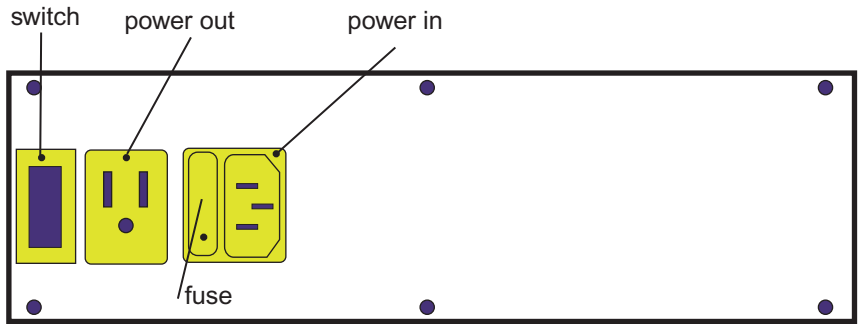


## (DIM) VOLTAGE DIMMING CONTROL PANEL

"DIM" (voltage dimming) studio lights utilize two wire voltage dimming ballasts. Remote SCR controllers reduce voltage resulting in a reduction of light output. The number of luminaires that can be controlled by one SCR depends on the size of the SCR. These controllers may be manually operated or driven by a primary signal such as DMX. If each light is to be controlled individually, a DMX multi-channel decoder to voltage shoe box could interface with the DIM

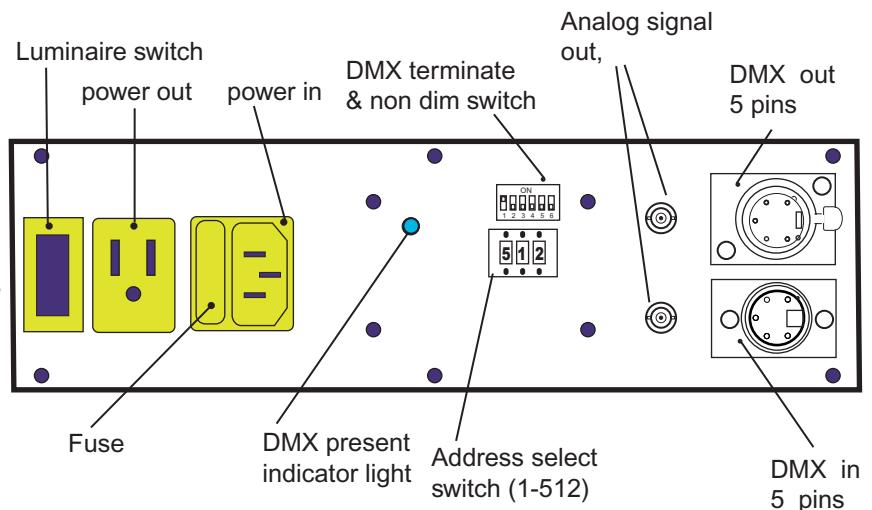


luminaire. The DIM system will reduce light output from 100-10 %. Further dimming may cause flicker. A manual or control off / on switch should be used to dim to black. Since most controllers leave a small voltage on the circuit when adjusted to zero the switch should be used to turn off the voltage when not in use. Otherwise, the capacitors in the ballasts will charge up and attempt to start the lamps potentially causing damage to the system.

## (DMX) DIMMING DISCRETE CONTROL PANEL

PrimeTime Lighting Systems now offers fluorescent studio lights which accept DMX-512 digital signals and respond precisely. Each fixture which is equipped with a DMX decoder and can be assigned a number from 1 to 512 by setting the address select switch. Any DMX control system can then dim individual luminaires independently from 100% to black. If the DMX signal is 2% for a fixed time, the fixture will turn off.

If The channel selector is set on 601-699, The luminaire will operate in manual mode at 1-99%.

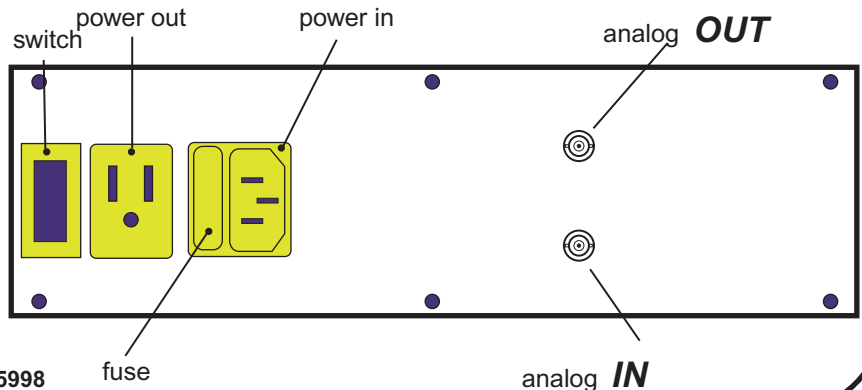


Note the "DMX IN" and "DMX OUT" ports. Using these ports, an array of lights can be daisy chained together. At the end of a string, the terminate switch of the DMX function switch should be set on "terminate" to ensure clear signals. The DMX controller, in each DMX fixture, sends an analog signal to the internal ballasts. Unlike the two wire voltage phase dimming ballast, which responds to the studio SCR or Triac, the new DMX ballast responds to a smooth analog signal. Unparalleled smooth dimming is the result. This analog signal can be exported via the BNC analog signal out ports. When several lights are to be controlled as a group, only one DMX equipped fixture (master) is required. The balance of the group may be daisy chained with less costly analog cable to each slave luminaire by eliminating the DMX decoder in all but one of the group. See "(DNR) Analog-Dimming Slave Control Panel".

Never connect two DMX lights with analog cables. "DMX" in the part number indicates full DMX equipped (Master) fixture.

## (DNR) ANALOG DIMMING SLAVE CONTROL PANEL

When group control of dimming is adequate, a DMX master can dim a group as one channel from 100% to black. Each DNR slave fixture has a relay control board which turns the fixture off at 1% like the DMX fixture. Alternately an 8 channel decoder shoe box can control 8 DNR fixtures as though they were discrete DMX lights, each having a number between 1 and 512. If the analog signal is lost, the fixture will go to 100%. "DNR" in the part number indicates analog dimming (slave with relay board).



PrimeTime Lighting Systems (214)-393-5998

## (DAN) ANALOG DIMMING SLAVE CONTROL PANEL

When dimming to 2% (without going to black) is adequate, DAN dimming, without a relay board, may be sufficient. In this case, a remote line switch, (manual or controlled) is required.

DAN slave fixtures do not have relay control boards which turn the lights off, at 1%, like the DMX fixture. An analog decoder shoe box can control DAN fixtures as though they were discrete DMX lights but the off / on function must be by remote switching. If the analog signal is lost the fixture will go to 100%. "DAN" in the part number indicates analog dimming (no relay board).

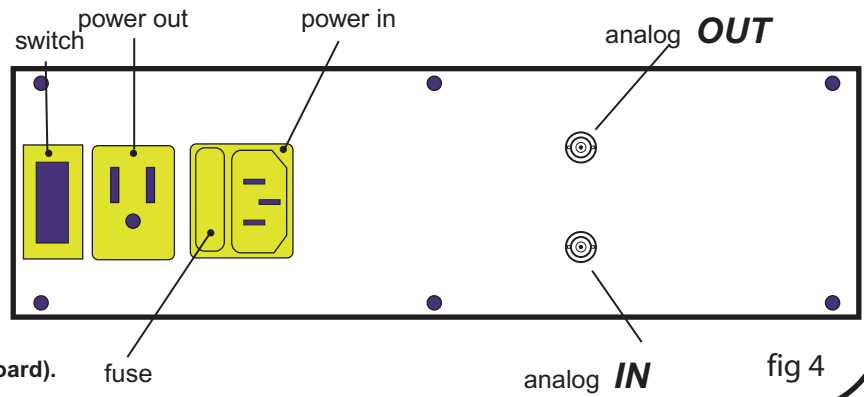


fig 4

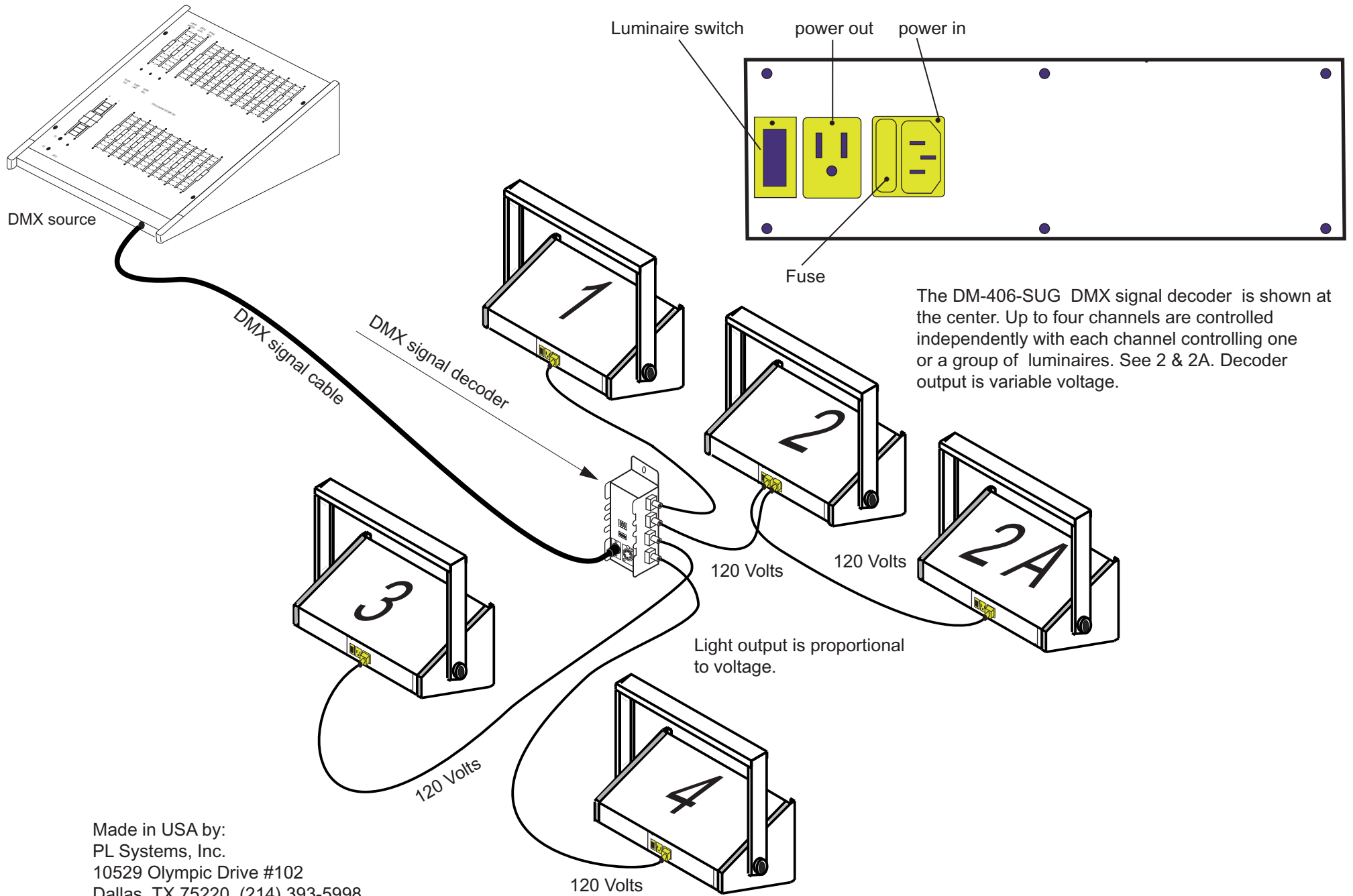
TABLE 1 DIMMING FUNCTIONS

FEATUES	FUL	DIM	DMX	DNR	DAN
Signal	NONE	line	digital	0-10 V	0-10 V
Lowest stable dim point	n/a	10%	0%	0%	2%
Relay switch in luminaire	no	no	yes	yes	no
Remote off / dim to black switch required	yes	yes	no	no	yes
Signal daisy chain	n/a	yes	yes	yes	yes
Signal cable type	n/a	line	5 pin mf	BNC ff	BNC ff

TABLE 2 DIMMING CAPABILITY

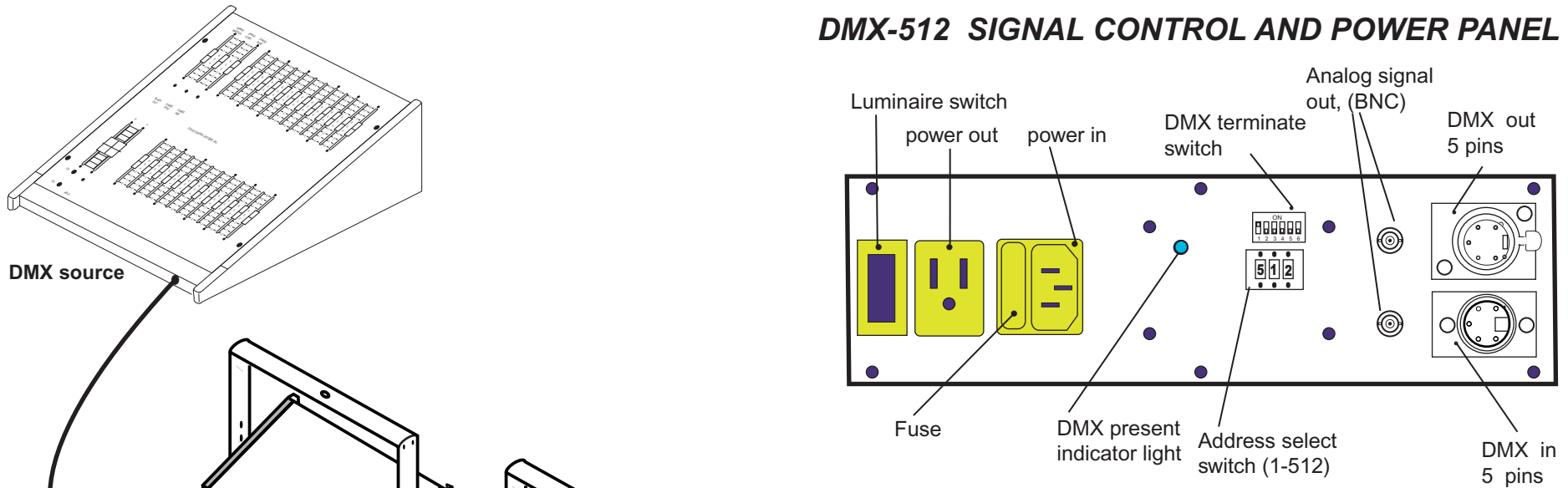
MODEL	FUL	DIM	DMX	DNR	DAN
1SL255	X	X	X	X	X
1SL280	X				
1BL55	X	X	X	X	X
2BL455	X	X	X	X	X
MSL157	X				
MSL155	X	X	X	X	X
MSL180	X				
MSL255	X	X	X	X	X
MSL280	X				
LSL255	X	X			X
LF154	X	X			X
LF124	X				
MJ154	X	X			X
MJ124	X				
MJ255	X	X			X

# FOUR CHANNEL DISCRETE DMX VOLTAGE DIMMING

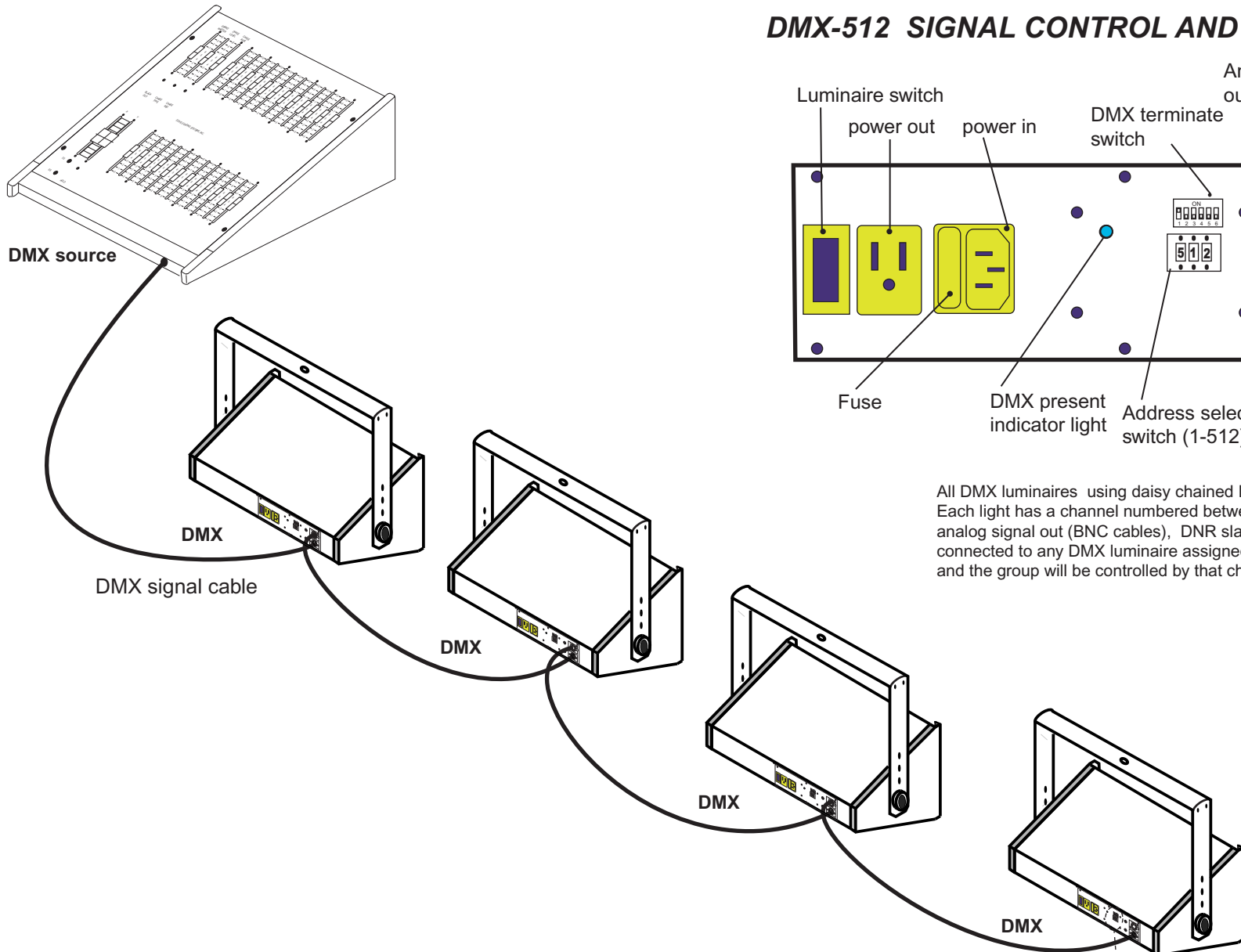


Made in USA by:  
PL Systems, Inc.  
10529 Olympic Drive #102  
Dallas, TX 75220 (214) 393-5998

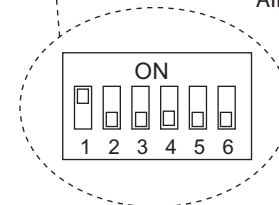
## DMX-512 SIGNAL CONTROL AND POWER PANEL



All DMX luminaires using daisy chained DMX control cables. Each light has a channel numbered between 1-512. Using the analog signal out (BNC cables), DNR slave units may be connected to any DMX luminaire assigned a channel number and the group will be controlled by that channel.

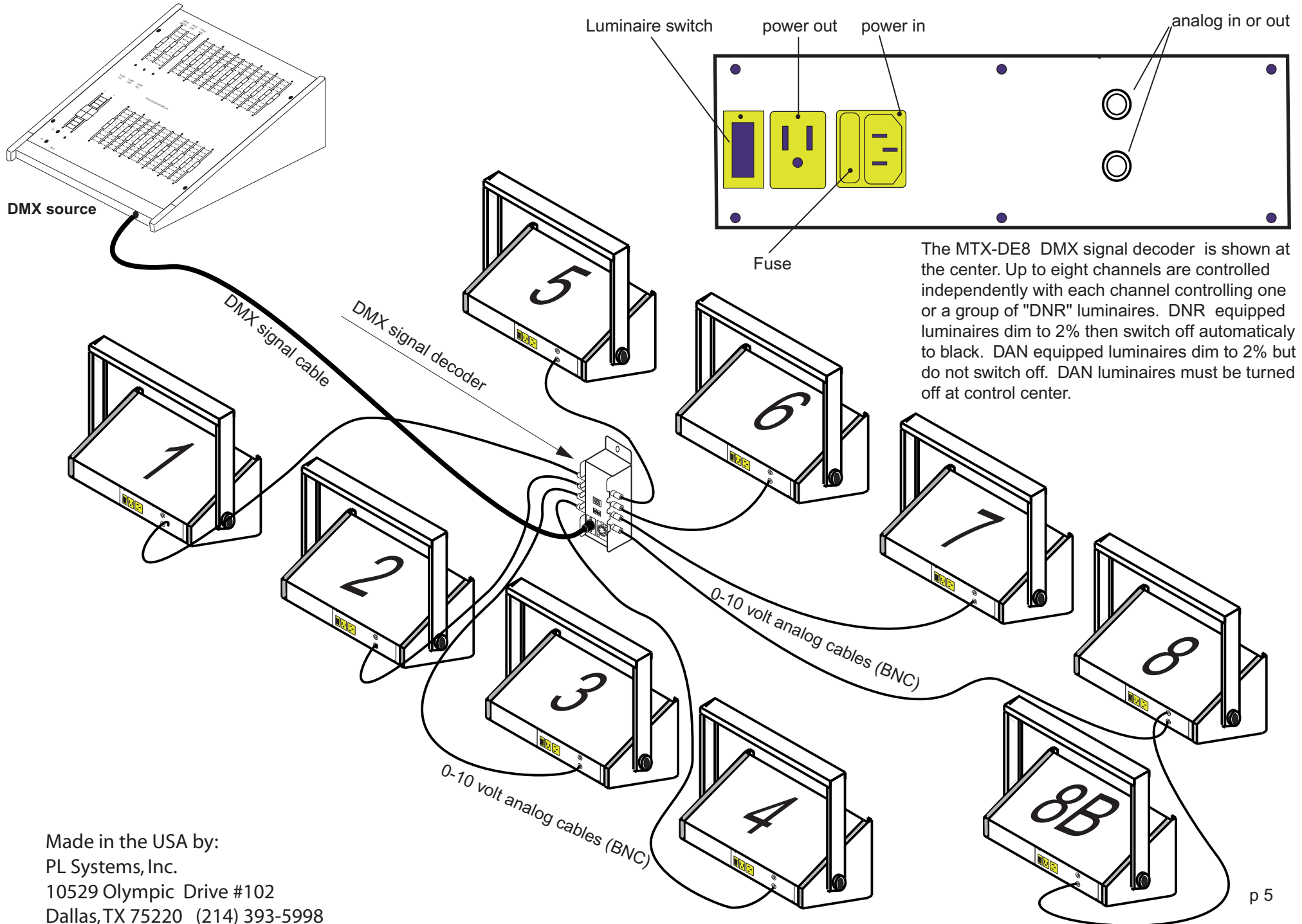


To prevent signal reflection back to fixtures in the daisy chain of the DMX cables, switch only the last fixture to block reflection by switching number one only to on as shown in figure. All others should be in off position.



Made in the USA by:  
 PL Systems, Inc.  
 10529 Olympic Drive  
 Dallas, TX 75220 (214) 393-5998

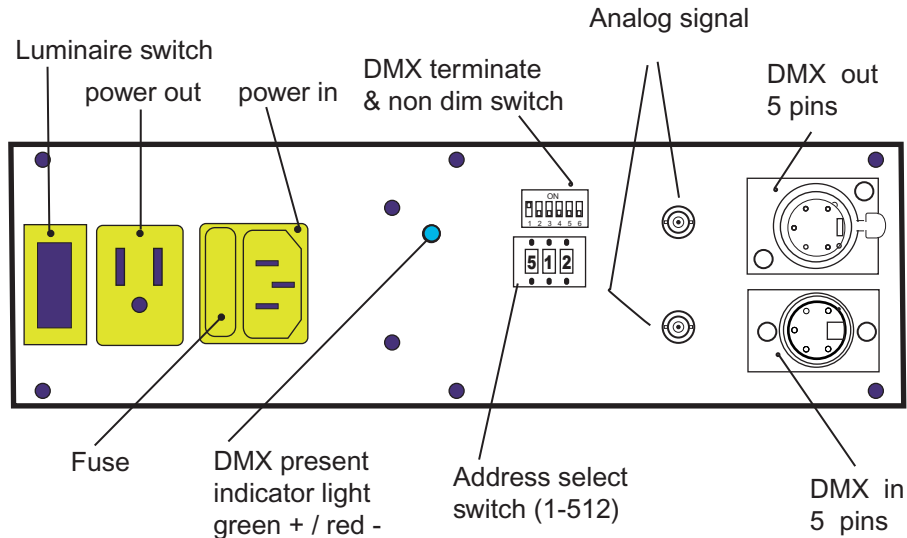
# DISCRETE CHANNEL OPERATION WITH EIGHT CHANNEL DMX DECODER AND DNR (or DAN) LUMINAIRES



Made in the USA by:  
PL Systems, Inc.  
10529 Olympic Drive #102  
Dallas, TX 75220 (214) 393-5998

# INSTRUCTIONS

## DMX-DIMMING, DISCRETE CONTROL



1. The PrimeTime DMX equipped luminaire should include a 10' (standard) detachable power cord which connects to conventional three prong, Edison, 120 volt outlets. A special connector, on the luminaire end, plugs into the male "power-in" receptacle. This receptacle is equipped with a 10 amp fuse and should be limited to string loads under 800 watts.
2. The "power out" Edison female receptacle should only be used with other fluorescent luminaires only.
3. With power attached, and the Luminaire switch on, the DMX indicator light should be red, indicating power but no DMX signal. If DMX signal is present, the light should be green.
4. Do not attach the DMX signal cable at this time.
5. Set the "address select switch" to 695 and the light should turn on at 95% brightness. Allow the lamps to warm up for 10 minutes.
6. Change the setting to 605 and the lamps should barely glow. Step up the address in 10% increments from 605 to 695. The light should respond by dimming up.
7. Set the address switch to your fixture number or to 001. The luminaire should turn off.
8. Plug the DMX cable into the "DMX in" socket. The indicator light should change to green indicating the presence of a DMX signal. The luminaire should come on at 100% assuming the DMX signal is at 100%.
9. By changing the DMX master control, dim the fixture to 0%.
10. Lamp life will be extended if sustained dimming is avoided for the first 100 hours.
11. If the luminaire is the last in the DMX daisy chain set the blue, "DMX terminate Switch" "on" at number 1 only. This prevents reflection of the signal.
12. If a luminaire is not to be dimmed, while others in the same chain are dimmed, set the blue switch on at #2. The light will be at 100% but goes off at 40%.
13. An alternate approach is to set the address between 601 and 699 (1% to 99%) ignoring the DMX. The light is extinguished only by switching the power off.
14. The analog ports are used with slave fixtures. For all DMX systems these ports are not used.

*Manufactured by  
 PL Systems, Inc.  
 10529 Olympic Drive  
 Dallas, Texas 75220  
 Tel: (214) 393-5998*