# LEVITON UPB<sup>™</sup> 1000W WALL SWITCH DIMMER AND AUXILIARY SWITCH

55A00-1 (Leviton UPB<sup>™</sup> 1000W Wall Switch Dimmer)

37A00-1 (Leviton Auxiliary Switch)

# INSTALLATION AND OPERATING INSTRUCTIONS

WARNINGS AND CAUTIONS

For indoor use only.

• Use this device with copper or copper-clad wire only.

#### 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!
- · To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.
- SAVE THESE INSTRUCTIONS.

### About Your Leviton UPB<sup>™</sup> Wall Switch Dimmer

The Leviton UPB™ Wall Switch Dimmer (Figure 1) is a high quality light-switch/dimmer that not only allows for local rocker switch control of a lighting load but also incorporates UPB™ two-way powerline communication technology that gives it the ability to be remotely controlled by other UPB<sup>™</sup> compatible controllers. The Leviton UPB<sup>™</sup> Wall Switch is highly configurable to allow for behaviors customized to each individual's desires. The Leviton UPB<sup>™</sup> Wall Switch is capable of storing up to 16 preset light levels and fade rates to create powerful lighting scenes. The Leviton UPB™ Wall Switch is also capable of transmitting UPB™ messages (including a current light level report) when rocker switch events occur. The Leviton UPB™ Wall Switch is capable of being set to a non-dimming mode in order to control such loads as fluorescent lights.

# Figure 1 - 55A00-1 Leviton UPB™ Wall Switch Dimmer



#### About Your 37A00-1 Leviton Auxiliary Switch

The 37A00-1 Leviton Auxiliary Switch (Figure 2) is a low cost (optional) companion device to the Leviton UPB™ Wall Switch. The 37A00-1 has a rocker switch that controls the Leviton UPB™ Wall Switch in the same exact way that its local rocker switch does





#### Installation Instructions

The Leviton UPB<sup>™</sup> Wall Switch Dimmer is wired directly to the lighting circuit and can (optionally) be controlled by one or more Leviton Auxiliary Switch producing three, four, or five-way circuits. Multi-way circuits make it possible for a group of switches to control the same set of lights. This section will illustrate how to hook-up the connections. NOTES

- 1. Refer to Figures 1 and 2 to determine the wire colors of the hook-up.
- 2. All Leviton UPB<sup>™</sup> Wall Switch Dimmers require a neutral (white) connection.
- 3. Leviton Auxiliary Switches require that the Line (black) wire be accessible. This wire may be connected to either phase of the 120/240V supply.
- 4. The blue and/or gray wire on the Leviton Auxiliary Switch Dimmer can be connected to either earth ground or neutral. The blue and/or gray wire serves only to light the LED on the Auxiliary Switch. This LED does not indicate anything except that power is applied and to serve as a night-light.

## Figure 3 – Wiring Diagram



#### AIR-GAP SWITCH

The Leviton UPB™ Wall Switch rocker switch has an air-gap switch that will remove all power from the load for safe installation and bulb replacement. To activate the air-gap switch firmly press the rocker bottom until you hear a loud "click" or you see the SYSTEM "OFF" label on the top rocker.

## Installation Procedure

- 1. Remove the faceplate from the existing wall switch.
- 2. Unscrew and pull the existing wall switch out of the wall box.
- 3. Disconnect the wires from the existing wall switch. Identify the "Line", "Neutral", "Load" and "Traveler" wires.
- 4. Install the 5 connecting wires per wiring configuration shown in Figure 3.
- NOTE: Be sure that the Leviton UPB<sup>™</sup> Wall Switch is in the SYSTEM "OFF" position by firmly pressing the Rocker
- Bottom until you click the air-gap switch to the open position or you see the SYSTEM "OFF" label on top of the Rocker. 5. Optionally install any Leviton Auxiliary Switch per wiring configuration shown in Figure 3.
- 6. After all connections have been made, be certain that all wire connectors are firmly attached and there is no exposed
- copper
- 7. Gently place the wires and Wall Switch into the wall box, with light emitting diode (LED) at the top of device, and screw in place.
- 8. Before installing the faceplate, restore power to the circuit, and firmly press the top of the Leviton UPB™ Wall Switch Dimmer until it snaps out of the SYSTEM "OFF" position.
- 9. After testing the Leviton UPB<sup>™</sup> Wall Switch Dimmer for proper local operation (per Table 2), install the faceplate cover(s) to the outside of the Leviton UPB<sup>™</sup> Wall Switch Dimmer(s).

#### De-rating Information

with the following chart

| Model   | Device  | No Fins      | No Fins Removed | One Fin Removed | Both Fins Removed |
|---------|---------|--------------|-----------------|-----------------|-------------------|
|         | Maximum | Removed Deep | Normal Depth    | Next to One     | Next to Two       |
|         | Load    | Box          | Box             | Dimmer          | Dimmers           |
| 55A00-1 | 1000W   | 1000W        | 900W            | 800W            | 600W              |

NOTE: When the 55A00-1 is mounted in a normal depth wall box it must also be de-rated from 1000W down to 900W.

# Using Your Leviton UPB<sup>™</sup> Wall Switch Dimmer

# Local Rocker Switch Operation in Table 2.

| Rocker Event | Top Rocker  | Bottom Rocker   |
|--------------|---|---|
| Single-Tap   | Brightens the light to 100% (on) at a 0.8-second fade rate.                   | Fades the light to 0% (off) at a 1.6-second fade rate.                  |
| Double-Tap   | Snaps the light to 100% (on).   | Snaps the light to 0% (off).  |
| Hold         | Starts fading (brightening) the light towards 100% at a 3.3-second fade rate. | Starts fading (dimming) the light towards 0% at a 3.3-second fade rate. |
| Release      | Stops brightening the light.  | Stops dimming the light.  |

#### LED Indicator

in Table 3 below

# Leviton U The load connected to th The load connected to th

# Using Your Leviton Auxiliary Switch

The Leviton UPB™ Wall Switch can (optionally) be connected to one or more Leviton Auxiliary Switch producing three, four, or five-way lighting circuits. Each Leviton Auxiliary Switch has a Decora® rocker switch that can be used to control the lighting load of the Leviton UPB™ Wall Switch in the same way as previously described in Table 2.



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· To reduce the risk of overheating and possible damage to other equipment, do not use switch, when set to dimming-capable, to control a receptacle, a motor-operated appliance, a fluorescent lighting fixture or a transformer-supplied appliance.

For a proper fit in a multiple gang installation, it may be necessary to remove one or both sides (break-off tabs) from the mounting plate (see Figure 1). When tabs are removed, the overall rating of the device must be reduced in accordance

The Leviton UPB™ Wall Switch Dimmer is packed full of different options and configurations that can be programmed into it using the UPB<sup>™</sup> UPStart configuration software. This section will describe the operation of the Leviton UPB<sup>™</sup> Wall Switch Dimmer in its factory default configuration. Please refer to the section entitled "Configuring the Leviton UPB™ Wall Switch Dimmer" for a description of the many other configuration options available.

The Leviton UPB™ Wall Switch Dimmer has a rocker switch that can be used to control the lighting load as described below

#### **Table 2: Rocker Switch Operation**

The Leviton UPB<sup>™</sup> Wall Switch Dimmer comes equipped with a multi-color LED indicator that is normally lit to blue. This LED indicator will blink different colors to indicate UPB™ communication status and configuration status as outlined

### Table 3: Status LED Operation

| PB™ Wall Switch Dimmer Status            | LED Color | ш |
|--|-----------|---|
| e Leviton UPB™ Wall Switch Dimmer is off | Blue      |   |
| e Leviton UPB™ Wall Switch Dimmer is on  | Black     |   |

# Configuring the Leviton UPB<sup>™</sup> Wall Switch Dimmer

The Leviton UPB<sup>™</sup> Wall Switch Dimmer is highly configurable. Many of its configuration options can only be enabled or modified with the use of the UPB<sup>™</sup> UPStart configuration software. **Table 4** describes the many configuration options available that can be set up with the use of the UPB<sup>™</sup> UPStart configuration software.

**NOTE:** Although the factory default operation of the Leviton UPB<sup>™</sup> Wall Switch is useful in many situations, it is highly recommended that your Leviton UPB<sup>™</sup> Wall Switch be configured with a Leviton controller or UPB<sup>™</sup> UPStart configuration software so that you can take advantage of its many configurable features.

# Table 4: 55A00-1 UPB<sup>™</sup> Wall Switch Configuration Options

| Option                                      | Factory Default  | Possibilities   |
|---|--|---|
| Dimming-Capable                             | Yes  | Yes or No (on/off only)   |
| Default Fade Rates                          | On = 0.8 seconds<br>Off = 1.6 seconds                                      | 16 different fade rates from 0 (Snap) to 1 hour.  |
| Top Rocker Single-Tap Action                | Fade to 100% at the<br>Default Fade Rate.                                  | Any Level (0% - 100% including Last On Level) at any of 16 Fade Rates.  |
| Top Rocker Double-Tap Action                | Snap to 100%.  | Any Level (0% - 100% including Last On Level) at any of 16 Fade Rates.  |
| Bottom Rocker Single-Tap Action             | Fade to 0% at the Default Fade Rate.                                       | Any Level (0% - 100% including Last On Level) at any of 16 Fade Rates.  |
| Bottom Rocker Double-Tap Action             | Snap to 0%.  | Any Level (0% - 100% including Last On Level) at any of 16 Fade Rates.  |
| Rocker Switch UPB Transmissions             | Disabled   | Configure any of 15 different UPB Messages (including<br>Status Report) to be transmitted upon any Rocker<br>Switch Event.  |
| UPB Transmission Attempts                   | 2  | 1, 2, 3, or 4 transmissions per event.  |
| Preset Light Levels and Fade Rates (Scenes) | Linked to six<br>pushbuttons on the<br>Leviton 6-Button<br>Room Controller | Link as many as 16 different Preset Light Levels and<br>Fade Rates to components on UPB™ compatible<br>controllers.   |
| UPB ID                                      | NID = 255<br>UID = 003   | Many UPB Identification parameters can be configured<br>including the Network ID (NID), Unit ID (UID), Network<br>Password, Network Name, Room Name, Device Name,<br>etc. |
| LED Color Control                           | (See Table 3)  | Any of 16 different LED modes consisting of the colors blue, red, magenta, and black.   |

# Changing Preset Light Levels

The Leviton UPB<sup>™</sup> Wall Switch Dimmer is specially designed to work with an Leviton controller consisting of Leviton Room Controllers and Leviton House Controllers. Pushbuttons on these controllers can be configured to activate the Preset Light Levels and Fade Rates stored in the Leviton UPB<sup>™</sup> Wall Switch Dimmer. Once configured, the homeowner can easily adjust the Preset Light Level that gets activated by a particular pushbutton by following this simple procedure.

# Step Operation

| 1 | Press the pushbutton on the Leviton Room Controller or Leviton House Controller to activate the currently stored Preset Light Level.         |
|---|--|
| 2 | Use the local rocker switch on the Leviton UPB <sup>™</sup> Wall Switch Dimmer to set the desired Preset Light Level.                        |
| 3 | Press the pushbutton on the Room Controller or House Controller five times quickly.  |
| 4 | The Leviton UPB <sup>™</sup> Wall Switch Dimmer will flash its lighting load one time to indicate that it stored the new Preset Light Level. |
|   |  |

## Putting the Wall Switch Dimmer Into Setup Mode

The Leviton UPB<sup>™</sup> Wall Switch Dimmer can be put into the Setup Mode by the following steps:

| Step | Operation   |
|------|---|
| 1    | Tap the Leviton UPB <sup>™</sup> Wall Switch local (or remote) rocker switch 5 times quickly.   |
| 2    | The Leviton UPB™ Wall Switch Dimmer will flash its lighting load one time and blink its LED blue to indicate that it is in Setup Mode. <b>NOTE:</b> the device will automatically exit Setup Mode after 5 minutes.w |

#### Setting Factory Defaults

The Leviton UPB<sup>™</sup> Wall Switch Dimmer can be set back to its factory defaults by the following steps:

| Step | Operation  |
|------|--|
| 1    | Identify the Leviton UPB <sup>™</sup> Wall Switch Dimmer that you want to set factory defaults by tapping its rocker switch 5 times quickly.                             |
| 2    | The Leviton UPB <sup>™</sup> Wall Switch Dimmer will flash its lighting load one time and blink its LED blue to indicate that it is ready to be set to factory defaults. |
| 3    | Set the factory defaults by tapping its rocker switch 10 times quickly.  |
| 4    | The Leviton UPB <sup>™</sup> Wall Switch Dimmer will flash its lighting load one time and blink its LED red to indicate that it has been set to factory defaults.        |
| 5    | Tap the rocker twice to stop the blinking.   |

#### FCC COMPLIANCE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses a instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the exo of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

· Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

#### 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

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Leviton warrants to the original consumer purchaser and not for the benefit of anyone else that products manufactured by Leviton under the Leviton brand name ("Product") will be free from defects in material and workmanship for the time periods indicated below, whichever is shorter: • Ome • OmniLT, Omni IIe, and Lumina: Two (2) years from installation or 30 months from manufacture date. • Thermostats, Accessories: Two (2) years from installation or 30 months from manufacture date. • Batteries: Rechargeable batteries in products are warranted for ninety (90) days from date Products with Windows® Operating Systems: During the warranty period, Leviton will restore corrupted operating systems to factory default at no charge, provided that the product has been used as originally intended. Installation of non-Leviton software or Limited Warranty is limited to the repair or replacement, at Leviton's option, of Product that fails due to defect in material or workmanship. Leviton reserves the right to replace product under this Limited Warranty with new or remanufactured product. Leviton is no replaced product is then warranted under the terms of this Limited Warranty for the remainder of the Limited Warranty time period or ninety (90) days, whichever is longer. This Limited Warranty does not cover PC-based software products. Leviton is no not responsible for issues related to improper installation, including failure to follow written Installation and operation instructions, normal wear and tear, catastrophe, fault or negligence of the user or other problems external to the Product. To view com

### SPECIFICATIONS

# Mo Incandescent Loads Dim Inductive Loads Dimmi Fluorescent Loads Non Power Maximum Dimmi Current Maximum Non-Connections LED Indicator Dimensions Weight Mounting Input Power

Input Frequency Operating Temp

| odel Number | 55A00-1            |
|-------------|--------------------|
| mming       | Yes                |
| ng          | Yes                |
| -dimming    | Yes (configurable) |
| ing         | 1000W / 1000VA     |
| dimming     | 8A                 |
|             | 16 GA              |
|             | Yes                |
|             | 4.3 X 2.5 X 1.9 in |
|             | 0.3 lb.            |
|             | Standard J box     |
|             | 120 ± 12 VAC       |
|             | 60 ± 3 Hz          |
|             | -40 °F to 104 °F   |

| and can radiate radio frequency energy and, if not installed and used in accordance with the quipment off and on, the user is encouraged to try to correct the interference by one or more  |
|---|
|   |
|   |
| at 1 800 405-5320.  |
| erved. Use herein of third party trademarks, service marks, trade names, brand names and/or   |
| <u> </u>  |
| <b>IniPro II and Lumina Pro:</b> Three (3) years from installation or 42 months from manufacture date.<br>te of purchase. <b>Note:</b> Primary (non-rechargeable) batteries shipped in products are not warranted.<br>modification of the operating system voids this warranty. Leviton's obligation under this<br>be responsible for labor costs of removal or reinstallation of Product. The repaired or<br>of responsible for conditions or applications beyond Leviton's control. Leviton is<br>mplete warranty and instructions for returning product, please visit us at www.leviton.com. |
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