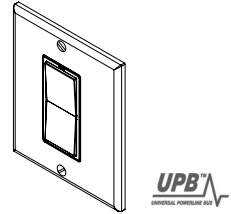




# HAI UPB™ High Power Wall Switch Dimmer and HAI Auxiliary Switch Installation and Operating Instructions



## For Models:

55A00-2 (HAI UPB™ 1500W Wall Switch Dimmer)

55A00-3 (HAI UPB™ 2400W Wall Switch Dimmer)

37A00-1 (HAI Auxiliary Switch)

## READ THESE INSTRUCTIONS BEFORE INSTALLING DEVICE

*This Wall Switch Dimmer is intended for installation in accordance with the National Electrical Code and local regulations. It is recommended that a qualified electrician perform this installation. Retain these instructions for reference or download the manual from [www.homeauto.com](http://www.homeauto.com).*

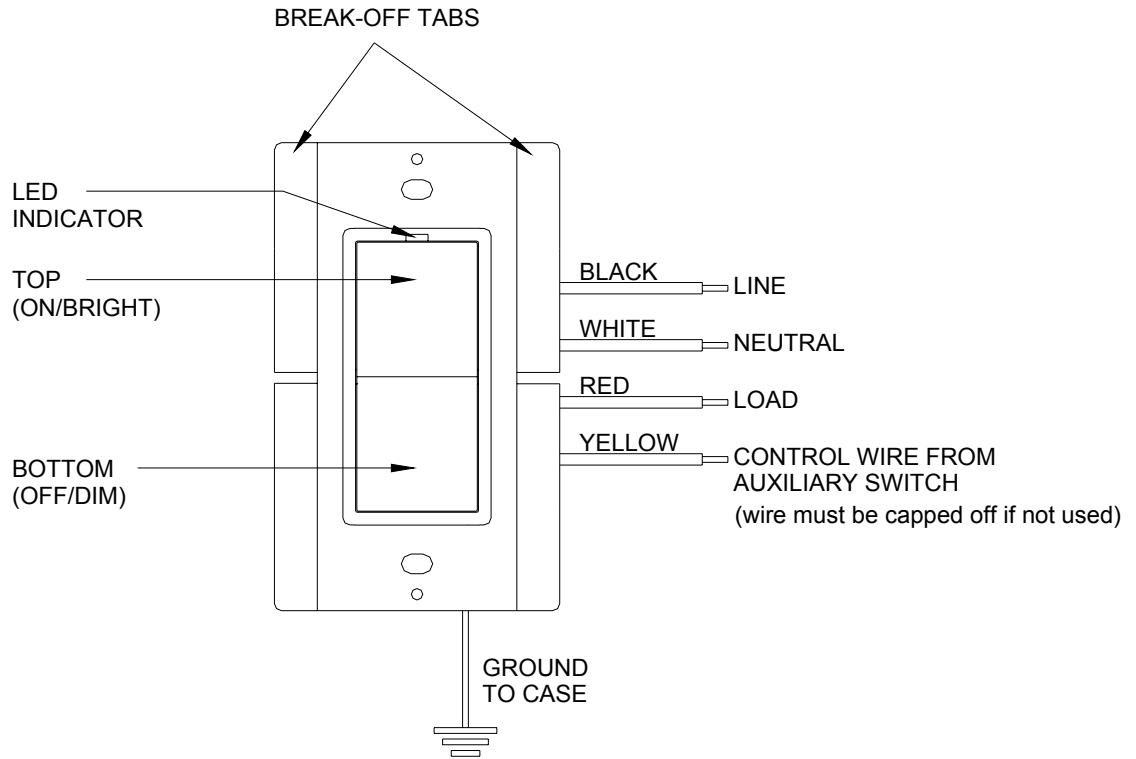
*To reduce the risk of overheating and possible damage to other equipment, do not use switch, when set to dimming-capable, to control a receptacle, a motor-operated appliance, a fluorescent lighting fixture or a transformer-supplied appliance. This product is for indoor use only. Connect only copper or copper clad wire to this device.*

## Important Notes Prior to Installation

1. All HAI UPB™ Wall Switch Dimmers require a neutral (white) connection wire.
2. Be sure that all power to the load has been disconnected by turning off the circuit breaker. Installing an HAI UPB™ Wall Switch with power on may expose you to dangerous voltages and may damage the device.

## About Your HAI UPB™ Wall Switch Dimmer

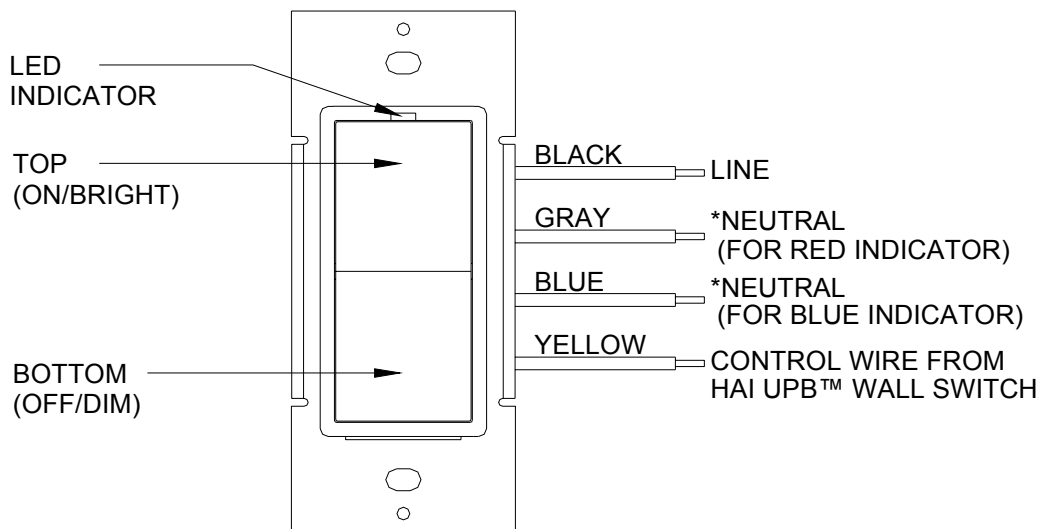
The HAI UPB™ Wall Switch Dimmer (Figure 1) is a high quality light-switch/dimmer that not only allows for local rocker switch control of a lighting load but also incorporates UPB™ two-way powerline communication technology that gives it the ability to be remotely controlled by other UPB™ compatible controllers.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



**Figure 1: HAI UPB™ Wall Switch Dimmer**

## **About Your 37A00-1 HAI Auxiliary Switch**

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



**Figure 2: 37A00-1 HAI Auxiliary Switch**

# Installation Instructions

The HAI UPB™ Wall Switch Dimmer is wired directly to the lighting circuit and can (optionally) be controlled by one or more HAI 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 HAI UPB™ Wall Switch Dimmers require a neutral (white) connection.
3. HAI 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 HAI 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.

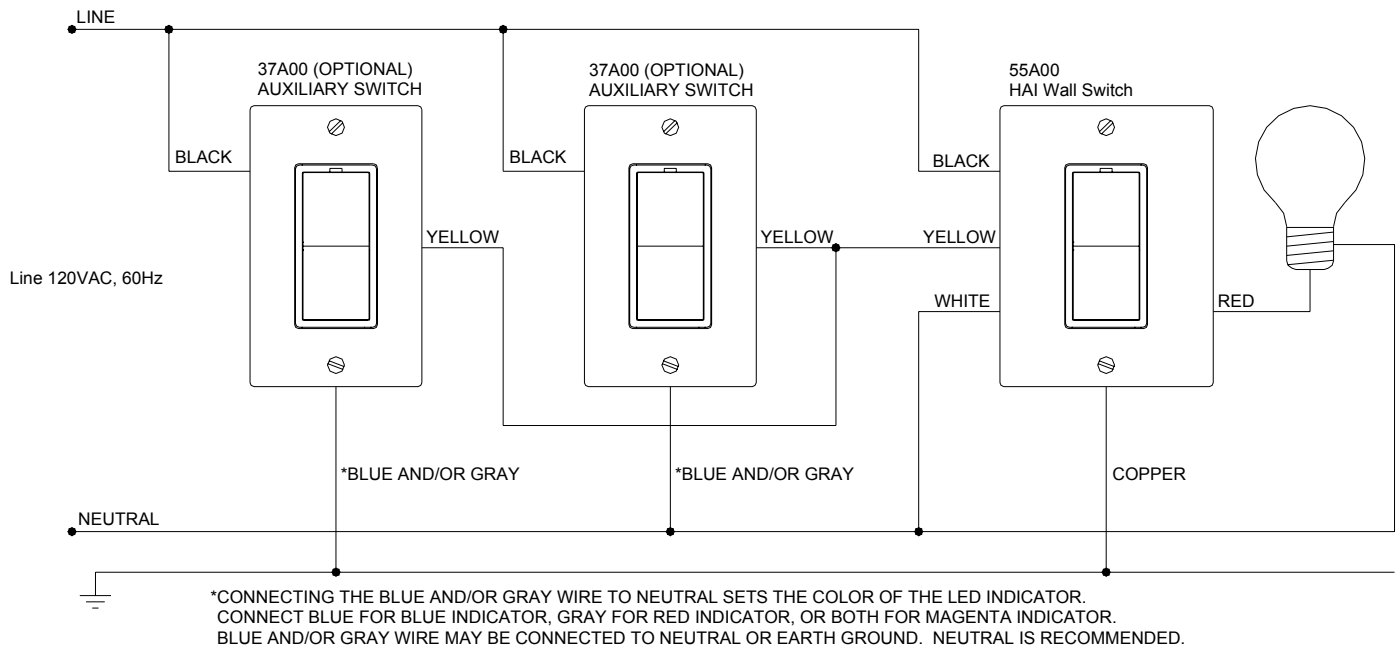


Figure 3: Wiring Diagram

## Air-Gap Switch

The HAI 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 HAI UPB™ 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 HAI 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 HAI UPB™ Wall Switch Dimmer until it snaps out of the SYSTEM “OFF” position.
9. After testing the HAI UPB™ Wall Switch Dimmer for proper local operation (per Table 2), install the faceplate cover(s) to the outside of the HAI UPB™ Wall Switch Dimmer(s).

## De-rating Information

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 with the following chart:

| Model   | Device Maximum Load (LCP*) | No Fins Removed Large Box** | No Fins Removed Normal Depth Box | One Fin Removed Next to One Dimmer | Both Fins Removed Next to Two Dimmers |
|---------|----------------------------|-----------------------------|----------------------------------|------------------------------------|---------------------------------------|
| 55A00-2 | 1500W                      | 1200W                       | 1000W                            | 800W                               | 700W                                  |
| 55A00-3 | 2400W                      | 2000W                       | 1800W                            | 1600W                              | 1400W                                 |

**Table 1: 55A00-2 and 55A00-3 De-rating Information**

\* LCP = PCS Lighting Control Panel

\*\* Large Wall Box = greater than 40 CU IN (1500W), greater than 90 CU IN (2400W)

# **Using Your HAI UPB™ Wall Switch Dimmer**

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

## **Local Rocker Switch Operation**

The HAI UPB™ Wall Switch Dimmer has a Decora-style rocker switch that can be used to control the lighting load as described below 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.  |

**Table 2: Rocker Switch Operation**

## **LED Indicator**

The HAI UPB™ 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 in Table 3 below.

| HAI UPB™ Wall Switch Dimmer Status                           | LED Color |
|--|-----------|
| The load connected to the HAI UPB™ Wall Switch Dimmer is off | Blue      |
| The load connected to the HAI UPB™ Wall Switch Dimmer is on  | Black     |

**Table 3: Status LED Operation**

# **Using Your HAI Auxiliary Switch**

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

# **Configuring the HAI UPB™ Wall Switch Dimmer**

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

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

| 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 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 Status Report) to be transmitted upon any Rocker Switch Event.   |
| UPB Transmission Attempts                   | 2   | 1, 2, 3, or 4 transmissions per event.   |
| Preset Light Levels and Fade Rates (Scenes) | Linked to six pushbuttons on the HAI 6-Button Room Controller | Link as many as 16 different Preset Light Levels and Fade Rates to components on UPB™ compatible controllers.  |
| UPB ID                                      | NID = 255<br>55A00-2 = UID 004<br>55A00-3 = UID 005           | Many UPB Identification parameters can be configured including the Network ID (NID), Unit ID (UID), Network Password, Network Name, Room Name, Device Name, etc. |
| LED Color Control                           | (See Table 3)   | Any of 16 different LED modes consisting of the colors blue, red, magenta, and black.  |

**Table 4: 55A00-2 and 55A00-3 Configuration Options**

## **Changing Preset Light Levels**

The HAI UPB™ Wall Switch Dimmer is specially designed to work with an HAI controller consisting of HAI Room Controllers and HAI House Controllers. Pushbuttons on these controllers can be configured to activate the Preset Light Levels and Fade Rates stored in the HAI UPB™ 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 HAI Room Controller or HAI House Controller to activate the currently stored Preset Light Level. |
| 2    | Use the local rocker switch on the HAI UPB™ 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 HAI UPB™ 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 HAI UPB™ Wall Switch Dimmer can be put into the Setup Mode by the following steps:

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

## **Setting Factory Defaults**

The HAI UPB™ Wall Switch Dimmer can be set back to its factory defaults by the following steps:

| Step | Operation  |
|------|--|
| 1    | Identify the HAI UPB™ Wall Switch Dimmer that you want to set factory defaults by tapping its rocker switch 5 times quickly.                             |
| 2    | The HAI UPB™ 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 HAI UPB™ 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.   |

# SPECIFICATIONS

| Model Number                         | 55A00-2               | 55A00-3              |
|--------------------------------------|-----------------------|----------------------|
| <b>Incandescent Loads Dimming</b>    | Yes                   | Yes                  |
| <b>Inductive Loads Dimming</b>       | Yes                   | Yes                  |
| <b>Fluorescent Loads Non-dimming</b> | Yes (configurable)    | Yes (configurable)   |
| <b>Power Maximum Dimming</b>         | 1500W / 1500VA        | 2400W / 2400VA       |
| <b>Current Maximum Non-dimming</b>   | 12.5 A                | 20 A                 |
| <b>Connections</b>                   | 14 GA                 | 12 GA                |
| <b>LED Indicator</b>                 | Yes                   | Yes                  |
| <b>Dimensions (H x W x D)</b>        | 4.68 X 2.75 X 1.25 in | 4.68 X 4.5 X 1.25 in |
| <b>Weight</b>                        | 0.5 lb.               | 0.7 lb.              |
| <b>Minimum Load</b>                  | 60 W                  | 60 W                 |
| <b>Input Power</b>                   | 120 ± 12 VAC          | 120 ± 12 VAC         |
| <b>Input Frequency</b>               | 60 ± 3 Hz             | 60 ± 3 Hz            |
| <b>Operating Temp</b>                | -40 °F to 104 °F      | -40 °F to 104 °F     |

## LIMITED WARRANTY

HAI warrants this product against defects in material and workmanship, under normal use and service, for a period of two (2) years from the date of purchase. During the warranty period, HAI will repair or replace, at its sole option, if this product fails due to defect. This warranty does not cover the cost of removal or reinstallation of any product. **This warranty does not cover failure caused by normal wear, damage to the product while in your possession (other than damage caused by defect or malfunction), or by its improper installation, including failure to follow the written installation and operation instructions, alterations, misuse, or abuse.** The remedies provided for in this warranty are the sole and exclusive remedies thereof. In no event shall HAI be liable for incidental expenses or consequential loss or damages. For the complete HAI Warranty for USA policy, see the HAI web site at [www.homeauto.com](http://www.homeauto.com).

**Any implied warranties, including warranties of merchantability and fitness for particular use or purpose are limited to a period of two (2) years from purchase date.** This warranty gives you specific legal rights, and you may have other legal rights, which vary from state to state. Some limitations may not apply to you.

For warranty and repair service within the continental United States, send defective unit carefully packaged, postage prepaid, along with description of trouble, name, return address, and phone number to: HAI, Repair Department, 4330 Michoud Blvd, New Orleans, LA, 70129. HAI will pay return shipping charges via normal ground service.

Outside of the continental United States: Contact an Authorized Distributor for repair/replacement instructions.

