

Quick Start Guide for ZyXEL omni.net USB in iMAC or Power PC

1. Release History:

1.1 Driver version: 1.0.0. Beta1

Release Date: 19.08.1999

1.2 Driver version: 1.0.0. Beta2

Release Date: 11.10.1999

Changes from Beta1:

- . The Multilink PPP (MP) is supported. MS-CHAP, CHAP-MD5 and PAP authentications are supported.
- . A configuration program for switch type, outgoing calling party number and multiple incoming MSN numbers are supported. Also a preference file for this ISDN USB TA will also support.
- . A new CCL (modem script) for MP is added.
- . For AT command sets, new commands '&J0' and '&J2' are added to support MP. Fix the bugs that drivers can't work with ZTerm S/W and 'ATH' doesn't report 'OK' when offline.
- . Installation is changed. Files 'USB Device Extension', 'USBPrintDriver' and 'USB Support' to support USB 1.2 are NOT copied into "System Folder->Extensions." For Mac OS earlier than 8.6 (e.g., 8.5.1, 8.5) a subdirectory "Files to support USB 1.2" of directory "ZyXEL omni.net USB V1.00 B2" is created. For Mac OS 8.5.1 and 8.5 users, you SHALL copy those files into "System Folder->Extensions." and then restart the iMAC to support USB 1.2. For Mac OS 8.6 and above, it is not necessary. Besides, a subdirectory 'Modem Scripts (CCLs)' is added into directory "ZyXEL omni.net USB V1.00 B2" for all modem scripts for this TA. Users with non-English MAC OS can install these modem scripts manually by dropping them on the system folder.

1.3. Driver version: 1.0.0. Beta3

1. Fix MLPPP compatibility problem with seedNet ISP in Taiwan.

1.4. Driver version: 1.0.0

Formal release version 1.0.0 (migrated from version 1.0.0. Beta3)

1.5. Driver version: 1.0.1

1. Add BOD functions for secondary channel:

Drivers can support Band-On-Demand function. The BOD function can be activated/deactivated in the "ISDN USB TA Configuration" program. The default threshold to add/remove the secondary channel is 48kps/32kps. The default persistence time for add/removing the secondary channel is 60 seconds. The change of above threshold/persistence-time values will be supported in later version of "ISDN USB TA Configuration" program.

2. Add Suspend/Resume function for secondary channel:

Drivers can support suspend/resume the secondary channel. The suspend/resume function can be triggered in the "ISDN USB TA Configuration" program. If the secondary channel is connected/disconnected (as indicated in the LEDs of the TA), then triggered the suspend/resume function in the "ISDN USB TA Configuration" program, will cause the secondary channel been disconnected/connected. Note!! if BOD function is activated, then triggering the suspend/resume function will cause the BOD function invalid.

3. Add multiple port functions:

"A serial port is a non-sharable resource. If your application has the port open, no other application can open it." as described in Apple's Technote 1119. So, to support multiple applications can access the ISDN TA at the same time, the multiple port functions are supported. Each port has his own configuration as shown in the "ISDN USB TA Configuration" program. For Fax calls (FAXStf or ValueFax), port #3 (G3 Fax Port) shall be used. The reason to use a dedicated port is to prevent from using the Fax port as the data port. (The fax function of current version is evaluation version only and only tested with FAXStf 5.0. Class I 14400 driver type shall be selected. The fax initial string shall be "AT&FVE".)

4. Make Configuration data (preference) files Backward-compatible:

The configuration data in the old preference file either can be used for the new driver or can be converted to new preference file. This is make sure that user don't have to delete the old preference file and rebuild the data in the new preference file. The conversion of old and new preference file is accomplished by the "ISDN USB TA Configuration" program. Once the program is executed and the new configuration is saved, the old preference file will be replaced by the new one.

5. Fix the bug that AT command "ATDT" can not take space characters inbetween the telephone number.

6. Add AT command "ATZ".

1.6. Driver version: 1.0.2

1. Fix MLP connection and crash problems.
2. Support the changing of BOD threshold/persistence -time values by "ISDN USB TA Configuration" program.

1.7. Driver version: 1.0.3

1. Fix MLP/BOD/Suspend/Resume problem on some ISP servers.
2. Verify drivers running on Mac OS 9 and iBook.
3. FAXStf5.0 is fully supported.

To run FAXStf 5.0, please install the FAXStf 5.0 first. After the installation, FAXStf will ask you to restart.

After restarting, double click "Fax Browser" icon in the FAXStf

5.0 directory(In your installed disk.) Choose "Edit"->"Settings...".

You have to make 3 settings:

- . Fax Modem: Click "Fax Modem", then click "Modem...".
Select "Driver Type" and chose "Class 1 for 14400 send/receive Modems".
- . Ports: Click "Ports", then choose "ZyXEL omni.net USB 3 (G3 Fax Port)".
- . Modem Init: Click "Modem Init", then type initial string "AT&FVE+FCLASS=1". (For u-law please type "AT&FVES27=1");
After then, reboot the OS.

4. Support automatic outgoing/incoming call-bumping:

When MLP connection using 2 B channels, user may want to send/receive a FAX automatically.

Automatic outgoing call-bumping can automatically suspend 1-B channel to send the FAX out. After the FAX is sent out the suspended B channel will automatically bump back.

Automatic incoming call-bumping can automatically suspend 1-B channel to receive the FAX if the FAX is been answered by the FAX applications. After the FAX is received completely, the suspended B channel will automatically bump back.

5. New "ISDN USB TA Configuration" program:

Old configuration program is replaced by this new program which is created using CodeWarrior PowerPlant.

1.8. Driver version: 1.0.4

1. Add the "About" window for "ISDN USB TA Configuration" program.

1.9. Driver version: 1.0.5

1. Fix can not accept incoming call problems.

1.10. Driver version: 1.0.6

1. Support Sleep Mode for MAC OS 9:

- when USB device is not used by any applications.
- when USB device is used by applications and no connection is established.
- when USB device is used by applications and some connections are established.

1.10. Driver version: 1.0.7

1. A new diagnostic function is added in configuration program.

1.11. Driver version: 1.0.8

1. Fix the disconnection problems that an incoming call cause the disconnection of the internet access when access internet with one B channel.
2. Fix the bug that when an incoming call is ringing, "ATH" command will not work ("OK" shall be responded.)
3. Fix the long delay time when a new application is started.

NOTE! Please delete all files belonged to old version drivers before you install the new version drivers (Not necessary for the preference files.) Check "Installer Log File" in the directory "ZyXEL omni.net USB V1.0.6 ." for installed files.

2. Installing the ZyXEL omni.net USB TA

- (1) Upgrade your iMac/G3 for USB, if necessary.

Apple is improving its USB software for better quality and performance.

Please visit Apple Software Updates web site at

<http://www.apple.com/swupdates>

or check the "UPDATES" directory in your CD for up-to-date information.

Also, before you install the drivers you had better have 32 MB RAM and with Mac OS Version 8.6 or above since these drivers is developed using USB 1.2 DDK. Apple has formally qualified USB 1.2 on iMac and Power Macintosh G3 system with built-in USB support as of System Software (SSW) v8.6.

For iMac with Mac OS 8.5 or Mac OS 8.5.1:

You have to execute "iMac Update 1.1" and "iMac Firmware Update".

For Blue & White G3 :

You have to execute "G3 Firmware Update 1.X.smi".

- (2) Run "ZyXEL omni.net USB INSTALLER"

It will setup necessary drivers for your ZyXEL omni.net USB TA.

Note: you'd better unplug the USB cable of the ISDN TA before installing the driver! The installed driver will work after you plug in the ZyXEL omni.net USB TA.

For Mac OS earlier than 8.6 (e.g., 8.5.1, 8.5) users, please copy the files in the subdirectory "Files to support USB 1.2" of directory "ZyXEL omni.net USB V1.0.8 " into "System Folder->Extensions." and then restart the iMAC to support USB 1.2.

For non-English MAC OS, please install modem scripts in the subdirectory 'Modem Scripts (CCLs)' of directory "ZyXEL omni.net USB V1.0.8" manually by dropping them on the system folder.

(3) Connect the USB connector to the "USB" jack on the back of the ZyXEL omni.net USB TA and plug the other end of the cable to the USB port of your iMac or the USB conversion card connected to your Mac PowerPC.

(4) Connect the RJ-45 connector to the "ISDN" jack on the back of the ZyXEL omni.net USB TA and plug the other end of the cable to the S/T jack of your NT1.

3. Getting on the Internet

(1) Settings for ZyXEL omni.net USB TA

a. MODEM settings

Control Panels -> modem

- . Selection Window of "Connect via" :ZyXEL omni.net USB
- . Selection Window of "Modem" : ZyXEL omni.net USB PPP 64K

b. TCP/IP settings

Control Panels -> TCP/IP

- . Selection Window of "Connect via" : PPP
- . Selection Window of "Configure" : Using PPP Server
- . In the field of "Name server addr." : Enter one local Name Server IP
(If you are using fixed IP, you have to choice "Manually" to set the IP.)

c. Remote Access (for iMac) or PPP (for Power PC) Settings

Control Panels->Remote Access (for iMac)

Control Panels->PPP (for Power PC)

- . Fill the fields of "Name", "Password" and "Number" for ISP respectively.
- . Press "Connect"

(2) Start your web browser (e.g., Netscape or I.E.) for Internet access

(3) After installing driver, you will have the files at the following folders
(It may be different for different version):

- . ZyXEL omni.net USB driver in "System Folder->Extensions"
- . ZyXEL omni.net USB V1.0.8 folder in desktop.
- . modem script files "ZyXEL omni.net USB PPP/T70/X75/V.120/V.110 64K/MP/PPP 128K": in "System Folder->Extensions->Modem Scripts"

(4). To use BOD or Suspend/Resume of 2nd B channel, please choose the MP/PPP 128K modem script.

4. Unplug the TA

NOTE!! If you unplug the ZyXEL omni.net USB TA, you should close all the application programs running on top of the ISDN TA. Because An Imac device can only be accepted by ONE application at a time. Even you unplug the USB TA, this device driver is still accepted under that application. You shall close the application before/after you unplug the TA. But be sure that you SHALL close the application before you plug it again. If you forget to do that, the ISDN TA will not work properly when you plug it again.

5. Uninstallation

If you want to uninstall the driver, you can just delete files you have installed. Please be noticed that for MAC OS 8.6 and above, files 'USB Device Extension', 'USBPrintDriver' and 'USB Support' to support USB 1.2 is not necessary be copied into "System Folder->Extensions." But for Mac OS 8.5.1 and 8.5 users, you SHALL copy those files into "System Folder->Extensions."

6. Configuring the TA

By running the configuration program 'ISDN USB TA Configuration' in the directory "ZyXEL omni.net USB V1.0.8 ", you can set configuration values for 'Switch Type', 'Outgoing calling party number' and 'Incoming MSN'. An 'ISDN USB TA Preferences' preference file will also be created in the "System Folder->Preferences."

7. AT Command Set

<any key> Terminate current connection attempt

+++ Escape sequence code

A Answer call

D Dial

DT Dial

DP Dial

DL Dial previous number

DS=n Dial stored number "n" (0<=n<=3)

E0 Disable character echo in command state

E1 Enable character echo in command state

H Terminate existing connection

I View Product information

O Return to online data state

Q0 Modem returns result code

Q1 Modem does not return result code

Z Reset to default configuration

&Jn MP enable/disable settings

0 MP is disabled

2 MP is enabled

&V View current active settings

S0=n Ring on which to automatic answer a call(0<=n<=9 , n=0 disable automatic answer mode)

S0? View number of ring

Bnn Set B channel protocol

00 X.75 transparent

01 X.75 T.70NL

15 V.110 9600

17 V.110 19200

18 V.110 38400 async

20 V.120

40 PPP

S33? View B channel protocol

&Zn=r Store Telephone Number (0<=n<=3)

&Zn? View Stored Telephone Number (0<=n<=3)