



# Configuration and Operation Manual

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## WEBS-PA-1

Version 1.1

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## Acronyms and Abbreviations

Following is the list of commonly used acronyms and abbreviations in the document.

Acronyms	Definition
4BSKH	One of the Device mode having four buttons, speaker, keypad, and handset.
ADA	Americans with Disabilities Act
AEC	Acoustic Echo Cancellation
ANSI	The American National Standards Institute a private non-profit organization that oversees the development of voluntary consensus standards for products, services, processes, systems, and personnel in the United States.
AUX	Auxiliary Input/Output. An Auxiliary Input accepts a contact closure from an external device, such as a Vehicle Detector, Door Switch, Scream Alert™, and card swipe. An auxiliary output produces a contact closure to an external device, such as a strobe light and motorized garage gate.
BABT	British Approvals Board of Telecommunications
CNG/VAD	Comfort Noise Generator/Voice Activity Detector. It is used to reduce the transmission rate during inactive speech periods while maintaining an acceptable level of output quality.
CSA	Canadian Standards Association
CE	The CE marking certifies that a product has met EU consumer safety, health or environmental requirements.
DHCP	Dynamic Host Configuration Protocol — protocol for assigning dynamic IP addresses to devices on a network.
DNS	Domain Name Server
DTMF	Dual Tone Multi Frequency signaling is used for telecommunication signaling over telephone lines.
FCC	Federal Communications Commission
FTP	File Transfer Protocol
GUI	Graphical User Interface
G.711	G.711 is codec also known as Pulse Code Modulation (PCM). It is the ITU-T international standard for encoding telephone audio on a 64 kbps channel.
G.723	G.723 is an ITU-T standard speech codec.

## Introduction

G.729	G.729 is an audio data compression algorithm. It is the ITU-T international standard for encoding telephone audio on 8 kbps channel.
IVR	Interactive Voice Response
IP-PBX	It is an IP based switch for call handling through public and private exchanges.
IE	Internet Explorer
IETF	The Internet Engineering Task Force (IETF) develops and promotes Internet standards.
PCBA	Printed Circuit Board Assembly
PoE	Power over Ethernet, IEEE 802.1af standard.
QoS	Quality of Service is of particular concern for the continuous transmission of high-bandwidth video and multimedia information.
SIP	Session Initiation Protocol is a signaling protocol, widely used for setting up and tearing down multimedia communication sessions over network.
TIA	Telecommunications Industry Association
UL	Underwriters Laboratories
VoIP	Voice over Internet Protocol

# 1 Introduction

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## 1.1 Overview of the Manual

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This manual provides detailed instructions for Configuration and Operation of the WEBS-PA-1 Communications Module. It is recommended to read this instruction manual completely before starting any configuration.

## 1.2 Intended Audience

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This manual is targeted for system administrators, who would configure and maintain the WEBS® devices. Fundamental knowledge with respect to networking and VoIP is essential in understanding this manual.

## 1.3 Objective

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This manual provides the required steps to configure and register the WEBS-PA-1 Communications Module with a WEBS Contact® Server. It guides an administrator through the configuration of the Communications Module via the Web GUI interface. Configuring other VoIP network elements is beyond the scope of this document.

## 1.4 Typographic Conventions

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The following guidelines are used as typographic conventions in this user manual.

Item	Convention	Sample
Acronyms	All uppercase	SIP
Chapter titles	Title caps	See Chapter 3 Getting Started
Command-line commands and options (switches)	All lowercase, bold	<b>ifconfig</b> command <b>/a</b> option
Device names	All uppercase	VOIP-500
Directories	All lowercase	/flash
Error message names	Initial caps	Update failed
File names	Title caps (internal caps in short file names are acceptable for readability)	MainLogFile.txt BackupLogFile.txt
Menu names	Bold; title caps	<b>Insert</b> menu

Programs and applications, including utility and accessory programs	Usually title caps	HyperTerminal
Toolbar button names	Usually title caps (follow the interface); bold	<b>Apply</b> <b>Reset</b>
URLs	All lowercase; break long URLs before a forward slash, if necessary to break; do not hyphenate. The protocol name can be omitted when telling someone to connect.	<a href="http://www.talkaphone.com/">http://www.talkaphone.com/</a>
User input	Usually title caps; bold	Enter <b>Password</b>

## 1.5 Related Documents

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WEBS-PA-1 Quick Installation Guide, version 1.0

WEBS Contact® User Manual, version 1.3.4

## **1.6 Support/Help Desk**

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Contact your distributor or call Talk-A-Phone Technical Support for additional information. Contact information for Talk-A-Phone Co. is:

Address:      Talk-A-Phone Co.  
                  7530 North Natchez Ave.  
                  Niles, IL 60714

Telephone:     (773) 539-1100

Fax:            (773) 539-1241

E-mail:          [info@talkaphone.com](mailto:info@talkaphone.com)

Web:            [www.talkaphone.com](http://www.talkaphone.com)

## 2 Overview of the WEBS-PA-1

The WEBS-PA-1 is an indoor area paging unit that allows for IP based paging in a WEBS® system, which can include other WEBS®-enabled mounts (Models WEBS-MT/R, WEBS-PM, WEBS-WM, WEBS-CM-2). The WEBS-PA-1 receives IP pages from a Paging Command Unit on a Local Area Network with a single subnet or from Zone Command Units on LANs with multiple subnets.

### 2.1 Physical Description

The WEBS-PA-1 indoor area WEBS Paging units is housed in an attractive 16 gauge brushed stainless steel enclosure. The PCB is conformal coated and provides user connections for line-level audio output, network interface, power, and auxiliary relay outputs. The WEBS-PA-1 contains a single 12 watt speaker. Check [www.talkaphone.com](http://www.talkaphone.com) for an updated information

#### 2.1.1 Front & Side View

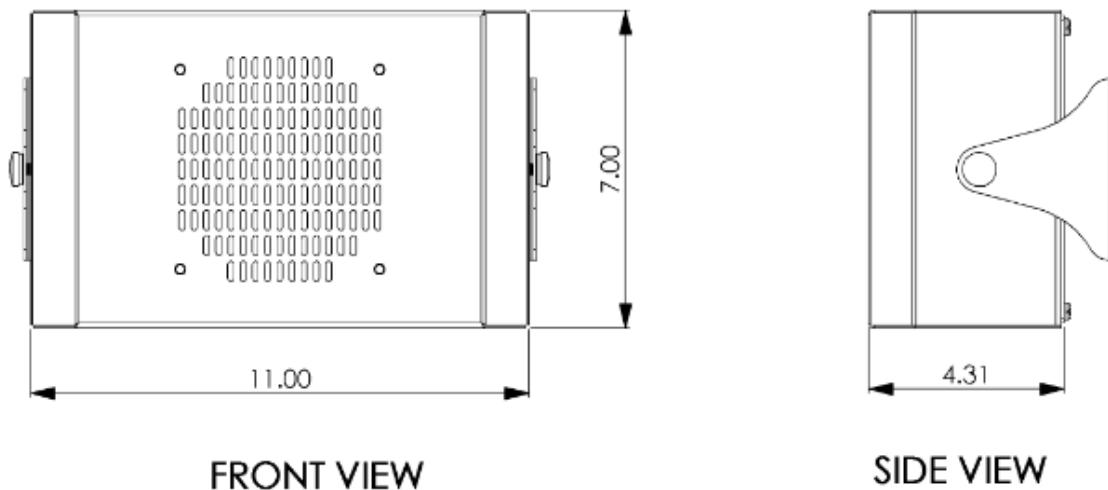


Figure 1 Front and Side Views

## 2.1.2 Internal View

Different connectors are available on the PCB as shown in the below diagram.

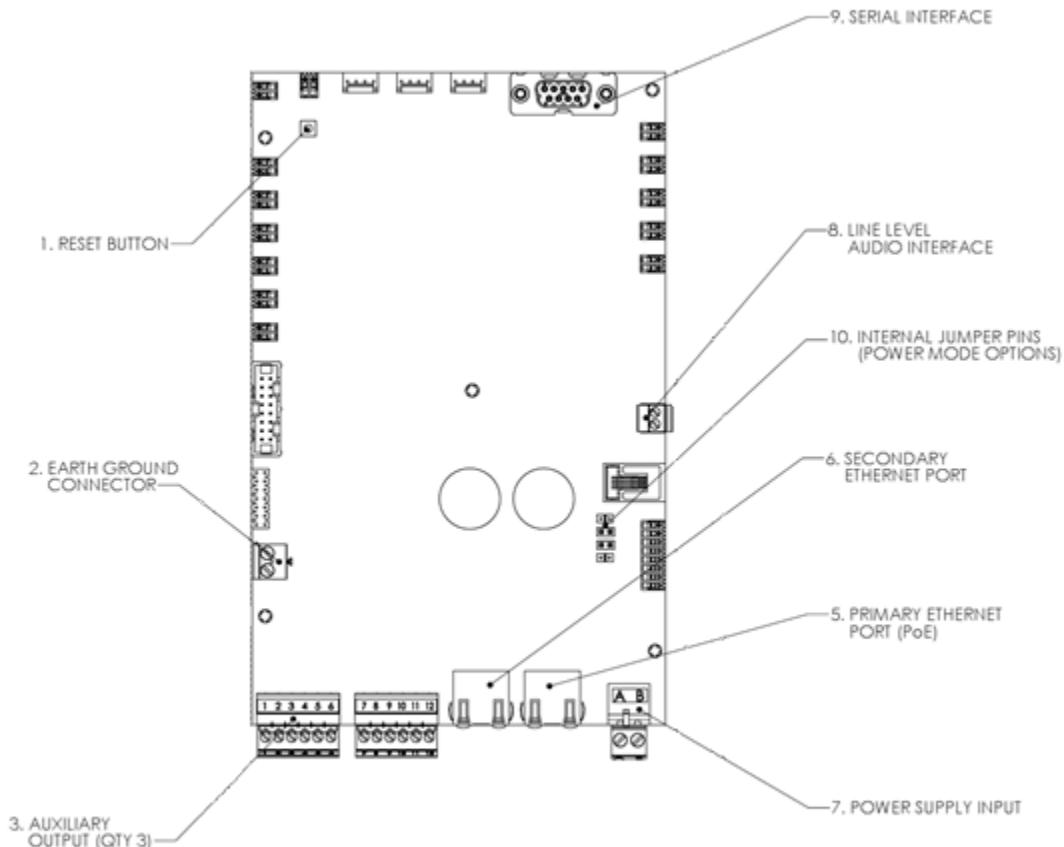


Figure 2 Internal Printed Circuit Board (PCB) view showing various connectors

S/N	Connectors	Description
1	RESET BUTTON	Reset button is a small push button to reset the WEBS-PA-1.
2	EARTH GROUND CONNECTOR	Earth ground connector should be used to connect appropriate grounding, based on your mount.
3	AUXILIARY OUTPUT (1-3)	3 closed-contact auxiliary outputs; opto-isolated (Opto-isolators with a minimum rating of 120mA at 120V AC and

Overview of the WEBS-PA-1

S/N	Connectors	Description
		DC) from the main board and data line.
<b>4</b>	N/A	N/A
<b>5</b>	PRIMARY ETHERNET PORT (PoE)	RJ-45 connector with PoE support for connecting 10/100BASE-T Ethernet.
<b>6</b>	SECONDARY ETHERNET PORT	RJ-45 connector for connecting any additional IP device (e.g. IP Camera, notebook computer). This port does not provide PoE.
<b>7</b>	POWER SUPPLY INPUT	<p>Local power (12VDC, 24V AC/DC).</p> <p>For selection of power supply between 12VDC and 24V AC/DC (Refer to 1.5 Related Documents: WEBS-PA-1 Quick Installation Guide, version 1.0)</p> <p>NOTE: Dedicated line regulated power supply required.</p>
<b>8</b>	LINE LEVEL AUDIO INTERFACE	3.5mm audio jack to connect to an external amplifier.
<b>9</b>	SERIAL INTERFACE	DB9 connector for serial console access.

## 3 Getting Started

The following are prerequisites for configuring the WEBS-PA-1 Communications Module.

- 1 PC must have the following specifications. The PC does not need to be connected to the Communications Module permanently. All configuration and monitoring functions can be done remotely via the network.
  - i. Mozilla Firefox 3.5, 3.6, 4 or 5, Internet Explorer 8 or 9.
  - ii. COM port, if using the serial console for programming. The available COM port number will need to be known (e.g., COM1, COM2).
- 2 Power over Ethernet (PoE) or optional 12/24V DC power supply to power up the Communications Module.  
NOTE: Dedicated line regulated power supply required.
- 3 Provide the WEBS-PA-1 with a proper Ethernet network connection.
- 4 Decide whether the Communications Module should be configured for DHCP or static IP address (network dependent). If the network requires static IP addresses, an available static IP address should be assigned by the Network Administrator.

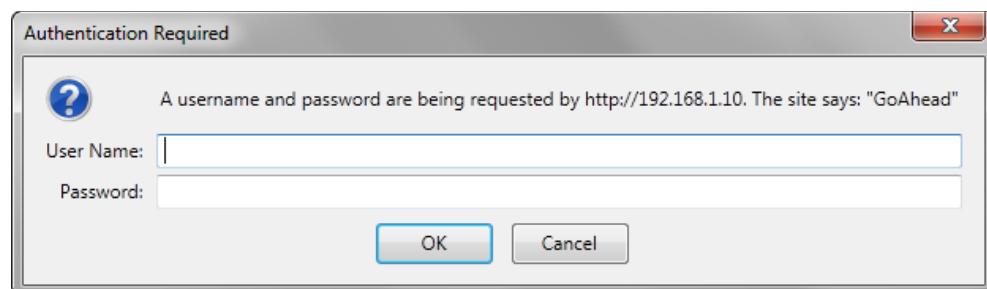
Power up the WEBS-PA-1 by connecting a 12V DC or 24V AC/DC power supply to the Power Supply Input (Refer to 1.5 Related Documents: WEBS-PA-1 Quick Installation Guide, version 1.0

or by connecting to a PoE Layer 2 switch by connecting via the Primary Ethernet Port (WAN).

NOTE: If not using PoE, a dedicated line regulated power supply is required.

### Configuration Using the Web GUI

- 1 Connect the Ethernet Cable to the Primary Ethernet port on the phone. By default, the WEBS-PA-1 is pre-configured with a default static IP address of 192.168.1.10. Note that you must select the appropriate Ethernet cable<sup>1</sup> (straight or crossover) depending on the peer device to which it is being connected.
- 2 Change the IP address of the connected PC to be on the same subnet as the default IP address of the WEBS-PA-1 (e.g., 192.168.1.3).
- 3 Open the Web browser and connect to the URL <http://192.168.1.10>. The browser prompts for authentication<sup>2</sup>.



- 4 Enter the default **Username** as **admin**; and default **Password** as **admin@123**<sup>3</sup>. After authentication is successful, you are redirected to the Home page.

<sup>1</sup> In general crossover cable is used to connect similar devices (computer to computer).

<sup>2</sup> In case you are not prompted for authentication, Refer to Appendix B: Troubleshooting and Maintenance

### 5 On the Network Menu, click IP Settings.

To setup the WEBS-PA-1 for a Static IP (Manual Configuration), select the **Static IP/Manual** (Refer to 4.4.1 IP Settings) option, and change the **IP Address**, **Subnet Mask**, and **Gateway** according to the network where the WEBS-PA-1 is being deployed. Press **Apply** to save the settings.

To setup the WEBS-PA-1 for DHCP (Automatic Configuration), select the **DHCP** option, for the DHCP server on the network to provide a dynamic IP address. Press **Apply** and **Reboot** the device to get an IP address from the DHCP server.

### 6 Disconnect the Ethernet cable from the PC and plug it to the required network port.

### 7 Access the WEBS-PA-1 Web Interface using the newly assigned<sup>4</sup> IP address.

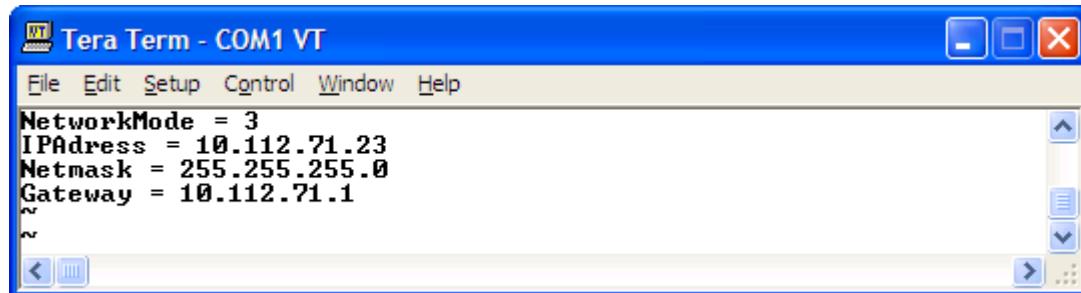
#### Configuration Using the Serial Console

1 Connect a null modem serial cable (DB9 Male to DB9 Female) from the serial port on the WEBS-PA-1 to the COM port on the PC determined above in step 1-ii.

2 Open your preferred serial console application (e.g., HyperTerminal or TeraTerm) on the PC and specify the following settings:

- Baud rate (bits per second): 115200 bps
- Data bits: 8
- Parity: None
- Stop bits: 1
- Flow control: None

3 Create ipsettings.txt file using **vi ipsettings.txt** and configure the IP settings as per your network. The below settings are meant for static configuration, for DHCP settings use NetworkMode = 1



The screenshot shows the Tera Term window titled "Tera Term - COM1 VT". The menu bar includes File, Edit, Setup, Control, Window, and Help. The main window displays the following configuration settings:

```
NetworkMode = 3
IPAddress = 10.112.71.23
Netmask = 255.255.255.0
Gateway = 10.112.71.1
~
```

4 Save the file (switch to command mode and use: wq followed by enter)

5 Run the configuration application to update the Communications Module IP configuration as follows:

```
configApp admin admin@123 ipsettings.txt
```

For other configuration options, refer to Chapter 4 Using the Web GUI and Chapter 5 Using the Serial Port.

<sup>3</sup> It is recommended to change the password and make note of it after the installation.

<sup>4</sup> In case of DHCP, determine the new IP address using **ifconfig** command on serial console or ask your DHCP server administrator.

## 4 Using the Web GUI

This section describes various configurable options available from the Web Interface of the Communications Module. It is the primary interface for configuring and monitoring the Communications Module. You must assign an IP address (Refer to 4.4.1 IP Settings) before configuring the features of the Communications Module.

### 4.1 Web GUI Layout

This section describes the layout of the Web GUI.



**Figure 3 Using Web GUI**

The Web GUI layout is divided into four sections:

- Header:** The Header section displays Talk-A-Phone Logo and product title “Communications Module”. The right side of the header has the Refresh, Help, and Logout buttons. The **Refresh** button is used to reload the content section. The **Help** button provides help content from the Talk-A-Phone website. The **Logout** button logs out the user. The **Apply** button will not be grayed out if the content pane (3) contains configurable parameters. The **Apply** button is used to save configuration changes to the WEBS-PA-1.

## Using the Web GUI

- 2 **Menu:** The menu page provides links to different menus and submenus available on the WEBS-PA-1.
- 3 **Content:** The top part of the content section is used for Page Title (3a) and Status (3b) for any operation. Bottom part of content pane (3c) is used for displaying configurable fields when a menu or a submenu is selected. All the fields (text boxes/dropdown) display allowed field ranges.
- 4 **Footer:** The Footer section displays the Talk-A-Phone copyright statement.

To update the WEBS-PA-1 configuration, the user must press the **Apply** button. After clicking **Apply** the status will be displayed in the “Status” section of the Content section (3b).

---

**Note:** When a configuration change is in the process of being applied, an  **Updating...** message appears.

An  **Updated.** message appears for the successful update.

An  **Update failed.** message appears if the input is incorrect. Incorrect inputs are marked with red.

---

## 4.2 Web Application Menu

---

This section provides a preview of the WEBS-PA-1's Web Menu hierarchy/organization.

Home
Maintenance
Device State
Statistics
Logging
Date & Time
Ping & Traceroute
Firmware Upgrade
SMTP Server Configuration
Email Notification Profiles
Reset to Default
Network
IP Settings
VoIP
Paging Settings
Authentication
Reboot

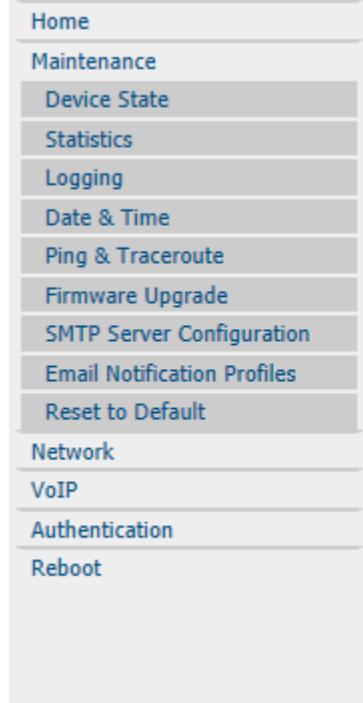
**Figure 4 Application Menu**

## 4.3 Home

The Home page displays WEBS-PA-1 information and contact information for Talk-A-Phone.

Login → Home

[Refresh](#) [Help](#) [Logout](#)



### Home

#### System Information

Hostname : WEBS-CM-2  
 Device Mode : OBS  
 Firmware Version : 1.0.1.7  
 Bootloader Version : 1.1.9  
 MAC Address : 00:1E:EB:00:06:3D

#### Contact Information

Address : 7530 North Natchez Ave.  
 Niles, IL 60714  
 Telephone : (773) 539-1100  
 Fax : (773) 539-1241  
 Email : info@talkaphone.com  
 Web : [www.talkaphone.com](http://www.talkaphone.com)

#### Powered by:



Figure 5 Home

Field Name	Description
Device Mode	This indicates the type of device. For example, OBS indicates a device having 0 buttons and a speaker.
Firmware Version	Indicates the version of the WEBS-PA-1 firmware.
Bootloader version	Indicates the version of the bootloader that is used during startup (booting) of the Communications Module. The bootloader version is independent of the firmware version.
MAC Address	Indicates the number assigned as the Communications Module's unique MAC address.

## 4.4 Network

### 4.4.1 IP Settings

The IP Settings page allows you to configure the IP settings and the hostname of the Communications Module.

Login → Network → IP Settings

Apply | Refresh | Help | Logout

**IP Settings**

**Configure network connection :**

DHCP - Automatic Configuration  
 Static IP - Manual Configuration

**Specify network details for "Static IP - Manual Configuration" :**

IP Address 192.168.1.10  
Subnet Mask 255.255.255.0  
Default Gateway 192.168.1.1  
DNS Server

**Enter hostname :**

Hostname VOIP-500

1  
2  
3  
4  
5

Figure 6 IP Settings

To set IP settings:

- 1 Select **DHCP – Automatic Configuration OR Static IP - Manual Configuration**.
- 2 Enter network details **IP Address**, **Subnet Mask**, **Default Gateway** of your network for **Static IP - Manual Configuration**.
- 3 Enter **DNS Server** to resolve domain name.
- 4 Enter **Hostname**. Use unique identifier for each device on the network.
- 5 Click **Apply** to save settings.

## 4.5 VoIP

### 4.5.1 Paging Settings

The WEBS-PA-1 Communications Module is used as a paging device by a WEBS Contact® Server. The page can be outputted through the line level output.

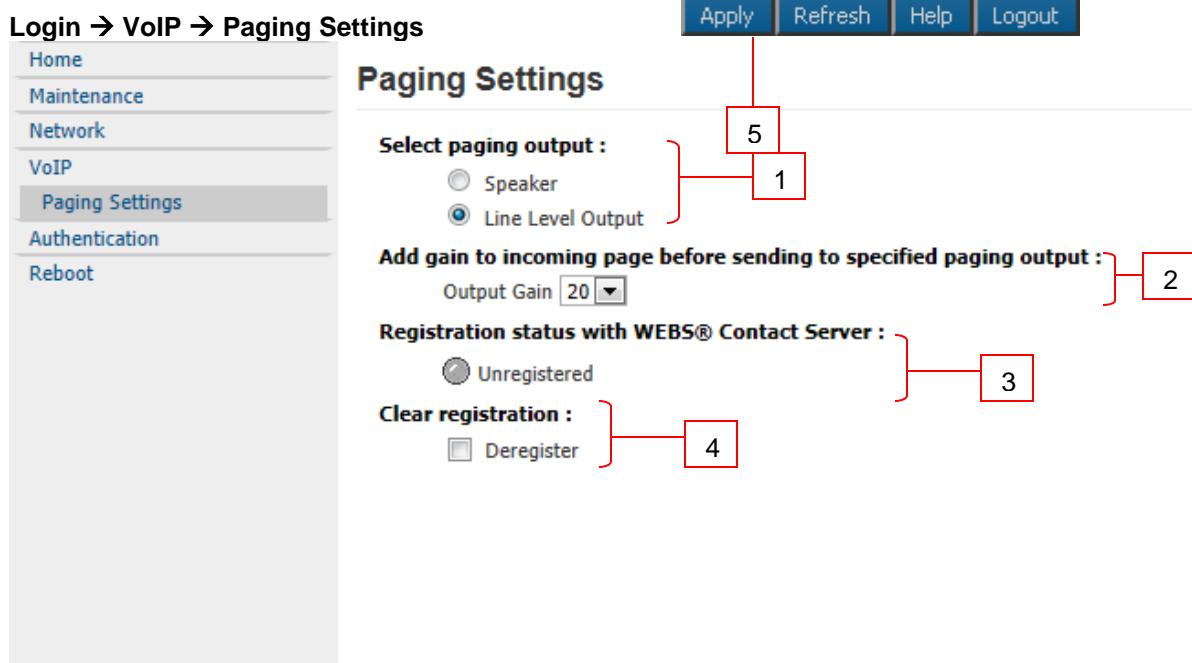


Figure 7 Paging Settings

#### To configure paging settings:

- 1 Select **Speaker** to send the incoming audio page to the attached speaker. The Line Level Output option is only available for specific models.
- 2 Click the drop-down menu to adjust the **Output Gain** for all incoming pages before sending to the selected audio paging output. Each level adjustment corresponds to approximately 3dB.
- 3 The Communications Module displays Unregistered or Registered @ <WEBS\_Contact\_Server\_IP Address> for Registration Status on the WEBS Contact® Server.
- 4 It is strongly recommended to deregister the device from the WEBS Contact® Server. In error situations where the WEBS Contact® Server is unable to deregister the device, select **Deregister** check box to clear the registration status.
- 5 Click **Apply** to save settings.

## 4.6 Authentication

The Authentication page allows the administrator to change the user credentials used to access the WEBS-PA-1 Communications Module through the Web interface.

The screenshot shows the 'Authentication' configuration page. On the left is a navigation sidebar with links: Home, Maintenance, Network, VoIP, **Paging Settings**, **Authentication**, and Reboot. The main area is titled 'Authentication'. It contains three sections: 'Authentication for HTTP Management Interface', 'Check 'SSH' and click on 'Apply' to enable SSH', and 'Authentication for SSH Interface'. Each section has three input fields: Username, Password, and Confirm Password. Red callout boxes numbered 1 through 4 point to specific elements: 1 points to the 'Username' field in the first section; 2 points to the 'SSH' checkbox in the second section; 3 points to the 'Username' field in the third section; and 4 points to the 'Apply' button at the top right of the page.

Figure 8 Authentication

To configure the authentication details:

- 1 Enter the user credentials to access the Web interface:
  - **Username**<sup>5</sup> accepts alphanumeric values and special characters (e.g., underscore “\_” and period “.”).
  - **Password**<sup>6</sup> accepts alphanumeric values and special characters (except “&”).
  - **Confirm password** requires you to type the password again for reconfirmation.
- 2 Check/uncheck the check box to **Enable SSH** access to the VOIP-500 phone.
- 3 Enter **Username** and **Password** to configure/modify Authentication for SSH user.
- 4 Click **Apply** to save settings.

<sup>5</sup> The maximum number of characters in username is 30.

<sup>6</sup> The maximum number of characters in password is 30.

## 4.7 Maintenance

### 4.7.1 Device State

The Device State page displays the current state of the devices attached to the WEBS-PA-1 Communications Module. If the status indicator is green the device is active, otherwise grey indicates that the device is inactive.

The screenshot shows the 'Device State' page. At the top right are three buttons: 'Refresh' (blue), 'Help' (orange), and 'Logout' (dark blue). On the left is a vertical navigation menu with the following items: Home, Maintenance, Device State (which is highlighted in blue), Statistics, Logging, Date & Time, Ping & Traceroute, Firmware Upgrade, SMTP Server Configuration, Email Notification Profiles, Reset to Default, Network, VoIP, Authentication, and Reboot. The main content area is titled 'Device State'. It contains three sections: 'LEDs' (with 'LED 3' shown as a grey circle), 'Auxiliary Outputs' (with 'Aux. Output #1', 'Aux. Output #2', and 'Aux. Output #3' all shown as grey circles), and 'Other Devices' (with 'Speaker' and 'Line Output' both shown as grey circles).

Figure 9 Device state

**Note:** The contents of this page will vary depending on the device mode.

## 4.7.2 Statistics

The Statistics page allows you to manage and maintain the details of the phone calls, current state of the phone, call statistics, call details, and auxiliary details. It also allows you to clear the statistics and provides a link to download the statistics to a text file.

The screenshot shows the Statistics page with the following interface elements:

- Header:** Login → Maintenance → Statistics. Buttons: Apply, Refresh, Help, Logout.
- Title:** Statistics
- Section:** Select statistics to download or clear :
  - Current State
  - Call Statistics
  - Call Details (last 50)
  - Auxiliary Details
- Link:** Click the 'Download' link below to save the statistics file to your computer : [Download](#)
- Section:** Select to clear statistics :
  - Clear statistics
- Note:** Select 'Clear statistics' & click 'Apply' to clear statistics.

Red boxes and numbers indicate steps:

- Red box labeled "1" covers the four checkboxes under "Select statistics to download or clear".
- Red box labeled "2" covers the "Download" link.
- Red box labeled "3" covers the "Apply" button at the top right.

Figure 10 Statistics

**To download the statistics file:**

- 1 Select or unselect a specific category of statistics. By default, all options are selected.
- 2 Click the [Download](#) link to download the statistics file to the local computer. A prompt should appear requesting to “save or open” the Statistics File. Click the **Save** option to save the file on the local PC.
- 3 Click **Apply** to save settings.

**Note:** To clear statistics, check the checkbox next to “Clear statistics” and click **Apply**. Executing the “Clear statistics” option will erase all of the selected statistics from the Communications Module.

**Description of Statistics File:**

<b>Fields</b>	<b>Description</b>
<b>Outgoing Calls</b>	
Total outgoing call attempts	Count of outgoing call attempts made from Buttons, Keypad, and Auxiliary Input activations.
Total unanswered outgoing calls	Count of unsuccessful calls unanswered by the remote side.
Total failed outgoing calls	Count of failed calls due to events such as remote side is busy, network issues, or unreachable destination.
Total outgoing call duration	Total duration of the successful outgoing calls (hh:mm:ss) between call answer and call termination events.
<b>Incoming Calls</b>	
Total incoming call requests	Total number of incoming call request from the remote side.
Total missed calls	Counts the missed calls (calls that are not answered).
Total failed calls	Counts the total number of failed calls (e.g., rejecting an incoming call when an Emergency Call is in progress).
Total incoming call duration	Total duration (hh:mm:ss) of successful incoming calls between call answer and call termination events.
<b>Incoming Pages</b>	
Total incoming page requests	Count of total number of incoming page requests from a WEBS Contact® Server.
Total unsuccessful pages	Count of unsuccessful page requests to the Communications Module (e.g., rejecting a page request when an Emergency Call is in progress and has a higher operation mode priority over paging).
Total voice page time	Total duration (hh:mm:ss) of successful pages.

**Call Statistics**

<b>Fields</b>	<b>Description</b>
Date	mm:dd:yyyy hh:mm:ss The starting time of a call event or a page event.
Type	Indicates whether the event was an incoming call, outgoing call, or a page.
Status	Displays the status of the call/page (i.e. whether the call/page was completed successfully or not).
Originator	The interface on the phone which initiated the call. The valid entries are:  Button #1/Button #2/Button #3/Button #4 AuxIn #1/AuxIn #2/AuxIn #3 Keypad

<b>Fields</b>	<b>Description</b>
	Remote For paging, the Originator is always Remote.
Source URL	URL of the source of the call (maximum of 30 characters).
Destination URL	URL of the destination of the call (maximum of 30 characters).
Duration	hh:mm:ss This indicates how long (in seconds) the call event or page event lasted. This field is only valid for successful calls/pages.
Voice Codec Used	The voice codec being used for a given call. The valid entries are: G.723, G.729, G.711 A law, and G.711 U law This field is only valid for successful calls/pages.
Mode	The VoIP protocol used for a particular call (SIP or H.323).
Fail Code	The reason code for the failure of a particular call/page. This field is only valid for unsuccessful calls.

#### **Call Logs**

<b>Fields</b>	<b>Description</b>
Date	mm:dd:yyyy hh:mm:ss The date and time for an Auxiliary activation/deactivation.
Aux Type	Aux Input 1/2/3 or Aux Output 1/2/3
Aux State	Displays the status of an Aux Input or Aux Output (Activated/Deactivated).

#### **Aux Logs**

### 4.7.3 Logging

Log messages generated by the Communications Module can be captured for review. Enabling the "DEBUG" option may degrade the Communications Module's performance. It is recommended to not use this option unless required.

The screenshot shows the 'Logging' configuration page under 'Maintenance'. The left sidebar lists various maintenance options. The main area is titled 'Logging' and contains the following sections:

- Send log messages to :** A group of radio buttons for selecting the destination. The 'Network' option is selected. Callout 1 points to this section.
- Specify logging server (required for network logging) :** Fields for 'Logging Server IP Address' and 'Logging Server Port' (set to 514). Callout 2 points to these fields.
- Select level of logging :** A group of six modules, each with a dropdown menu set to 'Warning'. The modules are: Audio, Call Control, Command Module, Device Control, SIP Module, and Timer. Callout 3 points to this section.
- Click the 'Download' link below to save the log file to your computer :** A link labeled 'Download'. Callout 4 points to this link.

At the top right are buttons for 'Apply', 'Refresh', 'Help', and 'Logout'. Callout 5 points to the 'Apply' button.

Figure 11 Logging

To configure logging over the network:

- 1 Select the **Network** option. This option enables **Logging Server** fields.
- 2 Enter the **Logging Server IP Address** and the **Logging Server Port**.
- 3 Select the log levels for different modules from the drop-down menu.
- 4 Select the SSH checkbox to enable SSH access to the device.
- 5 Click **Apply** to save the settings.

**Note** To disable logging, select **Nowhere (Disable)**

**Note** To download and save the log file on the computer, click the [Download](#) link.

**Note** A maximum of 500 KB of logging data can be collected. On exceeding this limit, the older 250 KB of logging data are purged from the log file.

#### 4.7.4 Date and Time

The Date and Time page allows you to set the date and time of the Communications Module.

Login → Maintenance → Date & Time

Apply Refresh Help Logout

Date & Time

Configure date and time :

Date 03/04/2010 MM/DD/YYYY 1

Time 15:55:05 HH:MM:SS 2

3

Figure 12 Date and Time Setting

To set the date and time:

- 1 Enter the **Date** in MM/DD/YYYY format.
- 2 Enter the **Time** in HH:MM:SS in 24 hour format.
- 3 Click **Apply** to save settings.

## 4.7.5 Ping and Traceroute

The Ping and Traceroute page is used to perform connectivity tests. The Ping command can be used to determine whether a destination is reachable from the Communications Module or not. Traceroute helps in determining intermediate hops to the destination IP address.

The screenshot shows the 'Ping & Traceroute' page with the following interface elements:

- Header:** Login → Maintenance → Ping and Traceroute. Buttons: Apply, Refresh, Help, Logout.
- Form Fields:**
  - Enter IP address to ping or traceroute : IP Address: 10.112.75.1 (highlighted by red box 1)
  - Radio buttons: Ping (selected) and Traceroute (highlighted by red box 2)
- Status Bar:** ✓ Ping executed. (highlighted by red box 3)
- Results Section:**

```
PING 10.112.75.1 (10.112.75.1) 56(84) bytes of data.
64 bytes from 10.112.75.1: icmp_seq=0 ttl=255 time=0.305 ms
64 bytes from 10.112.75.1: icmp_seq=1 ttl=255 time=0.268 ms
64 bytes from 10.112.75.1: icmp_seq=2 ttl=255 time=0.262 ms
64 bytes from 10.112.75.1: icmp_seq=3 ttl=255 time=0.271 ms

--- 10.112.75.1 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 2999ms
rtt min/avg/max/mdev = 0.262/0.276/0.305/0.023 ms, pipe 2
```
- Numbered Callouts:**
  - Red box 1 points to the IP Address input field.
  - Red box 2 points to the Ping radio button.
  - Red box 3 points to the status bar message.
  - Red box 4 points to the green checkmark icon.
  - Red box 5 points to the results section.

Figure 13 Ping and Traceroute

### To ping or traceroute:

- 1 Enter an IP Address.
- 2 Select Ping or Traceroute.
- 3 Click Apply.
- 4 The status bar indicates the command executed.
- 5 The Results section displays the results of the executed command.

#### 4.7.6 Firmware Upgrade

The Firmware Upgrade page is used to update the Communications Module to new firmware releases.

Login → Maintenance → Firmware Upgrade      **Apply** | **Refresh** | **Help** | **Logout**

**Firmware Upgrade**

Select protocol to update system:

FTP  
 HTTP

Specify firmware/configuration update server :

Update Server IP Address

Username

Password

Save Username and Password

Specify filename with complete path :

Filename

Check 'Update' and click on 'Apply' to begin the update process :

Update

**Note**  
The update process must not be interrupted.

Click the 'Download' link below to save the configuration file to your computer :  
[Download](#)

The diagram shows the 'Firmware Upgrade' page with several numbered callouts pointing to specific fields and buttons:

- Callout 1 points to the 'Protocol Selection' section, which includes the 'FTP' and 'HTTP' radio buttons.
- Callout 2 points to the 'Server Configuration' section, which includes the 'Update Server IP Address', 'Username', and 'Password' input fields, along with a 'Save Username and Password' checkbox.
- Callout 3 points to the 'Filename Input' section, which includes the 'Filename' input field.
- Callout 4 points to the 'Update Process' section, which includes the 'Update' checkbox.
- Callout 5 points to the 'Apply' button at the top right of the page.

Figure 14 Firmware Upgrade

##### To upgrade the firmware:

- 1 Select either the **FTP** or **HTTP** protocol to download the firmware image.
- 2 Enter the **Server IP Address**, **Username**<sup>7</sup>, and **Password**<sup>8</sup> for authentication. If the username and password is preferred to be retained for a future upgrade, select the **Save Username and Password** check box.
- 3 In the **Filename** box, enter the filename with its complete path. The filename is generally in the format of (EVP\_A\_B\_C\_D). This filename needs to be prefixed with directory relative to the HTTP or FTP root directory. For example, /tftpboot/EVP\_images/EVP\_1\_0\_0\_0). Consult the Administrator for FTP/HTTP settings.
- 4 Select the **Upgrade** check box.
- 5 Click **Apply**. One of the following progress messages is displayed:

<sup>7</sup> The maximum number of characters in username is 30.

<sup>8</sup> The maximum number of characters in password is 30.

## Using the Web GUI

- **Firmware upgrade initiated. Do not reboot...:** The firmware upgrade has been initiated; the firmware upgrade request is processed only when the Communications Module is in an idle state. For example, a page is in progress and administrator requests for a firmware upgrade through the Web GUI. The Communications Module checks for an active page every five seconds and starts the process once the active page is terminated.

The following are considered to be idle Communications Module states: no active paging and the Auxiliary Output is deactivated.

- **Firmware upgrade in progress. Do not reboot...:** The firmware upgrade is in progress. The process generally takes around 1-2 min to complete.
- **Firmware upgrade done. Going to reboot...:** The firmware upgrade is complete and a reboot has been initiated. After approximately one minute, the Communications Module will be accessible once again.

#### 4.7.7 SMTP Server Configuration

The SMTP Server Configuration page is used to configure the mail settings for email notifications.

Login → Maintenance → SMTP Server Configuration      **Apply** | Refresh | Help | Logout

**SMTP Server Configuration**

**Configure SMTP Server :**

Enable SMTP : **1**

SMTP Address **2**

Port **164**

**3**

Figure 15 SMTP Server Configuration

To setup SMTP:

- 1 Check the **Enable SMTP** check box.
- 2 Enter the **SMTP Address** and **Port** where emails should be sent.
- 3 Click **Apply** to save settings.

## 4.7.8 Email Notification Profiles

The Email Notification Profiles page is used to create email notification profiles and select the events that will trigger an email message being sent.

Login → Maintenance → Email Notification Profiles      **Apply** | **Refresh** | **Help** | **Logout**

### Email Notification Profiles

**Select Profile :**  
Select voice Notification Profile number **1**  

**Select Notification Events :**

<input type="checkbox"/> Emergency Call	<input type="checkbox"/> Aux Input 1 Activation
<input type="checkbox"/> Information Call	<input type="checkbox"/> Aux Input 2 Activation
<input type="checkbox"/> System Restore - Ethernet up	<input type="checkbox"/> Aux Input 3 Activation
<input type="checkbox"/> System Restore - Firmware Upgrade Fail	<input type="checkbox"/> Aux Input 1 Deactivation
<input type="checkbox"/> SIP Registration	<input type="checkbox"/> Aux Input 2 Deactivation
<input type="checkbox"/> SIP Deregistration	<input type="checkbox"/> Aux Input 3 Deactivation
<input type="checkbox"/> H323 Registration	<input type="checkbox"/> Aux Output 1 Activation
<input type="checkbox"/> H323 Deregistration	<input type="checkbox"/> Aux Output 2 Activation
	<input type="checkbox"/> Aux Output 3 Activation

**Enter the Email Addresses Associating with this profile :**

1	<input type="text"/>
2	<input type="text"/>
3	<input type="text"/>
4	<input type="text"/>
5	<input type="text"/>



Figure 16 Email Notification Profiles

### To setup an Email Notification Profile:

- 1 Check the **Notification Profile Number** you wish to modify. A total of 3 profiles are available.
- 2 Check the box for each **Notification Event** that should trigger an email notification being sent.
- 3 Enter the **Email Addresses** that the email notification should be sent to.
- 4 Click **Apply** to save settings.

## 4.7.9 Reset to Defaults

The Reset to Defaults page allows the Communications Module configuration parameters to be set to their default values. It also provides an option to retain the IP address and/or the username and password.

Login → Maintenance → Reset to Defaults

Reset to Defaults

Select settings to save :

Network IP Address      1  
 Username and Password      2  
 SIP

**Note**  
The system will automatically reboot after pressing 'Apply'.

Apply   Refresh   Help   Logout

Figure 17 Reset to Defaults

### To reset to defaults:

- 1 Select **Network IP Address**, if the IP address of the Communications Module needs to be retained. If this option is not selected the IP address of the WEBS-PA-1 will default to 192.168.1.10.
- 2 Select **Username and Password** if the Web Interface credentials need to be retained. If the option is not selected the username will default to admin and the password will default to admin@123.
- 3 Click **Apply**. The Communications Module automatically reboots with the default settings.

## 5 Using the Serial Port

---

The Communications Module has a serial port which can be used to perform the following operations:

- 1 Execute Linux commands — for example, to change directory “cd”, check memory usage “cat /proc/meminfo”, process statistics “ps”.
- 2 View and edit the flash contents.
- 3 Configure mandatory parameters of the WEBS-PA-1.

### To use the WEBS-PA-1 using a serial port:

- 1 Connect a null modem serial cable from the serial port on the Communications Module to an available COM port on the PC.
- 2 Launch the preferred console/terminal application (e.g., HyperTerminal or TeraTerm) on the PC and specify the following:
  - Baud rate: 115200 bps
  - Data bits: 8
  - Parity: None
  - Stop bits: 1
  - Flow control: None
- 3 Change the current working directory to /flash using the command cd /flash
- 4 Create or Edit the configuration file (configdbfile.txt) using the **vi** editor.
- 5 Run the configuration application to update the Communications Module configuration as follows  
configApp <username> <password> <name of configuration file>  
For example: configApp admin admin@123 configdbfile.txt

The configuration file requires a name=value pair separated by a new line. A “+” character is treated as comment in the file.

An example of configuration file is shown in Appendix C: Sample Serial Configuration File

## **6 WEBS Contact®**

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The Communications Module can also be managed using a WEBS Contact® Server. Configuring and using WEBS Contact® is beyond the scope of this document. For further information on managing a WEBS-PA-1 Communications Module using a WEBS Contact® Server, please refer to Related Documents: WEBS Contact® User Manual, version 1..

## 7 Operations

---

The Communications Module takes approximately one minute to boot.

The Communications Module needs to be programmed in accordance with the instructions provided in Chapter 4 (Refer to 4 Using the Web GUI).

### 7.1 Activating/Deactivating Auxiliary Outputs

---

To provide additional visible or audible alerts upon an event, the Communications Module is equipped with three Auxiliary Outputs. The Auxiliary Outputs can be used to connect devices such as a relay, siren, a strobe light, and a PTZ camera. These devices can then be activated during an active mass notification/page.

### 7.2 Paging Operation

---

The Communications Module can receive one-way paging messages from the WEBS Contact® Server and output the paging through the line level output. The Communications Module must be registered with the WEBS Contact® Server in order to receive incoming pages.

### 7.3 Rebooting the Communications Module

---

The WEBS-PA-1 can be rebooted using the **Reset** button (Refer to 2.1.2)

Internal View: RESET BUTTON) on the WEBS-PA-1. Pressing the **Reset** button once will reboot the WEBS-PA-1.

## 7.4 Factory Settings

---

The Communications Module can be reset to factory settings using the **Reset** button (Refer to 2.1.2: RESET BUTTON). Press and hold the **Reset** button for 10 seconds. The Communications Module will reboot with factory default settings.

**Note:** All data including IP address and username/password will be reset to factory defaults.

## Appendix A: Troubleshooting & Maintenance

Problem	Possible Causes & Corrective measures
<b>Unable to access the Communications Module's Web GUI</b>	<p><b>1</b> The IP address being used in the Web browser is incorrect. Connect the serial console and check the WEBS-PA-1's IP address.</p> <p><b>2</b> IP address of the Communications Module is conflicting with another network device. Reassign a new IP address to the WEBS-PA-1.</p> <p><b>3</b> The Communications Module's Web server is not responding. Reboot the Communications Module.</p>
<b>Unable to login to the Communications Module's Web GUI</b>	<p><b>1</b> The Communications Module's database is corrupt. Reset to factory default settings using the <b>Reset</b> button (Refer to 7.4 Factory Settings).</p>
<b>Unable to receive incoming pages</b>	<p><b>1</b> The Communications Module is not on the network. Check network settings.</p> <p><b>2</b> The Communications Module is not registered with a WEBS Contact® Server. Check Paging settings.</p>

## Appendix B: Frequently Asked Questions

---

- 1 I am experiencing audio problems on the Communications Module such as echo, distorted sound, or choppiness. How do I fix this?

  - i. Verify whether proper bandwidth is allocated for RTP traffic. You can utilize various mechanisms (RTP header compression and QoS) on the network.
  - ii. Check the hardware specifications of the WEBS Contact® Server. The CPU or available RAM may be insufficient.
- 2 How do I determine the IP address of the Communications Module?

**To determine the IP address:**

  - i. Connect a computer to the Communications Module in question using a serial port and serial cable.
  - ii. Open HyperTerminal or similar console application on the connected computer.
  - iii. At the command prompt, enter the ifconfig command. The IP address of the Communications Module will be displayed.

**To determine the IP address through the Web GUI:**

  - i. Follow the directions under Section 4.4.1 IP Settings.
  - ii. The IP Address field will display the IP Address of the Communications Module.
- 3 The Communications Module is not receiving paging requests from the WEBS Contact® Server. How do I fix this?

  - i. Refer to Section 4.5.1 Paging Settings.
  - ii. Check the Registration status with the WEBS Contact® Server.
  - iii. If the status is Unregistered then you will need to contact the Administrator of the WEBS Contact® Server in order to reregister the Communications Module for paging requests.
  - iv. If the status is registered at <WEBS\_Contact\_Server>, then refer to Section **Error! Reference source not found. Error! Reference source not found..**

---

**Note** It is not recommended to use the deregister option as it deregisters the Communications Module with the WEBS Contact® Server. The Communications Module will stop sending events to WEBS Contact® Server.

## Appendix C: Sample Serial Configuration File

```
+++++
++ This Configuration File is a sample configuration file, which has all the
++ default and allowed values for configurable attributes.
++
++ Admin/Programmer can modify the values as per permissible value/range for
++ defined parameters as described in comments given for each parameter.
++
++ Version - 1.0.0.0
++++

+++++
++ Field name      : VoIPProtocol
++ Description     : Protocol to be used for originating calls
++ Valid values    : VoIPProtocol = 1 for SIP (Default Value)
++                  VoIPProtocol = 2 for H.323
++ Note            : Changing this value will cause the phone to reboot.
++++

VoIPProtocol = 1

+++++
++ Field name      : AutoAnswer
++ Description     : Enables/disable auto answer mode of phone operation.
++ Valid values    : AutoAnswer = 0 - Disable
++                  AutoAnswer = 1 - Enable (Default Value)
++ Note            : None
++++

AutoAnswer = 1

+++++
++ Field name      : OperationPriority
++ Description     : Operation Priority between Phone and Paging operations.
++ Valid values    : OperationPriority = 1 Phone Mode has priority over Paging
++                  Mode (Default)
++                  OperationPriority = 2 Paging Mode has priority over Phone
++                  Mode
++ Note            : None
++++

OperationPriority = 1

+++++
++ Field name      : CallerIDPresentation
++ Description     : Caller ID presentation to the Remote party.
++ Valid values    : CallerIDPresentation = 0 - Disable
++                  CallerIDPresentation = 1 - Enable (Default Value)
++ Note            : None
++++

CallerIDPresentation = 1

+++++
++ Field name      : CallerID
++ Description     : Caller ID to be present to Remote Party.
++ Valid values    : 30 chars long, a-z,A-Z,*,0-9,.,-, No spaces allowed.
++                  Default value is VOIP-500
++ Note            : This will be sent when CallerIDPresentation = 1
```

```

+++++
CallerID = VOIP-500
+++++
++ Field name      : AudioCodec
++ Description     : Preferred Audio Codec to be used for Outgoing Calls.
++ Valid values    : AudioCodec = 1 - G.711 PCM A Law
++                      AudioCodec = 2 - G.711 PCM u Law (Default Value)
++                      AudioCodec = 3 - G.729a
++                      AudioCodec = 4 - G.723.1a
++ Note            : None
+++++
AudioCodec = 2
+++++
++ Field name      : AEC
++ Description     : Enable/Disable Acoustic Echo Cancellation.
++ Valid values    : AEC = 1 - Enable (Default Value)
++                      AEC = 0 - Disable
++ Note            : None
+++++
AEC = 1
+++++
++ Field name      : VAD_CNG
++ Description     : Enable/Disable Voice Activity detection/generation of
++                      Silence packets.
++ Valid values    : VAD_CNG = 1 - Enable (Default Value)
++                      VAD_CNG = 0 - Disable
++ Note            : None
+++++
VAD_CNG = 1
+++++
++ Field name      : AGC
++ Description     : Enable/Disable Automatic Gain Control
++ Valid values    : AGC = 0 - Disable (Default Value)
++                      AGC = 1 - Enable
++ Note            : None
+++++
AGC = 0
+++++
++ Field name      : JitterBuffer
++ Description     : Size of Jitter buffer (milliseconds)
++ Valid values    : 0 (Default Value), 30, 60, 90 , 120
++ Note            : None
+++++
JitterBuffer = 0
+++++
++ Field name      : LineLevelOutputGain
++ Description     : Line level output gain to be used during Recording or
++                      Amplifying.
++ Valid values    : 1 to 20, Default value is 16
++ Note            : None
+++++

```

## Appendix C: Sample Serial Configuration File

```
LineLevelOutputGain = 16

+++++
++ Field name      : Speaker
++ Description     : Enable/disable Speaker state, applicable to both Handset
++                      and Handsfree
++ Valid values    : Speaker = 0 - Disabled
++                      Speaker = 1 - Enabled (Default value)
++ Note            : None
++++

Speaker = 1

+++++
++ Field name      : SpeakerGain
++ Description     : Speaker gain, applicable to both Handset and Handsfree.
++ Valid values    : 1 to 20, Default value is 12
++ Note            : None
++++

SpeakerGain = 12

+++++
++ Field name      : Mic
++ Description     : Enable/disable Mic state, applicable to both Handset
++                      and Handsfree
++ Valid values    : Mic = 0 - Disabled
++                      Mic = 1 - Enabled (Default value)
++ Note            : None
++++

Mic = 1

+++++
++ Field name      : MicGain
++ Description     : Mic gain, applicable to both Handset and Handsfree.
++ Valid values    : 1 to 20, Default value is 12
++ Note            : None
++++

MicGain = 12

+++++
++ Field name      : CallProgressTones
++ Description     : Enable/Disable Call Progress Tones (Dial tone, Ringback
++                      tone, Ringing tone, Busy Tone etc)
++ Valid values    : CallProgressTone = 0 - Disabled
++                      CallProgressTone = 1 - Enabled (Default Value)
++ Note            : None
++++

CallProgressTones = 1

+++++
++ Field name      : KeyToAnswer
++ Description     : Key to be pressed by Remote party for answering the call.
++ Valid values    : 0-9, *, #, disable (default value)
++ Note            : Only applicable for Outbound Round Robin calls.

++++

KeyToAnswer = disable
```

```

+++++
++ Field name      : KeyToDisconnect
++ Description     : Key to be pressed by Remote party to disconnect the call
++                  from remote.
++ Valid values    : 0-9, *, # (default value), disable.
++ Note            : None
++++

KeyToDisconnect = #

+++++
++ Field name      : WelcomeTone
++ Description     : Enable/disable playing of Welcome Tone to remote party.
++ Valid values    : WelcomeTone = 0 - To not play
++                  WelcomeTone = 1 - To Play (Default Value)
++ Note            : Only played when AutoAnswer = 1.
++++

WelcomeTone = 1

+++++
++ Field name      : TimerNetResponse
++ Description     : Network Response Timer
++ Valid values    : 5 - 20 sec, in increment of 1 sec.
++                  Default value is 5 secs
++ Note            : Only applicable to Outbound Round Robin Calls
++++

TimerNetResponse = 5

+++++
++ Field name      : TimerRinger
++ Description     : Ringer Timer in number of rings.
++ Valid values    : 1 - 12. Default value is 5 rings
++ Note            : Only applicable to Outbound Round Robin Calls
++++

TimerRinger = 5

+++++
++ Field name      : TimerHangup
++ Description     : Hangup Timer
++ Valid values    : 0.5 - 3.0 seconds, in increment of 0.1 second.
++                  Default value is 0.5 secs
++ Note            : None
++++

TimerHangup = 0.5

+++++
++ Field name      : TimerInterDigitLocal
++ Description     : Local Inter digit timer, used during dialing numbers.
++ Valid values    : 5 - 20 seconds, in increment of 1 sec
++                  Default value is 5 secs
++ Note            : None
++++

TimerInterDigitLocal = 5

+++++
++ Field name      : TimerInterDigitRemote
++ Description     : Remote Inter digit timer, used during Remote DTMF

```

## Appendix C: Sample Serial Configuration File

```
++          operations
++ Valid values : 5 - 20 secs, in increment of 1 sec
++             Default value is 5 secs
++ Note        : None
+++++
TimerInterDigitRemote = 5

+++++
++ Field name   : CallConversation
++ Description   : Used for limiting Call Conversation time.
++ Valid values  : CallConversation = 0 , Calls lasts indefinite
++                  CallConversation = 1 Calls lasts for definite time
++
++ Field name   : TimerCallConversation
++ Description   : Call Conversation time, call only lasts for this time,
++                  applicable when CallConversation = 1
++ Valid values  : 1 - 360 minutes in increments of 1 minute.
++                  Default value is 12 minutes
++ Note        : None
+++++
CallConversation = 1
TimerCallConversation = 12

+++++
++ Field name   : RingBackBusy
++ Description   : Enable/Disable Ringback Busy Timer.
++ Valid values  : RingBackBusy = 0 , Call waits for indefinite
++                  RingBackBusy = 1 Calls waits for definite time before
++                  switching to next number
++
++ Field name   : TimerRingBackBusy
++ Description   : Ringback busy time, call switch to next number after
++                  waiting for this time, applicable when RingBackBusy = 1
++ Valid values  : 1 - 60 seconds in increments of 1 sec.
++                  Default value is 15 seconds
++ Note        : Only applicable to Outbound Round Robin Calls
+++++
RingBackBusy = 1
TimerRingBackBusy = 15

+++++
++ Field name   : HangupOnSilence
++ Description   : Enable/Disable Hanging of call on silence
++ Valid values  : HangupOnSilence = 0 - Disable
++                  HangupOnSilence = 1 - Call disconnect on silence.
++
++ Field name   : TimerHangupOnSilence
++ Description   : Duration after which call disconnects automatically, if no
++                  voice received.
++ Valid values  : 10 - 360 seconds, in increments of 1 second.
++                  Default value is 30 seconds
++ Note        : None
+++++
HangupOnSilence = 1
TimerHangupOnSilence = 30

+++++
++ Field name   : PagingOut
++ Description   : Output device for Paging messages.
```

```

++ Valid values      : PagingOut = 1 - To Handsfree Speaker
++                           PagingOut = 2 - To Line Level Out (Default Value)
++ Note              : None
+++++=====
PagingOut = 2

+++++=====
++ Field name       : PagingOutGain
++ Description       : Paging output gain.
++ Valid values     : 1 - 20, Default value is 20
++ Note              : None
+++++=====

PagingOutGain = 20

+++++=====
++ Field name       : PhoneNum
++ Description       : This parameter is used to define phone number for the
++                      purpose of receiving incoming calls.
++ Valid values     : 30 chars long, a-z,A-Z,*,0-9,.,-, No spaces allowed
++                      Default is VOIP-500
++ Note              : Mandatory Parameter
+++++=====

PhoneNum = VOIP-500

+++++=====
++ Field name       : SIPDomainName
++ Description       : This parameter is used to define domain to which this
++                      phone belongs to.
++ Valid values     : 30 chars long, a-z,A_Z,*, 0-9,.., No spaces allowed
++                      Default is example.com
++ Note              : Mandatory Parameter
+++++=====

SIPDomainName = example.com

+++++=====
++ Field name       : SIPRegister
++ Description       : This parameter is used to define Phone SIP Registration.
++                      If enable then Phone will try to register at given
++                      registrar.
++ Valid values     : SIPRegister = 0 - Disable SIP Registration (Default Value)
++                      SIPRegister = 1 - Enable SIP Registration
++ Note              : For Cases when SIPRegister = 1 configure following
++                      parameters.
++
++ Field name       : SIPRegistrarIP
++ Field name       : SIPRegistrarPort
++ Field name       : SIPReregistrationTime
++ Description       : SIPRegistrarIP - Registrar IP address
++                      SIPRegistrarPort - Registrar Port
++                      SIPReregistrationTime - Registration Refresh time
++ Valid Values     : SIPRegistrarPort : 1024 - 49151, 5060 (Default value)
++                      SIPReregistrationTime : 10 - 14400 secs, 3600 (Def value)
++
++ Field name       : SIPRegistrarUserName
++ Field name       : SIPRegistrarUserPassword
++ Description       : Optional parameters, required when using authenticating
++                      Registrar.
++ Valid values     : 30 chars long, a-z,A-Z,*,0-9,.,-, No spaces allowed
++ Note              : Only used when using authenticating Registrar.

```

## Appendix C: Sample Serial Configuration File

```
+++++
SIPRegister = 0
+SIPRegistrarIP =
+SIPRegistrarPort = 5060
+SIPReregistrationTime = 3600

++Cases where the registrar authenticates phone user.
+SIPRegistrarUserName =
+SIPRegistrarUserPassword =

+++++
++ Field name      : SIPOutBoundProxyIPAddress & SIPOutBoundProxyPort
++ Description     : Optional parameters. Used when using Outbound Proxy.
++ Valid values    : SIPOutBoundProxyPort : 1024 - 49151, 5060 (Default value)
++
++ Field name      : SIPOutBoundProxyUserName
++ Field name      : SIPOutBoundProxyUserPassword
++ Description     : Optional parameters, required when using authenticating
++                  proxy.
++ Valid values    : 30 chars long, a-z,A-Z,*,0-9,.,-, No spaces allowed
++ Note            : None
++++

+SIPOutBoundProxyIPAddress =
+SIPOutBoundProxyPort =

++Cases where Outbound Proxy authenticates phone user
+SIPOutBoundProxyUserName =
+SIPOutBoundProxyUserPassword =

+++++
++ Field name      : NumberList
++ Description     : Numbers to dial be dialed on press of Emergency and Info
++                  Buttons and also on Activation of Auxiliary Inputs.
++ Valid values    : Max 30 chars, for IP Addresses, Analog Numbers, Aliases
++                  and URLs
++ Example:
++                 NumberList1CN1 = 10.112.71.85
++                 NumberList1CN2 = 100@10.112.71.82
++                 NumberList1CN3 = 1005
++                 NumberList1CN4 = test@example.com
++                 NumberList1CN5 =
++                 NumberList1CN6 =
++ Note            : Admin can similarly configure Number List 2 to Number
++                  List 7
++++
++
++ NumberList1CN1 =
++ NumberList1CN2 =
++ NumberList1CN3 =
++ NumberList1CN4 =
++ NumberList1CN5 =
++ NumberList1CN6 =
++
++ NumberList2CN1 =
++ NumberList2CN2 =
++ NumberList2CN3 =
++ NumberList2CN4 =
++ NumberList2CN5 =
++ NumberList2CN6 =
++
```

```

++ NumberList3CN1 =
++ NumberList3CN2 =
++ NumberList3CN3 =
++ NumberList3CN4 =
++ NumberList3CN5 =
++ NumberList3CN6 =
++
++ NumberList4CN1 =
++ NumberList4CN2 =
++ NumberList4CN3 =
++ NumberList4CN4 =
++ NumberList4CN5 =
++ NumberList4CN6 =
++
++ NumberList5CN1 =
++ NumberList5CN2 =
++ NumberList5CN3 =
++ NumberList5CN4 =
++ NumberList5CN5 =
++ NumberList5CN6 =
++
++ NumberList6CN1 =
++ NumberList6CN2 =
++ NumberList6CN3 =
++ NumberList6CN4 =
++ NumberList6CN5 =
++ NumberList6CN6 =
++
++ NumberList7CN1 =
++ NumberList7CN2 =
++ NumberList7CN3 =
++ NumberList7CN4 =
++ NumberList7CN5 =
++ NumberList7CN6 =
+++++
++ Field name      : Button1CallList
++ Description     : List of numbers to be dialed from a specific List.
++ Valid values    : 1 - 7. 1 (Default value)
++
++ Field name      : Button1CallNetworkPriority
++ Description     : Network priority to prioritize the Emergency Traffic.
++ Valid values    : 1 - 63. 46 (Default value)
++ Note            : This field is only valid for phones having atleast 1
++                   button.
+++++
Button1CallList = 1
Button1CallNetworkPriority = 46

+++++
++ Field name      : Button2Type
++ Description     : Type of Button.
++ Valid values    : Button2Type = 1 - As AutoDial
++                   Button2Type = 2 - As Hookswitch (Default Value)
++
++ Field name      : Button2CallList
++ Field name      : Button2CallPriority
++ Field name      : Button2CallNetworkPriority
++ Description     : Required when Button programmed as AutoDial.
++ Valid values    : Button2CallPriority : 2 - 10 , 2 (default value)
++                   Button2CallNetworkPriority: 1 - 63. 46 (Default value)
++
++ Note            : This field is only valid for phones having more than 1

```

## Appendix C: Sample Serial Configuration File

```
++                      buttons.  
+++++  
  
Button2Type = 2  
+Button2CallList = 1  
+Button2CallPriority = 2  
+Button2CallNetworkPriority = 46  
  
+++++  
++ Field name      : AuxIn1CallList  
++ Description     : List of numbers to be dialed from a specific List.  
++ Valid values    : 1 - 7, none (Disable)  
++                  AuxIn1CallList = 1 (Default value)  
++  
++ Field name      : AuxIn1CallPriority  
++ Description     : Call priority for the call originated on activation  
++                  of AuxIn 1.  
++ Valid values    : 2 - 10. 2 (Default Value)  
++  
++ Field name      : AuxIn1NetworkPriority  
++ Description     : Network priority to be used for packets of the call. Used  
++                  for prioritizing the traffic.  
++ Valid values    : 1 - 63. 46 (Default value)  
++ Note            : Admin can similarly program values for AuxIn2 and AuxIn3  
+++++  
  
AuxIn1CallList = 1  
AuxIn1CallPriority = 2  
AuxIn1NetworkPriority = 46  
  
AuxIn2CallList = 1  
AuxIn2CallPriority = 2  
AuxIn2NetworkPriority = 46  
  
AuxIn3CallList = 1  
AuxIn3CallPriority = 2  
AuxIn3NetworkPriority = 46  
  
+++++  
++ Field name      : AuxOp1ActOnBut1Call & AuxOp1ActOnBut2Call  
++ Description     : Auxiliary Output 1 activation on call through Button #1 or  
++                  through Button #2.  
++ Valid values    : 0 - 3  
++                  0- Disable  
++                  1- Aux Activation when call is initiated through Button  
++                  2- Aux Activation when call initiated through Button is  
++                  connected  
++                  3- Aux Activation when call initiated through Button is  
++                  disconnected  
++  
++                  AuxOp1ActOnBut1Call = 0 (Default value)  
++  
++ Note            : Admin can similarly program values for AuxOutput 2 and 3  
+++++  
  
AuxOp1ActOnBut1Call = 0  
AuxOp1ActOnBut2Call = 0  
  
AuxOp2ActOnBut1Call = 0  
AuxOp2ActOnBut2Call = 0  
  
AuxOp3ActOnBut1Call = 0  
AuxOp3ActOnBut2Call = 0
```

```

+++++
++ Field name      : AuxOp1ActOnAuxIn1Act, AuxOp1ActOnAuxIn2Act ,
++                  AuxOp1ActOnAuxIn3Act, AuxOp1ActOnAuxIn1DeAct,
++                  AuxOp1ActOnAuxIn2DeAct & AuxOp1ActOnAuxIn3DeAct
++
++ Description       : Auxiliary Output activation on Activation/Deactivation of
++                      Auxiliary Inputs
++
++ Valid values     : 0 - 1
++                      0- Disable
++                      1- Aux Activation when Auxiliary Input is activated or
++                         deactivated
++
++                           AuxOp1ActOnAuxIn1Act = 0 (Default value)
++
++ Note             : Admin can similarly program values for AuxOutput 2 and 3
+++++

```

AuxOp1ActOnAuxIn1Act = 0  
 AuxOp1ActOnAuxIn2Act = 0  
 AuxOp1ActOnAuxIn3Act = 0

AuxOp1ActOnAuxIn1DeAct = 0  
 AuxOp1ActOnAuxIn2DeAct = 0  
 AuxOp1ActOnAuxIn3DeAct = 0

AuxOp2ActOnAuxIn1Act = 0  
 AuxOp2ActOnAuxIn2Act = 0  
 AuxOp2ActOnAuxIn3Act = 0

AuxOp2ActOnAuxIn1DeAct = 0  
 AuxOp2ActOnAuxIn2DeAct = 0  
 AuxOp2ActOnAuxIn3DeAct = 0

AuxOp3ActOnAuxIn1Act = 0  
 AuxOp3ActOnAuxIn2Act = 0  
 AuxOp3ActOnAuxIn3Act = 0

AuxOp3ActOnAuxIn1DeAct = 0  
 AuxOp3ActOnAuxIn2DeAct = 0  
 AuxOp3ActOnAuxIn3DeAct = 0

```

+++++
++ Field name      : AuxOp1ActOnRemoteKeyCode, AuxOp2ActOnRemoteKeyCode,
++                  AuxOp3ActOnRemoteKeyCode
++
++ Description       : Auxiliary Output activation on specified remote keycode
++
++ Valid values     : Disable,
++                      Max 4 chars containing 0-9, * and #.
++                      Default values are *11*, *12*, *13* correspondingly
++
++                           AuxOp1ActOnRemoteKeyCode = *11* (Default value)
++                           AuxOp2ActOnRemoteKeyCode = *12* (Default value)
++                           AuxOp3ActOnRemoteKeyCode = *13* (Default value)
++
++ Note             : None
+++++

```

AuxOp1ActOnRemoteKeyCode = \*11\*

## Appendix C: Sample Serial Configuration File

```
AuxOp2ActOnRemoteKeyCode = *12*
AuxOp3ActOnRemoteKeyCode = *13*

+++++
++ Field name      : AuxOp1ActOnLocalKeyCode, AuxOp2ActOnLocalKeyCode,
++                  AuxOp3ActOnLocalKeyCode
++
++ Description     : Auxiliary Output activation on specified local keycode
++
++ Valid values    : Disable, Max 8 chars containing 0-9, * and #.
++
++                  AuxOp1ActOnLocalKeyCode = Disable (Default value)
++                  AuxOp2ActOnLocalKeyCode = Disable (Default value)
++                  AuxOp3ActOnLocalKeyCode = Disable (Default value)
++
++ Note            : None
++++

AuxOp1ActOnLocalKeyCode = Disable
AuxOp2ActOnLocalKeyCode = Disable
AuxOp3ActOnLocalKeyCode = Disable

+++++
++ Field name      : AuxOp1DeActOnRemoteKeyCode, AuxOp2DeActOnRemoteKeyCode,
++                  AuxOp3DeActOnRemoteKeyCode
++
++ Description     : Auxiliary Output deactivation on specified remote keycode
++
++ Valid values    : Disable,
++                  Max 4 chars containing 0-9, * and #.
++                  Default values are *21*, *22*, *23* correspondingly
++
++                  AuxOp1DeActOnRemoteKeyCode = *21* (Default value)
++                  AuxOp2DeActOnRemoteKeyCode = *22* (Default value)
++                  AuxOp3DeActOnRemoteKeyCode = *23* (Default value)
++
++ Note            : None
++++

AuxOp1DeActOnRemoteKeyCode = *21*
AuxOp2DeActOnRemoteKeyCode = *22*
AuxOp3DeActOnRemoteKeyCode = *23*

+++++
++ Field name      : AuxOp1DeActOnLocalKeyCode, AuxOp2DeActOnLocalKeyCode,
++                  AuxOp3DeActOnLocalKeyCode
++
++ Description     : Auxiliary Output deactivation on specified local keycode
++
++ Valid values    : Disable, Max 8 chars containing 0-9, * and #.
++
++                  AuxOp1DeActOnLocalKeyCode = Disable (Default value)
++                  AuxOp2DeActOnLocalKeyCode = Disable (Default value)
++                  AuxOp3DeActOnLocalKeyCode = Disable (Default value)
++
++ Note            : None
++++

AuxOp1DeActOnLocalKeyCode = Disable
AuxOp2DeActOnLocalKeyCode = Disable
AuxOp3DeActOnLocalKeyCode = Disable
```

```

+++++
++ Field name      : AuxOp1DeActOnBut1Call & AuxOp1DeActOnBut2Call
++
++ Description     : Auxiliary Output 1 deactivation on call through Button #1
++                  or through Button #2.
++
++ Valid values    : 0 - 3
++                  0- Disable
++                  1- Aux Deactivation when call is initiated through Button
++                  2- Aux Deactivation when call initiated through Button is
++                      connected
++                  3- Aux Deactivation when call initiated through Button is
++                      disconnected
++
++                         AuxOp1DeActOnBut1Call = 0 (Default value)
++
++ Note            : Admin can similarly program values for AuxOutput 2 and 3
+++++
AuxOp1DeActOnBut1Call = 0
AuxOp1DeActOnBut2Call = 0

AuxOp2DeActOnBut1Call = 0
AuxOp2DeActOnBut2Call = 0

AuxOp3DeActOnBut1Call = 0
AuxOp3DeActOnBut2Call = 0

+++++
++ Field name      : AuxOp1DeActOnAuxIn1Act, AuxOp1DeActOnAuxIn2Act ,
++                  AuxOp1DeActOnAuxIn3Act, AuxOp1DeActOnAuxIn1DeAct,
++                  AuxOp1DeActOnAuxIn2DeAct & AuxOp1DeActOnAuxIn3DeAct
++
++ Description     : Auxiliary Output deactivation on Activation/Deactivation of
++                  Auxiliary Inputs
++
++ Valid values    : 0 - 1
++                  0- Disable
++                  1- Aux Deactivation when Auxiliary Input is activated or
++                      deactivated
++
++                         AuxOp1DeActOnAuxIn1Act = 0 (Default value)
++
++ Note            : Admin can similarly program values for AuxOutput 2 and 3
+++++
AuxOp1DeActOnAuxIn1Act = 0
AuxOp1DeActOnAuxIn2Act = 0
AuxOp1DeActOnAuxIn3Act = 0

AuxOp1DeActOnAuxIn1DeAct = 0
AuxOp1DeActOnAuxIn2DeAct = 0
AuxOp1DeActOnAuxIn3DeAct = 0

AuxOp2DeActOnAuxIn1Act = 0
AuxOp2DeActOnAuxIn2Act = 0
AuxOp2DeActOnAuxIn3Act = 0

AuxOp2DeActOnAuxIn1DeAct = 0
AuxOp2DeActOnAuxIn2DeAct = 0
AuxOp2DeActOnAuxIn3DeAct = 0

```

## Appendix C: Sample Serial Configuration File

```
AuxOp3DeActOnAuxIn1Act = 0
AuxOp3DeActOnAuxIn2Act = 0
AuxOp3DeActOnAuxIn3Act = 0

AuxOp3DeActOnAuxIn1DeAct = 0
AuxOp3DeActOnAuxIn2DeAct = 0
AuxOp3DeActOnAuxIn3DeAct = 0

+++++
++ Field name      : VMActionOnBut1CallInit, VMActionOnBut2CallInit ,
++                      VMActionOnInboundCallsAns, VMActionOnAuxIn1Act,
++                      VMActionOnAuxIn2Act & VMActionOnAuxIn3Act
++
++ Description      : Configured VM will be played to the user upon call
++                      initiation by the specified button
++
++ Valid values     : 1 - 5,Disable
++                      Disable - Disable the field
++                      1 - 5 Specifies the number of the VM to be played to the
++                      user.
++
++ VMActionOnBut1CallInit = Disable (Default value)
++
++ Field name      : VMActionOnInboundCallsAns
++
++ Description      : Configuring the specified VM to start playing or stop
++                      playing when the inbound calls are answered.
++
++ Valid values     : 1 - 10, Disable
++                      Disable - Disable the field
++                      1 - 5 specifies the number of the VM to be played to the user.
++                      6 -   Stops the VM #1(if playing)
++                      7 -   Stops the VM #2(if playing).Similarly the values 8 to 10
++                      can be configured to stop the VM #3 TO VM #5
++
++ Note             : Admin can similarly program values for VMActionOnAuxIn1Act,
++                      VMActionOnAuxIn2Act & VMActionOnAuxIn3Act on the guidelines
++                      for the VMActionOnInboundCallsAns
+++++

VMActionOnBut1CallInit = Disable
VMActionOnBut2CallInit = Disable
VMActionOnInboundCallsAns = Disable
VMActionOnAuxIn1Act = Disable
VMActionOnAuxIn2Act = Disable
VMActionOnAuxIn3Act = Disable
VMActionOnAuxIn1DeAct = Disable
VMActionOnAuxIn2DeAct = Disable
VMActionOnAuxIn3DeAct = Disable

+++++
++ Field name      : VM1PlayOnRemoteKeyCode, VM1StopOnRemoteKeyCode
++
++ Description      : The specified VM will be played/stopped to the user upon
++                      dialing the configured keycode from the remote side.
++
++ Valid values     : Disable, Combination of 0-9,*,# with maximum of 4 characters
++                      Disable - Disable the field
++                      *12#   - can be used to either start or stop VM #1 play to
++                      user when dialed from the remote side.
++
++ VM1PlayOnRemoteKeyCode = Disable (Default value)
++
```

```

++ Field name      : VM1PlayOnLocalKeyCode,VM1StopOnLocalKeyCode
++
++ Description    : The specified VM will be played/stopped to the user upon
++                   dialing the configured keycode from the local keypad.
++
++ Valid values   : Disable, Combination of 0-9,*,# with maximum of 8 characters
++                   Disable - Disable the field
++                   *123456# - can be used to either start or stop VM #1 play to
++                   user when dialed from the local keypad.
++
++                   VM1PlayOnLocalKeyCode = Disable(Default value)
++
++ Note           : Admin can similarly program values for VM #2 to VM #5
++                   Avoid using the same keycode for start and stop of the same
++                   VM.
+++++
VM1PlayOnRemoteKeyCode = Disable
VM1PlayOnLocalKeyCode = Disable
VM1StopOnRemoteKeyCode = Disable
VM1StopOnLocalKeyCode = Disable

VM2PlayOnRemoteKeyCode = Disable
VM2PlayOnLocalKeyCode = Disable
VM2StopOnRemoteKeyCode = Disable
VM2StopOnLocalKeyCode = Disable

VM3PlayOnRemoteKeyCode = Disable
VM3PlayOnLocalKeyCode = Disable
VM3StopOnRemoteKeyCode = Disable
VM3StopOnLocalKeyCode = Disable

VM4PlayOnRemoteKeyCode = Disable
VM4PlayOnLocalKeyCode = Disable
VM4StopOnRemoteKeyCode = Disable
VM4StopOnLocalKeyCode = Disable

VM5PlayOnRemoteKeyCode = Disable
VM5PlayOnLocalKeyCode = Disable
VM5StopOnRemoteKeyCode = Disable
VM5StopOnLocalKeyCode = Disable

+++++
++ Field name      : VM1PlayToUserInLoop
++
++ Description    : The VM #1 will be played to the user in loop
++
++ Valid values   : 0 - 1
++                   0- Disable, the VM play in loop
++                   1- Enable, the VM play in loop
++
++                   VM1PlayToUserInLoop = 0 (Default value)
++
++ Note           : Admin can similarly program values for VM #2 to VM #5
+++++
VM1PlayToUserInLoop = 0
VM2PlayToUserInLoop = 0
VM3PlayToUserInLoop = 0
VM4PlayToUserInLoop = 0
VM5PlayToUserInLoop = 0

+++++

```

## Appendix C: Sample Serial Configuration File

```
++ Field name      : VMActionOnOutboundCallsAns
++
++ Description     : The specified VM will be played to the guard, once the call
++                   is being answered by the the guard.
++
++ Valid values    : Disable 1 - 5
++                   Disable - Diable the option of playing the VM
++                   1 - 5 Specifies the number of the VM which needs to be
++                   played to the guard phone, when the call is being
++                   answered by guard.
++
++                   VMActionOnOutboundCallsAns = Disable (Default value)
++
++ Field name      : VM1PlayToGuardOnRemoteKeyCode, VM1StopToGuardOnRemoteKeyCode
++
++ Description     : The VM #1 will be played/stopped to the guard, once the
++                   configured key is dialed by the the guard.
++
++ Valid values    : Disable, Combination of 0-9,*,# with maximum of 4 characters
++                   Disable - Disable the field
++                   *12# - can be used to either start or stop VM #1 play to
++                   guard when dialed from the remote side.
++
++                   VM1PlayToGuardOnRemoteKeyCode = Disable (Default value)
++                   VM1StopToGuardOnRemoteKeyCode = Disable (Default value)
++
++ Note            : Admin can similarly program values for VM2 to VM5.
++                   Avoid using the same keycode for start and stop of the same
++                   VM.
+++++
VMActionOnOutboundCallsAns = Disable

VM1PlayToGuardOnRemoteKeyCode = Disable
VM1StopToGuardOnRemoteKeyCode = Disable

VM2PlayToGuardOnRemoteKeyCode = Disable
VM2StopToGuardOnRemoteKeyCode = Disable

VM3PlayToGuardOnRemoteKeyCode = Disable
VM3StopToGuardOnRemoteKeyCode = Disable

VM4PlayToGuardOnRemoteKeyCode = Disable
VM4StopToGuardOnRemoteKeyCode = Disable

VM5PlayToGuardOnRemoteKeyCode = Disable
VM5StopToGuardOnRemoteKeyCode = Disable

+++++
++ Field name      : VM1PlayToGuardInLoop
++
++ Description     : The VM #1 will be played to the guard in loop
++
++ Valid values    : 0 - 1
++                   0- Disable, the VM play in loop
++                   1- Enable, the VM play in loop
++
++                   VM1PlayToGuardInLoop = 0 (Default value)
++
++ Note            : Admin can similarly program values for VM #2 to VM #5
+++++
VM1PlayToGuardInLoop = 0
```

```

VM2PlayToGuardInLoop = 0
VM3PlayToGuardInLoop = 0
VM4PlayToGuardInLoop = 0
VM5PlayToGuardInLoop = 0

+++++++++++++++++++++
++ Field name      : KeypadMode
++ Description     : Mode of keypad to be used for dialing.
++ Valid values    : KeypadMode = 1 - Normal dial (Default Value)
++                  KeypadMode = 2 - Speed dial
++ Note            : If Keypad is in speed dial, then Admin should configure
++                  the speeddial numbers (Max 30 chars) .
++                  Admin can configure IP Addresses, Analog Numbers, Aliases
++                  and URLs. (Max 30 chars)
+++++++++++++++++++
KeypadMode = 1

++ Cases when speed dial is configured
+SpeedDialKey0 =
+SpeedDialKey1 =
+SpeedDialKey2 =
+SpeedDialKey3 =
+SpeedDialKey4 =
+SpeedDialKey5 =
+SpeedDialKey6 =
+SpeedDialKey7 =
+SpeedDialKey8 =
+SpeedDialKey9 =

+++++++++++++++++++++
++ Field name      : Led3
++ Description     : Admin can configure Led3 Mode for specific purposes
++ Valid values    : Led3 = 1 - Help on The Way
++                  Led3 = 2 - Out Of Service
++                  Led3 = 3 - Both (Default Value)
++
++ Note            : For Options 1 and 3, Configure following parameters
++
++ Field name      : Led3SwitchOn
++ Description     : Admin can configure Led3 to switch on when remote user
++                  enters specific key sequence.
++ Valid values    : Max 8 chars containing 0-9, * and #.
++                  Default is *98*
++ Note            : None
++
++ Field name      : Led3DurationType
++ Description     : Admin can configure Led3 duration of activation.
++ Valid values    : Led3Duration = 1 - For Entire Call (Default Value)
++                  Led3Duration = 2 - For indefinite duration
++                  Led3Duration = 3 - For Custom duration
++ Note            : If Led3Duration = 3 then configure duration time.
++
++ Field name      : Led3Duration
++ Valid values    : 1 - 3600 sec, in increments of 1 sec. 10 (Default Value)
++
++ Field name      : Led3SwitchOff
++ Description     : Admin can configure key sequence to switch off when remote
++                  Admin enters specific key sequence.
++ Valid values    : Max 8 chars containing 0-9, * and #.
++                  Default is *97*
++ Note            : None
+++++++++++++++++++

```

## Appendix C: Sample Serial Configuration File

```
Led3 = 3
Led3SwitchOn = *98*
Led3DurationType = 1
+Led3Duration = 10
Led3SwitchOff = *97*

+++++
++ Field name      : GuardAccessCode
++ Description     : Admin can set the guard access code using this field..
++ Valid values    : Maximum length 8 digits(0-9).
++                      GuardAccessCode = *4** (Default Guard access code)
++                      It will accept the values in the following format.
++                      *4*<xxxxxxxx>* , x can be 0-9 or blank
++ Note             : None
++++

GuardAccessCode = *4**

+++++
++ Field name      : AuthVolAdjust , AuthSpkrMicCtrl, AuthVoiceMessage ,
++                      AuthAuxOPOperation , AuthLED3Operation
++ Description     : Admin can configure the authentication for different
++ operations.
++                      a. Volume Adjustment During Call
++                      b. Speaker and Microphone Control During Call
++                      c. Voice Messages
++                      d. Aux o/p Activation Deactivation
++                      e. "Help on the way" LED activation and deactivation
++ Valid values    : 0 - To disable Authentication
++                      1 - To enable Authentication
++ Note             : None
++++

AuthVolAdjust      = 0
AuthSpkrMicCtrl   = 1
AuthVoiceMessage   = 1
AuthAuxOPOperation = 1
AuthLED3Operation = 0

+++++
++ Field name      : NetworkMode
++ Description     : It configures the Phone IP address Type.
++ Valid values    : NetworkMode = 1 - DHCP
++                      NetworkMode = 3 - STATIC (Default Value)
++ Note             : If NetworkMode = 3, must configure following
++ Field name      : IPAddress
++ Field name      : Netmask
++ Field name      : Gateway
++ Field name      : DNSServerIP
++
++ Description     : IPAddress - Phone IP Address - mandatory
++                      Netmask - The Subnet Mask Address - mandatory
++                      Gateway - The Default Gateway address - mandatory
++                      DNSServerIP - The DNS Server IP Address - optional
++                      Example:
++                      NetworkMode = 3
++                      IPAddress = 192.168.1.10 (Default)
++                      Netmask = 255.255.255.0 (Default)
++                      Gateway = 192.168.1.1 (Default)
++                      DNSServerIP = (Default blank)
++
++ Note             : NetworkMode = 3 (Static) should not applied in bulk update.
```

```

++ If applied then all phones will have same Network
++ Settings.
+++++=====

NetworkMode = 3
+IPAdress =
+Netmask =
+Gateway =
+DNSServerIP =

+++++=====
++ Field name : Hostname
++ Description : It configures the unique identifier of the phone at
++ network level
++ Valid Values : 30 chars long, a-z,A-Z,*,0-9,.,-, No space allowed.
++ Default Value is VOIP-500.
++ Note : This Parameter should not be applied in bulk update.
++ If applied then all phones will have same hostname.
+++++=====

+Hostname = VOIP-500

+++++=====
++ Field name : LogRedirection
++ Field name : LogServerIP
++ Field name : LogServerPort
++ Description : Admin can enable the logging, and route to specific
++ location.
++ Valid values : LogRedirection = 0 - To Disable Logging
++ LogRedirection = 1 - To Console
++ LogRedirection = 2 - To Network
++ LogRedirection = 3 - To File (Append) (Default Value)
++ LogRedirection = 4 - To File (New)
++ Note : If LogRedirection = 2 must configure LogServerIP &
++ LogServerPort
++ Example:
++ LogRedirection = 2
++ LogServerIP = 10.112.71.35
++ LogServerPort = 514
+++++=====

LogRedirection = 3
+LogServerIP =
+LogServerPort = 514

+++++=====
++ Field name : LogLevel
++ Description : Admin can configure the log levels of following modules
++ of EVP
++ a. AudioLogLevel - For Audio Module
++ b. CallControlLogLevel - For Call Control Module
++ c. CommandModLogLevel - For Webs Contact Client Module
++ d. DevCtrlLogLevel - For Device Control Module
++ e. H323LogLevel - For H323 Module
++ f. SIPLogLevel - For SIP Module
++ g. TimerLogLevel - For Timer Module
++
++ Valid values : 1 - Error
++ 3 - Error + Warning (Default value)
++ 7 - Error + Warning + Info
++ 15 - Error + Warning + Info + Debug
+= Note : None
+++++=====
```

## Appendix C: Sample Serial Configuration File

```
AudioLogLevel      = 3
CallControlLogLevel = 3
CommandModLogLevel = 3
DevCtrlLogLevel    = 3
H323LogLevel       = 3
SIPLogLevel        = 3
TimerLogLevel      = 3

+++++
++ End Of the File
+++
+++++
```

**Note** The lines proceeding with "+" sign are considered as comments in the configdbfile.txt file.

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