

## 8061 IP Relay Controller FW Version 2.7.3

### Installation & Configuration



#### Order Codes

**8061**      IP Relay Controller

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# ALGO

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## Important Safety Information



### **EMERGENCY COMMUNICATION**

If used in an emergency communication application, the 8061 IP Relay Controller should be routinely tested. SNMP supervision is recommended for assurance of proper operation.



### **DRY INDOOR LOCATION ONLY**

The 8061 IP Relay Controller is intended for dry indoor locations only.

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

**No wiring connected to the 8061 IP Relay Controller may leave the building perimeter without adequate lightning protection.**

## About the Algo 8061 IP Relay Controller

The 8061 IP Relay Controller can provide secure door control functionality when used with the Algo 8036 SIP Multimedia Intercom, 8039 SIP Video Intercom, or 8201 SIP PoE Intercom.

The 8061 serves as a bridge between the Algo intercoms and the peripheral door strike hardware.

As a door opening controller, the 8061 can be located in a secure environment to prevent tampering by outside visitors.

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

The 8061 can also provide a SIP interface for up to four 1202 Call Buttons.

The 8061 IP Relay Controller 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

- 8061 IP Relay Controller
- Network Cable

### What is not Included

- Optional 1202 Call Button
- Optional 8036 SIP Multimedia Intercom
- Optional 8039 SIP Video Intercom
- Optional 8201 SIP PoE Intercom

## Getting Started - Quick Install & Test



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

1. Connect the 8061 IP Relay Controller to an IEEE 802.3af compliant PoE network switch. The red lights on the front will remain on until boot up is completed – about 30 seconds.
2. After the red Power light begins to flash periodically, press the reset switch to hear the IP address over the analog outputs (eg. headset can be connected to the **Audio Output**). 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)
3. Access the 8061 IP Relay Controller web page by entering the IP address into a browser (Chrome, IE, Firefox, etc.) and login using the default password **algo**.

## Installation

The 8061 is wall mountable via screws.

## Web Interface

The 8061 IP Relay Controller is configurable using the web interface or provisioning features.

After the red Power light begins to flash periodically, press the reset switch to hear the IP address over the analog outputs (e.g. headset can be connected to the **Audio Output**). If there is no DHCP server the 8061 IP Relay Controller will default to the static IP address **192.168.1.111**.

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.



## Door Control

The 8061 IP Relay Controller can provide secure door control functionality when used with the Algo 8036 SIP Multimedia Intercom, 8039 SIP Video Intercom, or 8201 SIP PoE Intercom.

To configure the Door Control go to the **Basic Settings** → **Door Control** tab and enable the "Door Control Link". Then, enter the "Door Control Password", which will be reused when configuring the Algo Intercom with the 8061.

*Note: Since an Algo Intercom will be configured with the 8061 IP address, we recommend setting the 8061 to a static IP address. The IP address can be set in **Advanced Settings** > **Network** tab after log in. Contact your network administrator for more assistance.*

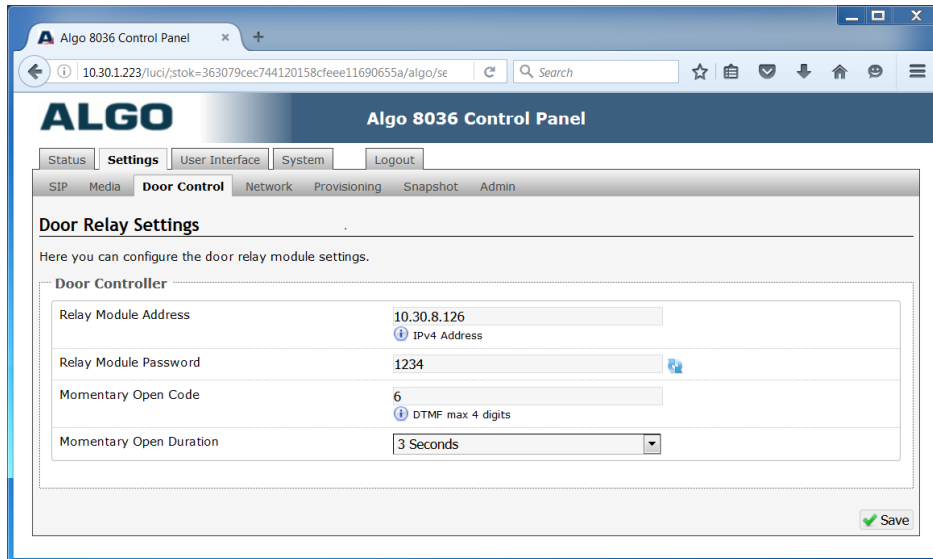
**Configure your intercom of choice (8036, 8039, or 8201) with the configurations below.**

### Door Control with an 8036

The 8036 can be configured from the web interface, once the 8036 IP address is retrieved from the display screen of the unit as it powers on. See [Algo 8036 SIP Multimedia Intercom](#) user guide for details.

1. Via the IP address, log into the 8036 Control Panel (default password is **algo**) and go to the **Basic Settings** > **Door Control** tab





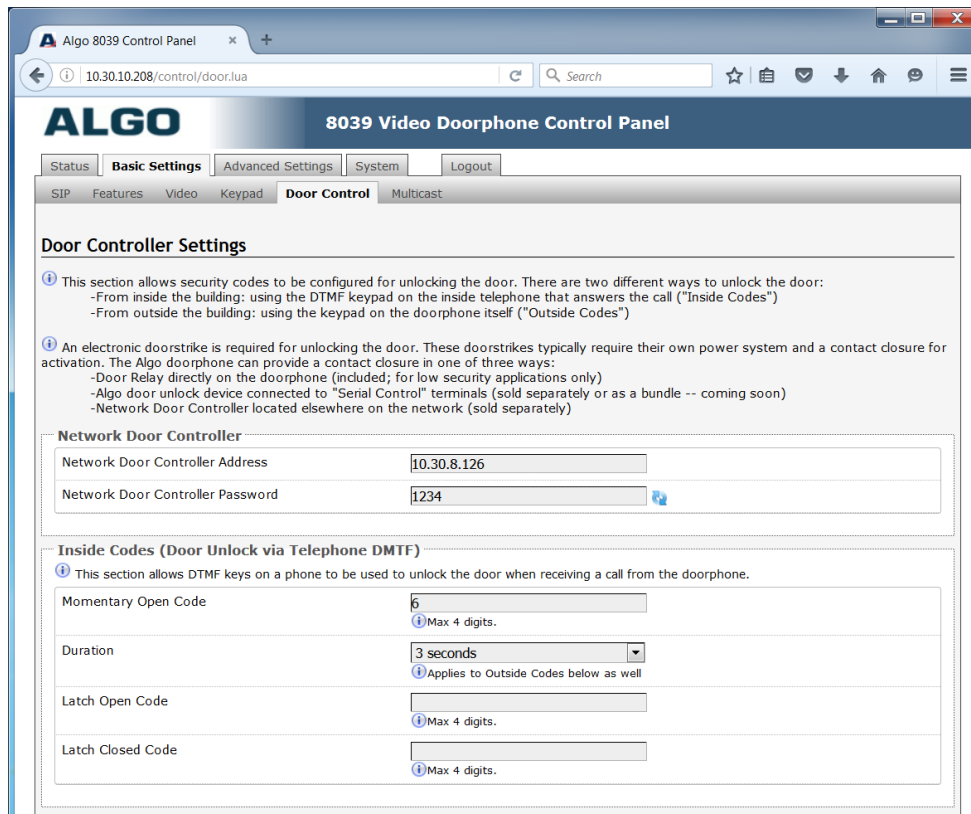
2. Enter the IP address of the 8061 in the "Relay Module Address" field and the associated password in the "Relay Module Password" field. This will authenticate the link between the 8061 and 8036
3. Enter a "Momentary Open Code". This is a 1-4 digit DTMF code that can be used to unlock the door for a brief period of time (Default: 6)
4. Set the "Momentary Open Duration" during which the door will be unlocked (Default: 3 seconds)

## Door Control with an 8039

The 8039 can be configured from the web interface. After the 8039 boots, press the blue call button to hear the IP address over the speaker. See [Algo 8039 SIP Multimedia Intercom user guide](#) for details.



1. Via the IP address, log into the 8039 Control Panel (default password is algo) and go to the **Basic Settings > Door Control** tab



2. Enter the IP address of the 8061 in the "Network Door Controller Address" field and the associated password in the "Network Door Controller Password" field. This will be used to authenticate the link between the 8061 and 8039
3. Enter a "Momentary Open Code". This is a 1-4 digit DTMF code that can be used to unlock the door for a brief period of time (Default: 6)
4. Set the "Duration" during which the door will be unlocked (Default: 3 seconds)

## Door Control with an 8201

The 8201 can be configured from the web interface. After the 8201 boots, press the blue call button to hear the IP address over the speaker. See [Algo 8201 SIP Multimedia Intercom](#) user guide for details.

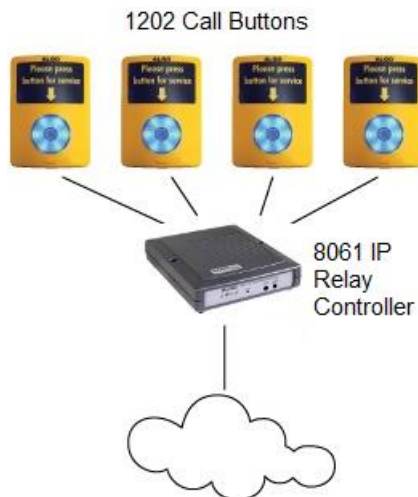


1. Via the IP address, log into the 8201 Control Panel (default password is algo) and go to the **Basic Settings > Door Control** tab

The screenshot shows the ALGO 8201 SIP Intercom Control Panel web interface. The browser address bar shows the URL `10.30.10.211/control/door.lua`. The page title is "8201 SIP Intercom Control Panel". The navigation menu includes "Status", "Basic Settings", "Additional Features", "Advanced Settings", "System", and "Logout". The "Basic Settings" tab is active, and the "Door Relay" sub-tab is selected. The "Door Controller Settings" section contains two informational paragraphs and a "Network Door Controller" configuration section. The "Network Door Controller" section has two fields: "Relay Module Address" with the value "10.30.8.126" and "Relay Module Password" with the value "1234". Below this is the "Door Unlock via Telephone DTMF" section, which includes four fields: "Momentary Open Code" with the value "6", "Duration" with a dropdown menu set to "3 seconds", "Latch Open Code", and "Latch Closed Code". Each of these four fields has a small icon and the text "Max 4 digits." below it.

2. Enter the IP address of the 8061 in the "Relay Module Address" field and the associated password in the "Relay Module Password" field. This will be used to authenticate the link between the 8061 and 8201
3. Enter a "Momentary Open Code". This is a 1-4 digit DTMF code that can be used to unlock the door for a brief period of time (Default: 6)
4. Set the "Duration" during which the door will be unlocked (Default: 3 seconds)

## SIP Interface



In addition to the Door Control functions, the 8061 can also provide a SIP interface to the Algo 1202 Call Button. Up to four Call Buttons can be supported by one 8061 and each 1202 may be individually configured to call a telephone unique for that Call Button.

*Note: Only one 1202 button press can be handled by the 8061 at a time.*

To connect a 1202 Call Button, run a wire pair from the input connector adapter block (pairs 1-4 A&B). The adapter block can then be attached to the back of the 8061 (see page 15

for details).

The wire pair can then connect to the **centre pair** of a modular connector at the back of the 1202 Call Button.

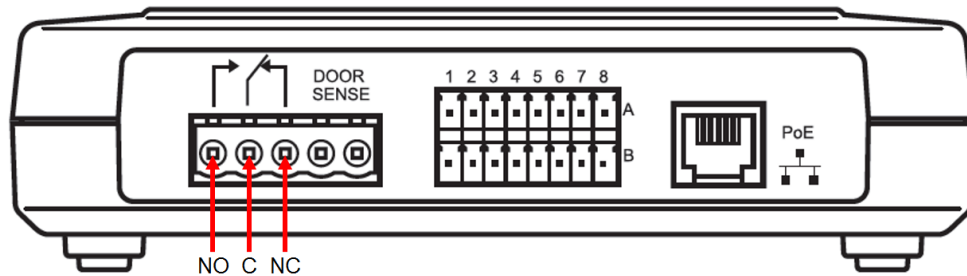


To register the Call Button with the controller, use the **Basic Settings** → **Input** tab. The **Input Mode** has to be set to "CallBox". Choose a Button # corresponding to the wiring pin and pick either "SIP Call" or "Analog" mode.

If using the "SIP Call" mode, enter the "Dialing Extension" and choose a "Tone" of the target phone. Next, in the **Basic Settings** → **SIP** tab, enter the SIP Server address, "Extension", "Authentication ID", and "Password". This information will be available from the IT Administrator. The phone should ring when the 1202 Call Button is pressed.

If using the "Analog" mode, choose a "Tone", "Interval Between Tones" information and Enable/Disable the "Trigger Relay Output" when the Call Button is pressed. The tone should be heard over the analog outputs (eg. headset can be connected to the **Audio Output**).

## Wiring Connections



### Audio Input (front)

Not implemented at this time.

### Audio Output (front)

When an analog mode is enabled in the “Basic Settings > Input” tab, a tone can be played in response to a callbox/relay input event. The output can also be used to speak the IP address (see page 8).

### Network Connection (back)

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

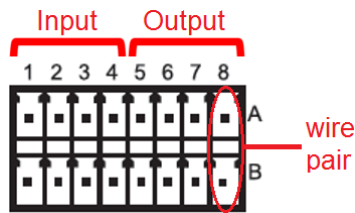
### Door Control (back)

Provides both normally open (NO), common (C), and normally closed (NC) relay contacts.

Two wires can run from a door strike to the NO/C or C/NC pair on the 8061. For more wiring information visit:

[www.algosolutions.com/doorstrike](http://www.algosolutions.com/doorstrike).

## Connector Block Adapter (back)



On the adapter, pairs 1-4 are input relays and pairs 5-8 are output relays. Use a screwdriver to depress a push-pin to open the adjacent wire holder (image right).



Once the wires are in place, the pair of connector blocks should be connected into the connector adapter on the back of the 8061.

## Red LED Indicators



**On steady:** power is OK, but Ethernet Link is not established.

**Blinks one second on, one second off:** Ethernet Link status OK, but IP Address not yet obtained.

**Light on, blinks off briefly every two seconds:** Link and IP Address established successfully



**Off:** the device is not registered with the SIP server.

**On and blinks briefly every two seconds:** the device is successfully registered with a SIP server and ready for use.

**Blinks one second on, one second off:** error registering with SIP Server – check configuration.

**On steady:** off-hook or ringing state is currently active.

## I/O Input/Output

Not implemented at this time.



**On:** Door Relay is activated.

## Reset

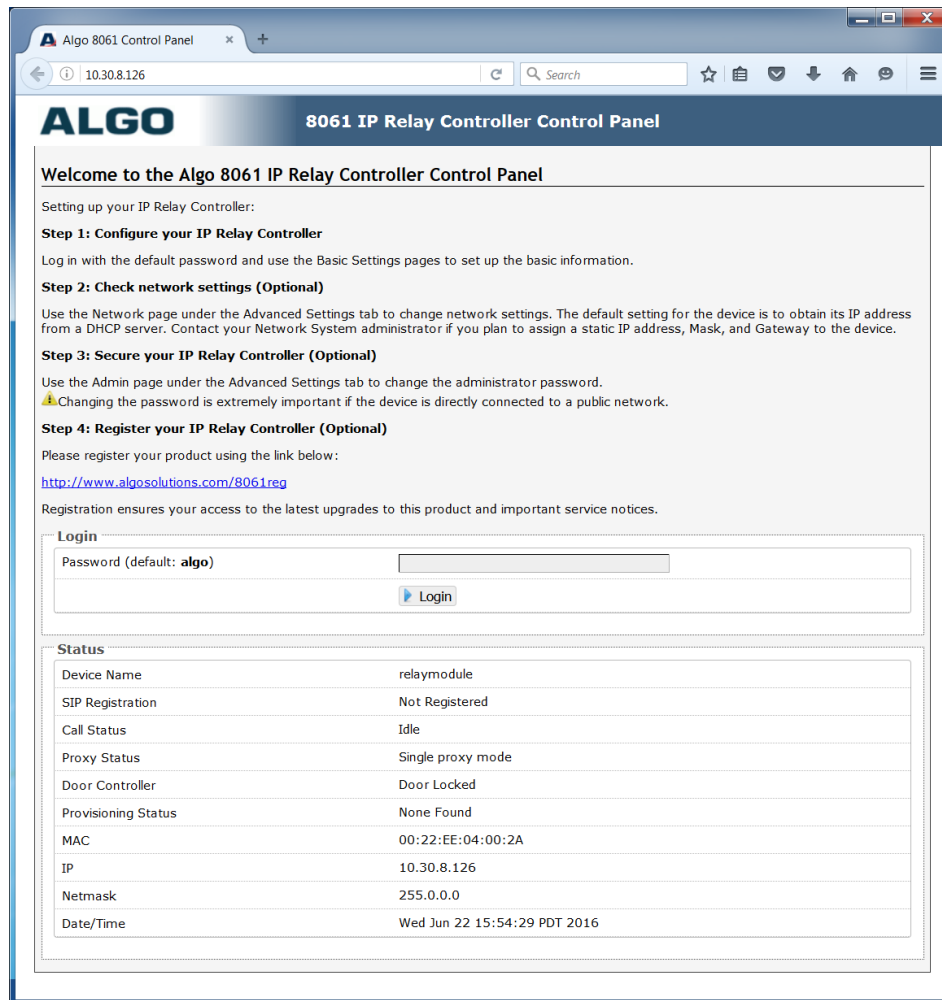
To reset all settings to default, reboot or power cycle the 8061 IP Relay Controller, by disconnecting the power from the 8061. Then press and hold the Reset button on the front of the device, and reconnect the power in the meantime. Continue to hold the Reset button until the Power LED on the front of the device starts to flash.

A reset will set all configuration options to factory default including the password.



## Web Interface 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.



## Status

The device's Status page will be available before and after log on. The section can be used to check 8061's SIP Registration status, Call Status, Proxy Status, and general MAC, IP, Netmask, Date/Time information.

For use as a door opener with an Algo Intercom (8036, 8039, or 8201) the only required configurations can be found in **Basic Settings > Door Control** tab of the 8061 and the Intercom of choice (see pages 9 - 12). It is also recommended to use a static IP address for the 8061, in **Advanced Settings > Network** tab.

Complete 8061 settings are described below in the following sections:

## Basic Settings Tab – SIP

Note: SIP account credentials in this section are only required if making a SIP call (**Basic Settings > Input**) or monitoring events on a SIP extension (**Basic Settings > Events**) via Subscribe/Notify.

The screenshot shows the 'SIP Settings' configuration page. It includes a 'Save' button at the bottom right, which is highlighted with a green circle and a green arrow pointing to it from the text below.

**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.

### Extension

This is the SIP extension for the 8061 IP Relay Controller.

## **Authentication ID**

May also be called Username for some SIP servers and in some cases may be the same as the SIP extension parameter above.

## **Authentication Password**

SIP password provided by the system administrator for the SIP extension/account used.

## Basic Settings Tab – Input

The screenshot displays the 'Basic Settings' tab for the 'Input' section. The main heading is 'Relay Input Settings'. Under the 'General' section, the 'Input Mode' is set to 'CallBox' (selected), with options for 'Relay Input' and 'Relay Input for Remote Control'. The 'SIP Call Ring Limit' is set to 'No limit', with a note that '1 ring = 6 seconds'. The 'SIP Call Maximum Duration' is set to 'None'. The 'Actions' section contains four button configurations. Button #1 is in 'SIP Call' mode with a dialing extension of '1901' and a tone of 'bell-1kHz.wav'. Button #2 is in 'Analog' mode with a tone of 'bell-1kHz.wav' and an interval of 0 seconds between tones. Button #3 is in 'Analog' mode with a tone of 'bell-1kHz.wav' and an interval of 0 seconds between tones. Button #4 is in 'SIP Call' mode with a tone of 'bell-1kHz.wav'. A 'Save' button is located at the bottom right of the form.

### Input Mode

The 8061 can interface with an Algo 1202 Call Button if the “CallBox” mode is enabled. The 8061 can also receive input from any normally open switch when “Relay Input” mode is enabled. If you are interested in using the “Relay Input for Remote Control”, please contact Algo for custom applications.

### SIP Call Ring Limit

Typically set to ensure that a call will not reach voicemail. This feature can be used to set a limit on how long the phone will ring before timing out.

## **SIP Call Maximum Duration**

Select the maximum call length. The SIP 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 8061 returns on-hook.

## **Button Mode – SIP Call**

When triggered by a Call Button or Input Relay, a pre-configured tone or voice file can be sent to a SIP extension. Enter the SIP Extension to be dialed and select an audio file to be played. The SIP server information should also be pre-configured in the "Basic Settings > SIP" tab.

*Note: Custom audio files can be uploaded in the **Advanced Settings > Tones** tab.*

## **Button Mode – Analog**

When triggered by a Call Button or Input Relay, a tone or a pre-recorded announcement can be played over the Audio Output. Select the Tone, interval between tones (seconds), and whether or not a relay output is to be triggered.

## Basic Settings Tab - Events

Status Basic Settings Advanced Settings System Logout

SIP Input **Events** Door Control

### Event Settings

The events are based on RFC 4235 Dialog Event Package for SIP.

**Subscribed Extensions**

Extension #1

Extension #2

**Actions**

Extension  None  Extension #1  Extension #2

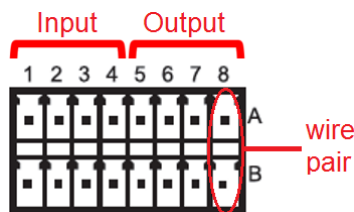
Event

Relay #

Extension  None  Extension #1  Extension #2

Extension  None  Extension #1  Extension #2

Extension  None  Extension #1  Extension #2



If supported by your phone system, the 8061 can use Subscribe/Notify to monitor up to 2 extensions for events like Ring, In-Use, or both. A specific event on a monitored extension can be configured to one of 4 relay outputs on the back of the 8061.

For example, when Extension #1 rings, Relay #1 can activate a loud ringer (e.g. 1825PM Duet Plus) and Relay #2 can activate a light (e.g. 1127 Visual Alerter, 1128 Analog Strobe Light, or 8182 SIP Strobe Light) when Extension #1 is in use.

*A SIP account is required in **Basic Settings > SIP** to use this feature.*

## Basic Settings Tab – Door Control

The screenshot shows a web interface with a top navigation bar containing 'Status', 'Basic Settings', 'Advanced Settings', 'System', and 'Logout'. Below this is a sub-navigation bar with 'SIP', 'Input', 'Events', and 'Door Control'. The 'Door Control' section is titled 'Door Relay Settings' and contains a 'Door Relay' section. This section has two fields: 'Door Control Link' with radio buttons for 'Enabled' (selected) and 'Disabled', and 'Door Control Password' with a text input field containing '1234' and a refresh icon. A 'Save' button with a green checkmark is located at the bottom right of the form.

### Door Control Link

Enable the door control.

### Door Control Password

Set a password that will be used for configuring the intercom for door control. Intercom (8036, 8039, and 8201) configurations can be found on pages 10 - 12.

## Advanced Settings Tab - Network

Status Basic Settings **Advanced Settings** System Logout

**Network** Admin Time Provisioning Tones Advanced SIP

### Network Settings

**Network Interface**

Protocol  Static IP  DHCP

IP Address

Netmask

Gateway

DNS Server

**802.1Q Virtual LAN**

VLAN Mode  Enabled  Disabled

VLAN ID   
Value range: 0 to 4094

VLAN Priority   
Value range: 0 to 7

**Differentiated Services**

SIP (6-bit DSCP value)

RTP (6-bit DSCP value)

**Advanced**

### Protocol

DHCP is an IP standard designed to make administration of IP addresses simpler. When selected, DHCP will automatically configure IP addresses for each 8061 IP Relay Controller on the network. Alternatively the 8061 can be set to a static IP address.

*Note: If using the 8061 for Door Control, we recommend setting the 8061 to a static IP address, since an Algo Intercom will be configured with the 8061 IP address. Other methods, such as DHCP reservations, can also be used to ensure that the IP address does not change.*



## **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

The screenshot shows the 'Advanced Settings' tab for the 'Admin' section. The interface includes a navigation bar with tabs for Status, Basic Settings, Advanced Settings, System, and Logout. Below this, there are sub-tabs for Network, Admin, Time, Provisioning, Tones, and Advanced SIP. The main content area is titled 'Admin Settings' and contains several sections:

- Admin Password:** Fields for 'Password' and 'Confirmation', both masked with dots and having a help icon.
- General:** Fields for 'Device Name (Hostname)' (value: relaymodule), 'Introduction Section on Status Page' (radio buttons for On and Off), and 'Web Interface Session Timeout' (value: 1 hour, with a dropdown arrow and a note: 'Web interface can log out after period of inactivity.').
- Log Settings:** Radio buttons for 'Log Level' (Error (Lowest), Notice ("Event"), Info ("SIP"), Debug (Highest)), a 'Log Size (1 ~ 1000 kB)' field (value: 100), radio buttons for 'Log Method' (Local, Network, Both), and a 'Log Server' field.
- High Availability:** Radio buttons for 'Hardware Watchdog' (Enabled, Disabled).
- Management:** Radio buttons for 'SNMP Support (v1 get only)' (Enabled, Disabled).

A 'Save' button with a green checkmark is located at the bottom right of the form.

### Password

Password to log into the 8061 IP Relay Controller 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 8061 IP Relay Controller 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.

## **Hardware Watchdog**

Use on the advice of Algo technical support only.

## **SNMP Support (v1 get only)**

Additional SNMP support is anticipated for future, but the 8061 IP Relay Controller will respond to a simple status query for automated supervision. Contact Algo technical support for more information.

## Advanced Settings Tab – Time

The screenshot shows a web interface for configuring time settings. At the top, there are tabs for 'Status', 'Basic Settings', 'Advanced Settings' (which is active), 'System', and 'Logout'. Below these are sub-tabs for 'Network', 'Admin', 'Time' (which is active), 'Provisioning', 'Tones', and 'Advanced SIP'. The main content area is titled 'Time Settings' and contains a 'General' section with two fields: 'Timezone' set to '(UTC-08:00) Pacific Time (US and Canada)' and 'NTP Time Server' set to 'pool.ntp.org'. A 'Save' button with a green checkmark is located at the bottom right of the form.

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

### **Timezone**

Select timezone.

### **NTP Time Server**

Allows the 8061 to synchronize to an external time server.

## Advanced Settings Tab – Provisioning

The screenshot shows the 'Provisioning Settings' page in a web browser. At the top, there are navigation tabs: Status, Basic Settings, **Advanced Settings**, System, and Logout. Below these are sub-tabs: Network, Admin, Time, **Provisioning**, Tones, and Advanced SIP. The main content area is titled 'Provisioning Settings' and contains several sections:

- Mode:** A section with a label 'Provisioning Mode' and two radio buttons: 'Enabled' (selected) and 'Disabled'.
- Settings:** A section containing several fields:
  - Server Method:** Two radio buttons: 'DHCP Option 66' and 'Static' (selected).
  - Static Server:** A text input field.
  - Download Method:** Three radio buttons: 'TFTP', 'FTP' (selected), and 'HTTP'.
  - Auth User Name:** A text input field.
  - Auth Password:** A text input field with a 'Show/Hide' icon.
  - Config Download Path:** A text input field.
  - Firmware Download Path:** A text input field.

At the bottom right of the form, there is a 'Save' button with a green checkmark icon.

*Note: It is recommended that Provisioning Mode be set to Disabled if this feature is not in use. This will prevent unauthorized re-configuration of the device if DHCP is used.*

Provisioning allows installers to pre-configure 8061 IP Relay Controller 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, 8061 IP Relay Controller 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 8061 IP Relay Controllers)	algot8061.conf
Specific (for a specific MAC address)	algot[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 8061 to the network
2. Access the 8061 Web Interface Control Panel
3. Configure the 8061 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 algot8061.conf
8. File algot8061.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 8061 IP Relay Controller 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 8061 IP Relay Controller with the MAC address specified in the configuration file name. Since all the necessary settings can be included in this file, the 8061 will be ready to work immediately after the configuration file is downloaded. The MAC address of each 8061 can be found on the back label of the unit.

For more Algo SIP endpoint provisioning information, see:  
[www.algosolutions.com/provision](http://www.algosolutions.com/provision)

## Advanced Settings Tab – Tones

The screenshot shows a web interface for 'Tones Management'. At the top, there are navigation tabs: Status, Basic Settings, **Advanced Settings**, System, and Logout. Below these are sub-tabs: Network, Admin, Time, Provisioning, **Tones**, and Advanced SIP. The main content area is titled 'Tone Management' and is divided into two sections: 'Tones' and 'Upload'.

**Tones Section:**

- File List:** A table with one entry: 'bell-1kHz.wav, 31 kB'. A radio button is selected next to the file name.
- Total Size:** 31 kB
- Delete Selected Tone:** A button labeled 'Delete' with a right-pointing arrow.
- Rename Selected Tone to:** A text input field followed by a 'Rename' button with a right-pointing arrow.

**Upload Section:**

- Upload New Tone File:** A 'Browse...' button next to the text 'No file selected.' Below this is a small blue icon and text: '8KHz/16KHz, 16-bit, Mono, PCM/u-law WAV File, or such files in zip format. Please limit the file name to 32 characters, and no spaces.'
- Auto Sound Level:** A checkbox that is currently unchecked.
- Compression (u-law):** A checkbox that is currently unchecked.
- Max Available Space:** 2388 KB
- Upload Tone File:** A button with a right-pointing arrow.

The 8061 IP Relay Controller includes several pre-loaded WAV files that can be selected to play for relay events. Files may be deleted or renamed. 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.

Custom WAV files may be uploaded into memory to play on a relay event or for other notification applications. An option is provided to normalize the uploaded file using "Auto Sound Level" and/or using "Compression (u-law)".



## Advanced Settings Tab – Advanced SIP

The screenshot shows the 'Advanced SIP Settings' configuration page. At the top, there are navigation tabs: Status, Basic Settings, **Advanced Settings**, System, and Logout. Below these are sub-tabs: Network, Admin, Time, Provisioning, Tones, and **Advanced SIP**. The main content area is titled 'Advanced SIP Settings' and is divided into two sections: 'SIP' and 'Server Redundancy'.  
**SIP Section:**  
- Outbound Proxy: Text input field.  
- STUN Server: Text input field.  
- Register/Subscribe Period (seconds): Text input field with '3600' entered.  
- Keep-alive Method: Radio buttons for 'None' and 'Double CRLF' (selected).  
- Keep-alive Period (seconds): Text input field with '30' entered.  
**Server Redundancy Section:**  
- Server Redundancy Feature (Multiple SIP Server Support): Radio buttons for 'Enabled' (selected) and 'Disabled'.  
- Backup Server #1: Text input field.  
- Backup Server #2: Text input field.  
- Polling Interval (seconds): Dropdown menu with '120 seconds (2 minutes)' selected. Below it is a help icon and text: '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: Radio buttons for 'Enabled' and 'Disabled' (selected). Below it is a help icon and text: '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: Radio buttons for 'Enabled' (selected) and 'Disabled'. Below it is a help icon and text: 'Reconnect with higher priority server once available, even if backup connection still fine.'  
- Polling Method: Radio buttons for 'SIP NOTIFY' (selected) and 'SIP OPTIONS'. Below it is a help icon and text: 'SIP message used to poll servers to monitor availability.'  
At the bottom right of the form is a 'Save' button with a green checkmark icon.

### Outbound Proxy

IP address for outbound proxy. A proxy (server) stands between a private network and the internet.

### STUN Server

IP address for STUN server if present.

### Register/Subscribe Period (seconds)

Maximum requested period of time where the 8061 IP Relay Controller will re-register with the SIP server. Default setting is 3600 seconds (1 hour). Only change if instructed otherwise.

### Keep-alive Method

If Double CRLF is selected the 8061 IP Relay Controller will send a packet every 30 seconds (unless changed) to maintain connection with the SIP Server if behind NAT.

## **Server Redundancy Feature**

Two secondary SIP servers may be configured. The 8061 IP Relay Controller 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 8061 IP Relay Controller will attempt to register with the backup servers. If enabled, the 8061 will always attempt to register with the highest priority server.

### **Backup Server #2**

If backup server #1 is unreachable the 8061 IP Relay Controller will attempt to register with the 2nd backup server. If enabled, the 8061 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.

## System Tab - Maintenance

The screenshot shows a web interface for system maintenance. At the top, there are navigation tabs: Status, Basic Settings, Advanced Settings, System (selected), and Logout. Below these is a sub-menu with Maintenance, System Log, and About. The main content area is titled 'System Maintenance' and is divided into three sections: 'Backup / Restore Configuration', 'Reboot', and 'Upgrade to New Firmware'. The 'Backup / Restore Configuration' section has three rows: 'Download Configuration File' with a 'Backup' button; 'Restore Configuration File' with a 'Browse...' button, 'No file selected.' text, and a 'Restore' button; and 'Restore Configuration to Defaults' with a 'Restore Defaults' button. The 'Reboot' section has one row: 'Reboot the device' with a 'Reboot' button. The 'Upgrade to New Firmware' section has four rows: 'Method' with radio buttons for 'From Local Files' (selected) and 'From URL'; 'Firmware Image' with a 'Browse...' button, 'No file selected.' text, and a disabled button; 'MD5 Checksum' with a 'Browse...' button, 'No file selected.' text, and a disabled button; and 'Upgrade' with an 'Upgrade' button.

### 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 8061 IP Relay Controller 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

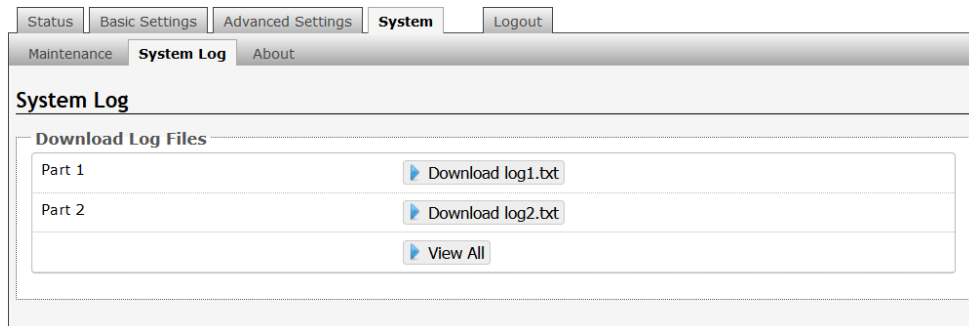
Point to the checksum file provided by Algo

## Upgrade 8061 IP Relay Controller Firmware

1. From the top menu, click on System, then Maintenance.
2. In the Maintenance section, click Reboot, and wait 30-60 seconds for the device to reboot and the web page to automatically reload.
3. Login to the device again, and click on System.
4. In the Upgrade section, click on Choose File and select the 8061 IP Relay Controller firmware file to upload. Note that both the FW firmware and MD5 checksum files must be loaded.
5. Click Upgrade
6. After the upgrade is complete, confirm that the firmware version has changed (refer to top right of Control Panel).

## System - Network Logging

System log files are automatically created and assist with troubleshooting in the event the 8061 IP Relay Controller does not behave as expected.



## Specifications

<b>Power Input:</b>	48V PoE IEEE 802.3af Class 0 (Max 4W – Idle nominal 2W)
<b>Door Open Relay:</b>	Normally Open and Normally Closed Max 30V 5A DC or AC
<b>Door Sense Input:</b>	Not implemented at this time
<b>Relay Outputs:</b>	Normally Open dry contact, Max 30V 50mA
<b>Relay Inputs:</b>	Normally Open dry contact, Max 2 kOhm OR - configured for 1202 Call Button
<b>Audio Input:</b>	Not implemented at this time
<b>Audio Output:</b>	0 dBm 600 Ohm 3.5 mm jack Isolated, Line Level, Mono output Connections provided to Tip & Sleeve No connection to Ring if Stereo cable is used
<b>Configuration:</b>	Web interface (HTTP) or auto-provisioning server
<b>Provisioning:</b>	TFTP, FTP, or HTTP
<b>Network Address:</b>	DHCP, or static IP address (recommended)
<b>Environmental:</b>	+32 to +122 deg F (0 to +50 deg C); suitable for dry indoor environments only.
<b>Compliance:</b>	RoHS, FCC Class B, CSA/UL (USA & Canada)
<b>Supported Algo Intercoms:</b>	8036, 8039 and 8201
<b>Dimensions:</b>	5.75" x 7" x 1.5"

## FCC Compliance Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.