

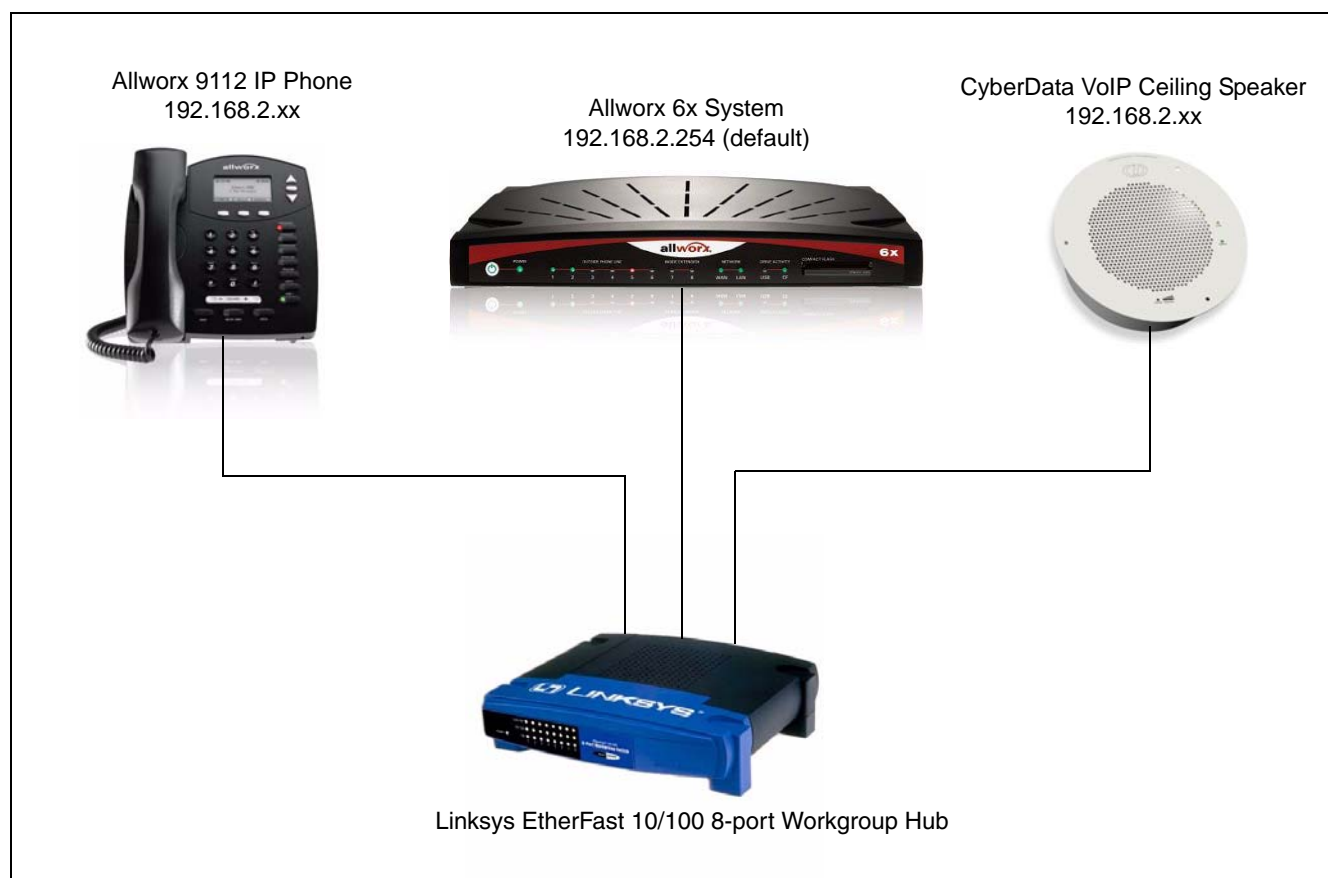


VoIP Ceiling Speaker with Allworx 6x Server Setup Guide

1.0 Setup Diagram

Figure 1-1 is a setup diagram for a single VoIP speaker configuration. In this configuration, the ceiling speaker acts as a standalone SIP telephony device.

Figure 1-1. Setup Diagram



2.0 Host PC Environment

Table 2-1. Host PC Environment Details

Description	
Hardware Type	Allworx 6x
Hardware Version	Configuration 04
Software Type	
Software Version	6.8.3.1

3.0 Test Setup Equipment

Table 3-1. Test Setup Equipment

Equipment	Model	Version
Allworx VoIP Phone	9112	1.8.2.1
Notes:		
Allworx System	6x	6.8.3.1
Notes:		
CyberData VoIP Ceiling Speaker	010844D	4.01
Notes:		
Linksys EtherFast 10/100 8-port Workgroup Hub	EFAH08W	2.0
Notes:		
Notes:		
Notes:		
Notes:		
Notes:		

4.0 Setup Procedure

To set up the Allworx 6x SIP Server for the CyberData VoIP Ceiling Speaker,

1. Go to the **Login** page. By default, the login can be found at the following web address:
192.168.2.254:8080
2. On the **Login** page, enter the password and click on **Login** to go to the **Home** page. The default password is **admin**.

Figure 4-2. Login

Welcome to Allworx

allworx®

[About Allworx](#)

**Your login session has expired.
Please login again.**

For access to the Allworx
administration web pages, please
enter the administration password.

Password

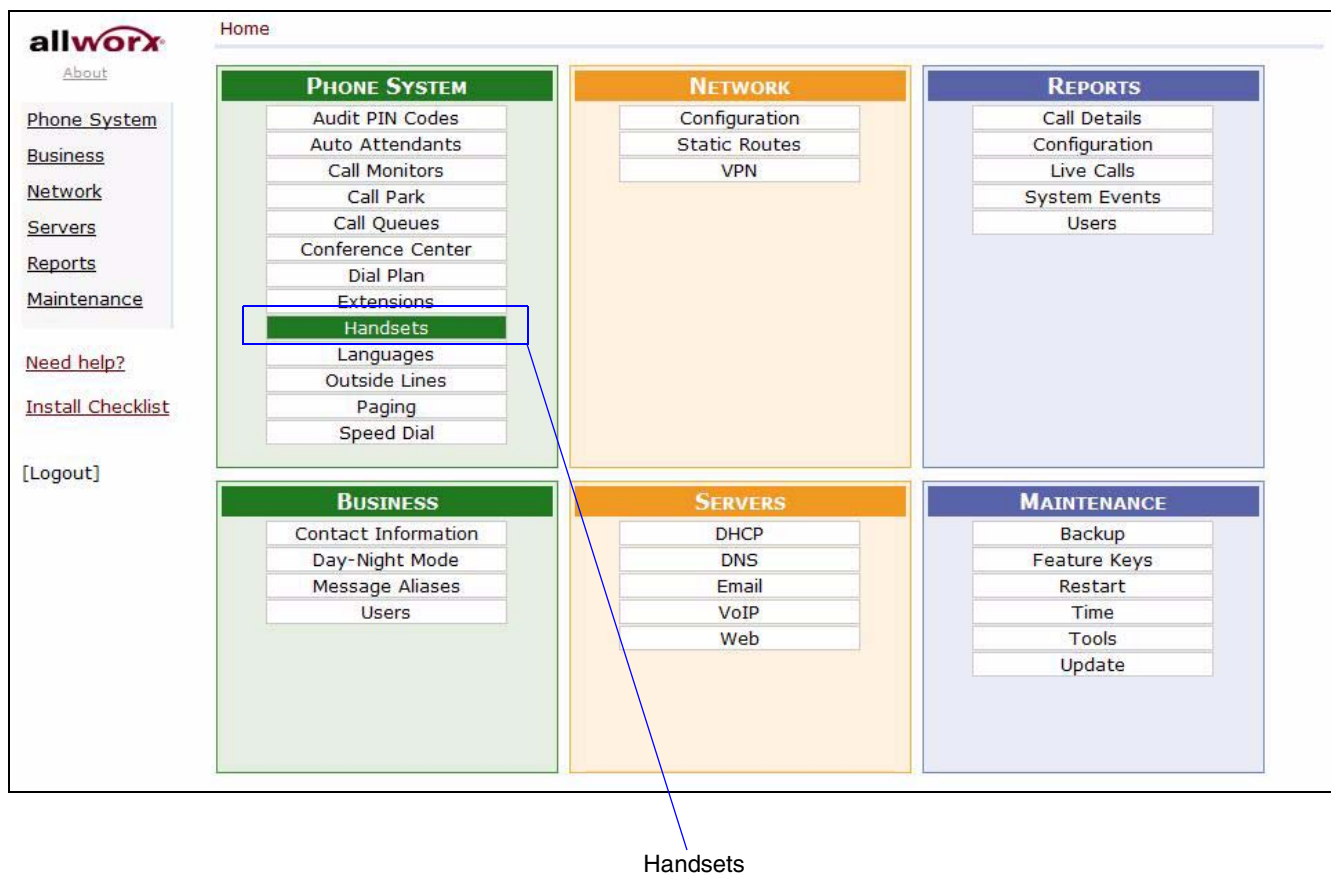
[Lost Password](#)

Password

Login

3. On the **Home** page, go to the **PHONE SYSTEM** section and click on **Handsets** to go to the **Handsets** page.

Figure 4-3. Home Page



- On the **Handsets** page, go to the **SIP Handsets** section and click on **Add new SIP Handsets** to go to the **Add new SIP Handsets** page.

Figure 4-4. Handset Page

The screenshot shows the Allworx web interface for the Handset page. The breadcrumb trail is [Home](#) > [Phone System](#) > [Handsets](#). The left sidebar contains a navigation menu with links for [About](#), [Phone System](#), [Audit PIN Codes](#), [Auto Attendants](#), [Call Monitors](#), [Call Park](#), [Call Queues](#), [Conference Center](#), [Dial Plan](#), [Extensions](#), [Handsets](#), [Languages](#), [Outside Lines](#), [Paging](#), [Speed Dial](#), [Business](#), [Network](#), [Servers](#), [Reports](#), [Maintenance](#), [Need help?](#), [Install Checklist](#), and [\[Logout\]](#).

The main content area has a sub-header [Home > Phone System > Handsets](#) and a navigation bar with [Analog Handsets](#), [SIP Handsets](#), and [Handset Configuration Templates](#). The **SIP Handsets** section is active, showing a table of existing handsets and a link to [add new SIP Handset](#) (highlighted with a blue box). The table has columns for Handset, Line, Owner, CallerID, Identification, and Action.

Handset	Line	Owner	CallerID	Identification	Action
Allworx 9112	View	Configuration	Add	Call Appearance	Reboot Phone
000add817e9f	1			MAC: 00-0A-DD-81-7E-9F User ID: 5100 Login ID: 5100 192.168.2.1:5060 (registration expired)	Replace Phone Modify Delete Ring
Allworx 9112	View	Configuration	Add	Call Appearance	Reboot Phone
000add81c6d9	1			MAC: 00-0A-DD-81-C6-D9 User ID: 5101 Login ID: 5101 192.168.2.3:5060 (expires: Nov 19, 2008 04:38 pm)	Replace Phone Modify Delete Ring
Allworx 9112	View	Configuration	Add	Call Appearance	Reboot Phone
000add81bec2	1			MAC: 00-0A-DD-81-BE-C2 User ID: 5102 Login ID: 5102 192.168.2.4:5060 (expires: Nov 19, 2008 04:38 pm)	Replace Phone Modify Delete Ring

The **Handset Configuration Templates** section shows a table of templates:

Model	Description	Action
Allworx 9112	9112 (Factory - Key)	View Activate
Allworx 9112	9112 (Factory - PBX) [ACTIVE]	View
Allworx 9102	9102 (Factory) [ACTIVE]	View
Allworx 9212	9212 (Factory - Key)	View Activate
Allworx 9212	9212 (Factory - PBX) [ACTIVE]	View

add new SIP Handset

5. On the **Add SIP Handsets** page, enter the following information as shown in [Figure 4-5](#):

- Caller ID Name
- Description
- Model
- Number of Lines
- Login ID
- Password

Note The information that you enter must match the SIP information in the Ceiling Speaker. In [Figure 4-5](#), the speaker is set for extension 5103.

Figure 4-5. SIP Handset Add

The screenshot shows the 'Add SIP Handset' page in the Allworx web interface. The page is divided into two main sections: 'SIP Handset' and 'Handset Configuration'. The 'SIP Handset' section contains fields for Owner, Extension, Caller ID Number, Caller ID Name, and Description. The 'Handset Configuration' section contains fields for Model, Number of Lines, Login ID, Password, a checkbox for downloading configuration, MAC Address, and SIP Protocol Port. A 'TIP' box provides additional information about Owner and Extension selection. A left sidebar contains navigation links for various system functions. Labels at the bottom of the page point to specific fields: 'Password' points to the Password field, 'Add' points to the Add button, 'Login ID' points to the Login ID field, 'Model' points to the Model dropdown, 'Number of Lines' points to the Number of Lines field, 'Description' points to the Description field, and 'Caller ID Name' points to the Caller ID Name field.

allworx
About

Phone System
[Audit PIN Codes](#)
[Auto Attendants](#)
[Call Monitors](#)
[Call Park](#)
[Call Queues](#)
[Conference Center](#)
[Dial Plan](#)
[Extensions](#)
Handsets
[Languages](#)
[Outside Lines](#)
[Paging](#)
[Speed Dial](#)
[Business](#)
[Network](#)
[Servers](#)
[Reports](#)
[Maintenance](#)
[Need help?](#)
[Install Checklist](#)
[\[Logout\]](#)

Home > Phone System > Handsets > Add SIP Handset

SIP Handset

Owner {none} ▾

Extension --- ▾ (optional, see TIP)

Caller ID Number user owner's extension ▾

Caller ID Name 5103

Description VoIP Speaker

TIP
 If an *Owner* other than 'admin' is selected the handset will automatically be added to the owner's *In Office* call route.
 If an *Extension* is selected, the extension will be created with a call route to ring this handset. This is typically used in the case of a conference room or lab phone that does not require an owner.

Handset Configuration

Model Generic SIP ▾ Number of Lines 1

Login ID 5103

Password ••••••

☐ Phone will download configuration file from Allworx

MAC Address

SIP Protocol Port 5060

Add Cancel

Password Add Login ID Model Number of Lines Description Caller ID Name

Note Figure 4-6 is an example of a CyberData VoIP Ceiling Speaker that is configured to extension 5103.

Figure 4-6. Ceiling Speaker Configured to Extension 5103

SIP Setup

SIP Server:	192.168.2.254	*
Outbound Proxy:		*
Remote SIP Port:	5060	*
Local SIP Port:	5060	*
SIP User ID:	5103	*
Authenticate ID:	5103	*
Authenticate Password:	ext5103	*
SIP Registration:	<input checked="" type="radio"/> Yes <input type="radio"/> No	*
Unregister on Reboot:	<input type="radio"/> Yes <input checked="" type="radio"/> No	*
Register Expiration (minutes):	1440	*

** changing this parameter causes system reboot when saved*

Save Settings

6. Click **Add** to go back to the **SIP Handsets** page.

7. Upon returning to the **SIP Handsets** page, you will see **(never registered)** in the **Identification** column of the **Generic SIP** section.

Figure 4-7. SIP Handset Never Registered

The screenshot shows the Allworx Phone System interface. The left sidebar contains navigation links for Phone System, Business, Network, and Maintenance. The main content area is titled 'Handsets' and includes sections for Analog Handsets and SIP Handsets. The SIP Handsets section contains a table with columns: Handset, Line, Owner, Caller ID, Identification, and Action. The table lists three SIP Handsets (Allworx 9112) and one Generic SIP (VoIP Speaker). The VoIP Speaker's Identification column shows 'User ID: 5103', 'Login ID: 5103', and '(never registered)'. A blue box highlights the '(never registered)' text, with a blue arrow pointing to it from the caption below.

Handset	Line	Owner	Caller ID	Identification	Action
Allworx 9112	1			MAC: 00-0A-DD-81-7E-9F User ID: 5100 Login ID: 5100 192.168.2.1:5060 (registration expired)	View Configuration Add Call Appearance Reboot Phone Replace Phone Modify Delete Ring
Allworx 9112	1			MAC: 00-0A-DD-81-C6-D9 User ID: 5101 Login ID: 5101 192.168.2.3:5060 (expires: Nov 19, 2008 05:08 pm)	View Configuration Add Call Appearance Reboot Phone Replace Phone Modify Delete Ring
Allworx 9112	1			MAC: 00-0A-DD-81-BE-C2 User ID: 5102 Login ID: 5102 192.168.2.4:5060 (expires: Nov 19, 2008 05:08 pm)	View Configuration Add Call Appearance Reboot Phone Replace Phone Modify Delete Ring
Generic SIP					
VoIP Speaker	1		5103	User ID: 5103 Login ID: 5103 (never registered)	Modify Delete Ring

(never registered) in the Identification column

8. To register the speaker, you will need to reboot the speaker by logging into the CyberData Configuration Home page.

9. Log into the CyberData Configuration Home page (Figure 4-8) by pointing your browser to the speaker's IP address.

For the initial configuration of the speaker, refer to the VoIP Ceiling Speaker Operation Guide which can be found at the following web address:

<http://www.cyberdata.net/support/voip/ceilingspeaker.html>

Note You may also download CyberData's VoIP Discovery Utility program which allows you to easily find and configure the default web address of the CyberData VoIP products. CyberData's VoIP Discovery Utility program is available at the following web address:

http://www.cyberdata.net/support/voip/discovery_utility.html

10. When prompted, enter the following **Web Access Username** and **Web Access Password** to access the CyberData Configuration Home page (Figure 4-8):

Default Login:

Web Access Username: **admin**

Web Access Password: **admin**

Figure 4-8. CyberData Configuration Home Page



Upgrade Firmware

11. Click **Upgrade Firmware** to open the **Firmware Upgrade** page.

12. On the **Upgrade Firmware** page, click on **Reboot**.

Figure 4-9. Reboot VoIP Speaker

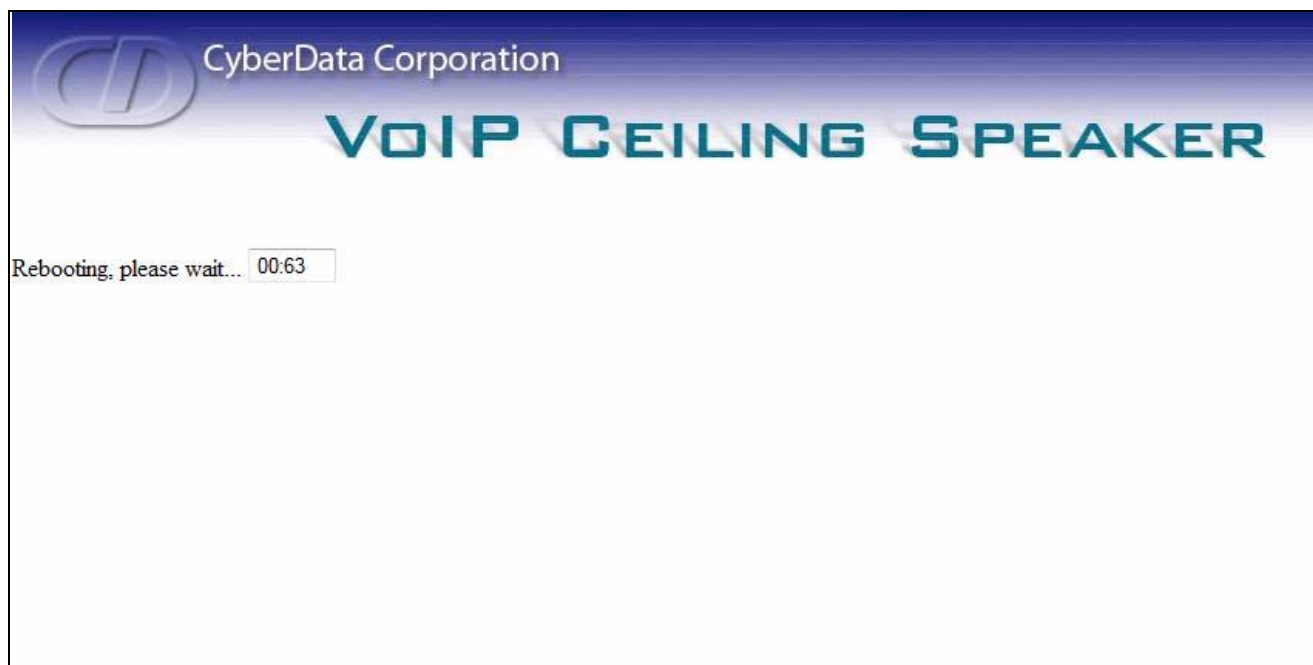
The screenshot displays the web interface for a VoIP Ceiling Speaker. At the top, the CyberData Corporation logo and the product name 'VOIP CEILING SPEAKER' are visible. The main section is titled 'Firmware Upgrade'. It contains two sub-sections: 'System Configuration' and 'Reboot System'. The 'System Configuration' section shows the bootname as '400-uboot-sip' and a table of firmware files for Partition 1 and Partition 2. The 'Reboot System' section has a blue 'Reboot' button. Below these sections is a 'Load New Firmware to Partition 1' section with input fields for 'TFTP Server IP' (192.168.2.253) and 'New Filename', and an 'Upload File' button. At the bottom, there is a navigation bar with buttons for 'Network Setup', 'Speaker Setup', 'SIP Setup', 'MGROUPS Setup', and 'Home Page'. A blue line points from the 'Reboot' button in the 'Reboot System' section to the 'Reboot' label below the interface.

	Partition 1	Partition 2
Kernel	▶400-image-spk-sip.bin	400-image-spk-sip.bin
Application	▶402-romdisk-spk-sip.img	402-romdisk-spk-sip.img

Reboot

-
13. After clicking on **Reboot**, a reboot timer countdown will begin.

Figure 4-10. Speaker Reboot Timer



14. After the speaker reboots, the green **Status** LED on the speaker will blink at one second intervals to indicate normal operation.

Note If **Yes** is selected for **Speaker Beep After Initialization** on the **Speaker Setup** page, you will hear a tone after the initialization sequence is complete.

15. Refresh the **SIP Handsets** web page and verify that the speaker is registered. The **Identification** column of the **Generic SIP** row shows the address and port that the speaker is using.

Figure 4-11. Successfully Registered Speaker

The screenshot shows the Allworx web interface. The left sidebar contains a 'Phone System' menu with options like Audit PIN Codes, Auto Attendants, Call Monitors, Call Park, Call Queues, Conference Center, Dial Plan, Extensions, Handsets, Languages, Outside Lines, Paging, Speed Dial, Business, Network, Servers, Reports, and Maintenance. The main content area is titled 'Home > Phone System > Handsets'. It has tabs for 'Analog Handsets', 'SIP Handsets', and 'Handset Configuration Templates'. The 'SIP Handsets' tab is active, showing a table with columns: Handset, Line, Owner, Caller ID, Identification, and Action. The table lists several handsets, including 'Allworx 9112' and 'Generic SIP'. The 'Generic SIP' row is highlighted, and its 'Identification' column contains the text: 'User ID: 5103', 'Login ID: 5103', '192.168.2.10:5060', and '(expires: Nov 20, 2008 04:15 pm)'. A blue box highlights the address and port number '192.168.2.10:5060', and a blue arrow points from the text 'Address and Port Number' below to this box.

Handset	Line	Owner	Caller ID	Identification	Action
Allworx 9112	1			MAC: 00-0A-DD-81-7E-9F User ID: 5100 Login ID: 5100 192.168.2.1:5060 (registration expired)	Modify Delete Ring
Allworx 9112	1			MAC: 00-0A-DD-81-C6-D9 User ID: 5101 Login ID: 5101 192.168.2.3:5060 (expires: Nov 19, 2008 05:08 pm)	Modify Delete Ring
Allworx 9112	1			MAC: 00-0A-DD-81-BE-C2 User ID: 5102 Login ID: 5102 192.168.2.4:5060 (expires: Nov 19, 2008 05:08 pm)	Modify Delete Ring
Generic SIP	1		5103	User ID: 5103 Login ID: 5103 192.168.2.10:5060 (expires: Nov 20, 2008 04:15 pm)	Modify Delete Ring

Address and Port Number

16. To test the speaker, pick up any phone that is configured to the Allworx system and call the speaker's extension number.
17. When a connection is established (as indicated by a beep), speak into the phone and verify that you can hear your voice through the speaker.

