

Algo SIP Endpoints and Zoom Phone Interoperability Testing and Configuration Steps

Need Help?

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Introduction

Algo SIP Endpoints can register to Zoom Phone as a third-party SIP Endpoint and provide Paging, Ringing as well as Emergency Alerting capability.

This document provides instructions to add your Algo device to the Zoom web portal. Interoperability testing results are also available in the end of this document.

All testing has been conducted with the Algo 8301 Paging Adapter and Scheduler, 8186 SIP Horn, and 8201 SIP PoE Intercom. These are representative of all Algo SIP speakers, paging adapters and doorphones and similar registration steps would apply. Please see exceptions in the yellow box below.

Note 1: only one SIP extension may be registered to any given Algo endpoint at a time with Zoom Phone. Multiple Lines feature will be release later in the year. For more information, please contact Zoom support.

Note 2: The following endpoints are exceptions and cannot register to Zoom, as TLS support is not available. 8180 SIP Audio Alerter (G1), 8028 SIP Doorphone (G1), 8128 Strobe Light (G1) and 8061 SIP Relay Controller. For more information, please contact Algo support.

Configuration Steps – Zoom Web Portal

To register an Algo SIP Endpoint to Zoom Phone begin by creating a new common area phone in the Zoom web portal. See the [Zoom support site](#) for more information.

1. Sign in to the Zoom web portal.
2. Click **Phone System Management** > [Users & Rooms](#).
3. Click the [Common Area Phones](#) tab.
4. Click **Add** and enter the following information:

The screenshot shows the Zoom web portal interface. On the left is a navigation sidebar with sections for PERSONAL (Profile, Meetings, Webinars, Phone, Recordings, Settings) and ADMIN (Dashboard, User Management, Room Management, Phone System Management, Users & Rooms, Auto Receptionists, Call Queues, Shared Lines). The 'Users & Rooms' section is highlighted. The main content area is titled 'Add Common Area Phone' and contains the following fields:

- Display Name:
- Description (Optional):
- Extension Number:
- Package: [Assign](#)
- Country:
- Time Zone:
- MAC Address:
- Device Type:
- Paging&Intercom:

At the bottom right of the form are 'Cancel' and 'Save' buttons.

- **Site** (only visible if you have [multiple sites](#)): Select the site you want the device to belong to.
- **Display Name**: Enter a display name to identify the device.
- **Description (Optional)**: Enter a description to help you identify the location of the device.
- **Extension Number**: Enter an extension number to assign it to the device.
- **Package**: Select your desired package.
- **Country**: Select your country.

- **Time Zone:** Select your time zone.
 - **MAC Address:** Enter the 12-digit MAC address of the Algo Endpoint. The MAC can be found on the product label or in the Algo Web Interface under **Status**.
 - **Device Type:** Select **Algo/Cyberdata**.
Note: If you don't have the **Algo/Cyberdata** option, contact your Zoom sales representative.
 - **Model:** Select **Paging&Intercom**.
 - **Emergency Address** (only visible if you don't have multiple sites): Select an [emergency address](#) to assign to the desk phone. If you selected a site for the common area phone, the site's emergency address will be applied to the phone.
5. Click **Save**.
 6. Click **Provision** to view the SIP credentials. You will need this information to complete provisioning using the Algo Web Interface.
 7. Download all certificates provided by Zoom. This will be used in a later step.

Provisioning

MAC Address 00-22-ee-12-00-25

Device Type Algo/Cyberdata Paging&Intercom

You will need to enable TLS1.2 for SIP registration and enable SRTP for secure calling on your IP phone. Please refer to your manufacturer's instructions for these processes.

You'll need following information for manual provisioning. For Algo/CyberData Paging/Intercom devices, see [Zoom Phone Supported Devices](#) to view the configuration guide.

SIP Account 1:

1. **SIP Domain:** 7002541309.zoom.us
2. **Outbound Proxy:** us01sip02.sc.zoom.us:5091
3. **User Name:** [REDACTED]
4. **Authorization ID:** [REDACTED]
5. **Password:** [REDACTED]

Please download [CA certificate](#), [DigiCert Global Root CA](#), [DigiCert Global Root G2](#), [DigiCert Global Root G3](#) and import to your IP phone if they are not in the trust list of the device.

Note: Please note that Zoom support team will not be able to troubleshoot or configure IP phones that are provisioned in this manner. Some Zoom Phone features may not work on manually provisioned phones. It may vary depending on your desk phone model.

Configuration Steps – Algo Endpoint

To register an Algo SIP Endpoint navigate to the Web Configuration Interface.

1. Open a web browser.
2. Type the IP Address of the endpoint. If you don't know the address yet, navigate to www.algosolutions.com, find the user guide for your product and go through the Getting Started section.
3. Log in and go to **Basic Settings** -> **SIP** tab.
4. Enter the information provided from Zoom as per below. Please note the credentials below and an example, use your credentials as generated by Zoom.
 - SIP Domain (Proxy Server) – Zoom SIP Domain
 - Page or Ring Extension – Zoom User Name
 - Authentication ID – Zoom Authorization ID
 - Authentication Password – Zoom Password

The screenshot displays the 'SIP Settings' configuration page. At the top, there are navigation tabs: Status, Basic Settings (selected), Additional Features, Scheduler, Advanced Settings, System, and Logout. Below these are sub-tabs: SIP, Features, and Multicast. The main content area is titled 'SIP Settings' and includes an information icon and text: 'This section allows the SIP server information & account credentials to be entered. This information should be obtained from your telephone system administrator or hosted account provider. After saving these settings, see the Status tab to confirm successful registration.' The configuration fields are as follows: 'SIP Domain (Proxy Server)' with the value '50744587.zoom.us' (circled in red); 'Ring/Alert Mode' with radio buttons for 'Monitor "Ring" event on registered SIP extension' and 'None' (selected); 'Page Extension' (circled in red); 'Authentication ID' (circled in red); 'Authentication Password' (masked with dots, circled in red); and 'Display Name (Optional)'. A 'Save' button with a green checkmark is located at the bottom right.

5. Go to **Advanced Settings** -> **Advanced SIP**.
6. Set the **SIP Transportation** protocol to "TLS".
7. Set **Validate Server Certificate** to "Enabled".
8. Set **Force Secure TLS Version** to "Enabled".
9. Enter the **Outbound Proxy** provided by Zoom.
10. Set **SDP SRTP Offer** to "Standard".
11. Set **SDP SRTP Offer Crypto Suite** to "All Suites".

The screenshot shows the 'Advanced SIP Settings' page. The 'General' section contains the following settings:

- SIP Transportation:** TLS (dropdown menu)
- SIPS Scheme:** Disabled (radio button)
- Validate Server Certificate:** Enabled (radio button)
- Force Secure TLS Version:** Enabled (radio button)
- SIP Outbound Support (RFC 5626):** Disabled (radio button)
- Outbound Proxy:** us01sip06.sc.zoom.us:5091 (text input)
- Register Period (seconds):** 3600 (text input)

The 'SRTP' section contains the following settings:

- SDP SRTP Offer:** Standard (dropdown menu)
- SDP SRTP Offer Crypto Suite:** All Suites (dropdown menu)

12. To upload the CA certificate (downloaded in a previous step) go to **System** -> **File Manager** tab.
13. Browse to "certs" -> "trusted" directory. Use the "Upload" button in the upper left corner or drag and drop to upload the certificates downloaded from Zoom. Please note you may be prompted to reboot the unit.
14. Ensure the SIP Registration Status shows "Successful" in the **Status** tab.

Status Basic Settings Additional Features Scheduler Advanced Settings System Logout

Device Status

Welcome to the Algo 8301 Paging Adapter & Scheduler Control Panel

Setting up your Paging Adapter & Scheduler:

Step 1: Configure your Paging Adapter & Scheduler
Log in with the default password and use the Basic Settings pages to set up the basic information.

Step 2: Check network settings (Optional)
Use the Network page under the Advanced Settings tab to change network settings. The default setting for the device is to obtain its IP address from a DHCP server. Contact your Network System administrator if you plan to assign a static IP address, Mask, and Gateway to the device.

Step 3: Secure your Paging Adapter & Scheduler (Optional)
Use the Admin page under the Advanced Settings tab to change the administrator password.
⚠ Changing the password is extremely important if the device is directly connected to a public network.

Step 4: Register your Paging Adapter & Scheduler (Optional)
Please register your product using the link below:
<http://www.algosolutions.com/register>

Registration ensures your access to the latest upgrades to this product and important service notices.

Status

Device Name	pagingadapter		
SIP Registration	Page	Successful	(Extension 215234142890)
Call Status	Idle		
Proxy Status	Single proxy mode		
Security	TLS	Enabled	
	SRTP	Disabled	
Provisioning Status	None Found		

Note: if registering additional extensions for ringing, paging or emergency alerting, enter the unique credentials for the respective extension in the same way.

Only one SIP extension may be registered to any given Algo endpoint at a time with Zoom Phone. Multiple Lines feature will be release later in the year. For more information, please contact Zoom support.

Interoperability Testing

Register to Zoom Phone

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 3.3.3
- Description: Verify 3rd Party SIP Endpoints are registered successfully.
- Result: **Successful**

Register Multiple SIP Extensions Simultaneously

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn
- Firmware: 3.3.3
- Description: Verify the server will sustain multiple simultaneous extensions registered to the same endpoint (e.g. page, ring, and emergency alert).
- Result: **Not supported at this time. Please see note below.**

Please note only one SIP extension may be registered to any given Algo endpoint at a time with Zoom Phone. Multiple Lines feature will be release later in the year. For more information, please contact Zoom support.

One-Way Page

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn
- Firmware: 3.3.3
- Description: Verify one-way page mode functionality, by calling the registered page extension.
- Result: **Successful**

Two-Way Page

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 3.3.3
- Description: Verify two-way page mode functionality, by calling the registered page extension.
- Result: **Successful**

Ringling

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn
- Firmware: 3.3.3
- Description: Verify ringing mode functionality by calling the registered ring extension.
- Result: **Successful**

Emergency Alerts

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn
- Firmware: 3.3.3
- Description: Verify emergency alerting functionality by calling the registered extension.
- Result: **Successful**

Outbound Calls

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 3.3.3
- Description: Verify emergency alerting functionality by calling the registered extension.
- Result: **Successful**

TLS for SIP Signaling

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 3.3.3
- Description: Verify TLS for SIP Signaling is supported.
- Result: **Successful**

SDP SRTP Offer

- Endpoints: 8301 Paging Adapter and Scheduler, 8186 SIP Horn, 8201 SIP PoE Intercom
- Firmware: 3.3.3
- Description: Verify support for SRTP calling.
- Result: **Successful**

Troubleshooting

SIP Registration Status = “Rejected by Server”

Meaning: The server received register request from the endpoint and responds with an unauthorized message.

- Ensure the SIP credentials (extension, authentication ID, password) are correct.
- Under Basic Settings -> SIP, click on the blue circular arrows to the right of the Password field. If the Password is not what it should be, the web browser is probably auto filling the password field. If so, any change on a page containing a password could be filled in with an undesired string.

SIP Registration Status = “No reply from server”

Meaning: the device is not able to communicate across the network to the phone server.

- Double check the "SIP Domain (Proxy Server)", under Basic Settings -> SIP tab field is filled out correctly with the address of your server and port number.
- Ensure the firewall (if present) is not blocking the incoming packets from the server.
- Ensure TLS is configured for SIP Transportation Method (Advanced Settings -> Advanced SIP).