



VoIP Zone Controller: 4-Port Audio Out Operations Guide

SiP Compliant 010881

Document Part #930109D
for Firmware Version 1.0.6

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Operations Guide 930109D
SiP Compliant 010881

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Technical Support

The fastest way to get technical support for your VoIP product is to submit a VoIP Technical Support form at the following website:
<http://www.cyberdata.net/support/contactsupportvoip.html>

We have several technical support staff monitoring this form and they will contact you within 12 hours after receiving a submission.

Phone: (831) 373-2601, Ext. 333

Email: support@cyberdata.net

Fax: (831) 373-4193

Company and product information is at www.cyberdata.net.

Revision History

Revision 930109D, which corresponds to firmware version 1.0.6, was released on November 15, 2011 and has the following changes:

- Updates the [Product Overview](#) introduction with the following text:

“The VoIP Zone Controller is a PoE-enabled, single SIP-endpoint, enabling user-defined paging zones through RCA line level output connections to legacy analog amplifiers to existing legacy analog speakers.”

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1 Product Overview

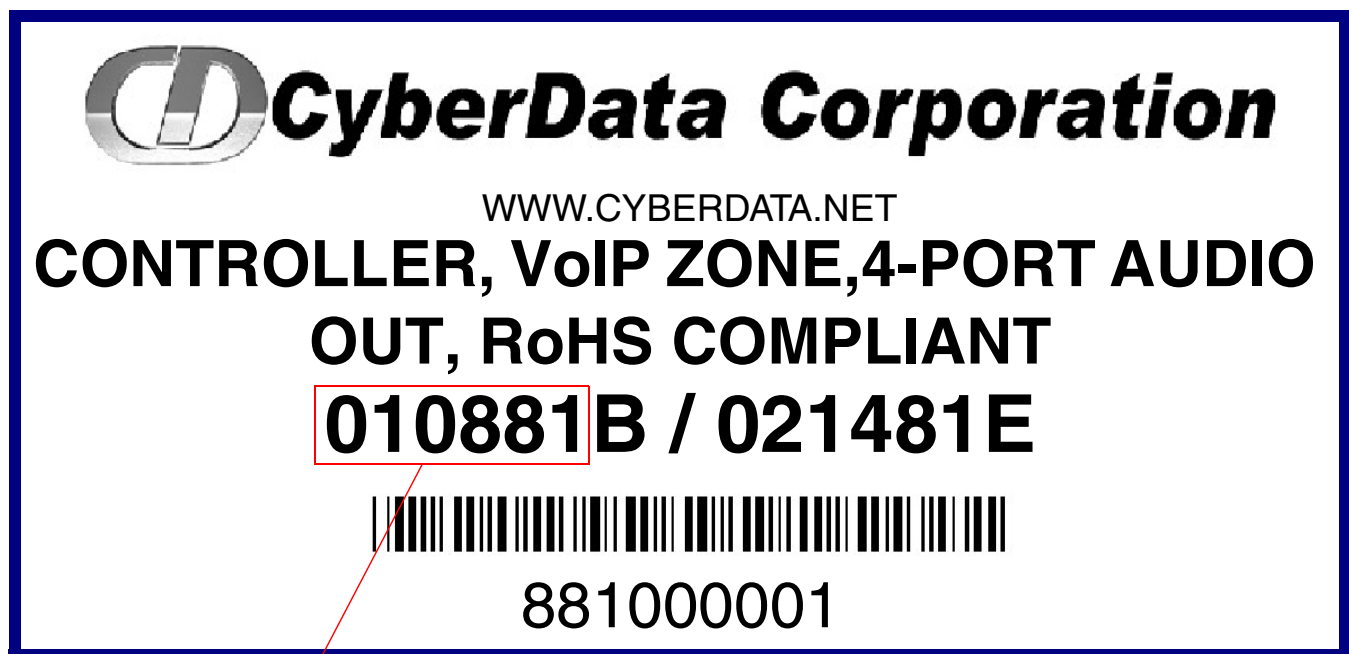
The VoIP Zone Controller is a PoE-enabled, single SIP-endpoint, enabling user-defined paging zones through RCA line level output connections to legacy analog amplifiers to existing legacy analog speakers.

SIP compliant IP-PBX's can now interface with existing legacy analog paging speaker installations.

1.1 How to Identify this Product

To identify the VoIP Zone Controller, look for a model number label similar to the one shown in [Figure 1-1](#). The model number on the label should be 010881.

Figure 1-1. Model Number Label



Model number

1.2 Product features

- SIP compliancy
- 10/100BaseT Ethernet Connection
- Page any combination of zones in 15 configurable groups
- TFTP-based firmware upgrades
- PoE enabled
- Connector for optional external power supply

1.3 Supported

- HTTP Web-based configuration
- Provides an intuitive GUI for easy system configuration and verification of speaker operations.
- DHCP Client
- TFTP Client
- Audio Codec
- G.711 U-law
- DTMF detection

1.4 Product Specifications

Specifications	
Regulatory Compliance	FCC Class A, UL 60950, CE
Power Requirement	PoE or 48V DC
Connection Speed	10/100 Mbps
Protocol	SIP compliant
Part Number	010881
Dimensions	6.11"L x 4.05"W x 1.15" H
Weight	1.2 pounds


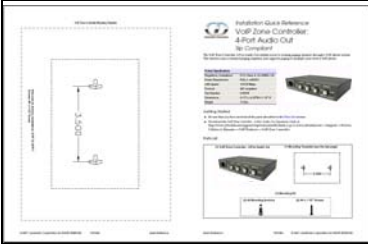
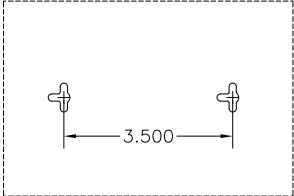

2 Implementing the VoIP Zone Controller

The topics in this chapter provide information on setting up, configuring, and using the VoIP Zone Controller.

2.1 Parts List

The packaging for the VoIP Zone Controller includes the parts in this illustration.

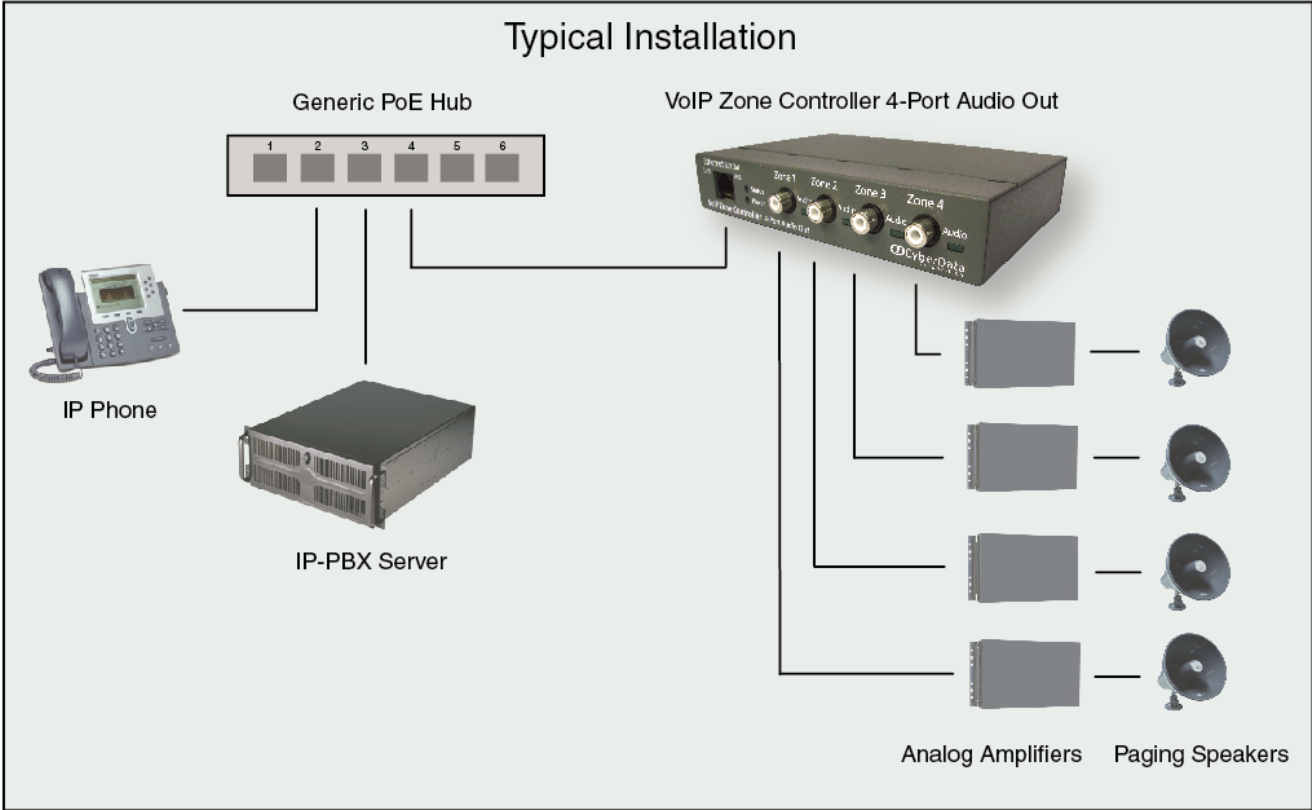
Table 2-1. Parts List

Quantity	Part Name	Illustration
1	VoIP Zone Controller	
1	Installation Quick Reference Guide	
1	Mounting Template (located on the last page of the <i>Installation Quick Reference</i>)	
1	Mounting Kit (part #070057A) which includes: (2) #4-6 x 7/8" Mounting Anchors (2) #4 x 1-1/4" Round Phillips Wood Screws	

2.2 Typical Installation

Figure 2-2 illustrates how the VoIP Zone Controller is normally installed as part of a paging system.

Figure 2-2. Typical Installation



2.3 Setting up the VoIP Zone Controller

Before you set up the VoIP Zone Controller, be sure that you have received all the parts described in [Section 2.1, "Parts List"](#).

2.3.1 Cables Used for Connecting to Legacy Analog Amplifiers

The VoIP Zone Controller connects to zones through RCA line level output connections to legacy analog amplifiers to existing legacy analog speakers.

2.3.2 Connect to the Power Source

To use PoE, plug a Cat 5 Ethernet cable from the VoIP Zone Controller **Ethernet** port to your network. As an alternative to PoE, you can plug one end of a +48V DC power supply into the VoIP Zone Controller, and plug the other end into a receptacle. If required, connect the earth grounding wire to the chassis ground on the back of the unit.

Figure 2-3. Connecting to the Power Source



2.3.3 Connect to the Network

Plug one end of a standard Ethernet cable into the VoIP Zone Controller **Ethernet** port. Plug the other end into your network.

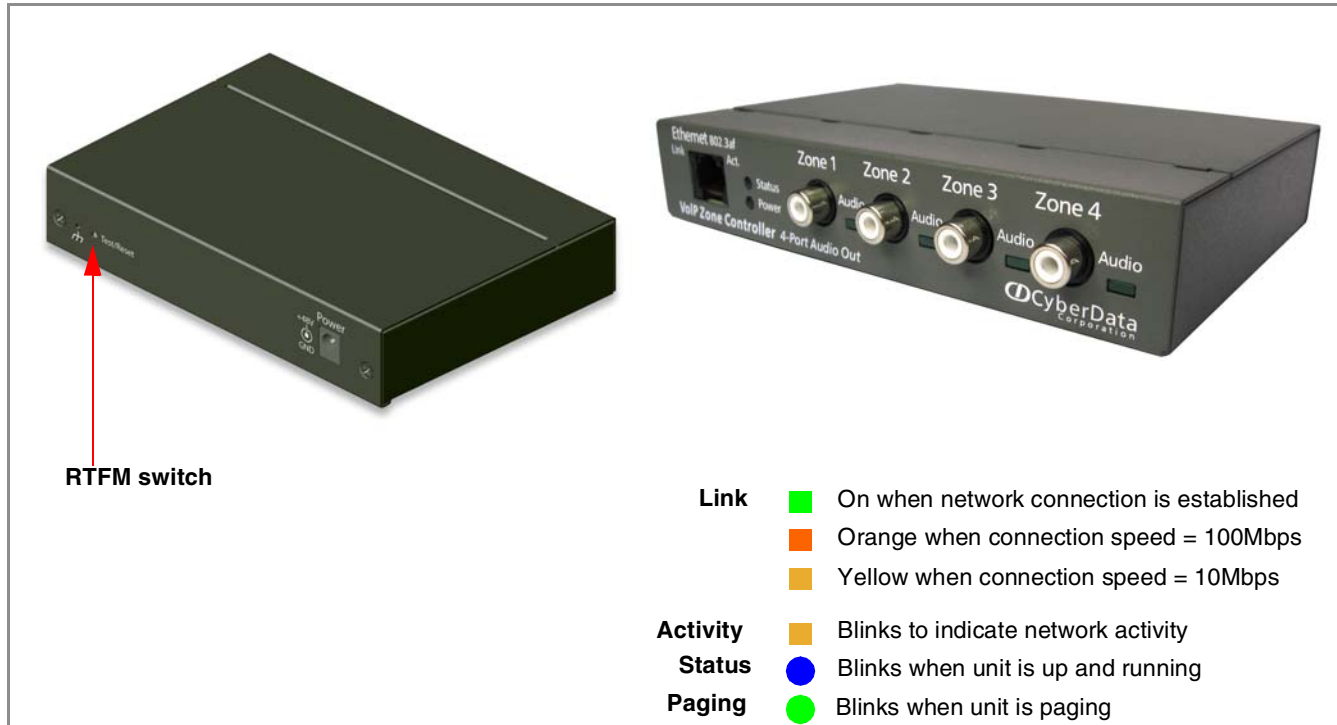
Figure 2-4. Connecting to the Network



2.3.4 Confirm that the VoIP Zone Controller is Up and Running

The indicator LEDs on the front of the VoIP Zone Controller verify the unit's operations.

Figure 2-5. VoIP Zone Controller Indicator LEDs



2.3.4.1 Confirm Power on, Network Connectivity, and Connection Speed

When you plug in the Ethernet cable or power supply:

- The round, **BLUE Status** LED on the front of the VoIP Zone Controller comes on indicating that the power is on. Once the device has been initialized, this LED blinks at one second intervals.
- The square, **GREEN Link** LED above the Ethernet port indicates that the network connection has been established. The **Link** LED changes color to confirm the auto-negotiated connection speed:
 - This LED is **YELLOW** at 10 Mbps.
 - This LED is **ORANGE** at 100 Mbps.
- The **GREEN Paging** LED comes on after the device is booted and initialized. This LED blinks when a page is in progress.

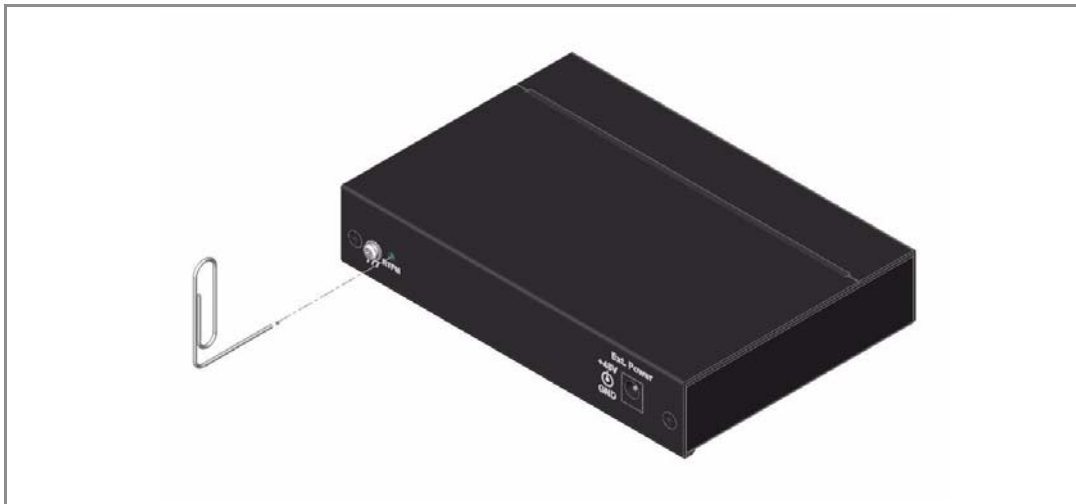
2.3.4.2 Verify Network Activity

The square, **YELLOW Activity** LED blinks when there is network activity.

2.3.5 Restore the Factory Default Settings as Required

The VoIP Zone Controller is delivered with factory set default values for the following parameters. Use the **RTFM** switch (see [Figure 2-6](#)) on the back of the unit to restore these parameters to the factory default settings.

Figure 2-6. RTFM Switch



Note When you perform this procedure, the factory default settings are restored for *all* the following parameters.

Parameter	Factory Default Setting
IP Addressing	static
IP Address	192.168.3.10
Subnet Mask	255.255.255.0
Default Gateway	192.168.3.1
Username	admin
Password	admin

To restore these parameters to the factory default settings:

1. Press and hold the RTFM switch until the paging LEDs come on.
2. Continue to hold the RTFM switch after the LEDs go off.
3. Continue to hold the RTFM switch until the audio LEDs come on a second time (approximately 10 to 12 seconds).
4. Release the RTFM switch.
5. Wait for approximately five seconds.
6. Power down the device.
7. Wait for approximately 10 seconds.
8. Power on the device. The unit should now be restored to factory defaults.

2.4 Configuring the VoIP Zone Controller

Use this section to configure the VoIP Zone Controller.

2.4.1 Gather the Required Configuration Information

Have the following information available before you configure the VoIP Zone Controller.

2.4.1.1 Static or DHCP Addressing?

Know whether your system uses static or dynamic (DHCP) IP addressing. If it uses static addressing, you also need to know the values to assign to the following VoIP Zone Controller parameters:

- IP Address
- Subnet Mask
- Default Gateway

2.4.1.2 Username and Password for Configuration GUI

Determine the Username and Password that will replace the defaults after you initially log in to the configuration GUI.

- The Username is case-sensitive, and must be from four to 25 alphanumeric characters long.
- The Password is case-sensitive, and must be from four to 20 alphanumeric characters long.

2.4.1.3 SIP Settings

To configure the SIP parameters, determine whether you want to register the VoIP Zone Controller. If you do, determine the number of minutes the registration lease remains valid, and whether you want to automatically unregister when you reboot. To configure the SIP parameters, you also need to determine the values for these parameters:

- SIP Server IP Address
- Remote and Local SIP Port Numbers
- SIP User ID, and Authenticate ID and Password for this User ID

2.4.2 Log in to the Configuration GUI

To log in:

1. For the initial configuration of the VoIP Zone Controller, open your browser and enter the following address:

`http://192.168.3.10`

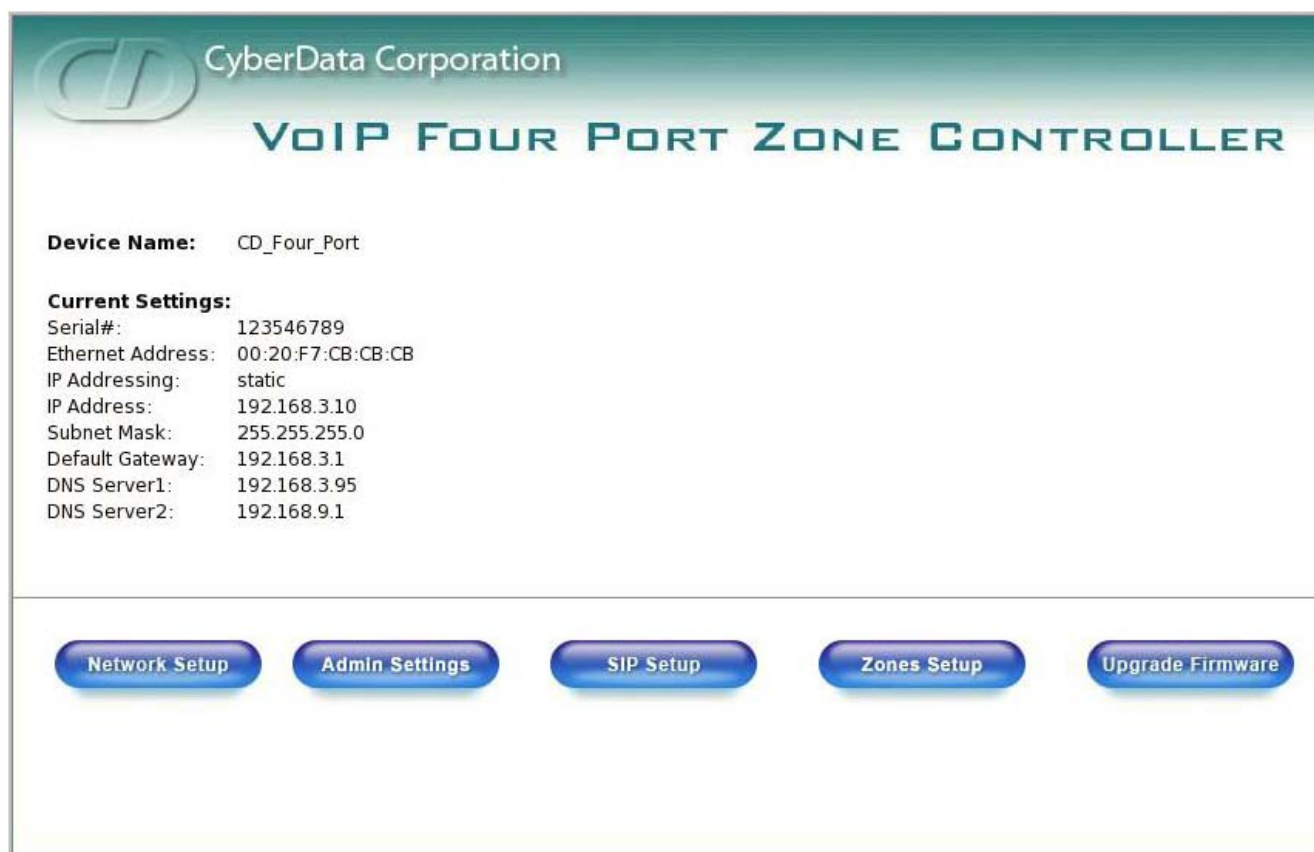
Note To work with the VoIP Zone Controller configuration *after* the initial configuration, log in using the IP address you assign to the device. [Section 2.4.3, "Configure the Network Parameters"](#) provides instructions for entering the IP address.

2. When prompted, use the following default **Username** and **Password** to open the configuration Home page:

Username: **admin**





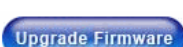
Password: **admin**

Figure 2-7. Home Page



3. On the **Home Page**, review the setup details and navigation buttons described in [Table 2-1](#).

Table 2-1. Home Page Overview

Web Page Item	Description
Device Name	Shows the device name.
Serial #	Device serial number.
Ethernet Address	Device ethernet address.
IP Addressing	Shows the current IP addressing setting (DHCP or static).
IP Address	Shows the current IP address.
Subnet Mask	Shows the current subnet mask address.
Default Gateway	Shows the current default gateway address.
DNS Server 1	Shows the DNS Server 1 address.
DNS Server 2	Shows the DNS Server 2 address.
	Link to the Network Setup web page.
	Link to the Admin Settings web page.
	Link to the SIP Setup web page.
	Link to the Zones Setup web page.
	Link to the Upgrade Firmware web page.

At this point you can:

- Review the VoIP Zone Controller’s **Current Settings**. Use the RTFM switch to restore the factory default settings. See [Section 2.3.5, "Restore the Factory Default Settings as Required"](#).
- Configure the network parameters. Click **Network Setup** and refer to [Section 2.4.3, "Configure the Network Parameters"](#) for instructions.
- Configure the Admin parameters. Click **Admin Settings** and refer to [Section 2.4.4, "Change the Default Username and Password"](#) for instructions.
- Configure the SIP parameters. Click **SIP Setup** and see [Section 2.4.5, "Configure the SIP Parameters"](#).
- Configure the Zones parameters. Click **Zones Setup** and refer tofor instructions.

Note Click the **Upgrade Firmware** button any time you need to upload new versions of the firmware or **Reboot** the VoIP Zone Controller. Refer to [Section 2.7, "Upgrading the Firmware"](#) and [Section 2.8, "Rebooting the VoIP Zone Controller"](#) for instructions.

2.4.3 Configure the Network Parameters

Configuring the network parameters enables your network to recognize the VoIP Zone Controller and communicate with it. Click **Network Setup** on the Home page to open the **Network Configuration** page.

Figure 2-8. Network Setup Page

CyberData Corporation
VoIP FOUR PORT ZONE CONTROLLER

Network Setup

IP Addressing: Static DHCP *

IP Address: *

Subnet Mask:

Default Gateway:

DNS Server1: *

DNS Server2: *







** changing this parameter causes system reboot when saved*

[Save Settings](#)

[Admin Settings](#) [SIP Setup](#) [Zones Setup](#) [Upgrade Firmware](#) [Home Page](#)

On the **Network Setup** page, enter values for the parameters indicated in [Table 2-2](#).

Table 2-2. Network Setup Parameters

Web Page Item	Description
IP Addressing*	Select either DHCP IP Addressing or Static IP Addressing by marking the appropriate radio button. If you select Static , configure the remaining parameters indicated in Table 2-2 . If you select DHCP , go to Step 3 .
IP Address*	Enter the Static IP address.
Subnet Mask	Enter the Subnet Mask address.
Default Gateway	Enter the Default Gateway address.
DNS Server 1*	Enter the DNS Server 1 address.
DNS Server 2*	Enter the DNS Server 2 address.
	Click on this button to save your configuration settings. Changing a parameter that has an asterisk next to it will cause a system reboot when saved.
	Link to the Admin Settings web page.
	Link to the SIP Setup web page.
	Link to the Zones Setup web page.
	Link to the Upgrade Firmware web page.
	Link to the Home page.

On this page:

1. Specify whether you use **Static** or **DHCP IP Addressing** by marking the appropriate radio button. Then, if you select **Static**, go to [Step 2](#).

Note Changing the **IP Addressing** selection causes the system to reboot when click Save Settings.

2. For Static IP Addressing, also enter values for the following parameters:
 - a. The VoIP Zone Controller's **IP Address**: The VoIP Zone Controller is delivered with a factory default IP address. Change the default address to the correct IP address for your system.

Note Changing the VoIP Zone Controller's **IP Address** causes the system to reboot when you click Save Settings.

- b. The **Subnet Mask**.
 - c. The **Default Gateway**.
3. Click **Save Settings** when you finish.

2.4.4 Change the Default Username and Password





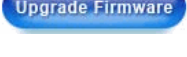
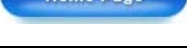
On the Home page, click **Admin Settings** to open the **Administrate Settings** page. After changing the Username and Password on this page, new browser requests will require you to log in using these new parameters.

Figure 2-9. Administrator Settings Page

The screenshot displays the 'Administrator Settings' page for the 'VoIP Four Port Zone Controller' by CyberData Corporation. The page features a header with the company logo and name. Below the header, the title 'Administrator Settings' is prominently displayed. The main content area contains several input fields: 'Device Name' with the value 'CD_Four_Port', 'Change Web Access Username' with the value 'admin', 'Change Web Access Password', and 'Re-enter New Password'. A blue 'Save Settings' button is positioned below these fields. At the bottom of the page, there is a horizontal row of five blue navigation buttons: 'Network Setup', 'SIP Setup', 'Zones Setup', 'Upgrade Firmware', and 'Home Page'.

4. On the **Administrator Settings** page, enter values for the parameters indicated in [Table 2-3](#).

Table 2-3. Administrator Settings Parameters

Web Page Item	Description
Device Name	Enter the name of the device.
Change Web Access Username	Use this field to change the Web Access Username
Change Web Access Password	Use this field to change the Web Access Password
Re-enter New Password	Use this field to re-enter a new password
	Click on this button to save your configuration settings. Changing a parameter that has an asterisk next to it will cause a system reboot when saved.
	Link to the Network Setup web page.
	Link to the SIP Setup web page.
	Link to the Zones Setup web page.
	Link to the Upgrade Firmware web page.
	Link to the Home page.

To change the default Web access Username and Password:

1. Enter the new Username from four to 25 alphanumeric characters in the **Change Username** field. The Username is case-sensitive.
2. Enter the new Password from four to 20 alphanumeric characters in the **Change Password** field. The Password is case-sensitive.
3. Enter the new password again in the **Re-enter New Password** field.
4. Click **Save Settings**.

2.4.5 Configure the SIP Parameters

The SIP parameters enable the VoIP Zone Controller to contact and register with the SIP server. On the Home page, click **SIP Setup** to open the **SIP Configuration** page.

Figure 2-10. SIP Setup Page

The screenshot shows the 'SIP Setup' configuration page for the VoIP Four Port Zone Controller. The page header includes the CyberData Corporation logo and the product name. The configuration fields are as follows:

Field	Value	Required
SIP Server :	192.168.3.95	*
Remote SIP Port:	5060	*
Local SIP Port:	5060	*
SIP User ID:	207	*
Authenticate ID:	207	*
Authenticate Password:	ext207	*
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):	60	*





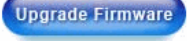

* changing this parameter causes system reboot when saved

Save Settings

Navigation buttons: Network Setup, Admin Settings, Zones Setup, Upgrade Firmware, Home Page

1. On the **SIP Setup** page, enter values for the parameters indicated in [Table 2-4](#).

Table 2-4. SIP Setup Parameters

Web Page Item	Description
SIP Server*	Enter the SIP server represented as either a numeric IP address in dotted decimal notation or the fully qualified host name (FQHN) up to 64 characters.
Remote SIP Port*	Enter the Remote SIP Port number (default is 5060).
Local SIP Port*	Enter the Local SIP Port number (default is 5060).
SIP User ID*	Enter the SIP User ID (up to 25 alphanumeric characters).
Authenticate ID*	Enter the Authenticate ID (up to 25 alphanumeric characters).
Authenticate Password*	Enter the Authenticate Password (up to 25 alphanumeric characters).
SIP Registration*	Enable/Disable SIP Registration.
Unregister on Reboot*	<ul style="list-style-type: none"> • Select Yes to automatically unregister the speaker when it is rebooted. • Select No to keep the speaker registered when it is rebooted.
Register Expiration*	Enter the SIP Registration lease time in minutes (default is 60 minutes).
	Click on this button to save your configuration settings. Changing a parameter that has an asterisk next to it will cause a system reboot when saved.
	Link to the Network Setup web page.
	Link to the Admin Settings web page.
	Link to the Zones Setup web page.
	Link to the Upgrade Firmware web page.
	Link to the Home page.

1. Enter the IP address of the **SIP Server**.
2. Enter the port numbers used for SIP signaling:
 - a. **Remote SIP Port**
 - b. **Local SIP Port**

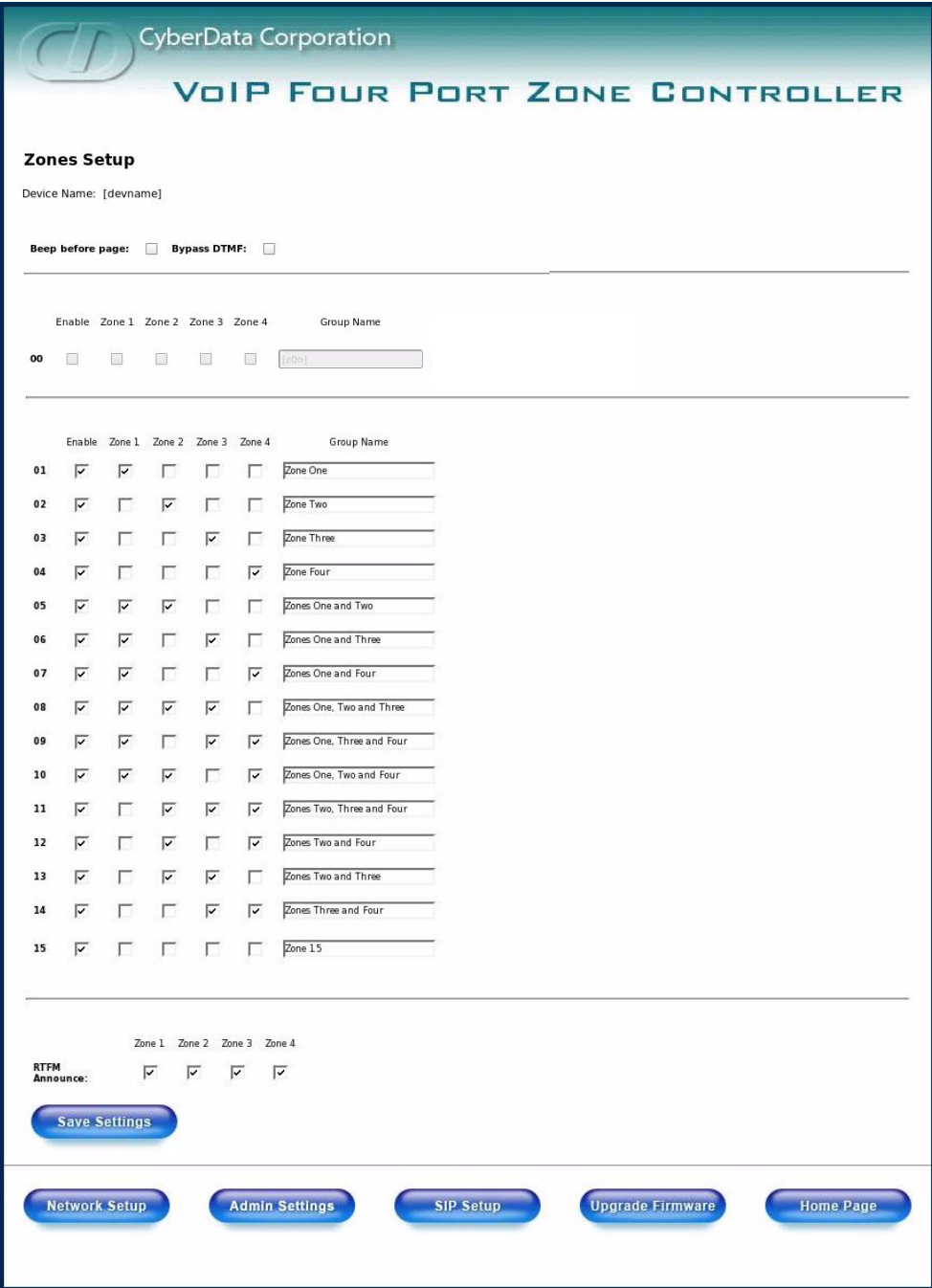
3. Enter the SIP registration parameters:
 - a. **SIP User ID**
 - b. **Authenticate ID**
 - c. **Authenticate Password**
4. For **SIP Registration**, designate whether you want the VoIP Zone Controller to register with your SIP server.
5. At **Unregister on Reboot**:
 - a. Select **Yes** to automatically unregister the VoIP Zone Controller when you reboot it. [Section 2.8, "Rebooting the VoIP Zone Controller"](#) provides instructions on that process.
 - b. Select **No** to keep the VoIP Zone Controller registered when you reboot it.
6. In the **Register Expiration** field, enter the number of minutes the VoIP Zone Controller registration lease remains valid with the SIP Server. The VoIP Zone Controller automatically re-registers with the SIP server before the lease expiration timeout.

2.5 Set up the Zones

- Each audio output jack on the VoIP Zone Controller represents a **Zone**.
- A **Group** is comprised of a combination of one or more Zones.
- You will need to plug any Zones that are used on the VoIP Zone Controller into an analog amplifier. Any speakers attached to the amplifier will be present in the Zone.





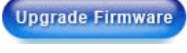
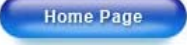
1. Click on the **Zones Setup** button to open the **Zones Setup** page. See [Figure 2-11](#).

Figure 2-11. Zones Setup



2. On the **Zones Setup** page, enter values for the parameters indicated in [Table 2-5](#).

Table 2-5. Zones Setup Parameters

Web Page Item	Description
Device Name	Shows the name of the device.
Beep Before Page	Check this box to play a beep before a page is sent.
Bypass DTMF	Check this box to send a page without having to enter a two-digit tone. When enabled, all four zones will be paged without waiting for DTMF entry.
Enable	Check this box to enable the Group.
Zones 1-4 Checkboxes	Check the box for the Zones that should comprise this Group.
Group Name	Assign an identifier to the Group.
RTFM Announce	Check the box for the Zone that you want to hear a RTFM announcement from.
	Click on this button to save your configuration settings. Changing a parameter that has an asterisk next to it will cause a system reboot when saved.
	Link to the Network Setup web page.
	Link to the Admin Settings web page.
	Link to the SIP Setup web page.
	Link to the Upgrade Firmware web page.
	Link to the Home page.

3. After changing the parameters, click **Save Settings**.

2.6 Operating the VoIP Zone Controller

- When you call to make a page, the VoIP Zone Controller generates a tone over the phone.
- When you hear this tone, enter the two-digit code for the group that you want to page.
- The VoIP Zone Controller establishes a connection to a group.
- The VoIP Zone Controller generates another tone to the phone.
- When you hear this tone, you can begin speaking.

Note Group 00 is configured to *Page All Zones*.

2.7 Upgrading the Firmware

The firmware on the board consists of two files: a Kernel and an Application, that can be loaded separately. Uploading the firmware files requires a host machine running a TFTP server. If you need to set up this server, "[Appendix A: Setting Up a TFTP Server](#)" provides instructions.

Figure 2-12. Firmware Upgrade Page

CyberData Corporation
VOIP FOUR PORT ZONE CONTROLLER

Firmware Upgrade

System Configuration		Reboot System	
Bootname:	u-boot-1.XX	Reboot	
	Partition 1	Partition 2	
Kernel	▶ vaab-image-r.bin	xxx-image-at75.bin	
Application	▶ vbai-romdisk-r.img	xxx-romdisk-at75.img	

Load New Firmware to Partition 1

TFTP Server IP:

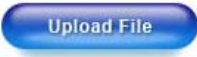





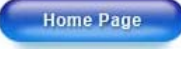
New Filename:

Upload File

Network Setup **Admin Settings** **SIP Setup** **Zones Setup** **Home Page**

To upload a firmware file, log in as instructed in [Section 2.4.2, "Log in to the Configuration GUI"](#). [Table 2-6](#) shows the web page items on the **Firmware Upgrade** page.

Table 2-6. Firmware Upgrade Parameters

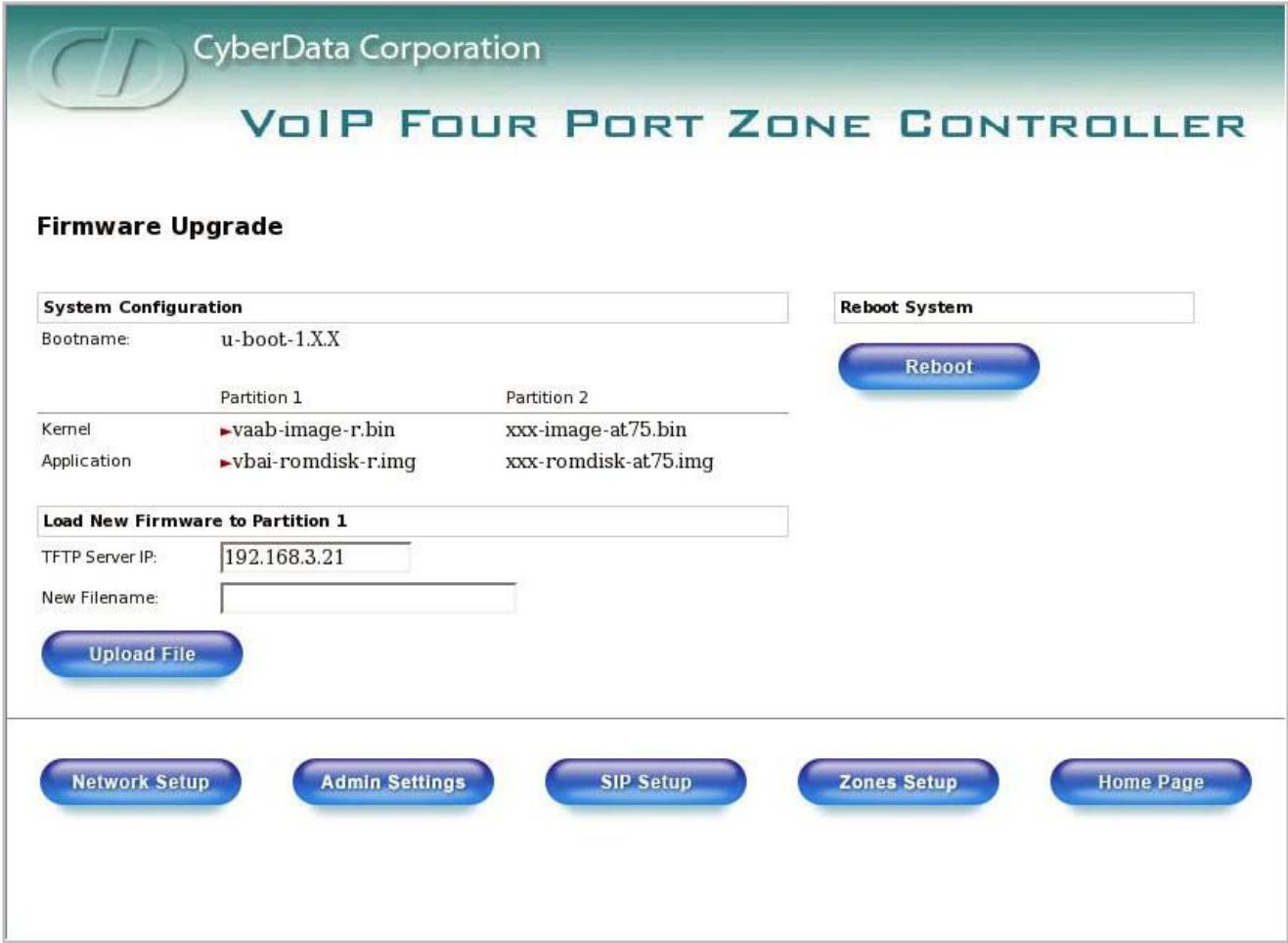
Web Page Item	Description
System Configuration	Shows the current configuration.
Bootname	Shows the current boot loader filename.
Kernel	Shows the current kernel filename for partition 1 and 2.
Application	Shows the current application filename for partition 1 and 2.
TFTP Server IP address	Enter the TFTP Server IP address.
New Filename	Use this field to enter the new file name for the kernel or application firmware file that you are uploading.
	Click on this button to automatically upload the selected firmware and reboot the system.
	Click on this button to reboot the system.
	Link to the Network Setup web page.
	Link to the Admin Settings web page.
	Link to the SIP Setup web page.
	Link to the Zones Setup web page.
	Link to the Home page.

1. On the Home page, click **Upgrade Firmware** to open the **Firmware Upgrade** page.
2. Enter the **TFTP Server IP** address.
3. Enter the Kernel or Application **New Filename** for the firmware file you are uploading.
4. Select the **Partition** to which the firmware is uploaded.
5. Click **Upload File** to automatically upload the selected firmware, and reboot your system.

2.8 Rebooting the VoIP Zone Controller

To reboot the system, log in as instructed in [Section 2.4.2, "Log in to the Configuration GUI"](#).

Figure 2-13. Firmware Upgrade Page



1. On the Home page, click **Upgrade Firmware** to open the **Firmware Upgrade** page. Go to the **Reboot** section on the right side of the page.
2. Click **Reboot**.

Appendix A: Setting Up a TFTP Server

A.1 Set up a TFTP Server

Upgrading the VoIP Zone Controller firmware requires a TFTP server on which you access the Web interface where you can upload the firmware files.

A.1.1 In a LINUX Environment

To set up a TFTP server on LINUX:

1. Create a directory dedicated to the TFTP server, and move the files to be uploaded to that directory.
2. Run the following command where `/tftpbboot/` is the path to the directory you created in [Step 1](#): the directory that contains the files to be uploaded. For example:

```
in.tftpd -l -s /tftpbboot/your_directory_name
```

A.1.2 In a Windows Environment

You can find several options online for setting up a Windows TFTP server. This example explains how to use the Solarwinds freeware TFTP server, which you can download at:

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

To set up a TFTP server on Windows:

1. Install and start the software.
2. Select **File/Configure/Security** tab/**Transmit Only**.
3. Make a note of the default directory name, and then move the firmware files to be uploaded to that directory.

Appendix B: Troubleshooting/Technical Support

B.1 Frequently Asked Questions (FAQ)

Go to the following URL to see CyberData's list of frequently asked questions:

<http://www.cyberdata.net/products/voip/legacyanalog/pagingzone4portaudio/faqs.html>

B.1.1 Documentation

The documentation for this product is released in an English language version only. You can download PDF copies of CyberData product documentation at:

<http://www.cyberdata.net/products/voip/legacyanalog/pagingzone4portaudio/docs.html>

B.2 Contact Information

Contact	<p>CyberData Corporation 3 Justin Court Monterey, CA 93940 USA www.CyberData.net Phone: 800-CYBERDATA (800-292-3732) Fax: 831-373-4193</p>
Sales	<p>Sales 831-373-2601 Extension 334</p>
Technical Support	<p>The fastest way to get technical support for your VoIP product is to submit a VoIP Technical Support form at the following website:</p> <p>http://www.cyberdata.net/support/contactsupportvoip.html</p> <p>We have several technical support staff monitoring this form and they will contact you within 12 hours after receiving a form submission.</p> <p>Phone: (831) 373-2601, Ext. 333 Email: support@cyberdata.net</p>
Returned Materials Authorization	<p>To return the product, contact the Returned Materials Authorization (RMA) department:</p> <p>Phone: 831-373-2601, Extension 136 Email: RMA@CyberData.net</p> <p>When returning a product to CyberData, an approved CyberData RMA number must be printed on the outside of the original shipping package. No product will be accepted for return without an approved RMA number. Send the product, in its original package, to the following address:</p> <p>CyberData Corporation 3 Justin Court Monterey, CA 93940 Attention: RMA "your RMA number"</p>
RMA Status Form	<p>If you need to inquire about the repair status of your product(s), please use the CyberData RMA Status form at the following web address:</p> <p>http://www.cyberdata.net/support/rmastatus.html</p>

B.3 Warranty

CyberData warrants its product against defects in material or workmanship for a period of two years from the date of purchase. Should the product fail within the warranty period, CyberData will repair or replace the product free of charge. This warranty includes all parts and labor.

Should the product fail out-of-warranty, a flat rate repair charge of one half of the purchase price of the product will be assessed. Repairs that are in warranty but are damaged by improper modifications or abuse, will be charged at the out-of-warranty rate. Products shipped to CyberData, both in and out-of-warranty, are shipped at the expense of the customer. Shipping charges for repaired products shipped back to the customer by CyberData, will be paid by CyberData.

CyberData shall not under any circumstances be liable to any person for any special, incidental, indirect or consequential damages, including without limitation, damages resulting from use or malfunction of the products, loss of profits or revenues or costs of replacement goods, even if CyberData is informed in advance of the possibility of such damages.

B.3.1 Warranty & RMA Returns within the United States

If service is required, you must contact CyberData Technical Support prior to returning any products to CyberData. Our Technical Support staff will determine if your product should be returned to us for further inspection. If Technical Support determines that your product needs to be returned to CyberData, an RMA number will be issued to you at this point.

Your issued RMA number must be printed on the outside of the shipping box. No product will be accepted for return without an approved RMA number. The product in its original package should be sent to the following address:

CyberData Corporation
3 Justin Court.
Monterey, CA 93940
Attn: RMA "xxxxxx"

B.3.2 Warranty & RMA Returns Outside of the United States

If you purchased your equipment through an authorized international distributor or reseller, please contact them directly for product repairs.

B.3.3 Spare in the Air Policy

CyberData now offers a *Spare in the Air* no wait policy for warranty returns within the United States and Canada. More information about the *Spare in the Air* policy is available at the following web address:

<http://www.cyberdata.net/support/warranty/spareintheair.html>

B.3.4 Return and Restocking Policy

For our authorized distributors and resellers, please refer to your CyberData Service Agreement for information on our return guidelines and procedures.

For End Users, please contact the company that you purchased your equipment from for their return policy.

B.3.5 Warranty and RMA Returns Page

The most recent warranty and RMA information is available at the CyberData Warranty and RMA Returns Page at the following web address:

<http://www.cyberdata.net/support/warranty/index.html>

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