

FSP-2x1B High/Low/Off PIR Photo/Motion Sensor

Outdoor



The FSP-2x1B is a family of passive infrared (PIR) outdoor sensors that raise or lower the electric lighting level to high, low or off based on motion and/or daylight contribution. Typically, once the sensor stops detecting movement and the time delay elapses, lights will first fade to low mode, and eventually switch off. When motion is detected, the sensor ramps the light level to high mode unless the daylight contribution is sufficient. The integral photocell can also switch the lights on and off for dusk to dawn control, so that lighting remains on overnight even without motion detection.



Features

- Three interchangeable lenses for mounting between 8' and 40'
- Remote setup and
- Adjustable high and low modes
- Adjustable time delay
- Adjustable cut off delay
- Adjustable sensitivity/service mode
- Adjustable setpoints
- Adjustable ramp and fade times
- UL and cUL listed
- IP66 rated
- FSIR-100 is FCC Part 15 compliant
- 5 Year Warranty
- RoHS compliant materials

Operation

The sensors control 0-10VDC or nondimming LED drivers or ballasts. The low voltage FSP-201B may be used with dim-to-off drivers or ballasts. Initial setup and subsequent sensor adjustments are made using a Wireless Handheld Configuration Tool (FSIR-100). This tool enables adjustment of sensor parameters including high/low mode, sensitivity, time delay, cut off and more. The FSIR-100 can read current parameter settings, and stores up to six sensor parameter profiles to speed commissioning of multiple sensors.

Mounting

Application

The FSP-2x1B family is available in three configurations for mounting inside a fixture, to the outside of a fixture or enclosure via a 1/2" knockout, or to a pole. **Pole Mounting continues on pg 2**

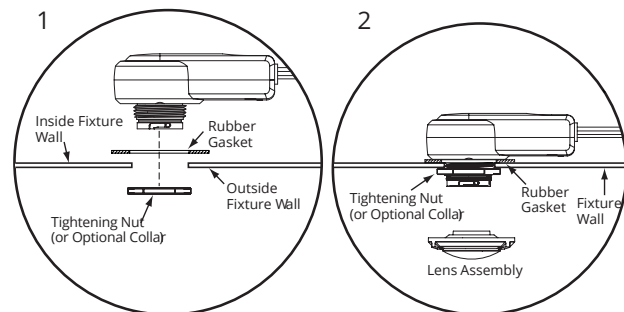
Installation

1. Determine an appropriate mounting location inside the light fixture. Allow a minimum distance of 0.2" (5.1mm) from the end of the sensor to the wall of the fixture.
2. Drill a 1.30" (33mm) diameter hole through the sheet metal in the bottom of the fixture.
3. Place the rubber gasket on the threaded collar, and install the sensor face down, parallel to the mounting surface. Ensure the rubber gasket touches the inside surface of the fixture. Install the tightening nut securely against the fixture to a torque of 25-30 in-lbs to ensure IP rating is maintained.
4. Align the locking features between the sensor and lens module and push the lens module forward until the O-ring seals firmly. Turn the lens module clockwise to lock in place.
5. Connect load, supply and control wires (see Figures 5 and 6 pg3).
6. Restore power from the circuit breaker.

Note: An optional collar can be installed in place of the tightening nut on the FSP-2x1B. This collar is included with the FSP-2x1B-S and FSP2x1B-D, as shown below.

Figure 1. Installing the FSP-2x1B in the light fixture

Note: The outside fixture wall thickness should be no greater than 0.125" (3.18mm) for optimal sensor mounting and security.



100-347VAC(Single Phase) 208/230/480VAC (phase to phase)

Load Ratings	@120V 0-800W tungsten, ballast, LED driver; 1/6hp motor @230-240V 0-300W ballast, LED driver @277V 0-1200W ballast, LED driver; 1/6hp motor @347/480V 0-1200W ballast, LED driver
0-10V Sinking Current	50mA
High/Low Modes	high:0-10V, low: off, 0-9.8V
Time Delay	30 sec, 1-30 min
Cut Off Delay	none, 1-59 minutes, 1-5 hours
Sensitivity/Service mode	low, med, max: on-fix, off-fix
Setpoints	hold off setpoint: none, 1-250 fc, auto photocell on/off setpoint: 1-250fc
Ramp and Fade Times	1-60 sec
Op Temperature	-40°F to +167°F (-40°C to +75°C)

Factory Defaults

High Mode	10V
Low Mode	1V
Time Delay	5 Minutes
Cut Off	1 hour
Setpoint	Disabled
Sensitivity	Max
Ramp up time	Disabled
Fade down time	Disabled
Photocell On/Off	Disabled

Certifications



Pole Mount

Installation

1. Determine an appropriate mounting location minimizing the electrical light contribution to the sensor's photocell.
2. Drill a 0.875" (22mm) diameter hole through the mounting surface, or mount to a 1/2" knockout.
3. Place the rubber gasket on the threaded collar, and install the sensor face down, parallel to the mounting surface. Ensure the rubber gasket touches the mounting surface. If needed, add the spacer between the sensor body and the rubber gasket to ensure a secure fit. Install the nipple nut and torque to 25-30 in-lbs to maintain IP rating.
4. Align the locking features between the sensor and lens module and push the lens module forward until the O-ring seals firmly. Turn the lens module clockwise to lock in place.
5. Connect load, supply and control wires (see **Figures 5 and 6** pg3).
6. Restore power from the circuit breaker.

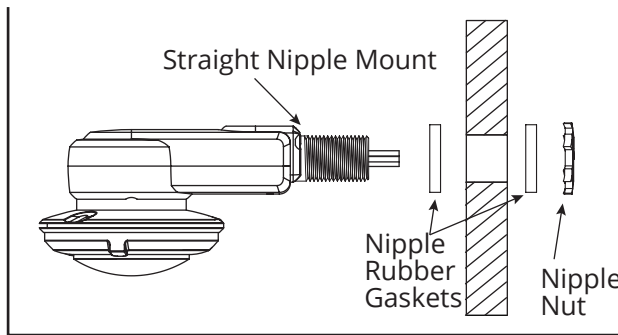


Figure 2. Installing the FSP-2x1B-S to the exterior of a fixture

NOTE: The outside fixture wall thickness should be no greater than 0.125" (3.18mm) for optimal sensor mounting and security.

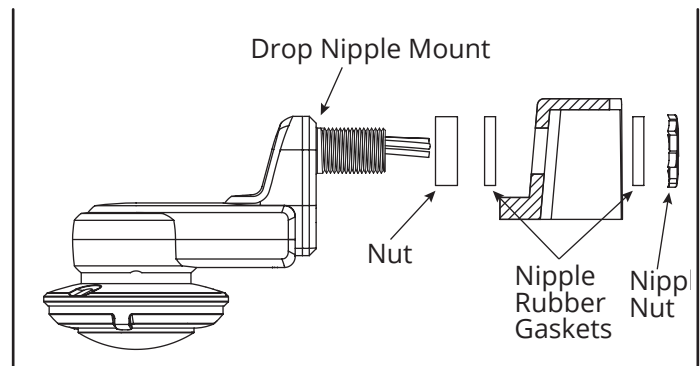
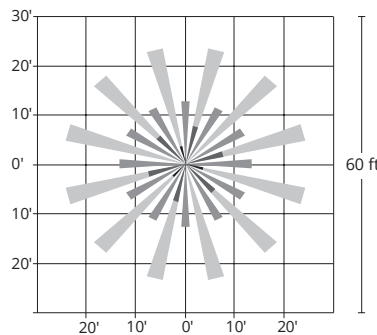


Figure 3. Installing the FSP-2x1B-D to a pole using the optional spacer

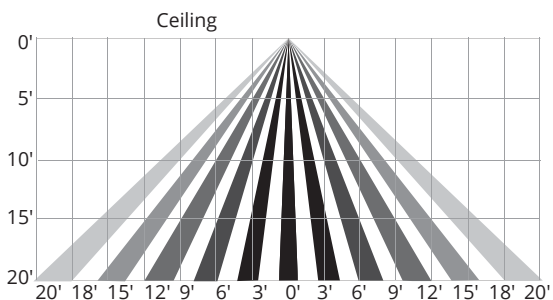
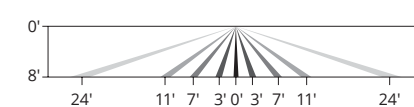
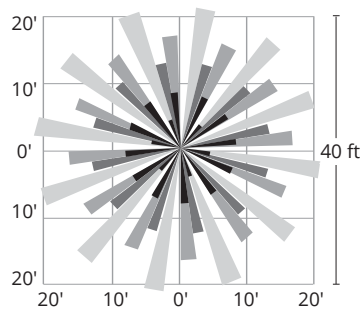
NOTE: The outside fixture wall thickness should be no greater than 0.125" (3.18mm) for optimal sensor mounting and security.

Coverage

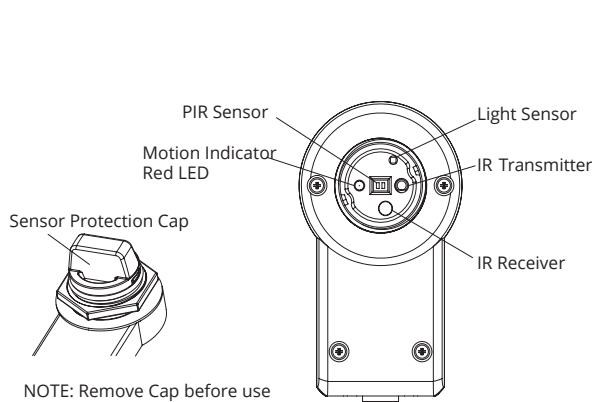
FSP-L2 top and side coverage patterns



FSP-L3 top and side coverage patterns

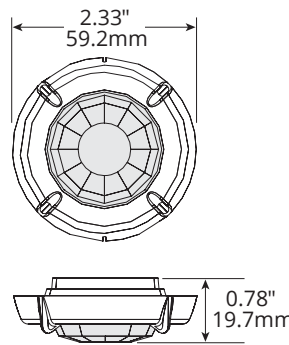


Dimensions

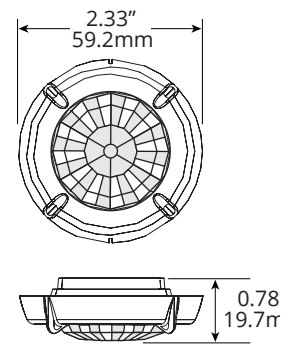


NOTE: Remove Cap before use

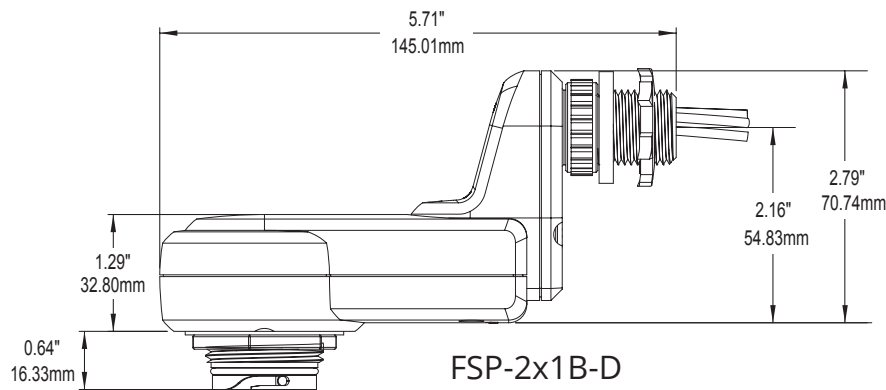
FSP-2x1B sensor module



FSP-L2 dimensions



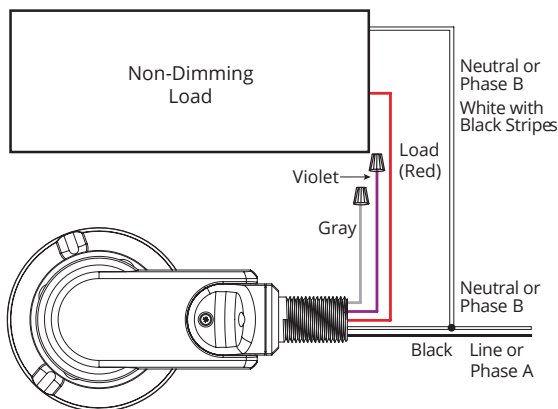
FSP-L3 dimensions



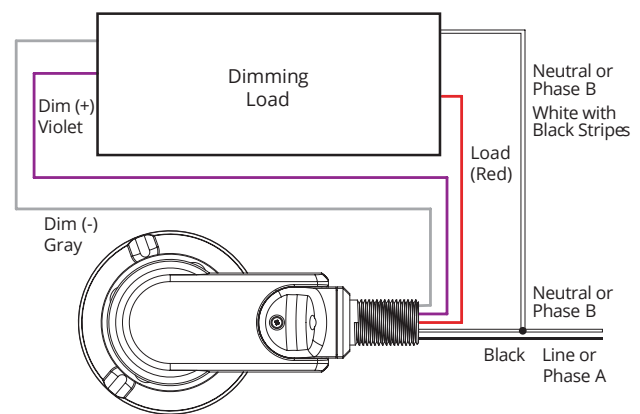
FSP-2x1B-D

Wiring

FSP-2X1-B wiring with non-dimming load.
Figure 5



FSP-2X1-B wiring with dimming load.
Figure 6



10 Year Warranty

ATG Electronics®
Industry Leading 10 Year Limited Warranty
For North American LED Lighting Fixtures

ATG Electronics warrants to the original purchaser of ATG Electronics Domestic LED products listed above that were manufactured for which the ATG Electronics Spec Sheet located on our website contains the words "10 year limited warranty" that, subject to the below terms and conditions of this warranty, when such LED products are properly installed they will comply with ATG Electronics published product specifications for such products and will be free from material defects in material and workmanship for a period of ten (10) years from the date of sale by ATG Electronics, or, if lesser, 50,000 hours of operation (at an average of 13.6 hours per day operation). The LED arrays in the Product(s) will be considered defective in material or workmanship only if a total of 15% or more of the individual light emitting diodes in the Product(s) fail to illuminate.

The above express limited warranty is extended by ATG Electronics® only to the original or first end-user purchaser and only for the original installed location. This warranty only applies to products purchased after June 1, 2017. This warranty is non-transferrable, whether by assignment or operation of law. The original purchaser must provide warranty claims to ATG Electronics within the warranty period promptly upon discovery and in accordance with ATG Electronics Return and Repair Procedures as outlined within this document.

Should any defects be found by ATG Electronics upon its inspection of the properly returned product, ATG Electronics sole responsibility and liability under this warranty will be, at its option, to either repair or replace the defective part or parts or else make available a new replacement unit that will provide equal or better performance. All decisions regarding the existence or non-existence of defects or otherwise affecting the warranty shall be made by ATG ELECTRONICS and shall be final and binding on all parties. Where a defective LED product is replaced under this warranty, the balance of the original warranty period shall remain effective.

Conditions and Exclusions

This warranty is conditioned upon proper installation, use and maintenance. This warranty will automatically become null and void and shall not be applicable to any LED fixture which (i) has not been timely paid for, (ii) is not installed and operated in accordance with the current edition of The National Electric Code (NEC), the Standards for Safety of Underwriters' Laboratory, Inc. (UL) or with ATG Electronics instructions and guidelines, (iii) has been moved from its original installation, (iv) has been installed within an area that has exposure to sulfur or any area with high acidic compounds in use, (v) has been operated in an ambient temperature or humidity that is higher than 35 degrees Celsius, (vi) has been subjected to a lightning strike, power surge or overvoltage condition, (vii) has its LED Board subjected to static electricity due to failure to discharge same prior to connecting or disconnecting the lead from the LED board, (viii) was not installed and/or operated in accordance with ATG Electronics instructions and guidelines, (ix) has been mishandled, misused, abused, tampered with, modified or altered by anyone other than ATG ELECTRONICS, (x) has been subjected to abnormal stresses and operating conditions, or (xi) has been operated without overvoltage and lightning protection devices in place.

Limitations

Disclaimers & Limitations of Liability

The foregoing warranty is exclusive of all other statutory, written or oral warranties and no other warranties of any kind, statutory, by operation of law or course of performance, or otherwise, are given, herein expressed or otherwise received. EXCEPT AS EXPRESSLY PROVIDED ABOVE, ATG ELECTRONICS DISCLAIMS ALL REPRESENTATIONS, WARRANTIES AND CONDITIONS OF ANY KIND, EXPRESS OR IMPLIED, REGARDING THE LED PRODUCTS AND ITS SERVICES, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR USE OR PURPOSE.

LIMITATION OF LIABILITY. Other than the obligation to repair or replace as provided above, ATG Electronics shall have no liability for any losses, expenses or damages as a result of the installation, use, inability to use, removal or replacement of any LED product. ATG Electronics will not under any circumstances whether as a result of breach of contract, breach of warranty, tort, strict liability or otherwise be liable for consequential, incidental, special or exemplary damages including but not limited to, loss of profits or revenues, loss of any other goods or associated equipment or damage to any associated equipment, cost of capital, cost of substitute products, facilities or services, down time cost or claims of claimant's customers. ATG Electronics liability on any claim of any kind for any loss or damages arising out of, resulting from or concerning any LED product, any aspect of this warranty or for any products or services furnished hereunder shall not exceed the price of the fixture which gives rise to the claim.

Return and Repair Procedures

All warranty requests and or questions are to be directed to ATG Electronics Customer Service Department (CSD) at 888-618-7298. If deemed necessary, the CSD will issue a Returned Merchandise Authorization (RMA) number which must be included on both the packing slip of the component or fixture being returned and on the outside of the box. You must include your name and contact information, including your email address, on the packing slip so that we can contact you easily. Each component or fixture must be packaged very carefully and properly so as to prevent damages in shipment and must be shipped freight prepaid. Please obtain a proof of delivery to ensure that the material is received.

Once the component or fixture has been received and tested, an evaluation report will be provided to the end user via email. This report will clarify the following:

- A) The component / fixture is covered under the warranty policy and will either be repaired or replaced.
- B) The component / fixture is not covered under the warranty policy and the reason for this determination.

If ATG ELECTRONICS determines that the component or fixture is covered under the warranty, then the appropriate repairs will be started or a replacement fixture will be manufactured and shipped. Please note that in the event the returned component or fixture is found not to be covered under this warranty, you may be subject to a labor charge for the evaluation process and will be responsible for all return shipping charges and fees. For components and fixtures determined to be covered under this warranty prior to the first anniversary of the Sale Date, the repaired or replacement component or fixture will be returned to you at no charge. You will be responsible for all other shipping charges.

No Labor Reimbursement

All components and fixtures determined to be covered by this warranty as provided above, will be repaired or replaced at no charge to the customer, however, except as expressly provided above with respect to recessed and linear fixtures during the first year, the customer must hire and pay for an electrician to remove and reinstall such components and fixtures. No labor costs will be covered for the removal or reinstallation of any components or fixtures. The warranty does not cover modifications, repairs or replacements, or the related labor or materials costs, that may be necessary to facilities or third party products in connection with the removal, repair, or replacement of any LED product under this warranty.