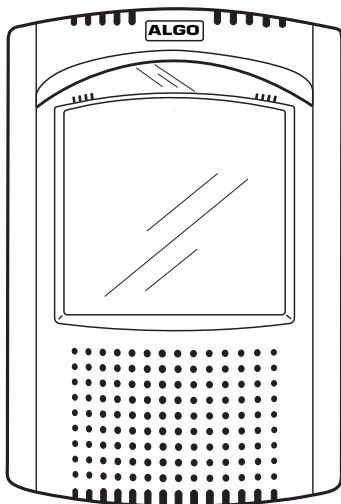


ALGO

Communication Solutions



8036 SIP Multimedia Intercom

User Guide

Algo Communication Products Ltd.

www.algosolutions.com

Table of Contents

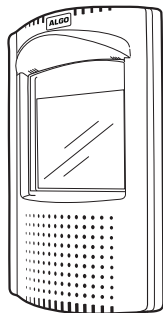
Overview	4
Introduction	4
Key Features.....	4
What's Included	5
Product Tour.....	6
Setup and Installation.....	7
Wall Mounting	7
PoE Network Connection	15
Programming and Configuration.....	16
Web Interface Control Panel	16
Accessing the Control Panel.....	16
Setup SIP Account.....	18
Application Development.....	19
Overview	19
Creating User Interface Screens	20
Custom Graphic Screens.....	20
Directory (Addressbook) Listings	21
Uploading user content	22
Control Panel Menu Reference.....	23
Status.....	23
Settings	24
User Interface.....	33
System	42
Door Control	45
Configuring the 8061	46
Configuring the 8036 with the 8061	47
Door Control Hardware and Wiring	47
Appendix	48
Upgrade 8036 Firmware	48
Soft Reset	49
Button Positioning Table.....	50

<i>Directory (Addressbook) Text Files</i>	<i>53</i>
<i>Working with Compressed Files</i>	<i>55</i>
<i>Specifications</i>	<i>57</i>
<i>FCC Compliance</i>	<i>59</i>
<i>Important Safety Notice</i>	<i>59</i>

Overview

Introduction

The 8036 is a multimedia SIP endpoint from Algo combining the functionality of an IP phone, security camera, and interactive kiosk. Easily configurable to support multiple applications and interface configurations, the product is designed for outdoor or public access locations to provide enhanced communication and support for guests and visitors.



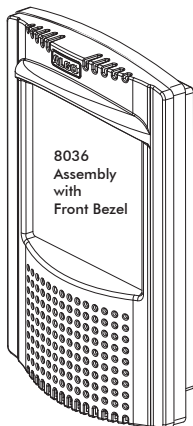
Key Features

- Sunlight viewable 5.7" VGA color capacitive touch display
- Integrated camera for still snapshot or H.264 video streaming
- Weatherproof
- Wideband speaker and dual microphones
- Presence detection
- Secure door/gate management
- Web interface panel for configuration and application programming

For comprehensive product and application information, please visit www.algosolutions.com/8036

What's Included

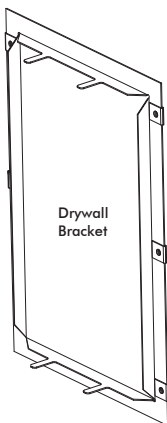
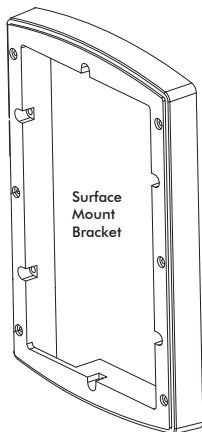
For information on the use of each of these components, please refer to "Setup and Installation" on page 7.



Ethernet
Cable Boot



Algo
Security
Tool



#8 x 1.5
Type A
Pan Head
Phillips
Qty: 6

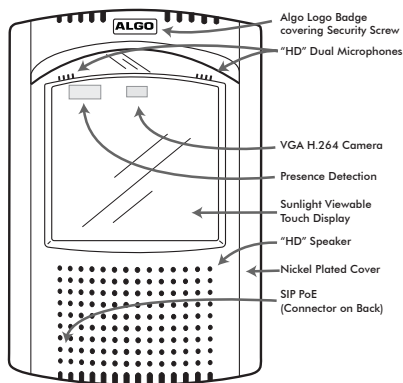


#8 x 1
Type B
Pan Head
Phillips
Qty: 6

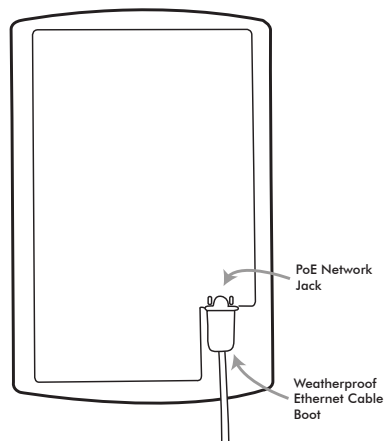


Product Tour

Front View



Back View (of 8036 Assembly)



Setup and Installation

This section will guide you with the physical installation of your new 8036 SIP Multimedia Intercom.

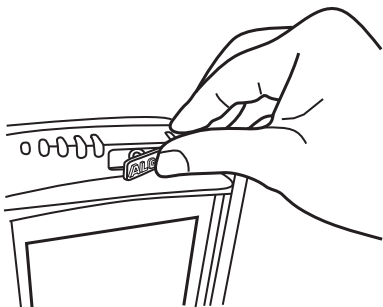
Wall Mounting

The 8036 can be either surface or flush mounted. The unit is designed to shed rainwater and allow air ventilation only when oriented in the correct position (ALGO logo at top) and installed vertically.

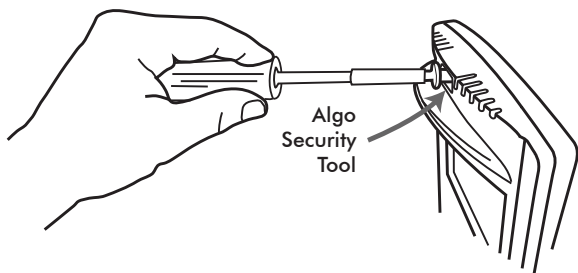
Removal of Front Bezel for Installation

The 8036 is shipped partially assembled and must be partially disassembled before it can be installed.

Remove the security screw behind the ALGO Logo Badge by first pressing on one side of the badge. This will raise the other side so that it can be removed easily by hand.



A security bit ("Algo Security Tool") is included with the 8036 that fits standard socket screwdrivers. Use the bit in a screwdriver to remove the security screw and carefully remove the Front Bezel by pulling at the top and then disengaging the bottom clip.



Put the Front Bezel, Security Screw, and Logo Badge aside for re-assembly after mounting.

Refer to the following diagrams for the appropriate methods and components to use for different mounting applications.

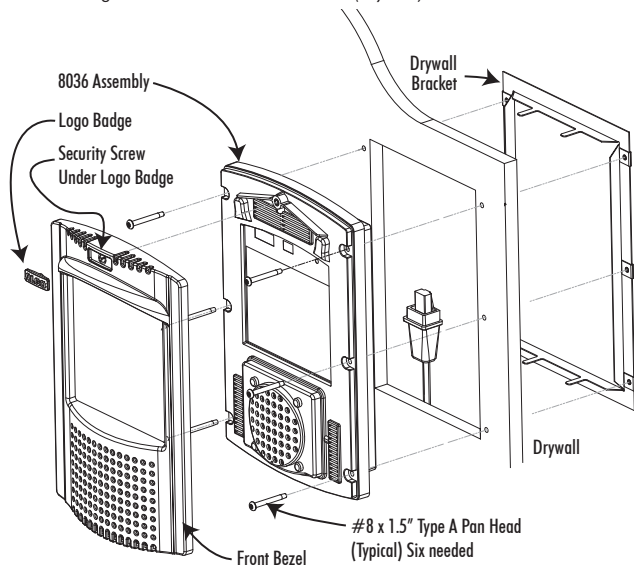
Flush Mounting into Drywall (Interior)

1. Create a drywall cut out per the template on page 4 of this sheet.
2. Place the Drywall Bracket into wall and bend tabs around to the front of the drywall to hold in place.
3. After connecting the Ethernet cable, use the #8 x 1.5" Type A Pan Head screws to secure the 8036 housing to the Drywall Bracket.
4. Replace the Front Bezel and keep the Algo Security Tool in a safe location.
5. Replace the ALGO Logo Badge.



The Mounting Gasket and Surface Mount Bracket are not required for drywall mounting.

Flush Mounting an 8036 into an interior wall (drywall)



A template for cutting a hole in the wall can be downloaded at www.algosolutions.com/8036mounting

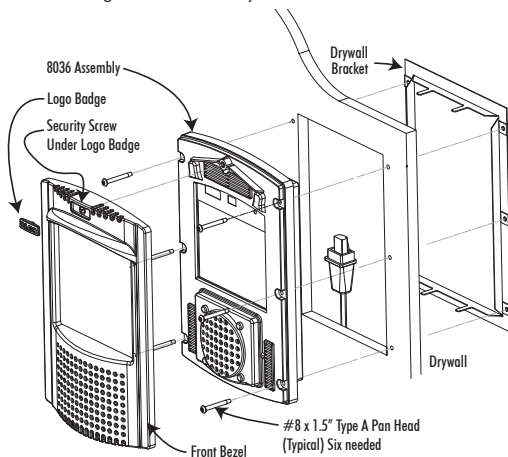
Flush Mounting into Other Materials or Outdoors

The same guidelines of flush mounting from the previous section apply, however, the Drywall Bracket may not be required if the wall material is firm enough to hold a screw close to the cutout edge. A #8 anchor may be required (not supplied) for the wall material.

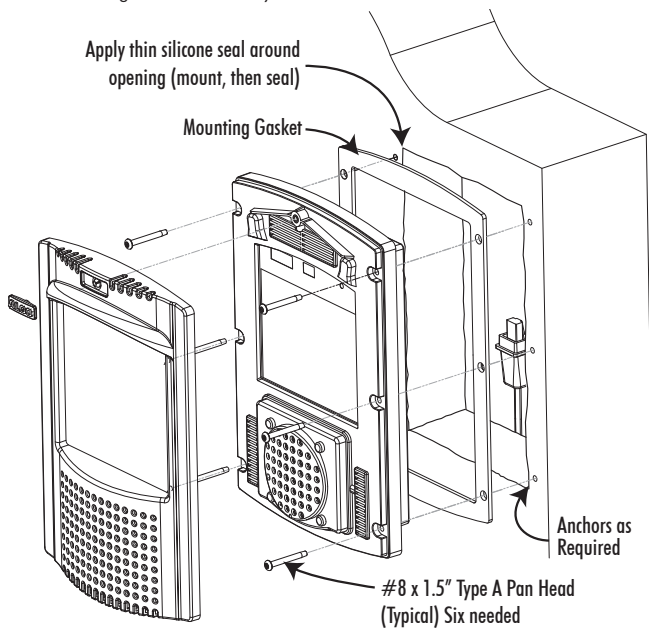
If outdoors:

1. A rubber Ethernet Cable boot is supplied to be placed over the network cable prior to terminating with a plug (see "PoE Network Connection" on page 15).
2. While the 8036 is designed to withstand rain, it may be undesirable for water to enter the wall cavity. This can be achieved by sealing the cable hole prior to mounting or using the Mounting Gasket between the 8036 and wall. Uneven surfaces may require a silicon bead around the 8036 after installation.

Flush Mounting an 8036 into Drywall



Flush Mounting an 8036 into Drywall



Surface Mounting

The Surface Mount Bracket may be used on a wall surface where flush mounting is undesirable, or not practical. The bracket also may be good option when integrating the 8036 into stonework.

1. Mount the Surface Mount Bracket using the #8 x 1.5" Type A Pan Head screws supplied. For some wall materials, #8 anchors may be required (not included).



There is a top and bottom to the Surface Mount Bracket. Make sure the two drainage holes are at the bottom.

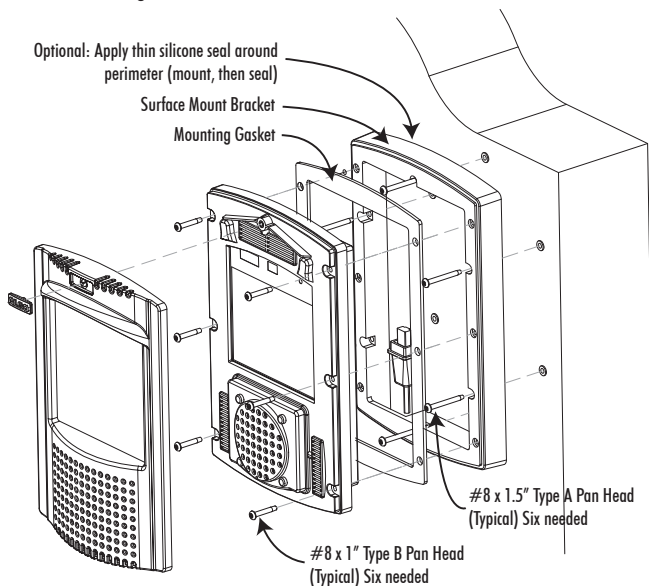
If outdoors:

- a. Ensure any opening in the wall is sealed or apply a silicon bead between the Surface Mount Bracket and wall surface around the outside perimeter.
 - b. The Ethernet Cable Boot is to be placed over the network cable prior to terminating with a plug (see "PoE Network Connection" on page 15).
 - c. To prevent water from getting behind the 8036, place the Mounting Gasket on to the back of the 8036 housing prior to mounting.
2. After connecting the Ethernet cable, use the #8 x 1" Type B Pan Head screws to secure the 8036 housing to the Surface Mount Bracket.
 3. Replace the Front Bezel and keep the Algo Security Tool in a safe location. Replace the ALGO Logo Badge.



The Drywall Bracket is not required when surface mounting.

Surface mounting an 8036 on outside wall



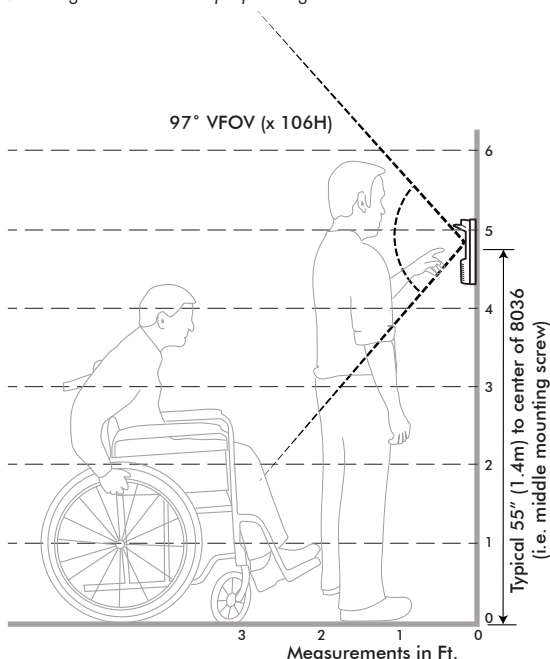
Mounting Height

The 8036 should be mounted at an appropriate height for your intended application. The considerations are:

1. Easy readability of the interface screens for users of different heights
2. Highest quality camera and video images.

For most applications, a mounting height of approximately 55 inches (1.4 m) from floor to center of display is recommended.

Mounting the 8036 at the proper height



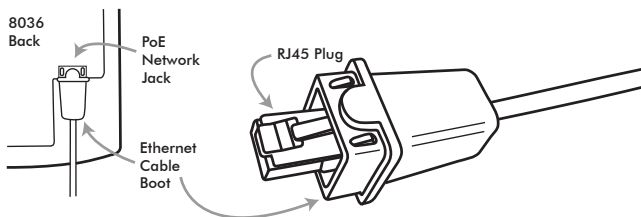
PoE Network Connection

The 8036 is powered by the Ethernet PoE network connection. Typically a network cable is run to the 8036 location and then terminated with a male RJ45 plug.



If you don't have a PoE switch, you'll need a PoE injector that installs between the 8036 and the network switch. The PoE injector will supply 48 Vdc to the 8036. Ensure that the PoE injector is fully compliant to the IEEE 802.3af standard.

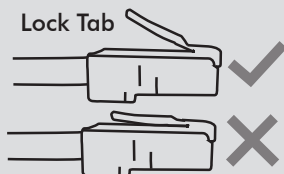
If mounting outdoors, slide the Ethernet Cable Boot onto the cable before installing the RJ45 plug.



After inserting the plug into the 8036 jack, carefully position the boot into the jack cavity to prevent moisture or insects from getting inside.



When inserting the plug into the jack, be sure the plug lock tab is not accidentally depressed, creating a loose connection.



Programming and Configuration

Web Interface Control Panel

Primary configuration of the 8036 is through the web interface control panel. Here is where you will be able to set up your 8036 and also develop interface screens to create interactive applications.

Accessing the Control Panel

To access the 8036 Control Panel, you first need to determine the 8036's IP address and then enter this address into a browser.

Find the IP Address

After connecting the 8036 to a network PoE port, the 8036 will attempt to obtain an IP address from the DHCP server and display this on the screen.



Welcome to the 8036 SIP Multimedia Intercom

To configure your new device, please open
a web browser to the following address:

192.168.0.120

If this is the first time you are using the 8036 and no user interface has yet been set up, you will be displayed the Welcome screen to the right which provides the IP address. If a User Interface already exists, the IP address will be shown for a few seconds at boot time, before the splash screen appears.

You will need to know this IP address in order to access the web interface tool.

If the 8036 is unable to obtain an IP address from the DHCP server, it will default to the fixed IP address 192.168.1.111.

Web Configuration Panel

Point your web browser to the 8036's IP address. This brings up the login page. The default password is **algo**.

The screenshot shows the 'ALGO Algo 8036 Control Panel' interface. It features a dark header with the 'ALGO' logo and the title 'Algo 8036 Control Panel'. Below the header, a message reads 'Welcome to the Algo 8036 SIP Multimedia Intercom Control Panel'. A prompt 'Please enter your password.' is followed by a password input field with a placeholder 'Password (default: algo)' and a 'Login' button. Below the login section, a 'Status' section displays three items: 'SIP Registration' with status 'Successful', 'Call Status' with status 'Idle', and 'Door Controller' with status 'Network error (send)'.

Status	
SIP Registration	Successful
Call Status	Idle
Door Controller	Network error (send)

Once logged in, the Status page is shown which welcomes you to the program (see "Control Panel Menu Reference" on page 23). From here you can access all of the configuration options for your 8036 device.

Setup SIP Account

The SIP account and related settings can all be found in the **Settings>SIP** section. This configuration will make the 8036's location known and allow the 8036 to make and receive calls. You must have a valid SIP account. You can get more details from your System/Network Administrator to fill in this section.

Application Development

Overview

With the 8036 you can easily design, implement, and update custom user interface screens and functions that help you communicate most effectively with visitors and guests. For example, you can make attractive landing pages with your company logo and graphics. On it, you can have buttons that make calls or that lead to various information or directory pages.

Example 8036 Custom Graphics Screen using 3 x 3 Full Button layout with four active buttons



You can set all of this up using the 8036 Control Panel. You'll also be able to back up all the configuration and user interface information to a PC for safekeeping.

Creating User Interface Screens

The key to an effective implementation of the 8036 is to configure a package of interface screens that fulfill the various visitor functions you require. You do this easily through the **User Interface** menu in the 8036 Control Panel (see “User Interface” on page 33).

For a basic implementation, you can set up simple screens and pages using the generic button graphics and background screens provided with the system. You can also easily create graphics screens developed with standard image editing programs and then import them into the 8036. Either way, you can set up multiple pages with different button configurations and layouts, enable or disable specific button locations, and set different actions associated with each button.

You can also import tab-delimited text files containing names and numbers and have the 8036 display a directory whereby visitors can call individuals directly.

Custom Graphic Screens

To develop custom interface screens you need to be able to create 640 x 480 pixel graphic files in the PNG (Portable Network Graphics) format. Most graphics/image editing programs (such as Adobe® Photoshop®) have this capability. Within the graphics program you can create your own background and button graphics and then align the button graphics (if used) to the layouts you have chosen for your 8036 User Interface.

The User Interface configuration allows you to create several types of pages with different button configurations. For information on the different types of button layout pages possible, please refer to the “Button Positioning Table” on page 50.

For example, here is a standard Two Button page layout in combination with a custom 640 x 480 PNG graphics file to create a simple Welcome page for visitors.



Directory (Addressbook) Listings

You can also upload tab-delimited text files to allow the 8036 to display directory pages. You can then set up pages to use these directory files to display a call directory for visitors to use. For more information, see "Directory (Addressbook) Text Files" on page 53.

Uploading user content

Before configuring a custom user interface, all the images, directory text files, and other resources that will be used by your UI must first be uploaded to the 8036.

You can upload individual files as you need them (see or you can upload content files in bulk using a properly formatted compressed file (in .tar.gz format). For more information on this, please see “Working with Compressed Files” on page 55.

Control Panel Menu Reference

Status

Introduction

This screen provides a quick guide to setting up your 8036. It covers four key steps:

- SIP Configuration
- Network Settings
- Securing the 8036 with a Password
- Customer Registration with Algo

In addition, this screen provides the current status of the 8036 in regards to SIP Registration, Call activity, and Door Controller (if implemented) actions.

The screenshot shows the 'Status' tab of the control panel. At the top, there are five tabs: 'Status' (selected), 'Settings', 'User Interface', 'System', and 'Logout'. Below the tabs is a header 'Welcome to the Algo 8036 SIP Multimedia Intercom Control Panel'. The main content area contains five steps for setup, each with a brief description. At the bottom, there is a 'Status' section with a table showing the current state of various components.

Status	
SIP Registration	No account
Call Status	Idle
Door Controller	Relay module not configured

Settings

SIP

The screenshot shows a web interface with a top navigation bar containing 'Status', 'Settings', 'User Extension', 'System', and 'Logout'. Below this is a sub-navigation bar with 'SIP', 'Home', 'Device Control', 'Network', and 'Admin'. The main content area is titled 'SIP Account' and contains the text 'Here you can configure the SIP settings.'.

Basic Settings

SIP Domain (Proxy Server) (i) Default port is 5080. To specify a different port, enter PROXY:PORT e.g. my_proxy.com:5070, or 192.168.1.10:5080.

User (Extension)

Authentication ID (Digest Username)

Authentication Password (Digest Password)

Enable Inbound Call ☐

Advanced Settings

Outbound Proxy (i) Default port is 5060. To specify a different port, enter OBPROXY:PORT, e.g. my_obproxy.com:5070, or 192.168.1.20:5080.

STUN server

Register Period 3600

Keep-alive Method None

Basic Settings	
SIP Domain (Proxy Server)	SIP Server Name or IP address
User (Extension)	Used to register the device on the SIP Server.
Authentication ID (Digest Username)	Used to register the device on the SIP Server.
Authentication Password (Digest Password)	Used to register the device on the SIP Server.

Enable Inbound Call	Allows the 8036 device to auto answer an inbound call. By default, this functionality is not activated.
Advanced Settings	
Outbound Proxy	Outbound proxy is a proxy (server) that stands between a private network and the Internet. Default port is 5060.
STUN Server	Allow communication between SIP server and 8036 if NAT is present.
Register Period	Maximum requested period of time where the 8036 will re-register with the SIP server. Default setting is 3600 seconds (1 hour). Only change if instructed otherwise.
Keep-alive Method	Method to maintain connection between the 8036 and the SIP server if the 8036 is behind NAT. Choices are: • None • Double CRLF

Media

StatusSettingsUser InterfaceSystemLogout

SIPMediaDoor ControlNetworkAdmin

Media

Here you can configure the media settings.

Video

Video Mode

One-way Video (Outgoing Only)

H.264 Video Profile Level

Level 3 Baseline Profile

H.264 Packet Type

Single NAL Unit

Enable Web Video

☐

Enable Auto White Balance

☒

Powerline Frequency

60 Hz (eg, North America)

Audio

Enable G.722 codec

☒

Speaker Volume

8

Microphone Volume

High

Save

Video	
Video Mode	One-way Video (outgoing only) In this mode, the 8036 only sends video to the remote end (typically a video phone). It does not show any video on the 8036 itself. Two-way audio is still maintained in this configuration. Two-way Video This mode allows video communication in both directions if the remote end supports video.



Note that video is only sent when the device is active on a call.

H.264 Video Profile Level	• Level 1.3 Baseline Profile • Level 3 Baseline Profile
H.264 Packet Type	• Single NAL Unit • Fragmentation Unit Type A (FU-A)
Enable Web Video	• Enable or disable Web Video This mode directs the 8036 video to the 8036 Control Panel web interface. When it is selected, neither the 8036 nor the remote SIP client show video. This is true even if the remote end is video-capable. Using this mode, video can only be seen in the web interface, and only when there is a call in progress. Once web video is enabled, the video can be seen on the Status page.
Enable Auto White Balance	• Enable or disable Auto White Balance
Powerline Frequency	• 60 Hz (e.g. North America) • 50 Hz (e.g. Europe)
Audio	
Enable G.722 codec	Enable or disable G.722 codec
Speaker Volume	From 1 (lowest) to 10 (highest)
Microphone Volume	Low, Medium, High

Door Control

The 8036 can be used with the optional 8061 SIP Relay Module to provide door control functionality. This section allows you configure the 8061 SIP Relay Module settings (if used).

StatusSettingsUser InterfaceSystemLogout

SIPMediaDoor ControlNetworkAdmin

Door Relay Settings

Here you can configure the door relay module settings.

Relay Module Address

IPv4 Address

Relay Module Password

.....

Momentary Open Code

6

Momentary Open Duration

1/4 Second

Save

Relay Module Address	IP address of 8061 SIP Relay Module
Relay Module Password	Used to authenticate the link between the 8036 and the 8061. Default password is algo
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 blank to disable this feature. (Default: 6)

Momentary Open Duration	The duration for which to unlock the door when the Momentary Open Code is entered. From 1/4 to 30 seconds.
--------------------------------	--

For more information on Door Control configuration and setup, see “Door Control” on page 45.

Network

The screenshot shows a web interface with a top navigation bar containing tabs: Status, Settings, User Interface, System, and Logout. Below this is a sub-navigation bar with tabs: SIP, Media, Door Control, Network (selected), and Admin. The main content area is titled "Network Interface" and contains the text: "Here you can configure the network interface settings." There are two sections: "Ethernet" and "Virtual LAN". The "Ethernet" section has a "Protocol" dropdown menu currently set to "DHCP Client". The "Virtual LAN" section has an "Enable VLAN" checkbox, which is currently unchecked. At the bottom right of the form is a "Save" button with a floppy disk icon.

Ethernet	
Protocol	• DHCP Client (default) • Static Address The default DHCP Client setting will allow the DHCP server to automatically configure IP addresses for each 8036 on the network. Alternatively, if your IT Administrator has assigned one or more <i>static</i> IP addresses, set the Protocol setting to Static Address.
Virtual LAN	
Enable VLAN	Enable or disable VLAN

Admin

The screenshot shows the 'Admin' settings page of a web interface. At the top, there are tabs for 'Status', 'Settings' (which is active), 'User Interface', 'System', and 'Logout'. Below these are sub-tabs for 'SIP', 'Media', 'Door Control', 'Network', and 'Admin' (which is active). The main heading is 'Admin', followed by the text 'Here you can configure the admin settings.' The settings are organized into three sections: 1. 'Admin Password' with fields for 'Password' and 'Confirmation', each with a small eye icon for toggling visibility. 2. 'General' with fields for 'Device Name (Hostname)' (ipmi), 'NTP Time Server' (pool.ntp.org), and 'Device Time (UTC)' (Tue Nov 20 14:05:01 2012) with a 'Sync with browser' button. 3. 'Log settings' with fields for 'Log Level' (Error (Low)), 'Log Size' (100 KIB), and 'Log Method' (Local). A 'Save' button is located at the bottom right.

Admin Password	
Password	
Confirmation	

General	
Device Name (Hostname)	ipmi
NTP Time Server	pool.ntp.org
Device Time (UTC)	Tue Nov 20 14:05:01 2012 Sync with browser

Log settings	
Log Level	Error (Low)
Log Size	100 i KIB
Log Method	Local

[Save](#)

Admin Password

Password / Confirmation

Password to log into the 8036 web interface Control Panel. You should change the default password as soon as possible in order to secure the device on the network.



If you have changed your password but forgotten it, you can reset your password through a Soft Reset of your 8036. See “Soft Reset” on page 49.

General

Device Name (Hostname)	Name to identify the device.
NTP Time Server	Domain name or IP address of NTP time server. Default is pool.ntp.org
Device Time (UTC)	If the NTP Time Server above is not available, you can sync time with your browser. Note that this will be UTC time and will likely be different than your local time indication.

Log Settings

Log Level	Amount of information provided in the log files. Choices are: • Error (Low) • Info (Medium) • Debug (High)
Log Size	Maximum size of log file in KB. Default is 100 KB.
Log Method	• Local • Network • Both Local and Network

User Interface

In this section, you can quickly create user interface screens using standard graphic files that come with your 8036. You can also create a UI using custom images (created with 3rd party tools like Adobe Photoshop) that you upload to the 8036. This can be done from the **Upload Image/Addressbook** section (see “Select the file” on page 38) or by uploading a tar.gz file to the device (see “Uploading user content” on page 22).



If you want to use custom graphics for your user interface, all the images, directory text files, and other resources that will be used by this interface must first be uploaded to the device.

Create Pages

Number of pages to be created

(i) Page limit is 20 , created so far 2

Page Type

- ☒ button
- ☐ directory

[Add Page\(s\)](#)

Page Settings

Start Page

(i) User interface starts with this page

Timeout time

(i) Maximum idle time for any page

Timeout Action

Door Unlock Code

Play click sound when door is open

Hangup button in call

Click Sound Volume

[Save Changes](#)

Upload Image / Addressbook

Select the file No file chosen [Upload File](#)

Addressbook template

List of pages

[+ Page 1 -](#)

[Save All Pages](#)

Create Pages

This is the section where you can create new user interface pages.

Create Pages

Number of pages to be created

1

ⓘ Page limit is 20 , created so far 2

Page Type

• button

• directory

➤ Add Page(s)

Two types of pages are able to be created:

- **Pages with buttons**
Pages where one or more buttons are displayed in accordance with pre-defined configurations. The buttons can provide different functionality such as making a call or redirecting to another page.
- **Directory Pages**
A list of names (sourced from an uploaded tab-delimited text file) with the ability to call people’s phone numbers by selecting the name, then pressing **Call**.



Example Button and Directory pages

Number of pages to be created	Sets the number of pages that will become individually editable using the List of Pages section.
Page Type	• Button • Directory

Page Settings

This section allows you to change settings that will be reflected throughout the user interface. Once the page settings are configured, press 'Save Changes' to restart the user interface and apply the changes.

Page Settings

Start Page

page1

User interface starts with this page

Timeout time

Never

Maximum idle time for any page

Timeout Action

Do Nothing

Door Unlock Code

Play click sound when door is open

Enable

Hangup button in call

Show

Click Sound Volume

6

Save Changes

Start Page	Sets the page to display when the 8036 starts up.
Timeout time	Sets the maximum idle time for any page. Selectable value from 1 second to 1 hour.

Timeout Action	Sets the action to take when the timeout time has elapsed. Options are: • Do Nothing • Go to Homepage
Door Unlock Code	1-8 digit numeric code that can be used, from the touch screen, to unlock the door for a brief period of time. Typically used as an employee access code.
Play click sound when door is open	A click sound can be played when a door is open, to create awareness. This can be enabled or disabled.
Hangup button in call	A hangup button can be displayed on the 8036 while a call is in progress. This option allows you to show or hide this button.
Click Sound Volume	The 8036 provides click sounds to provide users with audible feedback to assure them their key presses were registered. In addition, the click sound is played, if enabled, when the door is open. You can adjust the sound volume for these clicks from Mute to 10 (loudest).

Upload Image / Addressbook

Select the file

Allows you to upload a PNG image file or a tab-delimited text file (.TXT) to the device. The image file will be available for use in page backgrounds (see “Custom Graphic Screens” on page 20). The text file will be available to act as the source for Directory listings, such as a staff contact list (see “Directory (Addressbook) Text Files” on page 53).

List of Pages

This section allows you to modify and configure the various pages within your application and the actions associated with various page-specific buttons and user actions.

Click on the Page Title Text (e.g. “Page 1”) or the “+” sign in front of each page to view these settings for each page.

List of pages

Page 1 - First UI Page

Page Description: First UI Page: default1-sky-clouds.png

Button: Single Button

When touched outside button(s): Do Nothing

Button 1: Button Text: Make a Call, Action Type: Call, Dialing Extension: 1234

Save All Pages

Page Description

Adding a clear description of the page will make finding and editing pages later easier, particularly if there are many of them.

Background Image	Allows setting a background image for the screen. Several standard options have been supplied. The choices displayed depend on how many PNG files have been uploaded to the 8036's memory.
Button Configuration	A button configuration is a defined layout of buttons on the 640 x 480 screen. Several different button configurations have been provided: • Single Button • Two Buttons • Three Buttons • 2 x 2 Buttons • 3 x 2 Buttons • 3 x 3 Buttons • 3 x 3 Buttons Full For detailed information on exact button positions, including layout thumbnails, please view the "Button Positioning Table" on page 50.
Back Button	Adds a Back button to the lower left of the screen. Clicking it will return the user to the previously displayed screen. The Back button can be enabled or disabled.
Home Button	Adds a Home button to the lower right of the screen. Clicking it will return the user to the Home Screen (Page 1). The Home button can be enabled or disabled.

When touched outside button	Sets the type of action and result when a visitor touches the screen where there is no button displaying. The three types of actions are Call , Goto , and Do Nothing , each selectable through a drop down box.
Call	When selected, an Extension field is displayed where you can enter the telephone extension that should be called.
Goto Page	When selected, a Target Page dropdown box is displayed allowing you to select which page to display. In addition to the pages that you have created, the following pages are available: Dialer page: A dialpad page is presented, complete with a Call button (see “Dialer Page” on page 41). This allows the user to dial a phone number. Door Control page: A dialpad page is presented, similar to the Dialer page above, except that instead of a Call button, it has an Open button. This allows the user to enter a Door Unlock Code (see “Page Settings” on page 36).
Do Nothing	Sets the device to ignore any touches to the screen outside of a button.

Button Settings

Enable / Disable	Turns the button functionality on or off for the location indicated.
-------------------------	--

Button Text	Sets the text to be displayed in the button location.
Action Type	• Goto • Call • Do Nothing
Target Page	This setting is displayed if Action Type is set to Goto . Sets the page to display after button is clicked. Dropdown box displays all available pages.
Dialing Extension	This setting is displayed if Action Type is set to Call . Enter the telephone extension that should be called when the button is clicked.

Dialer Page

The image shows a screenshot of a 'Dialer Page' interface. At the top, there is a text input field with a small 'x' icon on the right. Below this is a numeric keypad with buttons for digits 1 through 9, 0, *, and #. To the right of the keypad are two large buttons: 'Call' and 'Exit'.

System

Maintenance

StatusSettingsUser Interface**System**Logout

MaintenanceSystem LogRecent LogsAbout

System Maintenance

Backup / Restore Configuration

Click "Generate configuration archive" to download an archive of the current configuration files. To reset configuration, click "Perform reset".

Download configuration backup:

Generate configuration archive

Reset configuration to defaults:

Perform reset

To restore configuration files, you can upload a previously generated backup archive here.

Restore configuration backup:

Choose File No file chosen

Upload archive...

Backup / Restore User Interface

Click "Generate User Interface archive" to download an archive of the current User Interface. To erase the User Interface, click "Erase".

Download User Interface backup:

Generate User Interface archive

Erase:

Erase

To restore User Interface files, you can upload a previously generated backup archive here. Click "Upgrade user interface" to use the latest default user interface.

Restore User Interface backup:

Choose File No file chosen

Upload archive...

Upgrade user interface:

Upgrade user interface

Reboot

Click "Reboot" to reboot the device.

Reboot:

Reboot

Upgrade to New Firmware

Upload a new firmware image and corresponding signature here to upgrade the device.

Firmware Image:

Choose File No file chosen

Signature:

Choose File No file chosen

Upgrade:

Upgrade...

Backup / Restore Configuration	
Download configuration backup	Creates a backup .tar.gz file of configuration settings for download. The configuration backup contains UI settings and SIP settings.
Reset configuration to defaults	Discards current configuration and resets to original factory settings.
Restore configuration backup	To restore configuration settings, point to an archived configuration .tar.gz file, then click Upload Archive. The 8036 will restart with the new settings.

Backup / Restore User Interface	
In this section, you can make a backup copy of (archive) all user interface (UI) files, erase all UI files, or restore the UI from an archive file.	
Download user interface Backup	Click Generate UI archive to download a compressed file (in .tar.gz format) containing all UI settings and files, including images and addressbook text files. Note that the files will have a folder structure where different files will be separated into different folders. It is important to maintain this folder structure to permit restoring later.
Erase	Click Erase to delete all UI files from the 8036. Before using this function, we suggest making a backup first (see above), just in case!

Restore user interface backup	Click Choose file to select a compressed file containing all user interface images and text files. Then click Upload archive to load the file to the 8036. Once the compressed file is uploaded, the 8036 automatically extracts the files. Note that a single file or partial group of files can also be uploaded, as long as they maintain the required folder structure and are zipped in that structure. The 8036 may take several minutes to complete the update.
Reboot	Reboots the device.
Upgrade to New Firmware	
This section allows you to upload a new firmware image and corresponding checksum to upgrade the device. For more information, please see “Upgrade 8036 Firmware” on page 48.	

System Log

For Algo Technical Support use only.

Kernel Log

For Algo Technical Support use only.

About

Provides basic product information, Algo contact information, and credits.

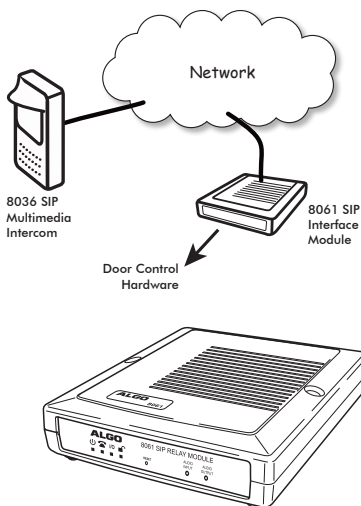
Door Control

The 8036 can provide door control functionality when used with the optional Algo 8061 SIP Relay Module.

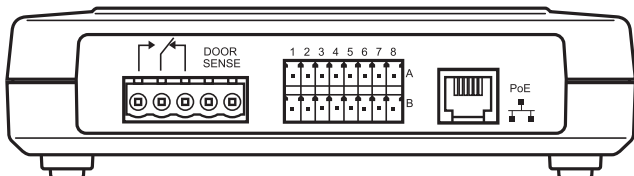
The 8061 serves as a bridge between the 8036 and peripheral hardware such as door strikes, door sensors, door bells, etc.

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.



PoE and Relay Connections on back of 8061 SIP Relay Module



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 8036 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 8036 with this device.

Features	
Multicast Zone	224.0.2.60:50000
Remote Tone	1202.wav
Multicast from Analog Input	☐ Enabled ☒ Disabled
Door Control Link	☒ Enabled ☐ Disabled
Door Control Password	*****

Configuring the 8036 with the 8061

1. Open the 8036 web interface Control Panel.
2. Go to **Settings > Door Control** and, in the **Relay Module Address** field, enter the IP address of the 8061 you determined in the previous section.
3. Enter the **Relay Module Password** that you set previously when you configured the 8061.

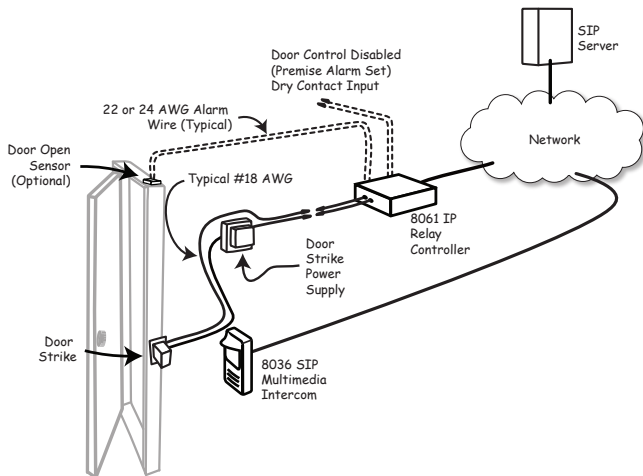


Note that the Relay Module Password is used solely to secure the link between the 8036 and the 8061. It is not the same as the Door Unlock code.

4. Refer to “Door Control” on page 28 for more configuration options.

Door Control Hardware and Wiring

Typical 8036 / 8061 Door Control Setup



Appendix

Upgrade 8036 Firmware

Periodically, new firmware for the 8036 is released that either offers new functionality or addresses problems.

To determine if there is firmware available for the 8036, please visit www.algosolutions.com/8036

To update the firmware:

1. From the top menu, click on
System > Maintenance > Upgrade to New Firmware



The screenshot shows a web form titled "Upgrade to New Firmware". Below the title is a instruction: "Upload a new firmware image and corresponding signature here to upgrade the device:". The form contains three rows. The first row is labeled "Firmware Image:" and has a "Choose File" button and a text field showing "No file chosen". The second row is labeled "Signature:" and also has a "Choose File" button and a text field showing "No file chosen". The third row is labeled "Upgrade:" and has a button with a right-pointing arrow and the text "Upgrade...".

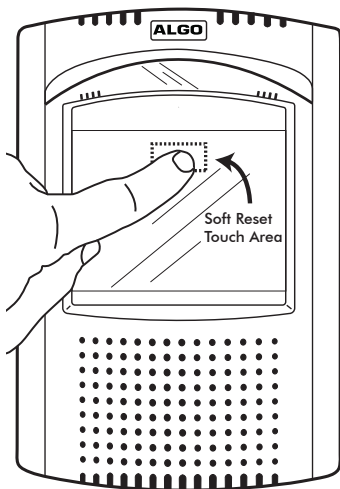
2. For **Firmware Image**, click on **Choose File** and select the 8036 firmware image file to upload.
3. For **Signature**, click on **Choose File** and select the checksum file to upload.
4. Click Upgrade.
5. After the upgrade is complete, confirm that the firmware version has changed (refer to top right of Control Panel).

Soft Reset

A soft reset of your 8036 may be necessary if, for example, the administrative password has been changed and then forgotten.

To do a soft reset:

1. Disconnect the network cable from the 8036.
2. Press and hold the top middle area¹ of the screen until a confirmation button displays in the bottom middle area with the text description "**Press here to reset to factory default.**"
3. Press this confirmation button within five seconds, and the unit will reset itself back to factory default settings.



¹ On the 640 x 480 pixel screen, this is a rectangle area from 240(x), 40(y) to 400(x), 120(y).

Button Positioning Table

The following table provides the location and sizing of standard button layouts for 8036 User Interface Screens.

Button Layout		Button Dimensions (in pixels) Width x Height	Upper Left X, Y Button Position(s) (in pixels)
<i>Single Button</i>		240 x 160	200,160
<i>2 Buttons</i>		240 x 160	40, 160 360,160
<i>3 Buttons</i>		180 x 120	30,160 230,160 430,160
<i>2 x 2 Buttons</i>		200 x 120	110,120 330,120 110,260 330,260
<i>3 x 2 Buttons</i>		180 x 120	30,100 230,100 430,100 30,240 230,240 430,240

3 x 3 Buttons		180 x 100	30,20 230,20 430,20 30,140 230,140 430,140 30,260 230,260 430,260
 <i>The 3 x 3 Buttons layout is similar to 3x3 Full Screen layout below but has extra space at bottom to allow the unobstructed use of the Home and Back buttons.</i>			
3 x 3 Buttons Full Screen		180 x 100	30,80 230,80 430,80 30,200 230,200 430,200 30,320 230,320 430,320

Adobe® Photoshop® Templates

To simplify the process of creating graphic screens with buttons that exactly line up to pre-configured 8036 button layouts, a set of Photoshop templates is available at www.algosolutions.com/8036templates

Here you'll find a link to a ZIP file containing multiple Photoshop files that provide guides for laying out User Interface screens for the 8036. Each file contains guides for placing buttons that corresponds to the 8036's standard button configurations.

To use the files, open up the Photoshop file that corresponds to the button configuration you want to use. Then set Photoshop to snap to guides (**View>Snap To>Guides**). Then

use Photoshop's Rectangle Tool to draw buttons using the guides. After completing the button graphics, choose the File>Save for Web and Devices menu and use the PNG-24 preset to create the PNG file for importing into the 8036.

Directory (Addressbook) Text Files

You can upload tab-delimited text files to the 8036 (**User Interface > Page Settings > Upload Image/Addressbook**) to create Directory pages. These Directory pages can then be used by visitors to make calls to individuals listed in the file.



As an example, here is the contents of a directory file with two fields, one for “name”, and one for “telephone extension”.

Al Smith	1028
Bob Johnson	2156
John Jones	2345
Paul Phillips	1287
Terry Stevens	1256

Note that each line represents one directory member field and that a TAB separates each field value. Note also that empty lines will result in empty lines in the Directory.

To create a tab delimited text file using Microsoft Excel:

1. Open your spreadsheet document go to the Windows/Office round button menu and choose Save As....
2. Change the "Save as type" or "Format" field to read: 'Text (Tab delimited)'.
3. Enter a name for the document and click Save.



If you need your Addressbook entries sorted, you should do this when editing your text file. Note that the 8036 will not sort Addressbook entries.

Working with Compressed Files

Using compressed tar.gz² files, the 8036 Control Panel allows you to:

- Create archive files of configuration settings
- Restore configuration settings
- Create archive files of User Interface files and settings
- Restore User Interface files and settings
- Upload one or more new or replacement user interface files to the 8036



Note that in all instances, existing files on the 8036 will be overwritten if the uploaded file name is the same.

When uploading a tar.gz file to the 8036, it is important that all the proper folder structure be maintained such that it matches what is used on the 8036. Otherwise, the uploaded files may get placed in a wrong location rendering them unusable.

The best way to get the folder structure right is to first download an archive from the 8036, extract it to a folder on your PC, then observe how the folders are named and arranged. Then make sure all the updated files are in the same directories. For example, all of the application images (e.g. background screens) and Directory / Addressbook files will be in the **apps/uiapp/user/** folder.



For more information on downloading and restoring configuration files, see “Backup / Restore Configuration” on page 43. For information on backing up and restoring user interface files, please see “Backup / Restore User Interface” on page 43.

² A tar.gz file is a collection of files packaged into a single file (using TAR) and then compressed (using GZIP).

Please note that you can give any name to the .tar.gz file. Once the .tar.gz file is uploaded, the 8036 automatically extracts the files. To replace a file, upload the .tar.gz file again with this new file. A single file or partial group of files can also be uploaded, as long as they maintain the required folder structure and are compressed in that structure.

Note that large applications with numerous image files may take several minutes to complete the update.

Specifications

SIP Compliance	RFC3261
Power Input	48 V PoE Class 0 (Max 12.95 W - Idle 3 W)
Physical Connection	RJ45
LCD Display	Active TFT 5.7" (14.5cm) color VGA, 80° viewing, sunlight readable, 1000:1 contrast, and 800 cd/m2 backlight
Codecs Supported	G.711, G.722 audio H.264 video, JPEG still image
Camera	1/3" (8.5mm) wide VGA CMOS Digital Image Sensor; Max 742x480 WVGA 60fps; 6.0 x 6.0µm pixel size for low light performance; 110dB dynamic range; WVGA, VGA, QVGA, CIF, QCIF formats
Image Memory	Optional to 8 GBytes
Touchscreen	Optically bonded projected capacitance, H7 hardness
Presence Detection	Area reflective 80cm range, invisible light beam
Speaker	Wideband 8 W
Microphones	Dual beam forming, wideband
Hands-free	Full-duplex capable, reverting to hands-free half duplex employing DSP echo cancellation and noise reduction for reliable communication in difficult outdoor environments
Programmability	Web interface option configuration, or custom applications using QT based QML script
Environmental	IP64 weather resistant; Ambient temperature: -30 to +60° C (-22 to 140° F)
Compliance	FCC, CSA/UL, CE
Door/Gate Control	Separate module SIP end point for physical security, sensing inputs, and third party equipment interfaces

Dimensions	Height: 10-3/4" (27.3 cm) Width: 7" (17.8 cm) Depth: 3" (7.6 cm)
-------------------	--

In the interests of continuing product improvement, specifications are subject to change without notice.



For more in-depth information on the 8036, including application notes and FAQ, please visit www.algosolutions.com/8036

FCC Compliance

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 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: 1) Reorient or relocate the receiving antenna, 2) Increase the separation between the equipment and receiver, 3) Connect the equipment into an outlet on a circuit different from that to which the receiver is connected, or 4) Consult the dealer or an experienced radio/TV technician for help.

Important Safety Notice



The 8036 SIP Multimedia Intercom is designed and tested to comply with EN 60950-1:2006 safety requirements. When the unit 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. The 8036 is a Power over Ethernet (PoE) device. The PoE power source must be a Limited Power Source (LPS), provided by CAT5 UTP cable, and isolated from mains by minimum reinforced or double insulation. Ensure that the PoE injector or PoE enabled switch carries safety regulatory approval marks (ie CSA, UL, CE).

ALGO

Algo Communication Products Ltd.
4500 Beedie Street
Burnaby, BC Canada V5J 5L2
www.algosolutions.com