

Cyberdata Ceiling Speaker Configuration

Bluestone rev 0.3

Overview

The CCS (Cyberdata Ceiling Speaker) contains a SIP UA, audio amp and loudspeaker designed to provide PA facilities in a SIP environment. There are two modes of operation described here 1) as a SIP UA 2) as an IPv4 multicast client.

Network Configuration for SIP Operation

Plug the unit into the network and then look at the DHCP leases for a MAC address of the following form: 00:20:f7:xx:xx:xx. As with the phones it will initially be configured on the untagged network, look under the Admin tab on the OSS for DHCP leases to derive its IP address. Now point a browser at this IP and login using user=admin, password=admin.

Under the networking tab you will see the screen below.

The screenshot shows the 'Network Configuration' page of the CyberData Ceiling Speaker. The page has a blue header with the title 'CyberData Ceiling Speaker'. On the left side, there is a vertical menu with buttons for 'Home', 'Device Config', 'Networking', 'SIP Config', 'Nightringer', 'Multicast Config', 'Audio Config', 'Clock Config', 'Event Config', 'Autoprovisioning', and 'Update Firmware'. The main content area is titled 'Network Configuration' and contains two sections: 'Stored Network Settings' and 'DHCP Timeout'. The 'Stored Network Settings' section includes radio buttons for 'Static' and 'DHCP' (selected), and input fields for 'IP Address' (10.10.10.10), 'Subnet Mask' (255.0.0.0), 'Default Gateway' (10.0.0.1), 'DNS Server 1' (10.0.0.1), 'DNS Server 2' (10.0.0.1), 'VLAN ID (0-4095)' (4), and 'VLAN Priority (0-7)' (0). The 'DHCP Timeout' section includes a text label 'DHCP Timeout in seconds*' and an input field with the value '60'. A note below states '* A value of -1 will retry forever'.

To finalize the networking setup do this:

- Use the VLAN row to set the VLAN ID to 4.
- Reboot the unit and wait the 30 seconds for it to come back up
- Use the Admin=>DHCP Leases on the OSS to rediscover its IP address
- Login to the CCS as before.

SIP Configuration

Deploy the unit as a generic SIP device on the GUI - for this example we will assume the unit has extension number 2323. Go to the “SIP Config” tab on the CCS and you will see a form similar to the one below:

The screenshot shows the SIP Configuration interface. On the left is a navigation menu with buttons for Networking, SIP Config (selected), Nightringer, Multicast Config, Audio Config, Clock Config, Event Config, Autoprovisioning, and Update Firmware. The main area is titled 'SIP Settings' and contains the following fields and options:

- Backup Server 1: (NOT Registered with SIP Server)
- Backup Server 2: (NOT Registered with SIP Server)
- Enable SIP operation:
- SIP Server: test.oss90.btcfg.com
- Backup SIP Server 1: [Empty field]
- Backup SIP Server 2: [Empty field]
- Use Cisco SRST:
- Remote SIP Port: 5060
- Local SIP Port: 5060
- Outbound Proxy: [Empty field]
- Outbound Proxy Port: 0
- SIP User ID: 2323
- Authenticate ID: 2323
- Authenticate Password: [Masked with dots]
- Register with a SIP Server:
- Re-registration Interval (in seconds): 360
- Unregister on Reboot:
- Disable rport Discovery:
- Buffer SIP Calls:
- Beep before Page:

Fill in the following on this form:

- SIP Server should be the FQDN for the OSS - this will resolve internally to correct LAN address. (*Note that using a literal IP address will NOT work - it will be rejected by the OSS.*)
- Ignore the Backup SIP server fields.
- Make the “SIP User ID” and “Authenticate ID” equal to whatever extension number you defined.
- Set the password to the one created by the GUI.
- Optionally check the “Beep before Page” checkbox.
- Press Save.

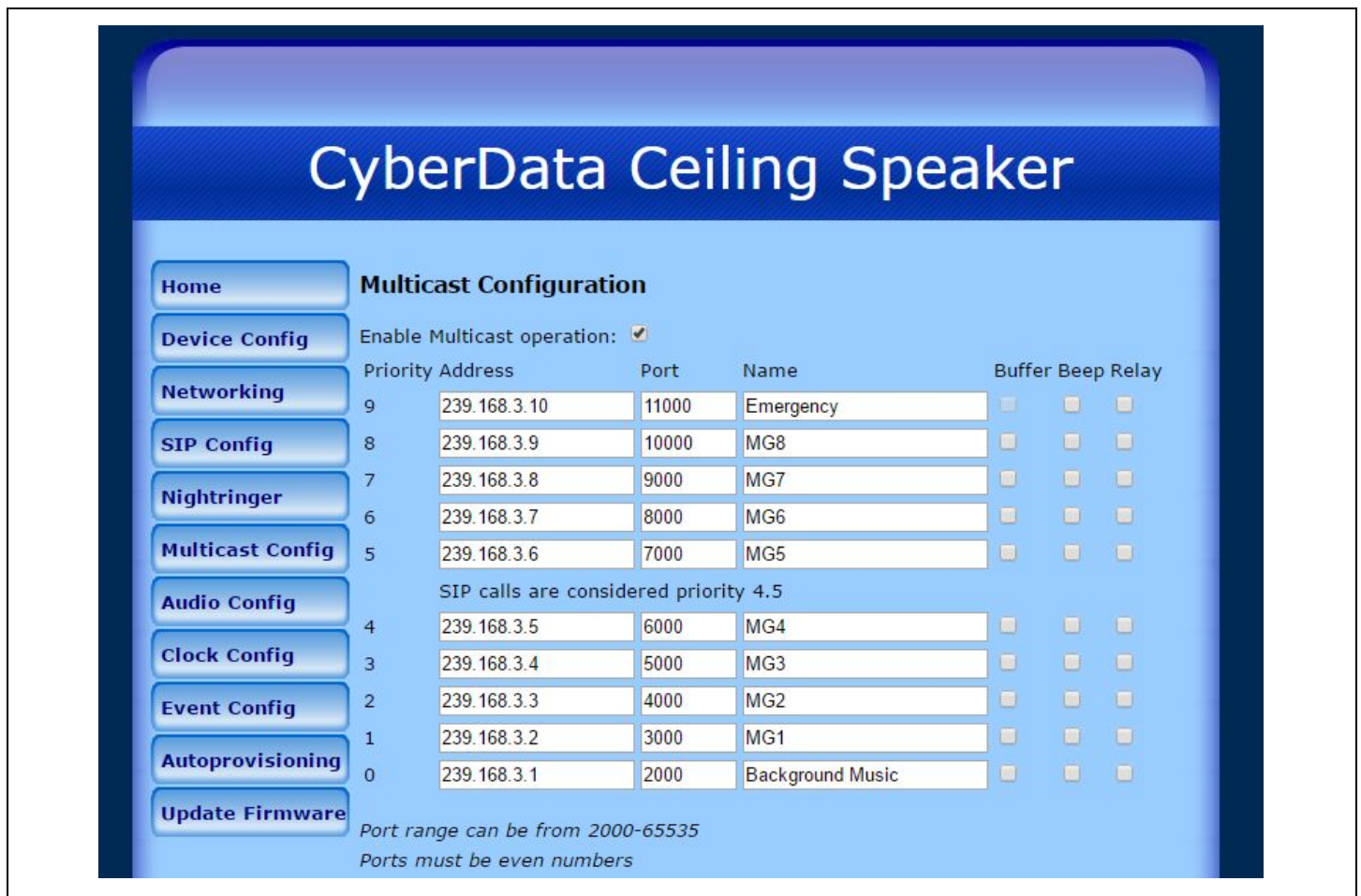
Under the “Device Configuration” tab

- Check that the “Auto Answer” checkbox is checked. Check and save this if necessary
- Reboot the unit.

Multicast Client

When used in conjunction with Yealink phones the multicast address is 239.168.3.5:6000 - this corresponds to the pre-defined level MG4 on the CyberData speaker, so all that needs to be done is to enable multicast operation, this can be done as follows:

- Log into the speaker’s web interface and if necessary configure this for VLAN 4 for as described in the “SIP Configuration” section above.
- If you do not intend to use this speaker as a SIP UA then click on “SIP Config” and uncheck “Enable SIP operation”.
- Click on the “Multicast Config” tab and check “Enable Multicast operation” as shown below.
- Save and reboot and configuration is complete



Volume Control

The default means for volume control is “Analog”. There is a knob of the front of the unit that you simply adjust to provide whatever volume is required. There is also an optional “Digital Volume” control under the “Device Configuration” tab.