LSC®

LIGHT STREAM CONTROLS

PP-DMX20L

4 CHANNEL DMX POWER PACK

User Instructions

LSC
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Light Stream Controls

4295 Charter Street

Los Angeles Ca. 90058

www.lightstreamcontrols.com

Introduction:

Thank you for purchasing the PP-DMX20L™ 4 channel power pack from LSC®. To optimize the performance of this product, please read these operating instructions carefully and familiarize yourself with the basic operations of this unit. The LSC® PP-DMX20L,™ is a four channel, DMX power pack. This unit has been tested at the factory before being shipped to you. There is no assembly required.

The LSC® PP-DMX20L™ is controlled via a standard DMX controller such as the LSC® Show Designer,™ or the LSC® DMX-Operator.™ This unit allow you to control special effect lighting, that normally could not be controlled, by a DMX controller. With this revision to our popular PP-DMX20™ we have eliminated confusing dipswitches and replaced them with an easy to use digital switching device that incorporates the use of an easy to read LCD display.

Customer Support:

LSC® provides a toll free customer support line to provide set up help and answers to any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.lightstreamcontrols.com for any comments or suggestions.

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

Voice:	(800) 322-6337
Fax:	(323) 582-2610
E-mail:	support@lightstreamcontrols.com

Warning!

To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture. Clearing memory often may cause damage to the memory chip, be careful not to re initialize your unit frequency often to avoid this risk. Only use the recommended AC/DC power adaptor.

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 LSC.

Set Up:

Power Supply: Before plugging your unit in be sure the source voltage in your area matches the required voltage for your LSC® PP-DMX20L.™ The PP-DMX20L™ is available in a 115v and 230v version. Because line voltage may vary from venue to venue, you should be sure to plug your power supply into a matching wall outlet before attempting to operate you controller.

Data Cable (DMX Cable) Requirements:

Your power pack and your controller require a standard 3-pin XLR connector for data input and data output (Figure 1). If you are making your own cables be sure to use standard two conductor shielded cable (This cable may be purchased at almost all pro 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 can not be "Y"ed or split.

Figure 1

Notice: 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.

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

Figure 2

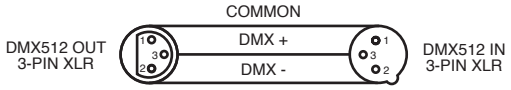


Figure 3

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 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

Product Description:

The PP-DMX20L,™ is 1, 2, or 4 channel DMX Power Pack. This pack can serve as a stand alone chaser or a DMX power pack. This pack is designed for zero-crossing circuitry which protects against inductive loads, so it is safe for use with lighting effects that include transformers such as pin spots. Each channel comes with two 3-prong Edison sockets inputs for a total of eight. This unit features XLR female and male connection for DMX compatibility. Each channel is equipped with a fuse for each channel, and a maximum output load of 6A per channel or 15A total. This revision of our popular PP-DMX20L™ has a great new case design that makes it great for permanent or mobile applications.

Functions and Controls Front Panel:

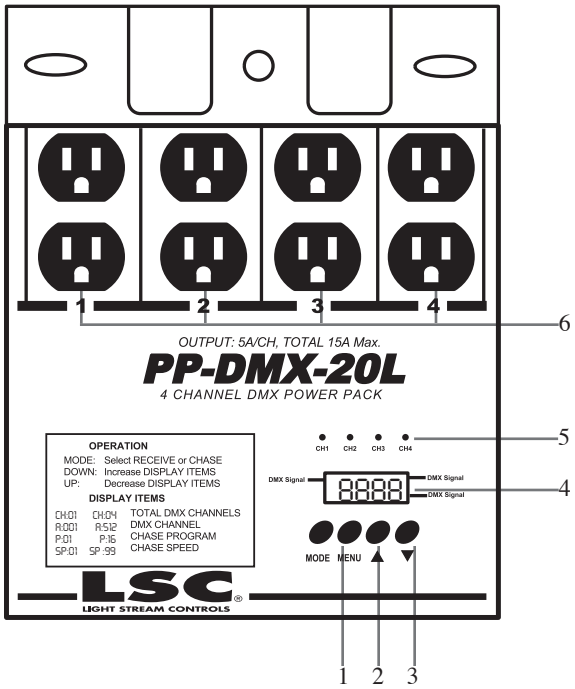
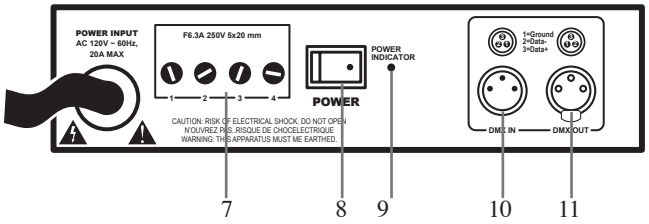


Figure 5

1. Down Button - This button will decrease the displayed value in the LCD display.
2. MODE Button - This button will activate the different functions in DMX and chase modes.
3. Up Button - This button will increase the displayed value in the LCD display.
4. LCD Display - This multifunction display will detail all chase and program activity that pertains to the current operating mode of the pack.
5. GREEN L.E.D. Indicators - These LEDs will indicate their relevant channel activity.
6. POWER OUTPUT - 3-prong grounded Edison output sockets. 8 total output sockets. Each channel has an output maxiimum of 6 amps. The unit has an output maximum of 15 amps

Functions and Controls Rear Panel:



7. Channel Fuses - Each of the four channels is protected by a 6.3A fuse. These fuses prevent you from overloading and damaging your pack. Be sure to always replace with the exact same type fuse.
8. Power Switch - This switch controls the units main power.
9. Power Indicator - This LED indicates the unit is active.
10. DMX Input - This connector accepts your DMX input signal.
11. DMX Output - This connector sends your DMX input signal through to the next DMX device.

Operation Modes:

The PP-DMX20L™ has two different operating modes. This unit can be used as a four channel chaser or as a 1, 2, or 4 channel DMX power pack. Please follow the instructions below to operate the unit in your desired mode.

Chase Mode:

Use this operating mode only if you are planning on using your PP-DMX20L™ as a four channel chaser. This device has 16 built in programs, you may select any of these programs to run at one time. You may control the speed at which the programs will chase.

1. Connect your lighting effects to the any of the eight power sockets on the pack.
2. Use the mode button to select chase mode. Chase mode is indicated by "PA" followed by numbers 01-16. "PA" is Programmed Applied. If "A" appears in the LCD display you are in DMX mode, the "A" stands for address.

3. Set your desired chase pattern. Once you have selected the chase function use the MODE button to select your desired chase. The chase pattern is represented in the LCD display by "P" followed by two numbers. You may select any of the built in 16 programs to run at a single time.
4. Set your desired chase speed: At this point you may change the program chase speed. While in chase mode, tap on the MODE button until the "SP" followed by two numbers is displayed in the LCD. Then use the UP and DOWN buttons to adjust the chase speed. A value of 99 will give you the fastest chase speed (about 1/10th of a second). A value of 01 will give you the slowest chase speed (about one step every 30 seconds)

DMX Mode: Use this operating mode only if you plan to use your power pack as a DMX switching device. This function will allow you to turn on non-DMX units on and off with the use of a DMX controller. Only on and off functions can be performed through this pack. You can set your power pack to functions as a 1, 2, or 4 channel DMX pack, which means you can combine the output functions.

1. Plug in a DMX controller to your power pack via the 3-pin XLR connections on the bottom of the unit.
2. Connect your lighting effects to any of the eight power sockets on the front of the pack.
3. Decide if you are going to use your power pack as 1, 2, or 4 channels. This function allows you to;
   a. Control the output to all four outlets with one DMX channel.
   b. Group outlet channels one and two and group outlets channels three and four. The first group will be controlled by one DMX channel and the second group will be controlled by another DMX channel. This gives the pack a DMX value of two.
   c. The default setting is a four channel DMX switcher, each channel is controlled by one DMX channel.
4. To change the channel function mode be sure you are in DMX mode. Hold the MODE BUTTON down for five seconds. After holding the MODE BUTTON down a channel value will appear in the LCD display. Use the UP and DOWN BUTTONS to change the channel value.
5. The power pack is also initially set to be activated by DMX address one. To change this setting be sure you are in DMX mode. Use the MODE button to select the address settings, this will be indicated by an "A" in the first character of the LCD followed by three numbers. Use the UP and DOWN arrow buttons to select your desired DMX address. Remember the DMX address tells your DMX controller what channel to activate the pack's functions.
6. Once you have set the pack's DMX address be sure your controller's address matches that of the packs'.

Fuse Replacement: To replace the protective fuse, use a flat head screwdriver to unscrew the fuse holder. Pull out the old fuse and replace it with a new one. Insert the fuse back into slot and tighten. Always replace with the exact same type fuse remove unless otherwise specified by an authorized LSC® service technician.

Caution: Always disconnect the units main power before performing any type of service or fuse replacement!

For any service related issues, please contact LSC®.