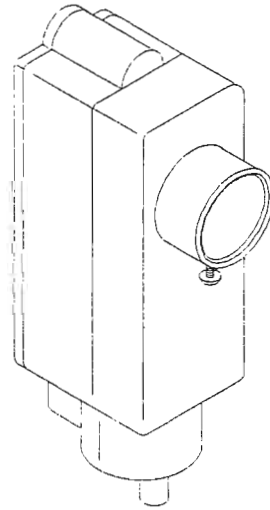




THE 3276 INPUT MODULE IS DESIGNED TO PROVIDE SOLIDYNE CONTROLLERS WITH BOTH OUTDOOR TEMPERATURE AND AMBIENT LIGHT LEVEL READINGS. WITH THE APPROPRIATE PROGRAMS, THIS MODULE PLAYS A KEY ROLE IN THE OPTIMIZATION OF HVAC EQUIPMENT AND INDOOR AND OUTDOOR LIGHTING AND SIGNS.

- Solid State Sensors
- Simple Mounting Design
- Dual sensor package decreases cost and installation time
- Ambient Light Sensing Element designed and engineered specifically for BAS applications utilizing an advanced silicon photo PIN diode
- Weather resistant enclosure

OUTDOOR TEMPERATURE AND AMBIENT LIGHT SENSOR



#3276

DISCLAIMER

Solidyne Corporation reserves the right to change product specifications without notice. Solidyne Corporation assumes no liability for damages incurred directly or indirectly from the use of this equipment or from errors, omissions or discrepancies between the equipment and the installation guides.

GENERAL

The 3276 Outdoor Temperature and Ambient Light Sensor is used to optimize HVAC and lighting programs. Ambient Light sensing allows for precise control of parking lot lights and outdoor signs, while the Outdoor Temperature Sensor enables Optimum Start/Stop and Lockout control of Heating and Cooling loads.

SPECIFICATIONS

MODEL: 3276

ELECTRICAL

INPUTS: Temperature -25° F to 230° F
Ambient Light 0 to 230 foot candles

OPERATING

TEMP: -25°F to +230°F

MECHANICAL

DIMENSIONS: See Figure 1

WIRING: 3 conductor Cable, (6 feet)

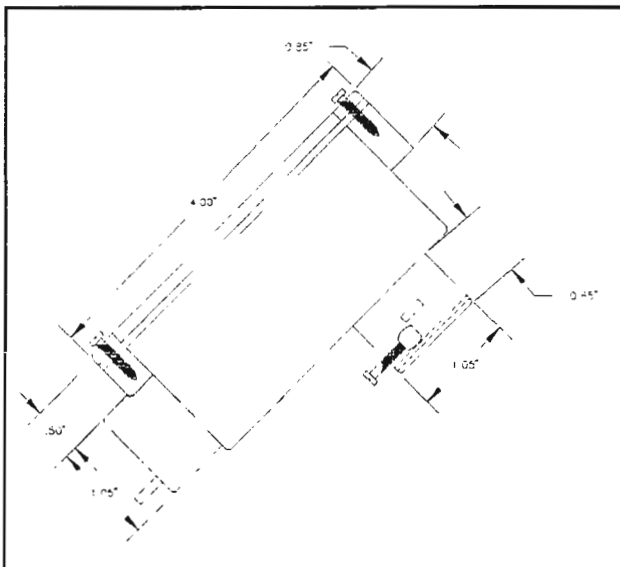


Fig. 1: Dimensions

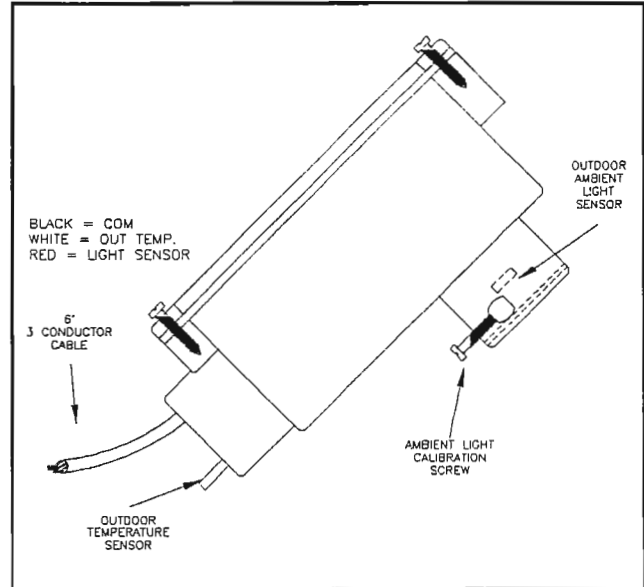


Fig. 2: Details

INSTALLATION

CAUTION

DISCHARGE ANY STATIC YOU MAY HAVE ACCUMULATED BY TOUCHING A GOOD EARTH GROUND BEFORE TOUCHING ANY COMPONENTS.

1. Before installing or removing this product, disconnect power or damage may occur to internal circuitry.
2. After the installation is complete, be sure to check the system out for proper operation.
3. This product should be installed and serviced by a trained, qualified service technician.

MOUNTING LOCATION

The following steps are recommended for installation:

1. Mount in proper location. Typically mounted to masonry wall via enclosed mounting bracket. Must be mounted outdoor on NORTH side of building out of direct sunlight (usually under eaves) not facing any artificial lighting. Adjust module at a 40° angle.
2. Run the 6' 3-conductor wire through outside wall to interior.
3. Connect the sensor wires to controller.
4. The 6' 3-conductor cable on the 3276 contains black, red and white wires. The Outdoor Temperature signal is on the white wire. The Ambient Light sensor is on the red wire. The black wire is common.
5. The 3-conductor cable can be run up to 2000 feet using 18 gauge wire.

CLIPPER CONNECTIONS

Connect the 3 conductors to the Clipper baseplate. The black wire connects to the I/O COM terminal. The red and white wires connect to separate INPUT terminals (See Figure 3).

XL9600 CONNECTIONS

Connect the 3 conductors to the XL9600 ICS Board. The black wire connects to an Analog Voltage Common terminal. The red and white wires connect to separate ANALOG INPUT terminals (See Figure 4).

Check the right bank of jumpers on the power supply board for proper positioning:

- a) Locate the jumper for the Temperature sensor and place it in the right position for ("voltage" sensor input).
- b) Locate the jumper for the Ambient Light sensor and place it in the right position for ("voltage" sensor input).

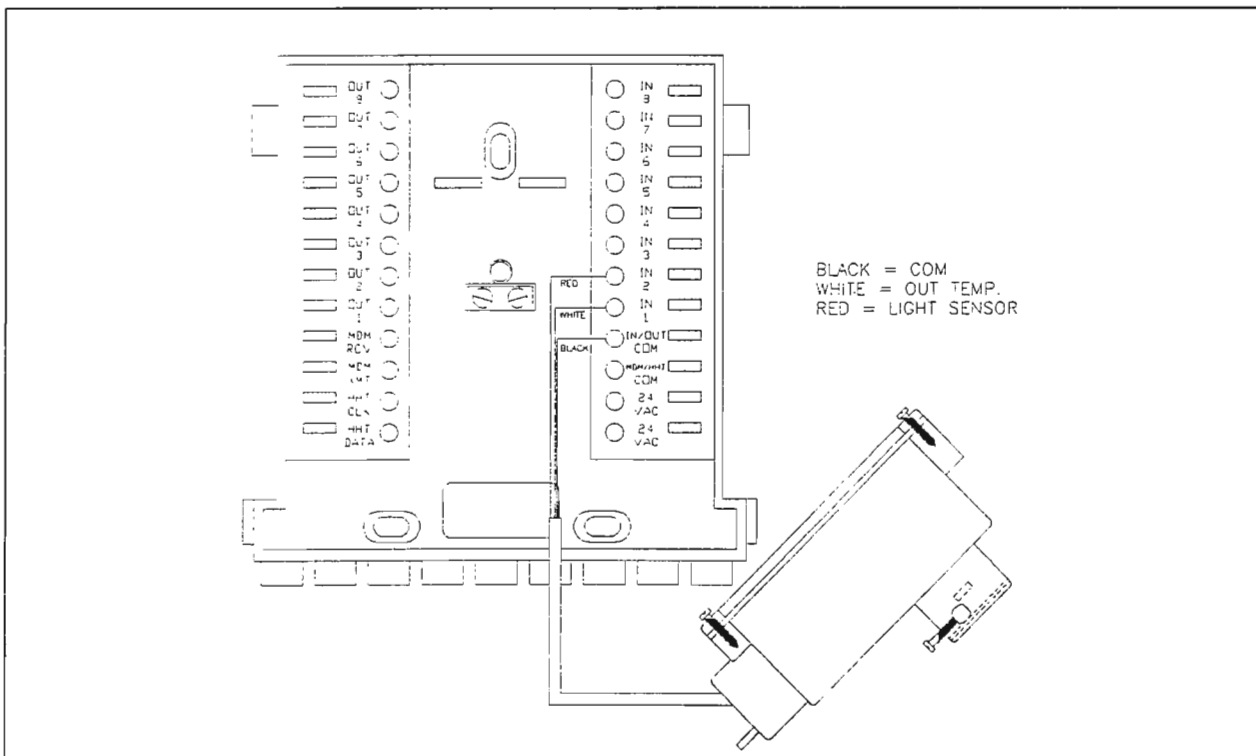


Fig. 3: Clipper Connections

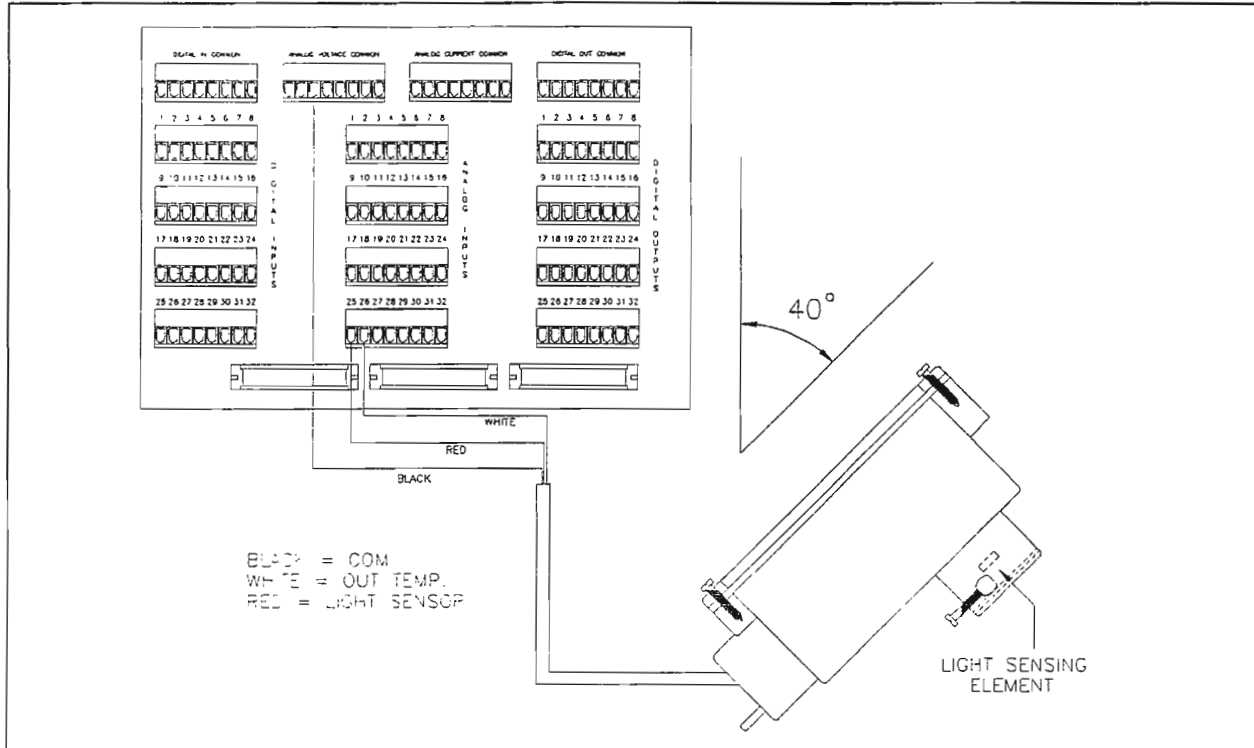


Fig. 4: XL9600 Connections

CALIBRATION AND CHECK OUT PROCEDURE

TEMPERATURE SENSOR

Using a digital thermometer, measure the outdoor temperature and compare to Controller readout (see Operating Manual for keyboard instruction). If there is a variance in readings, offset the controller value under the Miscellaneous Data, Analog Offset Menu (see Operating Manual for keyboard instruction).

AMBIENT LIGHT SENSOR

Adjust the module to a 40° angle. The light sensing element should be facing down (Figure 4). Once mounted, readings at controller should be:

180 - 200 on bright sunny days
30 - 50- on overcast days
0 at night

Turn the calibration screw clockwise to lower readings, counterclockwise to increase readings as appropriate.

TROUBLESHOOTING

1. TEMPERATURE SENSOR READS -25 (SHORTED) OR 230 (OPEN). The probable cause is either the jumper position on the XL9600 Power Supply Board is not correct or the wiring is improper.
 - a) Verify that the jumper position on the RIGHT bank of jumpers is correct on the XL9600 Power Supply Board for the selected sensor(see INSTALLATION).
 - b) Verify the wiring of white and black wires.
2. AMBIENT LIGHT SENSOR READS -25 (SHORTED) OR 230 (OPEN).
 - a) Verify that the jumper position on the RIGHT bank of jumpers is correct on the XL9600 Power Supply Board for the selected sensor(see INSTALLATION).
 - b) Verify the wiring of red and black wires.
 - c) If the Ambient Light sensor continues to read "230" (on a bright sunny day) after wires are checked. turn the calibration screw **CLOCKWISE** until reading is acceptable.

ORDERING KEY

Refer to your authorized Solidyne Wholesaler for complete ordering information.

If you have additional questions or need further information related to this product or any other Solidyne products, call (800) 648-3980 for ordering information or call (708) 394-3333 for technical support.

1. Order part #3276.
2. For use with XL9600, Clipper and Micromizer Controllers.