Leprecon®

PRO LIGHTING EQUIPMENT

LWD-2400 Installation Manual

Part Number 21-2186C

Software Versions: v2.00

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12 July, 2000
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Filename:
\\ESERVER\D\DOCBIN\21-2186C.doc

Revision History:

Rev:	1.1
Date:	15 MARCH 2000 gaw
Description:	Original input.

Rev:	B
Date:	11 JULY 2000 cb
Description:	Illustrations Added

Rev:	C
Date:	12 JULY 2000 dhs
Description:	Clean up

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LWD-2400 Specifications

CHANNELS:	12
LOAD PER CHANNEL:	20 Amps
UNITS LINKABLE:	Yes, up to 4 in a networked system, up to 32 in DMX only systems
POWER INPUT:	105-124 VAC 50-60 HZ
POWER INPUT LOCATION:	Bottom or Top
Control Input:	DMX512, Addressable for Each Pack in System
COOLING:	Convection Cooled, 100% Duty Cycle
DIMMING CURVE:	Within 5% of Square Law, Programmable
NON-DIM	Programmable Per Channel
DIMENSIONS:	26.5” High x 24” Wide x 6” Deep
WEIGHT:	65 lbs
DISPLAY:	LCD 2 line 16 character with backlight
CUE/SCENES:	100
CUE PROGRAMMING:	Fade, Delay, Link
REAL TIME CLOCK:	Day, Hour, Minute, Second
INTERNAL PROGRAMMING:	Yes
EXTERNAL PROGRAMMING:	Console Snapshots

POWER REQUIREMENTS

Three Phase:	80 amps per leg, with Neutral
Single Phase:	120 amps per leg, with Neutral

MOUNTING

The LWD-2400 is attached to the wall using six screws, at least #10 in size. The mounting pattern is shown in Fig 1. Note the distance from the top and bottom of the unit relative to the top set of mounting slots. Install the unit as required to meet applicable safety regulations.

A plywood mounting base is recommended if a suitable mounting surface is not available. Use of all six mounting screws are also recommended.

A simple technique for mounting is to spot and pre-drill the top two holes. Install screws, but do not fully tighten. Hang the dimmer from these screws. Spot the remaining 4 holes, and install screws to fully secure the dimmer to the wall.

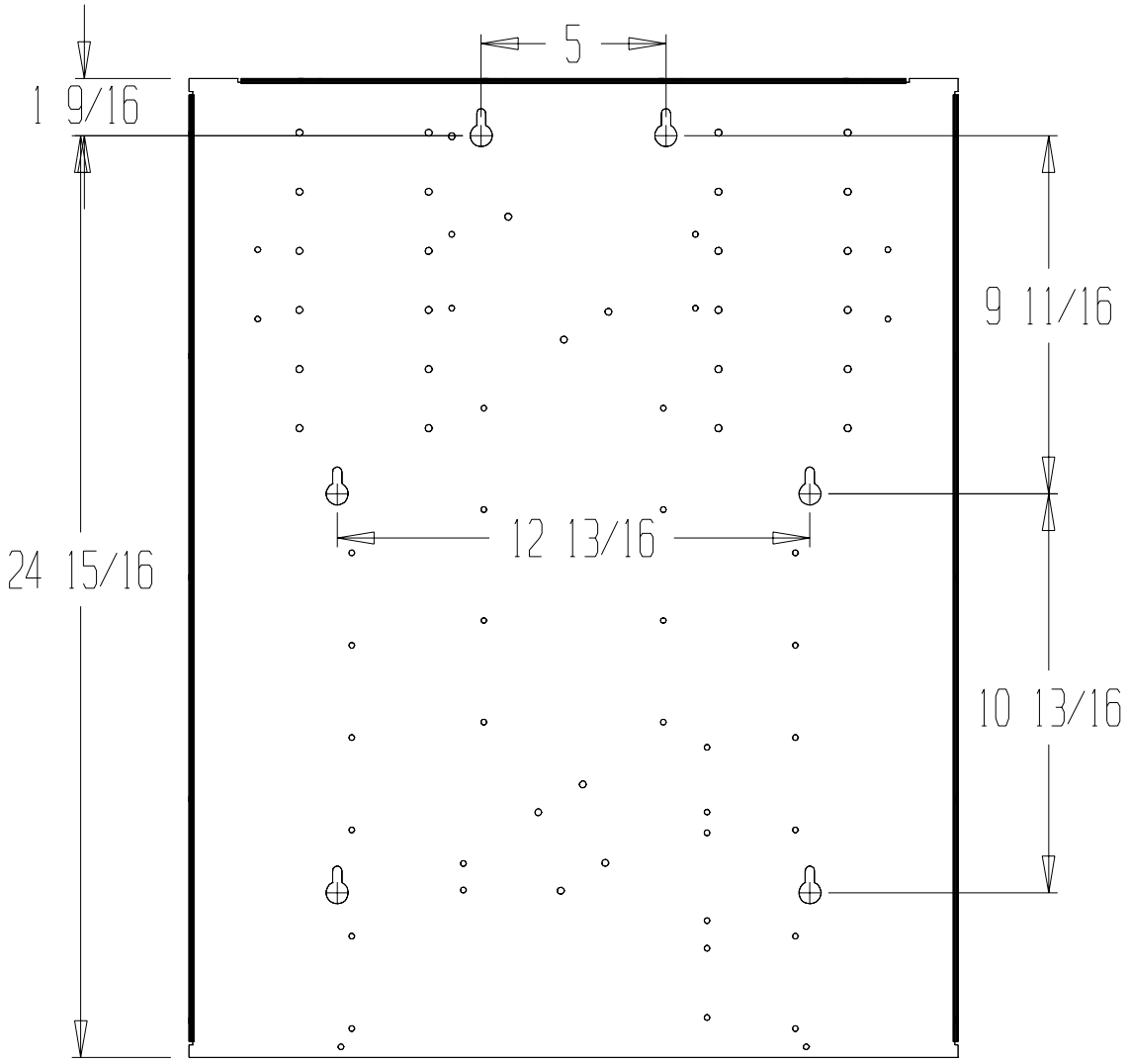

Fig 1

CLEARANCE

The dimmer requires sufficient clearance to allow airflow for cooling. The dimmer is rated to operate at an ambient temperature of 40 degrees Celsius, or 104 degrees Fahrenheit. The following clearances are suggested:

Top:	24 inches
Bottom:	24 inches
Right Side:	12 inches
Left Side:	12 inches

LINE CONNECTIONS

Power can enter from either the top or bottom. There are no punch-outs provided in either panel. The installer is expected to punch the desired opening.

The LWD-2400 is pre-wired to distribute the input regardless of which entry point is used. Refer to the connection drawing below. For top entry power, connect the X, Y, Z, NEUTRAL and GND at the top of the drawing. For bottom entry power, use the lower set of connections.

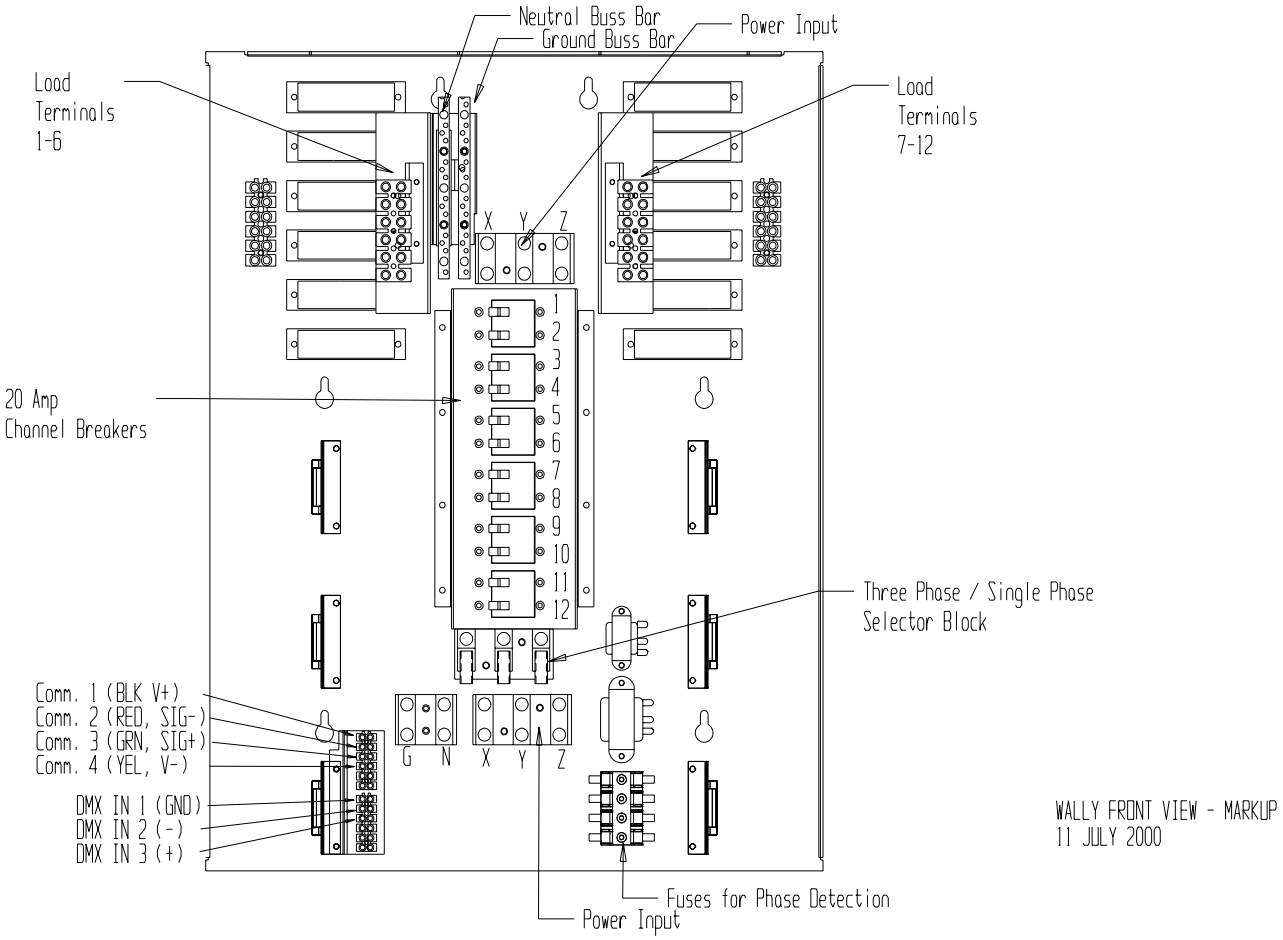

Fig 2

PHASE CONFIGURATION

Three phase connection – factory default

Just below the twelve load breakers there are three Fast-On termination blocks, one each for the X, Y and Z phases. The unit is factory wired for three phase operation, with the twelve load wires evenly distributed to each phase. There should be four black wires on the X phase termination block, four reds on the Y, and four blues on the Z for three phase operation.

Three phase connection – User configured

If single-phase operation is desired, the four blue Z phase load wires must be redistributed to the X and Y phases. Take the two blue-with-black-tape wires and move them to any open position on the X phase termination block. Move the two blue-with-red-tape wires to the Y phase block.

The system will automatically sense the phase configuration and adjust the dimmer timing accordingly.

LOAD CONNECTIONS

Load connections must enter at the top of the LWD-2400. The installer must punch the panel as required.

Connect the 12 NEUTRUAL wires to the NEUTRAL bus bar. A second bus bar is provided for the 12 GROUND wires. Finally, as shown in the figure, LOAD 1 through LOAD 6 are connected to the six position terminal strip to left of center, and LOAD 7 through LOAD 12 on the right.

DMX CONNECTIONS

A terminal strip is supplied for connection to the DMX control cable. Figure 2 shows the location and connections required on this block. Two connections can be made to the block for daisy chain connection to other dimmers in the system.

It is important that the proper type of cable is used for DMX connection. If you have questions about suitable cable types, contact a Leprecon dealer or refer to the specification for DMX 512. Suggested cable types include Belden 9841 and Belden 9842. Microphone cable is not acceptable for use as DMX communication cable.

For convenience in programming and testing, a DMX in XLR connector is provided at the bottom panel of the dimmer.

COMMUNICATIONS CONNECTIONS

If networking of two or more LWD-2400's is desired, the Communication terminal strip must be utilized. The four external communications wires must be attached to the COMM terminal strip as shown in the figure.

The figure lists the color of the wires as GRN, RED, BLK and YEL . Actual color is unimportant, but proper connections are. Be sure that the wires 1 through 4 are connected to pins 1 through 4 of every unit in the system.