# WL 1000

User Manual

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Websites: www.eurotech.com - www.belsati.com
www.zypad.com

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Zypad is a registered trademark of Eurotech S.p.A.
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## Conventions

The following table lists conventions that are used throughout this guide.

| Icon | Notice Type | Description |
|---|---|---|
| | **Information note** | Important features or instructions |
| | **Warning** | Information to alert you to potential damage to a program, system or device or potential personal injury |

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# Chapter 1 Introduction

Congratulations on purchasing the Zypad WL1000 Wrist Wearable Personal Computer!
You have made a wise choice in selecting the Zypad WL1000, a reliable and intelligent device that will become your personal assistant whatever you do and wherever you go.
Please read the following paragraphs carefully:

## Regulatory and Safety Approvals

**EN 50371:2002**

Generic standard to demonstrate the compliance of low power electronic and electrical apparatus with the basic restrictions relating to human exposure to electromagnetic fields (10MHz ~ 300GHz) – general public.

This product is marked CE0051 in accordance with the Class 2 product requirements specified in the R&TTE Directive, 1999/5/EC.

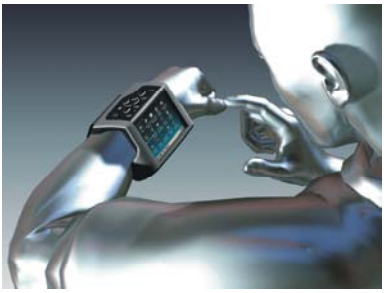
The CE Mark on the product indicates that the system has been tested and conforms to the provisions of the 89/336/EEC Electromagnetic Compatibility Directive and the 73/23/EEC Low Voltage Directive.

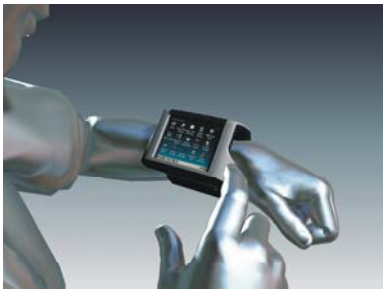
For further information, please contact:

**Eurotech S.p.A.**
**A member of the Eurotech Group**
**Via Fratelli Solari, 3/a**
**33020 AMARO (Udine)**
**ITALY**

Eurotech shall not be liable for use of our products with equipment (i.e., power supplies, personal computers, etc.) that are not CE marked and do not comply with the Low Voltage Directive.

The equipment is designed as a Wrist-worn Wearable Personal Computer.





| This equipment may be operated in: | | | | AT | BE |
|---|---|---|---|---|---|
| CY | CZ | DK | EE | FI | FR |
| DE | GR | HU | IE | IT | LV |
| LT | LU | MT | NL | PL | PT |
| SK | SI | ES | SE | GB | IS |
| LI | NO | CH | BG | RO | TR |

## Important information to the user

This part contains information relevant to safety and environment protection, written in the languages of the Countries where the product is distributed.

Before proceeding to the start guide, please carefully read the following paragraphs:

### SAFETY NOTICES AND WARNINGS

#### *FCC information and compliance*

The Zypad WL1000 has been tested and found to comply with the limits of a Class B digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference. The Zypad WL1000 generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications or to devices that are not appropriately shielded.
Eurotech is not responsible for any radio or device, which may be affected by harmful interference. Appropriate shielding of susceptible devices is not the responsibility of Eurotech. Further, Eurotech is not responsible for unauthorized modifications of Eurotech equipment including the substitution or attachment of cables and/or other unauthorized equipment.
If electrical interference is harmfully affecting a device, it is the responsibility of the user to correct this interference.
In order to minimize the affects of electrical interference, use only shielded data cables with the Zypad WL1000 system.
In accordance with FCC 15.21, changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**Tested to Comply with FCC Standards for Home or Office Use**

The Zypad WL1000 has been tested and found to comply with part 15 of the FCC rules.
Operation is subject to the following two conditions:

1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

The FCC ID is: UKIZYPADWL1000.
The Zypad WL1000 integrates the following modules that have the following FCC IDs:

- WLAN module FCC ID: NKRDRCM
- Bluetooth module FCC ID: POOWML-C29XX

**Emissions information for Canada**
This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

*Use with care*

Do no use your Zypad WL1000 whilst driving a vehicle. If you must use your Zypad WL1000, park the vehicle first. Always secure your Zypad WL1000 while driving; do not place your Zypad WL1000 on the passenger seat or where it can break loose in a collision or sudden stop. For vehicles equipped with an airbag, remember that an airbag inflates with great force. Do not place your Zypad WL1000 in the area over the airbag or in the airbag deployment area.
Use of the Zypad WL1000 device for navigation (using the optional car holder) still means that you need to drive with due care and attention.

*Battery*

**WARNING:**
**IF BATTERY IS INCORRECTLY REPLACED, THERE MAY BE A DANGER OF EXPLOSION. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISPOSE OF USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.**

**USE ONLY THE LI-ION BATTERY PACK PROVIDED BY EUROTECH. The use of any other battery pack not sold/manufactured by Eurotech in the Zypad WL1000 will void your warranty and may result in damage to the Zypad WL1000 wearable computer.**

**BATTERY PRODUCT SAFETY**

THE LITHIUM-ION BATTERY PACK CONTAINED IN THE PRODUCT MUST BE RECYCLED OR DISPOSED OF CORRECTLY.
**USE ONLY THE AC ADAPTER THAT IS PROVIDED / RECOMMENDED BY EUROTECH.**

LITHIUM-ION BATTERY PACKS MAY GET HOT, IGNITE, EXPLODE AND / OR CAUSE SERIOUS INJURY IF USED IN AN INAPPROPRIATE WAY, PLEASE FOLLOW THESE SAFETY WARNINGS:

- Do not place the battery pack in fire or heat the battery in any way.
- Do not reverse the polarity of the battery pack.
- Do not short the terminals of the battery pack.
- Do not carry or store battery pack together with metal objects.
- Do not pierce the battery pack with nails, strike the battery pack with a hammer, step on the battery pack or in any way expose it to strong impacts or shocks.
- Do not solder directly onto the battery pack.
- Do not expose battery pack to liquid, or allow the battery contacts to get wet.

- Do not disassemble or modify the battery pack: The battery pack contains safety and protection devices, which, if damaged, may cause the battery pack to generate heat, ignite or explode.
- Do not discharge the battery pack using any device except for the specified device. When it is used in devices other than the specified devices, the battery pack can be damaged or its life expectancy reduced. If the device causes any abnormal current to flow, it may cause the buttery pack to become hot, ignite or explode and may cause serious injury.
- In the event that the battery pack leaks and the fluid gets into your eyes, do not rub the eye. Rinse well with water and immediately seek medical attention. If left untreated, the battery fluid may cause permanent damage to the eyes.
- To avoid damaging your Zypad WL1000 or the AC Adapter users should insure that all connectors are properly aligned before connecting them.

## RAEE

The information below is issued in compliance with the regulations as set out by the 2002/96/CE directive, subsequently superseded by 2003/108/CE; they refer to electrical and electronic equipment and the waste management of these products (WEEE).
When disposing of a device, including all of its components, subassemblies and materials that are an integral part of the product, you should take into consideration the WEEE directive.

This symbol has been attached to the equipment or, in the case that this is not possible, on the packaging, instruction literature and / or the guarantee sheet. By using this symbol, it states that the device has been marketed after August 13th 2005, and implies that when possible you must separate all of its components and dispose of them in accordance with local waste disposal legislations.

- Because of the substances present in the equipment, improper use or disposal of the refuse can cause damage to human health and to the environment.
- With reference to RAEE, it is compulsory not to dispose of the equipment with normal urban refuse; arrangements should be instigated for separate collection and disposal.
- Please contact your local waste collection body for further information regarding recycling of RAEE.
- In case of illicit disposal, sanctions will be levied on transgressors.

## ROHS

This device, including all components, subassemblies and consumable materials that are an integral part of the product, has been manufactured in compliance with the European directive 2002/95/EC, known as the RoHS directive (Restrictions on the use of certain Hazardous Substances), this directive targets the reduction of certain hazardous substances previously used in electrical and electronic equipment (EEE).

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## Limited Warranty

Eurotech warrants its products to be free from defects in materials and workmanship and to conform to Eurotech's published specifications applicable to the products purchased at the time of shipment. This warranty does not cover any Eurotech product, which is:

(i) Improperly installed or used.

(ii) Damaged by accident or negligence, this includes failure to follow the appropriate maintenance, service and cleaning schedules.

(iii) Damaged as a result of:

a. Modification or alteration by the purchaser or other party.
b. Excessive voltage or current being supplied to or drawn from any interface connections
c. Static electricity or electro-static discharge.
d. Operation under conditions beyond the specified operating parameters.
e. Repair or service of the product by anyone other than Eurotech or its authorized representatives.

**Should this WL1000 be malfunctioning, please contact your original dealer** providing information about the product name, the serial number, and the details about the problem.

EXCEPT AS MAY BE OTHERWISE PROVIDED BY APPLICABLE LAW, THE FOREGOING WARRANTY IS IN LIEU OF ALL OTHER COVENANTS OR WARRANTIES, EITHER EXPRESSED OR IMPLIED, ORAL OR WRITTEN, INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
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All provisions of this Limited Warranty are separate and severable, which means that if any provision is held invalid and unenforceable, such determination shall not affect the validity of enforceability of the other provisions hereof.

Use of any peripheral with the Zypad WL1000 terminal not manufactured, sold or recommended by Eurotech may void the warranty. This includes but is not limited to: cables, power supplies.

Eurotech extends these warranties only to the first end-user of the products. These warranties are non transferable.

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## Software Limited Warranty

EUROTECH warrants that the SOFTWARE shall run substantially in conformity with the manual/s and the written material accompanying the product for the period of one year from the date of purchase.

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# *Chapter 2 Product overview*

## ERGONOMICS

The patented shape of Zypad WL1000 fits comfortably onto either arm, even over clothes, with a bright outdoor-readable colour TFT touch screen display, an easy to access keypad and a stylus to simplify input operations. The adjustable wrist strap on the back panel ensures secure grip, ideal weight distribution and maximum comfort.

## RUGGED DESIGN

The Zypad WL1000 has been designed with a sturdy case and can withstand extreme temperatures, high humidity, moisture, and dust conditions.

## HIGHLIGHTS

**User Friendly operating system:**
The Zypad WL1000 can be supplied with Windows CE 5.0 to meet the needs of developers and users.

**Wireless Radio Design:**
Integrated PAN (Bluetooth) and LAN (IEEE 802.11 b/g).

**Integrated GPS positioning system:**
Integrated 12-Channel GPS system

**Tilt and dead reckoning system:**
Detects if the operator has been motionless for a specified amount of time. Under these circumstances a location beacon can be transmitted to the remote server.

**Multiple I/O:**
Integrated USB Device, USB Master ports and IRDA port.

**320x240 (1/4 VGA) 256k Colour High Visibility Display** with **Touch Screen** and **Automatic Contrast Adjust:**
A huge amount of data as well as images can be displayed.

**High Performance CPU and Memory System:**
Even complex applications can be run on the device.

**Enhanced Power Management:**
The Zypad WL100 is based on Li-Ion power cell technology, this allows for maximum operating time and saves energy when the operator is not using the Zypad (patented).

## FEATURES

| | |
|---|---|
| **Processor** | AU 1100 @ 400 MHz |
| **Memory** | ➢ Up to 64 MB Non Volatile FLASH<br>➢ 64 MB RAM |
| **Display** | ➢ 320x240 pixel (1/4 VGA) 256K Colour 3.5" TFT with Touch Screen<br>➢ Automatic contrast adjustment via ambient light sensor |
| **LEDs** | ➢ Charge LED<br>➢ WLAN Activity LED<br>➢ WPAN Activity LED |
| **Audio** | Integrated |
| **I/O** | ➢ USB Device<br>➢ USB Master<br>➢ Audio Jack Stereo |
| **WPAN** | Bluetooth Class 2 (up to 10 meters) |
| **WLAN** | Integrated IEEE 802.11b/g with internal antenna |
| **WWAN** | External via Bluetooth |
| **GPS** | Integrated with internal antenna |
| **Other devices** | Accelerometer for the *Tilt and Dead Reckoning System.*<br>Can determine whether the user is moving or has fallen down.<br>(GPS supplies the position) |
| **Expansion slots** | User accessible Mini SD |
| **Keyboard** | 11 backlit keys |
| **Power** | ➢ 3.6 V 2200 mAh Li-Ion Interchangeable Battery Pack<br>➢ Automatic power save when the computer is not in use (position sensor) |
| **Battery charging** | ➢ External universal power supply<br>➢ Multiple battery charger<br>➢ USB cable for PC connection<br>➢ Car cigarette lighter power supply |
| **Input device** | Integrated stylus connected to the strap |
| **O.S.** | WINDOWS CE 5.0 |
| **Application development system** | WIN CE: Microsoft Platform Builder & Eurotech SDK for CE |
| **Operating temperature** | -10°C ÷ +50°C |
| **Storage temperature** | -20°C ÷ +50°C |
| **Humidity** | 95% relative humidity non condensing |
| **Environmental** | Waterproof |
| **Regulatory approvals** | USA/CANADA - R&TTE |
| **Weight** | 290 g (battery included) |

## ACCESSORIES

| | |
|---|---|
| **Battery Charging** | Universal Power Supply (AC adapter)<br>Dual Battery Pack charger **(*)**<br>Vehicle (cigarette lighter) Battery Charger **(*)** |
| **Display Protection** | Display Protective Film pack |
| **Cables** | USB Device and USB Host cables |
| **Audio** | Earphone (cabled) **(*)**<br>Bluetooth Earphone (wireless) **(*)** |

**(*)** Optionally available accessories

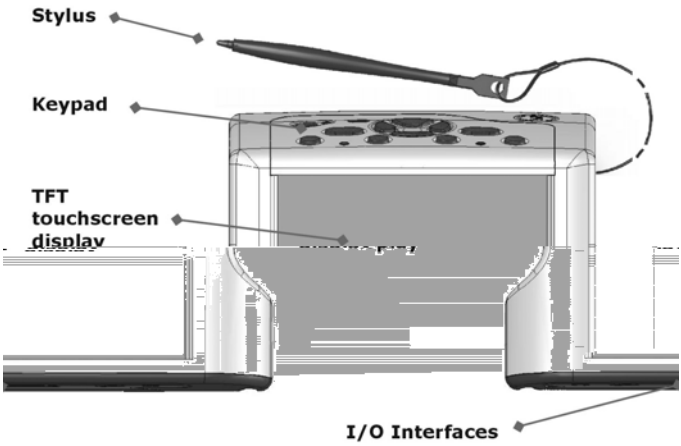



Figure 1. Front view of the Zypad WL1000

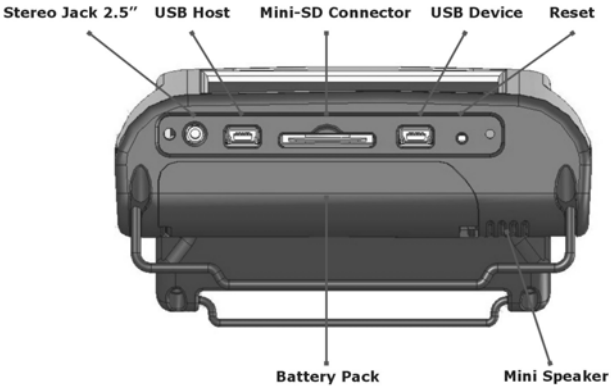



Figure 2. I/O interfaces (protection cover removed) of the Zypad WL1000

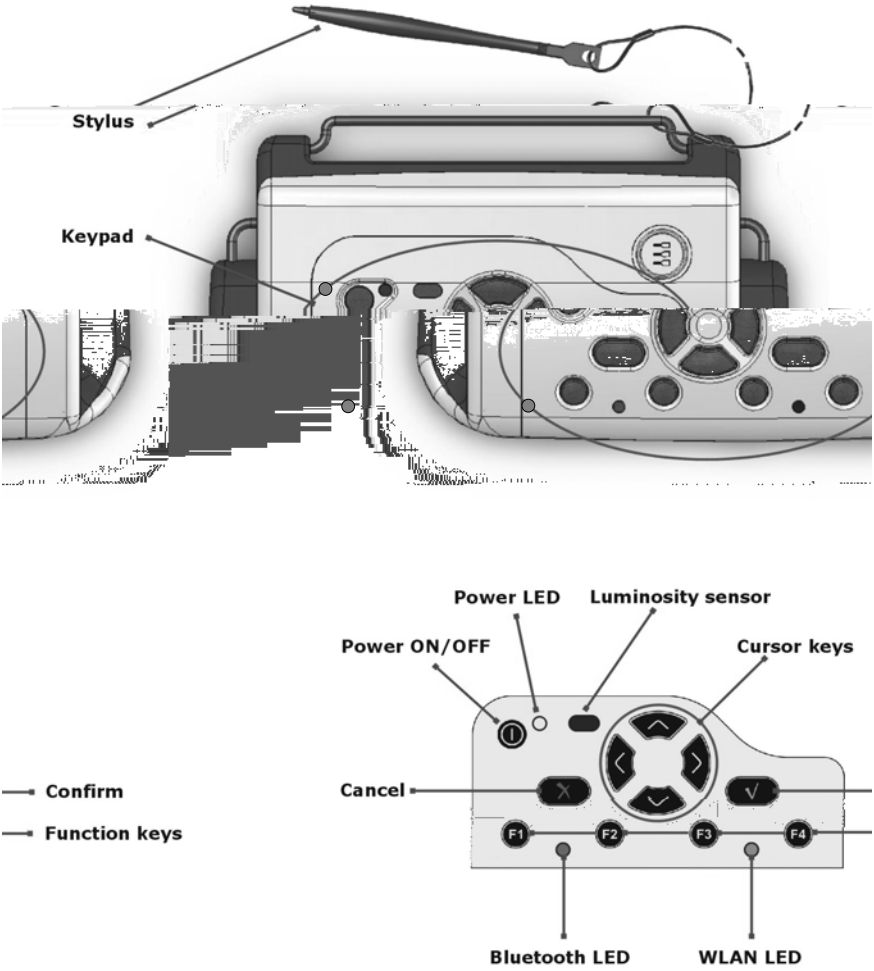
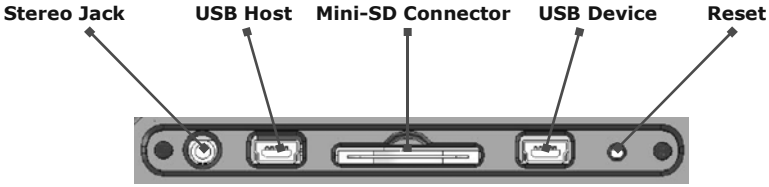



Figure 3. The keypad of the Zypad WL1000

## The I/O interfaces and the Reset button

A waterproof cover on the bottom side of the WL1000 protects the I/O interfaces and the Reset button.

First remove the protective cover by gently pulling on the small tab to the left of the Zypad, as showed above. This will reveal the following I/O interfaces.




### THE STEREO PORT

It is possible to connect an Earphone to the WL1000 dedicated stereo 2.5mm jack plug.

### THE USB HOST PORT

This USB Host port is used to connect peripherals to the WL1000 (the host).
This port can also be used to connect a USB key for upgrading the firmware (for further information visit: ftp://zypad:zypad@downloads.zypad.com)

### THE MINI-SD CONNECTOR

Use this connector to insert a standard Mini-SD memory card.

### THE USB DEVICE PORT

This USB Device port is used to connect the WL1000 (as a slave device) to a host computer.
It is also used to connect the battery charger (AC adapter).
When the WL1000 is connected as a slave device, the host computer automatically charges the WL1000 battery.

### THE RESET BUTTON

The Reset button allows you to stop all running applications and restart the ZYPAD WL1000. Doing so will stop all running applications and will erase any *unsaved* data within running applications. The reset operation will not erase any program or saved data. We recommend that the user save any data before resetting the WL1000. Use the stylus to lightly press the Reset button.

## Power management

### TURNING THE DEVICE ON AND OFF

The ON/OFF button has several uses:

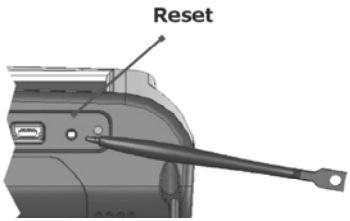
- Turning the Zypad ON
  - Pressing will turn the power ON
- Suspend Mode (see Suspending the Device)
  - Pressing once will activate the suspend mode
  - Pressing it again will wake the WL1000 up
- Turning The Zypad OFF
  - Pressing for a few seconds will cause the power off*

* This will halt all applications that are running and erase any unsaved data. Be sure to save any unsaved data before you power-down the device.

### RESETTING THE DEVICE

This procedure describes how to reset the ZYPAD WL1000.

**WARNING:**
**The reset will stop all running applications and will erase any *unsaved* data within any running application. Be sure to save any unsaved data within a running application before resetting the WL1000. The reset operation will not erase any program or saved data.**




To perform a reset:

1. Locate the Reset button on the bottom side of the WL1000 under the protection cover
2. Use the stylus to lightly press the Reset button.

## DETECTION OF THE USER ARM POSITION (THE ENERGY SAVING DEVICE)

The ZYPAD WL1000 integrates a newly patented Eurotech Energy Saving Device that detects the position of the user's arm.
When the arm that wears the device is hanging down beside the user's body the ZYPAD WL1000 turns off the screen backlight in order to save the battery.
When the user lifts the arm the backlight will be on again.

**NOTE:**

- The default configuration is for right-handed users, who wear the ZYPAD WL1000 on the left arm: the ZYPAD WL1000 turns off the screen backlight when the LEFT arm is hanging down beside the body.
  If the user is left-handed and wears the ZYPAD WL1000 on the right arm, he must modify the "User settings" in the "Zypad Setup" selecting the RIGHT arm.
- The detection of the users arm position is deactivate when the WL1000 is connected to the AC adapter and is charging the battery.
  It is recommended not to wear the ZYPAD WL1000 while charging the battery.

## SUSPENDING THE DEVICE

The suspend mode turns off the screen backlight and powers down all the peripheral devices except for the CPU in order to save battery power. This mode will not halt any running application and does not erase any program or unsaved data.

### *How to activate the suspend mode*

The following conditions will suspend the WL1000:

- When the WL1000 is idle for a user-defined period, this time can be customized using the "Power Properties" in the "Control Panel"
- Pressing the ON/OFF button , pressing it again will wake the WL1000 up.

## The Keypad

The keypad of the Zypad WL1000 is located on the upper side and is provided with the following buttons that can be also programmed (see Zetup (Zypad Setup), “**Hardware Keys” Tab**):

**ON/OFF button**
Use to turn the Zypad WL1000 on, off, enter suspend mode or exit suspend mode.

**Enter (Confirm) button**
Used for confirm or accept a request or option

**Esc (Cancel) button**
Used for cancel or deny a request or option

**Left Arrow button**
Works like the left arrow key on a standard PC keyboard

**Up Arrow button**
Works like the up arrow key on a standard PC keyboard

**Right Arrow button**
Works like the right arrow key on a standard PC keyboard

**Down Arrow button**
Works like the down arrow key on a standard PC keyboard

**Function Key “F1” button**
Programmable function key

**Function Key “F2” button**
Programmable function key

**Function Key “F3” button**
Programmable function key

**Function Key “F4” button**
Programmable function key

## The Stylus

Your ZYPAD WL1000 comes with a stylus that you should use to tap or write on the screen.
In all respects, the stylus works in the same way as a pen or mouse.

Figure 4. The stylus

Three basic actions are possible when using the stylus:

1. **Tap / Double tap.** Lightly touch the screen with the stylus point to select or double tap to open an item. Lift the stylus after you tap an item. Tapping is equivalent to the click operation for selecting (double click for opening) an item with the mouse of your computer.

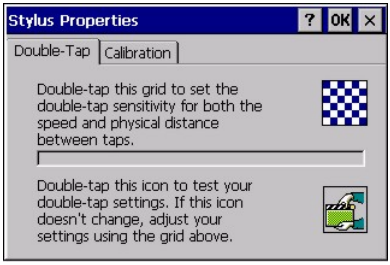
2. **Drag.** Place the point of the stylus on the screen and drag an item across the screen without lifting the stylus until you have completed the desired operation. This operation is equivalent to dragging an item with the left mouse button pressed and held.

3. **Tap and hold.** Hold the stylus point on an item for a short time until a menu will be displayed. This operation is equivalent to the right click on the mouse.

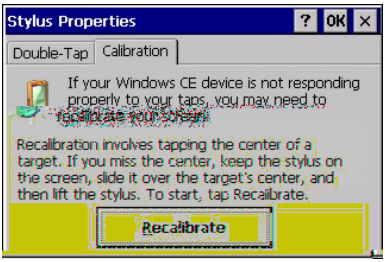
### *The Stylus Properties*

The stylus properties allow you to configure the double tap sensitivity and the screen calibration.
To set the Stylus properties:

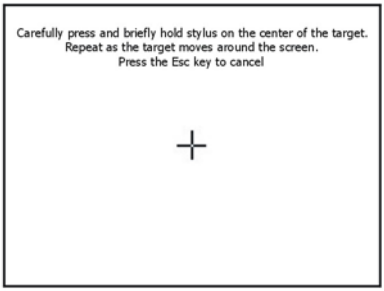
1. Tap **Start > Setting > Control Panel**
2. Double tap on the **Stylus** icon. You will obtain the following screenshot.




3. You will be able to set the Double-Tap sensitivity.
4. Follow the instructions that are shown.
5. Tap the **Calibration** tab.
6. The screen you obtain will allow you to calibrate the touch-screen.



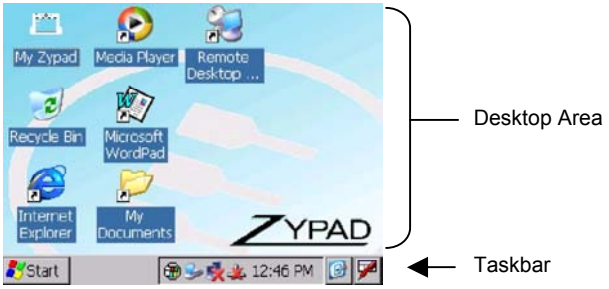

7. Tap on the **Recalibrate** button
8. Follow the instructions that will appear.




9. This enters the new calibration settings
10. Press the Enter button on the keypad to accept the new settings or the Esc button to keep the old settings.

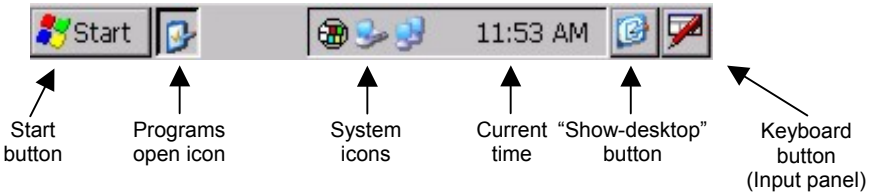
## Navigating the Display

When you turn on your Zypad WL1000, you will obtain the desktop visualization as on a standard PC. The screen is divided in two sections: the Desktop Area and the Taskbar.




### THE TASKBAR

As in a standard PC, the Taskbar at the bottom of the screen displays the Start button (the Flag), the system icons for utilities loaded in memory and the current time. Furthermore, the Taskbar includes the keyboard button, which opens and closes the Input Panel, and the “Show-desktop” button.
If you open a program, a corresponding icon will appear on the task bar.



### *Configuring the Taskbar and the Start Menu*

Tapping: **Start > Setting > Taskbar and the Start Menu…**will allow the user to configure the of the Taskbar and Start Menu properties

### THE COMMAND BAR

When you open a folder (the picture refers to the Control Panel folder, see the corresponding icon on the Task bar), use the Command Bar on the top of the screen to perform a task, such as opening or editing a file.

## The Input Panel

When the user starts a program or selects a field that requires text or numbers, the Input Panel (a QWERTY-style keyboard) automatically becomes available.
The Input Panel can also be opened by tapping the Keyboard button on the task bar and tapping **Keyboard** (the Keyboard button on the taskbar will change into a little keyboard ).

Use the stylus to select letters, numbers or symbols for the current application.
To close the Input Panel tap the little keyboard button on the taskbar and tap **Hide Input Panel**.

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# *Chapter 3 The Control Panel*

## Introduction

The **Control Panel** program permits the user to set many of the system parameters.

To view it tap: **Start > Settings > Control Panel**

A screen with all the available icons will appear:

**NOTE:**
Each time you modify any parameters, you should save the Registry in order to maintain them at power off.
To do this double-tap on "*Zetup*", select the "Registry" tab and tap "Save".

## Knowing the icons and their functions

### BLUETOOTH DEVICE PROPERTIES

Used to enter the “Bluetooth Manager” and insert a Bluetooth device.
Before proceeding insure that the Bluetooth Communication feature in the Communication Tab of the Zypad setup is enabled: See the “Zetup (Zypad Setup)” paragraph.
The corresponding Bluetooth LED will turn ON.

### CERTIFICATES

Certificates are used by some applications for establishing trust and for secure communications.
Certificates are signed and issued by certificate authorities and are valid for a prescribed period. Windows CE manages multiple certificate stores.

### DATE/TIME

Used to change the year, month, date, time, time zone o select automatic adjust for Daylight Saving Time.

### DIALING PROPERTIES

Used to adjust the dialling location settings (i.e. home or office)

### DISPLAY PROPERTIES

Use to adjust the Display Properties:

- Background
- Appearance
- Backlight

See the “Zetup (Zypad Setup)” paragraph for further features.

### INPUT PANEL

Used to adjust the input panel (keyboard) properties

### INTERNET OPTIONS

Used to adjust the following internet options:

- General
- Connection
- Security
- Privacy
- Advanced
- Popups

### KEYBOARD

Used to adjust the properties of an external keyboard.

**NOTE:** the main keyboard used is the soft input panel

### MOUSE

Used to adjust the properties of an external mouse.

**NOTE:** the stylus provided with your WL1000 works in the same way as a pen or mouse (see the Stylus paragraph.)

### NETWORK AND DIAL-UP CONNECTIONS

Configures Network and Dial-up connections.
(See the "Starting a WAN connection" paragraph)

### OWNER

Used to set the owner properties:

- Owner identification information
- Notes and additional information

Network identification for remote networks

## PASSWORD

Used to set the password properties

## PC CONNECTION

Used to set the PC connection properties.
These settings control the connection between your Zypad WL1000 and a desktop computer.

## POWER

Used to check battery power and set the power properties.

**The "Battery" tab**
Provides an indication of the battery charge level
If the "Very Low" warning message is shown, the remaining time is less than 30 minutes before the device shuts down.

**The "Schemes" tab**
Allows you to select one of the power available schemes: **Battery Power** or **AC Power**
You can also choose the amount of time that must pass before the system will switch to the next power conservation state.
The available power conservation states are:
**User Idle**: the user has stopped interacting but may still be using the device
**System Idle**: Entered after a period in User Idle, driver and system process are still active
**Suspend**: Entered when driver and system process stop interacting with the system

**"Device Status" Tab:**
Shows the power level provided for each specific device.
The power level ranges from "**High (D0)**" which means the device is at the highest power level to "**Off (D4)**" which means the device is at the lowest power level

**NOTE:** The battery status is also displayed with an icon on the task bar.

The AC adapter is providing power to the WL100

The AC adapter is providing to the WL1000 and is charging the main batteries.

The battery is providing power to the WL1000.

The battery is very low and needs charging.

### REGIONAL SETTINGS

Use to set:

- The regional settings
- The input language
- The user Interface Language

### REMOVE PROGRAMS

Used to remove the user-installed programs.

### STARTUP MANAGER

Used to select the programs you wish to run automatically and in which order when the WL1000 turns on.

### STORAGE MANAGER

Allows you to manage the proprieties of the storage devices installed (i.e.: Internal Flash, SD Memory Card)

### STYLUS

Allows you to manage the stylus proprieties:

- Double-tap sensitivity for both the speed and physical distance between taps
- Calibration of the touch screen

### SYSTEM

Allows you to check and set the system proprieties:

- General information
- Adjust RAM memory allocation
- Name of the device
- Copyrights information

### TERMINAL SERVER CLIENT LICENSES

Shows the installed terminal server client licenses

### VOLUME & SOUNDS PROPERTIES

Used to set the volume and sound proprieties.

## ZETUP (ZYPAD SETUP)

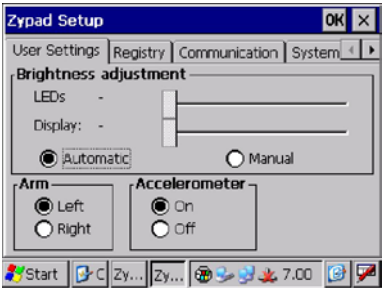
Zetup

Allow you to set the setup parameters of your Zypad WL1000.

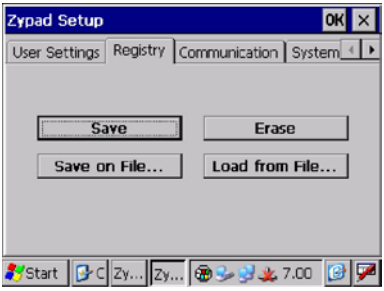
**User Settings:**
Allow users to set the LED and Display brightness.
Furthermore it allows you to select which arm the WL1000 is on and set the accelerometer in order to activate the suspend mode when your arm is hanging down beside the body.

Default settings are:

- Brightness adjustment: “Automatic”
- Arm: “Left”
- Accelerometer “Off”

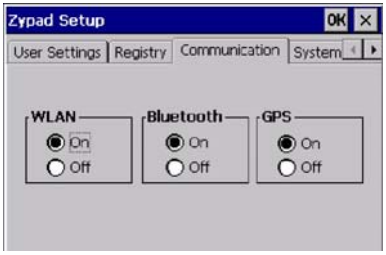



**Registry:**
Allows users to save, erase or load the WL1000 Registry.
**WARNING: Each time you modify any parameter; you should save the Registry, by doing so the Zypad will maintain them at power off.**



**Communication:**
Allow the user to turn On or Off the communication devices. Default settings are:

- WLAN: “On”
- Bluetooth: “On”
- GPS: “On”




**System:**
Displays the versions of the operating system and firmware installed.
The “Soft Reset button” allows you to perform a reset that will halt all applications that are running, erases any unsaved data and resets the Operating System.
Be sure to save any unsaved data before perform the reset.

**Hardware Keys:**
Displays the function assigned to each key.
It is possible to change the function by tapping on each key and selecting a new one from the list that will appear

# Chapter 4 Synchronization

## Installing & Using Microsoft ActiveSync

Microsoft ActiveSync is the synchronization software recommended for transferring and synchronizing files between the WL1000 and a Host PC running Windows XP.

### INSTALLING MICROSOFT ACTIVESYNC ON THE HOST PC

Complete the following steps to install Microsoft ActiveSync on the host computer:

1. Insert the CD-ROM containing the Microsoft ActiveSync program software on the Host PC
2. The setup programme should Auto Start.
3. Follow the instructions that will appear on the screen

### SETTING UP A PARTNERSHIP

1. Start ActiveSync on the Host PC
2. Turn on your WL1000
3. Using the USB cable provided connect the WL1000 USB port to a USB port of the Host PC.

### TRANSFERRING FILES

To transfer files, complete the following steps on the Host PC:

- After you have set up the partnership, tap the “Explorer” button at the top of the ActiveSync window (or select “Explorer” from Start > All Programs > Accessories > Windows Explorer). The WL1000 is detected as a “Mobile Device”
- Navigate to the target directory on your WL1000 and copy the desired file by using the Copy/paste method or dragging and dropping the desired file(s) into the folder.

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# *Chapter 5 Getting Connected*

Your Zypad WL1000 provides for the following networking availability:

- **WPAN** (Wireless Personal Area Network, up to 10 meters): via integrated Class 2 Bluetooth device (internal antenna)
- **WLAN** (Wireless Local Area Network): via integrated IEEE 802.11b/g device (internal antenna)
- **WWAN** (Wireless Wide Area Network): via external Bluetooth wireless modem
- **WAN** (Wide Area Network): via external Serial USB device

## Configuring Bluetooth for WPAN e WWAN networking

The integrated Bluetooth device allows users to have access to features including dial up, file transfer, wireless networking, wireless communication and995 676.1598 Tm(WW)1 613.6403 Tu80.0002 Tw 7.9

8. Flag the **Active** option. A red flag will appear on the device icon
9. Tap **OK**

### HOW TO REMOVE A BLUETOOTH DEVICE

1. Tap **Start** > **Settings** > **Control Panel** > Double tap on **Bluetooth Device Properties**
2. In the **Trusted** list double tab on the device you want to remove
3. Tap **Delete**

### HOW TO CONFIGURE BLUETOOTH FOR ACCEDING TO WWAN NETWORKS

With your Zypad WL1000, it is possible to access a WWAN network by using an external Bluetooth wireless modem.

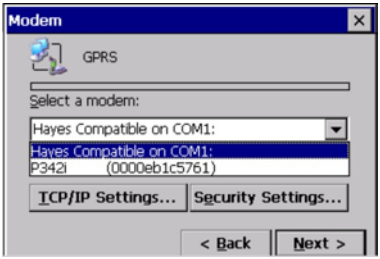
**Note:**

Means device not connected to a network

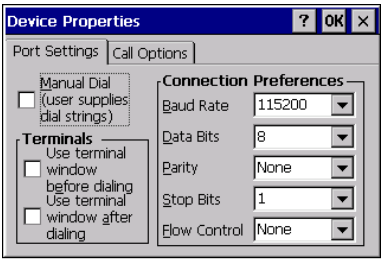
Means device connected to a network

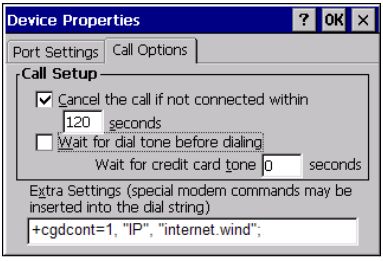
The following steps will give you an example about how to configure the WL1000 Bluetooth feature for using an external GPRS device.
In the example, the GPRS device used is called: P342i.

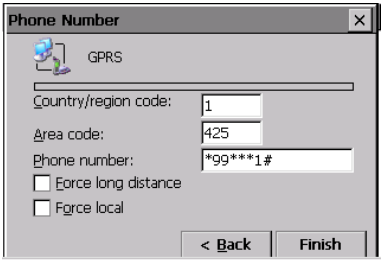
1. Insure that the Bluetooth Communication feature in the Communication Tab of the Zypad setup is enabled: see the "Zetup (Zypad Setup)" paragraph. The corresponding LED will turn ON.
2. Tap **Start** > **Settings** > **Network and Dial-up Connections**
3. Double tap on **Make New Connection**
4. Type a name for the connection
5. Tap **Next**



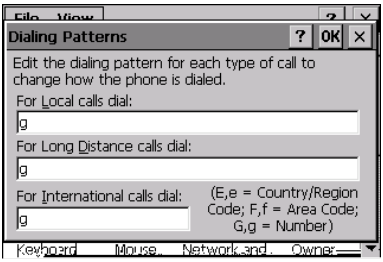

6. Select the GPRS device as a modem (in the example, the P342i device). It is possible to add new Bluetooth modems by tapping the "**Bluetooth…**" button and following the procedure listed in the paragraph: "How to insert a Bluetooth device"
   **NOTE:** The Hayes Compatible modem is a standard default option of WinCE that is not available with the WL1000
7. Tap "**Configure…**"
8. Select the parameters and the Call Options according to your GPRS operator (these may differ from the parameters used below as example)






9. Tap **Finish**
10. Tap **Start** > **Settings** > **Control Panel > Dialling**
11. Configure the **Dialling patterns**




12. Tap **OK**
13. Run **Internet Explorer**
14. Select the **View** menu > **Internet Options**

## Starting a Wireless Network Connection (WLAN networking)

Your Zypad WL1000 integrates an IEEE 802.11b/g Wireless LAN feature.
The first time you use your WL1000 the internal WLAN card is not connect to a wireless network.

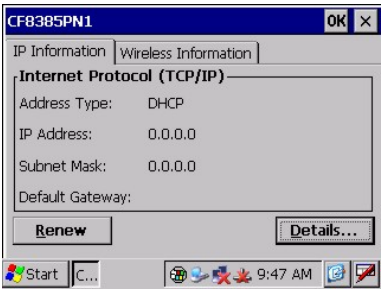
**Note:**

Means WLAN is not connected to a wireless network

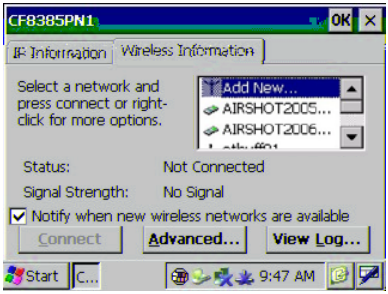
Means WLAN is connected to a wireless network

### HOW TO START THE CONNECTION

1. Insure that the WLAN feature in the Communication Tab of the Zypad setup is enabled: see the "Zetup (Zypad Setup)" paragraph. The corresponding LED will turn ON.
2. Double tap the icon on the Task bar
3. The IP Information will be displayed. The first time no information will be available

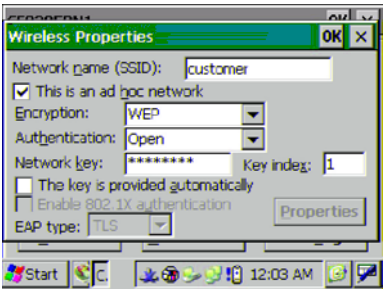



4. Select the "Wireless Information" tab

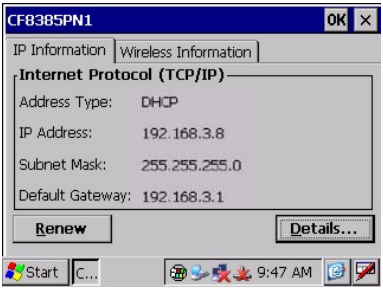



5. A list with the available Wireless access points will be displayed.

6. Select the access point you want by double-tapping it or double-tap “Add New “ to add a new access point
7. Select the parameters in the “**Wireless Properties”** and tap **OK** to confirm



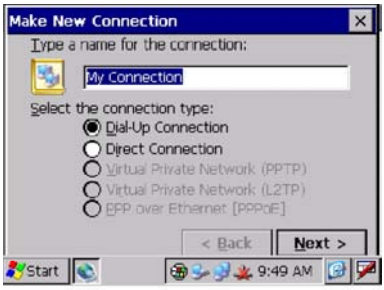

8. Tap “**Connect**” to connect WLAN with the Access point.
9. The internal WLAN card is now connected to the access point you have selected. Tap the “IP Information” tab to have the list of the parameters



## Starting a WAN connection

These steps will tell you how to create a new WAN connection on your WL1000:

1. Insure that the WLAN feature in the Communication Tab of the Zypad setup is enabled: see the "Zetup (Zypad Setup)" paragraph. The corresponding LED will turn ON
2. Tap **Start** > **Settings** > **Network and Dial-up Connections**
3. Double tap the **Make New Connection** icon
4. In the **Make New Connection** dialog box, enter a name for the connection
5. Select the connection type: Dial-up or Direct




- **If you selected the** "**Dial-up Connection**"**:**
  The procedure to follow is the same describe in the paragraph "How to Configure Bluetooth for acceding to WWAN networks". The connection you have just created appears as an icon in the "**Network and Dial-up Connections**" folder.
- **If you selected the** "**Direct Connection**"**:**
  The selectable device is "Serial USB" only. The Device dialog box allows you to configure the Serial USB properties and set the TCP/IP and security settings

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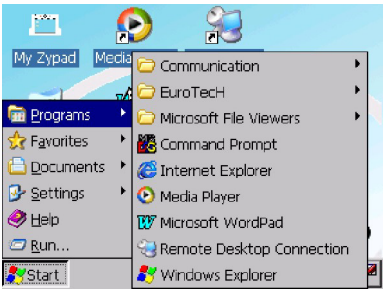
# Chapter 6 Software programs

As shown in the figure below the **Start** button opens a menu that provides quick access to frequently used programs and common system areas.




The Windows CE version installed has the following items in the **Start** menu:

| | | | |
|---|---|---|---|
| Start ▸ | Programs ▸ | Communication ▸ | Terminal |
| | | Eurotech ▸ | Gpsview |
| | | Microsoft File Viewers ▸ | Microsoft Excel Viewer<br>Microsoft Image Viewer<br>Microsoft PDF Viewer<br>Microsoft PowerPoint Viewer<br>Microsoft Word Viewer |
| | | Command Prompt<br>Internet Explorer<br>Media Player<br>Microsoft WordPad<br>Remote Desktop Connection<br>Windows Explorer | |
| | Favorites ▸ | (Empty) | |
| | Documents ▸ | (Empty) | |
| | Settings ▸ | Control Panel<br>Network and Dial-up Connections<br>Taskbar and Start Menu… | |
| | Help | | |
| | Run | | |

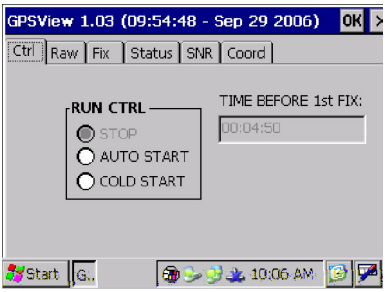
## Getting Satellite Signals, The GPSView Program

Your Zypad WL1000 features an integrated 12 Channel GPS system. GPSView is a program developed by Eurotech; it is demonstration software for viewing GPS data.

### STARTING THE GPSVIEW PROGRAM

The steps below show you how to start **GPSView** and get signals from up to 12 satellites.

1. Tap **Start** > **Programs** > **Eurotech** > **GPSView**
2. The WL1000 automatically starts searching for satellites. A timer on the right automatically starts counting until the first satellite fix is acquired.




**NOTES:**

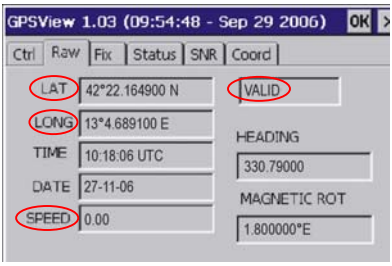
- When you are running the acquiring process for the first time you can speed up the satellite detection by leaving your WL1000 in a vertical position (screen rotated 90° counter clockwise). In this way the integrated GPS antenna is directed

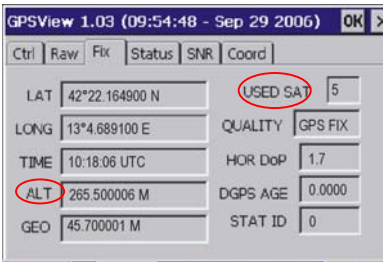
- It can take a few minutes to acquire satellites and fix your position, if one or more of the following conditions are verified since you last fixed your position:

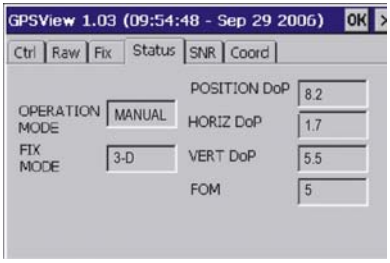
  a. It is first time you are running the acquiring process
  b. The geographic area has changed
  c. A lot of time (several days) has passed

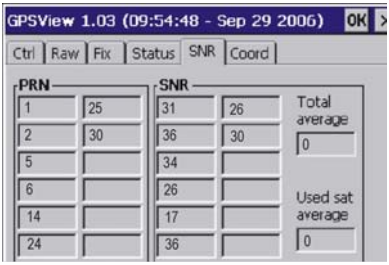
  In these cases, in order to speed up the satellite detection the suggested procedure is to tap **STOP** in the **RUN CTRL** section and then tap **COLD START**

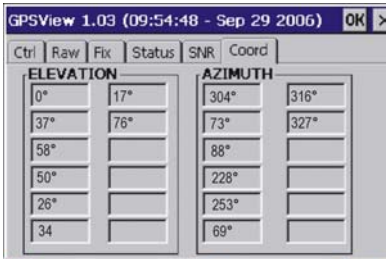
The following are demonstration screenshots displaying GPS information:




The table below lists the main data names used to find your global coordinates.

| LABEL: | MEANING: |
|---|---|
| LAT | Latitude in degrees starting from the Equator |
| LONG | Longitude in degrees starting from the Prime Meridian (Greenwich) |
| SPEED | Speed in m/s |
| ALT | Altitude in meters from the sea level |
| USED SAT | Number of acquired satellites (maximum 12) |
| VALID | Status of the acquiring process (VALID/INVALID) |