8039 SIP Video Intercom
FW Version 1.3

Installation & Configuration

Order Codes

8039   SIP Video Intercom
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⚠️ Important Safety Information

This product is powered by a certified limited power source (LPS), Power over Ethernet (PoE); through CAT5 or CAT6 connection wiring to an IEEE 802.3af compliant network PoE switch. The product is intended for installation indoors or on outdoor perimeter of a building. If used in an outdoor environment, additional protective measures must be taken according to the installation manual. All wiring connections to the product must be in the same building. If the product is installed beyond the building perimeter or used in an inter-building application, the wiring connections must be protected against overvoltage / transient. Algo recommends that this product be installed by a qualified electrician.

If you are unable to understand the English language safety information then please contact Algo by email for assistance before attempting an installation support@algosolutions.com.

⚠️ Consignes de Sécurité Importantes

Ce produit est alimenté par une source d’alimentation limitée certifiée (alimentation par Ethernet); des câbles de catégorie 5 et 6 joignent un commutateur réseau à alimentation par Ethernet homologué IEEE 802.3af. Le produit est conçu pour être installé à l’intérieur ou dans une zone adjacente à un édifice; selon le manuel d’installation, des mesures de sécurité additionnelles s’avèrent alors nécessaires. Tout le câblage rattaché au produit doit se trouver dans le même édifice. Si le produit est installé au-delà du périmètre de l’édifice ou utilisé pour plusieurs édifices, le câblage doit être protégé des surtensions transitoires. Algo recommande qu’un électricien qualifié se charge de l’installation de ce produit.

Si vous ne pouvez comprendre les consignes de sécurité en anglais, veuillez communiquer avec Algo par courriel avant d’entreprendre l’installation au support@algosolutions.com.

⚠️ Información de Seguridad Importante

Este producto funciona con una fuente de alimentación limitada (Limited Power Source, LPS) certificada, Alimentación a través de Ethernet (Power over Ethernet, PoE); mediante un cable de conexión CAT5 o CAT6 a un conmutador de red con PoE en cumplimiento con IEEE 802.3af. El producto se debe instalar en lugares cerrados o en el perímetro de un edificio al aire libre. Si se utiliza en un ambiente al aire libre, se deben tomar medidas de
protección adicionales de acuerdo con el manual de instalación. Todas las conexiones cableadas al producto deben estar en el mismo edificio. Si el producto se instala fuera del perímetro del edificio o se utiliza en una aplicación en varios edificios, las conexiones cableadas se deben proteger contra sobretensión o corriente transitoria. Algo recomienda que la instalación de este producto la realice un electricista calificado.

Si usted no puede comprender la información de seguridad en inglés, comuníquese con Algo por correo electrónico para obtener asistencia antes de intentar instalarlo: support@algosolutions.com.

⚠️ Wichtige Sicherheitsinformationen


Sollten Sie die englischen Sicherheitsinformationen nicht verstehen, kontaktieren Sie bitte Algo per Email bevor Sie mit der Installation beginnen, um Unterstützung zu erhalten. Algo kann unter der folgenden E-Mail-Adresse erreicht werden: support@algosolutions.com.

⚠️ 安全须知

本产品由认证的受限电源（LPS），以太网供电（PoE），通过CAT5或CAT6线路联接至IEEE 802.3af兼容的PoE网络交换机供电。本产品适用于室内或建筑物周边安装。如用于室外环境，必须按照安装手册采用附加的保护措施。所有联接本产品的线路必须源自同一建筑物。本产品如需用于超出建筑物周边范围或跨建筑物的安装，线路联接部分必须有过压和瞬态保护。Algo建议本产品由专业电工安装。

如果您对理解英文版安全须知有问题，安装前请通过电子邮件和Algo联系，support@algosolutions.com。
Important Safety Information

**EMERGENCY COMMUNICATION**

If used in an emergency communication application, the 8039 SIP Video Intercom should be routinely tested. SNMP supervision is recommended for assurance of proper operation. Contact Algo for other methods of operational assurance including the use of the integrated microphone for automated “sound to air” acoustic testing.

**WET OR OUTDOOR ENVIRONMENTS**

The 8039 SIP Video Intercom is intended for indoor or outdoor locations and may be subjected to spray or weather, provided the rear wiring cavity is properly sealed to prevent water ingress.

Gaskets included with the 8039 SIP Video Intercom may be effective against water ingress on some, but not all surfaces in which case additional protective measures must be taken such as a perimeter sealant.

**CAT5 or CAT6 connection wiring to an IEEE 802.3af compliant network PoE switch must not leave the building perimeter without adequate lightning protection.**

When the Intercom is connected to wiring that exits the building, there is potential risk of lightning induced electrical surges or high voltages from fault conditions. To reduce risk, outdoor wiring should be protected by Earth grounded conduit whenever possible. Relay input and output connections must not leave the building perimeter without adequate lightning protection.
About the Algo SIP 8039 SIP Video Intercom

Ideal for secure business entrances, emergency intercom, and gated entrances, Algo’s 8039 SIP Video Intercom provides hands-free intercom capability with video, entrance security with door unlock control, rugged weatherproof design, and superior audio performance.

Fully compatible with SIP industry standards, the 8039 SIP Video Intercom will work with most hosted or enterprise SIP-base servers supporting third-party SIP endpoints.

The 8039 SIP Video Intercom is configured using central provisioning features or by accessing a web interface using browsers such as Google Chrome, Firefox, or Internet Explorer.

What is Included

- 8039 SIP Video Intercom
- Gaskets

What is not Included

- Optional 8061 IP Relay Controller
Getting Started - Quick Install & Test

⚠️ This guide provides important safety information which should be read thoroughly before permanently installing the intercom.

1. Connect the 8039 SIP Video Intercom to an IEEE 802.3af compliant PoE network switch. The backlight keypad will turn on. After about 30 seconds, a beep will signal the completion of the boot process.

2. After the boot is complete, press the blue call button on the 8039 to hear the IP address. (Once the SIP Server field is populated in the 8039 web interface, the call button will contact the preconfigured extension when pressed.) The IP address may also be discovered by downloading the Algo locator tool to find Algo devices on your network: www.algosolutions.com/locator

3. Access the 8039 SIP Video Intercom web page by entering the IP address into a browser (Chrome, IE, Firefox etc) and login using the default password algo.

4. Enter the IP address for the SIP server into the SIP Domain field under the BASIC SETTINGS > SIP tab.

5. Enter the SIP Extension, Authentication ID, and Password. Also enter the target Dialing Extension that the Intercom will Call. Note: The Authentication ID may also be called Username for some SIP servers, and in some cases may be the same as the SIP extension.

6. Press the Call Button on the 8039 Intercom, then answer the phone to communicate over the Intercom. Press the digit 6 on the phone keypad to activate the door control relay for three seconds (if applicable).
Installation

The 8039 SIP Video Intercom is weather protected for outdoor installation. However, if network cabling extends beyond the perimeter of the building, then adequate lightning protection is required to protect the cabling and network switch from lightning surges. No lightning protection is required by UL or CSA if the 8039 is located on the outside wall of a building and the wiring is inside the perimeter of the building.

The 8039 is wall and door frame (mullion) mountable via the supplied mounting plate:

Secure the mounting plate to the wall/mullion door frame via two #8 screws. Attach the 8039 into the mounting plate and secure the device in place with the attached security screw at the bottom of the mounting plate using the provided Allen wrench.
Web Interface

The 8039 SIP Video Intercom is configurable using the web interface or provisioning features.

After boot up, the speaker will beep and the intercom will have obtained an IP address. If there is no DHCP server the 8039 SIP Video Intercom will default to the static IP address **192.168.1.111**.

Before the 8039 is configured, the call button on the front can be pressed to play the IP address over the speaker. (Once the SIP Server field is populated on the 8039 web interface, the call button will contact the preconfigured extension when pressed.) The IP address may be discovered by downloading the Algo locator tool to find Algo devices on your network: [www.algosolutions.com/locator](http://www.algosolutions.com/locator)

Enter the IP address (eg 192.168.1.111) into a browser such as Google Chrome, Firefox, or Internet Explorer (other than IE9). The web interface should be visible and the default password will be **algo** in lower case letters.
Wiring Connections

Network Connection

Connect RJ45 jack from PoE network switch or non-PoE network and 48V 350 mA IEEE 802.3af compliant power injector.

There are two lights on the Ethernet jack:

**Green light:** On when Ethernet is working, flickers off to indicate activity on the port.

**Amber light:** Off when successful 100Mbps link is established. Typically on only briefly at power up.

Under normal conditions, the Amber light will turn on immediately after the Ethernet cable is first connected. This indicates that PoE power has been successfully applied. Once the device connects to the network, it will switch to the Green light instead, which will typically flicker indicating traffic on the network.

Door Control Relay

Provides both normally open and normally closed relay contacts. **Note:** The 8061 IP Relay Controller can be used as an alternative more secure option for door opening control, by using a separate relay from the public-facing intercom.

Serial Control

**Coming Soon**

Door Sensor (Dry Contact Input)

**Coming Soon**
Backlit Keypad and Call Button

The backlit keypad and call button will be steady during power up and will flash during a reset.

When making a call, the call button light will flash rapidly, while the call is ringing at the far-end phone. Once the call is answered, the flashing will slow down.

Reset

The 8039 SIP Video Intercom can only be reset during a power up. To reset, reboot or power cycle the 8039 SIP Video Intercom, wait until all the backlit keys start flashing. Then press and hold the call button until the call button begins a double flash pattern. Release the call button and allow the unit to complete its boot process. **Do not press the call button until all the keys start flashing.**

A reset will set all configuration options to factory default including the password.
Web Interface Login – Status and Login

The web interface requires a password which is "algo" by default. This password can be changed using the Admin tab after logging in the first time.

This device’s Status page will be available before and after log on. The section can be used to check 8039’s SIP Registration status and other information.
Status Tab – Video

The video can be seen in the “Status > Video” tab when the user is not logged in. A separate video password can also be enabled, to allow users to access the video, but not the rest of the device settings. This password can be set in “Basic Settings > Video” tab, “Session Password” field. Video settings like brightness, contrast, view (Dewarped or Fisheye) are also available in the “Basic Settings > Video” tab.
Basic Settings Tab – SIP

Note: Any time changes are made to settings in the Web Interface the "Save" key must be clicked to save the changes.

**SIP Domain (Proxy Server)**

SIP Server Name or IP Address.

**SIP Extension**

Used to register the 8039 on the SIP Server.

**Authentication ID**

May also be called Username for some SIP servers and in some cases may be the same as the SIP extension.
**Authentication Password**

SIP password provided by the system administrator for the SIP account.

**Extension to Dial**

Enter the phone number that will be dialed when the call button is pressed. This can also be a Hunt Group number. Ensure that voice mail is not reached.

*Note: The “Basic Settings > Keypad” tab offers additional keypad modes like playing a pre-recorded list of contacts when the call button is pressed and using the keypad to dial extensions or listed departments.*
Basic Settings Tab – Features

Speaker Volume

Select speaker audio level from 1 (lowest) to 10 (highest).

Automatic Gain Control (AGC)

Normalizes the audio level. This ensures audio level heard at the speaker is always at a consistent level, independent of the phone that is used to answer the call.

Answer Inbound Call

Allow the 8039 to auto-answer an inbound call. By default, this functionality is activated.
Play Answer Tone

An optional beep tone can be played over the speaker when the intercom answers an inbound call.

Outbound Ring Limit

This feature can be used to set a limit on how long the intercom will ring before timing out. If the call is not answered within this time period, the 8039 will go back to an idle state.

Ringback Tone

Allows an audible ringback tone to be played on the 8039 speaker until the call is answered.

Allow Call Button to End Active Call

If enabled, allows the visitor to end an active call by pressing the call button.

G.722 Support

Enable or disable the G.722 codec.

Maximum Call Duration

Select the maximum call length. The call will be terminated once the maximum time is reached. In the event that a call inadvertently reaches voicemail or gets accidentally left on hold, this setting ensures that the 8039 returns on-hook.

Door Sensor Connector

**Coming Soon**
## Basic Settings Tab – Video

### Exposure Region

Select an exposure calculation region for optimal image rendering. “Spot” method calculates exposure based on the center area of the image. “Full Frame” method uses the entire image to determine the exposure. “Centre Weighted” uses mainly the center area and a fraction of the remaining frame to compute the exposure.

### Camera View

Camera view can be set to either a “Dewarped” full page view or a circular “Fisheye”.

<table>
<thead>
<tr>
<th>Camera Settings</th>
<th>Centre Weighted</th>
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</thead>
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<tr>
<td>Camera View</td>
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<td>Brightness</td>
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<tr>
<td>Contrast</td>
<td>Default</td>
</tr>
<tr>
<td>Sharpness</td>
<td>Default</td>
</tr>
<tr>
<td>Powerline Frequency</td>
<td>60 Hz (e.g. North America)</td>
</tr>
</tbody>
</table>

**SIP Video Settings**

- **SIP Video Capacity**: CIF (352x288)
- **SIP Video Stream**: CIF (352x288)
- **High Resolution Stream**: 720p (1280x720)

**Web Video Settings**

- **Maximum Browser Sessions**: 8
- **Session Passcode**: This allows a separate password to be configured that allows access to only the “Status > Video” tab.

### SIP Video Settings

- **SIP Video Capacity**: CIF (352x288)
- **SIP Video Stream**: CIF (352x288)
- **High Resolution Stream**: 720p (1280x720)
White Balance

Select the white balance settings. “Auto” will auto-detect the light levels and auto-balance the video accordingly. Other balance choices include: Daylight 6500K and 5500K, Fluorescent, and Incandescent.

Brightness

Increase or decrease image brightness either above or below the default value.

Contrast

Increase or decrease image contrast either above or below the default value.

Sharpness

Increase or decrease image sharpness either above or below the default value.

Powerline Frequency

Choose the local powerline frequency. For example, 60 Hz in North America and 50 Hz in Europe.

SIP Video Capacity

This controls the video parameters included in the SIP 'Offer' that is sent when the 8039 initiates a call. Select the video capacity as supported by the video phone that will answer the calls.

SIP Video Stream

This controls the actual video stream sent by the 8039.

High Resolution Stream

This controls the resolution defined by "High Resolution" mode in the SIP Video settings. Select the video resolution as supported by the video phone that will answer the calls, 720p (1280x720) or VGA (640x480).
Maximum Browser Sessions

Allows for a limit to be set on the number of separate browser sessions that can be open simultaneously to show the video. The setting can be “Disabled” for unlimited number of sessions.

Session Passcode

Allows a separate password to be configured that allows access to only the "Status > Video" tab.
Basic Settings Tab – Keypad

Dial Mode – Single Number

This mode allows the doorphone’s “Call” button to dial a pre-configured phone number, the “Extension to Dial”. There is also an option to allow all the number keys on the keypad to dial this same extension.

Dial Mode – List

This mode allows each of the 10 “number” keys to dial a different pre-configured phone number. For example, 1 for Reception, 2 for Sales, 3 for Shipping, etc.

The Call button can be configured to play a voice-menu detailing the available options to the visitor. The voice-menu can be uploaded via a custom audio file in the “Advanced Settings > Tones” tab.
**Dial Mode – Keypad Dial**

This mode allows the keypad to be used to dial extensions directly. If an incorrect number is dialed by mistake, the “#” key can be pressed to cancel, and the extension can be dialed again.

Set the “Length of Extension to Dial”, correctly to match the extension length of your phone system.

The Call button can be set to “Dial Extension” (e.g. reception) or to “Play Voice Prompt” giving the visitor instructions and/or summary of main extensions to dial via the keypad.

*Warning: Set appropriate permissions on the phone system to ensure that a malicious visitor cannot use the intercom to dial an external number. Also ensure that a visitor will not reach voicemail to avoid the call from getting “stuck.”*

**Keypad Backlight**

Enable or disable the Keypad’s blue backlight.

**Call Button Backlight**

Enable or disable the call button’s blue backlight.

**Backlight Brightness**

Set the enabled keypad and call button backlight level to “High Brightness” or “Low Brightness”.
Basic Settings Tab – Door Control

The 8039 can be used with the optional 8061 IP Relay Controller for additional door security, as it is located inside the building and separate from the public-facing intercom. This section allows you to configure the 8061 settings (if used). For more information about the 8061, see “8061 IP Relay Controller” on page 47.
**Network Door Controller Address**

IP address of the optional 8061 IP Relay Controller.

**Network Door Controller Password**

Used to authenticate the link between the 8039 and the 8061. Ensure that the two devices have matching passwords. Default password is algo.

*Note: The Relay Module Password is used solely to secure the link between the 8039 and the 8061. It is not the same as the Momentary Open Code.*

**Momentary Open Code**

1-4 digit DTMF code that can be used to unlock the door for a brief period of time. Leave this field black to disable this feature.

(Default: 6)

**Duration**

The time period for which to unlock the door when the Momentary Open Code is entered. From ¼ to 30 seconds.

**Latch Open Code**

1-4 digit DTMF code that can be used to unlock the door indefinitely. Leave this field black to disable this feature.

**Latch Closed Code**

1-4 digit DTMF code that will lock the door again when it is latched open. Leave this field blank to disable this feature.

**Number of Doorphone Keypad Codes**

Select number of codes to configure. For instance, “Single” for one main entry code or “Multiple” for distribution among multiple individuals.
Code #1 – 50

1-8 digit code that will lock the door again when it is latched open. Leave this field blank to disable this feature.

Door Unlock Tone

A sound can be played when a door is open, to create awareness.

Local Door Relay

Enable or disable the door control relay on the 8039.
Basic Settings Tab – Multicast

The 8039 SIP Video Intercom is able to act as a multicast Slave, allowing it to multicast messages from a Master device (e.g. 8180, 8186, 8188, 8301) over the intercom speaker. Please note, the 8039 is not meant for voice paging in large areas. Instead we recommend using the 8186 SIP Horn Speaker for outdoor or wide-area applications (e.g. factory, warehouse), and the 8180 SIP Audio Alerter or 8188 SIP Ceiling Speaker for any other indoor paging requirements.

Multicast Mode (Slave Selected)

If Slave mode is enabled the 8039 intercom speaker will activate when receiving a multicast message.

Number of Zones

Select “basic” zones if configuring nine or fewer multicast zones or “expanded” to configure up to 50 zones. The expanded zones have the same behaviour as the basic slave zones, but are hidden by default to simplify the interface.
Advanced Settings Tab - Network

**Protocol**

DHCP is an IP standard designed to make administration of IP addresses simpler. When selected, DHCP will automatically configure IP addresses for each 8039 SIP Video Intercom on the network. Alternatively the 8039 can be set to a static IP address.

**VLAN Mode**

Enables or Disables VLAN Tagging. VLAN Tagging is the networking standard that supports Virtual LANs (VLANs) on an Ethernet network. The standard defines a system of VLAN tagging for Ethernet frames and the accompanying procedures to be used by bridges and switches in handling such frames. The standard also provides provisions for a quality of service prioritization scheme commonly
known as IEEE 802.1p and defines the Generic Attribute Registration Protocol.

**VLAN ID**

Specifies the VLAN to which the Ethernet frame belongs. A 12-bit field specifying the VLAN to which the Ethernet frame belongs. The hexadecimal values of 0x000 and 0xFFF are reserved. All other values may be used as VLAN identifiers, allowing up to 4094 VLANs. The reserved value 0x000 indicates that the frame does not belong to any VLAN; in this case, the 802.1Q tag specifies only a priority and is referred to as a priority tag. On bridges, VLAN 1 (the default VLAN ID) is often reserved for a management VLAN; this is vendor specific.

**VLAN Priority**

Sets the frame priority level. Otherwise known as Priority Code Point (PCP), VLAN Priority is a 3-bit field which refers to the IEEE 802.1p priority. It indicates the frame priority level. Values are from 0 (lowest) to 7 (highest).

**Differentiated Services (6-bit DSCP value)**

Provides quality of service if the DSCP protocol is supported on your network. Can be specified independently for SIP control packets versus RTP audio packets.
Advanced Settings Tab – Admin

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<th>Admin Settings</th>
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<td>Admin Password</td>
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<tr>
<td>Web Interface Protocol</td>
</tr>
<tr>
<td>SNMP Support (v1 get only)</td>
</tr>
</tbody>
</table>

**Password**

Password to log into the 8039 SIP Video Intercom web interface. You should change the default password *algo* in order to secure the device on the network. If you have forgotten your password, you will need to perform a reset using the Reset Button in order to restore the password (as well as all other settings) back to the original factory default conditions.

**Confirmation**

Re-enter network admin password.

**Device Name (Hostname)**

Name to identify the device in the Algo Network Device Locator Tool.

**Introduction Section on Status Page**

Allows the introduction text to be hidden from the login screen.
Web Interface Session Timeout

Set the maximum period of inactivity after which the web interface will log out automatically.

Log Level

Use on the advice of Algo technical support only.

Log Method

Allows the 8039 SIP Video Intercom to write to external Syslog server if the option for external (or both) is selected.

Log Server

If “Network” or “Both” is selected this is the address of the Syslog server on the network.

Web Interface Protocol

The HTTPS is always enabled on the device. Use this setting to disable the HTTP. When HTTP is disabled, requests will be automatically redirected to HTTPS. Also note that since the device can have any address on the local network, no security certificate exists, and thus most browsers will provide a warning when using HTTPS.

SNMP Support (v1 get only)

Additional SNMP support is anticipated for future, but the 8039 SIP Video Intercom will respond to a simple status query for automated supervision. Contact Algo technical support for more information.
Advanced Settings Tab – Time

Network time is used for logging events into memory for troubleshooting.

**Timezone**

Select timezone.

**NTP Time Servers**

The interface will attempt to use Timer Server 1 and work down the list if one or more of the time servers become unresponsive.

**Device Date/Time**

This field shows the current time and date as set on the device. If testing the device on a lab network that may not have access to an external NTP server, the “Sync with browser” button can be used to temporarily set the time on the device.

*Note: This time value will be lost at power down, or overwritten if NTP is currently active. Time and date are used only for logging purposes and are not typically required.*
Advanced Settings Tab – Provisioning

Provisioning allows installers to pre-configure 8039 SIP Video Intercom units prior to installation on a network. It is typically used for large deployments to save time and ensure consistent setups.

There are two different Provisioning methods that can be used: via DHCP Option 66 or via a Static Server. In addition, there are three different ways to download provisioning files from a “Provisioning Server”: TFTP (Trivial File Transfer Protocol), FTP, or HTTP.

For example, 8039 SIP Video Intercom configuration files can be automatically downloaded from a TFTP server using DHCP Option 66. This option code (when set) supplies a TFTP boot server address to the DHCP client to boot from.

DHCP must be enabled if using DHCP Option 66, in order for Provisioning to work.

One of two files can be uploaded on the Provisioning Server (for access via TFTP, FTP, or HTTP):

- Generic (for all 8039 Paging Adaptors) algop8039.conf
- Specific (for a specific MAC address) algom[MAC].conf
MD5 Checksum

In addition to the .conf file, an .md5 checksum file must also be uploaded to the Provisioning server. This checksum file is used to verify that the .conf file is transferred correctly without error.

A tool such as can be found at the website address below may be used to generate this file: http://www.fourmilab.ch/md5

The application doesn’t need an installation. To use the tool, simply unzip and run the application (md5) from a command prompt. The proper .md5 file will be generated in the same directory.

If using the above tool, be sure to use the “-l” parameter to generate lower case letters.

Generating a generic configuration file

1. Connect 8039 to the network
2. Access the 8039 Web Interface Control Panel
3. Configure the 8039 with desired options
4. Click on the System tab and then Maintenance.
5. Click “Backup” to download the current configuration file
6. Save the file settings.txt
7. Rename file settings.txt to algop8039.conf
8. File algop8039.conf can now be uploaded onto the Provisioning server

If using a generic configuration file, extensions and credentials have to be entered manually once the 8039 SIP Video Intercom has automatically downloaded the configuration file.
Generating a specific configuration file

1. Follow steps 1 to 6 as listed in the section “Generating a generic configuration file”.
2. Rename file settings.txt to algom[MAC address].conf (e.g. algom0022EE020009.conf)
3. File algom[MAC address].conf can now be uploaded on the Provisioning server.

The specific configuration file will only be downloaded by the 8039 SIP Video Intercom with the MAC address specified in the configuration file name. Since all the necessary settings can be included in this file, the 8039 will be ready to work immediately after the configuration file is downloaded. The MAC address of each 8039 SIP Video Intercom can be found on the back label of the unit.
Advanced Settings Tab – Tones

Uploading custom Ring Tones (WAV Files)

Custom WAV files may be uploaded into memory to play on the 8039 speaker. An option is provided to normalize the uploaded file using “Auto Sound Level” and/or using “Compression (u-law)”.

An existing file may also be modified by downloading the original via the links in the web interface, making the desired changes, and then uploading the new version with a different name.
Advanced Settings Tab – Advanced Audio

**Dynamic Range Compression (DRC)**

If enabled, compresses the dynamic range of page audio to increase loudness.

**Dynamic Range Compression Gain**

Higher compression gain increases distortion.

**Jitter Buffer Range**

The jitter buffer removes the jitter in arriving network packets by temporarily storing them. This process corrects the inconsistent delays on the network. It is recommended to use the lowest value.
**Advanced Settings Tab – Advanced SIP**

<table>
<thead>
<tr>
<th>Advanced SIP Settings</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outbound Proxy</strong></td>
<td></td>
</tr>
<tr>
<td>IP address for outbound proxy. A proxy (server) stands between a private network and the internet.</td>
<td></td>
</tr>
<tr>
<td><strong>STUN Server</strong></td>
<td></td>
</tr>
<tr>
<td>IP address for STUN server if present.</td>
<td></td>
</tr>
<tr>
<td><strong>Register Period (seconds)</strong></td>
<td></td>
</tr>
<tr>
<td>Maximum requested period of time where the 8039 SIP Video Intercom will re-register with the SIP server. Default setting is 3600 seconds (1 hour). Only change if instructed otherwise.</td>
<td></td>
</tr>
<tr>
<td><strong>Keep-alive Method</strong></td>
<td></td>
</tr>
<tr>
<td>If Double CRLF is selected the 8039 SIP Video Intercom will send a packet every 30 seconds (unless changed) to maintain connection with the SIP Server if behind NAT.</td>
<td></td>
</tr>
</tbody>
</table>
Server Redundancy Feature

Two secondary SIP servers may be configured. The 8039 SIP Video Intercom will attempt to register with the primary server but switch to a secondary server when necessary. The configuration allows re-registration to the primary server upon availability or to stay with a server until unresponsive.

If Server Redundancy is selected the web page will expand as shown below.

Backup Server #1

If primary server is unreachable the 8039 SIP Video Intercom will attempt to register with the backup servers. If enabled, the 8039 SIP Video Intercom will always attempt to register with the highest priority server.

Backup Server #2

If backup server #1 is unreachable the 8039 SIP Video Intercom will attempt to register with the 2nd backup server. If enabled, the 8039 SIP Video Intercom will always attempt to register with the highest priority server.

Polling Intervals (seconds)

Time period between sending monitoring packets to each server. Non-active servers are always polled, and active server may optionally be polled (see below).

Poll Active Server

Explicitly poll current server to monitor availability. May also be handled automatically by other regular events, so can be disabled to reduce network traffic.

Automatic Failback

Reconnect with higher priority server once available, even if backup connection is still fine.

Polling Method

SIP message used to poll servers to monitor availability.
Advanced Settings Tab – Advanced Multicast

Audio Sync

When paging to the 8039 SIP Video Intercom as well as other third party devices, the low latency of the 8039 may cause the audio to lead other devices. By adding audio delay up to one second, the 8039 may be synchronized with other endpoints or telephones that have greater latency.

Zone Definition

The “Expanded” Slave or Master zones can be enabled/disabled in Basic Settings > Multicast. Default IP addresses and ports may be revised for any given zone in the table.

Note: Ensure that the Address and Port settings are the same for all master and slave devices.
Page Tone and Page Volume

When an Algo device is the multicast Master, a page tone will play on the Slave device, so it is recommended to set the Slave tone to “None”. If a page is received from a non-Algo device that doesn’t send a tone, a tone can be inserted on the Slave device allowing for a page tone to be played prior to page audio starting.

By default, the same page volume can be set for all Slave zones in the Basic Settings > Features tab. Unique page volumes may be revised on a per-zone basis in the table above. For instance, emergency pages can be louder on certain Slave endpoints.
System Tab - Maintenance

Download Configuration File

Save the device settings to a text file for backup or to setup a provisioning configuration file.

Restore Configuration File

Restore settings from a backup file.

Restore Configuration to Defaults

Resets all 8039 SIP Video Intercom device settings to factory default values.

Reboot the Device

Reboots the device.
Method

Specify whether the firmware files will be downloaded from the local computer or a remote URL.

Firmware Image

Point to the firmware image provided by Algo

MD5 Checksum

Point to the checksum file provided by Algo

Upgrade 8039 SIP Video Intercom Firmware

1. From the top menu, click on System, then Maintenance.
2. In the Upgrade section, click on Choose File and select the 8039 SIP Video Intercom firmware file to upload. Note that both the FW firmware and MD5 checksum files must be loaded.
3. Click Upgrade
4. After the upgrade is complete, confirm that the firmware version has changed (refer to top right of Control Panel).

System – System Log

System log files are automatically created and assist with troubleshooting in the event the 8039 SIP Video Intercom does not behave as expected.
Specifications

**Power Input:** 48 V PoE IEEE 802.3af Class 0 (Max 10 W - Idle nominal 6 W).

**Protocol:** SIP (initiate or answer call).

**Multicast:** Receive.

**Audio Codecs:** G.711 A-law, G.711 u-law, G.722.

**Video Codecs:** H.264 Main or high profile.

**Video Resolution:** 720p, VGA, CIF up to 30fps.

**Image Sensor:** 187 Degree FOV horizontal and vertical. Fisheye image de-warped.

**Server Redundancy:** Primary, secondary, tertiary.

**Processor:** Linux OS; ARM Cortex-A8 Core with HD video processor and floating point DSP.

**Enclosure:** Clear passivated aluminum.

**Keypad Functions:** Press any key to call; access control; dial number directly; directory annunciation.

**Microphone:** Single Wideband.

**Speech Processing:** Background noise reduction.

**Memory:** 1 GByte audio storage.

**Door Control:** Optional Algo 8061 IP Relay Controller or internal relay NO or NC rated 30V 1A. Dual EOL resistor terminations available on request.

**Configuration:** Web interface (HTTP or HTTPS) or autoprovisioning server.
Provisioning: TFTP, FTP, HTTP

Supervision: SNMP

NAT: STUN, CRLF Keep Alive.

Environmental: -40 to +122 deg F (-40 to +50 deg C); Rated for outdoor environments.

Dimension: 1.95” W x 10.4” T x 1.64” D (4.95 cm x 26.3 cm x 4.17 cm).

Mounting: Includes concealed mounting bracket and secure screw with matching security tool.

Weight: 3.2 lb (1.5 Kg).

8061 IP Relay Controller

The 8039 can provide door control functionality when used with the optional Algo 8061 IP Relay Controller.

The 8061 serves as a bridge between the 8039 and peripheral hardware such as door strike.

As a door opening controller, the 8061 can be located in a secure environment to prevent tampering of the public-facing intercom.

The door control feature is activated by a command from the answering telephone keypad, or entry of the door release code by a visitor via the 8039 itself.

Typical 8039/8061 Setup
PoE and Relay Connections on back of 8061 IP Relay Controller:

1. Connect the 8061 to the network via an Ethernet cable at the back of the device. Ensure that a PoE port is used for power and that the 8061 is connected to the same subnet and VLAN as the target intercom.

2. Run two wires from the door strike to the Normally Open/Common (NO/C) input pair or Common/Normally Closer (C/NC) input pair on the 8061. For more wiring information please visit: www.algosolutions.com/doorstrike.

Configuring the 8061

1. Find the IP address of the Algo 8061 using the Algo locator tool available from the Algo website www.algosolutions.com/locator). This tool displays all of the Algo devices available on the network, and their corresponding IP addresses. Note this address down as you will need it when you configure the 8039 for use with this device.

2. Point your browser to the above IP address. The 8061 Control Panel will be displayed.

3. Log in. The default password is algo.

4. Go to the Config page and set a password in the Door Control Password field in the Features section. Note this password down as you will be reusing it when configuring the 8039 with this device.
FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.