

Algo Configuration Guidelines for Fuze

Fuze Recommends

Fuze Recommends, is a beta technical partner project from Fuze where recommendations for hardware and or software can be made and published by the vendor of equipment that has been found to operate within Fuze's recommended configuration guidelines.

The following configuration guidelines for these third-party services have been recommended as being compatible with Fuze existing SIP requirements.

Note: Fuze does not support Third Party Services so any subsequent configuration questions or issues must be directed to the third-Party vendor's Support Services.

Note: Fuze is subject to change connectivity requirements without notice and without further validation.

Note: The customer is responsible for maintaining the security of the device and supplied credentials. Fuze is not liable for any subsequent costs resulting from misconfiguration.

Algo contact information

info@algosolutions.com – Sales and product questions

support@algosolutions.com – Tech Support on Products

Document Control	
Fuze Recommends - Algo Configuration Guidelines for Fuze	
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Logging into the Algo

1. Log into the web interface by typing the device's IP address in the web browser. For device-specific instructions to discover the IP address, check its User Guide, typically supplied with the unit or use the [Algo Network Device Locator](#).
2. Enter the default password (algo)

ALGO 8301 Paging Adapter & Scheduler Firmware: 3.4.4

Welcome to the Algo 8301 Paging Adapter & Scheduler

Setting up your Paging Adapter & Scheduler:

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

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

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

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

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

Login

Password (default: algo) Login

Status

Device Name	algo-8301		
SIP Registration	Page Ring #2	Successful	(Extension D5MTH9B0->9270) (Extension D5MTH9B0->9261)
Call Status	Idle		
Proxy Status	Single proxy mode		
Provisioning Status	Disabled		
MAC	00:22:ee:09:63:20		
IPv4	192.168.1.242/24, Gateway: 192.168.1.1		
Switch Port ID	mac 3c5c3c37b919		
Date / Time	Mon Sep 13 14:58:47 EDT 2021		
Next Scheduled Event	No Events Scheduled		
Multicast Mode	Master Mode: Idle		
Volume	Page Volume: 10 (0dB) Ring Volume: 10 (0dB)		
Relay Input Status	Disabled		

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*****UPGRADE THE FIRMWARE to 3.4.4*****

<https://www.algosolutions.com/firmware-downloads/>

Pick your IP endpoint and follow the instructions for the firmware currently installed.

Note: This process can take up to 45 minutes.

Note: You may be asked to reboot the unit during this process, but you don't need to until the end, However you will need to do it at least once.

Advanced Settings – Admin

Here you will:

- 1 Set 'Force Strong Password' to Enabled (Optional, If you choose not to do this make sure you are still setting a strong password) Algo suggests 10 characters. 1 lower case, 1 upper case, 1 number, 1 special character
- 2 Set 'Allow Secure SIP Passwords' to Enabled.
- 3 Set a strong password to protect the device. This is mandatory to save the page

These are required for a secure unit. Once complete you can verify by downloading the configuration and noting the passwords are encrypted. See **System - Maintenance** section below.

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The screenshot shows the 'Admin Settings' page of the Algo 8301 Paging Adapter & Scheduler. The page is titled '8301 Paging Adapter & Scheduler' and 'Firmware: 3.4.4'. The 'Admin Settings' section includes fields for 'Old Password', 'Password', and 'Confirmation', each with a 'Go' button. The 'General' section includes 'Device Name (hostname)', 'Introduction Section on Status Page', 'Show Status Section on Status Page when Logged Out', 'Display Switch Port ID on Status Page', 'Web Interface Session Timeout', and 'Play Tone at Startup'. The 'Log Settings' section includes 'Log Level' and 'Log Method'. The 'Management' section includes 'Web Interface Protocol', 'Force Strong Password', and 'Allow Secure SIP Passwords'. The 'Simple Network Management Protocol' section includes 'SNMP Support'. The 'API Support' section includes 'RESTful API'. The 'System Integrity' section includes 'System Integrity Checking'. The 'SIP-Apps' section includes 'SIP-Announce Support'. The 'InformaCast' section includes 'InformaCast Support'. Two purple arrows point to the 'Admin Settings' section, specifically to the 'Old Password', 'Password', and 'Confirmation' fields, and to the 'Force Strong Password' and 'Allow Secure SIP Passwords' checkboxes. The 'Save' button is visible at the bottom right of the page.

MAKE SURE TO CLICK SAVE – Failure to do so will result in you losing what you just set.

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Basic Settings – SIP

Note: This is for using the Algo endpoint as a paging extension.

Here you will:

- Enter the Fuze supplied URL in the SIP Domain (Proxy Server) field
- Enter the SIP peer name in the page Extension and Authentication ID.
- Enter the password in the Authentication Password field. These credentials come from Fuze.
- Enter the Realm which is asterisk

The screenshot shows the 'SIP Settings' configuration page in the ALGO 8301 Paging Adapter & Scheduler interface. The 'SIP Domain (Proxy Server)' field contains 'border-all-vap.sip.thinkingphones.net'. The 'Ring/Alert Mode' section has 'Monitor Ring event on registered SIP extension' selected. The 'Page Extension', 'Authentication ID', and 'Authentication Password' fields all contain 'DSMTHPBX-x9270'. The 'Realm' field contains 'asterisk'. A 'Save' button is located at the bottom right of the configuration area.

MAKE SURE TO CLICK SAVE – Failure to do so will result in you losing what you just set.

Note: To use the Algo IP endpoint as a night bell make sure Monitor “Ring” event... is selected.

If no Multicast is being used, you can enter the Ringer credentials here, otherwise move to the next step.

This screenshot shows the 'SIP Settings' configuration page with additional fields. The 'Ring Extension', 'Authentication ID', 'Authentication Password', 'Display Name (Optional)', and 'Realm' fields are currently empty. The 'Page Extension', 'Authentication ID', 'Authentication Password', 'Display Name (Optional)', and 'Realm' fields are all set to 'DSMTHPBX-x9270'. A 'Save' button is located at the bottom right.

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Additional Features – More Ring Extensions (When using Multicast)

Next step is to add the Night bell/Ringer SIP credentials as the Ring Extension and set the appropriate Multicast Group if it is a Master unit.

ALGO 8301 Paging Adapter & Scheduler Firmware: 3.4.4

More Ring Extensions

Ring Extension 2 Enabled Disabled

Extension: DSMITHPBX-x9261

Authentication ID: DSMITHPBX-x9261

Authentication Password: *****

Display Name (Optional):

Realm: asterisk

Ring Tone: <Use Default Ring Tone>

Multicast Zone: Zone 3

Ring Extension 3 Enabled Disabled

Ring Extension 4 Enabled Disabled

Ring Extension 5 Enabled Disabled

Ring Extension 6 Enabled Disabled

Ring Extension 7 Enabled Disabled

Ring Extension 8 Enabled Disabled

Ring Extension 9 Enabled Disabled

Ring Extension 10 Enabled Disabled

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Advanced Settings – Advanced SIP

You will need to

- Set Register Period (Seconds) to 360
- Set 'Standard' on SDP SRTP Offer
- Select Keep-Alive Method to Double CRLF
- Set the Keep-Alive Interval (seconds) to 30 – This prevents premature NAT session timeout.

ALGO 8301 Paging Adapter & Scheduler Firmware: 3.4.4

Advanced SIP Settings

General

SIP Transport: Auto

SIP Scheme: SIP

Validate Server Certificate: Enabled

Force Secure TLS Version: Enabled

SIP Outbound Proxy (RFC 5626): Disabled

Outbound Proxy: Disabled

Register Period (seconds): 360

SRTP

SDP SRTP Offer: Standard

SDP SRTP Offer Crypto Suite: AES_GCM_128_CMAC_SHA1_64

NAT

Media NAT: None

Server Redundancy

Server Redundancy Feature (Multiple SIP Server Support): Disabled

Intraresiliency

Keep-Alive Method: Double CRLF

Keep-Alive Interval (seconds): 30

Use Outgoing TLS port in SIP headers: Enabled

Do Not Reuse Authorization Headers: Enabled

Allow Missing Subscription-State Headers: Enabled

Save

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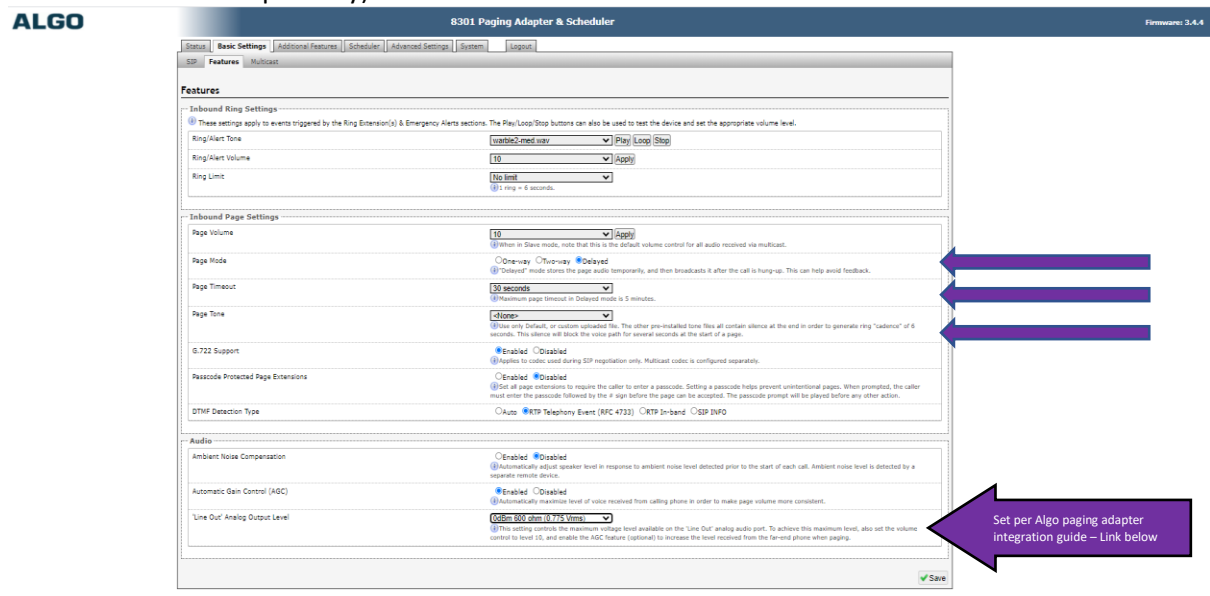
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Basic Settings – Features

Here you will:

- Set the paging to delayed, avoiding feedback in case the person paging is directly below a speaker. This is optional, but highly recommended.
- Set the output to match the impedance of the paging system. You will find settings for some common paging systems in the Paging adapter amplifier integration guide on the Algo website. Link provided below.
- Set the volume for Ring/Alert Volume and Page Volume as required
- Turn off the Ring Page tone if you don't want to hear a tone before the page plays
- Set the Page timeout to 30 seconds or so to avoid long pages. If someone puts paging on hold or park this prevents an extraordinarily long page.

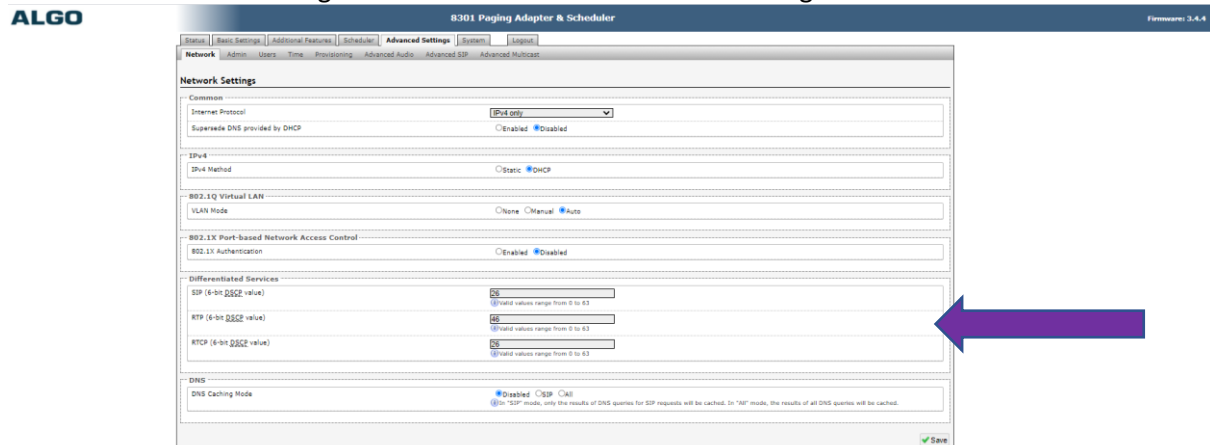
NOTE: The Output setting is different on all models that have an output (i.e. 8180 has a direct 600 Ohm Unbalanced output only).



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Advanced Settings - Network

Enter QOS values to ensure voice priority. Once you click save you will be prompted to reboot. QOS Values are in the image below and are consistent across all Algo devices.



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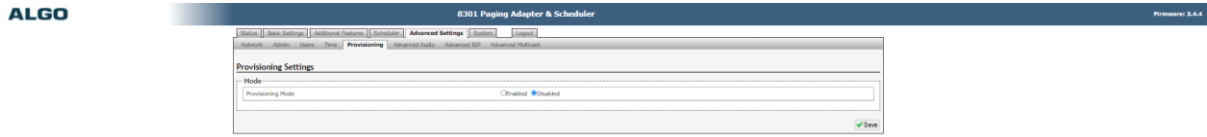
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Advanced settings – Provisioning

This should be disabled unless you intend to maintain a provisioning server for these devices.

Note: Fuze does not offer this service



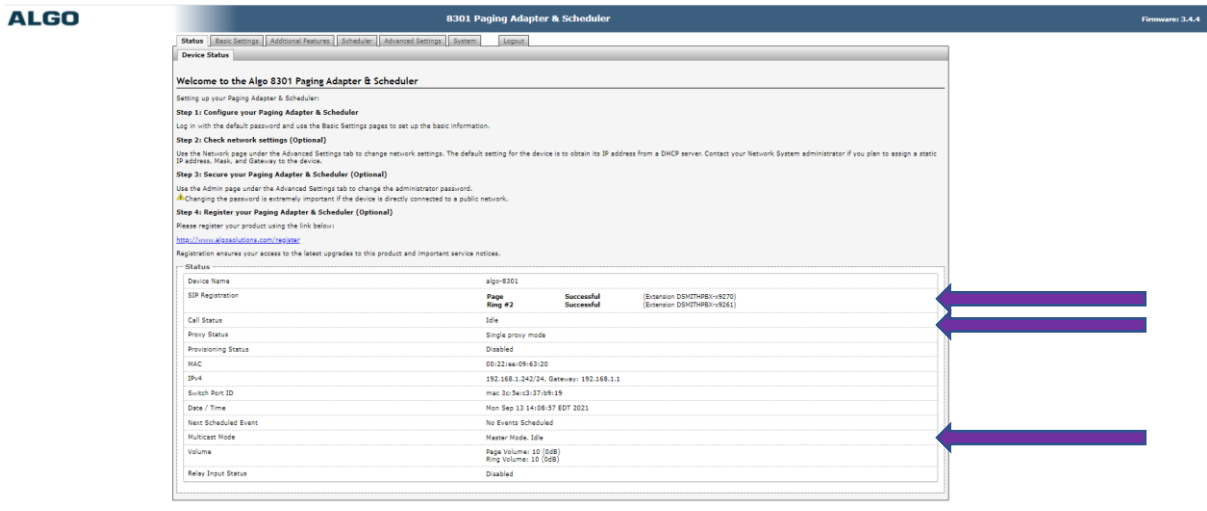
MAKE SURE TO CLICK SAVE – Failure to do so will result in you losing what you just set.

Status

Verify your settings. You should see Successful for Page and if applicable Ringer

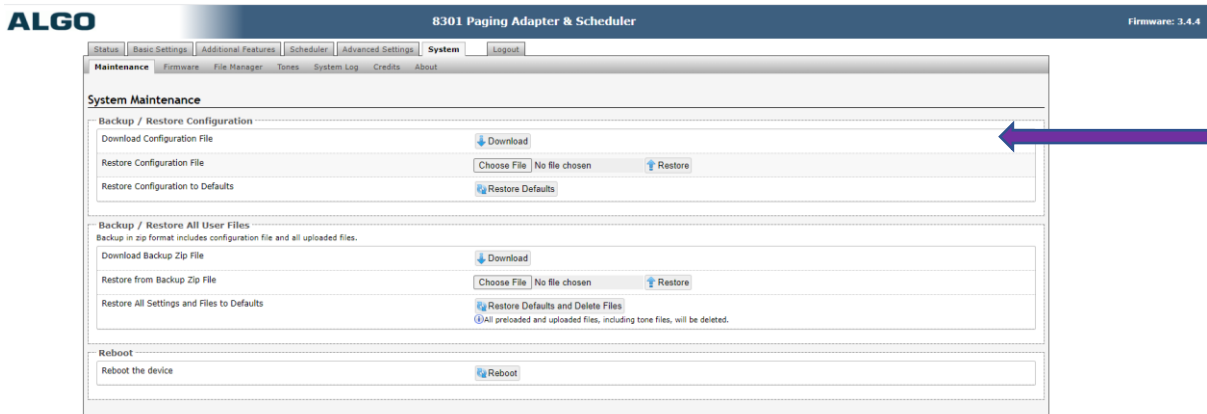
Here you can see the call status (Recording, paging, ringing)

You can also see the Multicast Mode in real time.



System – Maintenance

Here is where you can download the configuration to verify the passwords are encrypted. You can also upload a previously saved config.



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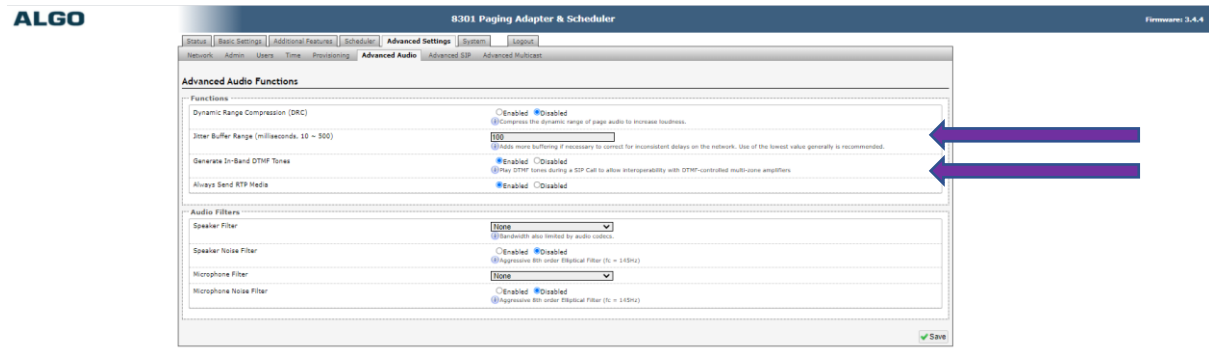
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Additional information and Troubleshooting steps

Advanced Settings – Advanced Audio

In some cases, you may want to increase the Jitter buffer to correct network latency. You can also enable DTMF passthrough here to Play DTMF tones during a SIP Call to allow interoperability with DTMF-controlled multi-zone amplifiers



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For connections to specific common paging systems

<https://www.algosolutions.com/wp-content/uploads/2019/11/Paging-Adapter-Amplifier-Integration-Guide.pdf>

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