Specializing in Building Sensors

iR-TEC

Important Preparation

1. Programming for SmartDIM should be done at either Dawn or Dusk for best results. Creating dawn or dusk can be achieved by closing blinds if available.
2. Programming should be done with light fixtures off.
3. If you have multiple fixtures with sensors in each fixture do the following:
   a. Use the remote to shut off all the fixtures.
   b. Program each sensor/fixture one at time.
   c. This will allow the sensor to make its best decisions without outside interference.
   d. Make sure to shut off all fixtures before starting the programming of the next sensor.

Settings for Success

1. Control: OSLATO (This will allow you to achieve the below graph)
2. Ambient Lux: This is not available for setting and will be automatically selected when you choose the SmartDIM option later.
3. Delay: This is the time delay after which the lights will dim down after the sensor has sensed its last occupant. The longer this time delay the more opportunity for the sensor to reset and keep the lights on.
4. Time Off: This secondary time delay allows for a lower level of light (About 20% of the higher occupied level) to run to give a transitional lower light level period. Again, the longer this time the greater chance that the sensor has to reset and go back to the higher operating level.
5. High Dim: During the setting in this step is when the sensor will take a snapshot of the Ambient Light it is seeing. Once you Upload the SmartDIM setting the sensor will measure the amount of Ambient Light and save that. The sensor will use that number to determine its hold off point, which will be 2x that recorded value. You can download the current lux the sensor is seeing to have an idea of what the hold off point will be.
6. SmartDIM: This bar chart allows you to refine the range over which the sensor will control the lights. The sensor will make its own determination of what the high-end light output will be to best fit the environment. By reducing the bar chart downward, the sensor will increase the overall range the lights will operate over. (Example: Max may give you 90% output down to 70%, while setting the bar graph at 2 the sensor may give you 90% output down to 10%. These outputs will vary sensor to sensor based on what each sensor sees.)
7. Ramp Up: Instant is the best setting to make sure the lights come on as quickly as possible when an occupant is detected.
8. Fade Down: During testing and commissioning it is best to set this for Instant to be able to see the changes immediately. For operation Soft or Slow are generally more pleasing to an occupant.
9. VM-TA and VM-TB: These do not apply to these settings.
10. Sensitivity: This refers to the ability of the sensor to detect an occupant. If the sensor is detecting to far or outside a room, lowering this can help.

THE REMAINING SETTINGS ARE NOT APPLICABLE WHEN USING SMARTDIM

Testing

To show the operation of the SmartDIM enabled sensors you can do the following:

1. Having the sensor in Instant for Ramp Up and Fade Down will show the changes the best.
2. To best see a change in light levels, make sure to reduce the SmartDIM bar graph to a lower level (lower than 12 is recommended for testing/demoing).
3. If possible, you can cover the sensor and the lights will increase and dim down when removed.
4. You can shine a flashlight at the sensor and the lights will dim down and increase again when removed.

SmartDIM Control — Light level graph with legend: Daylight, Electric Light, Total Light