



AVANTI 3015ip TELEPHONE INSTALLATION NOTES

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The information in this publication refers to the Telrad UNITE IP family of telephone systems, including the UNITE IP I-100, UNITE IP C-128, UNITE IP C-400 and UNITE IP C-1000 systems, Release e2e-1, as of January 2004. Telrad Connegy, Inc., reserves the right to make changes in the equipment described in this manual without notification. However, changes in the equipment do not necessarily render this manual invalid.

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FCC Regulations - Warning for Installations in the USA

This equipment generates, uses and can radiate radio frequency energy and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user should contact the Telrad Connegy Field Service Department, at the telephone number listed below, to correct the interference problem. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of the FCC Rules which are designed to provide reasonable protection against such interference when operated in a commercial environment.

Avanti 3015ip Installation Notes

1. GENERAL

This document describes the procedures necessary for the installation and initial setup of the Telrad Connegy Avanti 305ip telephone.

2. TYPOGRAPHIC CONVENTIONS

Bolded text in brackets indicates a fixed button on the Avanti 3015ip telephone, as in **[SPEED DIAL/PROGRAM]**.

Bolded italic text in curly brackets indicates a softkey on the telephone, as in ***{YES}***.

The Courier font indicates text displayed on the Avanti 3015ip screen, as in TVS Menu.

3. AVANTI 3015ip INSTALLATION ARCHITECTURE

The Avanti 3015ip requires a link to a power source and one to the data network. If Power-over-Ethernet is not enabled in the organization, it is necessary to use a power adaptor.

Optionally, a PC can be connected to the network through the Avanti 3015ip. Both the telephone and the PC are connected to the network through a full-line-speed Ethernet switch. This ensures audio quality and priority regardless of network activity.

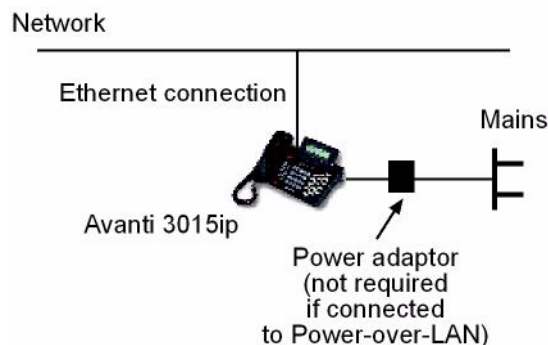


Figure 1 Avanti 3015ip basic external connection schematics

The Avanti 3015ip connects directly to an Ethernet network. If connected to an office local area network (LAN), the Avanti 3015ip requires a category 5 10/100 BaseT UTP cable with an RJ-45 connector. Figure 1, above, shows the basic external connection architecture of the Avanti 3015ip.

3.1 CONNECTING THE AVANTI 3015IP THROUGH THE WAN

The Avanti 3015ip can be connected at a remote location through Public Internet Wide Area Network (WAN). Connection to the WAN requires a broadband internet link, such as a DSL or cable modem.

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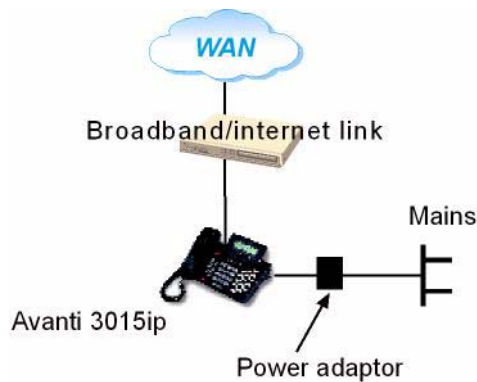


Figure 2 Connection to the WAN

3.2 PC CONNECTION

A PC can be connected to the network through the Avanti 3015ip. In this case, the Avanti 3015ip is transparent to the PC operation. Calls arriving or made by the Avanti 3015ip do not affect PC operation, nor does this operation interfere with the Avanti 3015ip's.

When connecting a PC through the Avanti 3015ip, the data cable from the Avanti 3015ip (see Figure 4, below) connects to an Ethernet network card in the PC.

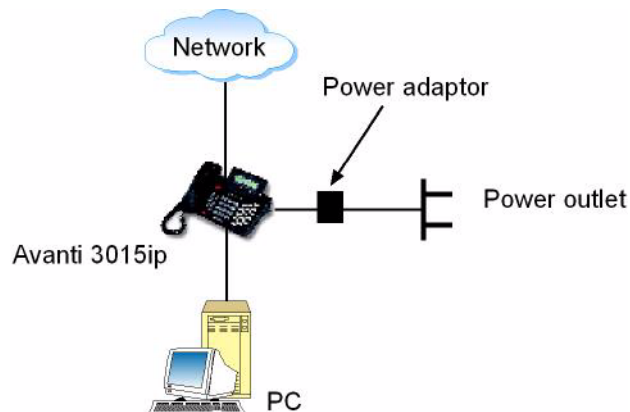


Figure 3 PC connection through Avanti 3015ip

4. INSTALLING THE AVANTI 3015ip

Before beginning the installation and setup process, make sure you have a list of all the IP addresses of the new extensions, as well as the address of the IP Server, the FTP Server, etc. The source for all these addresses is the customer's IT manager.

After unpacking and visually inspecting the Avanti 3015ip and its accessories, connect the Avanti 3015ip to the network (see Figure 4). If using a power adaptor, connect the data line first, then connect the power adaptor following the instructions in Section 5.3 (See Figure 4, below).

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If Power-over-EtherNet is enabled, follow the instructions in Section 5.3 before inserting the data connector on the rear side jack of the Avanti 3015ip (see Figure 4).

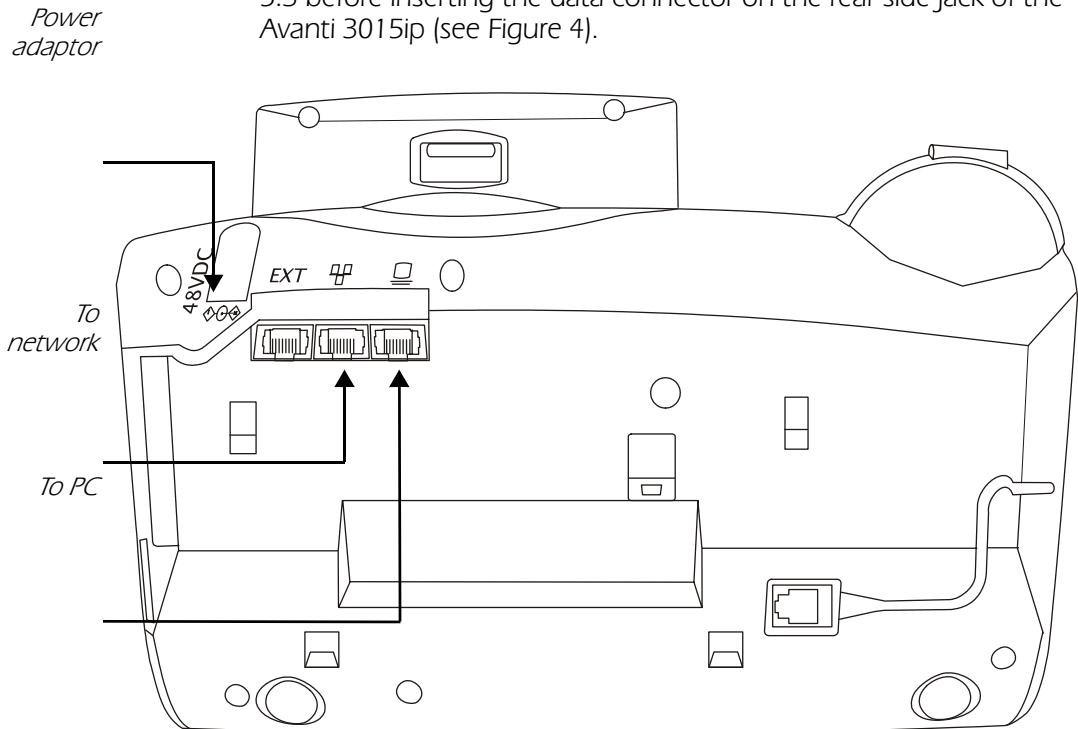


Figure 4 Avanti 3015ip external connection sockets

If this is the first time the Avanti 3015 ip is connected, perform the initial setup procedure.

5. INITIAL SETUP

5.1 SETUP CONTROLS

During the setup process you are required to enter data, confirm your choices, etc. In addition to the softkeys appearing on the screen, you may use the following buttons:

Keys	Meaning
[LO HI]	Use for navigating along an address line, same as with the arrow keys on a computer keyboard.
Dialpad buttons	Use for digit input
[#]	Saves the data entered and continues the setup process. Same as <Enter> on a computer keyboard.
[*]	Dot (".")
[0], [1]	For boolean parameters (i.e. parameters whose possible values are Yes or No), pressing [0] changes the value to No, [1] changes to Yes. This can be used instead of pressing the {YES} and {NO} softkeys displayed after pressing {EDIT}.

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Keys	Meaning
Softkeys	When required to enter a value manually, remember that the leftmost softkey under the display accepts the present value and moves on to the next option, while the middle softkey returns you to the previous screen.

5.2 DHCP CONFIGURATION PRINCIPLES

Section 4.11, "Working with DHCP" in the UNITE IP TVSe Server System Manual, contains a detailed explanation of the principles of configuration for DHCP support.

The configuration options for the Avanti 3015ip telephone are organized in three menus: the IP Menu, the TVS Menu and the User Menu. Following is a description of these menus and the navigation possibilities between them.

TIP You can press [LO HI] upon entry to a screen to place the cursor directly on an IP address line. Pressing LO will place the cursor in the first field, while pressing HI will locate it on the last field. You can navigate through the fields of an input field using [LO HI] as required. The digits you type will overwrite existing values.

To jump to the next field after entering less than three digits on an IP address, press [*].

If a DHCP Server is enabled in the system, it may be configured in one of two modes:

- *Addressing only mode:* The DHCP server provides an IP address for the IP extension, as well as the subnet and router addresses, but the FTP Server address needs to be entered manually.
- *Full info mode:* The DHCP server provides IP addresses and additional pre-defined data, such as the FTP Server address.

The Avanti 3015ip Setup procedure is performed by means of three menus:

- *IP Menu:* Enables you to configure DHCP support.
- *TVS Menu:* Enables definition of the telephone's IP address and network submask, as well as of the FTP Server's IP address, in case it was not defined on the DHCP Server.
- *User Menu:* Enables you to define the Avanti 3015ip extension number and password. The password must be the

5.3 AUTOMATIC ERROR DETECTION

If you enter a value greater than 255 in one of the fields of an IP address, the Avanti 3015ip Setup software will automatically detect it and reject your input.

The network fields of the Phone IP address and Router IP address must be the same, as yielded by a logical AND operation between each of these addresses and the Subnet Mask. Otherwise, at the end of the IP Menu the display will show:

```
IP CONFIG. ERROR
<BACK> <EXIT>
```

Pressing {EXIT} forces the Setup program to store the address you entered. If you press {BACK}, the menu is displayed again from the beginning, so that you can correct the wrong entry.

5.4 THE SETUP PROCEDURE

1. To begin the Setup procedure, connect the Avanti 3015ip to the power source while at the same time holding down the **[SPEED DIAL/PROGRAM]** button. After a few seconds the display shows:

Phone Configuration
<Boot> <Edit> <Info>

{Info} displays general phone information like the MAC address.
{Boot} initiates the startup process.

2. Press **{Edit}** to enter the Setup procedure,

The display shows
IP Menu?

The softkeys change to **{YES}** and **{NO}**. From this point on, unless indicated otherwise, the left softkey will display the next choice in the menu, and the middle softkey the previous one.

3. Press **{YES}**

The display shows
DHCP - Y

The value of the DHCP (Dynamic Host Configuration Protocol) parameter should be Yes, unless you know there is no DHCP Server.

After pressing the **{NEXT}** softkey, you are asked whether you want to proceed

4. Exit this menu?

5. Press **{NEXT}** to proceed, or **{BACK}** to return to the DHCP parameter.

☞ **If DHCP = Yes** (otherwise proceed to step 11.) you are asked:
Use DHCP FTP - Yes

6. The FTP server is where the application software resides. If no FTP Server IP address was programmed on the DHCP Server (ask the organization's IT manager for details on the DHCP Server configuration), you should change this parameter's value to No. Otherwise, press **{NEXT}** to continue to step 9.

7. If you changed the value of the DHCP FTP option to No, you will be asked to enter the IP address of the TVSe FTP Server:

FTP Server IP Addr.

8. Enter the address of the TVSe FTP Server and press **{NEXT}**.

9. The TVS Menu prompt appears:

TVS Menu

10. Press **{YES}** to enter the TVS Menu, or **{NO}** to proceed to the User Menu.

11. If the DHCP value was No, you will be asked for the extension's IP address:

Phone IP Address
[192.333.22.123]

or other address previously modified.

12. Enter the extension's IP address

TIP You can navigate along the DN line by pressing **[LO HI]** when the TVS User DN screen is displayed.

If the currently stored DN has four digits and you wish to enter a shorter number, move the cursor leftward by pressing the **LO** side of the **[LO HI]** button until it reaches the beginning of the line and the unwanted digits disappear.

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NOTE If you attempt to type in a value greater than 255, the digits you entered will be displayed briefly then disappear. See above, Section 5.3.

Once you enter the IP address, the display shows
Network Subnet Mask
[255.255. 0. 0]

The subnet mask must always represent a sequence whose left (most significant) side consists of consecutive 1s, and its right (less significant) side of consecutive 0s. No mixing of 1s and 0s can occur. The following table shows examples of legal and illegal binary subnet masks and their decimal equivalents:

Binary	Decimal	Legal
11111111 11111111 00000000 00000000	255 255 0 0	☺
11111111 11111111 11100000 00000000	255 255 224 0	☺
11111111 00000000 11111111 00000000	255 0 255 0	☹
11110000 00000000 00000000 00000000	240 0 0 0	☺
11111111 11111010 00000000 00000000	255 250 0 0	☹
00000000 01010101 10101010 11111111	0 85 170 255	☹

13. Enter the required Subnet Mask and press **[#]**.

The display shows now:
Router IP address
[192.333.22.123].

14. Enter the required router IP address and press **[#]**.

The display shows now:
FTP server IP addr.
[192.333.22.123]

15. Enter the required FTP server IP address and press **[#]**.

Finally, the display shows
Exit this menu?
<YES> <NO>

Pressing **{NO}** will return you to the beginning of the menu.

16. Press **{YES}** to continue.

The display shows
TVS Menu?
<YES> <NO>

After you press **{YES}**, the display shows
File Config - Yes

17. The File Config. value should be Yes always. Press **{NEXT}** to leave it unchanged. The display shows now:

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TVS Serv. IP Address
[141.226.213. 65].

18. Enter the required TVS Server IP address and press **[#]**.

The next option displayed is
Web Serv. IP Address
[192.333.22.123].

19. Enter the required Web Server IP address and press **{NEXT}**.

20. You are asked
Exit this menu?

21. Press **{YES}** to enter the User Menu, or **{NO}** to go back to step 16.

The display shows now
TVS User DN
[786]

This is the extension number for this station. You can enter up to four digits.

22. Enter the station DN and press **[#]**.

The display now shows:
TVS User Password
[****]

The display shows asterisks instead of the password digits. When you start typing in the password, the length of the line displayed reverts to one.

23. Enter the UNITE IP user password and press **[#]**.

The display shows:
Exit this menu?

The softkeys change to **{YES}** and **{NO}**. Pressing **{NO}** will return you to the beginning of the menu.

24. Press **{YES}** to exit the menu. If you entered new data the display shows

Exit?
<YES> <NO>

Otherwise if no data was entered, you will only be asked whether you want to exit.

25. Press **{YES}**.

The setup procedure is now complete. The display shows, after a few seconds:

Phone Configuration
<Boot> <Edit> <Info>

To start up the telephone press **{Boot}**. The display shows:

Saving Setup

and shortly afterwards

Saving Setup - Done!

Then

ST3015IP -> Welcome!
Initializing info...

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And, after a short delay:

FTP Loading -> Done!

Then:

ST3015ip -> TVS App
Built: Dec 10 2003

Then:

Starting Data Link
Connecting to System

The Avanti 3015ip is now up and running.