

Addressable Dimmer Pack

Cat. No. N4600, N5000

WARNINGS AND CAUTIONS

- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER** at circuit breaker or fuse and test that power is off before wiring!
- If you are unsure about any part of these instructions, consult an electrician.
- To be installed and/or used in accordance with appropriate electrical codes and regulations.

PK-93125-10-00-0F

USER GUIDE

INTRODUCTION

Thank you for your decision to purchase a Leviton product.

Dimmer packs are the heart of any stage lighting system. They translate incoming low-voltage signals generated by controllers into power levels required to drive lamps to desired intensities.

The Leviton Satellite Dimmer Packs, N4600 and N5000 are both fully user addressable allowing assignment of four of a possible 128 control channels. Microplex technology, developed by Leviton for the stage lighting market, is the electrical marriage of microprocessor technology with digitally controlled multiplexing. Microplex technology allows your system to be connected using standard microphone cables or even audio snakes. System expansion is further simplified through the ability to daisy chain additional dimmer packs to an existing system. This application of Microplex technology makes system set up and operation easy and convenient.

Our philosophy at Leviton is to utilize only the highest quality components. Problems that often plague dimmers such as flickering lights, buzzing in audio equipment and triac failure are minimized with toroidal devices. In place of triacs, Leviton only uses professional grade dual SCR's.

You can be confident your Leviton Dimmer Packs feature the best performance and reliability available.

ADDRESSING

Each Leviton dimmer pack is fully user addressable to receive any of 128 possible control signals. Control signals may be assigned in increments of four by addressing the dimmer packs to receive them. To accomplish this simply position the address select DIP switches as described in the following chart.



Channels	1	2	3	4	5	6
1-4	Off	Off	Off	Off	Off	N/A
5-8	On	Off	Off	Off	Off	N/A
9-12	Off	On	Off	Off	Off	N/A
13-16	On	On	Off	Off	Off	N/A
17-20	Off	Off	On	Off	Off	N/A
21-24	On	Off	On	Off	Off	N/A
25-28	Off	On	On	Off	Off	N/A
29-32	On	On	On	Off	Off	N/A
33-36	Off	Off	Off	On	Off	N/A
37-40	On	Off	Off	On	Off	N/A
41-44	Off	On	Off	On	Off	N/A
45-48	On	On	Off	On	Off	N/A
49-52	Off	Off	On	On	Off	N/A
53-56	On	Off	On	On	Off	N/A
57-60	Off	On	On	On	Off	N/A
61-64	On	On	On	On	Off	N/A
65-68	Off	Off	Off	Off	On	N/A
69-72	On	Off	Off	Off	On	N/A
73-76	Off	On	Off	Off	On	N/A
77-80	On	On	Off	Off	On	N/A
81-84	Off	Off	On	Off	On	N/A
85-88	On	Off	On	Off	On	N/A
89-92	Off	On	On	Off	On	N/A
93-96	On	On	On	Off	On	N/A
97-100	Off	Off	Off	On	On	N/A
101-104	On	Off	Off	On	On	N/A
105-108	Off	On	Off	On	On	N/A
109-112	On	On	Off	On	On	N/A
113-116	Off	Off	On	On	On	N/A
117-120	On	Off	On	On	On	N/A
121-124	Off	On	On	On	On	N/A
125-128	On	On	On	On	On	N/A

IMPORTANT: All Leviton Dimmer Packs are shipped from the factory addressed for channels 1- 4. Units must be readdressed (**see chart above**) before being capable of receiving any other channels.

SPECIFICATIONS

	N4600	N4600-9	N5000	N5000-9
Nominal Input Voltage	120VAC 60Hz	240VAC 50Hz	120VAC 60Hz	240VAC 50Hz
Number of Channels:	Four		Four	
Power Output per Channel:	600 Watts@ 120V	600 Watts @ 240V	1,200 Watts @ 120V	1,200 Watts @ 240V
Total Maximum Power Output:	2,400 Watts		2,400 Watts	
Filtering:	(4) Toroidal chokes 160 μSEC.		(4) Toroidal chokes 400 μSEC.	
Control Signal Type:	Leviton "Microplex"		Leviton "Microplex"	
Input Voltage to Output Response Time:	50 MSEC.		50 MSEC.	
Control Isolation:	1200 Volt HV		1200 Volt HV	
+15 V DC Available to Controller:	400 MA		400 MA	
Dimensions (HxWxD):	8" x 9.5" x 3.5"		8" x 9.5" x 3.5"	
Weight:	7.5 lbs.		10 lbs.	
Mounting Spec. (from hole centers):	8.25"		8.25"	

AUTO TEST

This built-in test function allows you to connect and test lamps at full intensity without the need of a controller. When DIP switch #6 is off (down) and the dimmer pack is receiving AC power and no control source is connected to the pack, all dimmers are driven to full. All working lamps will light to full intensity.

LEVEL LED'S

Individual yellow LED's for each channel indicate when the dimmer is receiving control signals. This feature is an excellent troubleshooting tool in identifying possible problems with control signal transmissions or defective lamps and fixtures.

AC POWER CABLE

This is the main power cord for your dimmer pack, which ultimately carries all of the AC power consumed by lights connected to the dimmer. It must be connected to a power source capable of supplying the total power drawn by the lights (see specification section of this manual for details on maximum power capability).

WARNING: DO NOT remove grounding prong of AC plug. To do so may cause exposure to potentially lethal voltage levels and will void the warranty on this product.

POWER INDICATOR

This green LED will light whenever the dimmer pack is receiving AC power and functioning properly.

CIRCUIT PROTECTION

Both the N4600 and N5000 are equipped with safety circuit interruption devices to protect the units from becoming overloaded. The N4600 utilizes internal fusing while the 5000 features a resettable external circuit breaker as well as internal fusing.

MOUNTING

Leviton N4600 and N5000 Dimmer Packs are designed to be mounted vertically. Each dimmer pack is provided with two mounting flanges or ears designed for securing to the center of truss bars. Most truss bars are already properly drilled to accept mounting of dimmers, however in some cases you may need to drill holes in your truss bar to accommodate your dimmer pack.

AC OUTPUT RECEPTABLES

Dual standard 5-15R AC outlet receptacles are provided for each channel of both the N4600 and N5000. These receptacles provide power to the lamps in your lighting system. The amount of power supplied to these outlets controls the intensity of the lights they drive. Multiplexed signals received from your Leviton controller are translated into power levels to achieve the desired light intensity. Each dual receptacle corresponds to a single channel with the maximum power capabilities described in the specifications section of this manual. Under no circumstances should maximum recommended power capabilities be exceeded. To do so may be hazardous and will void your warranty. Most incandescent lamps and fixtures may be connected to these outlets. Do not connect any other electrical appliances or equipment to the dimmer packs.

MICROPLEX INPUTS

Both the male and female Microplex connectors may be used for input signals. Microplex technology allows your system to be connected using standard microphone cables or even audio snakes. Microplex may be received from your Leviton controller or another dimmer pack. The Microplex system also provides D.C. phantom power to your control unit eliminating the need for AC power cords on most Leviton controllers. Up to one hundred twenty-eight individual control channels plus phantom power to your controller may be transmitted through a single microphone cable.

MICROPLEX EXPANSION

The male and female Microplex connectors are wired in parallel allowing either one to be used for input or output of control signals. When used as an output, the Microplex connectors will provide control signals to another dimmer pack. This is called daisy chaining and makes expansion of your system easy.

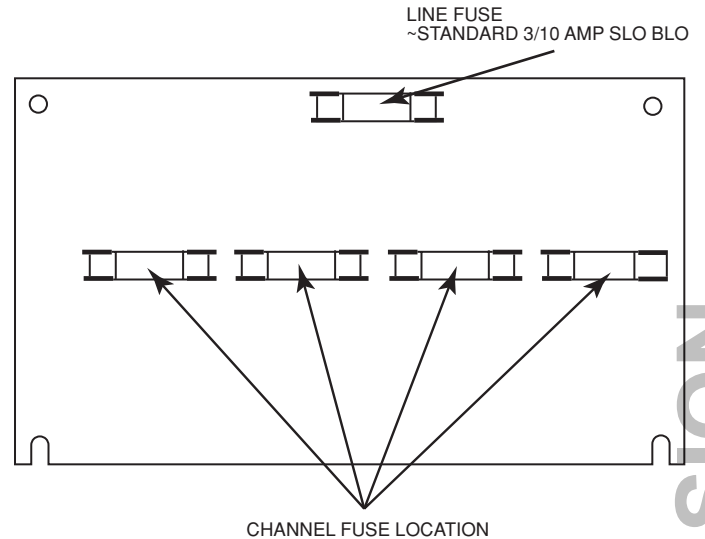
OPERATIONAL HINTS

1. Always place your dimmer packs as close as possible to the lights they are powering. This will reduce the number of extension cords required to hook up your system.
2. Use a power outlet located as close as possible to an electrical service panel (fuse box). It is best if the power outlet is on a separate circuit breaker or fuse from your audio system.
3. Ensure that the rating of the breaker or fuse for the chosen outlet is adequate.
The required rating (in amps) of the breaker or fuse may be calculated with the following formula:
 $I = P/E$
Where I = the current (in amps)
P = the power (in watts)
E = the voltage (in volts)
For example: if you are using six, 300-watt lamps (1800 watts total), you should have at least a 15 amp electrical service.
4. Always use quality 14 gauge (or heavier) grounded extension cords.
5. DO NOT place AC power cables or extension cords for lighting near sensitive audio cables (guitar cords, mic cables, audio snakes, etc.).

TROUBLESHOOTING

WARNING: PLEASE DISCONNECT POWER BEFORE REMOVING COVER FOR SERVICE, AS HIGH VOLTAGE IS OTHERWISE PRESENT.

Symptom	Check List
No output, LED indicators show status OK	<ol style="list-style-type: none"> 1. Check fixture lamps. 2. Check channel fuses (Refer to diagram).
No power	<ol style="list-style-type: none"> 1. Check line fuse (Refer to diagram). 2. If fuse blows after replacement. Check transformer.
Lights always OFF	<ol style="list-style-type: none"> 1. Check channel fuses. 2. Check fixture lamps. 3. Check blackout feature on console. 4. Check DIP switch assignment. 5. Check maximum dimmer assignment on control console. 6. Check soft patch on control console.
Lights always ON	<ol style="list-style-type: none"> 1. Check DIP switch assignment. 2. Check signal cable. 3. Check output mode of control console.
Lights and LED indicators on dimmer pack flicker or glow dimly.	<ol style="list-style-type: none"> 1. Transmission length may be a problem. Get console closer with a shorter cable to verify. Remedy may be the use of 18-gauge cable or an external power supply at the console (Call dealer or Technical Services for details). 2. Check pre-heat setting of console.



REPLACE WITH VALUES AS LISTED BELOW:

N4600 = 8 AMP FAST BLO, 250 VAC
N5000 = 15 AMP FAST BLO, 250 VAC

FOR CANADA ONLY

For warranty information and/or product returns, residents of Canada should contact Leviton in writing at Leviton Manufacturing of Canada Ltd to the attention of the Quality Assurance Department, 165 Hymus Blvd, Pointe-Claire (Quebec), Canada H9R 1E9 or by telephone at 1 800 405-5320.

LIMITED 2 YEAR WARRANTY AND EXCLUSIONS

Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that this product at the time of its sale by Leviton is free of defects in materials and workmanship under normal and proper use for two years from the purchase date. Leviton's only obligation is to correct such defects by repair or replacement, at its option. For details visit www.leviton.com or call 1-800-824-3005. This warranty excludes and there is disclaimed liability for labor for removal of this product or reinstallation. This warranty is void if this product is installed improperly or in an improper environment, overloaded, misused, opened, abused, or altered in any manner, or is not used under normal operating conditions or not in accordance with any labels or instructions. There are no other or implied warranties of any kind, including merchantability and fitness for a particular purpose, but if any implied warranty is required by the applicable jurisdiction, the duration of any such implied warranty, including merchantability and fitness for a particular purpose, is limited to two years. Leviton is not liable for incidental, indirect, special, or consequential damages, including without limitation, damage to, or loss of use of, any equipment, lost sales or profits or delay or failure to perform this warranty obligation. The remedies provided herein are the exclusive remedies under this warranty, whether based on contract, tort or otherwise.