



1.4D/X 1.4D/XE

Operating Instructions (supplements 1.4N/1.4D Operating Instructions)

Safety

- **Warning:** To avoid possible damage to the ballast, turn fixture "OFF" before connecting fixture to or disconnecting fixture from DMX control cable.
- Do not service fixture until the appropriate service manual has been read and the unit has been completely de-energized.
- All fixtures are fuse protected.
- To prevent fire or shock hazard, do not expose the unit to water or moisture.
- Do not operate fixture without lamp installed. Operating the fixture without the lamp installed may result in damage to the ballast
- Refer to 1.4N/1.4D Operating Instructions manual for general use of the 1.4 light fixture (document number 019-100).
- Never carry energized fixture with your hands close to the sockets or work with your hands near an exposed socket that is energized.
- Never remove lamps from the fixture or insert lamps into the fixture while it is energized.
- Service on the unit should be performed only by a qualified technician.
- In case of lamp failure:
 1. Turn fixture "OFF."
 2. Wait 30 seconds for ballast to reset.
 3. Install new lamp.
 4. Turn fixture "ON."

Owner's Record

- The serial number of this product can be found on the side of the main housing. You should note the model number and the serial number in the space provided and retain this book for future reference as a permanent record of your purchase.

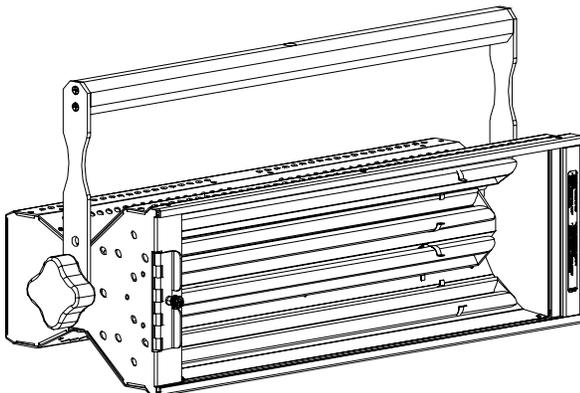
Model No. _____

Serial No. _____

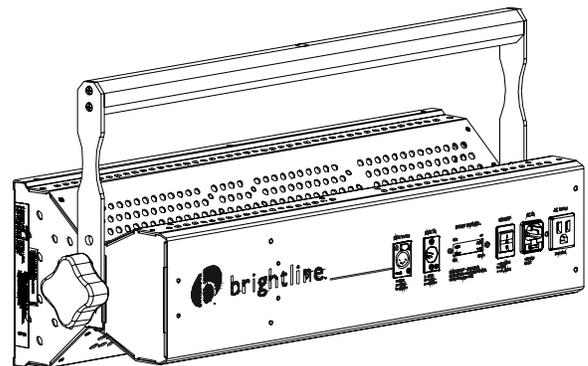
Date of Purchase _____

Product Description

- The Brightline 1.4D/X and 1.4D/XE is a 4-lamp, 55-watt, DMX512-controlled, energy-efficient light fixture. This fixture combines digital electronics with a state-of-the-art optical system to produce a soft, full-spectrum, flicker-free light source.



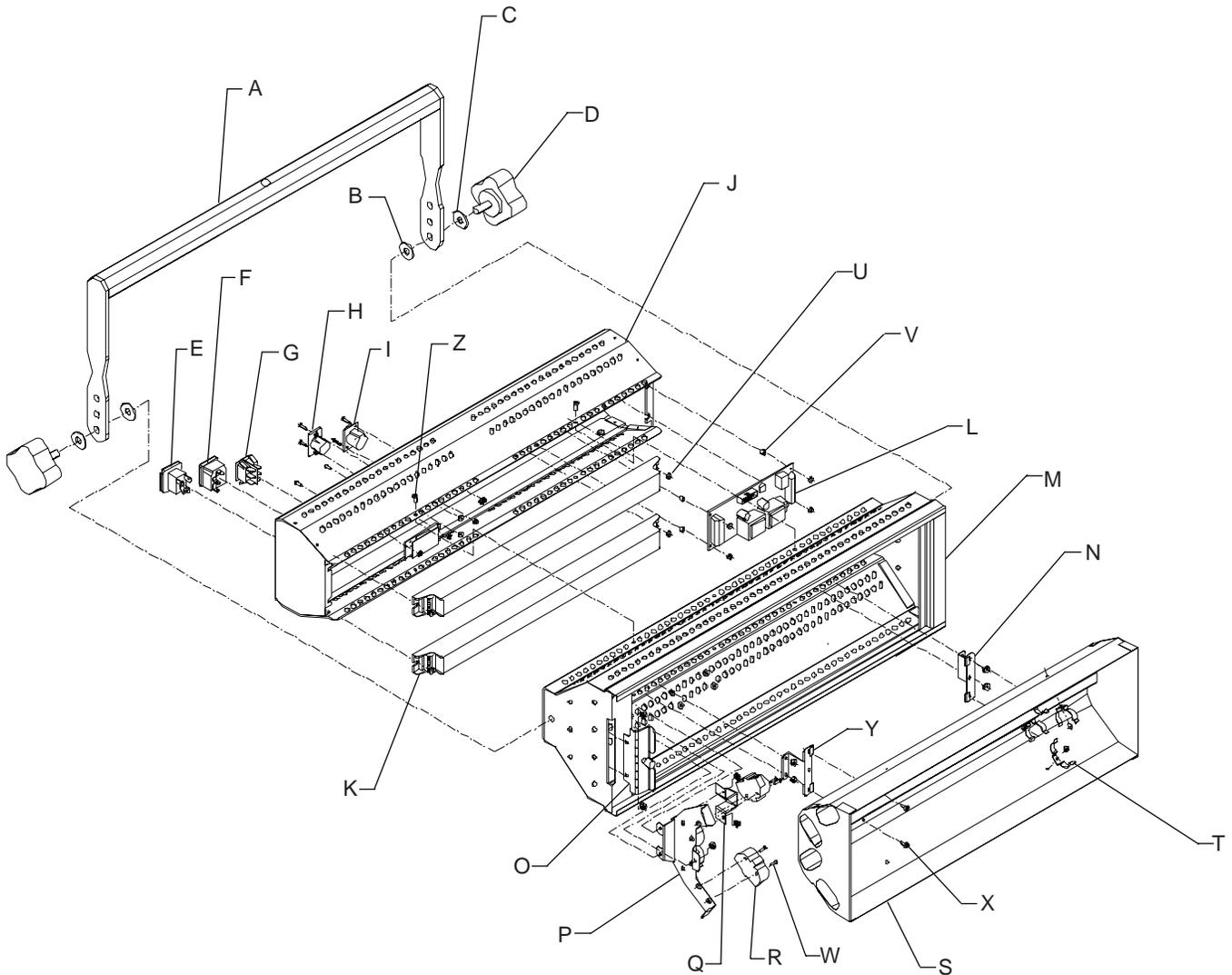
Front



Back

Exploded Assembly

- | | |
|----------------------------------|----------------------------------|
| A - Yoke | N - Reflector Bracket |
| B - Cork Washer | O - Accessory Latch |
| C - Nylon Washer | P - Socket Bracket |
| D - Yoke Palm Handle | Q - Wire Guard Bracket |
| E - Receptacle | R - Socket |
| F - Power Inlet Module with Fuse | S - Reflector |
| G - Rocker Switch | T - Lamp Clip |
| H - Male 5 Pin XLR Receptacle | U - 6-32 Nut |
| I - Female 5 Pin XLR Receptacle | V - Nylon Spacer |
| J - Ballast Housing | W - 4-40 x .25 Lg. Screw |
| K - Ballast | X - 6-32 x .25 Lg. Screw |
| L - Signal Convertor | Y - 6-32 Tinnerman Nut |
| M - Main Housing | Z - 6-32 x .25 Black Oxide Screw |



DMX Cable Layout

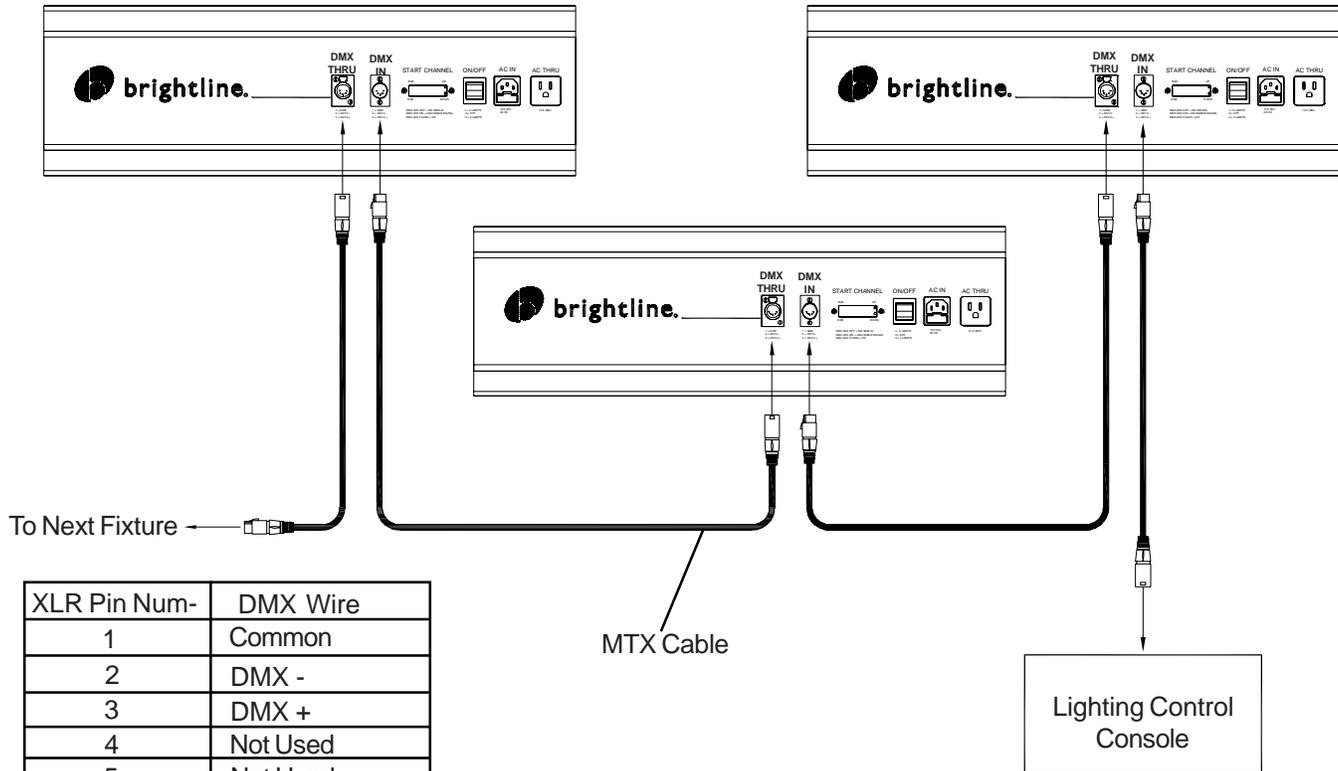


Table 1

DMX Networking Guidelines

If you are connecting more than one DMX fixture, it is imperative to properly configure the DMX network. Following the guidelines below should reduce the possibility of networking errors.

1. Fixtures and other devices in a DMX network need to be configured in a daisy-chain fashion. The use of DMX "Y" devices or "twofers" is not appropriate.
2. You can use up to 32 Brightline DMX fixtures on a single DMX data line. If there are more than 32 units, the use of a DMX repeater amplifier or splitter amplifier is required. A repeater amplifier is an electronic device that boosts the DMX signal. A splitter amplifier is an electronic device that boosts the DMX signal and provides for multiple DMX outputs from a single DMX input (since using multiple DMX devices may cause signal degradation).
3. With most DMX devices, there is a "DMX Thru/DMX Terminate" switch that is set to "Terminate" for the last device on the data line and set to "Through" for all other devices. Brightline DMX fixtures are self-terminating, and thus this switch is not provided.
4. Brightline fixtures, like the majority of DMX devices, use 5-pin, XLR-type plugs wired according to Table 1. Pins 4 & 5 are not used, and so, on Brightline fixtures, are not connected. Pin 1 (shield) should be connected to earth ground only at the control console.
5. Only cables intended for DMX operation should be used. Avoid DMX runs parallel to power cables, particularly those from dimmer racks.

Note: These guidelines will help the user configure most DMX networks. For more information, contact the manufacturer of the control console, or a DMX manual. A useful DMX guide is "Recommended Practice for DMX-512" by Adam Bennette, co-published by PLASA in the United Kingdom and USITT in North America.

Installing DMX Control Cables

1. Turn power "OFF" on all devices.

Note: If the fixture power is not turned "OFF" before connecting or disconnecting the DMX cable to the fixture, damage to the ballast may result.

2. Insert the male plug end (Figure 1) into the appropriate female receptacle on the lighting control console.
3. Line up the locking key on the female plug end (Figure 2) with the male receptacle on the first fixture labeled "DMX IN." Insert the plug into the receptacle until it locks into place.

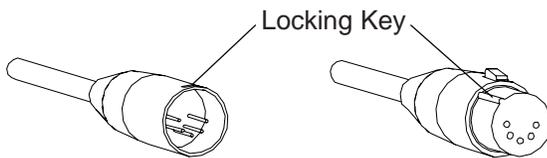


Figure 1

Figure 2

4. To add additional fixtures, line up the locking key on the male plug end of the jumper cable (Figure 1) with the female receptacle labeled "DMX THRU" on the first fixture. Insert the plug into the receptacle until it locks into place.
5. Route the jumper cable to the next fixture.
6. Line up the locking key on the female plug end of the jumper cable (Figure 2) with the male receptacle labeled "DMX IN" on the next fixture. Insert the plug into the receptacle until it locks into place.
7. Repeat Steps 4-6 for remaining fixtures.
8. Turn power "ON" on all devices.

Disconnecting Cables

1. Turn power "OFF" on all devices.
2. To disconnect the female end of cable, press down the release button on the plug (Figure 3) and pull the plug out of the receptacle (Figure 4). Pressure should be applied to the plug, not the cables.

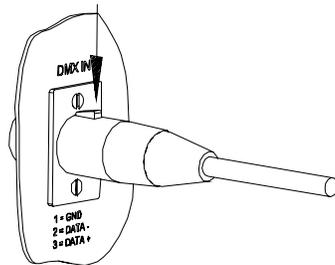


Figure 3

3. To disconnect the male end of cable, press in the release button on the female receptacle (Figure 5) and pull the plug out of the receptacle (Figure 6). Pressure should be applied to the plug, not the cables.

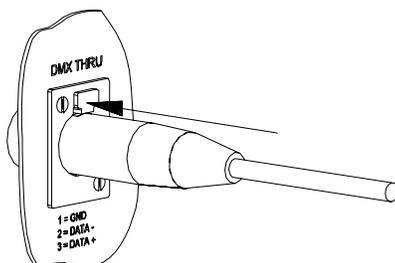


Figure 5

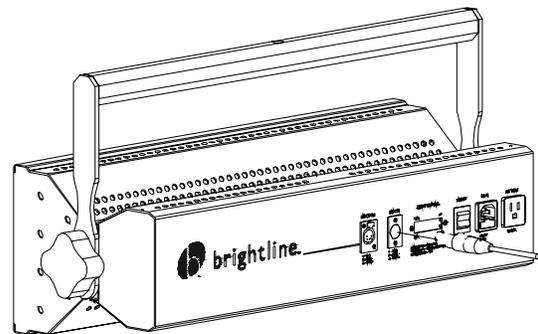


Figure 4

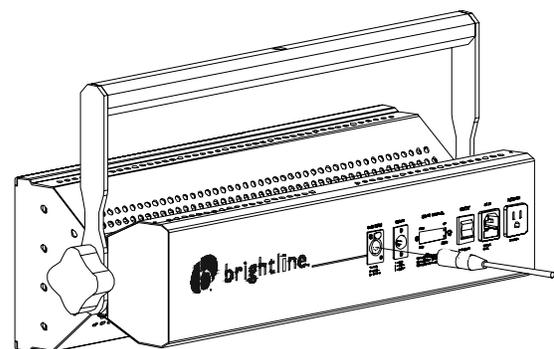


Figure 6

Reading the LED Display

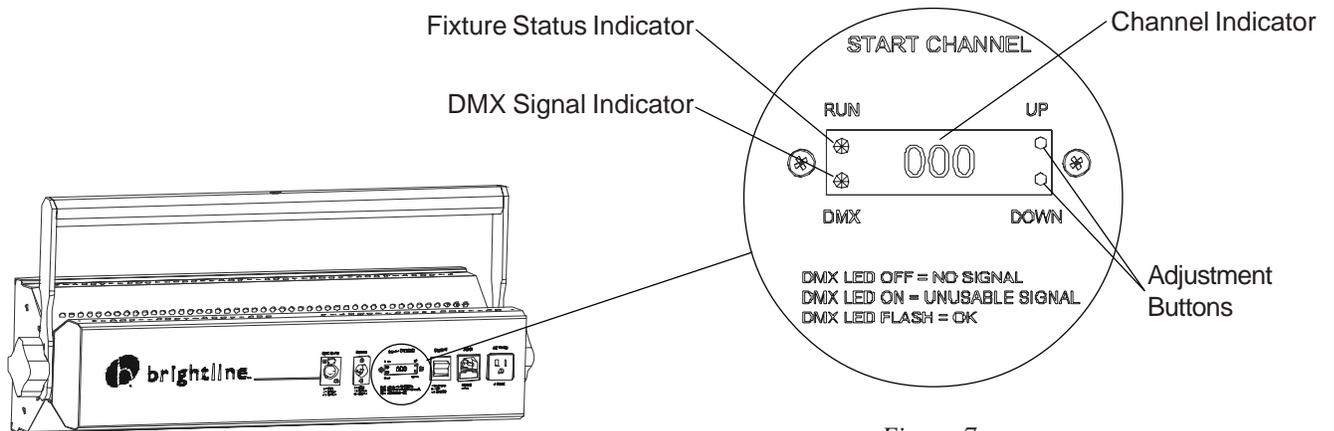


Figure 7

- The channel indicator is used to determine the setting of the fixture in the following modes:
 - Emergency On Mode:** Fixture is manually operating at 100%
 - Manual Dimming Mode:** Fixture is manually dimmed at LED display without the use of a lighting control console.
 - Console Dimming Mode:** Fixture is set to a DMX address for dimming by the use of a lighting control console. Use Table 2 to evaluate the readout of the channel indicator on the LED display (Figure 7).

Channel Indicator	Description
000	Emergency ON/Fixture at 100%
001-512	DMX Address for Lighting Control Console
513-899	Not Available
900-999	Manual Dimming (1% Increments, 900 = OFF, 925 = 25%, etc.)

Table 2

- The DMX signal indicator is used to determine whether the fixture is receiving a DMX signal while in the **Console Dimming Mode**. The lighting control console and all necessary DMX cabling must be installed. Use Table 3 to evaluate the readout of the DMX signal indicator on the LED display (Figure 7).

DMX Signal Indicator	DMX Signal Status
DMX LED Off	No Signal
DMX LED On	Unuseable Signal
DMX LED Flashing	Signal OK

Table 3

- The fixture status indicator is used to determine whether the changes being made to the settings at the LED display are completely processed. Use (Table 4) to evaluate the readout of the fixture status indicator on the LED display (Figure 7). Any changes made to the settings will require a few seconds to be processed.

Fixture Status Indicator	DMX Signal Present	Emergency On/Manual Dimming
Run LED Off	Processing Changes to Settings	Processing Changes to Settings
Run LED On	Settings completely processed	Not Available
Run LED Flashing	Not Available	Settings completely processed

Table 4

Note: Fixtures are supplied with onboard memory capabilities that retain the fixture's last setting.

Setting the DMX Address

1. Program DMX addresses by gently pressing in the adjustment buttons with a pointed object such as a pen (Figure 8).

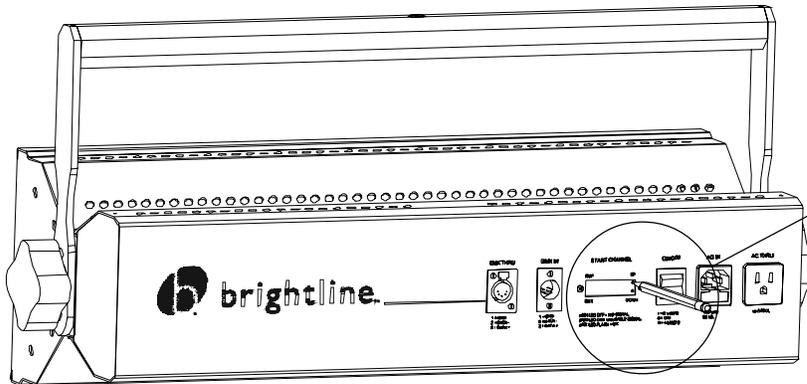


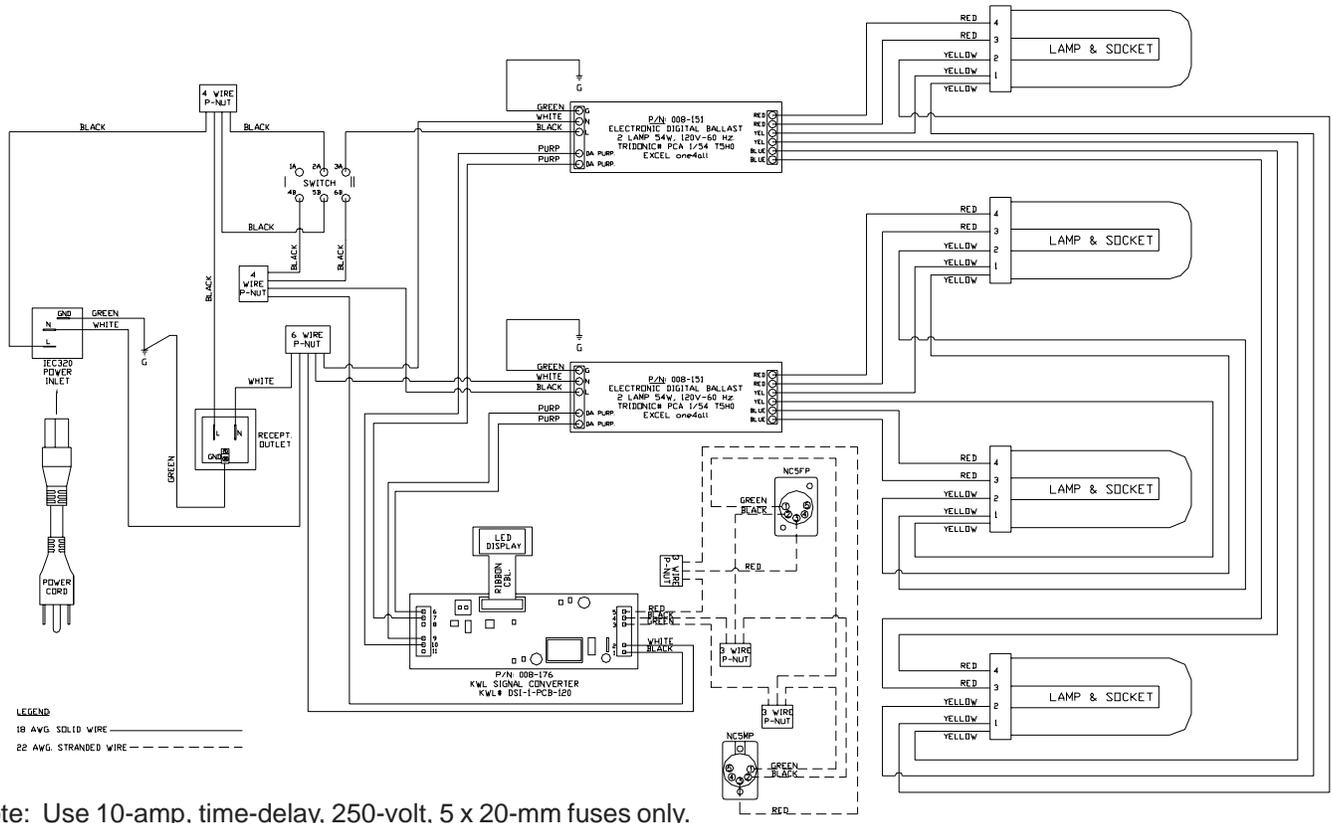
Figure 8

2. Use Channels 001 thru 512 to program the DMX addresses for the lighting control console. Program the DMX address on the fixture to match the desired channel at the lighting control console.
(Example: 001 = channel 1, 002 = channel 2, etc.)
3. A fixture can be programmed for individual control by setting the DMX address exclusively to a single fixture. Multiple fixtures can be set to the same DMX address to control a group of fixtures on a single channel at the lighting control console.

DMX Troubleshooting Guide

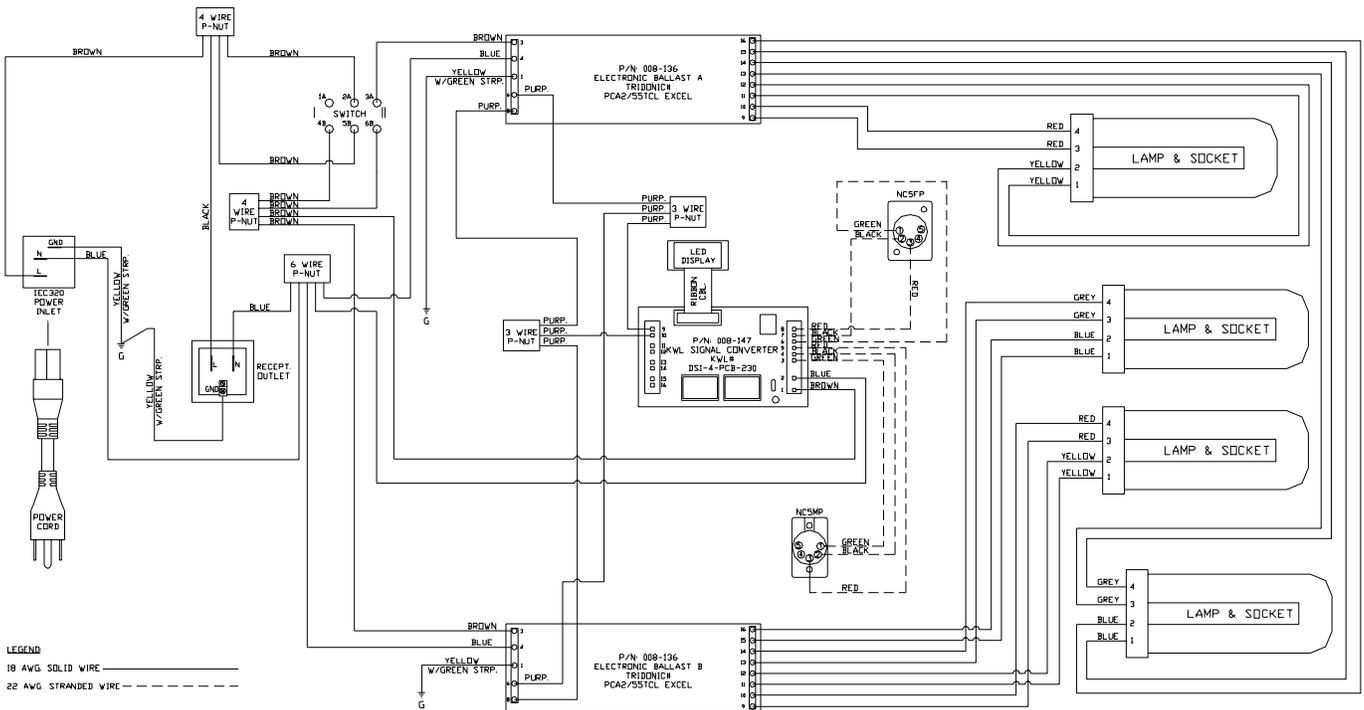
Problem	Possible Cause	Solution
No DMX signal on all fixtures in DMX system.	<ol style="list-style-type: none"> 1. Lighting control console power is turned "OFF." 2. Cabling or connection problem between lighting control console and first fixture in DMX system. 	<ol style="list-style-type: none"> 1. Turn lighting control console power "ON." 2. Check connections at first fixture and lighting control console or try another DMX cable.
No DMX signal on a single fixture or group of fixtures in the DMX system.	Cabling or connection problem with jumper cable.	Check connection of jumper cable between fixture with no signal and previous fixture in DMX system or try another DMX jumper cable.
Fixture is turned "ON" and cannot be dimmed at lighting control console.	<ol style="list-style-type: none"> 1. Fixture is set to "Emergency ON" mode or "Manual Dimming" mode. 2. Cabling or connection problem and fixture is remembering last setting. 	<ol style="list-style-type: none"> 1. Set DMX address at fixture to match desired channel at the lighting control console. 2. Check cabling and connections in DMX system.
Unusable DMX signal.	<ol style="list-style-type: none"> 1. Cabling problem. 2. Start channel is set higher than number of channels transmitted by lighting control console. 	<ol style="list-style-type: none"> 1. Check the wiring in DMX cable plug ends. The DMX + and DMX - wires may be crossed. 2. Set start channel lower to accommodate the number of channels transmitted by the lighting control console.

Wiring Diagram - 1.4D/X 120V



Note: Use 10-amp, time-delay, 250-volt, 5 x 20-mm fuses only.

Wiring Diagram - 1.4D/XE 230V



Note: Use 10-amp, time-delay, 250-volt, 5 x 20-mm fuses only.

