

# half-<sup>TM</sup> light



## Plug & Play Energy Saving Device for Lighting

Up to 50% Energy Savings & Works with All Lighting

### Applications:

#### Multiple Ballast Light Fixtures

• Classrooms, offices, & high bay fluorescent fixtures

#### Step Dimming Ballast Control

• Eliminates dual wall switch control

#### Alternate Fixture Control

• High bay fixtures in box stores, gymnasiums, exhibition halls, & warehouses

**Functional  
Devices, Inc.**

For more details, pricing and availability,  
call toll free 800.888.5538 or visit [www.Half-Light.com](http://www.Half-Light.com)

American Made  
  
American Owned

# half-light™

## Description

The Half-Light™ Series installs in the wiring compartment of almost any light fixture and uses existing switches to start lighting levels at 50% and then can be sequenced to full light.

## Specifications

See below.

## Features

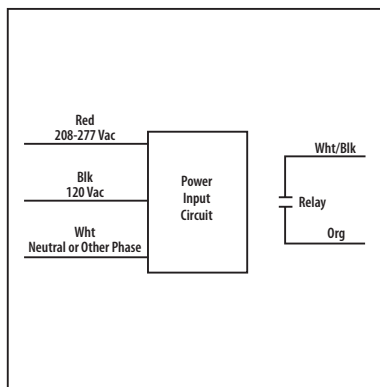
- Up to 50% energy savings
- Potential 2 year payback
- Does not change voltage waveform
- Installs easily in wiring compartment of light fixture
- Uses existing wall switch
- Bi-level lighting control
- Passive energy savings
- Can be used with most motion sensors (mechanical switching)
- Low cost
- 120 / 208-277 Vac
- Made in USA
- UL Listed, C-UL, CE approved



## Two Stage and Three Stage Half-Light™ Controllers

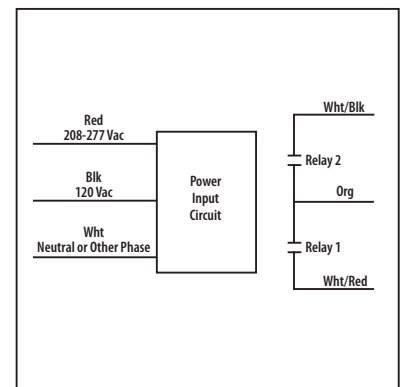
### HAF2

Enclosed Independent Control for Multiple Ballast Light Fixtures from One Existing Wall Switch, **Two Stage**; 120/208-277 Vac



### HAF3

Enclosed Independent Control for Multiple Ballast Light Fixtures from One Existing Wall Switch, **Three Stage**; 120/208-277 Vac



## Specifications

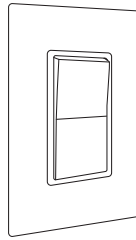
- Input Power:** 120 / 208-277 Vac
- Contact Ratings:** 5 Amp Ballast @ 120-277 Vac  
5 Amp Incandescent @ 120 Vac
- Operating Temperature:** -30 to 140° F
- Humidity Range:** 5 to 95% (non-condensing)
- Dimensions:** 3.75" x 1.66" x 1.18"
- Weight:** 0.20 lbs. (HAF2); 0.24 lbs. (HAF3)
- Wire Length:** 6.00"
- Approvals:** UL Listed, C-UL, CE
- Power Consumption:** Refer to www.Half-Light.com for details

See next page for bi-level and step dimming applications.

# Three Applications

## Multiple Ballast Light Fixtures

- Classrooms, offices, & high bay fluorescent fixtures



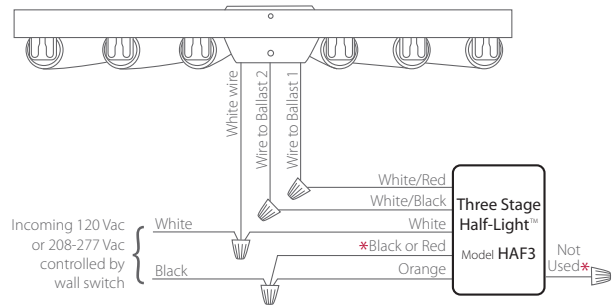
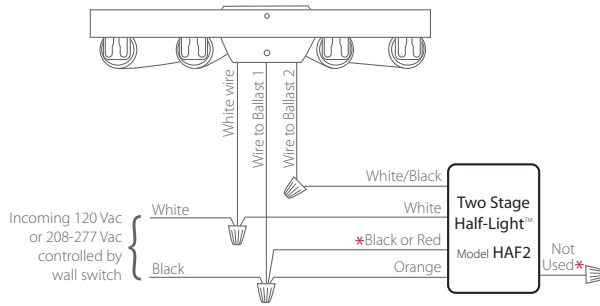
### Two Stage Half-Light™

- Switch ON activates Ballast 1 Only (50% light)
- Switch OFF, then ON activates Both Ballasts (Full light)

Wall switch can be replaced by switching devices such as contactors, relays, or controllers.

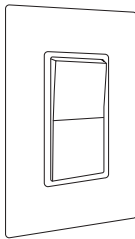
### Three Stage Half-Light™

- Switch ON activates Ballast 1 Only
- Switch OFF, then ON activates Ballast 2 Only
- Switch OFF, then ON activates Both Ballasts (Full light)



## Step Dimming Ballast Control

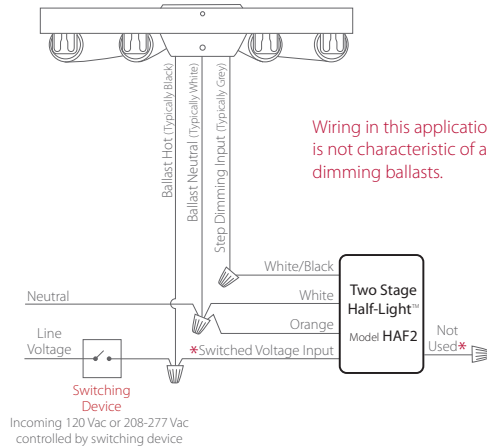
- Eliminates dual wall switch control



### Two Stage Half-Light™

- Switch ON 50% Light
- Switch OFF, then ON Full Light

Wall switch can be replaced by switching devices such as contactors, relays, or controllers.



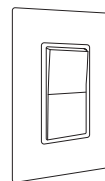
Wiring in this application note is not characteristic of all step dimming ballasts.

## Alternate Fixture Control

- High bay fixtures in box stores, gymnasiums, exhibition halls, & warehouses

Start up and restart times may vary depending on fixture.

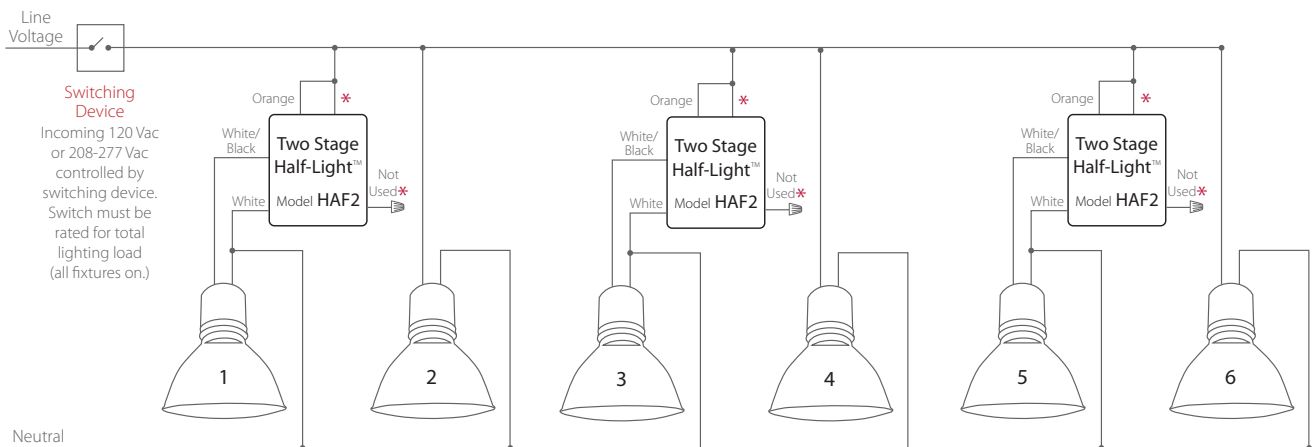
Lights 2, 4, and 6 controlled by switch only.  
Half-Light™ controls lights 1, 3, and 5.



### Two Stage Half-Light™

- Switch ON Every Other Light On
- Switch OFF, then ON All Lights On

Wall switch can be replaced by switching devices such as contactors, relays, or controllers.



\* For 120 Vac systems, Black wire is used, Red wire is not used. For 208-277 Vac systems, Red wire is used, Black wire is not used.

**1. Physical Characteristics**

- 1.1. The controller shall be mountable within a ballast channel or compartment.
- 1.2. The controller shall be furnished with integral color coded leads
- 1.3. The controller shall be housed in plastic.
- 1.4. The controller shall have LED(s) indicating sequence status of the outputs.
- 1.5. The controller shall have two screw tabs for mounting

**2. Performance Requirements**

- 2.1. The controller output shall be an electro-mechanical relay capable of switching 5A Ballast at 120-277Vac and 5A Incandescent at 120Vac.
- 2.2. The controller input shall be controlled from any device that mechanically switches the input mains.

**3. Regulatory Requirements**

- 3.1. The controller shall not contain any Volatile Organic Compounds (VOCs).
- 3.2. The controller shall be Underwriters Laboratories, Inc. UL Listed, C-UL, 916 Energy Management Equipment.
- 3.3. The controller shall comply with Section 1605 of the American Recovery and Reinvestment Act "Buy American Requirements"

**4. Other**

- 4.1. The manufacturer shall have at least a forty-year history of producing electronic products for the North American market.
- 4.2. The manufacturer shall be American owned.
- 4.3. The controller shall be manufactured in the USA.