Pro-D6™

Snapshot

OK on Dimmer	⊘
Outdoor OK	⊘
Sound Activated	⊘
DMX512	✓
Master/Slave	⊘
115V/230V Switch	⊘
Circuit Breaker	✓
User Serviceable	⊘
Duty Cycle	⊘

USER MANUAL

CHAUVET
Value • Innovation • Performance
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(800) 762-1084 – (954) 929-1115
FAX (954) 929-5560
www.chauvetlighting.com

TABLE OF CONTENTS

1. BEFORE YOU BEGIN

What is included

- 1 x Pro-D6™
- Warranty Card
- 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.

AC Power

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 is its average current draw under normal conditions. All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch. Before applying power to a fixture, check that the source voltage matches the fixture's requirement. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it is set to the correct line voltage you will use.

Warning! ***Verify that the input voltage specified on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the unit. All fixtures must be connected to circuits with a suitable Earth Ground.***

Contact Us

World Wide

General Information
CHAUVET
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Hollywood, FL 33020
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Technical Support
CHAUVET
3000 North 29th Court
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fax: 954.929.5560 **(Attention: Service)**

World Wide Web www.chauvetlighting.com

Safety Instructions

Please read these instructions carefully, which includes important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Always make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- This product is intended for indoor use only!
- To prevent risk of fire or shock, do not expose fixture to rain or moisture. Make sure there are no flammable materials close to the unit while operating.
- The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Always disconnect from power source before servicing or replacing lamp or fuse and be sure to replace with same lamp source.
- Secure fixture to fastening device using a safety chain. Never carry the fixture solely by its head. Use its carrying handles.
- Maximum ambient temperature (Ta) is 104°F (40°C). Do not operate fixture at temperatures higher than this.
- In the event of a serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- 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.

Caution! ***There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact CHAUVET at: 954-929-1115.***

2. INTRODUCTION

Features

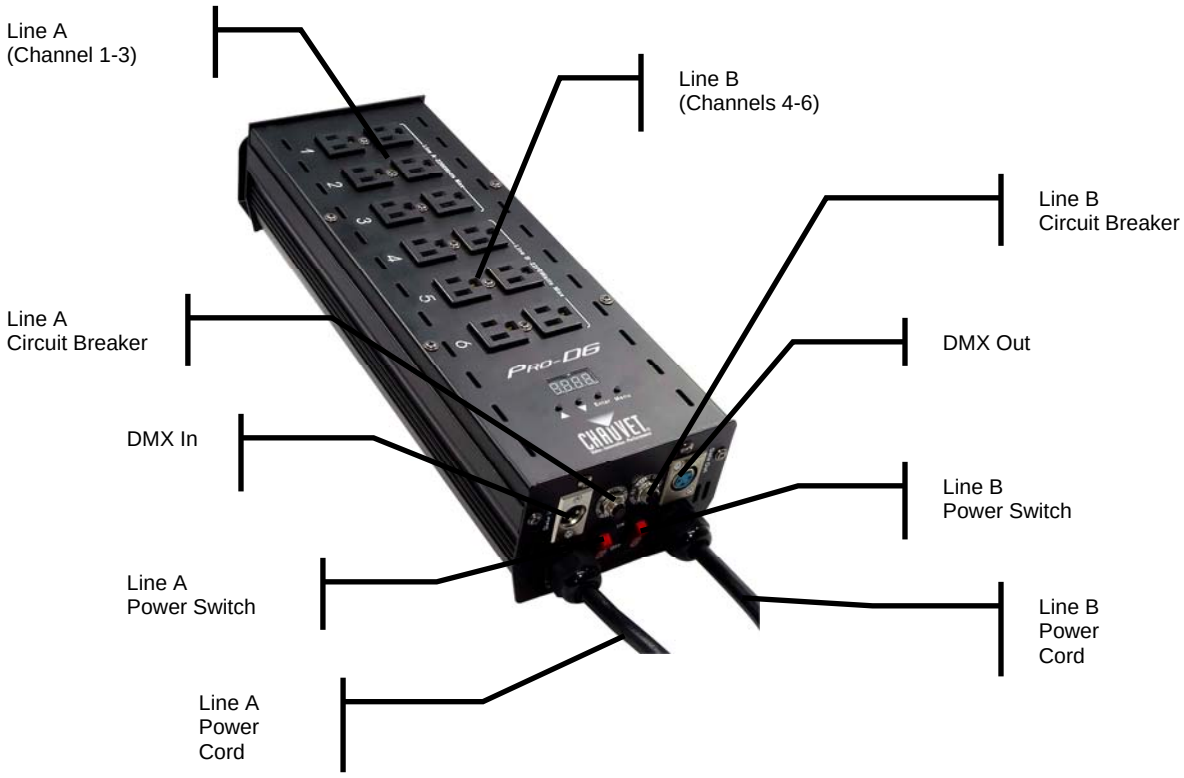
CONTROL FEATURES

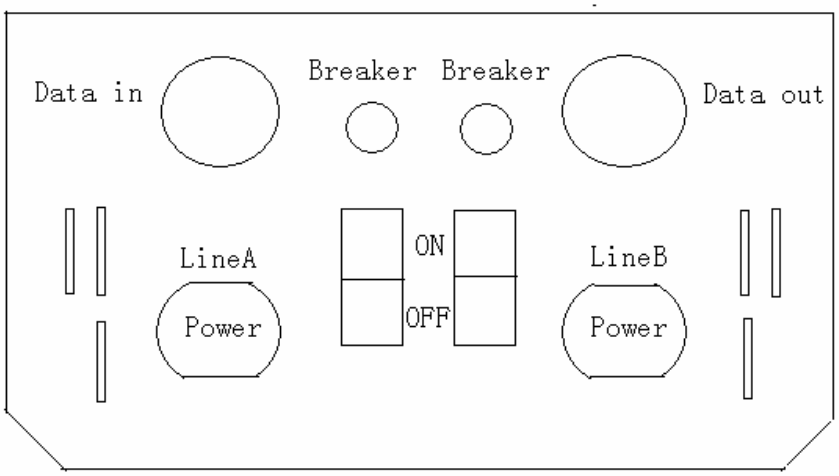
- 6-channel DMX-512 dimmer/switch
- Dimmer curve selection for each channel: square, switch or linear
- Each channel can be set as either dimmer or relay
- Each channel can be set to any DMX address

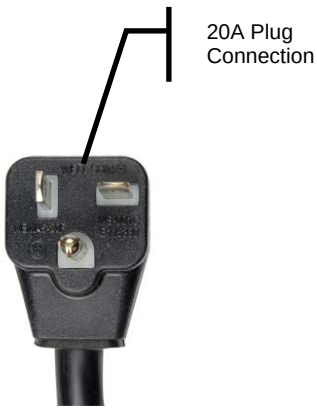
ADDITIONAL FEATURES

- Dual 20A power lines (requires 2 separate circuits)
- Individual switch, circuit breaker and plug per line
- Accommodates different voltages per line (simultaneously)

Product Overview







3. SETUP

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.

Important: 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 devices 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 meters (1640 ft.)
Maximum recommended number of fixtures on a serial data link: 32 fixtures

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:

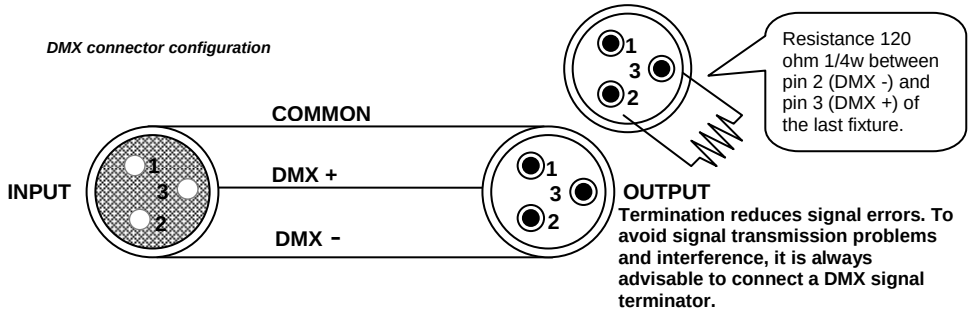
2-conductor twisted pair plus a shield
Maximum capacitance between conductors – 30 pF/ft.
Maximum capacitance between conductor and shield – 55 pF/ft.
Maximum resistance of 20 ohms / 1000 ft.
Nominal impedance 100 – 140 ohms

POWER CONNECTION

The Pro-D6 has been designed to work on multiple input voltages (115V and 230V) simultaneously, and comes fitted with 20 amp connectors for this purpose. For example, Line A can be plugged into 115V and Line B can be plugged into 230V. Any voltage between 100 and 264 volts may be used.

CABLE CONNECTORS

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



Termination reduces signal errors. To avoid signal transmission problems and interference, it is always advisable to connect a DMX signal terminator.

CAUTION 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 ohm meter 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

Note! 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
Do not use		Do not use
Do not use		Do not use

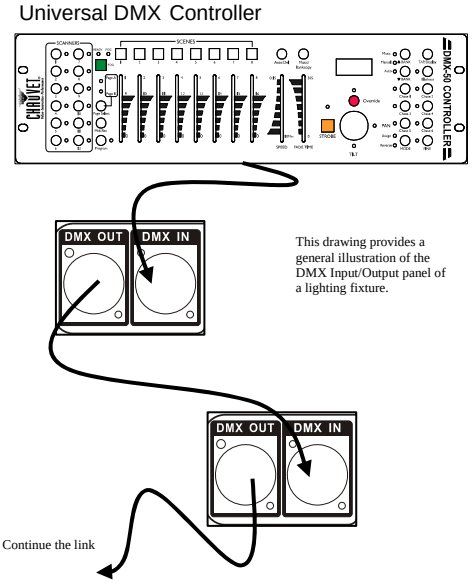
Setting up a DMX Serial Data Link

1. Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the controller.
2. Connect the end of the cable coming from the controller which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 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 1.5m/4.9ft
DMX4.5	DMX Cable 4.5m/14.8ft
DMX10	DMX Cable 10m/32.8ft

Universal DMX Controller



Mounting

ORIENTATION

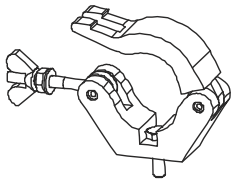
This fixture may be mounted in any position provided there is adequate room for ventilation.

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.

- When selecting installation location, take into consideration lamp replacement 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.

Hanging Clamp



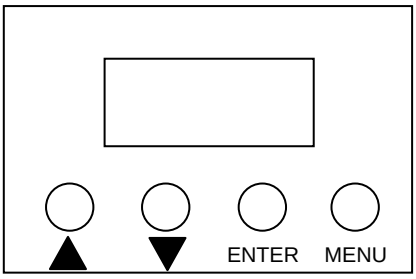
Note!
Clamp is sold separately.

4. OPERATING INSTRUCTIONS

Navigating the Control Panel

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

Button	Function
<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
<MENU>	Used to access the menu or to return to a previous menu option

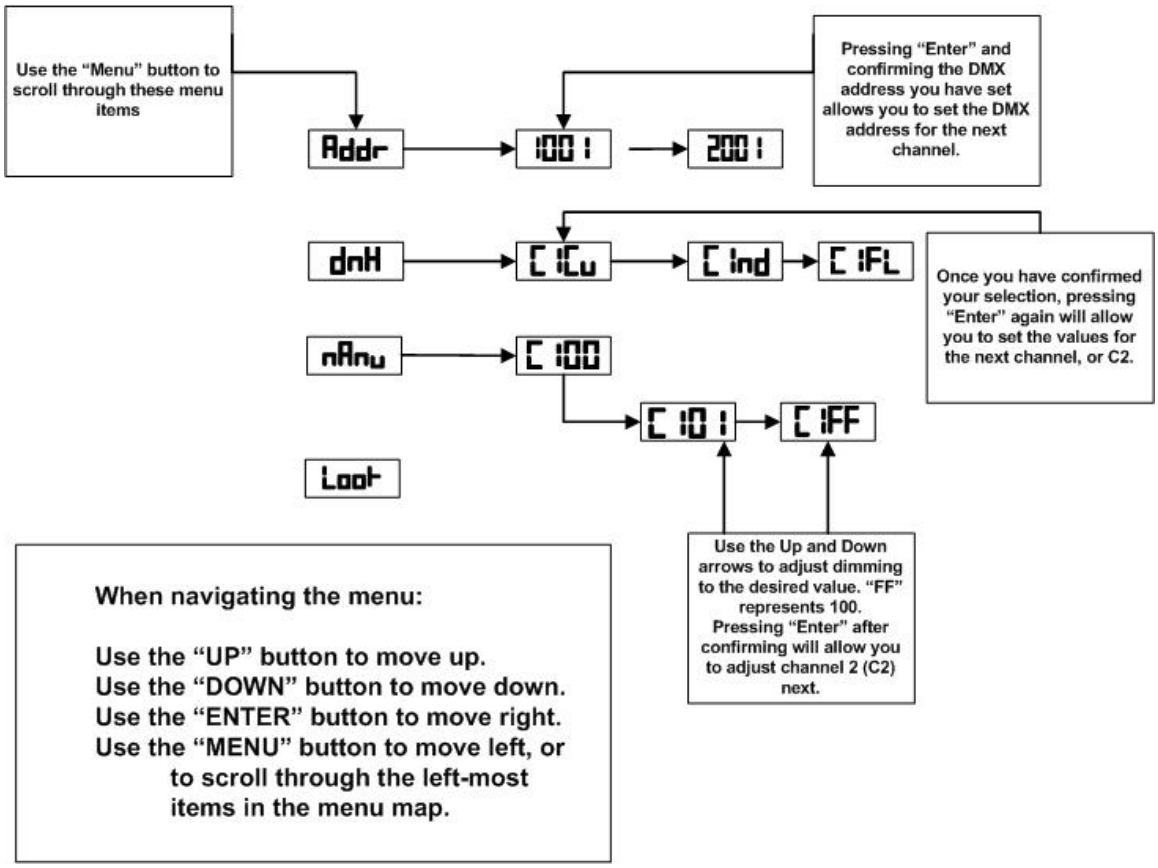


The Control Panel LED Display shows the menu items you select from the menu map on page 10. When a menu function is selected, the display will show immediately the first available option for the selected menu function. To select a menu item, press **<ENTER>**.

Pressing the **<MENU>** button will allow access to the top of the menu map. What appears on the bottom line of the display is one of the four choices in the menu map. Use the **<UP>** and **<DOWN>** buttons to navigate the menu map and menu options. Press the **<ENTER>** button 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 the **<MENU>** button.

Note: Line A must be used when only one line is needed in order for the unit to function properly.

Menu Map


Use the "Menu" button to scroll through these menu items
Addr
001
200
Pressing "Enter" and confirming the DMX address you have set allows you to set the DMX address for the next channel.
dnH
C1Cu
C1nd
C1FL
Once you have confirmed your selection, pressing "Enter" again will allow you to set the values for the next channel, or C2.
nAnu
C100
C101
C1FF
Loot
Use the Up and Down arrows to adjust dimming to the desired value. "FF" represents 100. Pressing "Enter" after confirming will allow you to adjust channel 2 (C2) next.
When navigating the menu:
Use the "UP" button to move up.
Use the "DOWN" button to move down.
Use the "ENTER" button to move right.
Use the "MENU" button to move left, or to scroll through the left-most items in the menu map.

Menu Functions

LCD Readout	Mode Details
Addr	DMX Addressing- Allows the user to select the DMX address for each channel independently.
dnH	Manually set output level range utilized while receiving DMX input.
nAnu	Manual Dimming- Allows operator to manually dim the fixtures on channels 1-6 without DMX input.
Look	This displays the current channel output

User Configurations

TO SET THE DMX ADDRESS:

1) Select Addr by pressing menu until the display reads correctly. Press enter to reach the second step of the addressing menu.

2) The first number indicates the channel being addressed, and will flash. The next three numbers represent the DMX value being assigned. Use the up and down arrow keys to select the correct value. Once you are satisfied with your input, press enter to confirm your selection.

3) Pressing the menu button to cycle through and reach the Addr menu again will allow you to assign an address to the next higher channel in numerical value. You must select enter after each address is inputted to utilize this feature.

TO SET MAXIMUM OUTPUT VALUE IN DMX MODE:

1) Press the menu button until the display reads dnH. Press enter to progress into the menu.
2) You will see the channel being modified flashing on the left side of the display, for channel 1, it will flash C1.
3) Use the Up and Down arrow keys to select the maximum output value for the selected channel when DMX value 255 is received. Set the value from 00-FF, where FF represents 100%.
4) Press enter to save changes.
5) Pressing enter a second time will allow you to adjust the same parameters for the next highest channel. For example, if we had just set channel 1, pressing enter again would allow us access to channel 2.

   Note: For linear dimming, select C1.CU. Non-dimming can be set with the value C1.nd, which turns the unit to full off when input received is below 40% (DMX value of 102), and turns to full on when above 60% (DMX value of 153). Lastly, C1.FL stands for Fluorescent out, which does not turn on a fixture until input level reaches 50% (DMX value 128).

TO MANUALLY SET DIMMING:

1) Press the menu button until nAnU appears on the display.
2) Press enter to enter the menu, at which point the display will read C1.00
3) Use the up and down arrows to set the value from 00-FF, where FF represents 100%.
4) Press enter to confirm the value.
5) The display will stop flashing at this point. If you would like to set another channel, pressing enter again will allow access to set the manual value for channel 2. Each channel becomes available once the channel immediately preceding it is set.

General Troubleshooting

Symptom	Solution(s)	Applies to			
		Lights	Foggers & Snow	Controllers	Dimmers & Chaser
Auto shut off	Check fan thermal switch reset	✓			
Beam is very dim or not bright	Clean optical system or replace lamp Check 220/110v switch for proper setting	✓			
Breaker/Fuse keeps blowing	Check total load placed on device				✓
Chase is too slow	Check users manual for speed adjustment	✓		✓	✓
Device has no power	Check for power on Mains. Check device's fuse. (internal and/or external)	✓		✓	✓
Fixture is not responding	Check DMX Dip switch settings for correct addressing Check DMX cables Check polarity switch settings	✓			
Fixture is on but there is no movement to the audio	Make sure you have the correct audio mode on the control switches. If audio provided via ¼" jack, make sure a live audio signal exists Adjust sound sensitivity knob	✓		✓	✓
Lamps cuts off sporadically	Possible bad lamp or fixture is overheating. Lamp may be at end of its life.	✓			
Light will not come on after power failure	Some discharge lamps require a cooling off period before the electronics in the fixture can kick start it again, wait 5 to 10 minutes before powering up	✓			
Loss of signal	Use only DMX cables Install terminator Note: Keep DMX cables separated from power cables or black lights.	✓	✓	✓	✓
Moves slow	Check 220/110v switch for proper setting	✓			
No flash	Re-install bulb, may have shifted in shipping	✓			
No laser output	Bounce mirror motor may have shifted during shipping, readjust	✓			
No light output	Check slip ring & brushes for contact Install bulb Call service technician	✓			
Relay will not work	Check reset switch Check cable connections				✓
Remote does not work	Make sure connector is firmly connected to device	✓	✓		
Stand alone mode	All Chauvet lighting fixtures featuring stand-alone functions do not require additional settings, simply power the fixture and it will automatically enter into this mode	✓			

If you still have a problem after trying the above solutions, please contact CHAUVET Technical Support at the location on the next page.

Technical Support

Address: Service Dept.
3000 N 29th Ct, Hollywood, FL 33020 (U.S.A.)
Support (Email): tech@chauvetlighting.com
Telephone: (954) 929-1115 - (Press 4)
Fax: (954) 929-5560 - (Attention: Service)
Website: http://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 surrounding can cause greater accumulation of dirt on the unit's optics. Clean with soft cloth using normal glass cleaning fluid. - Always dry the parts carefully. - Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.

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 Merchandise Authorization Number (RA #). Products returned without an RA # will be refused. Call CHAUVET and request RA # 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 properly pack fixture, any shipping damage resulting from inadequate packaging is the customer's responsibility. CHAUVET reserves the right to use its own discretion to repair or replace product(s). As a suggestion, proper UPS packing or double-boxing is always a safe method to use.

Note: If you are given an RA #, 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 RA #
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.

Technical Specifications

WEIGHT & DIMENSIONS

Length	19.3 in (490 mm)
Width	5.7 in (144 mm)
Height	3.9 in (100 mm)
Weight	9.7 lbs (4.4 kg)

POWER

Autoswitching	100V AC or 240V 50/60Hz
Power Output	15A (1,725W) per channel, 20A (2,300W) max (x2) at 110V
Power Output	15A (3,450W per channel, 20A (4,600W) max (x2) at 230V
Circuit breaker (Line A)	20A
Circuit breaker (Line B)	20A

THERMAL

Maximum ambient 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

ORDERING INFORMATION

Pro-D6	Pro-D6

WARRANTY INFORMATION

Warranty	2-year limited warranty