DIGITAL YACHT

Installation & Quick Start Guide
WL500 Wireless Adaptor/Antenna

1. Introduction

Congratulations on the purchase of your WL500 Wireless Adaptor/Antenna. This unit is designed for permanent installation on board a sail or motor boat. The WL500 comprises the following parts;

- Cel 24 2.4GHZ external antenna
- Cel E179F base for antenna
- 10M LMR400 coax cable assembly
- WL500 Modem unit
- CD-Rom and Manual

ⓘ **Before operating the unit you should familiarise yourself with the complete user manual supplied with the product.**

2. Before you start

The WL500 comes complete with a CD-ROM that includes all necessary drivers for the following operating systems;

- Microsoft Windows XP®, Windows Vista® and Windows 7®
- Apple Mac OS X 10.3 and 10.4

Note: *Compatible drivers for the WL500 are also included with some LINUX distributions such as the latest version of Ubuntu. However, due to the wide variety of LINUX distributions available we cannot guarantee that the WL500 will work on all LINUX computers and suggest that users search for compatibility with the Zydas (ZD1211) or Atheros (AR5007UG) wireless chipsets that the WL500 uses.*

ⓘ *Do not plug in the WL500 to the USB port of your computer until you have inserted the driver CD-ROM.*

3. Mounting the WL500 Antenna

The WL500 should be mounted in line of sight with the wireless router that you wish to connect to. Unlike VHF antennas, height is not critical and popular antenna locations include; cockpit guard rail, radar arch or wheel house roof. The WL500 antenna has the popular 1" x 14 TPI thread mount, found in many VHF antennas. The WL500 is supplied with an antenna mount that is suitable for mounting to a flat horizontal surface (see Fig 1 below). However, if you wish to mount the WL500 antenna in a different manner, a wide variety of different brackets are available for this type of threaded mount, consult your local marine electronics dealer or chandlery for more information.
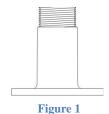
ⓘ *Use of this system may be prohibited in certain localities and territories. Please check with Digital Yacht prior to operation. It is intended for offshore use only. The WL500 is a high power wifi access system with an ERP of 1W*

Installation

The maximum distance from the antenna to the below deck modem unit is 10m as per the supplied cable. This is a specialist coax cable assembly and it should not be cut or lengthened.

Mount the deck base using the supplied fasteners. Drill a clearance hole for the cable and connector through the deck. Screw the N type connector to antenna and mount antenna onto base

Figure 1

Power Requirements

The WL500 modem unit has an integral DC power module fitted with regulated cigarette lighter cable. This power module must not be removed and is external to the modem so RF does not get induced into the power supply. The unit is preset to 6V - do not change this setting. If there is no cigarette lighter socket available, this connector can be removed and a connection made direct to a 12V DC source via a 1A fuse. The unit requires 10-16v dc input

3. Driver/Software Installation

It is very important that you do not plug the WL500 in to a USB port of your computer unless you the WL500 Drivers CD-ROM close to hand. By plugging in the WL500 you will initiate the Windows "Found New Hardware Wizard" which will not be able to complete correctly without the Driver CD-ROM being present. The installation process varies depending upon which Operating System your computer has, so please ensure that you follow the correct procedure.

Installation for Windows XP

Insert the WL500 Drivers CD-ROM in to your Windows PC. After the CD-ROM has been detected by Windows, plug in the WL500 in to a spare USB port.

After a few seconds, Windows should detect the WL500 and display the Found New Hardware Wizard (see Fig 2).

Windows is asking if you wish to search for the driver on-line using Windows Updater. Click on the "No, not at this time" option and then click the "Next" button.

Figure 2

Windows will now ask you if you want to install the software automatically (see Fig 3). Click on the "Install from a list or specific location (Advanced)" option and then click the "Next" button.
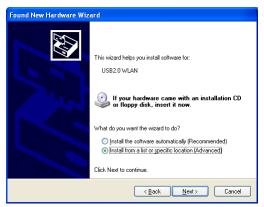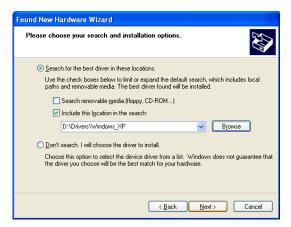

Figure 4

Figure 3

You will now be asked where you want to search for the software (see Fig 4).Click on the "Include this location in the search;" option and then click on the "Browse" button .

You will be presented with the normal Windows Browse window (see Fig 5). Scroll down the list of locations until you see the "My Computer" option, double click on this and you should see the CD-ROM location appear. Double click on this and then double click on the "Drivers" folder and then click on the "Windows_XP" folder, at which point the "OK" button, which was greyed out should now be active. Click on the "OK" button.

Figure 5

You should now return to the same window as you were at before, but now the correct location for the Windows XP drivers should be in the white entry box to the left of the "Browse" button (see Fig 6). Click the "Next" button
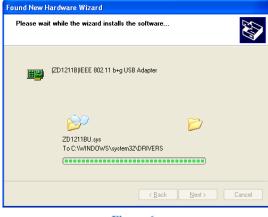

Figure 7

Figure 6

Windows should now start to install the driver and you will see the window shown in Fig 7. This takes a few moments to complete but when finished you will see the window in Fig 8.

This indicates that everything has installed correctly and your WL500 is now ready to be used.

Click the "Finish" button to close the "Found New Hardware Wizard" and return to normal Windows operation.

Figure 8

If your laptop has a built-in, normal wireless adaptor, then you should turn it off whenever the WL500 is plugged in. Consult your laptop instruction manual to find out how to do this. Following this procedure whenever the WL500 is plugged in, will ensure that you connect via the WL500 to get the best signal range possible.

The WL500 should now appear as one of the Wireless Network Adaptors available on your PC. On the taskbar, right click on the wireless network icon and select the option "View Available Wireless Networks". Select the Wireless network that you wish to connect to and click the "Connect" button (see Fig 9).
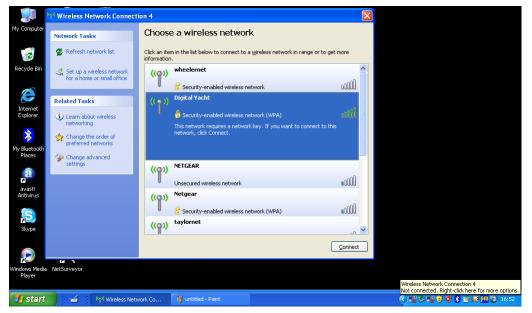

Figure 9

Installation for Windows Vista and Windows 7

Insert the WL500 Drivers CD-ROM in to your Windows PC. After the CD-ROM has been detected by Windows, plug in the WL500 in to a spare USB port.

After a few seconds, Windows should detect the WL500 and either display the "Found New Hardware Wizard" as shown in Fig 10 or the small pop up window shown in Fig 11.

Figure 11

Figure 10

If you see the "Found New Hardware Wizard" window in Fig 10, click on the "Locate and install driver software (recommended)" option and Windows will start searching for the WL500 drivers.

After a short period (<30 seconds), you should either see the window in Fig 12 or the small pop up window shown in Fig 13.

Figure 12

Figure 13

Your WL500 is now ready to use. If your laptop has a built-in, normal wireless adaptor, then you should turn it off whenever the WL500 is plugged in. Consult your laptop instruction manual to find out how to do this. Following this procedure whenever the WL500 is plugged in, will ensure that you connect via the WL500 to get the best signal range possible.

The WL500 should now appear in Windows Vista as one of the Wireless Network Adaptors available on your PC. On the taskbar, right click on the wireless network icon and select the option "Connect to a Network". Select the Wireless network that you wish to connect to and click the "Connect" button (see Fig 14).
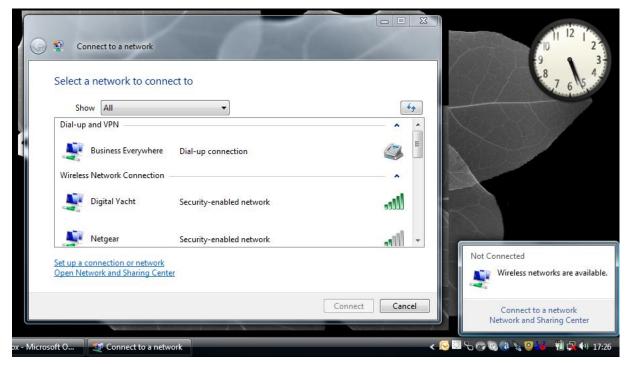
Figure 14

In Windows 7, the WL500 should also appear as one of the Wireless Network Adaptors available on your PC, but the presentation of the list of wireless networks is slightly different to that of Vista (see Fig 15). When you click on the wireless network icon in the taskbar, a pop up window of the available networks appears. You should click on the network you wish to connect to and then click on the "Connect" button that appears.
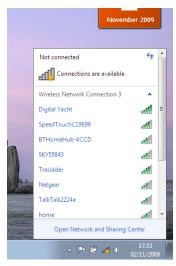
Installation for Apple Mac OS X

Insert the WL500 Drivers/Software CD-ROM in to your Apple Mac and using Finder open the folder called MAC.

Included in this folder is a PDF file that explains how to install the driver software on a MAC. Follow the instructions in this PDF file. The procedure is identical for V10.3 and V10.4 (Intel) systems but you must select the correct installer included on the DMG file for the version you have on your Mac.

Installation for LINUX

Due to the large number of different LINUX distributions, it is not possible to guarantee that the WL500 will work on all distributions. It has been tested on Ubuntu V8.04.2 (a Debian based distro) with Kernel V2.6.24 and all drivers were included in this distro.

If the drivers are included in your distro, simply insert the WL500 USB connector in to a spare USB port and LINUX will automatically load the correct driver and you will see the wireless networks that the WL500 can detect in the drop down wireless menu that appears when you click the wireless icon in the task bar.