**FEATURES**

- PIE-1 changes analog relay output signals (N.C.) to original ASCII code.
- PIE-1 can supply power to detector using a PoE hub or switch.

**SAFETY PRECAUTION**

- Follow all cautions and instructions in this manual before installation.
- Keep this manual after installation so that you can read when necessary.
- Remember the meanings of “Warning” and “Caution” below to use the product safely.

⚠️ **Warning**
If you ignore a warning, the user or other people may be injured or dead.

⚠️ **Caution**
If you ignore a caution, the user or other people may be injured or the product or something around it may be damaged.

- Do not repair, dismantle or modify the product yourself.
- Do not touch the product with a wet hand.
- Be careful not to damage other interior wiring when installing or wiring the product.
- Power off the product immediately if smoke, odor or strange sound emits from the product.
- Do not install the product in an extremely moist place such as a bathroom or a place where the product may be wet.

⚠️ **Warning**

- Insert the connectors securely when wiring.

⚠️ **Caution**

- Be sure to use the attached cables.
- Do not use 12V and 24V power sources at the same time.

**CE Statement**

Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures. (EN55022)
2 CONNECT PIE-1 TO THE SIP MAIN UNIT

**Step 1**
(1) Prepare an appropriate Dual Gang Box.
(2) Using an Allen key, detach the SIP base from the SIP main unit.

**Step 2**
(1) Plug the alarm 10-pin cable to PIE-1.
(2) Plug the power 2-pin cable to PIE-1. Use the 12VDC connector.
   Note: When using an optional heating unit, use the 24VDC connector.
(3) Set the Selector switch of PIE-1 to the left.
(4) Plug a CAT5 cable to the Ethernet connector for PoE.
(5) Place the PIE-1 into the Dual Gang Box.

**Step 3**
(1) Take off a rectangular gasket and two round gasket from the gasket sheet.
(2) Apply the rectangular gasket on the SIP mounting plate.
(3) Apply the two round gaskets in layers around the round hole of the SIP mounting plate.

**Step 4**
(1) Pass the alarm 10-pin cable and the power 2-pin cable through the hole.
(2) Using four screws, mount the SIP mounting plate to the Gang Box.
(3) Pass the cables through the hole on the back of the SIP base.
(4) Using two screws, mount the SIP base to the SIP mounting plate on the Gang Box.

**Step 5**
Plug the alarm 6-pin cable, the alarm 4-pin cable and the power 2-pin cable to terminals on the SIP base.
Note: Refer to the Connection Table.

**Step 6**
(1) Connect the power and alarm cables.
(2) If cables are too long, put the extra portions into the Gang Box.

**Step 7**
Mount the SIP main unit onto the SIP base.

⚠️ Warning
When the PIE-1 unit is accommodated not in Gang box, mount it in weather proof box or cabinet to avoid moisture.
 PIE-1 CONNECTION TABLE FOR SIP SERIES

<table>
<thead>
<tr>
<th>Model name</th>
<th>Alarm 6-pin cable</th>
<th>Alarm 4-pin cable</th>
<th>Power 2-pin cable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Orange pair</td>
<td>Yellow pair</td>
<td>Green pair</td>
</tr>
<tr>
<td>SIP-100</td>
<td>Far</td>
<td>Near</td>
<td>Creep</td>
</tr>
<tr>
<td>SIP-5030, 404/5, 4010/5, 3020/5</td>
<td>–</td>
<td>Alarm</td>
<td>Creep</td>
</tr>
<tr>
<td>SIP-404, 4010, 3020</td>
<td>–</td>
<td>Alarm</td>
<td>–</td>
</tr>
</tbody>
</table>

⚠️ Caution
Be sure to insulate the cables you are not using.

3 AFTER INSTALLATION

(1) Before using PIE-1, set the IP addresses of PIE-1 and the computer in the following procedure.

The default settings of PIE-1 are as follows.
IP Address: 192.168.0.126
Subnet Mask: 255.255.255.0
Default Gateway: 0.0.0.0

1. Set the local area connection.

2. Using Internet Explorer, access the site below. (http://192.168.0.126/)
3. Enter the user ID and the password below.
   User ID: PIE-1
   Password: OPTEX
4. Change the IP address if necessary.
5. Select the detector you have connected.

7. Click “Overview” button. Confirm the settings in the Overview screen.

Download the detailed instructions at our site. (http://www.optex.co.jp/e/redwall/download/index.html)

(2) Confirm the output of the Event Code, and set VMS/NVR.
(3) After setting VMS/NVR, conduct a walk test.

4 RESETTING

If you forget the IP address you have set, reset it to obtain the default IP address in the following procedure.

1. Pull off the cable connected to the Ethernet connector for PoE. PIE-1 turns off.
2. While pressing the RESET button, connect the cable to the Ethernet connector for PoE again. PIE-1 turns on.
3. Keep pressing the RESET button until the green and yellow LEDs both go off. (They go off within ten seconds.)
4. Release the RESET button. The software restarts, and PIE-1 obtains the default IP address.

6. After changing settings. Click “Save Config” button.
5 CONNECT PIE-1 TO THE RLS UNIT

Note >> Use a switch or hub conforming to IEEE802at type2.

Step 1
(1) Using a screwdriver, remove the cover from the RLS main unit.

Step 2
(1) Plug the power 2-pin cable to the RLS main unit.
(2) Plug the CAT5 cable to Ethernet connector of the RLS main unit.

Step 3
(1) Plug the power 2-pin cable to PIE-1. Use the 24VDC connector.
(2) Set the Selector switch of PIE-1 to the right.
(3) Lead a CAT5e cable from the switching hub into the RLS main unit through a hole on its bottom.
(4) Plug the CAT5e cable to the Ethernet connector for PoE of PIE-1.
(5) Plug the CAT5 cable, already connected to the RLS main unit (Step 2(2)), to the Ethernet connector for detector of PIE-1.

Step 4
(1) Connect the power cables.
(2) Place PIE-1 into the cover.

Step 5
(1) Mount the cover onto the RLS main unit.

6 SPECIFICATIONS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power supply</td>
<td>PoE* (IEEE802.3af/at compliant)</td>
</tr>
<tr>
<td>Power output</td>
<td>24VDC 800mA max, 12VDC 50mA max</td>
</tr>
<tr>
<td>Signal input</td>
<td>5 input for dry contacts (N.C. only)</td>
</tr>
<tr>
<td>Place of use</td>
<td>Outdoor (Inside of the waterproof case)</td>
</tr>
<tr>
<td>Alarm output</td>
<td>Redwall event code (UDP/TCP)</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-40 to +60°C (-40 to +140°F)</td>
</tr>
<tr>
<td>Operating humidity</td>
<td>95% RH. max</td>
</tr>
<tr>
<td>Operation LED (Normal)</td>
<td>Green light is ON when the power is supplied by PoE</td>
</tr>
<tr>
<td>Operation LED (When communicating)</td>
<td>Yellow light blinks during communication</td>
</tr>
<tr>
<td>Function setting</td>
<td>Use web browser</td>
</tr>
<tr>
<td>Dimension</td>
<td>87.5mm x 94.7mm x 33.0mm (2.66” x 3.73” x 1.30”)</td>
</tr>
<tr>
<td>Weight</td>
<td>270g (9.5 oz Including all parts) Main unit: 90g (3.2 oz)</td>
</tr>
<tr>
<td>Supported protocols</td>
<td>IPv4, ARP, UDP, TCP, ICMP, HTTP</td>
</tr>
<tr>
<td>Accessories</td>
<td>Alarm 10-pin cable (26cm), Alarm 6-pin cable (10cm), Alarm 4-pin cable (10cm), Power 2-pin cable (26cm), Power 2-pin cable (10cm), SIP mounting plate for Gang Box, Gasket sheet for Gang Box, No. 6-32 UNC screw (5/8 inch) x 5</td>
</tr>
</tbody>
</table>

*Required power less than 12.95W, can use the PoE Hub.
*Required power less than 25.5W, can use the PoE Plus Hub.
*Specifications may be modified without prior notice.

7 DIMENSIONS

Unit : mm (inch)

Note >>
When use REDSCAN series, use CAT5e or greater cable between the PIE-1 unit and the PoE Hub.
*Required power less than 25.5W, can use the PoE Plus Hub.