HAI® HAI UPB™ Wall Switch and Auxiliary Switch

Installation and Operating Instructions

For the following Models:

35A00-1 HAI 600W Dimmer Switch, 35A00-1CFL 600W CFL/LED Dimmer, 35A00-3 HAI 600W Non-Dimming Switch (collectively referred to as HAI UPB™ Wall Switch, in this document), and 37A00-1 HAI Auxiliary Switch

READ THESE INSTRUCTIONS BEFORE INSTALLING DEVICE

This HAI UPB™ Wall Switch and Auxiliary Switch is intended for installation in accordance with the National Electrical Code and local codes and regulations. It is recommended that a qualified electrician perform this installation. Retain these instructions for reference.

To reduce the risk of overheating and possible damage to other equipment, when configured as dimming-capable, do not install to control a receptacle, a motor-operated appliance, or a transformer-supplied appliance.

This product is for indoor use only. Connect only copper wire to this device.

Important Notes Prior To Installation

1. All HAI UPB™ Wall Switches 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 or Auxiliary Switch with power on may expose you to dangerous voltage and may damage the device.

HAI UPB™ Wall Switch Overview

The HAI UPB™ Wall Switch (Figure 1) allows for local control of lighting by using the Decora-style rocker switch. It also incorporates the UPB™ two-way powerline communication technology that gives it the ability to be remotely controlled by UPB™ compatible controllers. The HAI UPB™ Wall Switch is also capable of transmitting UPB™ messages (including current light level) when the rocker switch is turned on, turned off, brightened, or dimmed.

Each switch can be configured to custom fit an individual's lifestyle and desires. The HAI Dimmer Switch is capable of storing up to 16 preset light levels and fade rates to create powerful lighting scenes. The HAI Non-Dimming Switch is used to control such loads as fluorescent lights and ceiling fans.
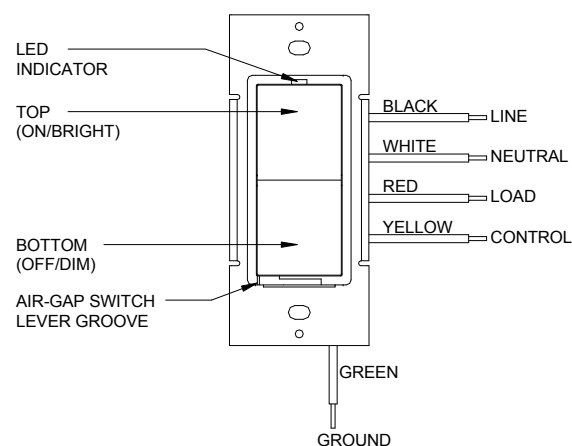
Figure 1 - HAI UPB™ Wall Switch

HAI Auxiliary Switch Overview

The 37A00-1 HAI Auxiliary Switch (Figure 2) is an optional companion device used with the HAI UPB™ Wall Switch for multi-way circuits. The HAI Auxiliary Switch has a Decora-style rocker switch that controls the lighting load in the exact same manner as the Decora-style rocker switch on the HAI UPB™ Wall Switch.
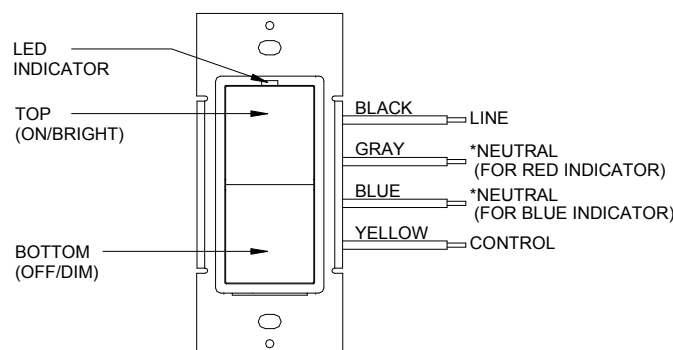
Figure 2 – HAI Auxiliary Switch

Changing Switch Color

The color of the HAI UPB™ Wall Switch and Auxiliary Switch may be changed to complement the interior décor. The HAI UPB™ Wall Switch and Auxiliary Switch is supplied with a white switch plate. Additional colors are available; contact your HAI distributor for more information. When changing the switch plate, make sure that the switch is disconnected from all power, and proceed as follows:
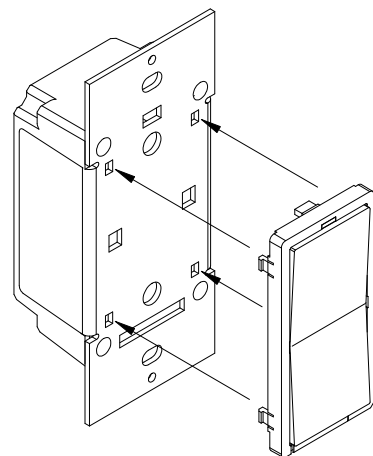
Figure 3 – Changing Switch Color

The switch plate attaches to the HAI UPB™ Wall Switch and Auxiliary Switch with two latches on the right and two on the left. Using a small-bladed screwdriver, gently depress the upper and lower latch on one side while lifting up on the plate. Once the latches are released on one side, remove the switch plate from the other side.

1. Align the latches of the new switch plate to the openings on the mounting plate and gently snap into place.

INSTALLATION INSTRUCTIONS

The HAI UPB™ Wall Switch is wired directly to the lighting circuit and can be controlled by adding one or more optional HAI Auxiliary Switches producing multi-way circuits. Multi-way circuits make it possible for a group of switches to control the same light or set of lights. This section will illustrate how to make the connections.

Notes:

1. Refer to Figures 1 and Figure 2 to determine the wire colors for each connection.

2. All HAI UPB™ Wall Switches require a neutral (white) connection.

3. The Line (black) wire must be accessible for the installation of all HAI Auxiliary Switches. This wire may be connected to either phase of the 120/240V supply. The blue and/or gray wire on the HAI Auxiliary Switch can be connected to either earth ground or neutral. The blue and/or gray wire is only used to light the LED on the switch. This LED only indicates that power is applied and serves as a night-light. Connect the blue wire only to light the LED blue. Connect the gray wire only to light the LED red. Connect both the blue wire and the gray wire to light the LED magenta.
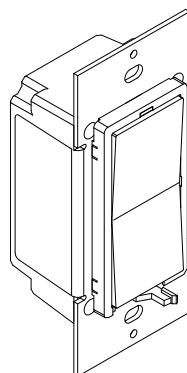
Air-Gap Switch Lever

The HAI UPB™ Wall Switch has an air-gap switch lever that will remove all power from the load for safe switch installation and light bulb replacement. To activate the air-gap switch, using your fingernail, pry open the lever at the groove (Figure 1). Swing the lever fully open so that it is perpendicular to the bottom rim (Figure 4). After servicing, push the lever fully closed so that it is parallel to the bottom rim. The lever must be pushed fully closed for normal operation.

Figure 4 – Air-Gap Switch Lever

Installation Procedure

1. Be sure that all power to the load has been disconnected by turning off the circuit breaker.

2. If applicable, remove the faceplate from the existing wall switch, remove the existing wall switch from the wall box, and disconnect the wires from the existing wall switch. Identify the "Line", "Neutral", "Load" and "Traveler" (if applicable) wires.

3. Be sure that the air-gap switch lever on the HAI UPB™ Wall Switch is fully open.

4. Remove ¾" of insulation from each of the wires on the HAI UPB™ Wall Switch. Install the HAI UPB™ Wall Switch by connecting wires per wiring configuration shown in Figure 5.

5. Install any optional HAI Auxiliary Switch per wiring configuration shown in Figure 5.

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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 HAI UPB™ Wall Switch into the wall box with the LED at the top of device. Using the supplied screws, attach the HAI UPB™ Wall Switch to the wall box.

8. Before installing the faceplate, restore power to the circuit, and then fully close the air-gap switch lever.

9. After testing the HAI UPB™ Wall Switch and Auxiliary Switch for proper local operation (see Table 2 and Table 3), install a Decora-style faceplate over each switch.

HAI UPB™ Wall Switch De-Rating

In two-gang installations, there is no need to de-rate the 35A00-1, 35A00-1CFL, or 35A00-3. In three-gang installations, each switch must be de-rated from 600W to 500W.

Model	Device Maximum Load	Next to One Dimmer	Next to Two Dimmers
35A00-1	600W	600W	500W
35A00-1CFL	600W	600W	500W
35A00-3	600W	600W	500W

Table 1 – HAI Wall Switch De-Rating

HAI DIMMER SWITCH OPERATION

The HAI Dimmer Switch has many configurable items that can be set using the UPB™ UPStart configuration software. The following describes the operation of the HAI Dimmer Switch in its factory default configuration.

Local Rocker Switch Operation

The HAI Dimmer Switch has a Decora-style rocker switch that can be used to control the lighting load as follows.

Rocker Event	Top Rocker	Bottom Rocker
Single-Tap	Brightens the light to 100% (on) at default fade rate and restarts auto shut-off timer (if applicable).	Fade the light to 0% (off) at default fade rate.
Double-Tap	Snaps the light to 100% (on) and overrides auto shut-off.	Snaps the light to 0% (off).
Hold	Starts fading (brightening) the light towards 100% at default fade rate and restarts auto shut-off timer (if applicable).	Starts fading (dimming) the light towards 0% at default fade rate.
Release	Stops brightening the light and restarts auto shut-off timer (if applicable).	Stops dimming the light.

Table 2 - HAI UPB™ Dimmer Switch Local Operation

HAI NON-DIMMING SWITCH OPERATION

The HAI Non-Dimming Switch has many configurable items that can be set using the UPB™ UPStart configuration software. The following describes the operation of the HAI Non-Dimming Switch in its factory default configuration.

Local Rocker Switch Operation

The HAI Non-Dimming Switch has a Decora-style rocker switch that can be used to control the load as follows.

Rocker Event	Top Rocker	Bottom Rocker
Single-Tap	Turns the load on and starts auto shut-off timer (if applicable).	Turns the load off.

Table 3 – HAI Non-Dimming Switch Local Operation

LED Indicator

The HAI UPB™ Wall Switch comes equipped with a multi-color LED indicator that is normally lit to blue when the load is off. The LED will turn off when the load is turned on or set to any level above 0%. The LED will flash magenta while the auto shut-off timer is running (if the configured LED option is always off, the LED will remain off during the timeout period).

If used, the LED in the HAI Auxiliary Switch is always lit.

HAI AUXILIARY SWITCH OPERATION

The HAI UPB™ Wall Switch can be connected to one or more HAI Auxiliary Switches producing multi-way lighting circuits. Each HAI Auxiliary Switch has a Decora-style rocker switch that controls the lighting load in the exact same manner as the Decora-style rocker switch on the connected HAI UPB™ Wall Switch, as previously described. When connected, the LED remains continually on at all times while power is applied.

Setup Mode

To configure the HAI UPB™ Wall Switch using an HAI controller or a PC running the UPB™ UPStart configuration software, it must be put into Setup Mode as follows:

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

Table 4 – HAI Wall Switch Setup

Note:

Setup mode and blink mode take precedence over auto shut-off. If the auto shut-off timer is running, and then either setup mode or blink mode occurs, the auto shut-off timer will be reset and disabled until setup or blink mode expire.

LINE

**37A00 (OPTIONAL)
AUXILIARY SWITCH**

BLACK

Line 120VAC, 60Hz

YELLOW

**37A00 (OPTIONAL)
AUXILIARY SWITCH**

BLACK

YELLOW

**35A00
HAI Wall Switch**

BLACK

YELLOW

WHITE

RED

NEUTRAL

*BLUE AND/OR GRAY

*BLUE AND/OR GRAY

GREEN

*CONNECTING THE BLUE AND/OR GRAY WIRE TO NEUTRAL SETS THE COLOR OF THE LED INDICATOR.
CONNECT BLUE FOR BLUE INDICATOR, GRAY FOR RED INDICATOR, OR BOTH FOR MAGENTA INDICATOR.
BLUE AND/OR GRAY WIRE MAY BE CONNECTED TO NEUTRAL OR EARTH GROUND. NEUTRAL IS RECOMMENDED.

Refer to the following Table for specific manufactures and model numbers of dimmable CFL and LED bulbs approved for use with these dimmers:

CFL / LED	Lamp Manufacturer	Lamp Model	Lamp Wattage (W)
CFL	EcoSmart	2R3015DIM	15
CFL	EcoSmart	ES5CCDF052	5
CFL	EcoSmart	ES5M10123	23
CFL	EcoSmart	ES5R315DIM35K	15
CFL	EcoSmart	ES5R315DIM50K	15
CFL	Feit	BPESL15T/DM	15
CFL	Feit	BPESL23T/DIM	23
CFL	GE / Energy Smart	FLE15/2/DV/R30	15
CFL	GE / Energy Smart	FLE15HT3/2/DV/SW	15
CFL	GE / Energy Smart	FLE26/2/DV/R40	26
CFL	GE / Energy Smart	FLE26HT3/2/DV	26
CFL	Litetronics	16AE5L092725	27
CFL	Litetronics	18185K085141	5
CFL	Litetronics	18185K088141	8
CFL	Litetronics	18505A10111	11
CFL	Litetronics	18BR5E09152	15
CFL	Litetronics / EarthMate	E05129LW	5
CFL	Litetronics / EarthMate	E2752AJLW	27
CFL	Neptun	61920-ADIM	20
CFL	Neptun / EarthTronics	CF24SW1BDIM	24
CFL	Phillips	EL/A PAR38	20
CFL	Phillips	EL/A R30 DIM	16
CFL	Phillips	EL/A R40 DIM	20
CFL	Sylvania	CF5EL/A15/827/DIM/BL	5
CFL	Sylvania	CF5EL/B10/827/C/ADP/DIM/BL	5
CFL	Sylvania	CF14EL/R20/DIM	14
CFL	Sylvania	CF14EL/TWIST/DIM	14
CFL	Sylvania	CF19EL/BR40/DIM	19
CFL	Sylvania	CF24EL/TWIST/827/DIM/RP	24
CFL	TCP	2R2014DIM	14
CFL	TCP	40123	23
CFL	TCP	4R3016TD	16
CFL	TCP	CCA05	5
CFL	ULA	SDR23W2P-R30 DIM	23
LED	Cooper Lighting - HALO	ML706830	14
LED	Cree	CR6-0210E	12
LED	Cree	CR6-0323E	12
LED	EcoSmart	ECO-GU24-575L-YOW	12
LED	EcoSmart	G2510003-005	8
LED	EcoSmart	R2010010-013	8
LED	Lemnis Lighting	Pharox 300	6
LED	Phillips	12E26A60	12.5
LED	Phillips	3E12B1 1-E	3
LED	Phillips	6E26R20	6
LED	Phillips	7E26PAR20-E	7
LED	Phillips	8E26A60	8
LED	Sylvania	LED8PAR20/DIM/827/FL36	8
LED	Sylvania	LED8PAR20/DIM/827/NFL25	8
LED	Sylvania	LED8PAR20/DIM/830/NFL25/HVP	8
LED	Sylvania	LED10PAR30/DIM/SG830/WSP15	10
LED	Sylvania	LED11PAR30/DIM/SG/830/SP10	11
LED	TCP	LDA153WH30K	3
LED	Toshiba	218-50053	7.8
LED	Utilitech	0171150	2
LED	Utilitech	0338802	7.5
LED	Utilitech	0352280	3.5

CFL = Compact Fluorescent Lamp
LED = Self Ballasted, Light-Emitting Diode

Reset to Factory Default Settings

To reset the HAI UPB™ Wall Switch to factory default settings:

Step	Operation
1	On the HAI UPB™ Wall Switch that you want to reset to factory default, tap the rocker switch quickly 5 times.
2	The HAI UPB™ Wall Switch will flash the lighting load one time and blink its LED blue to indicate that it is ready to be reset.
3	Tap the rocker switch quickly 10 times to reset to factory default setting.
4	The HAI UPB™ Wall Switch will flash the lighting load one time and blink its LED red to indicate that it has been reset.
5	Tap the rocker switch once more to stop the LED from blinking.

SPECIFICATIONS

Model Number	35A00-1	35A00-1CFL	35A00-3
Incandescent Loads Dimming	Yes	Yes	Yes (configurable)
Inductive Loads Dimming	Yes	Yes	Yes (configurable)
Florescent Loads Non-Dimming	Yes (configurable)	Yes (configurable)	Yes
Power Maximum Dimming	600W / 600VA	600W / 600VA	600W / 600VA
Current Maximum Non-Dimming	5A	5A	5A
Connections	18 GA	18 GA	18 GA
LED Indicator	Yes	Yes	Yes
Dimensions	4.1 x 1.75 x 1.45	4.1 x 1.75 x 1.45	4.1 x 1.75 x 1.45
Weight	0.25 lb.	0.25 lb.	0.25 lb.
Mounting	Standard J Box	Standard J Box	Standard J Box
Input Power	120 ± 12 VAC	120 ± 12 VAC	120 ± 12 VAC
Input Frequency	60 ± 3 Hz	60 ± 3 Hz	60 ± 3 Hz
Operating Temperature	-40 °F to 104 °F	-40 °F to 104 °F	-40 °F to 104 °F

Note: It is normal for this switch to make a slight buzzing sound during operation. It is also normal for the switch and wall plate to feel warm to the touch.

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.

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.