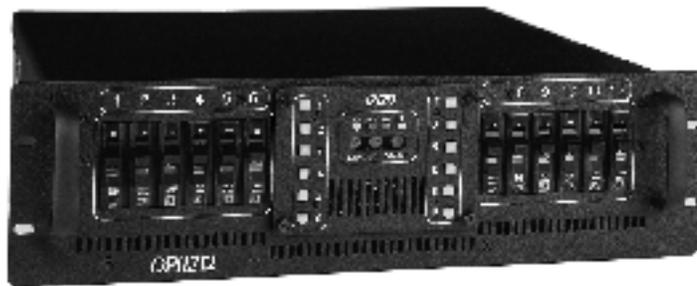


Owner's Manual

DPI SERIES DIMMER

Models 624D and 1212D
Models 624A and 1212A



**TEATRONICS LIGHTING CONTROLS,
INC.**

1236 Los Osos Valley Rd., Ste. G
Los Osos, CA 93402

Phone: (805) 528-6900
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01/23/98

RECEIVING YOUR EQUIPMENT

As soon as you have received your equipment, open the boxes and examine the equipment inside. If any damage is noted, contact the carrier immediately to file a claim for damages. When the equipment left the factory it was in good condition and properly packed.

If you find the equipment to be in accordance with your order and the packing list, and also in good condition, you may read on to the section covering **SETUP** and **CONNECTION**. If for some reason the equipment in the carton does not agree with your order or the packing list, contact the factory immediately and we will help solve any problems.

INTRODUCTION

Thank You for buying a new Dimmer Per Instrument (DPI) 624/1212 dimmer pack from Teatronics Lighting Controls, Inc. Before reading this owner's manual, examine your equipment carefully, if damage is evident contact your carrier immediately to file a claim. Contact our Sales department for questions concerning your order or packing list at (805) 528-6900 (8:00 am - 5:00 pm Pacific Time).

Thank You Again.

TABLE OF CONTENTS

RECEIVING YOUR EQUIPMENT	<i>i</i>
INTRODUCTION	<i>ii</i>
TABLE OF CONTENTS	<i>iii-iv</i>
TABLES AND DRAWINGS	<i>v</i>
TECHNICAL DATA SHEETS.....	-
SETUP AND CONNECTION	1
MECHANICAL INSTALLATION	1
RACK MOUNTING	1
ELECTRICAL INSTALLATION	2
POWER HOOKUP	2
CONTROL CONNECTIONS	5
OPERATION	7
CONTROLS AND INDICATORS	7
CONTROL FUNCTIONS	8
DMX START ADDRESS.....	8
CHANNEL LOADING	9
NON-DIM OPERATION.....	9
FILTERING	9
OVER VOLTAGE PROTECTION	10

TABLE OF CONTENTS

IN CASE OF TROUBLE	11
TROUBLESHOOTING	11
OBTAINING SERVICE	12
TROUBLESHOOTING CHART	13
SELECTED PARTS LIST	18
WARRANTY	19
SCHEMATICS	20

TABLES AND DRAWINGS

INPUT POWER WIRING	3
DMX-DPI CONTROL WIRING	5
DPI ANALOG CONTROL WIRING	6
FRONT PANEL CONTROLS.....	7
SELECTED PARTS LISTS.....	18
SCHEMATICS	20

SETUP AND CONNECTION

MECHANICAL INSTALLATION

For portable use, set the DPI on a level, cool surface where the ambient air temperature does not exceed 105 degrees Fahrenheit (40 degrees Celsius). An area free of falling trusses, stage props, and misplaced feet is ideal. Having your unit exposed to rain or customers is also discouraged. Up to four units may be stacked vertically as long as the stack is not used as a stepladder. Realize that any dust stirred up will eventually find its way to the internal surfaces of the unit, reducing its cooling efficiency and shortening the life of the fan. As a general rule, think clean and cool for safe, reliable, long term performance.

RACK MOUNTING

DPI dimmers may be rack mounted on standard EIA 19" equipment rail under the following conditions:

- 1) Remove the unit's plastic feet to allow them to mount next to each other.
- 2) Do not support each unit only by the front panel; its weight must be supported by side rails.
- 3) An enclosed rack system needs adequate exhaust ventilation at the top of the cabinet. Louvered vents may be adequate but an exhaust fan is preferred. The front of the units must have access to cool intake air.
- 4) DPI front panels are 5.25 inches high. This is 3 standard (1.75") rack spaces.
- 5) Input power wiring should allow enough slack that a unit may be removed from the rack individually for service without disconnecting it.

SETUP AND CONNECTION (continued)

ELECTRICAL INSTALLATION

POWER HOOKUP

Four terminals must be connected to provide input power to a DPI dimmer (see diagram on the next page). The lugs are pressure type, accepting copper or aluminum conductors. Removing eight machine screws on the top cover will access these terminals. The four terminals are Line 1, Line 2, Neutral, and Ground.

Line 1 and Line 2 are the 'hot' supply lines. These terminals may be connected to any source of 120 volt (referenced to neutral) power. Each line terminal will draw 60 Amps when the dimmer is under full load. Common wiring practice calls for hot lines to be black, blue, or red.

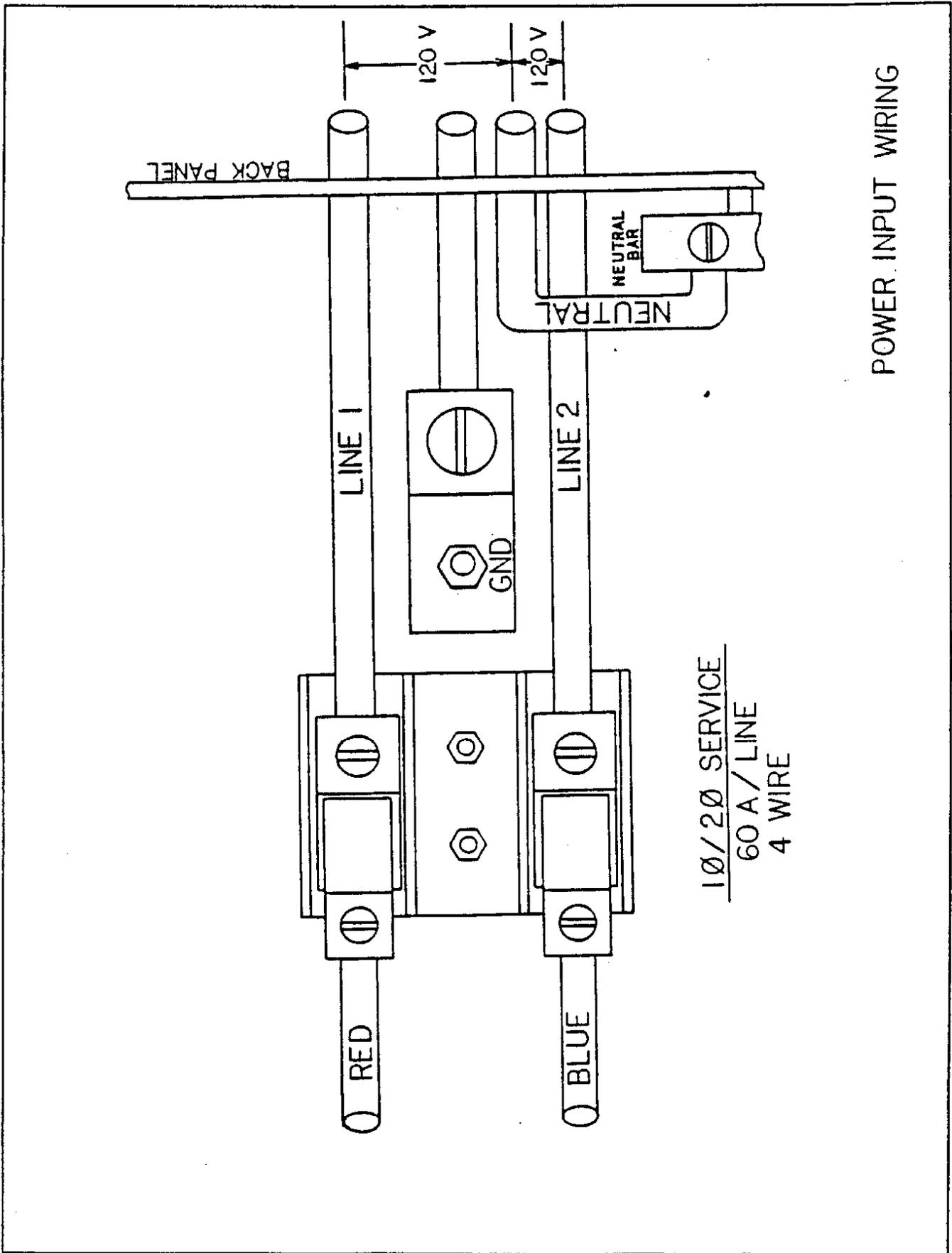
Neutral is the return path for load current. If Line 1 and Line 2 are connected to the same 'phase', this terminal can draw twice the line current (120 Amps). Normally the two line terminals are not connected to the same phase so that the neutral current can not exceed the line current. Common wiring practice calls for the neutral wire to be white.

Ground is not a current carrying terminal but must be capable of handling significant current in case of a short in any of the loads, load wiring, or the dimmers. Failure to provide proper grounding can result in fire or personal injury. Common wiring practice calls for the ground wire to be green or green with a yellow stripe.

Teatronics Lighting Controls, Inc. recommends that dimmers requiring 'hard wired' input power (such as the DPI) be installed by a licensed electrical contractor due to the complexity of local and national electrical codes.

Four common supply connections are listed here:

- 1) Single Phase, 120 volt AC, 120 Amps. Lines 1 and 2 are tied together at the service box. Two neutral lines must be run because the neutral carries twice the line current (120 Amps). Use #6 AWG wire rated for 90 degrees Celsius (type THHN) or #4 AWG wire rated for 60 degrees Celsius (type TW) for the two neutral wires and one for each line. Ground may be made through solid conduit or a separate wire if solid conduit is not bonded to the dimmer.
- 2) Single Phase, 120/240 volt AC, 60 Amps. Lines 1 and 2 are connected to the two 'hot' legs of this type service. When connected this way, the neutral current will not exceed either line current. Use #6 AWG wire rated for 90 degrees Celsius (type THHN) or #4 AWG wire rated for 60 degrees Celsius (type TW) for all supply connections. Ground may be made through solid conduit if it is bonded to the dimmer.
- 3) Three Phase Wye, 120/208 volt AC, 60 Amps. Same as for a single phase, 120/240 volt service. One hot leg is not used. Use of any two phases of a three phase wye service will insure that the neutral current will not exceed either line current.



SETUP AND CONNECTION (continued)

ELECTRICAL INSTALLATION (continued)

POWER HOOKUP (continued)

- 4) Three Phase Delta with Derived Neutral, 120/240 volt AC, 60 Amps. Lines 1 and 2 are connected to the two hot legs whose voltage with respect to the derived neutral is 120 volts. The third hot leg in a three phase delta supply is 208 volts with respect to the derived neutral. Do not use this high voltage (stinger) leg.

Supply circuit protection and disconnect (i.e. main breaker) is the responsibility of the user and should be adequate for the loading indicated above. Regardless of the mode of connection, a neutral line must be connected. It is also highly recommended that all supply voltages be checked with a meter before connection to the pack, especially in unfamiliar venues. Reversing a hot leg and earth ground creates unforgiving and embarrassing situations, not to mention voiding the warranty.

240 VOLT OPERATION

A switch on the power supply board under the top cover allows a DPI pack to operate on power grids where the line to neutral potential is 220 - 240 volts AC. Use a small screwdriver to slide the actuator from 115V to the 230V position.

The dimmer does not convert a 240 volt feed to 120 volt outputs. Be sure to use 240 volt lamps when using the DPI on 240 volt power grids.

GROUNDING

The term 'grounding' refers to a separate conductor which is connected from the equipment case to earth ground (often through a properly constructed conduit system). This is not the same as neutral or common. For safe operation the DPI dimmer case must be grounded. If flexible conduit is used, a separate conductor is required for the ground.

All that is required to connect the control console to the dimmer pack(s) is a remote cable or cables of the proper type. This cable is connected to the output jack on the back of the console and to the input jack on the back of the dimmer pack(s). Each connector is keyed to assure proper connection; when the keys are lined up the connectors will slide together with ease. Do not force connectors! Broken connectors are not covered by the warranty.

SETUP AND CONNECTION (continued)...

CONTROL CONNECTIONS

The DMX-DPI requires one DMX connection. The signal common is isolated from the supply neutral and also from earth ground.

DMX DPI MULTIPLEX CONTROL WIRING

PIN #	FUNCTION DMX	CONTROL CABLE WIRING	
		Belden 8723	Canare L-4E6S
1	Common	Black & Sheild	Shield
2	-Data	Green	Blue
3	+Data	White	Blue
4	Unused		White
5	No Connection	No Connection	White

Note: Wiring on control cables must be one-to-one. Since the Canare cable has two white and two blue wires, continuity checks must be made to be sure the signals are not crossed.

Analog Input

Analog control requires one control input per channel, referenced to a signal common. The signal common is isolated from the supply neutral and also from earth ground. The low voltage control signal is zero to ten volts D.C. The input impedance is 20K Ohms. With the control voltage at zero, the output of the dimmer is at idle (about 6 volts). With the control voltage at ten volts the output of the dimmer is at maximum (about 4 volts less than the supply voltage).

Analog control wiring color codes are given in figure 2. Pin 12 of the SRC, or pin 13 of the DB 15 connector, provide power from the dimmer when using 'passive' control consoles. Power from the dimmer is not needed for consoles having AC line cords.

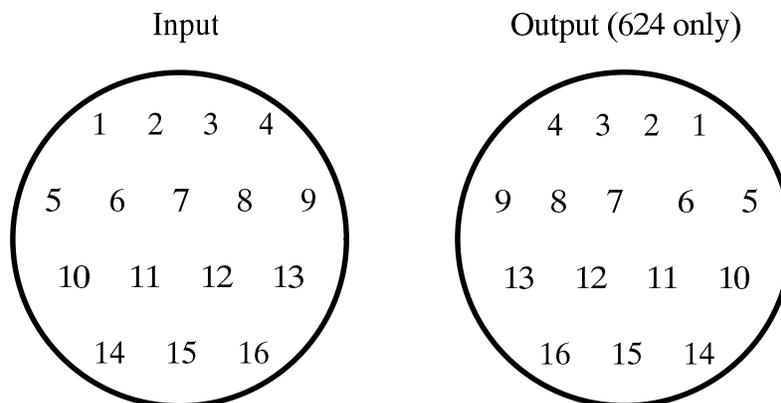
The connectors are keyed for proper orientation. Once seated, you may gently tighten the SRC locking ring (be careful not to cross-thread the ring). Hand tighten only, and only tight enough to prevent the connector from falling out. The locking ring may be left free if there is no danger of the cable being pulled out.

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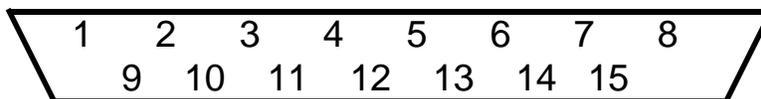
DPI ANALOG CONTROL WIRING

SRC PIN #	DB 15 PIN #	FUNCTION	INTERNAL WIRING		BELDEN
			1212	624	
1	1	Channel 1	Brown	Brown	Black
2	2	Channel 2	Red	Red	Red
3	3	Channel 3	Orange	Orange	White
4	4	Channel 4	Yellow	Yellow	Green
5	5	Channel 5	Green	Green	Orange
6	6	Channel 6	Blue	Blue	Blue
7	7	Channel 7	Violet	Channels 7 thru 12 are looped through channels 1 thru 6	White/Black
8	8	Channel 8	Gray		Red/Black
9	9	Channel 9	White		Green/Black
10	10	Channel 10	Black		
11	11	Channel 11	Brown	Blue/Black	
12	13	+15 Volts	Orange	Orange	Black/White
13		Reserved	Yellow	Yellow	Red/White
14	14	Spare	No Connection	No Connection	No Connection
15	15	Common	Green	Green	Blue/White
16	12	Channel 12	Red	loop through	Green/White

SRC Pin numbers facing back of dimmer



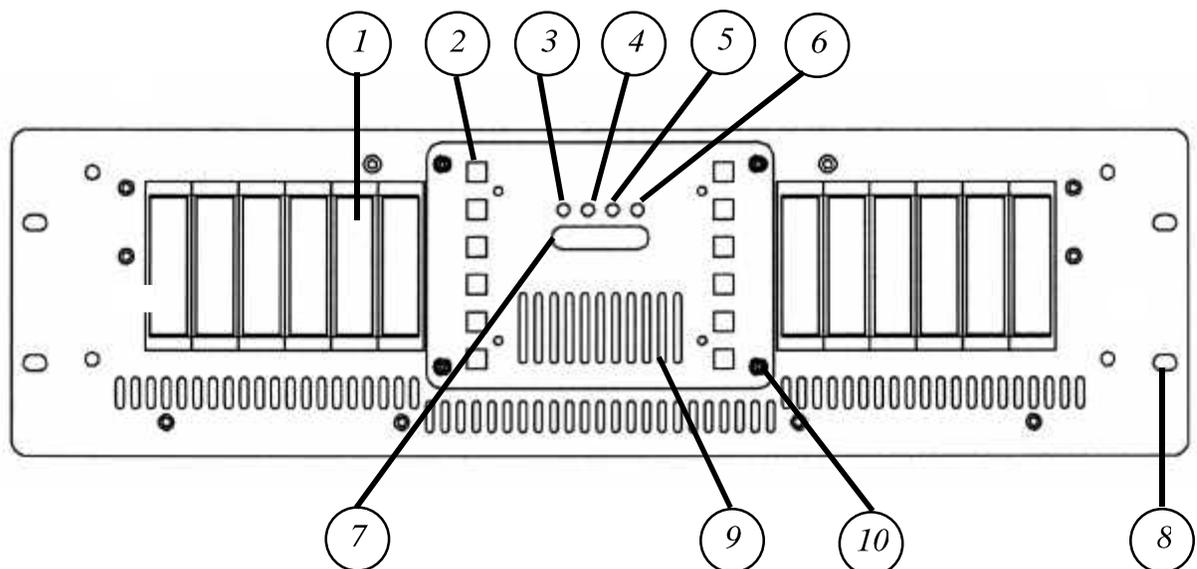
DB 15 CONNECTOR



OPERATION

CONTROLS AND INDICATORS

- 1) 10 OR 20 AMP CHANNEL BREAKER: Square-D type QO, 10,000 Amps Interrupting Capacity.
- 2) LIGHT EMITTING DIODE (LED) MIMIC/CONTROL OVERRIDE: Mechanically latching switch keeps channel at full regardless of incoming control level. LED inside the switch indicates level of control channel.
- 3) L1: Indicates presence of LINE 1 supply voltage.
- 4) +V: +15 volts DC supply present indicator.
- 5) -V: -15 volts DC supply present indicator.
- 6) L2: Indicates presence of LINE 2 supply voltage.
- 7) Dimmer start address (DMX) / Idle Set (Analog)
- 8) Holes for mounting on EIA 19" rack.
- 9) Additional air intake vents.
- 10) THUMBSCREWS: Loosen to access main board and non-dim switches.
- 11) AIR EXHAUST FANS (BOTH SIDES): Remember, do not block these fans so that proper cooling may be achieved.



OPERATION (continued)

CONTROL FUNCTIONS

Centered on the front panel are two columns of push-on/push-off switches. These 'override' switches override any control signal coming to the dimmer and force the associated channel to full. These switches are useful for testing, checking channel to load assignments, and focusing. They may also be used as a last ditch effort to get lights on stage if the console fails or the control cable gets damaged. These switches should be left in the 'out' position for normal operation.

Inside the override switches are status LED's. These indicators mimic the control level for each channel. Pressing the override switch will also bring the control status LED to full. When a system fails to operate properly, these indicators can help isolate the fault to either the control or load side of the dimmer.

Each channel has an associated circuit breaker. The circuit breakers are provided for safety and to protect the load wiring. The breakers are not capable of protecting the internal dimmer components against short circuits, or extreme overloads. If the breaker trips after the load has been up for a short period of time, it probably means that a slight overload exists. Hot patching, although it will not harm the dimmer, is not recommended by industry safety standards. If the breaker trips immediately, it probably indicates an extreme overload or a shorted output. Miswired fixtures, worn cables, loose connections or sloppy workmanship are all situations that can cause catastrophic failure. If, after the fault is cleared, the channel will not come up, will not go off, or stays part way on all the time, then the output device in the dimmer has failed.

NOTE

Since Teatronics Lighting Controls, Inc. has no control over customer installed wiring and fixtures, the solid-state relays are not covered under warranty. DPI dimmers are not short circuit proof.

DIMMER START ADDRESS

The DMX DPI dimmer uses three address wheels located in the center of the control panel. The wheels are set to the dimmers starting location in the DMX 512 chain. The starting address refers to the first dimmer of the pack. IF you wished the first dimmer of the pack to begin at channel ONE you set the address to 001.

Example:

For instance you have one 6 channel pack followed by a 12 channel pack. The first pack's address is 001, the second pack's address is 007. The first pack is using addresses 001 through 006, the second pack is using addresses 007 through 018.

OPERATION (continued)

CHANNEL LOADING

Any incandescent load from 40 Watts up to rated load capacity (1200 Watt for DPI 1212 and 2400 Watts for DPI 624) may be connected to each dimmer channel. Although not U.L. listed for other than incandescent loads, the DPI dimmer will not be harmed by most loads such as motors, neons, pin-beam spots, fog machines, etc. 'Dimming' of these loads can sometimes cause damage to the load however. Check with the manufacturer of the lighting instrument as to whether dimming is advisable on these loads. Teatronics Lighting Controls, Inc. recommends de-rating the dimmer's capacity by 30% when driving other than incandescent loads (840 Watts max. for DPI 1212 and 1680 Watts max. for DPI 624).

NON-DIM OPERATION

On the main control board in the DPI dimmer are slider switches. Each switch affects the dimmer's channels (Groups of three DMX, Each Phase - Analog). In their normal 'DIM' position, the associated channels function as an incandescent lamp dimmer with pre-heat idle voltage. Some loads can be damaged by having an idle voltage applied or by applying less than full voltage to them. When the slide switch is placed in the 'NON-DIM' position, the associated channels function as solid-state switches which are either on or off, without any idle. The channels in non-dim mode will turn on with a control setting above 5 and will be off below 5. Flicker may be present if the control remains at, or near 5.

The non-dim switches on the main control board are accessed by loosening the four thumb screws and removing the front cover plate. Located on the component side is switch 16, a four position DIP switch. Located near the DIP switch is nomenclature that indicates the corresponding channels that each switch controls. Setting these DIP switches to the "ON" position will change the corresponding channels to "non-dim".

Some loads, particularly strobe lights, will exhibit strange behavior when connected to a dimmer, even in non-dim mode. In the case of a strobe light, the small leakage current through the solid-state relay will cause the strobe to occasionally fire even when the relay is turned off. To cure this problem a small load (such as a 25 watt 120 volt lamp) should be placed in parallel with the strobe light.

FILTERING

Each dimmer channel has an associated filter choke inside the pack. These chokes help to filter out the electrical noise that often causes hum in sound systems and musical instrument pickups. The chokes also help to eliminate 'lamp sing' that can cause audible noise to come from the lighting fixtures. In providing these filtering functions, the chokes themselves generate a slight buzz. It is recommended that the dimmer pack be placed in an area where this buzz will not be heard by the audience or picked up by recording equipment.

OPERATION (continued)

OVERVOLTAGE PROTECTION

Line 1, nominally at 120 volts AC, provides power to the fan and power supply transformer. Should a miswiring condition occur such that the voltage between Line 1 and neutral exceeds 140 volts AC, a sensing relay will disconnect the input to the fan and power supply thus protecting the dimmer from overvoltage. If the four green indicators on the front panel light only momentarily when power is applied, an overvoltage condition probably exists and must be corrected.

IN CASE OF TROUBLE

TROUBLESHOOTING

This section serves two purposes. For the experienced user, it gives details that will help locate most problems that are field serviceable. For the user who is not comfortable with live high voltage circuits inches from their fingertips, this section will help locate suspected problems with the dimmer and may save you a long distance phone call or shipping costs to a service center (as well as down time). Even if the user is not able to solve the problem, performing these diagnostics will help the user explain the malfunction to a service technician.

Please bear with us if we seem to state the obvious. Some of our customers are not as familiar with dimming equipment and controls as others. Many apparent failures result from not being familiar with the operating characteristics of the dimmer, so read the manual sections on "operation" carefully. The more experienced user may find the troubleshooting chart at the end of this manual more useful than this section.

In a system consisting of dimmers, control cables, and controllers, the first step is to confine the malfunction to one part of the system. Substituting known good parts, or swapping suspected bad parts is an excellent trouble shooting technique. If disconnecting the dimmer from the control wiring does not cure the problem then the control console is probably not at fault.

There are two forms of malfunction common to solid-state dimmers: "Failed Off" in which the lights do not come on, and "Failed On" in which the lights cannot be turned off.

If your system has "failed off", check that a lamp load is connected and that the lamp is not burned out. Verify that the primary power is on and that all four LED's on the front panel are lighted. Check that all channel breakers are on (in up position). A tripped breaker is reset by first turning the breaker to the fully off (down) position and then restoring it to its on (up) position. NOTE: Breakers often 'trip' when subjected to impact; check all breakers after shipping or moving the dimmer pack. Make sure the loads are plugged in and that all extension cords are continuous. Check load circuits by plugging them into a known live 'non-dim' circuit not on the dimmer pack. Check that the control cable is intact, and plugged in at both ends.

Some consoles derive their operating power from the dimmer pack. If more than one dimmer pack is used with this type of console, the pack connected to the first few channels, supplies power to the console. If the first pack is not powered or is disconnected from the console, none of the channels will work.

The loads connected "failed on" dimmers will stay on until the channel breaker is turned off. First check that the channel override switches are turned off (out position). Try unplugging the control cable from the dimmer. If the failure goes away, the cable or console is at fault. If the output stays on, then the problem is probably in the dimmer. For those who wish to attempt the repair themselves, consult the troubleshooting chart for more information. Be advised that unauthorized repairs on units will void any remaining warranties.

IN CASE OF TROUBLE (continued)

OBTAINING SERVICE

If after performing these tests you still cannot get proper operation, you may send your unit to T.L.C. Send your unit to the factory, freight prepaid, along with a note describing the specific complaint and the results of the checks you have made. Before shipping your equipment, please call the Sales Department to obtain a Return Materials Authorization number (RMA number). Our phone number is (805)528-6900. Please call during working hours, 8:30 to 4:30 Pacific time. Send your unit well packed and insured to:

Teatronics Lighting Controls, Inc.
1236 Los Osos Valley Rd., Ste. G
Los Osos, CA 93402
ATTN: RMA #

IN CASE OF TROUBLE (continued)

TROUBLESHOOTING CHART

The troubleshooting chart is organized as follows:

#) **This top line contains a description of the symptoms.**

- | | | |
|----|--|--|
| a) | The possible causes are listed under the symptoms. | Tests to verify that the cause listed to the left is given here along with likely solutions. |
| b) | A second possible cause. | Test for second possible cause. |

1) **No channels work, fan is off, all LED's are off.**

- | | | |
|----|--|--|
| a) | No power to unit. | Locate and activate main breaker. |
| b) | Neutral disconnected. | Neutral line is required for all modes of connection. Neutral bar is located on back panel, isolated from case ground. |
| c) | Input is miswired resulting in the overvoltage protection circuit being activated. | LED indicators will flash once when power is first applied. Correct overvoltage on line 1. |
| d) | Line 1 protection fuse is blown. | Replace with 1/2 Amp "normal blow" glass fuse. TLC part #4200051100. |
| e) | Transformer primary is shorted. | Resistance should be approx. 78 Ohms between pins 1 and 3, or 4 and 6. Replace transformer and 1/2 Amp fuse. Transformer is Signal part #14A-20-28, TLC part #1912402028 |
| f) | Overvoltage relay is activated at normal voltage. | Check 22K, 2 Watt resistor and overvoltage relay (Circuit may be disabled by removing resistor). Relay is Aromat part #HA1-115, TLC part #4412120000 |
| g) | Broken trace under transformer or 'faston' tab on power supply board. | Check for loose tabs, broken traces, and cold solder joints. Use continuity checker. |

IN CASE OF TROUBLE (continued)

TROUBLESHOOTING CHART (continued)

2) No channels work, fan is on, all LED's are off.

- | | | |
|----|--|---|
| a) | Six conductor harness between main board and power supply is open. | Check continuity of harness. Check that crimps are seated properly. One end may be reversed. |
| b) | Plus and minus 15 volt supplies shorted or crossed. | Check supply voltages at test points on main board. Isolate fault by disconnecting cables. Remove short, replace regulators if necessary. |

3) No channels work, fan is on, only - "V" LED is on.

- | | | |
|----|---|---|
| a) | Ambient internal air temperature exceeds 55 degrees Celsius (131 degrees Fahrenheit). | Allow unit to cool to reset thermostat. Check for air flow restriction. |
| b) | Thermostat sensor defective (Unit is not excessively hot). | Thermostat may be faulty. Airpax part number 66L060. TLC part #441116001. |

4) No channels work, fan is on, all indicators on.

- | | | |
|----|--|---|
| a) | Remote cable to console is disconnected. | See if LED mimics follow control signal from console. |
| b) | Channel breakers are off. | Move handles "up" to "on" position. If breaker has tripped it must be reset by moving to "off" (down) position before turning "on". |
| c) | Voltage select switch on power supply board is in 230 Volt position. | Switch to 115V position for domestic power grids. |
| d) | Ribbon cable to main board open (Override switches will still work). | Reseat connector on main board. Lineup brown wire (pin 1) with arrow on socket. |

IN CASE OF TROUBLE (continued)

TROUBLESHOOTING CHART (continued)

5) Half of the channels, all adjacent, are out.

- | | | |
|----|---|---|
| a) | No power to one line. | Check for a blown fuse. Check incoming feed voltages with respect to neutral. |
| b) | Line 2 fuse blown (Only if it is the right half of the dimmers that do not work). | Replace with 1/2 Amp "normal blow" fuse. |

6) Channel breakers keep tripping.

- | | | |
|----|---|--|
| a) | Channel overloaded. | Reduce loads to proper rating. |
| b) | Inductive (transformer) loads cause "over current" surge. | De-rate channel capacity by 30%. |
| c) | Breaker worn out. | Remove power. Replace breaker. Square D part #QO110 (10 Amp) or QO120 (20 Amp) as appropriate. |

7) Channels do not dim, but turn on full above a certain control level.

- | | | |
|----|---|--|
| a) | Sync circuit defective (If switch point is about 90% and problem only affects one phase of the channels). | Check H11AA1 by swapping with sync that works. |
| c) | Solid-state relay is bad (If switch point is arbitrary and problem affects only one channel). | Swap power cube (solid-state relay) with another in the pack to isolate fault. Replace if appropriate. |

IN CASE OF TROUBLE (continued)

TROUBLESHOOTING CHART

(continued)

8) Most channels work, one or more stays off.

- | | | |
|----|--|--|
| a) | No load connected or lamp burned out. | Check load using a power circuit not on the pack. |
| b) | Bad channel on control console. Bad control cable. (Override switch will still work). | Swap control cables and control channels to isolate fault. |
| c) | Broken wire on input connector inside dimmer. Ribbon wire on main board disconnected. (Override switch will still work). | Check continuity with ohmmeter. See DPI control wiring chart. |
| d) | Faulty solid-state relay. | Verify the power cube is defective by swapping with another. Replace if appropriate. |

9) Most channels work, one or more stay on.

- | | | |
|----|----------------------------------|---|
| a) | Override switch on or defective. | Switch should be out for normal operation |
| b) | Solid-state relay shorted. | Lift control connection on power cube. If channel stays on, then cube is shorted. This is the single most common failure in solid-state dimmers. It is usually caused by overloads and short circuits. Be sure to clear the cause of failure before replacing cube. |

IN CASE OF TROUBLE (continued)

TROUBLESHOOTING CHART (continued)

10) All channels stay on, but go off if console is disconnected.

- | | | |
|----|--|----------------------------------|
| a) | Signal common open between console and dimmer. | Check cable with an ohmmeter. |
| b) | Console is defective. | Refer to console owner's manual. |

11) Most channels work, one or more channels will not go to full.

- | | | |
|----|--|---|
| a) | 'Soft patch' of a computerized console is at a proportional level below full (Override will still take channel to full). | Become familiar with the operation of your computerized console. |
| b) | Half of the solid-state relay is open. | Swap cubes with a good channel to verify failure. Replace if appropriate. |

12) Most channels work, one or more channels will not turn off.

- | | | |
|----|---|---------------|
| a) | Half of the solid-state relay is shorted. | See 9c above. |
|----|---|---------------|

13) Output always reads 120 volts when measured with a meter.

- | | | |
|----|--------------------|--|
| a) | No load on channel | Channel must have a load to yield an accurate reading. |
|----|--------------------|--|

14) Output does not read 60 volts when control is set at half.

- | | | |
|----|---|---|
| a) | The 'square law' dimming curve is not linear. | It's not supposed to read 60 volts |
| b) | Most AC meters will not give accurate readings on 'dimmed' outputs. | Use only a "true RMS meter" to get accurate readings. |

TEATRONICS LIGHTING CONTROLS, INC.

SELECTED PARTS

MAIN COMPONENTS

+7519 DPI 1212 ANALOG MAIN BOARD
+7518 DPI 1212 DMX MAIN BOARD
+7569 DPI 624 ANALOG MAIN BOARD
+7517 DPI 624 DMX MAIN BOARD
+7501 DPI POWER SUPPLY BOARD
+*5023 TERMINAL CONTROL INPUT 12 CHANNEL
+*5024 TERMINAL CONTROL INPUT 6 CHANNEL
+*5028 WALL MOUNT KIT

REPAIR PARTS

806000000 PRE GREASED PAD, POWER CUBE
3806242000 POWER CUBE, 40 AMP DUAL
4201000110 BREAKER, 10 AMP
4202000120 BREAKER, 20 AMP
+7503 CHOKE, 10 AMP
+6028 CHOKE, 20 AMP
5106328250 CAPTIVE PANEL SCREW
5110326107 RACK SCREW, 10-32X.75 TRUSS HEAD
3910320000 STAGEPIN, 20 AMP CHASSIS RECEPTACLE
3910323100 TWISTLOCK, L5-20, CHASSIS RECEPTACLE
3910358000 DUPLEX EDISON UGROUND, 20 AMP CHASSIS RECEPTACLE
3951900007 SOCAPEX, 6 CHANNEL, 20 AMP CHASSIS RECEPTACLE
3910113300 POWERPOLE CONNECTOR, 30 AMP
3910113000 POWERPOLE CONNECTOR, 75 AMP
3951622116 16 PIN SRC MALE CHASSIS MOUNT, PINS
+3951 16 PIN SRC FEMALE CHASSIS MOUNT, SOCKETS
3971500001 15 PIN DB-15 MALE CHASSIS MOUNT, PINS
3971500000 15 PIN DB-15 FEMALE CHASSIS MOUNT, SOCKETS

MATING CONNECTORS

3950500011 5 PIN XLR FEMALE CABLE MOUNT, A5F
3950500012 5 PIN XLR MALE CABLE MOUNT, A5M
3951612116 16 PIN SRC MALE CABLE MOUNT, PINS
3951662116 16 PIN SRC FEMALE CABLE MOUNT, SOCKETS
3971500001 15 PIN DB-15 MALE CABLE MOUNT, PINS
3971500000 15 PIN DB-15 FEMALE CABLE MOUNT, SOCKETS
3971500010 15 PIN DB-15 CABLE BACK SHELL

LIMITED WARRANTY

Teatronics Lighting controls, Inc. (TLC) agrees that its products shall be free from defects in material, and workmanship for a period of one year from date of delivery. Said warranty will not apply if equipment is used in conditions of service for which it is not specifically intended. The manufacturer is not responsible for damage to its apparatus through improper installation, physical damage, or poor operating practice.

TLC's sole responsibility under this warranty shall be to repair or replace, at TLC's discretion, such parts as shall be determined to be defective upon inspection by TLC or their authorized agent. Such equipment shall be replaced or put in operating condition, free of all charges except transportation, and the correction of any defects by repair or replacement by TLC shall constitute fulfillment of all obligations to the original purchaser or retail customer. **FREIGHT TERMS ON WARRANTY REPAIRS ARE FOB TLC'S FACTORY OR DESIGNATED REPAIR FACILITY.** Collect shipments or freight allowances shall not be acceptable. TLC does not assume responsibility for unauthorized repairs to its goods, even when determined to be defective.

TLC shall not be liable for any incidental, general, or consequential damages in case of any failure to meet the conditions of any warranty or shipping schedule. Nor will any claim be allowed for labor costs, loss of profits or income, repair costs, or any other expenses incidental to replacement or repair of the item under said warranty.

The owner's obligation during the warranty period described herein is to notify TLC in writing, within ONE WEEK (7 calendar days) of any suspected defect, and with TLC's authorization (RMA), to return the item or apparatus prepaid to the TLC factory.

No other representations, guarantees, or warranties, expressed or implied, are made by the manufacturer in connection with the manufacture and sale of its equipment. This warranty is nontransferable and applies only to the original purchaser or retail customer.

Teatronics Lighting controls, Inc.
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