Connecting a Cisco Output Module

Overview

The optional Cisco Output Module (Figure 5-1) is attached to a Cisco Physical Access Gateway or Cisco Reader Module to provide additional connections for up to 8 outputs, each of which can be configured as Normally Open (NO) or Normally Closed (NC).

Figure 5-1  Cisco Output Module
The Cisco Output Module is connected to a Cisco Physical Access Gateway or Cisco Reader Module using a CAN connection to provide connections for additional output devices, as shown in Figure 5-2.

**Figure 5-2  Cisco Reader Module connected to the Cisco Physical Access Gateway**

**Package Contents**

Each Cisco Output Module includes the following:
- 2 mounting brackets, with 4 screws for each bracket
- Regulatory compliance and safety information
- Quick start guide
- Connector plugs:

<table>
<thead>
<tr>
<th>Type</th>
<th>Quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 Pin</td>
<td>9</td>
</tr>
<tr>
<td>2 Pin</td>
<td>3</td>
</tr>
</tbody>
</table>
Physical Overview and Port Description

Each Cisco Output Module includes 10 ports for connecting additional output devices as shown in Figure 5-3 and Figure 5-4.

*Figure 5-3  Cisco Output Module Ports and Connectors*
Figure 5-4  Cisco Output Module Ports and Connectors: Top View

1. **Power**  
   Two-pin connector for Voltage In (VIN) and Ground (GND) to connect a 12 to 24 VDC external power source.

2. **CAN interface**  
   A 3-wire CAN bus is used to connect additional modules.  
   **Note**  Modules are connected using the CAN1 interface. The CAN2 interface is not supported in this release.

3. **CAN terminator**  
   The CAN terminator switch is set to ON for the last device in a CAN wiring bus. This switch is set to OFF for all other devices in the CAN bus.
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Physical Overview and Port Description

Status LEDs

Each output port includes a status LED that indicates the following information:

<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off</td>
<td>Output not configured</td>
</tr>
<tr>
<td>Solid Green</td>
<td>Output configured and in default state</td>
</tr>
<tr>
<td>Blinking Green</td>
<td>Output configured and active</td>
</tr>
</tbody>
</table>
Installing the Cisco Output Module

Install a Cisco Output Module is provide additional output connections for a Cisco Reader Module or Gateway

Before You Begin
Verify the following:

- Verify that the module has access to a power source. See the “Power Options and Requirements” section on page 1-12 for more information.
- Verify that you have the necessary mounting brackets or other hardware. See the “Mounting a Gateway or Optional Module” section on page 1-14.

Procedure
To install the module, perform the following procedure:

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**Step 1**  
Mount the module to a wall. See the “Mounting a Gateway or Optional Module” section on page 1-14 for more information.

**Step 2**  
Connect the module to the DC power source:

a. Insert a two-pin connector plug into the DC power port (Figure 5-5)

b. Connect the Voltage In (VIN) and ground (GND) wires.

See the “Power Options and Requirements” section on page 1-12 for more information.
Figure 5-5  Power Connections for the Cisco Output Module

Step 3  Connect the module to the CAN bus:
   a. Insert a three-pin connector plug into the CAN1 port, as shown in Figure 5-6.
   b. Connect the CAN wires to the CAN bus, as shown in Figure 5-7
   c. Turn the CAN terminator ON if the device is the last device in a CAN wiring bus.

Note  The CAN terminator switch is included on the Reader, Input and Output modules only (the Gateway is always the first device in the CAN bus). Set the terminator switch to OFF for all other modules in the CAN bus.

Note  The CAN2 interface is not supported in this release.

See the “Optional Expansion Modules” section on page 1-5 for more information.
Installing the Cisco Output Module

**Step 4** Connect output devices to the module:

a. Insert three-pin connector plugs into the output ports.

b. Connect the wires from the output devices:
   - Common (C) is always used, and either NC or NO is used to complete the connection.
- If the relay is normally open, use the C & NO connections. The circuit is closed when triggered.
- If the relay is normally closed, use the C & NC connections. The circuit is opened when triggered.

**Step 5**  See the Cisco Physical Access Manager User Guide for information to configure the module ports.