

Project Name	
Project #	
Model #	SEN-053-WM-PBD720
Type	

## PBD-720 Push-Button Dimmer Switch

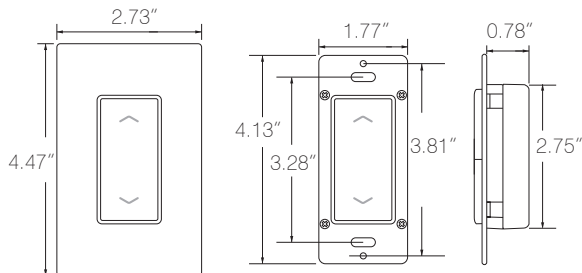


### OVERVIEW

The PBD-720 is a single pole, low voltage push-button dimmer switch designed to fit into a standard NEMA wall box. This sleek, low profile switch provides a momentary contact signal for IR-TEC power pack to manually control the connected lighting, together with an adjustable 0-10V output to dim the light as desired through intuitive button operation.

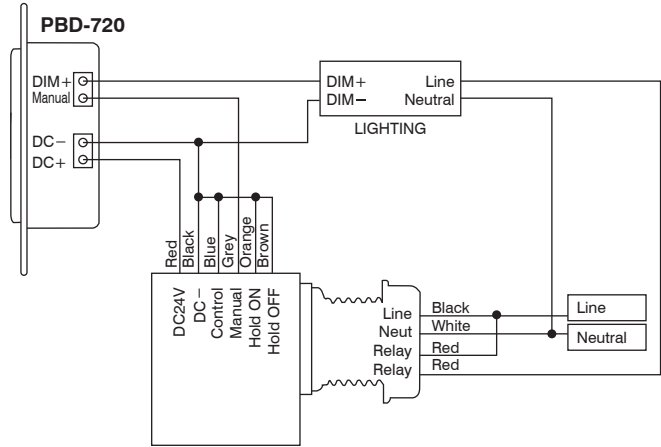
A short press on the button will activate the manual on/off control signal, and a long press at upper/lower position of the button will increase/decrease 0-10V dimming control output. LED light bars will indicate the operational status and dim level while pressing the button. Pluggable type terminal block makes low voltage wiring connection quick and easy. A screwless snap-on Decora wall plate is supplied to create a modern, high-end appearance for all spaces.

### DIMENSIONS

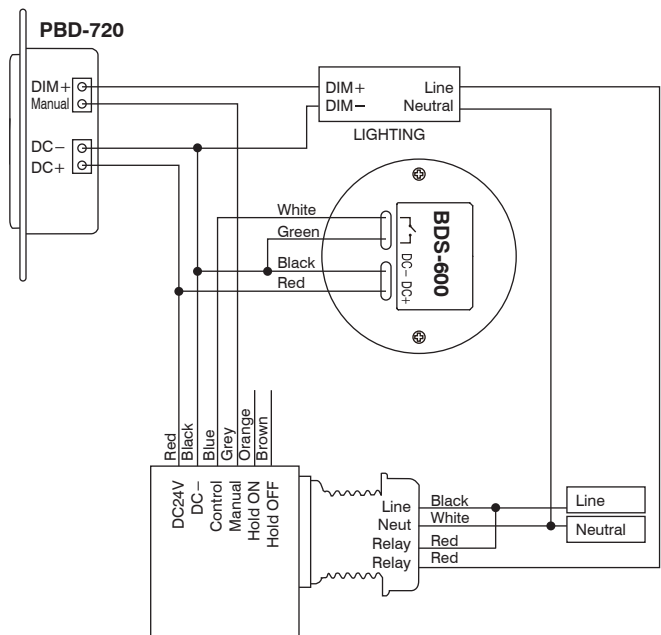


### WIRING DIAGRAMS

#### A. Manual On/Off with Dimming Control



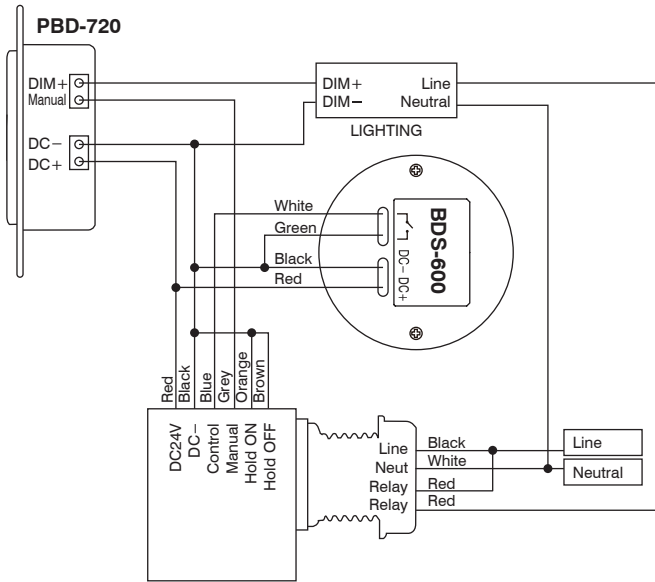
#### B. Occupancy Sensing with Dimming Control



# PBD-720

## Push-Button Dimmer Switch

### C. Vacancy Sensing with Manual On/Off & Dimming Control



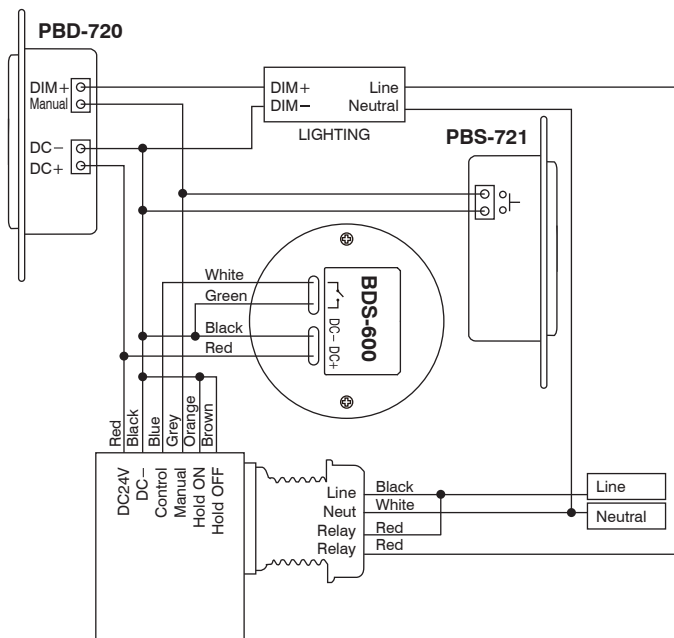
### SPECIFICATIONS

Power voltage	12-24 VDC
On/off control	Momentary, 50 mA, 24 VDC max.
Dimming control	0-10V, max 25 mA (Sink)
Dimming range	1% ~ 100%
Op. humidity	Max 95% non-condensation
Op. temperature	-14°F ~ 122°F (-10°C ~ 50°C)
Dimensions	4.13"H x 1.77"W x 1.04"D (w/mounting plate)

### ORDERING INFORMATION

- PBD-720W** – Low Voltage Push-Button Dimmer Switch, 12-24 VDC, White
- PBD-720I** – Low Voltage Push-Button Dimmer Switch, 12-24 VDC, Ivory

### D. Vacancy Sensing with 3-way Manual On/Off & Dimming Control

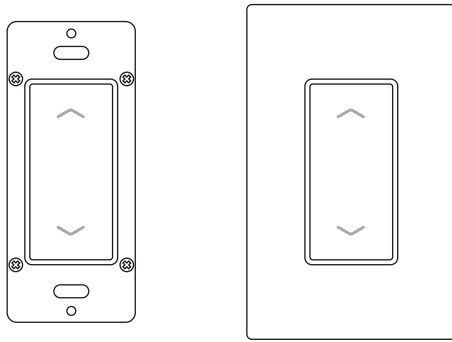




## PBD-720 Series

Push-Button Dimmer Switch

### INSTALLATION INSTRUCTIONS



Indoor dry location use only  
Utilisation a L'interieur Uniquement

#### WARNING & CAUTION

- Turn power OFF at circuit breaker before installing.

#### AVERTISSEMENT & PRUDENCE

- Coupez l'alimentation au disjoncteur avant d'installer.

### OVERVIEW

The PBD-720 is a single pole, low voltage push-button dimmer switch designed to fit into a standard NEMA wall box. This sleek, low profile switch provides a momentary contact signal for IR-TEC power pack to manually control the connected lighting, together with an adjustable 0-10V output to dim the light as desired through intuitive button operation.

A short press on the button will activate the manual on/off control signal, and a long press at upper/lower position of the button will increase/decrease 0-10V dimming control output. LED light bars will indicate the operational status and dim level while pressing the button. Pluggable type terminal block makes low voltage wiring connection quick and easy. A screwless snap-on Decora wall plate is supplied to create a modern, high-end appearance for all spaces.

### OPERATION

#### On/Off Switching

A short press (less than half a second) on any part of the button while the blue LED's are off will switch the connected light on or off.

#### Dim Level Adjustment

A long press (greater than half a second) on any part of the button will enter into dim level adjust mode.

#### Coarse Adjustment

Two 4-LED blue bars along the side of the button will light up to indicate the current dim level. Each LED represents a 25% dim level increment. Press and hold either the UPPER or LOWER arrows on the button to increase or decrease the dim level rapidly by 25% increments.

#### Fine Adjustment

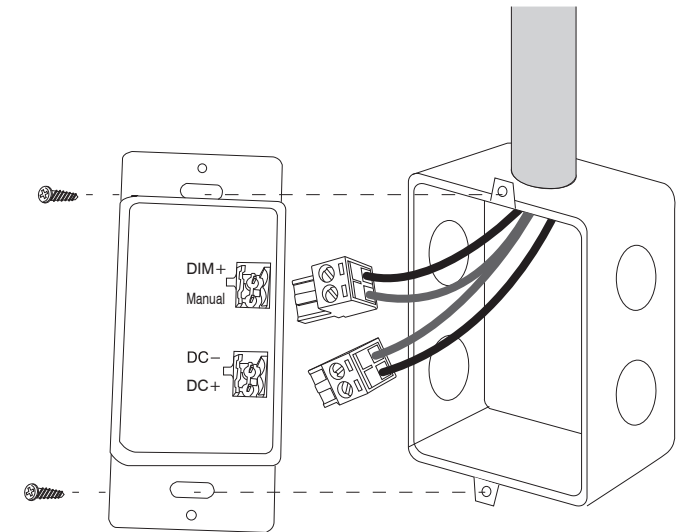
The dimmer allows for micro-adjustments after release to change the dim level step by step for a more fine-tuned setting through short presses on either the UPPER or LOWER arrow on the buttons while the blue LED's are lit.

#### NOTE:

After changing the dim level, allow the LED bars to turn off before trying to use on/off control function.

### INSTALLATION

1. Lead a 4-core low voltage cable from the power pack and ballast/driver to the wall box.
  2. Connect the wires to the terminals of pluggable connectors as below.
    - **DC+** is for 24VDC power input
    - **DC-** is for **DIM-** of 0-10V dimmable driver/ballast
    - **DIM+** is 0-10V output for **DIM+** of 0-10V dimmable driver/ballast
    - **Manual** is control signal for manual on/off switching
  3. Plug the connector into the respective pin block. Mount the PBD-720 on the wall box with the screws.
- NOTE:** Do NOT mount the switch upside down to avoid reverse dimming adjustment.
4. Snap-on the Decora plate.



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P/N: 058-72001-005

This product may be covered by one or more U.S. patents or patent applications.  
Please visit [www.irtec.com](http://www.irtec.com) for more information.

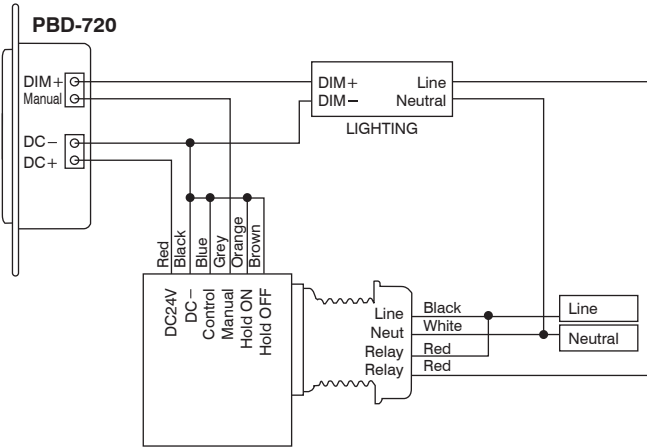


## WIRING DIAGRAMS

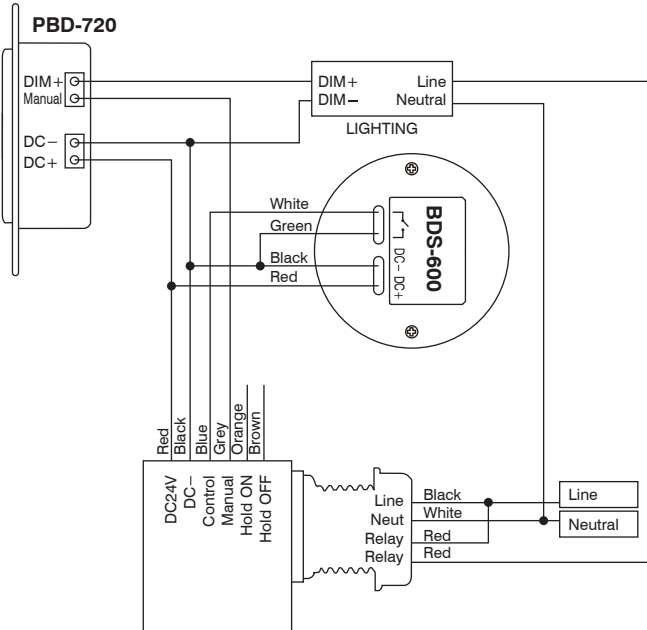
### NOTE:

One PBD-720 can control multiple drivers/ballasts, but one driver/ballast can ONLY be controlled by one PBD-720.

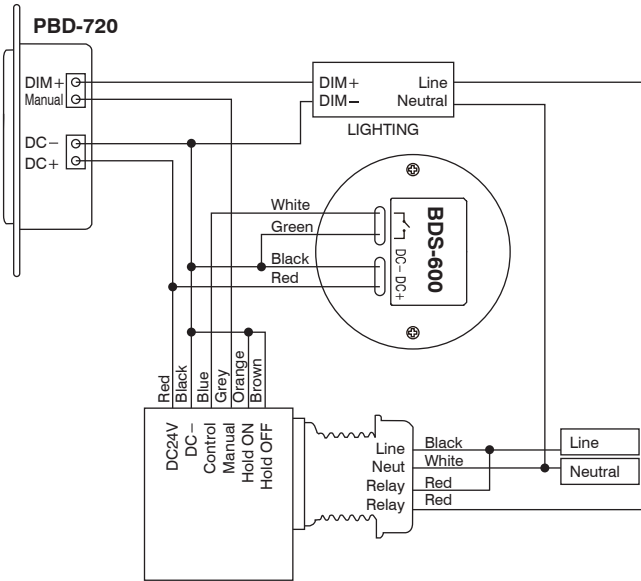
### A. Manual On/Off with Dimming Control



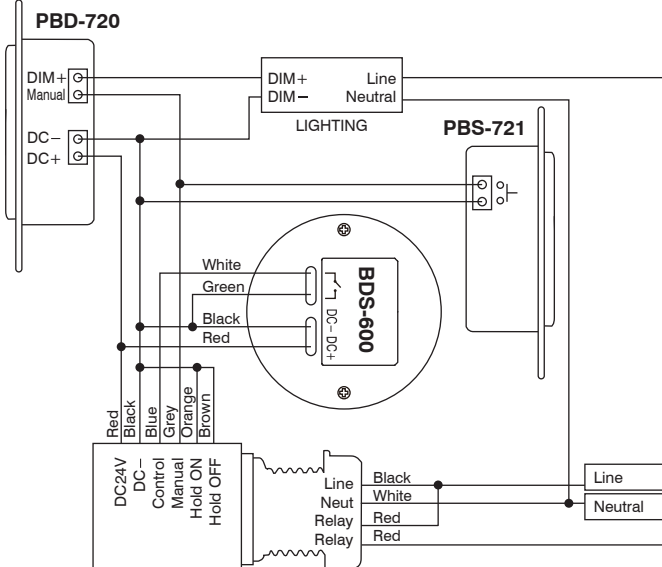
### B. Occupancy Sensing with Dimming Control



### C. Vacancy Sensing with Manual On/Off & Dimming Control

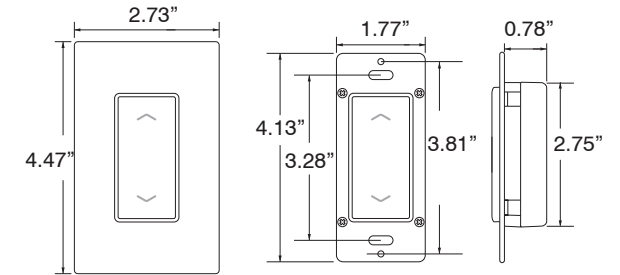


### D. Vacancy Sensing with 3-way Manual On/Off & Dimming Control



NOTE: Other IR-TEC low voltage occupancy sensor may be applicable, please contact sales team for more information.

## DIMENSIONS



## SPECIFICATIONS

Power voltage	12-24 VDC
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## ORDERING INFORMATION

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PBD-720I – Low Voltage Push-Button Dimmer Switch, 12-24 VDC, Ivory

## WARRANTY

IR-TEC International Ltd. warrants this product to be free of defects in materials or workmanship for a period of five years from date of shipment. There are no obligations or liabilities on the part of IR-TEC International Ltd. for consequential damages arising out or in connection with the use or performance of this product or other indirect damages with respect to loss of property, revenue, profit, or cost of removal, installation or reinstallation.