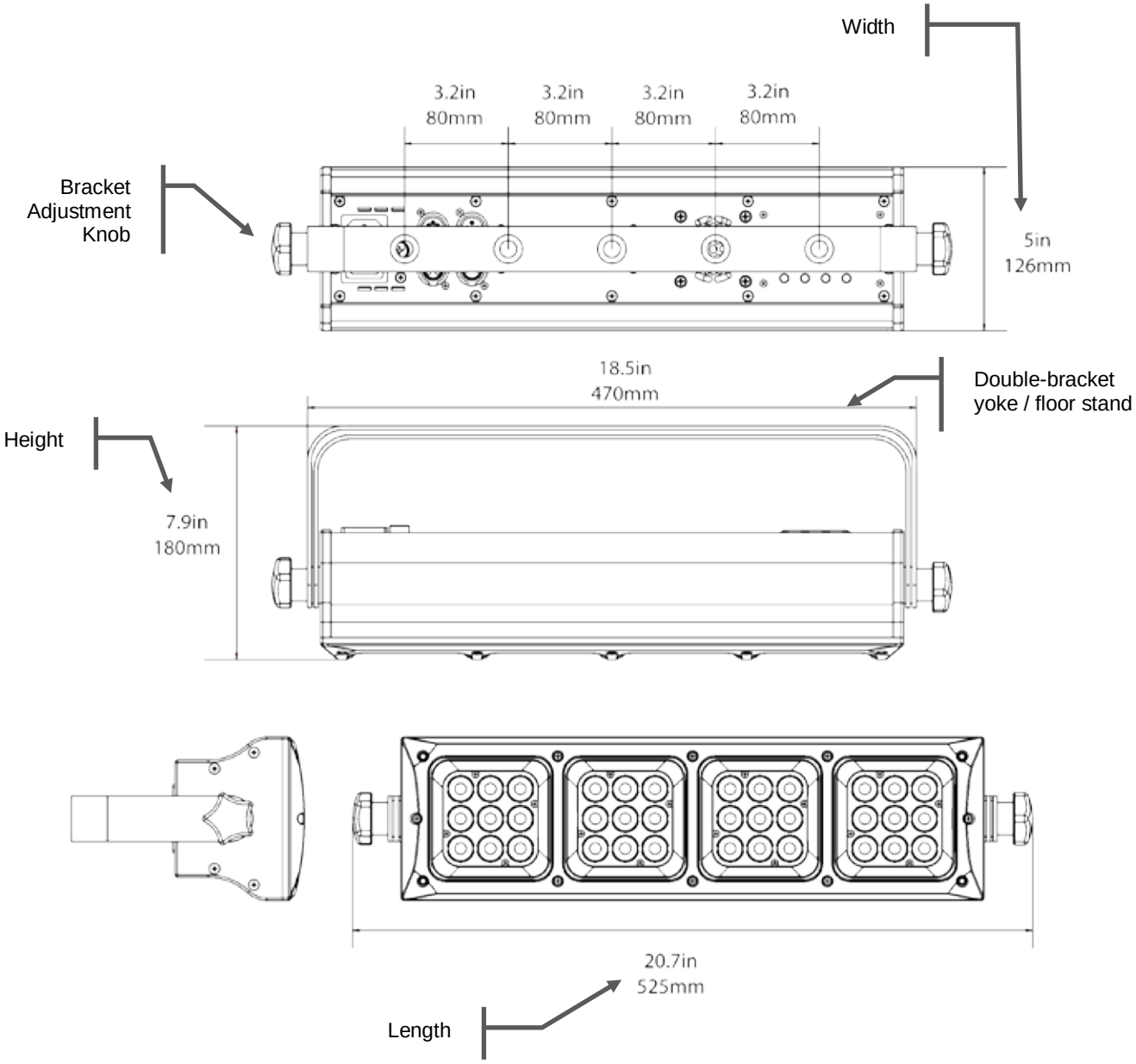
[ARC 1]	CHANNEL	DESCRIPTION
	1	Red
	2	Green
	3	Blue

[ARC1+D]	CHANNEL	DESCRIPTION
	1	Dimmer
	2	Red
	3	Green
	4	Blue

Product Overview



Product Dimensions



3. SETUP

AC Power

This fixture has an auto-switching power supply that can accommodate a wide range of input voltages (100 ~ 240 VAC, 50/60 Hz). Before powering on the unit, make sure the line voltage to which you are connecting it is within the range of accepted voltages.

This fixture is designed for power linking from one COLORdash™ Quad to another COLORdash™ Quad fixture. This is done with IEC extension cables.

Always connect the fixture to a switched circuit. Never connect the fixture to a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used only as a 0 to 100% switch.

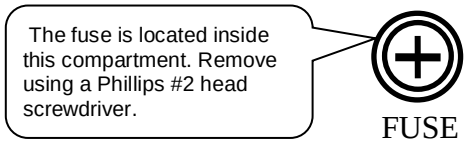
To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixture's specifications chart. A fixture's listed current rating indicates its average current draw under normal conditions.

Always connect the fixture to a circuit with a suitable electrical ground.

Fuse Replacement

Disconnect the power cord before replacing a fuse and always replace with the same type fuse.

With a Phillips #2 head screwdriver, unscrew the fuse holder from its housing. Remove the damaged fuse from its holder and replace with exact same type fuse. Screw the fuse holder back in its place and reconnect power.



Mounting

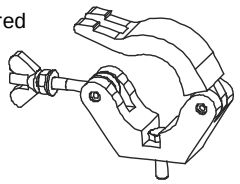
Orientation

This fixture may be mounted in any safe position, provided there is adequate room for ventilation.

Rigging

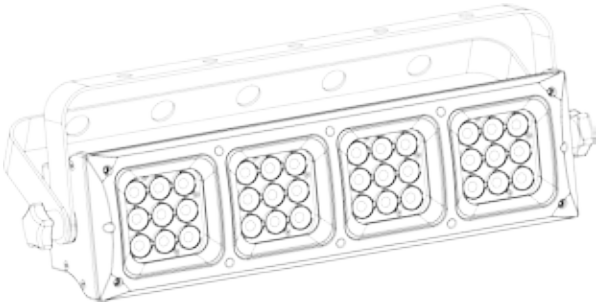
It is important never to obstruct the fan or vents pathway. Mount the fixture using, a suitable “C” or “O” type clamp. Adjust the angle of the fixture by loosening both knobs and tilting the fixture. After finding the desired position, retighten both knobs.

Hanging Clamp



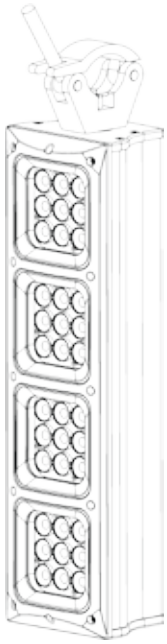
- When selecting installation location, consider access and routine maintenance.
- Safety cables must always be used.
- Never mount in places where the fixture will be exposed to rain, high humidity, extreme temperature changes or restricted ventilation.

Clamp is sold separately.



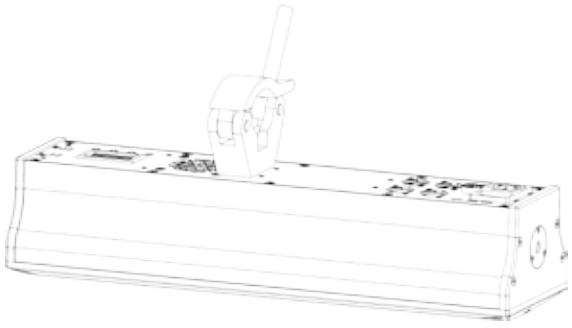
Double yoke bracket/floor stand:
The fixture ships with this configuration installed.

Note: it is recommended that 2 clamps be used when hanging in this configuration.



Vertical hang:
The clamp is mounted directly to the fixture’s M10 threaded hole on either side of the fixture, without any other bracket(s).

Note: this setup provides limited angle adjustments.



Horizontal hang:
The clamp is mounted directly to the fixture’s M10 threaded hole on the rear of the fixture, without any other bracket(s).

Note: this setup provides limited angle adjustments.

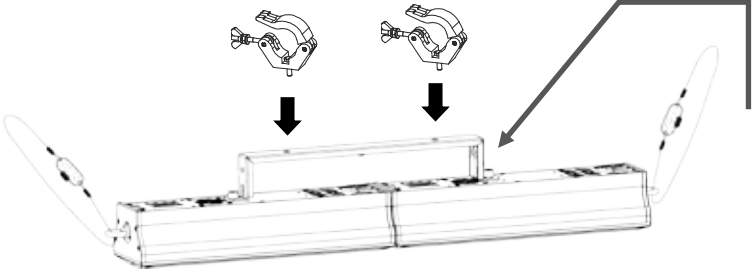
Fixture Stacking

The fixture may be stacked together horizontally to create a strip light or vertically for a blinder effect. With the different methods of bracket mounting, this turns this fixture into a very versatile lighting tool.

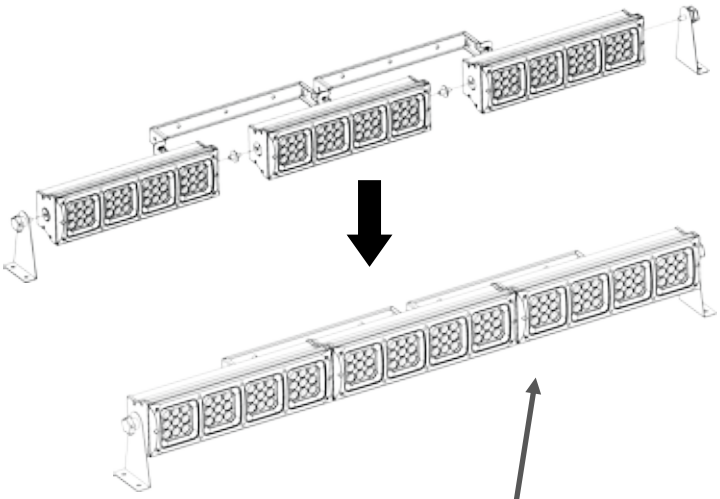
In this configuration, it is only recommended that a maximum of 3 fixtures be stacked together at a time.

You will still need to connect and configure each fixture separately. For the power, you may use the linking cables provided with the fixture.

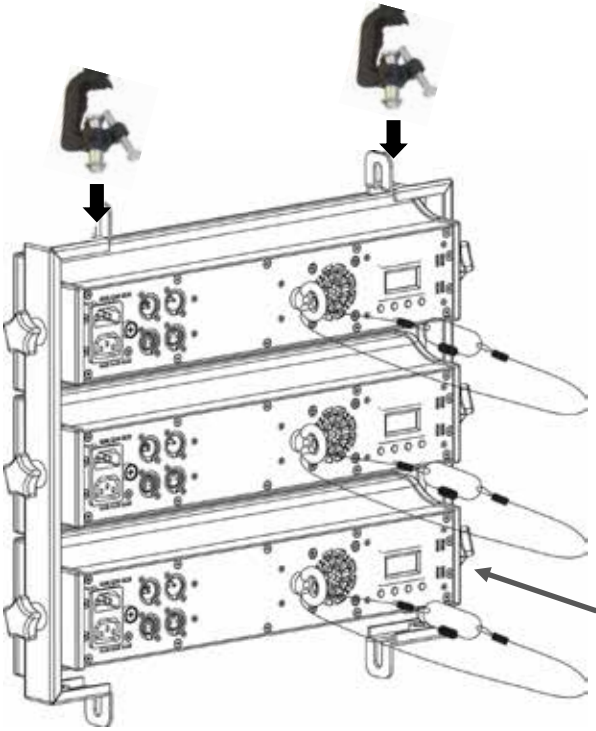
It is recommended to use at least 2 clamps when hanging the fixtures in a stacking configuration.



Horizontal Stacking (hanging)
The safety cables are installed by relocating the safety attachment points to the sides of the fixtures



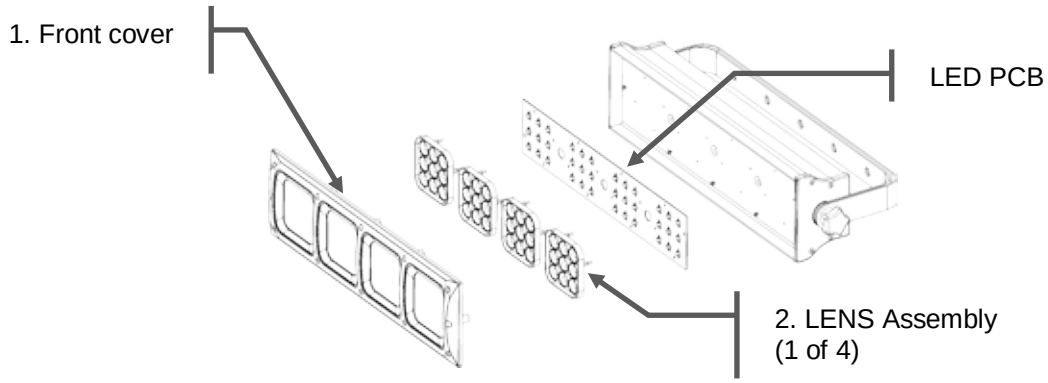
Horizontal Stacking (floor standing)
You must use the attachment screws, floor standing brackets, and the linking brackets



Vertical Stacking (hanging)
When using the vertical stacking method, you must use theater style c-clamps (CLP-04)

Lens Assembly Installation/Replacement

The COLORdash™ Quad comes with 26° x 6° lens assembly preinstalled from the factory. However, there are 2 other optional lens kits 15° degree **(CL20X15)** and 30° degree **(CLENS3009)** available as accessories, which will alter the beam & field angles. Please follow the below instructions for proper replacement/installation.



1. Remove the front cover, using a Phillips #2 screwdriver. There are 10 screws for this cover.
2. After removing the front cover, remove the screws that hold the lens assembly in place. There are 4 lens assemblies for each fixture. There are 4 Phillips #2 screws that secure each of these assemblies in position.
3. The same assembly is to be reinstalled with the new lenses in place and the process is complete.

Use care when performing this procedure, as this gives you direct access to the LEDs, which are very fragile.

When replacing the lens assembly, be sure that the power is disconnected from the fixture beforehand.

You must be VERY CAREFUL when opening this fixture. Improper handling on the behalf of the user may void the manufacturer's 2-year warranty.

Fixture Linking

You will need a serial data link to run light shows of one or more fixtures using a DMX-512 controller or to run synchronized shows on two or more fixtures set to a master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. To comply with the EIA-485 standard no more than 32 fixtures should be connected on one data link. Connecting more than 32 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal.

Maximum recommended serial data link distance: 500 m (1640 ft)
Maximum recommended number of fixtures on a serial data link: 32

Data Cabling

To link fixtures together you must obtain data cables. You can purchase CHAUVET certified DMX cables directly from a dealer/distributor or construct your own cable. If you choose to create your own cable please use data-grade cables that can carry a high quality signal and are less prone to electromagnetic interference.

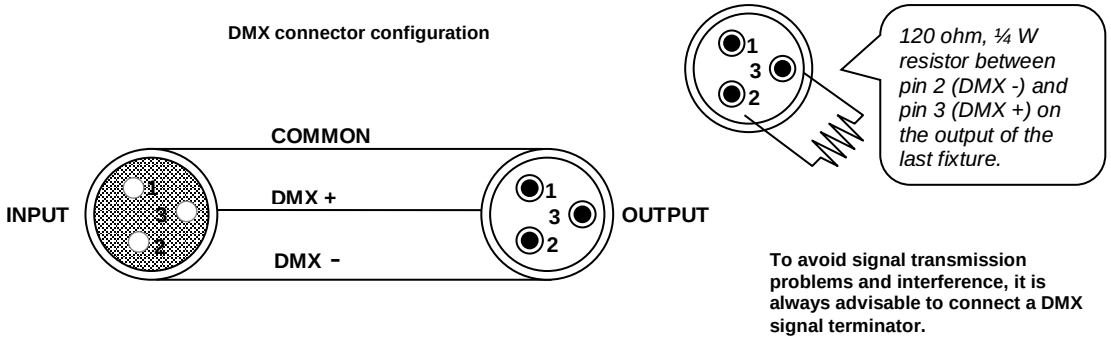
DMX Data Cable

Use a Belden© 9841 or equivalent cable which meets the specifications for EIA RS-485 applications. Standard microphone cables cannot transmit DMX data reliably over long distances. The cable will have the following characteristics:

Type:	*shielded, 2-conductor twisted pair*
Maximum capacitance between conductors:	*30 pF/ft*
Maximum capacitance between conductor and shield:	*55 pF/ft*
Maximum resistance:	*20 ohms/1000 ft*
Nominal impedance:	*100 – 140 ohms*

Cable Connectors

Cabling must have a male XLR connector on one end and a female XLR connector on the other end.



Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohmmeter to verify correct polarity, and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin to 5-Pin Conversion Chart

If you use a controller with a 5-pin DMX output connector, you will need to use a 5-pin to 3-pin adapter. CHAUVET Model No: DMX5M, or DMX5F.

The chart below details a proper cable conversion:

3-PIN TO 5-PIN CONVERSION CHART

Conductor	3-Pin Female (Output)	5-Pin Male (Input)
Ground/Shield	Pin 1	Pin 1
Data (-) signal	Pin 2	Pin 2
Data (+) signal	Pin 3	Pin 3
Not used		Pin 4
Not used		Pin 5

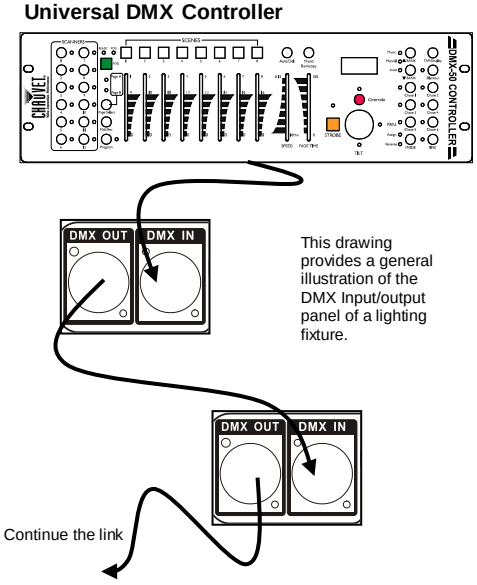
Setting up a DMX Serial Data Link

1. Connect the (male) 3 or 5-pin connector side of the DMX cable to the output (female) 3 or 5-pin connector of the controller.
2. Connect the end of the cable coming from the controller which will have a (female) 3 or 5-pin connector to the input connector of the next fixture consisting of a (male) 3 or 5-pin connector.
3. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

CHAUVET Certified DMX Data Cables

Order Code	Description
DMX1.5	DMX Cable 1.5 m/4.9 ft
DMX4.5	DMX Cable 4.5 m/14.8 ft
DMX10	DMX Cable 10 m/32.8 ft

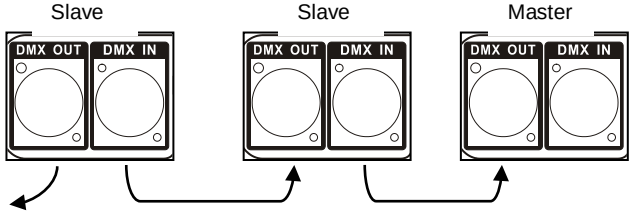
Universal DMX Controller



Master/Slave Fixture Linking

1. Connect the (male) 3-pin connector side of the DMX cable to the output (female) 3-pin connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a (female) 3-pin connector to the input connector of the next fixture consisting of a (male) 3-pin connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.

Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via settings in the control panel. Secondarily, the fixtures that follow may also require a slave setting. Please consult the "Operating Instructions" section in this manual for complete instructions for this type of setup and configuration.



4. OPERATING INSTRUCTIONS

Control Options

The COLORdash™ Quad is addressable in the DMX range of 001 to 512. In its simplest control form, this allows for the control of up to 51 fixtures in the 10-channel Stage 1 personality; however, a secondary ID address system exists for use in a limited DMX universe and architectural environments. The ID address system allows the user to assign up to 66 fixtures within the same DMX address; in effect, multiplying the control of COLORdash™ Quad within a single universe to 3,366 fixtures. The COLORdash™ Quad ID address system is accessed using DMX channel 9 (Stage 1). Consideration must be placed when programming live performances or cues that need to trigger on demand or on a time line. So, to remain within one-second execution time, program no greater than 10 fixtures on ID addressing per DMX channel.

DMX-512 control without ID address

The COLORdash™ Quad operates on 10 channels of DMX (STAGE 1). Address each fixture in increments of 10 channels. For example: 1, 11, 21, 31, 41, etc.. To save time you can use the same DMX address for each fixture. All fixtures will then respond simultaneously to control. You may also group your fixtures and address those groups alike for faster programming and control.

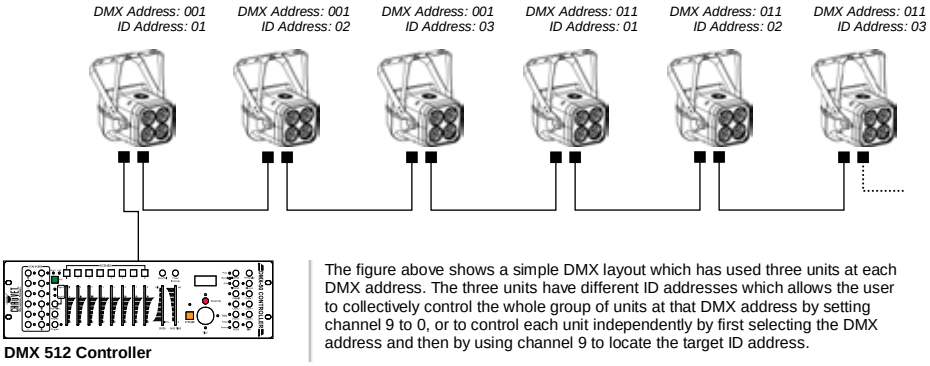
1. Access the control panel function by pressing the **<MODE>** button until the ***RUN*** is displayed.
2. Press **<SET>** and use the **<UP/DOWN>** buttons to select ***DMX*** function.
3. Press **<MODE>** button until ***ADDRESS*** is displayed.
4. Press the **<SET>** button.
6. Use the **<UP/DOWN>** buttons to select an address of 001 ~ 512.
7. Press the **<SET>** button to confirm action. Then press **<MODE>** to exit.

Deactivate ID addressing in each fixture by setting the control panel function *ID ON/OFF* to *OFF*.
MENU >SETTINGS>ID ON/OFF>OFF

If ID addressing is not deactivated in the fixture's control panel function, unintended results may occur if values are present in channel 9. Make sure values on channel 9 are set to 0.

DMX-512 addressing with ID address

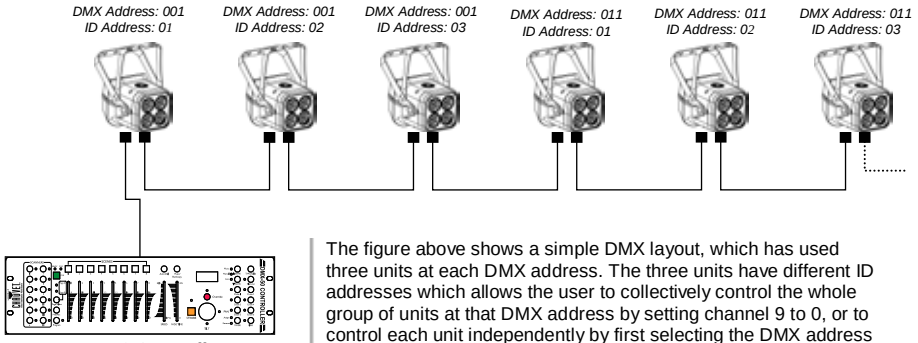
1. Follow instructions 1 ~ 7 in the previous section for DMX-512 addressing.
2. Activate ID addressing in each fixture by setting panel function ***ID ON/OFF*** to ***ON***.
   MENU>Settings>ID ON/OFF>ON
3. For every DMX-512 starting address the user can set 66 separate ID addresses.
4. Set ID addresses in each fixture by setting the control panel function ***ID*** to incremental values (for example: 1, 2, 3, 4, 5, 6, etc).
   MENU>Settings>ID address>01~66
5. ID addresses are accessible using channel 9 (Stage 1).



DMX 512 Controller

The figure above shows a simple DMX layout which has used three units at each DMX address. The three units have different ID addresses which allows the user to collectively control the whole group of units at that DMX address by setting channel 9 to 0, or to control each unit independently by first selecting the DMX address and then by using channel 9 to locate the target ID address.

DMX Addressing Example

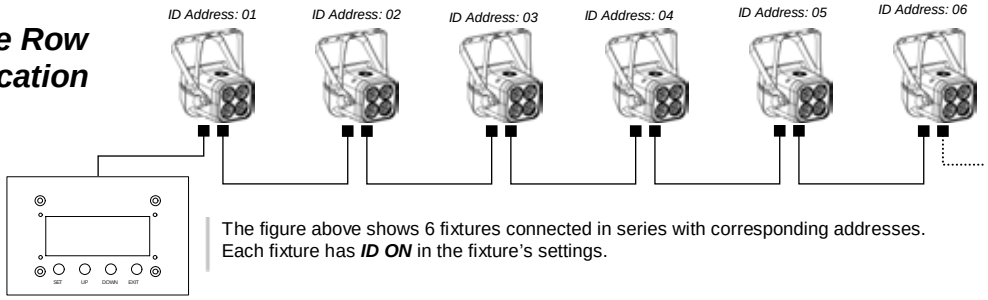


DMX 512 Controller

The figure above shows a simple DMX layout, which has used three units at each DMX address. The three units have different ID addresses which allows the user to collectively control the whole group of units at that DMX address by setting channel 9 to 0, or to control each unit independently by first selecting the DMX address and then by using channel 9 to locate the target ID address.

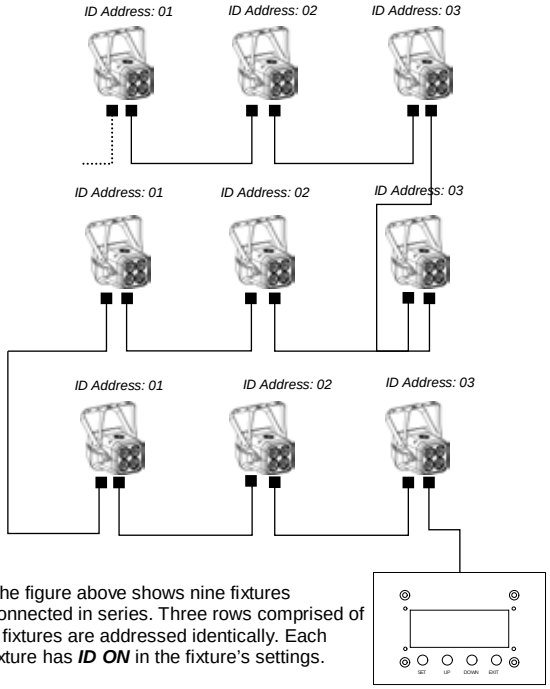
DMX + ID Addressing Examples

Single Row Application



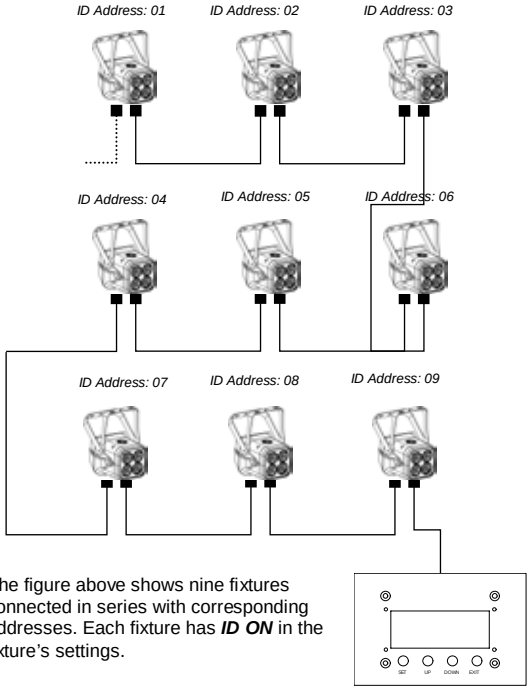
The figure above shows 6 fixtures connected in series with corresponding addresses. Each fixture has ***ID ON*** in the fixture's settings.

Repeat Row Block Application



The figure above shows nine fixtures connected in series. Three rows comprised of 3 fixtures are addressed identically. Each fixture has ***ID ON*** in the fixture's settings.

Block Application



The figure above shows nine fixtures connected in series with corresponding addresses. Each fixture has ***ID ON*** in the fixture's settings.

Setting the Starting DMX Address

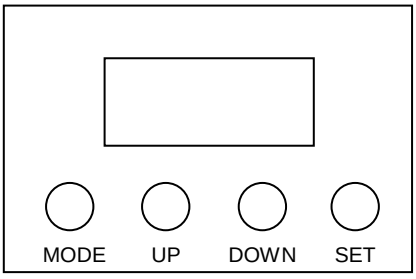
This DMX mode enables the use of a universal DMX controller device. Each fixture requires a "start address" from 1 ~ 512. A fixture requiring one or more channels for control begins to read the data on the channel indicated by the start address. For example, a fixture that uses 6 DMX channels and was addressed to start on DMX channel 100, would read data from channels: 100, 101, 102, 103, 104, and 105. Choose start addresses so that the channels used do not overlap, and note the start address selected for future reference.

If this is your first time addressing a fixture using the DMX-512 control protocol, we suggest jumping to the “Appendix” and reading the “DMX Primer” section. It contains very useful information that will help you understand its use.

Control Panel Functions

Access control panel functions using the four panel buttons located directly underneath the LCD display.

Button	Function
<MODE>	Used to access the menu or to return to a previous menu option
<UP>	Scrolls through menu options in ascending order
<DOWN>	Scrolls through menu options in descending order
<ENTER>	Used to select and store the current menu or option within a menu



The Control Panel LCD Display shows the menu items you select from the menu map. When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press **<SET>**. Use **<UP/DOWN>** to navigate the menu map and menu options. Press **<SET>** to access the menu function currently displayed or to enable a menu option. To return to the previous option or menu without changing the value, press **<MODE>**.

Password Menu Lockout

The COLORdash™ Quad has a password lock-out feature. Enable/disable this by using the Control Panel.

This feature uses a default, non-changeable, password of <UP>, <DOWN>, <UP>, <DOWN>. After 30 seconds of inactivity, the lockout will automatically engage once it has been enabled.

Upload Customs

The custom programs in the COLORdash™ Quad may be transferred (copied) from one fixture to another, thus giving the ability to only program them on a single fixture, and then duplicate this on several others. This is referenced in the control panel as ***Upload***. Follow the steps below for this process. On all fixtures that are going to receive the upload, set them on ***SLAVE*** operation.

1. Disconnect from DMX controller.
2. Using DMX cables, daisy chain the slave fixtures from the output of the fixture with the custom program to be copied to the other fixtures.
3. Using **<UP/DOWN>**, select ***Settings*** in the control panel. Press **<SET>**.
4. Using **<UP/DOWN>**, select ***Upload***.
5. Enter the password. Press **<SET>** to confirm and begin the transfer.
6. The slave fixtures will display green if the transfer is successful. They will display red if the transfer is not successful. And, during the transfer, they will display yellow.

The units receiving the new custom programs from the master must be set to “SLAVE”. Otherwise, they will not allow receipt of the programs.

Menu Map

MAIN FUNCTION	SUB-FUNCTION	SELECTION	INSTRUCTION
1. STATIC	Red	000 ~ 255	User can combine red, green, and blue to generate a custom color
	Gree (Green)	000 ~ 255	
	Blue	000 ~ 255	
	Stro (Strobe)	000 ~ 255	Select strobing frequency: 0 ~ 20 Hz
2. AUTO	Auto	001 ~ 010	Fully pre-programmed programs; cannot be altered
	Custom	001 ~ 010	User-programmable programs; may be altered in the ***EDIT*** menu option
4. RUN	(No sub function)	<DMX> ~ <SLAV>	Sets the operating mode for the fixture: to receive signal from a DMX controller (DMX) or to receive signal from the DMX out of another COLORdash™ Quad (Slave)
5. PERSON	(No sub function)	Stage 1	9-channel with ID
		Block	12-channel individual RGB control over each module (1 of 4)
		ARC 1	3-channel RGB color mixing
		ARC 1+D	4-channel RGB color mixing with master dimmer
6. ID	(No sub function)	Addr:001~066	Assigns the ID address to a fixture
7. SET	Upload	**Password required*	Performs an upload of the custom programs to another fixture. Displays *"End!"* when successful
	Reset	**Password required*	Performs a factory reset
8. LOCK	(No sub function)	<ON> ~ <OFF>	Enables or Disables password lockout
9. EDIT	Custom 010 ~ 010 *(Scene 001 ~ 030)*	Red [0~255]	User-programmable programs; can be altered
		Gree (green) [0~255]	Adjust different parameters to create a custom look. These looks (scenes) can be stacked, with the fade times and scene times altered to the desired effect
		Blue [0~255]	
		Stro (strobe) [0~20]	
		Time [0~255]	
		Fade [0~255]	
10. FANS	(No sub function)	<OFF>	Keeps the fans off, regardless of the temperature. If the temperature of the LEDs reached a temperature >60° C, then the fan will automatically turn back on to compensate
		<LOW>	Adjusts the fan speed to its quietest speed
		<NORMAL>	Adjusts the fan speed to a normal speed, a median between speed and noise levels
		<HIGH>	Adjusts the fan speed to the highest sustainable value.
		<AUTO>	Automatically turns on the fan, when needed

The password is UP>, <DOWN>, <UP>, <DOWN>.

DMX-512 Channel Values

The COLORdash™ Quad has four DMX-512 channel configurations: STAGE 1, BLOCK, ARC 1, and ARC 1 + D.

STAGE 1

CHANNEL	VALUE	FUNCTION
1		**Dimmer**
	000 ó 255	0 ó 100%
2		**Red**
	000 ó 255	**(or STEP TIME when Custom 01-10 is activated)**
		0 ó 100%
3		**Green**
	000 ó 255	**(or FADE TIME when Custom 01-10 is activated)**
		0 ó 100%
4		**Blue**
	000 ó 255	0 ó 100%
5		**Color Macro + White Balance**
	000 ó 010	No Function
	011 ó 035	Red 100%/ Green Up/ Blue 0%
	036 ó 060	Red Down/ Green 100%/ Blue 0%
	061 ó 085	Red 0%/ Green 100%/ Blue Up
	086 ó 110	Red 0%/ Green Down/Blue 100%
	111 ó 135	Red Up/ Green 0%/Blue 100%
	136 ó 160	Red 100%/ Green 0%/ Blue Down
	161 ó 185	Red 100%/ Green Up/ Blue Up
	186 ó 210	Red Down/ Green Down/ Blue 100%
	211 ó 215	White 1: 3200K
	216 ó 220	White 2: 3400K
	221 ó 225	White 3: 4200K
	226 ó 230	White 4: 4900K
	231 ó 235	White 5: 5600K
	236 ó 240	White 6: 5900K
	241 ó 245	White 7: 6500K
	246 ó 250	White 8: 7200K
	251 ó 255	White 9: 8500K
6		**Strobe**
	000 ó 004	No Function
	005 ó 255	0 ó 20Hz
7		**Auto + Custom Programs + Fan Control**
	000 ó 010	Reset to display fan setting
	011 ó 020	Fans Off (Hold for 3 sec)
	021 ó 030	Fans Low (Hold for 3 sec)
	031 ó 040	Fans Normal (Hold for 3 sec)
	041 ó 050	Fans High (Hold for 3 sec)
	051 ó 060	Fans Auto (Hold for 3 sec)
	061 ó 070	Auto 1
	071 ó 080	Auto 2
	081 ó 090	Auto 3
	091 ó 100	Auto 4
	101 ó 110	Auto 5
	111 ó 120	Auto 6
	121 ó 130	Auto 7
	131 ó 140	Auto 8
	141 ó 150	Auto 9
	151 ó 160	Auto 10
	161 ó 170	Custom 1
	171 ó 180	Custom 2
	181 ó 190	Custom 3
	191 ó 200	Custom 4
	201 ó 210	Custom 5
	211 ó 220	Custom 6
	221 ó 230	Custom 7
	231 ó 240	Custom 8
	241 ó 250	Custom 9
	251 ó 255	Custom 10
8	0 ó 255	**Auto Speed (only when CH.7 is between 061 ~ 255)**

CHANNEL	ID ADDRESSING					
	VALUE	ID	VALUE	ID	VALUE	ID
9	000 ó 009	All IDs	212	ID 23	235	ID 46
	010 ó 019	ID 1	213	ID 24	236	ID 47
	020 ó 029	ID 2	214	ID 25	237	ID 48
	030 ó 039	ID 3	215	ID 26	238	ID 49
	040 ó 049	ID 4	216	ID 27	239	ID 50
	050 ó 059	ID 5	217	ID 28	240	ID 51
	060 ó 069	ID 6	218	ID 29	241	ID 52
	070 ó 079	ID 7	219	ID 30	242	ID 53
	080 ó 089	ID 8	220	ID 31	243	ID 54
	090 ó 099	ID 9	221	ID 32	244	ID 55
	100 ó 109	ID 10	222	ID 33	245	ID 56
	110 ó 119	ID 11	223	ID 34	246	ID 57
	120 ó 129	ID 12	224	ID 35	247	ID 58
	130 ó 139	ID 13	225	ID 36	248	ID 59
	140 ó 149	ID 14	226	ID 37	249	ID 60
	150 ó 159	ID 15	227	ID 38	250	ID 61
	160 ó 169	ID 16	228	ID 39	251	ID 62
	170 ó 179	ID 17	229	ID 40	252	ID 63
	180 ó 189	ID 18	230	ID 41	253	ID 64
	190 ó 199	ID 19	231	ID 42	254	ID 65
	200 ó 209	ID 20	232	ID 43	255	ID 66
	210	ID 21	233	ID 44		
	211	ID 22	234	ID 45		

CHANNEL	VALUE	FUNCTION
10		**Block**
	000 ó 009	Block 1,2,3,4
	010 ó 029	Block 1
	030 ó 049	Block 2
	050 ó 069	Block 3
	070 ó 089	Block 4
	090 ó 109	Block 1,2
	110 ó 129	Block 3,4
	130 ó 149	Block 1,4
	150 ó 169	Block 2,3
	170 ó 189	Block 1,2,3
	190 ó 209	Block 2,3,4
	210 ó 229	Block 1,3,4
	230 ó 255	Block 1,2,4

BLOCK

CHANNEL	VALUE	FUNCTION
1	000 ó 255	**Red 1** 0 ó 100%
2	000 ó 255	**Green 1** 0 ó 100%
3	000 ó 255	**Blue 1** 0 ó 100%
4	000 ó 255	**Red 2** 0 ó 100%
5	000 ó 255	**Green 2** 0 ó 100%
6	000 ó 255	**Blue 2** 0 ó 100%
7	000 ó 255	**Red 3** 0 ó 100%
8	000 ó 255	**Green 3** 0 ó 100%
9	000 ó 255	**Blue 3** 0 ó 100%
10	000 ó 255	**Red 4** 0 ó 100%
11	000 ó 255	**Green 4** 0 ó 100%
12	000 ó 255	**Blue 4** 0 ó 100%

ARC 1 + D

CHANNEL	VALUE	FUNCTION
1	000 ó 255	**Dimmer** 0 ó 100%
2	000 ó 255	**Red** 0 ó 100%
3	000 ó 255	**Green** 0 ó 100%
4	000 ó 255	**Blue** 0 ó 100%

ARC 1

CHANNEL	VALUE	FUNCTION
1	000 ó 255	**Red** 0 ó 100%
2	000 ó 255	**Green** 0 ó 100%
3	000 ó 255	**Blue** 0 ó 100%

DMX Operation Notes (STAGE 1)

Master Dimmer

- Channel 1 controls the intensity of the currently projected color
- When the slider is at the highest position (255), the output intensity is at its maximum.

Red, Green, Blue and White Color Selection

- Channels 2, 3, 4 and 5 control the intensity ratio of the Red, Green, Blue and White LEDs respectively.
- Channels 2, 3, and 4 can be combined together to create over 16 million color combinations.

Strobe

- Channel 7 controls the strobe of Channels 2 ~ 4.
- Channel 7 has priority over Channels 2, 3, and 4.
- Speed of the strobe is adjustable from 0 ~ 20 Hz.

Color Macros

- Channel 6 selects the Color Macro.
- Channel 6 has priority over Channels 2, 3, 4, 5 and 7.
- Channel 1 is used to control the intensity of the current Color Macro.

ID Address Selection

- Use channel 9 to select the target ID address.
- Each independent DMX address can have up to 66 ID addressed fixtures.
- ID address **0** allows control of all fixtures simultaneously.

Auto & Custom Programs

- Channel 7 selects the preset Auto/Custom programs 1 ~ 10
- When activating the Auto/Custom programs, it is possible to control the Step Time and Fade Time by using Channels 2 and 3 respectively.

Block

- This fixture is divided into four sections, referred to as blocks. Channel 10 determines your block selection.

Contact Us

World Wide

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World Wide Web www.chauvetlighting.com

5. APPENDIX

DMX Primer

There are 512 channels in a DMX 512 connection. Channels may be assigned in any manner. A fixture capable of receiving DMX 512 will require one or a number of sequential channels. The user must assign a starting address on the fixture that indicates the first channel reserved in the controller. There are many different types of DMX controllable fixtures and they all may vary in the total number of channels required. Choosing a start address should be planned in advance. Channels should never overlap. If they do, this will result in erratic operation of the fixtures whose starting address is set incorrectly. You can however, control multiple fixtures of the same type using the same starting address as long as the intended result is that of unison movement or operation. In other words, the fixtures will be slaved together and all respond exactly the same.

DMX fixtures are designed to receive data through a serial Daisy Chain. A Daisy Chain connection is where the DATA OUT of one fixture connects to the DATA IN of the next fixture. The order in which the fixtures are connected is not important and has no effect on how a controller communicates to each fixture. Use an order that provides for the easiest and most direct cabling. Connect fixtures using shielded two conductor twisted pair cable with three pin XLR male to female connectors. The shield connection is pin 1, while pin 2 is Data Negative (S-) and pin 3 is Data positive (S+). CHAUVET carries 3-pin XLR DMX compliant cables, DMX-10 (33'), DMX-4.5 (15') and DMX-1.5 (5')

General Maintenance

To maintain optimum performance and minimize wear, fixtures should be cleaned frequently. Usage and environment are contributing factors in determining frequency. As a general rule, fixtures should be cleaned at least twice a month. Dust build up reduces light output performance and can cause overheating. This can lead to reduced lamp life and increased mechanical wear. Be sure to power off fixture before conducting maintenance.

- Unplug fixture from power.
- Use a vacuum or air compressor and a soft brush to remove dust collected on external vents and internal components.
- Clean all glass when the fixture is cold with a mild solution of glass cleaner or Isopropyl Alcohol and a soft lint free cotton cloth or lens tissue.
- Apply solution to the cloth or tissue and drag dirt and grime to the outside of the lens.
- Gently polish optical surfaces until they are free of haze and lint.

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates. Damp, smoky or particularly dirty surroundings can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

Always dry the parts carefully after cleaning them.

Never spin a fan using compressed air.

Returns Procedure

Returned merchandise must be sent prepaid and in the original packing; call tags will not be issued. Package must be clearly labeled with a Return Merchandize Authorization Number (RMA #). Products returned without the RMA # will be refused. Call CHAUVET and request an RMA # prior to shipping the fixture. Be prepared to provide the model number, serial number and a brief description of the cause for the return. Be sure to pack fixture properly; any shipping damage resulting from inadequate packaging is the customer's responsibility. As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

CHAUVET reserves the right to use its own discretion to repair or replace product(s).

If you are given an RMA #, please include the following information on a piece of paper inside the box:

1) Your name
2) Your address
3) Your phone number
4) The RMA #
5) A brief description of the symptoms

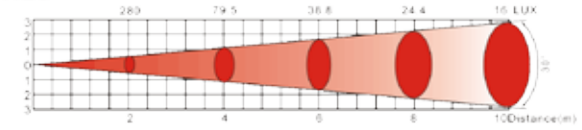
Claims

Damage incurred in shipping is the responsibility of the shipper; therefore, the damage must be reported to the carrier upon receipt of merchandise. It is the customer's responsibility to notify and submit claims with the shipper in the event that a fixture is damaged due to shipping. Any other claim for items such as missing component/part, damage not related to shipping, and concealed damage, must be made within seven (7) days of receiving merchandise.

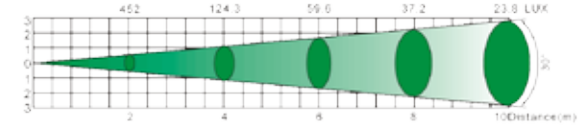
Photometrics

30° LENS

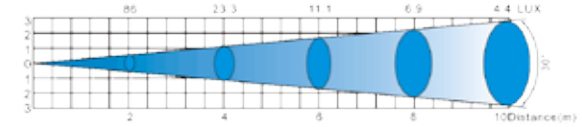
RED



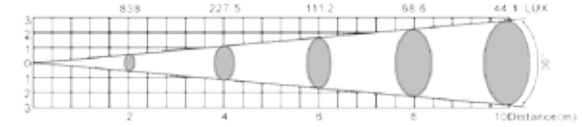
GREEN



BLUE

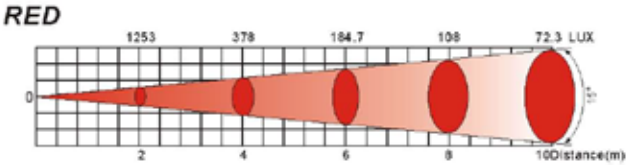


RGB

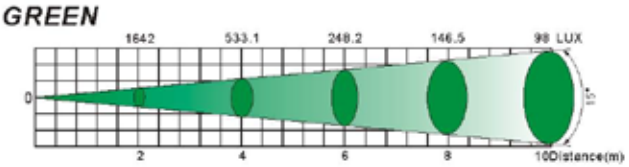


15° LENS

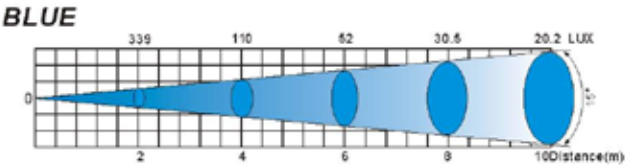
RED



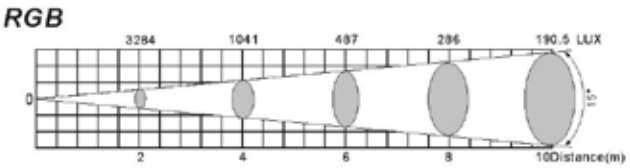
GREEN



BLUE

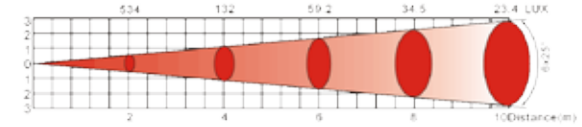


RGB

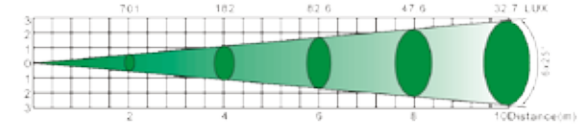


6x25° LENS

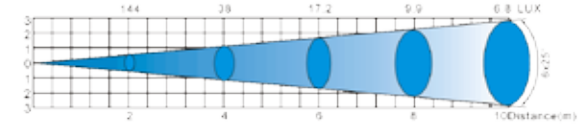
RED



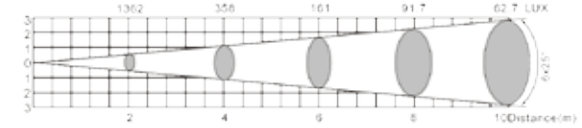
GREEN



BLUE



RGB

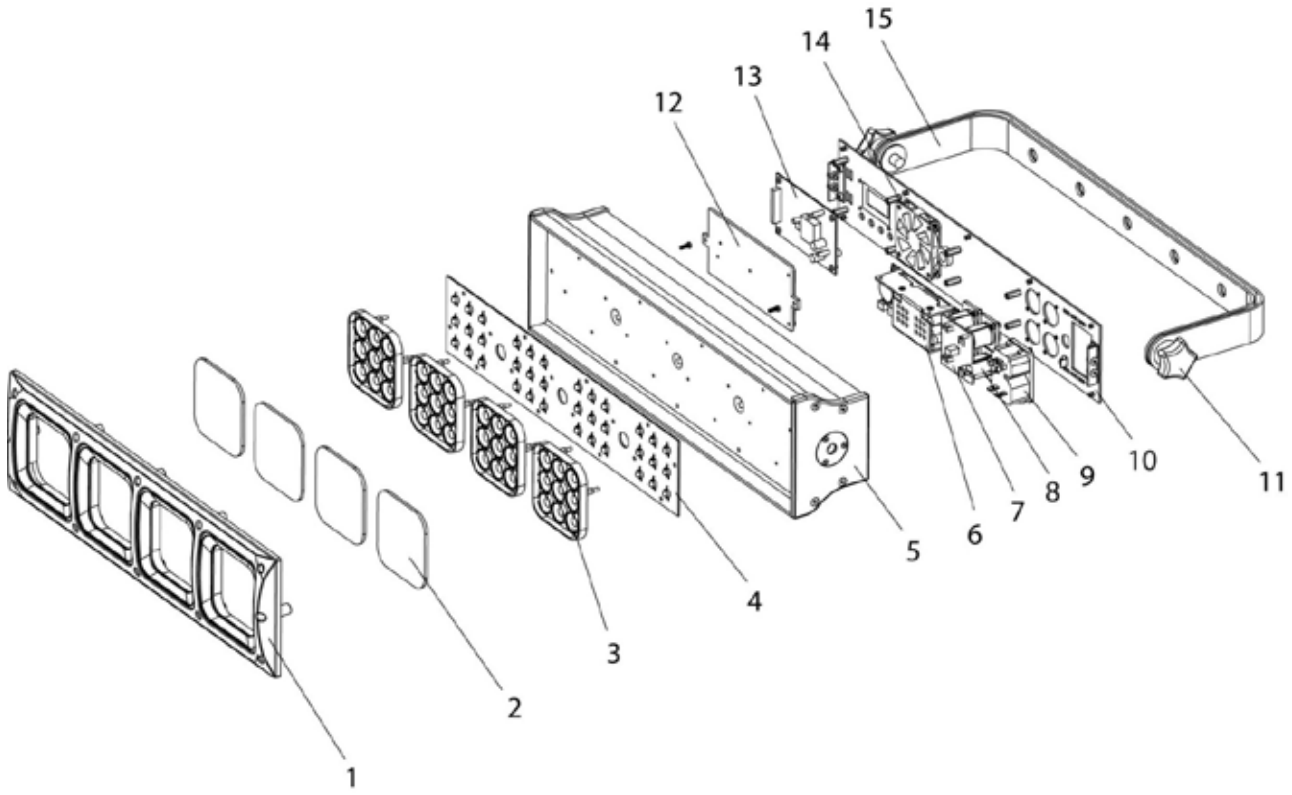


COLORdash™ Quad Service Maintenance Guide

SYMPTOM	POSSIBLE CAUSE(S)	POSSIBLE ACTION(S)
General low light intensity	· Dirty lens assembly	· Clean the fixture regularly.
	· Misaligned lens assembly	· Install lens assembly properly.
White LED does not illuminate	· Faulty LED	· Replace the LED PCB *(Part#: P222-CDQLED).*
	· Faulty LED driver	· Replace the LED Driver PCB *(Part # P170-CDQLDB).*
Both red, green or blue LED's are not illuminating	· Opened LED. If any red, green or blue LED opens up, the other LED will not illuminate. This is because they are connected in series.	· Replace the LED PCB *(Part#: P222-CDQLED).*
	· Faulty LED driver	· Replace the LED Driver PCB *(Part # P170-CDQLDB).*
Only one red, green or blue LED illuminates	· Short-circuited LED. If any red, green or blue LED shortens, only the other LED will illuminate. This is because they are connected in series.	· Replace the LED PCB *(Part#: P222-CDQLED).*
None of the LEDs are illuminating	· Faulty LED PCB	· Replace LED PCB *(Part#: P222-CDQLED)*
	· Faulty LED Driver PCB	· Replace LED Driver PCB (*Part#: P170-CDQLDB*)
	· No Auto or Static mode response; faulty main PCB	· Replace Main PCB *(Part#: P170-CDQDPY)*
Breaker/Fuse keeps blowing	· Excessive circuit load	· Check total load placed on the electrical circuit.
	· Short circuit along the power wires	· Check for a short in the electrical wiring (internal and/or external).
Device does not power up (no display)	· No power	· Check for power on Mains.
	· Loose power cord	· Check power cord
	· Faulty internal power supply	· Replace internal power supply *(Part#: P140-CDBELTR)*
	· Faulty Main Board	· Replace Main PCB *(Part#: P170-CDQDPY)*
Fixture is not responding to DMX	· Wrong DMX addressing	· Check Control Panel and unit addressing
	· Damaged DMX cables	· Check DMX cables
	· Wrong polarity settings on the controller	· Check polarity switch settings on the controller
	· Loose DMX cables	· Check cable connections
	· Faulty Main PCB	· Replace Main PCB *(Part#: P170-CDQDPY)*
Loss of signal	· Non DMX cables	· Use only DMX compatible cables
	· Bouncing signals	· Install terminator as suggested.
	· Long cable / Low level signal	· Install amplifier right after fixture with strong signal.
	· Too many fixtures	· Install an optically coupled DMX splitter after unit #32.
	· Interference from AC wires	· Keep DMX cables separated from power cables or black lights.

If you still have a problem after trying the above solutions, please contact CHAUVET Technical Support. (See "Contact Us")

Exploded View



	Description	Part Number
1	Front plastic cover	P100-CDQFPC
2	Plastic lens cover	P150-CDQPLC
3	LED Lens assembly (1 of 4)	*See section on lens installation*
4	LED Metal-core PCB assembly	P222-CDQLED
5	Plastic side cover	P100-CDQPSC
6	Electronic Transformer	P140-CDQTRAN
7	DMX PCB	P110-CDQDMX
8	Fuseholder	P110-CDQFUH
9	IEC Power connector	P110-CDQIEC
10	Back panel	P100-CDQBKP
11	Bracket adjustment knob	P111-CDQBAK
12	LED Driver PCB	P170-CDQLDB
13	Display PCB	P170-CDQDPY
14	Cooling fan	P130-CDQFAN
15	Mounting/hanging bracket	P111-CDQMHB
16	Master IC chip (on display PCB)	P170-CDQMIC (not shown)
17	Extra bracket set	P111-CDQEBK

Technical Specifications

WEIGHT & DIMENSIONS

Length	6 in (152 mm)
Width	11 in (279 mm)
Height	14 in (355 mm)
Weight	9.9 lbs (4.9 kg)

POWER

Autoswitching internal power supply	100 V ~ 240 VAC, 50/60 Hz
Fuse	2 A, 250 V
Power consumption @ 120 V, 60 Hz	59 W (0.8 A) max
Power consumption@ 230 V, 50 Hz	58 W (0.47 A) max
Inrush current @ 120 V, 60 Hz	0.74 A
Inrush current @ 230 V, 50 Hz	0.2 A
Additional Power Output @ 120 V	15 units max
Additional Power Output @ 230 V	30 units max

LIGHT SOURCE

LED	1 W, 350 mA, 36 (12 Red, 12 Green, 12 Blue) 50,000 hrs

PHOTO OPTIC (WITH INCLUDED 25° X 6° LENS ASSEMBLY)

Luminance @ 1 m	480 lux
Beam Angle	25° x 10°
Field Angle	46° x 21°

COOLING

Fan cooled	50 x 18 mm, 24 V fan
Maximum ambient operating temperature	104° F (40° C)

CONTROL & PROGRAMMING

Data input	locking 3-pin XLR male socket
Data output	locking 3-pin XLR female socket
Data pin configuration	pin 1 shield, pin 2 (-), pin 3 (+)
Protocols	DMX-512 USITT
DMX Channels	User Configurable: 3, 4, 10, or 12 channels

ORDERING INFORMATION

COLORdash™ Quad	COLORDASHQUAD
15° Optical Lens kit (20 pcs)	CL20X15
30° Optical Lens kit (20 pcs)	CLENS3009
26° x 6° Optical Lens kit (20 pcs)	Installed
Power extension cable	EXT-2

OPTIONAL CONTROLLER

COLORado ™ Controller	COLOR-CON

WARRANTY INFORMATION

Warranty	2-year limited warranty