NOTE: The self-diagnostics module is designed to perform self-diagnostic testing for five minutes every month and thirty minutes every six months. The testing consists of a diagnostic evaluation of AC to DC transfer, charging, battery condition and emergency lamp condition. Self-diagnostics works in conjunction with the test switch/pilot light assembly. Any failures will be indicated by a flashing multi-chromatic LED and an audible alarm. See sample of module in Figure 1.

INSTALLATION INSTRUCTIONS FOR SELF-DIAGNOSTICS MODULE
COMPATIBLE WITH THE PS600 (S14), (S20), PS1400 (S14), (S20) AND PSDL3 (S11) FLUORESCENT BATTERY PACKS

CAUTION: The self-diagnostics module is not compatible with test switch/pilot lights that are not designed for self-diagnostics. If installing the PSSD module to a PS600 (S14), (S20), PS1400 (S14), (S20) or PSDL3 (S11) that has previously been installed in the fixture, dispose of the existing test switch/pilot light and replace it with the version supplied with the PSSD module. Do not leave battery/PSSD module connected for extended periods of time without a continuously energized branch circuit. Allow unit to charge battery for a minimum of 24 hours before testing.

NOTE: The self-diagnostics module can be retrofitted on some existing Power Sentry products. Figure 2 demonstrates these existing products. Please note that the Power Sentry must have these series numbers only. It is not compatible with any prior series.

Fluorescent Battery Packs
Compatible with Self-Diagnostics

<table>
<thead>
<tr>
<th>Series</th>
<th>Field-Installed</th>
<th>Date Codes</th>
<th>Factory-Installed</th>
<th>Date Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS600</td>
<td>14 - 20</td>
<td>After Dec-00</td>
<td>&gt;0012S14</td>
<td>After Feb-01</td>
</tr>
<tr>
<td>PS1400</td>
<td>14 - 20</td>
<td>After Dec-00</td>
<td>&gt;0012S14</td>
<td>After Feb-01</td>
</tr>
<tr>
<td>PSDL3</td>
<td>11</td>
<td>After Jan-02</td>
<td>&gt;0201S10</td>
<td>After Jan-02</td>
</tr>
</tbody>
</table>

IMPORTANT SAFEGUARDS

1. READ AND FOLLOW ALL SAFETY INSTRUCTIONS
2. Before wiring to power supply, turn off electricity at fuse or circuit breaker.
3. To reduce the risk of electrical shock, disconnect the SD module from battery pack before servicing.
4. All servicing should be performed by qualified personnel.
5. Consult your local building code for approved wiring and installation.
6. Do not use standard product outdoors. This product is for use with indoor fixtures sealed or unsealed, except air handling heated outlets or hazardous location applications.
   Battery packs and the PSSD module with DW option are UL Listed for installation (0-50°C ambient) in:
   - Dry or damp locations, sealed or unsealed luminaires
   - Wet Locations, only if installed in a sealed and/or gasketed wet location listed luminaire
   Note: DW option does not make the product suitable for mounting outside the fixture in wet location applications.
7. The emergency battery pack must be connected to an unswitched AC power source (120 or 277).
8. Do not mount near gas or electric heater.
9. Do not attempt to service the self-diagnostics module. Module does not contain field-serviceable parts. Contact manufacturer for service information.
10. Equipment should be mounted in location and at heights where it will not readily be subjected to tampering by unauthorized personnel.
11. The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
12. Do not use this equipment for other than intended use.

SAVE THESE INSTRUCTIONS

US PATENT NO. 6,577,136
INSTALLATION PROCEDURE

**MOUNTING IN WIREWAY**

See Figure 4 for part descriptions.

1. If the fluorescent battery pack has been installed previously, remove and dispose of the existing test switch/pilot light.

2. Determine the best location within the wireway for mounting the PSSD module and route wires as needed to clear the chosen location. See Figure 3.

**CAUTION:** Do not locate SD module TSPL and/or route cables within 1” of fixture lamps.

3. Peel paper backing from the adhesive tape located on the bottom of the PSSD module and press module firmly into position.

   Note: Adhesive tape is difficult to reposition once applied. Locate mounting position carefully.

   Note: If desired, there is a mounting slot on one side of the module provided for screw mounting. Screw not provided.

   Figure 3

4. Plug the test switch/pilot light connector (shipped with the module) into the side of the module.

5. Insert one side of TS/PL 1 into 1/2” hole in the wireway cover and then snap other side into place. Slide mounting clip firmly onto TS/PL mounting post.

6. Make sure to place self-diagnostics status indicator label around TS/PL for use by maintenance personnel.

   Note: If this is a new installation, drilling the 1/2” hole in the desired location of the test switch/pilot light may be required.

   Note: If you wish to disarm the audible alarm, you will need to cut the loop wire on the test switch/pilot light connector.

7. Plug PSSD connector end of self-diagnostics module into 4-pin black connector attached to the fluorescent battery pack.

   **CAUTION:** Connecting the PSSD module to the battery pack completes the battery circuit so that high voltage is present on the output lead wires. Do not leave battery/PSSD module connected for extended periods of time without a continuously energized branch circuit. Allow unit to charge battery for a minimum of 24 hours before testing.

8. The test switch/pilot light should show a steady green color indicating normal charge mode six seconds after AC power is applied.

9. If there is not enough room in wireway to mount, you can mount to the back of the fixture. You must order the ELA PSMKSD accessory (supplied standard with the PSDL3 SD product) to do this.

   See Figure 4 for part descriptions.

10. Insert one side of TS/PL 1 into hole in the wireway cover and then snap the other side into place. Slide mounting clip firmly onto TS/PL mounting post.

   Note: If you wish to disarm the audible alarm, you will need to cut the loop wire on the TS/PL connector.

11. Make sure to place self-diagnostics status indicator label around TS/PL for use by maintenance personnel.

12. Plug PSSD connector end of self-diagnostics module into 4-pin black connector attached to the fluorescent battery pack.

   **CAUTION:** Connecting the PSSD module to the battery pack completes the battery circuit so that high voltage is present on the output lead wires. Do not leave battery/PSSD module connected for extended periods of time without a continuously energized branch circuit. Allow unit to charge battery for a minimum of 24 hours before testing.

13. The TS/PL should show a steady green color, indicating normal charge mode six seconds after AC power is applied.

**BACK OF FIXTURE MOUNTING**

1. If the fluorescent battery pack has been installed previously, remove wireway cover and dispose of the existing test switch/pilot light (TS/PL).

2. Determine the best location on back of fixture for mounting the PSSD module.

3. Pop out knockout on back of fixture. If no knockout available, punch a 1” diameter hole in fixture and lead 36” connectorized lead wire from PSSD module through hole into wireway channel.

4. Peel paper backing from adhesive tape located on the bottom of the PSSD module and press module firmly into position.

   Note: Adhesive tape is difficult to reposition once applied. Locate mounting position carefully.

   Note: If desired, there is a mounting slot on one side of the module provided for screw mounting. Screw not provided.

5. If fixture knockout that is less than 1” in diameter has been used, feed the TS/PL connector (shipped with the module) up through knockout or drilled hole in back of fixture and plug into the side of the module. If 1” hole has been drilled, feed the TS/PL assembly down through hole into fixture wireway. Add grommeting (not provided) to protect TS/PL wires. Plug 4-pin black connector into the side of the module. Snap the TS/PL into the hole in the wireway cover.

6. Cover module wires with the ELA PSMKSD (wire cover) accessory.

7. Use screw provided to attach the ELA PSMKSD to back of fixture.

8. Insert one side of TS/PL 1 into hole in the wireway cover and then snap the other side into place. Slide mounting clip firmly onto TS/PL mounting post.

   Note: If you wish to disarm the audible alarm, you will need to cut the loop wire on the TS/PL connector.

9. Make sure to place self-diagnostics status indicator label around TS/PL for use by maintenance personnel.

10. Plug PSSD connector end of self-diagnostics module into 4-pin black connector attached to the fluorescent battery pack.

11. The TS/PL should show a steady green color, indicating normal charge mode six seconds after AC power is applied.

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Emergency lighting systems should be tested as often as local codes require, or at least quarterly to insure that all components are operational.

Maintenance personnel must have a way to differentiate emergency fixtures from non-emergency fixtures. This is done by visibility of the test switch/pilot light.

**IMPORTANT:** If the test switch/pilot light is not visible once installed on a lensed fixture, the “charge indicator” sticker will need to be placed on the back of the lens directly above the pilot light so it can be identified as an emergency fixture.

**CAUTION:** Connecting the PSSD module to the battery pack completes the battery circuit so that high voltage is present on the output lead wires. Do not leave battery/PSSD module connected for extended periods of time without a continuously energized branch circuit. Allow unit to charge battery for a minimum of 24 hours before testing.

1. If the fluorescent battery pack has been installed previously, remove and dispose of the existing TS/PL and replace with new self-diagnostics TS/PL. Insure protective cable bushing is inserted into clamp connector (not provided).
2. Remove knockout on back of external wireway cover box.
3. Feed 4-pin black connector from TS/PL through the front hole in external wiring cover box, then through knockout on the back and plug into the PSSD module.
4. Feed PSSD module connector down through external wireway cover knockout and attach to 4-pin black connector coming out of the fluorescent battery pack. Feed excess wire into wireway cover box.
5. Re-secure external wireway cover box to fluorescent battery pack.
6. Cover module wires with the ELA PSMKSD (wire cover) accessory (provided standard with the PSDL3 SD product).
7. Peel paper backing from adhesive tape located on the bottom of the PSSD module and press module with ELA PSMKSD attached over external wireway cover knockout. Note: Adhesive tape is difficult to reposition once applied. Locate mounting position carefully.
8. Use screw provided to attach the ELA PSMKSD to the back of the external wireway cover.
9. Mount TS/PL where it is visible both in an ON and OFF position and as high up on the downlighting reflector as possible. Use drill to make a 1/2” diameter hole in the reflector. A center-punched drilling point is recommended. Once drilled, use sandpaper to smooth rough edges around the hole.
10. From the back of the reflector, insert one side of the TS/PL into 1/2” hole and then snap the other side into place. Note: If you wish to disarm the audible alarm, you will need to cut the loop wire on the TS/PL connector.
11. Make sure to place self-diagnostics status indicator label around TS/PL for use by maintenance personnel.
12. Six seconds after AC power is applied, the TS/PL should show a steady green color, indicating normal charge mode.
THREE-YEAR TOTAL CUSTOMER SATISFACTION

Complete Customer Satisfaction. This module is guaranteed to perform to our customers’ complete satisfaction for a period of three years from date of invoice. Our guarantee covers any defect in manufacturing, provided the defect develops under normal and proper use. This liability extends only to the replacement of the defective part. Labor charges will be honored by the factory only with prior written approval from our Post Sales Service Department.

If you have questions concerning this product, please contact Technical Support at 1-888-300-7017 or visit our Web site at www.powersentrysafety.com.