

## 2506 Polycom Ring Detector

### Installation Guide



#### Order Codes

**2506** Polycom Ring Detector



## Table of Contents

ABOUT THE ALGO 2506 POLYCOM RING DETECTOR .....	3
GETTING STARTED - QUICK CONFIGURE & TEST .....	4
ALGO SIP ENDPOINT WEB INTERFACE CONFIGURATION .....	5
8128/8138 WEB CONFIGURATION .....	6
8180 WEB CONFIGURATION .....	7
8180G2 WEB CONFIGURATION .....	8
8186/8188/8189/8301 WEB CONFIGURATION .....	9
WIRING CONNECTIONS .....	10
TRIGGERING MULTIPLE DEVICES .....	14
TESTING .....	15
TROUBLESHOOTING .....	15
WIRING CONNECTIONS .....	15
HEADSET JACK .....	15
PHONE VOLUME .....	15

## About the Algo 2506 Polycom Ring Detector

Polycom VVX phones can be configured to provide ring audio to the headset jack instead of the speaker. The Algo 2506 module detects the low-level audio from the headset jack and provides an isolated signal to activate an Algo SIP endpoint.

Only one compatible Algo SIP Endpoint can be connected directly to the 2506 Polycom Ring Detector at a time. However, any of the four devices can relay a signal to additional devices via the relay output connections on the back or via multicast.

### What is Included

- 2506 Polycom Ring Detector
- Coiled Handset Cord
- Wires

### What is not Included

- Algo SIP Endpoint (see list below for compatible devices).

### Compatible Algo SIP Endpoints

- 8128 SIP Strobe Light
- 8138 SIP Multicolored Strobe
- 8180 SIP Audio Alerter
- 8186 SIP Horn Speaker
- 8188 SIP Ceiling Speaker
- 8189 SIP Surface Mount Speaker
- 8301 Paging Adapter & Scheduler

## Getting Started - Quick Configure & Test



*This guide provides important safety information which should be read thoroughly before permanent setup.*

1. First configure the device via the web interface, as per the instructions in this guide. Next, test that the configuration is correct by shorting a pair of wires to the input on the back of the device.
2. Connect one end of a wire pair (maximum length of 20 feet) to the "+" and "-" screw input terminals on the 2506 and the other end to the relay terminals on the Algo alerting device. The pin polarity and placement varies between devices. Refer to the guide for more information.
3. Connect the Algo alerting device to the network via an Ethernet cable at the back of the device. Ensure that a PoE port is used for power.
4. Plug one end of the coiled handset cord into the RJ jack on the 2506 and the other end into the HEADSET jack on the Polycom phone.
5. Set the ring signal on the phone to be sent to the headset jack.
6. **Set the VVX Polycom phone ringing volume to maximum.** (Ensure that the headset is set up before the ring volume is configured.)
7. When an incoming call is received by the Polycom VVX phone, an audio/visual alert will be triggered.

## Algo SIP Endpoint Web Interface Configuration



The compatible Algo SIP Endpoint web interface should be configured before any wiring connections are made to avoid damaging the 2506.

Connect the Algo SIP Endpoint to the network via an Ethernet cable at the back of the device. Ensure that a PoE port is used for power.

After boot up, the device will beep and the intercom will have obtained an IP address. If there is no DHCP server the device will default to the static IP address **192.168.1.111**.

Directions to obtain the IP address of the SIP device can be found in the [product specific documentation](#). The IP address may also be discovered by downloading the Algo locator tool to find Algo devices on your network: [www.algosolutions.com/locator](http://www.algosolutions.com/locator)

Status	
Device Name	sipalerter
SIP Registration	No Account
Call Status	Idle
Proxy Status	Single proxy mode
Provisioning Status	None Found
MAC	00:22:EE:00:00:9E
IP	10.30.2.5
Netmask	255.0.0.0
Date/Time	Tue Mar 29 16:55:02 PDT 2016

1. Enter the IP address (eg 192.168.1.111) into a browser such as Google Chrome, Firefox, or Internet Explorer (other than IE9).
2. In the web interface, enter the password to log in. The default password is **algo**.
3. Go to "Advanced Settings > Input/Output" tab.
4. Follow the appropriate instructions below, depending on the device being used.
5. Click "Save" in the bottom right corner of the page.
6. Short a pair of wires to the input on the back of the device to see if an alert is triggered. If not, verify the PoE connection and web configuration options.

## 8128/8138 Web Configuration

The screenshot shows the ALGO web interface with the following configuration options:

- General**
  - Relay Input Mode:  Disabled,  Relay Normally Open,  Relay Normally Open with Supervision (e.g. Algo 1203 Call Switch),  Relay Normally Closed,  Relay Normally Closed with Supervision,  Algo 1202 Call Button
- Action When Input Triggered**
  - Start Flash Pattern: 1 - Multi-strobe Fast White
- Output**
  - Output Relay:  Enabled,  Disabled

A green circle highlights the "Save" button in the bottom right corner.

The 8128 Generation 1 does not require relay output configuration from the web interface. For 8128G2/8138 please follow the instructions below.

- Set the "Relay Input Mode" to "Relay Normally Open".
- Select desired flash pattern.

## 8180 Web Configuration

The screenshot displays the 'Input/Output Settings' page in a web browser. The page has a navigation bar with tabs for 'Status', 'Basic Settings', 'Advanced Settings', 'System', and 'Logout'. Below this is a sub-navigation bar with 'Network', 'Admin', 'Time', 'Provisioning', 'Tones', 'Advanced Ring/Alert', 'Input/Output', and 'Advanced SIP'. The main content area is titled 'Input/Output Settings' and is divided into 'Output' and 'Input' sections.

**Output Section:**

- Speaker Mode:  Auto,  External,  Internal,  Disabled. A note below states: "The 'External' speaker mode cannot be used if 'Relay Input' mode is selected for the Speaker Terminal Function."
- Relay Mode:  Both,  Ring,  Page,  Disabled
- Message Waiting Light:  None,  On,  Flash
- Heartbeat Light:  Enabled,  Disabled
- Page Light:  Enabled,  Disabled

**Input Section:**

- Speaker Terminal Function:  Speaker Output,  Relay Input. This option is circled in red.
- Relay Input Polarity:  Normally Open Contact,  Normally Closed Contact
- Ring Tone: chime.wav (?)
- Ring Duration:  Play Once,  Play While Held,  Play until Cancelled. A note below states: "The 'Play until Cancelled' mode requires the Ring/Alert Mode setting to be set to 'Call to Cancel'."
- Program Buttons:  Enabled,  Disabled

A green circle highlights the 'Save' button at the bottom right of the configuration area.

For 8180G2 please see next section. For 8180 Generation 1, please follow instructions below.

- Set the "Speaker Terminal Function" to "Relay Input".
- Ensure that "Relay Input Polarity" is set to "Normally Open Contact". Other configuration options can be set as desired.

## 8180G2 Web Configuration

Status Basic Settings **Additional Features** Advanced Settings System Logout

Input/Output Emergency Alerts More Page Extensions More Ring Extensions

### Input/Output

**Terminal Block Functions**

Speaker Mode  Auto  Internal  External  Disabled  
Note that Auto mode is not available when the Relay Terminal Function is set to Input.

Relay Terminal Function  Output  Input

**Input**

Relay Input Mode  Disabled  Relay Normally Open  
 Relay Normally Open with Supervision (e.g. Algo 1203 Call Switch)  
 Relay Normally Closed  
 Relay Normally Closed with Supervision  
 Mute Switch  
 Mute Switch with Supervision  
 Algo 1202 Call Button  
 Algo 1204 Volume Control Switch  
 Algo 1204 Volume Control Switch with Supervision

**Audio Streaming**

Microphone Always On  Enabled  Disabled  
This feature will stream the microphone audio via multicast for monitoring applications. When microphone streaming is active, the device will act as multicast Master regardless of the setting in Basic Settings > Multicast. Note that streaming is only available while the device is idle (it will be interrupted if a Page call is active).

**Action When Input Triggered**

Action  Play Tone  Make SIP Voice Call  Make SIP Call with Tone  Stream Mic Audio  
"Play Tone" will play a recorded audio file to a local speaker and multicast if configured. "Stream Mic Audio" will stream microphone audio to multicast only, so it requires Multicast "Master" mode to be enabled in "Basic Settings > Multicast".

Tone/Pre-recorded Announcement

Tone Duration  Play Once  Play While Held

**Output**

Output Light  Enabled  Disabled  
Disable the light on the speaker entirely (keep the light off even when the speaker is active).

Output Light Colour  Blue  Red

Heartbeat Light  Enabled  Disabled  
Flash the light every 30 seconds to indicate that the device is powered and running.

- Set the "Relay Terminal Function" to "Input".
- Set the "Relay Input Mode" to "Relay Normally Open".
- Ensure that "Action" is set to "Play Tone". Other configuration options can be set as desired.



## 8186/8188/8189/8301 Web Configuration

The screenshot shows the 'Input/Output' configuration page. At the top, there are navigation tabs: Status, Basic Settings, Additional Features (selected), Scheduler, Advanced Settings, System, and Logout. Below these are sub-tabs: Input/Output (selected), Emergency Alerts, More Page Extensions, and More Ring Extensions. The main content area is titled 'Input/Output' and contains several sections:

- General:** 'Relay Input Mode' is set to  Relay Normally Open. Other options include Disabled, Relay Normally Open with Supervision (e.g. Algo 1203 Call Switch), Relay Normally Closed, Relay Normally Closed with Supervision, Mute Switch, Mute Switch with Supervision, Algo 1202 Call Button, Algo 1204 Volume Control Switch, Algo 1204 Volume Control Switch with Supervision, Algo 1205 Audio Interface Switch, and Algo 1205 Audio Interface Switch with Supervision.
- Audio Streaming:** 'Audio Always On' is set to  Disabled. A note states: "Audio Always On" will play sound on the Line Out and Aux Out ports as well as multicast if configured. Input port and volume can be configured below in the "Audio Input Settings" section.
- Action When Input Triggered:** 'Action' is set to  Play Tone. Other options include Make Two-Way SIP Voice Call, Make SIP Call with Tone, and Stream Audio. A note states: "Play Tone" and "Stream Audio" will play sound on the Line Out and Aux Out ports as well as multicast if configured. Below this, 'Tone/Pre-recorded Announcement' is set to 'chime.wav' and 'Tone Duration' is set to  Play Once.
- Output:** 'Output Relay' is set to  Enabled.

A green circle highlights the 'Save' button at the bottom right of the page.

- Set the "Relay Input Mode" to "Relay Normally Open".
- Ensure that "Action" is set to "Play Tone". Other configuration options can be set as desired.

## Wiring Connections



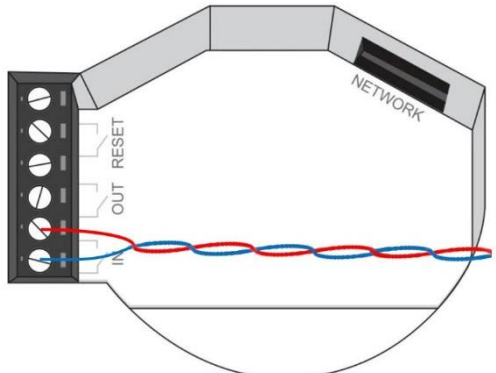
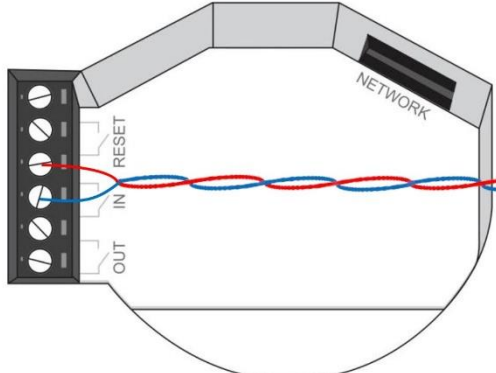
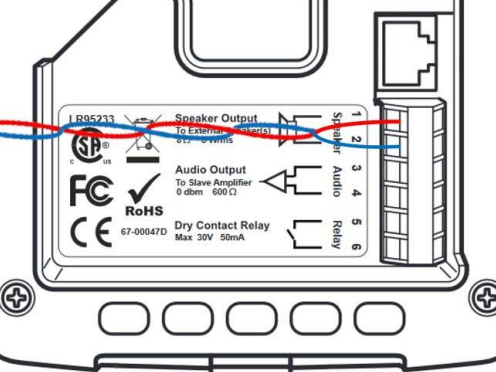
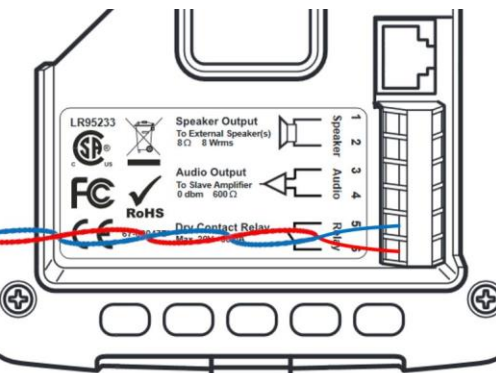
*The compatible Algo SIP Endpoint web interface should be configured before any wiring connections are made to avoid damaging the 2506. Please see previous instructions before proceeding with this section.*

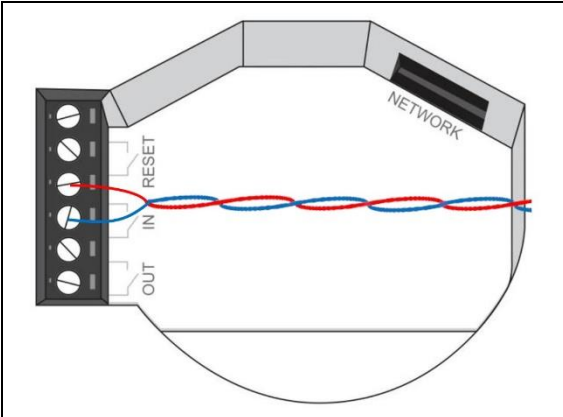
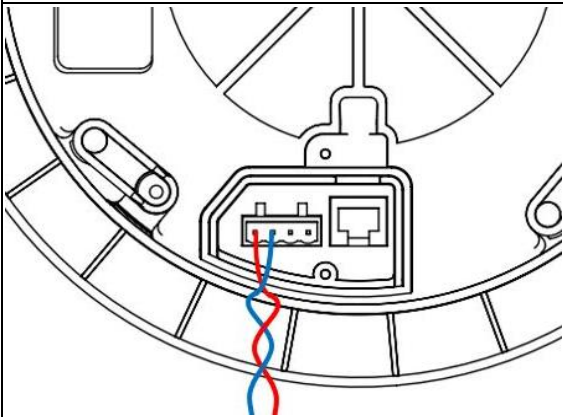
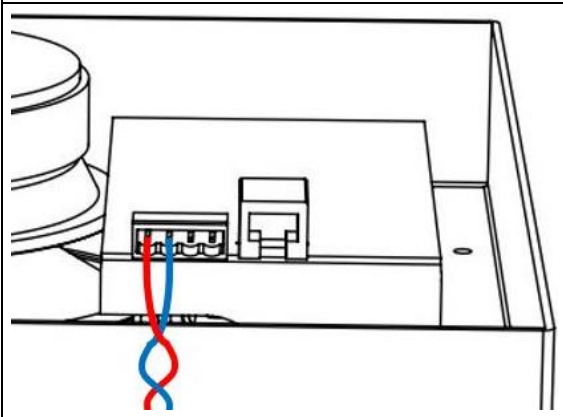
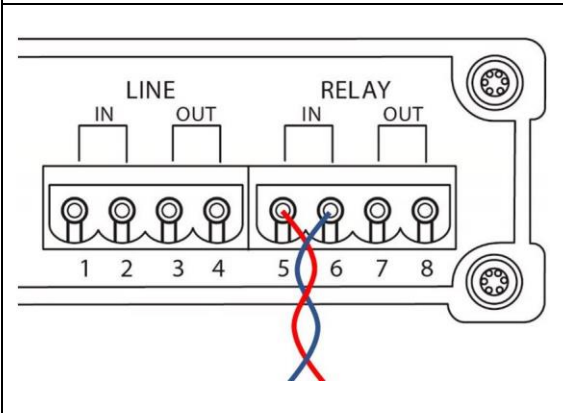
The 2506 can be connected to an Algo alerting device via the following setup:



1. Use a screwdriver to connect a wire pair into the "+" and "-" terminals via the screw input connector on the 2506. It is recommended to keep wiring distances to maximum of 20 feet (indoor only) due to low audio levels.
2. As per the following table, connect the wires from the 2506 to the relay input (speaker output on 8180) on the device of choice:

*Note: The pin polarity/placement varies between devices. Ensure correct polarity is used with each device.*

	<p><b>8128 SIP Strobe Light</b></p> <ul style="list-style-type: none"> <li>• 2506 "+" to Pin 2</li> <li>• 2506 "-" to Pin 1</li> </ul>
	<p><b>8128 SIP Strobe Light (G2) 8138 SIP Strobe Light</b></p> <ul style="list-style-type: none"> <li>• 2506 "+" to Pin 4</li> <li>• 2506 "-" to Pin 3</li> </ul>
	<p><b>8180 SIP Audio Alerter</b></p> <ul style="list-style-type: none"> <li>• 2506 "+" to Pin 1</li> <li>• 2506 "-" to Pin 2</li> </ul> <p>*The speaker output on the 8180 is used as relay input.</p>
	<p><b>8180 SIP Audio Alerter (G2)</b></p> <ul style="list-style-type: none"> <li>• 2506 "+" to Pin 6</li> <li>• 2506 "-" to Pin 5</li> </ul>

 <p>A diagram of a SIP Horn Speaker showing a terminal block on the left with pins labeled IN, RESET, and OUT. A red wire is connected to the IN pin and a blue wire to the OUT pin. A NETWORK port is visible on the right side of the device.</p>	<p><b>8186 SIP Horn Speaker</b></p> <ul style="list-style-type: none"><li>• 2506 "+" to Pin 4</li><li>• 2506 "-" to Pin 3</li></ul>
 <p>A diagram of a SIP Ceiling Speaker showing a terminal block with two pins. A red wire is connected to the left pin and a blue wire to the right pin.</p>	<p><b>8188 SIP Ceiling Speaker</b></p> <ul style="list-style-type: none"><li>• 2506 "+" to Pin 1</li><li>• 2506 "-" to Pin 2</li></ul>
 <p>A diagram of a SIP Ceiling Speaker showing a terminal block with two pins. A red wire is connected to the left pin and a blue wire to the right pin.</p>	<p><b>8189 SIP Ceiling Speaker</b></p> <ul style="list-style-type: none"><li>• 2506 "+" to Pin 1</li><li>• 2506 "-" to Pin 2</li></ul>
 <p>A diagram of a SIP Paging Adapter and Scheduler showing a terminal block with eight pins. The first four pins are labeled LINE IN and LINE OUT. The last four pins are labeled RELAY IN and RELAY OUT. A red wire is connected to pin 5 and a blue wire to pin 6.</p>	<p><b>8301 SIP Paging Adapter and Scheduler</b></p> <ul style="list-style-type: none"><li>• 2506 "+" to Pin 5</li><li>• 2506 "-" to Pin 6</li></ul>

3. Connect the device to the network via an Ethernet cable at the back of the device. Ensure that a PoE port is used for power.

4. Plug the coiled handset cord into the RJ jack of the 2506.



5. Plug the other end of the handset cord into the HEADSET jack of the Polycom VVX phone.



6. Ensure that the ring signal on the Polycom VVX phone is sent to the headset jack. On the phone interface go to:

**Settings > Basic > Preferences > Audible Ringer > select Headset**

7. Set the VVX Polycom phone ringing volume to maximum by pressing volume up (+) key on the phone, while idle or ringing. The ring level should appear on the phone's display screen.

*Note: Ensure that the headset is set up before the ring volume is configured.*

8. When an incoming call is received by the Polycom VVX phone, a visual/audio alert will be triggered.

## Triggering Multiple Devices

Multicast can be used to trigger alerts from one Algo SIP Endpoint to any number of additional Algo alerting products. Neither SIP registration nor SIP licencing will be required. This can be used to provide both audible and visual alerting, or for coverage of large areas.

When using multicast, ensure that all the alerting devices are connected to the same subnet and VLAN. The alerting device that is connected directly to the 2506 should be set as a multicast master and all the additional devices as multicast slaves.

For further multicast configuration details, refer to [product specific documentation](#).

Non-SIP devices, like the Algo 1128 LED Strobe Light can also be activated using one of the Algo SIP Endpoints\* described in this guide. Connect the relay output of the Algo SIP Endpoint to the to the relay input on the back of the non-SIP devices. Thus, once activated, the Algo SIP Endpoint will trigger additional visual alerts on the 1128.



*\*Except 8180G2 (since this device requires the shared relay input/output port to be configured as an input when used with the 2506, so no output is available). Please contact Algo support for further information.*

## Testing

Call the Polycom VVX phone to activate the Algo SIP endpoint.  
Ensure only one alerting device is connected directly to the 2506 at a time.

## Troubleshooting

### Wiring Connections

To verify that the Algo SIP Endpoint is powered and configured correctly, short the wire pair on the input of the alerting device and see if an audio/visual alert is triggered. If not, verify the PoE connection and web configuration options as described in the Algo SIP Endpoint Web Interface Configuration of this guide.

If the Algo SIP endpoint functions correctly, next verify the polarity of the wiring between the alerting device and the 2506.

If a continuous alert is triggered or the alerting device is activated when the phone isn't, the pin polarity may be reversed.

### Headset Jack

Ensure that the ring signal is sent to the headset jack on the Polycom VVX phone. On the phone interface go to:

**Settings > Basic > Preferences > Audible Ringer > select Headset**

### Phone Volume

Ensure that the phone ringer volume is set to a max. The volume should be configured after the headset is set up.