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VST3300 Series IP PBX

Quick Installation Guide

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VST3300 Series

Quick Installation Guide

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1. Safety Instructions



- 1. Do not attempt to service the product yourself. Any servicing of this product should be referred to qualified service personnel.
- 2. To avoid electric shock, do not put your finger, pin, wire or any other metal objects into vents and gaps.
- 3. To avoid accidental fire or electric shock, do not twist power cord or place it under heavy objects.
- 4. This product should be connected to a power supply of the type described in the operating instructions or as marked on the device.
- 5. To avoid hazard to children, dispose of the product's plastic packaging carefully.
- 6. The phone line from Telecom Company or traditional PBX should always be connected to the LINE or FXO connector. It should not be connected to the PHONE/FAX or FXS connector as it may cause damage to the product.

Please read all instructions before using this product to prevent damage to this product. If the document you read is in digital format, print out the whole manual for easy installation.



2. Package Contents and Related Environmental

Requirements

2.1 Contents

Includes :

Model Name	Analog Channels		SIP Channels (Default)	
			SIP Lines	SIP Trunks
VST3305	3	1 FXO + 2 FXS	8	2
VST3306A	4	2 FXO + 2 FXS	12	2
VST3306B	4	4 FXS	12	2
VST3306C	4	4 FXO	12	2
VST3318A	16	8 FXO + 8FXS	24	2
VST3318D	16	4 FXO + 12 FXS	24	2
VST3318E	16	12 FXO + 4 FXS	24	2

VST3300 Series Device x 1

- Power Cord x 1
- Console Cable x 1
- Manual/Tools CD x 1
- RJ-45 LAN Cable x 1
- RJ-11 Phone Cable x 1
- Rubber Foot Pads x 1

Dedicated accessories for VST3318:

Plug-in Modules

Modules	Description
MP3208+	4FXS + 4FXO
MP3008+	8FXS
MP3108+	8FXO

- Rack mounting accessories for standard rack
- IDC connectors x 4



2.2 Hardware and network requirements

This product requires the basic environment listed below.

- 1. Broadband IP network, fixed IP (Public or Private IP) is suggested. This device may connect to a router using dynamic IP (PPPoE).
- 2. Bi-directional, 64~512 Kbps bandwidth or more is recommended depending on port usage. (Each call occupies about 40 Kbps. Make estimations for concurrent calls and occasional poor network conditions.)

Note: If a fixed public IP address (Public or Private IP) is not used, this system can still work. In this case, the factory default value will not be suitable. Please refer to the operation manual or contact your distributor for more assistance.



3. Device Figure

This device can be cascaded or integrated into a network. The diagram below shows a single unit and its LED indicators.

3.1 Panel

The example below is the 16 ports model (VST3318)



3.2 LED indicators

Please refer to section 7.4 Check LED Status for the meaning of each LED indicator and status of the device.

3.3 Connectors

Terminal	Label	Description
Voice	FXS	For analog phone sets or FAX machines
	FXO	For public lines or trunk from Analog PBX
	BROADCAST (for VST3305 only)	For an amplifier, speakers or earphones
Network	To WAN (MDI-X)	RJ-45 MDI-X terminal, for WAN
	To LAN (MDI)	RJ-45 MDI terminal, for LAN
DO 000	CDR	For Call Detail Records
RS-232	CONSOLE	For system console management

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4. Hardware Installation

4.1 General Connection

4.1.1 Connection of Telephone Line

There are 2-wire and 4-wire telephone lines. A 2-wire line is OK for this machine. The connector type is RJ-11.

 The FXS or Phone port of this machine can connect to phone set or Trunk card/FXO port of an analog PBX only.



• The FXO or Line port of this machine can connect to the PSTN from a CO or a Line card/FXS from an Analog PBX only.

Attention: VST3300 Series extensions will seize the highest FXO port number first when trunk calls are made. Therefore, connect the FXO ports of the VST3300 Series from highest number downward. For example, on the 16 port model, please follow the sequence $16 \rightarrow 15 \rightarrow 14 \rightarrow 13 \rightarrow$. For port position arrangement refer to 4.2.2 Module Numbering



Attention: Incorrect connection of the FXS/Phone ports of this machine to the PSTN or Line card of an analog PBX will damage this machine or the analog PBX.



4.1.2 Connection of Network Cables

There are 2 kinds of LAN cables, straight through cables and crossover cables. Both connectors are RJ-45 type although they appear the same. Using the wrong cable type will not damage the machine. The figure below is for your reference.



Confirm the following:

- The Link/Act LED of the PC network card is ON or blinking.
- LNK/ACT LED of MDI or MDI-X port of VST3300 Series is ON or blinking.

Otherwise, change the port or LAN cable and retry it again

Note: PC connection is for the configuration of this product. When configuration is complete, no PC is required to make or accept calls, the PC can then be shut down.

4.1.3 Connection of Console Cable

The Console port is available for a PC connection and can be used to make initial configurations such as for IP address and regional ID. Some initial values have already been set on this machine. If connected to a LAN, the console cable is not required.





4.2 Connection of the 16 Port Model

4.2.1 Installation of Modules

There are 3 available modules: MP3008+, MP3108+ and MP3208+.

Modules can be installed into the S1 or S2 bays freely according to the needs of the structure. Loosen the screw of bay cover and remove the cover, then, insert module into the bay and tighten the screws.

Attention: If the module is installed when you get it from distributor, don't change its position. A module change (change position, add, remove) requires a Factory Reset and reconfiguration of settings.

4.2.2 Module Numbering

The port numbers are labeled on the front panel of the 19 inches rack model. For convenient management via Web management page and Console interface from a remote site, the numbering is based by the port group. Each group consists of four ports. The following table indicates the port number and the corresponding location:

Model	Group	Location	Numbering for			or
woder			management			t
	Group 1	Lower module (S1), left side 4 ports	1	2	3	4
VOTODAO	Group 2	Lower module (S1), right side 4 ports	5	6	7	8
VS13318	Group 3	Upper module (S2), left side 4 ports	9	10	11	12
	Group 4	Upper module (S2), right side 4 ports	13	14	15	16

4.2.3 Use IDC Connector

An IDC connector is used for the voice interfaces (FXS and FXO ports) on the rack model. With IDC connectors, PBX lines and telephone wires can be easily connected to the VoIP gateway. No special tools are required; please follow the instruction below:

(Remark: For IDC connectors, it's better to use a No. 24 wire, e.g. CAT 5, and bind two wires for one port)



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1.	Prepare materials.	
2.	Insert the insulated wires directly into the block.	
3.	Push the block down until it is locked to flush the conductor with the probe.	Push here
4.	Cut off the conductor part on the outside edge to avoid from causing a short circuit.	

4.2.4 Connection between IDC Connector and Phone Set

The Voice interfaces (FXS and FXO ports) of this machine use IDC connectors and can be connected to a phone set with an extension or the PSTN.





4.3 Connection of Basic Structure

The figure below is the basic structure; please ignore the connections inside the dotted line. When your machine is configured correctly for the Internet, these services will be available (extra charge is required for some services)





5. Initial Settings for a Single Device

5.1 Phone Set Configuration (Phone Set Programming Mode)

The system management has a special password (the default password is 9999). You can unhook any phone set connected to the device and dial *0 09 9999 # (If there are no FXS ports, connect a FXO port to trunk (PSTN) \rightarrow press the button on the rear panel \rightarrow make a call to this FXO port \rightarrow dial 09 9999 # after DuDuDu tone.) Now, dialing can be used for system management.

Attention: The button on the rear panel is for maintenance purposes. Do not push it under normal conditions.

5.2 Configuration of Telecom Region ID

The default Region ID of this machine is USA. The purpose of Region ID is to adapt the PSTN specifications for dial tone, busy tone, country code and area code for each country.

If this machine is not installed in USA, the Region ID must be changed. The example below shows you how to change it to China.

Step 1

- 1. Dial *0 09 9999 # you will hear a Du Du Du tone.
- 2. Dial 95 07 # you will hear Du Du Du. (95 is the parameter for Region ID, 07 is China's Region ID. Refer the table below).
- 3. Dial 97 1# you will hear a Du Du Du tone.
- 4. Hang up the phone. The machine will restart automatically. When the CPU/ACT LED is ON, restart is complete.

Region ID Table

Country	Region ID	Country	Region ID
Australia	02	Korea	24
Philippines	03	Malaysia	26
Canada	06	Singapore	36
China	07	Slovenia	38
Vietnam	10	Spain	40



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France	12	Taiwan	43
Germany	13	Thailand	44
Hong Kong	15	Britain	46
Italy	22	USA	47
Japan	23		

5.3 Configuration of IP Address

This Chapter explains how to configure the **IP Address** of this device. Before configuration, apply for an IP from your system administrator. It can be a fixed Public IP. If fixed private IP is used, you have to refer the description of section 6.2 Open Server Port to Penetrate NAT to penetrate NAT (Firewall, Router) device. Please execute the steps after this chapter.

Example: Assume the IP address listed below. This IP address has to be in the same Subnet of the Router and can not conflict with the any IP address dispatched by DHCP.

IP Address: 192.168.1.11 Subnet Mask: 255.255.255.0 Default Gateway: 192.168.1.254

•	Ste	ep 2
	1.	Dial *0 09 9999 # you will hear a Du Du Du tone.
	2.	54 0 # Du Du Du (54 is the parameter, 0 represents a fixed IP)
	3.	55 192*168*1*11 # Du Du Du (55 is the parameter, it is followed by
		the IP Address)
	4.	56 255*255*255*0 # Du Du Du (56 is the parameter, it is followed by
		the Subnet Mask)
	5.	57 192*168*1*254 # Du Du Du (57 is the parameter, it is followed by
		the Default Gateway)

Note: To use the default IP information of this machine (IP Address: 192.168.0.2, Subnet Mask: 255.255.255.0), modify the subnet settings of the PC to be in the same subnet.

5.4 Configuration of My Phone Number

My Phone Number is the phone number for the device. It is recommended for ease of use to configure the number to be the same as the main the PSTN phone number of your company or the PSTN number of your home.



Example: Assume the information below.

Country Code : 86 (China)

Area Code : 21 (Shanghai)

Phone Number : 46286434

Attention: The 3 items above are required for all calls, no matter if they are long distance calls, international calls or not.

Step 3

- 1. Continued from last section (still in phone set programming mode)
- 2. 50 21 # Du Du Uu (50 is the parameter. 21 represents the Area Code of Shanghai)
- 51 46286434 # Du Du Du (51 is the parameter. It is followed by the Phone Number)

Note: Country code is not required, as it is configured in Region ID.

5.5 Restart

To implement the settings above, a restart of the machine is required.

Step 4

- 1. Continued from last section (still in phone set programming mode)
- 2. 98 1 # Du Du Uu (98 is the parameter, 1 represents Warm-restart)
- 3. Hang up the phone set.

When the LED of CPU/ACT is ON, the machine is ready.



6. Configuration of Router

A Router is a connection between the LAN and Internet. It may also have other functions, such as Firewall, DHCP Server, etc.

A DHCP Server can dispatch IP Addresses to PCs and devices in a LAN environment. In this example, we assume that this router has a DHCP Server activated.

6.1 Connection to Internet

Assume this machine is installed behind a Router and connected to others by straight through cable or crossover cable to Internet.



Then a SIP device (SIP Phone, Softphone, etc) or VoIP community user in Internet can communicate with desktop phone set as an extension. A desktop phone set at a remote site can also be communicated with as an extension.

6.1.1 Configuration

First, make sure you have logged into a PC with administrator permission and the PC is connected to the network.

Set the Network Interface Card (NIC) to accept IP from DHCP. Example: From **My Network Places**, right click and select **Properties**





Choose the Network connection type, right click and select Properties



Local Area Connection Properties will pop up. Select Internet Protocol (TCP/IP)

🕹 Local Area Connection Properties 🛛 🔹 🛛 🔀
General Authentication Advanced
Connect using:
Broadcom NetXtreme 57xx Gigabit Cc Configure
This connection uses the following items:
Image: Setwork Monitor Driver Image: Setwork Monitor Driver
Registration (TCP/IP)
Install Uninstall Properties
Description
Transmission Control Protocol/Internet Protocol. The default wide area network protocol that provides communication across diverse interconnected networks.
 Show icon in notification area when connected Notify me when this connection has limited or no connectivity
OK Cancel

Select Obtain an IP address automatically and Obtain DNS Server address automatically.



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Internet Protocol (TCP/IP) Properties
General Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
O Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
O Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced
OK Cancel

To confirm that the PC had gotten the IP address from Router click Start and Run. In the Run window enter "cmd"

Run	? 🛛
-	Type the name of a program, folder, document, or Internet resource, and Windows will open it for you.
Open:	Emd 🔍
	OK Cancel Browse

Input "ipconfig" into the window that will appear to see if an IP was received. (The IP you get will not be the same.)





- Enter the Web management of a Router by opening a browser and inputting the Router's IP address. (This example uses Edge-Core's VR-50 VPN Router with IP address 192.168.1.1)
- 2) Click **General Settings** from the selection on the left for the WAN settings.
- 3) Choose Static IP. Enter the **WAN IP**, **Subnet Mask** and **Default Gateway**, which can be gotten from your ISP.



6.2 Open Server Port to Penetrate NAT

VST3300 Series gateway may connect to an IP Sharing device and define a private IP Address to communicate with other VST3300 IP-PBXs.

In the following table, the port numbers used in VST3300 Series IP-PBX are listed. Open the following ports in the firewall with the port numbers listed in the table.

Packet type	Signaling Port Number
PBX Signaling	UDP 2000
SIP Signaling	UDP 5060
Voice Packet	UDP 10000~10999
FTP	TCP 21
Web	TCP 80
Telnet	TCP 23





Normally every server uses a specific port number depending on its type, e.g. WEB servers use TCP port 80, and FTP servers use TCP port 21. Configurations are made to map a specific port number to an internal private IP Address. Therefore, by IP Sharing, the packet will be transferred to a specific port number to its corresponding private IP Address. For example, if the private IP Address 192.168.1.36 is used in a LAN network with an IP Sharing device. It is mapped to a corresponding port number, TCP port 80. Therefore, any packets sent to TCP port 80 will be transferred to IP Address "192.168.1.36". For the VST3300 Series the UDP port 2000 is used for PBX Signaling. This should be reflected in the mapping port of the IP Sharing device.

Example: Opening UDP ports 10000~10999 for Voice Packets

(Edge-Core's VR-50 VPN Router is used for this example)

A) In VR-50's Web management, select Advanced/Forwarding. Click Service Management

d e e e e e e e	
	Advanced Setting => Forwarding
Home	Port Range Forwarding
General Setting	Service IP Address Enable
Advanced Setting	Al Twife (TCPUUDP/1~65535) 💌 192 . 168 .
- Forwarding	Service Management Add to list
- Unite Reaction	
One to One NAT	
- DDNS	
DHCP	
Tool	
Firewall	Delete relected application
VPN	
100	
	Port Triggering
	Application Illame Trigger Port Range Incoming Port Range
	to
	Add to list

B) A window will pop up. Enter a name to describe the port forwarding ("RTP" to indicate Voice Packets) Then select the protocol type (UDP). Then enter the Port Range (10,000 – 10,999) Click "Add to List" and the "Apply"



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Service Name RTP Protocol UDP V Port Range 10000 to 10999	Al Traffic [TCPRUDP/1~68536] DMS [UDP/53~53] FTP [TCP/21~21] HTTP TCP/80~80] HTTP Secondary [TCP/8880~8880] HTTPS [TCP/43~43] HTTPS Secondary [TCP/8443~8443] TFTP [UDP/85~63] MAP [TCP/13~113] POP3 [TCP/13~143] NNTP [TCP/13~113] POP3 [TCP/10~116] SMMP [UDP/161~161] SMMP [UDP/161~273] TELNET [TCP/25~23] TELNET Secondary [TCP/8023~8023]	8
Add to list Apply	Delete selected service	

C) In the Service drop down menu, select the Service Port you just created (RTP 10000-10999). Enter the IP Address that packets will directed to (192.168.1.36). Enable.

Home	Port Range Forwarding
General Setting	IP Address Feable
Advanced Setting	
DM2 Host	All Yafic (TCPU/OP/1=6553)
Forwarding	DNS JUDP/S3-531 Add to lat
UPHP	HTTP (TCP/80*80)
Routing	HTIP Seconday [TCP/8080*8080]
One to One NAT	HTTPS Seconday (TCP/8443-8443)
MMC Close	TFTP UDPAG-60
DUCD	NNTP [TCP/15/15]
DHCP	POP3 (TCP/110-110) (2009) 2002 (2001)
Tool	SWMP (DDP/16) T61) SWMP (DDP/25)
Firewall	TELNET [TCP/23-23] relected application
ritewan	TELNET 380 (TEP/382 392)
VPN	[DHCP [JDP:/67=67] [PETP (FCP://272=1723)
Log	IPSec [UDP/500"500]
	L2TP [JDP/1701*1701] Part Triggering
	PBC (UDP/2000 2000) For Part Banase Incoming Port Banase
	ATP/TCP/10000*109991



7. Checking before Dialing

7.1 Enter Web for verification

Enter Web Interface

- Open a browser, enter the IP address (192.168.1.36) configured for the device by phone set in section 5.3 Configuration of IP Address and used in the server port configuration in section 6.2 Open Server Port to Penetrate NAT
- 2. Input User name "WEB" (must be capital letters) and keep the Password blank. This is default value and can be modified later in Web interface.



3. The Web Management page will appear (see below)

E d g e – c o r E Powered by Accton				١	/ST	330	0 Se	⊚ erie	°s IP	РВХ			
System Summary			lo	lle	e	Bus	y 📕	0	ff Line	ſ	Disable		
💣 Home				<u></u>	(Conve	" rsation)			8				
😐 🛅 1.System													
😐 📮 2.Channel							Analog C	hanne	I				
■ ■ 3.SIP ■ 4.Dialing Plan	Ch	St	Suffix	Туре	DND	Fwd	Barring Class	T.38	Statistics In/Out	PickUp/ Group	Ext. No.	Voice Mail	Gain In/Out
-■ 5.IP Settings	1		11/OP*	FXS	-		0	-	0/0	V/1	1011	-	0/0
- 🖹 6.Phone Book	2		12/OP	FXS	-	-	0	-	0/0	V/1	1012	-	0/0
-■ 7.File Transfer	Ch	St	Access	Туре	Error Count	Fwd	Trunk Class	T.38	Statistics In/Out	Last N	umber D)ialed	Gain In/Out
-Search-	3		9	PSTN	0		0	V	0/0				0/0
-Restart-	4		9	PSTN	0	-	0	V	0/0		-		0/0



7.2 Check Related Configurations

Enter the Web page below to verify the settings

7.2.1 Basic Information

Web Path: 1.System\1.1Basic Information





7.2.2 IP Setting

Web Path: 5.IP Settings

(Need Warm-Restart)	Apply Cancel	
	IP Address Settings	
IP State:	Manual 🖌	Fixed ID type is
Public IP Address		Manual
IP/Port:	220.130.191.136/ 3983	Wanuai
Current Settings		
IP Address:	192.168.1.36	Example IP info
Subnet Mask:	255.255.255.0	192.168.1.36
Default Gateway:	192.168.1.1	255.255.255.0
Change To		192.168.1.1
IP Address:	192.168.1.36	
Subnet Mask:	255.255.255.0	
Default Gateway:	192.168.1.1	
	DNS Server	
Primary Address:	168.95.1.1	
Secondary Address:	0.0.0.0	
	Global IP Phone Number	

7.3 Restart

To implement the settings when all configurations are done, restart this machine by clicking **-Restart-** at left bottom of Web page. Wait a moment for the restart to complete.



Attention: Should the Router also require a restart it, first restart the router and then the VST3300 Series device.



7.4 Check LED Status

Check related LED indicators to ensure the devices are useable

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LED	Label	Description	ז Status		
10/100	Link/Activity	Network Link Up	ON	OK	
Ethernet		Sending/Receiving data packets	FLASH	ОК	
	100Mbps	Transmission Rate is 100Mbps	ON	ОК	
		Transmission Rate is 10Mbps	OFF	Possible failure. OK if Router is running 10Mbps	
Port Info	LOOP/ RING	Phone set is off the hook	ON	OK	
	OUT (FXS)	Phone set is on the hook/ Phone is idle	OFF	ОК	
		Ring signal sending	FLASH	OK	
	LOOP/ RING IN (FXO)	Incoming call is answered, loop current detected.	ON	ОК	
		Incoming call is ringing	FLASH	OK	
		No incoming call	OFF	OK	
Device	Power	Power supply is normal	ON	OK	
	Alarm	Errors detected during run of auto Hardware diagnostics	ON	Failure	
	Activity	CPU is in normal operation	ON	OK	
		CPU is running	FLASH	OK	
		System is able to access NTP Server (Time Server)	ON	ОК	
	NTP	System is trying to access to NTP Server	FLASH	Failure, unable to connect.	
		Not able to access to NTP Server	OFF	Failure, wait and try to re-connect.	
	CMNT SRVR	Registered to Community Server	ON	<u>Ö</u> K	
		Not registered to Community Server	OFF	Failure, unable to connect or failed to register CMNT SRVR	
	ITSP	Registered to ITSP	ON	OK	
		Not Registered to ITSP	OFF	Failure to connect or register to ITSP	

Router

Routers may have several LEDs indicating Power, WAN/LAN connection, etc. Check that the LEDs for Power, WAN connection and LAN ports connecting to the VST3300 Series device are active.



7.5 Trouble Shooting

7.5.1 The configuration is not correct

- If you find the configuration at section 7.2 Check Related Configuration is different from the setting you configured by phone set, then modify the settings from Web and click the Apply button.
- If you are unable to enter the Web, it is possible that the IP settings are not correct.
 Please configure it again according to 5.3 Configuration of IP Address
- If IP settings are modified again (IP Address, Subnet Mask, Default Gateway), then do a Restart after you clicking the <u>Apply</u> button. Enter Web again with the new IP address, such as http://192.168.14.8. If Subnet has changed, the IP settings in PC also need to change.

7.5.2 LED Errors

Check the LED indicators to insure the machine is usable.

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- TIME SRVR is OFF: Please check if Router is connected to the Internet. Please refer to chapter 6 Configuration of Router for configuration of Router. Also check the IP setting of VST3300 Series is able to connect Internet.
- CMNT SRVR is OFF: Please check or modify the setting of Router or the machine itself to see if TIME SRVR is ON. If TIME SRVR is ON, then it may due to the related problem of CMNT SRVR. If it happens and VST3300 Series really connects to Internet, please contact the distributor that you purchase.

Router

WAN is OFF: Check if correct LAN Cable (straight through, crossover) is used. WAN info of ISP is configured correctly. Please refer to section 6 Configuration of Router If the LAN LED indicators are OFF, check if correct LAN cables (straight through, crossover) have been used and the connections are correct. Refer to section 4.1.2 Connection of Network Cable.



8. Making Phone Calls

When the basic settings above have been configured, you can make ordinary calls as shown in the following.

8.1 Dialing between Extension

FXS ports of this product act as PBX extensions. Extension numbers are from 1011 to 1026 (depending on model's port number). Make a call by dialing an extension number.



Example: User of Ext. 1011 dials $1013 \rightarrow 1013$ is rings \rightarrow user of 1013 answers the phone. User of Ext. 1013 dials $1011 \rightarrow 1011$ is rings \rightarrow user of 1011 answers the phone.

8.2 Make and Answer Trunk Calls

Extensions can seize a trunk and make PSTN calls

A trunk is seized from the highest FXO port number of downward. Please make sure that the PSTN lines are connected starting from the highest number FXO/Line port.



Example:

- User of Ext. 1011 dials 9 and trunk dial tone is heard→then dials 82261234 (this is a PSTN number. Add a country code and area code if required.)
- 2. A caller from the PSTN dials the VST3300 Series Device's phone number \rightarrow



auto-attendant is heard \rightarrow caller dials 1011 \rightarrow 1011 rings \rightarrow User of Ext. 1011 answers the phone.

8.3 Making a Call to the Distributor

The VST3300 Series should have the support from its distributor. In addition to a PSTN phone number, they should also provide Network Phone Number. You can try to make a service call (IP Phone Number of Community) to verify the IP call. Please make sure the CMNT SRVR LED on front panel is ON before making an IP phone call. If it is OFF, first solve this problem. Refer to section 7.5.2 LED Errors



Each VST3300 IP-PBX has a unique IP Phone number. Besides making calls between two VST3300 Series devices, you can also can make call to others by IP Phone number. (Limited to devices connected to the internet, may not work for those under NAT)

How to learn the IP Phone Number of the device:

A label (example shown below) on the bottom of each device shows the IP Phone number of the unit.

MODEL NAME:	
PRODUCT S/N: 1773604918042300006 8	
MAC ADDRESS: 000362902737	
IP PHONE NO: +28 -6-201 -1006	
Input Rating: 5V / 1.5A DC 12V / 0.5A DC	IP Phone No. of
· 檢磁 3902C635	this machine
This unit complies with Part 15 & 68 of FCC Rules.	
FCC REG.NO.:US:VTLMF06BPF3504 REN: 0.6B	
USOC JACK: RJ11C	
Operation is subject to following two conditions:	
(1) This device may not cause narmful interference	
(2) This device must accept any interference received including interference that may cause undesired operation.	
Region: Taiwan	
MADE IN TAIWAN 00450A05	



Dialing Method:

Not only the number structure, but also dialing method of IP Phone Numbers are the same as traditional telecoms.

First, what is the number you want to dial? Compare it with your own number.

- If the country code and area code are the same, you only need to dial **+office code+ subscriber number+#
- If the country code is the same, but area code is different, you need to dial **+long distance access code+area code +office code+subscriber number+#
- If the country code is different, you need to dial **+International access code+country code+area code +office code+ subscriber number+#

Below are examples: Assume the Long Distance access code is "0" and the International Access code is 002.

Calling side IP Phone number	Called side IP Phone number	Dialing method
28-6-202-1000	28-6-202-7799	 ** 202 7799 #, wait DISA answer the call and then dial extension. ** 202 7799 11 #, one step dialing
28-6-202-1000	28-7-200-6600	 ** 07 200 6600 #, wait DISA answer the call and then dial extension. ** 07 200 6600 11 #,, one step dialing
28-6-202-1000	86-21-8226-1234	 ** 002 86 21 8226 1234#, wait DISA answer the call and then dial extension. ** 002 86 21 8226 1234 11#, one step dialing

Example:

Assume the service number is 28-6-201-7799, the IP Phone Number of the user's VTS3300 Series device is 28-6-201-7688

- 1. User of Ext. 1011 dial **28-6-201-7799# and is answered by the auto-attendant of customer service. The user then dials according to the auto-attendant's greeting.
- Please ask distributor to dial **28-6-201-7688# (the user's VST3300 device). The auto-attendent of this machine will answer the call. The distributor can then dial Ext. 1011 and the user of Ext 1011 will answer the call.



9. Other Important Notices

9.1 Change Password

A set of management passwords should be configured to prevent network invasion. Passwords for FTP and Console must be set by Console. Web passwords can be set in the Web management page.

9.1.1 How to Use Console or Telnet

• Entering Console management interface

After connecting the PC to the VST3300 Series device via a Console cable, Power on the PC and configure the PC parameters as follows (use Windows HyperTerminal software):

- Speed : 9600
- Data Bit : 8
- Parity Check : None
- Stop Bit : 1
- Flow Control : None



• Using Telnet to enter management interface

Telnet is usable even if you don't have a Console cable. When previous section 6.1.1 Configuration has been completed, execute the following Telnet commands to connect.



Example: telnet 192.168.1.36



9.1.2 Change Web Password

Configure a set of management passwords to prevent network invasion. Specify 1~6 digits or English letters. This password can be changed by Web or Console.

• Configure it from Web

Web Folder: 1.System\1.1Basic Information

	Web Management Password	
User Name:	WEB	
Password:		
Confirm Password:		

Input User Name and repeat the Password twice Click the Apply button when it is done.

• Configure it from Console or Telnet



(Example: configure the Web password to 123, Input is in **Red-Bold**)

IP PBX >enable

IP PBX #configure

Enter configuration commands, one per line. End with CNTL/Z

IP PBX (config)#password web_write password 123

IP PBX (config)#exit



9.1.3 Change Password of FTP, Telnet and Console

Configure a set of Console password (shares with Telnet and FTP) to prevent network invasion. Specify 1~6 digits or English letters.



(In this example, configure Console and FTP password to 123, Input is in **Red-Bold**)

IP PBX >enable

IP PBX #configure

Enter configuration commands, one per line. End with CNTL/Z

IP PBX (config)#password console write 123

IP PBX (config)#exit

9.2 Change Service Port

9.2.1 Change Service Port of Http, Console, FTP

Change the service port to make the device more stable and prevent attacks from hackers.

• Configure it from Console or Telnet

```
By Console:
```

Example: configure Service Port of Web (http) to 8080, Telnet to 7070, and FTP to 6060. The Service port range is 1~65534. Be careful to not make any conflicts with any existing Service Port. (Input is in **Red-Bold**)

IP PBX>enable IP PBX#configure Enter configuration commands, one per line. End with CNTL/Z IP PBX(config)#service_port web 8080



System need to restart

IP PBX(config)#service_port telnet 7070

System need to restart

IP PBX(config)#service_port ftp 6060

System need to restart

IP PBX(config)#exit

IP PBX#restart

This command resets the system. System will restart operation code agent. Reset system, [Y]es or [N]o or [P]end? Yes

9.2.2 How to Enter System with Customized Service Port.

Before entering the System with a Customized Service Port, first specify this service port.

Example: (continued from the previous sections) Assume the IP of the device is 192.168.1.36

*To enter Web, please input http://192.168.1.36:8080

*To enter Telnet, please input Telnet 192.168.1.36 7070

*In FTP client software, such as WS FTP and Cute FTP, you can change a server port number. To enter FTP, change the default from 21 to 6060. Note: the default account is "FTP" and cannot be changed.

9.3 Recordable Greetings

Greetings are pre-recorded voice messages that are played for incoming PSTN or IP calls. They explain how to dial a number or give status information. Pre-recorded greetings are saved in the device. They are also recordable to meet users' needs. Example:

Greeting number	Description of Greeting	Example of Message
Greeting (1)	For initial greeting of welcome, office hours, etc.	Good day, this is XX XXX, please dial an extension number or 0 for Operator
Greeting (2)	For line is busy message	The line is busy, please dial another extension number or 0 for operator
Greeting (3)	For wrong number/not recognized number	The number you dialed is not recognized, please dial again
Greeting (4)	For waiting/call transfer	Thank you, please wait a moment



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Greeting number	Description of Greeting	Example of Message
Greeting (5)	For holiday greetings, off duty messages, etc.	This is off-duty time, please dial an extension number directly or call again during office hours
Greeting (6)	For no answer	Your call has not been answered, please dial another extension number or 0 for Operator
Greeting (7)	For inability to answer the call due to possible network problem or line problem	Your call was could not be answered, please dial other extension number or 0 for operator
Greeting (8)	When another IP-PBX activates a Consult Transfer. The calling side of the device will hear this greeting section	Default is music. Possible recording: "Please hold, the person you are calling is making a consult transfer with another party"

For the method to record greeting, please refer to Operation Manual Chapter 12, System Greeting of Auto Attendant

9.4 Other References

- For configuration with different purposes and details of installation, please refer to the VST3300 Series Operation Manual.
- For the different dialing method of users, please refer to VST3300 User Dialing Guide
- For the detailed parameters of each function, please refer to the VST3300 Series Technical Manual. (future release)
- For the integration of this device with other products, please refer to VST3300 Series Application Manual. (future release)
- For troubleshooting (including installation and operation), please refer to the VST3300 Series Maintenance Manual. (future release)

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