

V500 Series

IP Phone

Quick Start Guide

Version 1.00

8/2007

Edition 1

The logo for ZyXEL, featuring the word "ZyXEL" in a bold, blue, sans-serif font. The "Z" and "y" are lowercase, while "XEL" are uppercase. The letters are closely spaced and have a slight shadow effect.

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Overview

At the time of writing, this Quick Start Guide covers the following models:

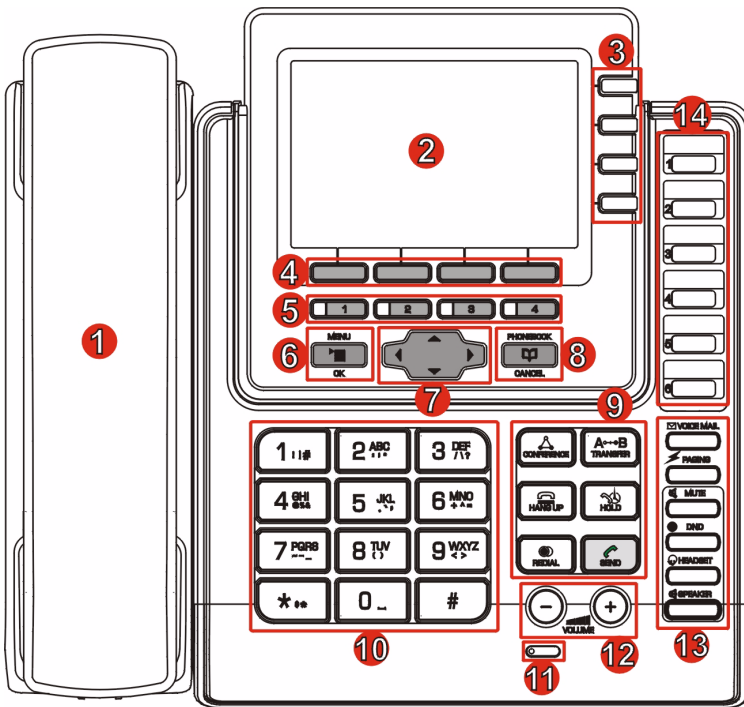
- V500: IP Phone.
- V501: IP Phone with Power over Ethernet (PoE).

This Quick Start Guide shows you how to set up and use your V500. It includes the following sections:

- **Hardware and Connections** - introduces the physical features of the V500 and shows you how to connect it to your network.
- **Initial Configuration** - discusses how to set up your network configuration and SIP server registration using the V500's LCD screen and keypad.
- **Phone Operation** - covers how to use the V500's basic telephone functions, such as making a call.

You can also configure the V500 via the web configurator using a computer connected to the V500's **PC** port. See your User's Guide for details.












1 Hardware and Connections



1	Handset
2	LCD screen
3	Account keys
4	Softkeys
5	Line keys
6	Menu
7	Navigator
8	Phonebook
9	Action keys
10	Alphanumeric keypad
11	Microphone
12	Volume keys
13	Function keys
14	Custom keys

The following table describes some of the hardware features used for basic operations. See the hardware chapter in your User's Guide for full descriptions of all features.

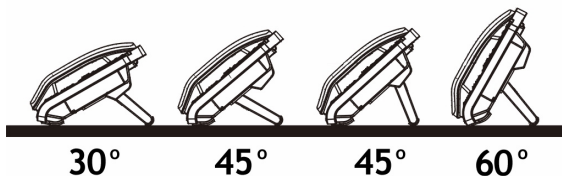
FEATURE	DESCRIPTION
Account keys	<p>Use these to select the SIP account you want to use. You can configure up to four SIP accounts on the V500.</p> <p>Note: You can select an account only when it has been configured (use the Advanced Setting > SIP Configuration LCD screen menus to configure an account).</p>

FEATURE	DESCRIPTION
Softkeys	These keys' functions depend on the screen currently displayed on the LCD screen. A word or symbol displayed on the LCD screen above a softkey shows its current function.
Line keys	Press these to select the phone line you want to use. The V500 has four phone lines.
Menu 	Press this to display the V500's configuration menu. Press it again to exit the menu. The menu is not accessible when a call is in progress.
Navigator 	Press these keys to move around the V500's screens. Press  to go up one line in a menu, and press  to go down one line. Press  to move one space to the right, and press  to move one space to the left. You can also press  to make a menu selection, and press  to return to the previous menu.
Phonebook 	Use this to display the list of contacts stored in the V500. You can add, edit and delete phonebook entries from this screen.
Alphanumeric keypad	Use these to enter numbers, letters and symbols. Use the # key to switch between Number mode, Uppercase mode, Lowercase mode and Symbol mode.
Microphone	The microphone is active when the V500 is in speakerphone mode.
Volume keys	Use the + key to increase the volume, and use the - key to decrease it. <ul style="list-style-type: none"> When you use the handset, these keys control the handset's speaking and listening volume. When you use the headset, these keys control the speaking and listening volume on the headphone () and microphone () ports on the V500. When you use the speakerphone, these keys control the internal speaker and microphone (Mic) volume.

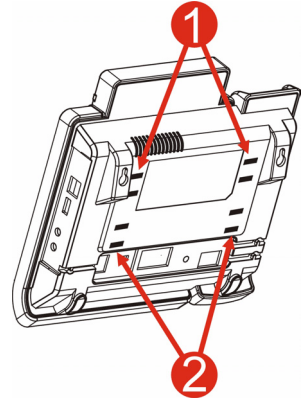
1.1 Stand Installation

Attach the included stand, unless you want to hang the V500 on a wall (see your User's Guide for wall-mounting instructions).

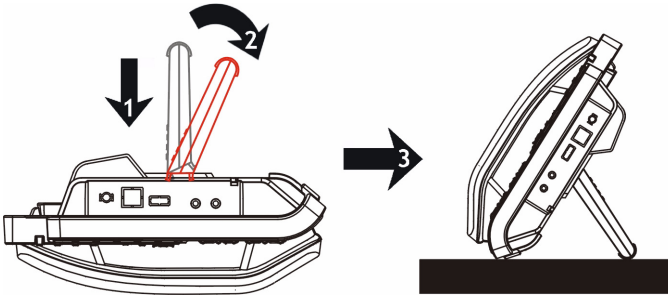
There are four ways to attach the included stand, as shown.



If you want to stand the V500 at its lower angle (nearer the horizontal) use the holes marked **1** in the following figure. Use the holes marked **2** to stand the V500 at its higher angle (nearer the vertical).

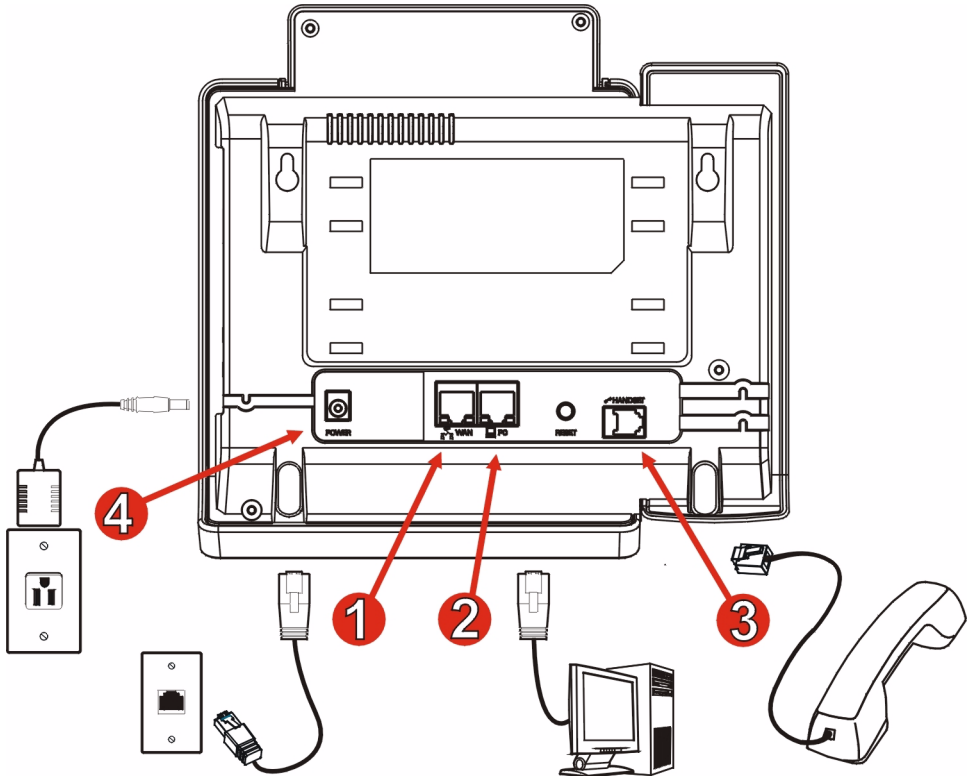


Take the stand and connect it to the V500 as shown in the following figure.



- 1** Insert the two connectors on the longer side of the stand first.
- 2** Pivot the stand down until the other two connectors are inserted.
- 3** Turn the V500 the right way up. Check that the stand is securely attached.

1.2 Rear Panel Hardware Connections



1 WAN: Use an Ethernet cable to connect the V500 to your network.

V501 only: if you are using Power over Ethernet (PoE), connect the Ethernet cable supplying power to this port. See [Section 1.3 on page 6](#) for more information on PoE.

2 PC (optional): Use an Ethernet cable to connect your computer to the **PC** port on the V500 to access your network through the V500, or to configure the V500 using the web configurator (see your User's Guide for information on using the web configurator).

3 HANDSET: Connect the included handset cable to the **HANDSET** port on the V500. Connect the other end to the handset. Hang up the receiver before you connect the power.

4 POWER: Connect the included power adaptor to the **POWER** socket on the V500. Plug the power adaptor into an appropriate power source.

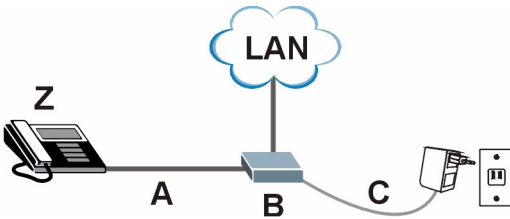
V501 only: if you are using Power over Ethernet (PoE), you do not need to connect the power adaptor.

1.3 V501 Only: Power over Ethernet (Optional)

Power over Ethernet (PoE) is the ability to provide power to your V501 via an 8-pin CAT 5 Ethernet cable, eliminating the need for a nearby power source.

A PoE injector (not included) is also needed to supply the Ethernet cable with power. This feature allows increased flexibility in the location of your V501.

In the following figure, **Z** is your V501, **A** is the CAT 5 Ethernet cable, **B** is the PoE injector and **C** is the power cable.



2 Initial Configuration

This section describes how to use the phone's LCD screen menus to:

- [Set up Your Network Connection](#)
- and
- [Set up Your Voice Account](#)

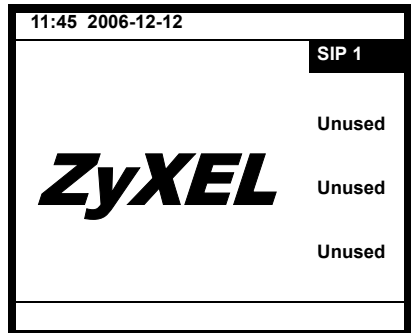
The phone does not need to be connected to a computer to do this.



When entering information, use the **#** key to cycle between **Uppercase**, **Lowercase**, **Symbol** and **Number** modes. The current mode is displayed on the LCD screen. Press a key multiple times to access the different characters. For example, in **Uppercase** mode press **9** four times to enter "**Z**".

2.1 Set up Your Network Connection

When you have finished your hardware connections, look at the LCD screen. The V500 displays your Voice over Internet (VoIP) account registration status in the tabs on the right, and time and date details in the top section.



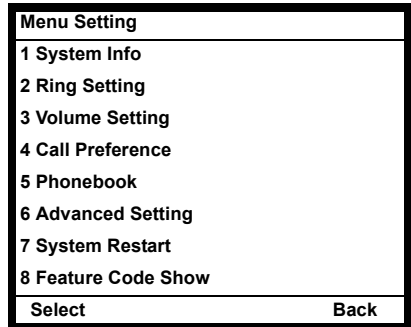
The V500 allows you to configure up to four VoIP accounts (also known as SIP accounts). When a VoIP account is not active, **Unused** displays. When an account is active but not successfully registered, **No Reg** displays in the tab. When an account is active and successfully registered, the tab displays the account name (**SIP 1** in this example).



If the LCD screen displays nothing, recheck your hardware connections. See section 1.2.

Follow these steps to configure your network settings.

- 1 Press the **Menu** key, and use the navigator to select **Advanced Setting**. Press **Select**.

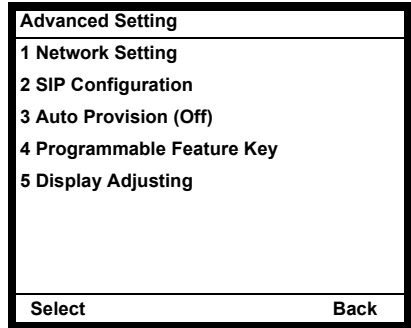


You can also use the alphanumeric keypad to make your selections in the LCD screen. For example, you can press the **6** key in the **Menu Setting** screen (above) to go to the **Advanced Setting** screen.

2 Select **Network Setting**.

Choose from the following options:

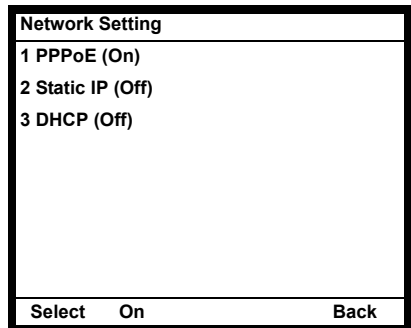
- If you were given a username and password for network access, go to section 2.1.1 on page 8.
- If you were given an IP address and subnet mask to use, go to section 2.1.2 on page 9.
- If you were not given an IP address to use, go to section 2.1.3 on page 10.



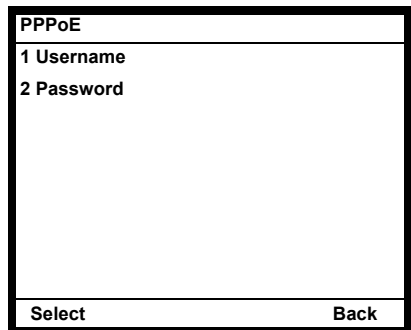
2.1.1 Set Up PPPoE

- 1 If you were given a username and password, select **PPPoE (Off)** in the **Advanced Setting > Network Setting** menu. Press the **On** softkey to have the V500 use PPPoE.

The screen displays **PPPoE (On)**. Press **Select** to enter your information.



- 2 Press **1** to enter the user name for your account.



- 3 The **PPPoE Username** screen displays. Press **Edit** and enter your user name.

PPPoE Username

Current:
New: User123

Number mode

Save <- Back

Press **Save** when you are done, then press **2** to enter the **PPPoE Password** screen. Press **Edit**.

- 4 Enter your password, then go down to **Confirm** and re-enter it. Press **Save** when you are done.

Edit Password

Current:
New: NewPassword
Confirm: NewPassword

Lowercase mode

Save <- Back

2.1.2 Set Up a Static IP Address

- 1 If you have an IP address to use, select **Static IP (Off)** in the **Advanced Setting > Network Setting** menu. Press the **On** softkey to have the V500 use a static IP address.

The screen displays **Static IP (On)**. Press **Select** to enter your information.

Network Setting	
1 PPPoE (Off)	
2 Static IP (On)	
3 DHCP (Off)	
<div style="display: flex; justify-content: space-between;"> Select Back </div>	

- 2 Use the options in this menu to enter the static IP address, gateway and DNS information provided by your Internet Service Provider (ISP) or network administrator. Press **Back** to return to the previous screen.

Static IP	
1 IP Address	
2 Default Gateway	
3 Subnet Mask	
4 1st DNS	
5 2nd DNS	
<div style="display: flex; justify-content: space-between;"> Select Back </div>	

2.1.3 Get an IP Address Automatically



The V500 is set to get an IP address automatically by default.

- 1 If you have neither a username and password nor an IP address to use, select **DHCP (Off)** in the **Advanced Setting > Network Setting** menu. Press the **On** softkey to have the V500 use DHCP.

DHCP allows your V500 to get an IP address automatically. Press **Back** to return to the previous screen.

Network Setting	
1 PPPoE (Off)	
2 Static IP (Off)	
3 DHCP (On)	
<div style="display: flex; justify-content: space-between;"> Select Back </div>	

2.2 Set up Your Voice Account

Follow these steps to configure your VoIP account.

- 1 Press the **Menu** key, then press **6** to enter the **Advanced Setting** menu.
- 2 Press **2** to enter the **SIP Configuration** menu.
- 3 If **VoIP 1 Configuration** does not display **Active**, select its entry and press the **Active** softkey. If the SIP account is not active, you cannot use it to make or receive calls.

SIP Configuration		
1	VoIP 1 Configuration (On)	
2	VoIP 2 Configuration (Off)	
3	VoIP 3 Configuration (Off)	
4	VoIP 4 Configuration (Off)	
Select Off Back		

- 4 Press **1** to select the **SIP 1 Configuration** menu. You can configure up to four SIP accounts on the V500 (see the User's Guide for details).

Enter the information exactly as given to you by your VoIP service provider.



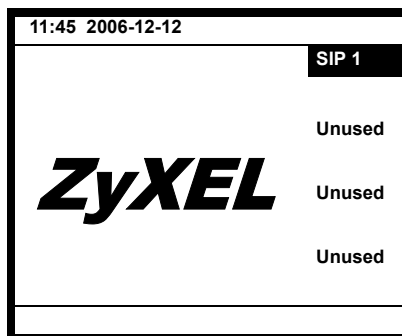
If your VoIP service provider did not give you information to use for any of the fields in this menu, leave them at their default settings.

The following table describes the fields in this menu.

FIELD	DESCRIPTION
1 Display Name	Choose a name for this SIP account. This name displays in the SIP account's tab on the V500's LCD screen.
2 SIP Number	This is your SIP account number. If you have a SIP account like 1234567@voip-provider.com , the SIP Number is 1234567 .
3 SIP Local Port	This is the port on the V500 used for SIP calls. The default is 5060.
4 SIP Server Addr	This is the IP address of the server your VoIP service provider uses for SIP calls.
5 SIP Server Port	This is the port on the SIP server used for SIP calls. The default is 5060.
6 SIP Register Server	This is the IP address of the server your VoIP service provider uses to register the V500. If your VoIP service provider did not give you a specific SIP register server address, enter the SIP Server address again.

FIELD	DESCRIPTION
7 SIP Register Port	This is the port the SIP register server uses to register the V500. The default is 5060.
8 SIP Service Domain	If you have a SIP account like 1234567@voip-provider.com , the SIP Service Domain is voip-provider.com .
9 SIP Auth ID	This is the user name for this SIP account.
10 Auth Password	This is the password for this SIP account.
11 Codec Priority	Your V500 and the SIP server must use the same voice codec (coder / decoder). Select the codecs you want the V500 to try using first, second and third.
12 Voicemail Number	This is the number you enter to access your voicemail messages for this SIP account.
13 DNS SRV / DNS	Turn this on (select On) to have the V500 use the DNS servers you configured in section 2.1.2. Turn it off (select Off) if you do not want the V500 to use DNS. DNS SRV is off by default.
14 Call ID	Use this to turn outgoing caller ID on (On) or off (Off).
15 NAT Setting	Use this to configure Network Address Translation.
16 Backup SIP Server	Use this to set up the SIP server(s) the V500 uses if it cannot access the main SIP server.

- 5 When you are done configuring **SIP 1 Configuration**, press **Back**. The upper right part of the LCD screen displays the SIP account name you registered (“**SIP1**”, in this example).
- 6 See section 3 for how to test your V500’s configuration by making a call.



If your SIP account does not register successfully (**Unused** or **No Reg** is still displayed in the main screen) or you cannot make a call, check your connections and re-enter your SIP settings. Restart the V500 (turn the power off, then back on). If this does not help, contact your network administrator or VoIP service provider.

3 Phone Operation

This section describes how to use your V500's basic telephone functions.



For more information on the V500's telephone functions, see the hardware chapter in your User's Guide.

MAKING A CALL

1	Pick up the handset. A Line key LED turns on. The LCD screen shows which SIP account you are using. Change these, if you want, using the Line and Account keys.
2	Check that you can hear a dial tone.
3	Enter the number you want to call. If you have numbers stored in the V500's phone book, you can use the navigator to select from the list of entries. See your User's Guide for more information on using the phone book.
4	Press the yellow SEND key to start the call.

RECEIVING A CALL

When the phone rings, do one of the following:

- Pick up the handset to receive the call using the handset.
- Press the **SPEAKER** key to receive the call using the internal speakerphone.
- Press the **HEADSET** key to receive the call using an external headset.

ENDING A CALL

When you want to end a call, press the **HANG UP** key. Alternatively, do one of the following:

- If you are using the handset, replace it in the cradle.
- If you are using the internal speakerphone, press the **SPEAKER** key.
- If you are using an external headset, press the **HEADSET** key.

PLACING A CALL ON HOLD

Press the **HOLD** key once to place a call on hold. Press it a second time to return to the call. You can make a call on another line (press another line key) then return to the call on hold.

USING VOICEMAIL

Once you have configured your SIP account's voicemail number on the V500, press the **VOICEMAIL** key to check your messages.

Use the **Advanced Setting > SIP Configuration > SIP 1 ~ 4 Configuration > Voicemail Number** menu to set the voicemail account number. The account you check when you press the **VOICEMAIL** key depends on which SIP account is currently active. See your User's Guide for more information.

MAKING A CONFERENCE CALL

Take the following steps to make a three-way conference call.

- | | |
|----------|--|
| 1 | Either start a call, or receive a call. Make sure you know which line the call is using (the corresponding Line key lights up). |
| 2 | Ensure the call is active (you can talk with the other person). Press the Conference key. This "marks" the first call you want to mix into the conference call. |
| 3 | Press another Line key. You can either receive an incoming call, make another outgoing call, or resume an existing call that you previously put on hold. |
| 4 | Ensure the call is active and press the Conference key again. The three-way conference call begins. All three parties can talk with one another. |

TRANSFERRING A CALL

Take the following steps to transfer an ongoing call to another phone number.

- | | |
|----------|--|
| 1 | During the ongoing call, press the Transfer key. The next available line automatically activates. Ensure you can hear a dial tone. |
| 2 | Dial the number to which you want to transfer the call. |
| 3 | To transfer the call, either: <ul style="list-style-type: none"> • Wait until you hear the ringing tone, then put down the handset, press the Speaker key or the Headset key (depending on which you are using) to end the call. • Wait for the other person to answer, then end the call. |

Viewing a Product's Certification(s)

- 1** Go to www.zyxel.com.
- 2** Select your product from the drop-down list box on the ZyXEL home page to go to that product's page.
- 3** Select the certification you wish to view from this page.