

Netgenium ASP7002-IP

Installation Guide

Firmware Version 1.8.31



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PREFACE

This preface describes the purpose, audience, organization, and conventions of this guide

The preface covers these topics:

Purpose, page 1

Audience, page 1

Conventions, page 2

Purpose

The *Netgenium ASP7002-IP Manual* provides information about installing and configuring the Netgenium ASP7002-IP Speaker

Audience

The *Netgenium ASP7002-IP Manual* is written for network administrators and installers responsible for installing and configuring the Netgenium ASP7002-IP. This guide requires knowledge of IP networking, technology and QoS.

Conventions

This document uses the following conventions:

BOLD ORANGE font is used to show Navigation steps to
configure a feature

BOLD RED font is used to indicate a button or hyperlink

BLUE font is used to indicate a label on the web page

CHAPTER 1

HARDWARE OVERVIEW

The Netgenium ASP7002-IP Speaker is a POE device. It is capable of being powered from either IEEE802.3af or PoE Plus equipment. The class of power supply dictates the output power of the amplifier and hence the volume. An IEEE802.3af power source will result in approximately 9W of audio (max), a PoE Plus power source will result in around 25W of audio (max).

The speaker is designed for external use 1 RJ 45 style socket for connection to the LAN. The LAN interface is a standard 10/100 network connection. The screw terminals enable connection of locking hardware, readers and a host of I/O devices (RTX, Emergency Breakglass etc.)

CHAPTER 2

CONFIGURATION

This chapter describes how to set up the ASP7002-IP for connectivity to the LAN and configure the attached hardware in its environment.

Initial Network Setup

Connect the ASP7002-IP to a PoE capable network switch or via a mid-span device.

To logon for the first time, open a web browser and type the IP address of the panel in the address bar. Each unit is pre-configured with a default IP address of *10.100.1.175* when it leaves the factory. The default username and password are as follows:

- Username: netgenium
- Password: netgenium

The home page is shown in figure 4.1. This provides basic information on the controller such as software version serial number etc. Navigation around the menu structure is via the tabs shown at the top of the home page. Each tab redirects the browser to the master page for the configuration section selected. In each section a sub menu is accessible via the links on the left of the page.



Figure 4.1 Home Page

To set the speakers IP address:

Navigate to: Setup

Configure the options as described below then click the **Apply** button.

General

- Device Name: The name for the device (usually a description of the location)

Network

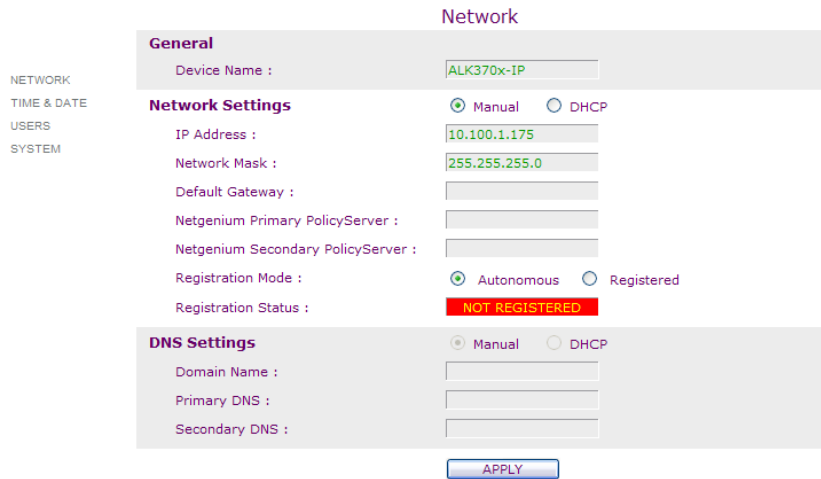
- IP Address: IP address of the device
- Network Mask: Subnet Mask of the device
- Default Gateway: Default Gateway for the device
- Netgenium Primary PolicyServer: The IP Address of the primary PolicyServer
- Netgenium Secondary PolicyServer: The IP Address of the secondary PolicyServer
- Registration Mode: Autonomous or registered with PolicyServer
- Registration Status: Current registration status.

DNS Settings

- Domain Name.
- Primary DNS.
- Secondary DNS.

Network Port

- Link Configuration: Set the speed and duplex settings of the network interface.



Network

General
 Device Name : ALK370x-IP

Network Settings
 Manual DHCP
 IP Address : 10.100.1.175
 Network Mask : 255.255.255.0
 Default Gateway :
 Netgenium Primary PolicyServer :
 Netgenium Secondary PolicyServer :
 Registration Mode : Autonomous Registered
 Registration Status : NOT REGISTERED

DNS Settings
 Manual DHCP
 Domain Name :
 Primary DNS :
 Secondary DNS :

APPLY

Figure 4.2 Network Setup

If you have changed the IP address of the speaker you will lose the connection to it. Open another browser session and reconnect the new IP address.

Time & Date

Navigate to: Setup>Time&Date

The screenshot shows the 'Time & Date' configuration page for a Netgenium device. On the left is a navigation menu with 'TIME & DATE' selected. The main content area is titled 'Time & Date' and contains the following sections:

- Current ASP700x-IP Time**: Shows the current time as 30/11/1999 00:11:38.
- Time Settings**: Includes a dropdown for 'Time Zone' set to 'GMT (Dublin, Lisbon, London, Reykjavik)' and a checkbox for 'Enable Daylight Saving adjustment' which is unchecked.
- Set to Computer Time**: A radio button option with a date field '06/10/2009' and a time field '09:18:38'.
- Set Manually**: A radio button option with separate date and time fields.
- Use NTP**: A radio button option with a text field for 'Server IP Address'.

An 'APPLY' button is located at the bottom of the configuration area.

Figure 4.3 Time & Date

This page enables you to set the system time and date. The options are:

Set to Computer Time

This option sets the time and date to that of your computer when the **Apply** button is clicked.

Set Manually

Enter the time and date in the textboxes provided and click the **Apply** button.

Use NTP

With this option enabled the controller will synchronize its time and date with an NTP server every 5 minutes. Enter the IP Address of the NTP server and click the **Apply** button.

If the controller is configured to register with PolicyServer the unit will automatically be synchronised with PolicyServers date and time.

Users

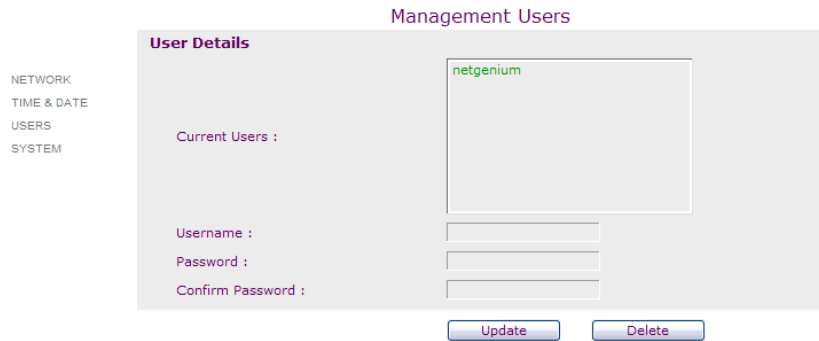
Navigate to: Setup>Users

Use this page to manage the user accounts used to administer the unit.
The default settings are:

- Username *netgenium*
- Password *netgenium*

To add a new user account, enter the username and password and click the **Update** button.

To remove an account, highlight the name to delete and click the **Delete** button.

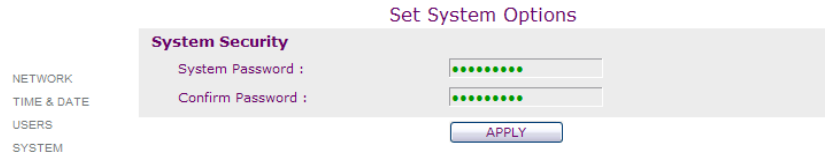


The screenshot shows the 'Management Users' interface. On the left is a navigation menu with options: NETWORK, TIME & DATE, USERS, and SYSTEM. The main area is titled 'User Details' and contains a 'Current Users' list with one entry, 'netgenium', highlighted in green. Below the list are three input fields labeled 'Username:', 'Password:', and 'Confirm Password:'. At the bottom right are two buttons: 'Update' and 'Delete'.

System

Navigate to: Setup>System

The system password is used to authenticate requests between PolicyServer and the end devices. The default setting is *netgenium*.



The screenshot shows a web interface for configuring system options. On the left is a vertical navigation menu with the following items: NETWORK, TIME & DATE, USERS, and SYSTEM. The main content area is titled 'Set System Options' and contains a section for 'System Security'. This section has two input fields: 'System Password :' and 'Confirm Password :', both containing masked characters (dots). Below these fields is a blue 'APPLY' button.

Speaker

Navigate to: Speaker

Accessing the Speaker tab allows you to configure the audio settings of the speaker.

General

Mute Speaker

Mutes the speaker output.

Audio Levels

Announcements can be allocated a priority between 0 (lowest) and 9 (highest). A default volume level can be set for each priority level, if required.

To set the volume level for a priority level:

1. Select the volume level from the dropdown list.
2. Click the **Apply** button.

Speaker Setup

SPEAKER

MICROPHONE

FLEX-IO INPUTS

FLEX-IO OUTPUTS

General

Mute Speaker :

Announce IP on Boot :

Audio Levels

Default Speaker Volume (Priority 0): ▼

Default Speaker Volume (Priority 1): ▼

Default Speaker Volume (Priority 2): ▼

Default Speaker Volume (Priority 3): ▼

Default Speaker Volume (Priority 4): ▼

Default Speaker Volume (Priority 5): ▼

Default Speaker Volume (Priority 6): ▼

Default Speaker Volume (Priority 7): ▼

Default Speaker Volume (Priority 8): ▼

Default Speaker Volume (Priority 9): ▼

Microhone

Not used in this firmware version.

FlexIO Inputs

Not used in this firmware version.

FlexIO Output

Not used in this firmware version.

IP Telephony

Navigate to: IP Telephony

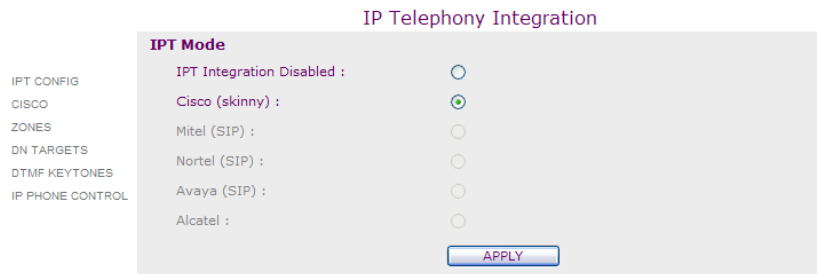
Speakers can be registered with IP Telephony (IPT) applications and used as part of the telephone system. When when registered they can be configured with a directory number (DN) and act as a telephony end point.

IPT systems supported in this version of firmware are:

- Cisco (skinny)

To enable telephony integration:

Select the integration type and click the **Apply** button.



Cisco

Navigate to: IP Telephony>Cisco

The integration with Cisco's Call Manager is configured on this page.

Registration Status

Registration Status

The current registration status with Call Manager.

Call Status

The current call status of the speaker.

Assigned Directory Number

The DN assigned to the speaker.

Cisco IP Telephony Setup

IPT CONFIG

CISCO

ZONES

DN TARGETS

DTMF KEYTONES

IP PHONE CONTROL

Registration Status

Registration Status : Not Configured

Call Status : N/A

Assigned Directory Number : N/A

IPT Details

CCM TFTP Server (DHCP Option 150)

CCM IP Address (1)

CCM IP Address (2)

CCM IP Address (3)

CCM IP Address (4)

CCM IP Address (5)

Incoming Calls drop auto answer manual answer

Phone Emulation 7902 7961

CCM Name Prefix

Device Name (to CCM)

IPT Details

CCM TFTP Server (DHCP Option 150)

Enter the IP address of the TFTP server and click the **Apply** button. The speaker will use option 150 to extract the address of the Call Manager servers.

CCM IP Address (1)

IP address of Call Manager.

CCM IP Address (2)

IP address of Call Manager.

CCM IP Address (3)

IP address of Call Manager.

CCM IP Address (4)

IP address of Call Manager.

CCM IP Address (5)

IP address of Call Manager.

Incoming Calls

This option defines how the speaker handles incoming calls. the options are:

- Drop the call
- Auto answer the call
- Manual answer the call

Phone Emulation CCM Name Prefix

Defines the model of telephone the speaker will emulate when registered with Call Manager.

CCM Name Prefix

Defines the prefix to the MAC address the speaker uses when registering with Call Manager. Default prefix is *SEP*.

Registering the Speaker with CCM.

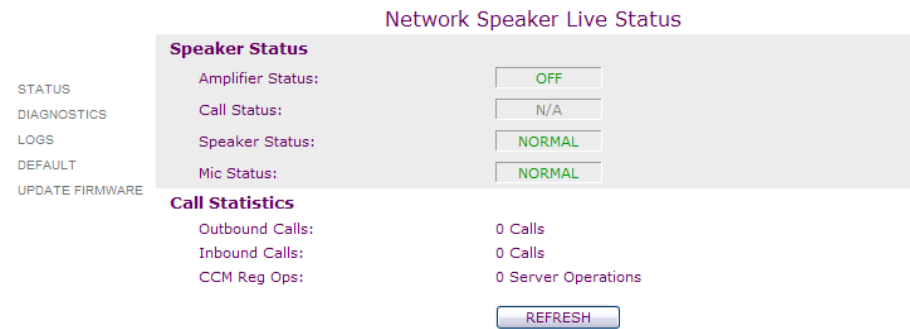
1. Assign the speaker an IP address.
2. Manually add the device in Call Manager, or enable auto registration.
3. Enable Cisco IP telephony integration in the speaker configuration.
Navigate to: IP Telephony
Select the **Cisco** radio button and click **Apply**
4. Enter the IP Address of the Call Manager server you want to register with.
Navigate to: IP Telephony>Cisco
Enter the IP address in the **CCM TFTP Server (DHCP Option 150)** textbox and click the **Apply** button.

If the speaker is configured correctly in Call Manager the speaker will register with CCM, download its config file and have a directory number on the system.

CHAPTER 3

MAINTENANCE & DIAGNOSTICS

Selecting the Maintenance in the configuration window provides data on the current status of the ICP0ASP7002-IP's features, the ability to test each function of the speaker remotely and the ability to upgrade the firmware.



The screenshot shows a web interface for 'Network Speaker Live Status'. On the left is a navigation menu with options: STATUS, DIAGNOSTICS, LOGS, DEFAULT, and UPDATE FIRMWARE. The main content area is divided into two sections: 'Speaker Status' and 'Call Statistics'. The 'Speaker Status' section includes four rows, each with a label and a button: Amplifier Status (OFF), Call Status (N/A), Speaker Status (NORMAL), and Mic Status (NORMAL). The 'Call Statistics' section shows three rows of data: Outbound Calls (0 Calls), Inbound Calls (0 Calls), and CCM Reg Ops (0 Server Operations). A 'REFRESH' button is located at the bottom of the statistics section.

Network Speaker Live Status	
Speaker Status	
Amplifier Status:	OFF
Call Status:	N/A
Speaker Status:	NORMAL
Mic Status:	NORMAL
Call Statistics	
Outbound Calls:	0 Calls
Inbound Calls:	0 Calls
CCM Reg Ops:	0 Server Operations
REFRESH	

Figure 3.1 Status

Speaker Status

Provides the following data:

Amplifier Status

Shows the current status of the audio amplifier. ON/OFF

Call Status

Shows the current call status,

Speaker Status

Indicates the current status of the speaker. NORMAL/STREAMING

Mic Status

Indicates the current status of the mic (if fitted).
NORMAL/STREAMING

Call Statistics

Diagnostics

Navigate to: Maintenance>Diagnostics



Figure 3.2 Diagnostics

The diagnostics page allows you test the speaker functionality remotely.

Output Diagnostics

Simulate the I/O (if fitted) being activated.

Call Diagnostics.

Test the call functionality via CCM

Logs

Navigate to: Maintenance>Logs

The speaker logs events in a temporary buffer for diagnostic purposes. This buffer is stored in volatile memory and is lost when the unit is powered off.

To clear the buffer manually, click the **Clear Logs** button.

Default

Navigate to: Maintenance>Default



Figure 3.3 Default

Clicking the **DEFAULT** button will return the speaker to factory default settings. Clicking the **REBOOT** button will reboot the speaker.

Update Firmware

Navigate to: Maintenance>Update Firmware

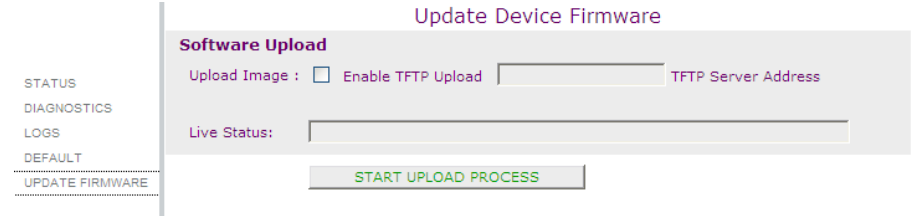


Figure 3.4 Update Firmware

The firmware can be updated via a TFTP server. To update the firmware:

1. A TFTP server must be available on the network.
2. The ICP image should be stored in the TFTP root directory.
3. Tick the [Enable TFTP Upload](#) check box.
4. Enter the IP address of the TFTP server.
5. Click the **Start Upload Process** button.

Ensure the speaker is not rebooted and the network connection to the TFTP server remains intact during the upload process.

If you see the message “Problem writing image to flash” in the Live Status window. The upload process has failed

Reboot the speaker and start again.

Do not repeat the upload process without a reboot.

The upload process will begin. The current status of the upload process is displayed in the [Live Status](#) window. The correct upload

- Uploading File
- Writing Main Image
- Writing Header
- Rebooting

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