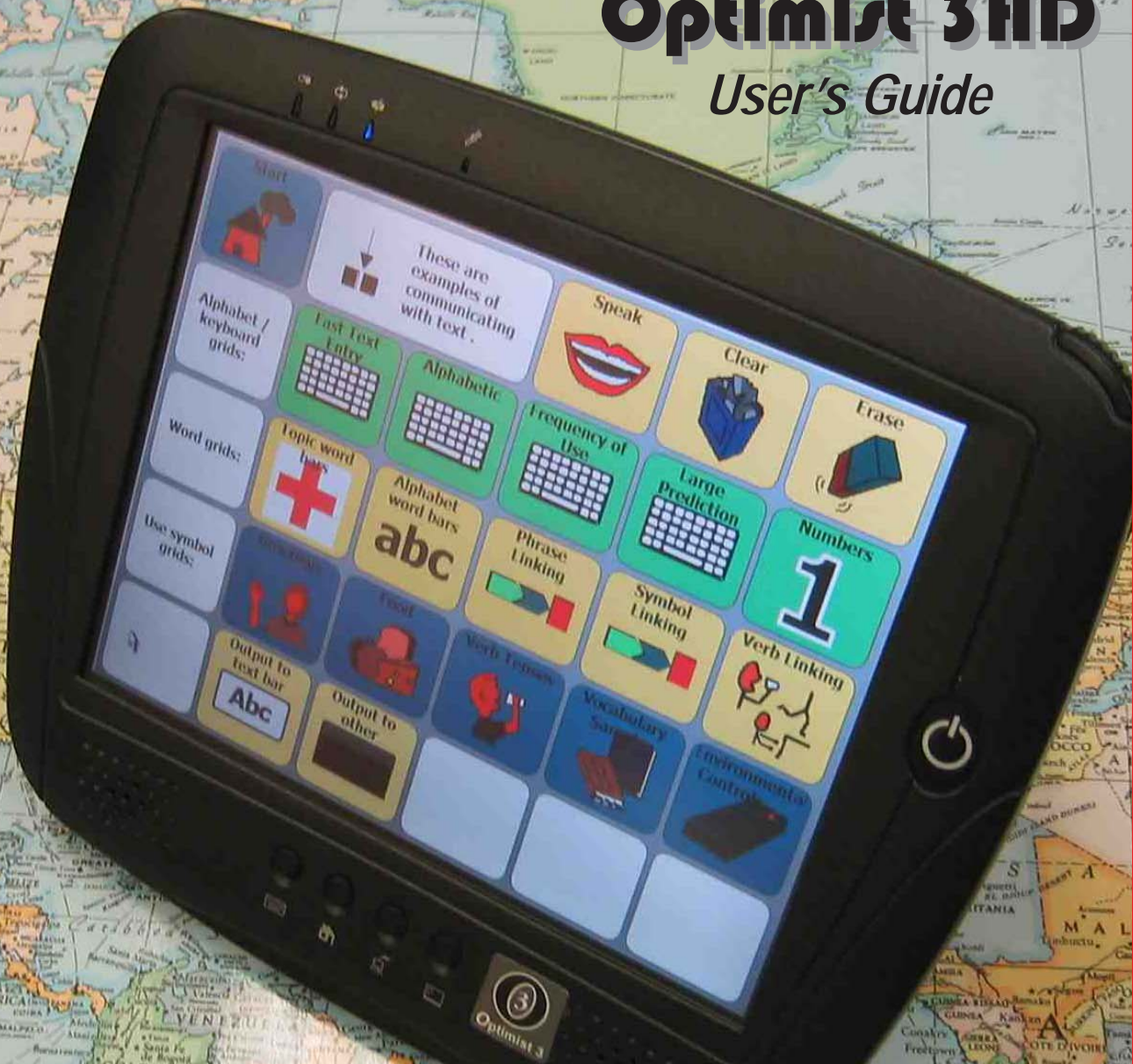


# Optimist 3HD

## User's Guide



ZYGO Industries, Inc.

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The **Optimist 3HD**, including all components, is not designed to be operated in an explosive environment. If the user is in an explosive environment, the unit should be removed from the area immediately.

Interface Warning: This is not manufactured to any specific software suite. There are various software packages and add-on hardware options available on the market; however, because the computer industry lacks standards in these areas, ZYGO Industries, Inc. does not and cannot make any warranty or representation with respect to the performance of this product with any particular software packages and/or non-ZYGO add-on hardware options. Therefore, ZYGO Industries, Inc. hereby disclaims any representations or warranty that this product is compatible with any combination of products you may choose to connect. While ZYGO representatives or authorized dealers may be able to assist you, and may make recommendations, they are NOT authorized to vary or waive this disclaimer.

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# Certifications and Limited Warranty

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## COMPLIANCE SPECIFICATIONS

The **Optimist 3HD** has been subjected to testing and quality controls to ensure that the devices will perform as set forth in the published specifications. All **Optimist 3HD** units have been tested and designed to comply with the identified information technology standards.

## FCC CLASS B RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of FCC Rules. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference with radio communications. Operation of this device in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his/her own expense.

## LIMITED WARRANTY

ZYGO Industries, Inc. provides a limited warranty of one year.

ZYGO Industries, Inc. reserves the right to change its warranty policy at any time. Such new warranty shall take effect immediately and apply to products sold and distributed after the date of such change in warranty.

## ACKNOWLEDGMENTS

**Optimist 3HD** is a trademark of ZYGO Industries, Inc. ZYGO is a registered trademark of ZYGO Industries, Inc. Windows is a registered trademark of Microsoft Corporation. All other trademarks and registered trademarks are property of their respective corporations.



## CAUTION:

### FAILURE TO COMPLY MAY RESULT IN SERIOUS INJURY

Please review the following material carefully. Failure to follow the instructions, or failure to heed the warnings contained herein could lead to serious injury.

### SPECIAL BATTERY CAUTIONS

The following are special precautions you should take when using and handling batteries.

- Do not expose batteries to direct sunlight or extreme heat.
- Do not submerge batteries in liquid.
- Do not incinerate batteries.
- Do not handle damaged or leaking battery packs.
- Do not attempt to discharge batteries by short-circuiting them.
- Do not attempt to charge batteries with a charger other than one approved for use with the **Optimist 3HD**.
- Do not leave or operate the **Optimist 3HD** in an excessively hot environment such as a closed vehicle under hot sunshine or beside a fire, heater, or blow dryer. Do not leave the **Optimist 3 HD** exposed to excessive heat for any period of time. Excessive heat exposure may result in melting, or cause the electronics/battery to overheat resulting in fire.
- Use only the supplied batteries and AC Adapter. Failure to follow this instruction may result in battery burst or liquid leak, and may cause fire, or injury.
- Store and Dispose of all batteries in accordance with the instructions contained herein. Never dispose of the battery by burning. Any such action may result in excessive heating, explosion, or fire.
- Do not disassemble, modify, puncture, or strike any battery with force or allow batteries to become wet. Any such action may result in excessive heat, explosion, or ignition.
- If at anytime the **Optimist 3HD** batteries should smell, heat up, become discolored, leak fluid, change shape, or experience an abnormal occurrence, remove the battery from the **Optimist 3HD** and do not use it.
- Should leaking fluid from the battery make contact with skin, eyes or clothes, immediately flush with water. If contact with eyes, receive medical treatment immediately. Failure to follow this instruction may result in a skin rash or significant eye damage.



## CAUTION

There is a danger of explosion if the battery is incorrectly replaced. Replace only with the same type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions. Unwanted lithium ion battery packs may be returned to the battery manufacturer for disposal.

## Optimist 3HD CASING

The **Optimist 3HD** casing is a magnesium alloy enclosure. Dismantling or opening the case will void warranty and may possibly cause electric shock. Avoid wet environments.

## GETTING STARTED WITH THE *Optimist 3HD*

Thank you for purchasing the **Optimist 3HD**. Before you use this device, please read this manual for setup procedures, safety precautions, and other important information. Review the contents even if you are an experienced user.

If you have any problems, contact Customer Service at (800) 234-6006 (U.S. and Canada) or (503) 684-6006, or by E-mail at [zygo@zygo-usa.com](mailto:zygo@zygo-usa.com).

## Precautions

- Always exercise care when operating and handling the **Optimist 3HD**.
- Do not apply excessive pressure or force to the display screen.
- Avoid exposing the panel screen to direct sunlight or other heat source. Where possible, the **Optimist 3HD** should be facing away from direct lighting to reduce glare.
- DO NOT use any AC-DC adapter other than the one provided with the device.
- In the unlikely event that smoke, abnormal noise, or strange odor is present, immediately power the **Optimist 3HD** off. Please report the problem to your device provider immediately.
- Never attempt to disassemble the **Optimist 3HD**—doing so will void your product's warranty.

# Introducing the ZYGO *Optimist 3HD*

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Although it is based on high-performance computer technology, the **Optimist 3HD** is supplied as a Speech Generating Device (SGD). It is set up for use with augmentative or alternative communication (AAC) software to perform as a communication aid only. Optional programs to perform other non-AAC functions can be purchased separately and added at any time.

The **Optimist 3HD** has an all-light readable display with outstanding ergonomics and a sleek appearance. The following illustrations give you an overview of the **Optimist 3HD**.



## Technical Specifications and Ports of *Optimist 3HD*

The **Optimist 3HD**'s base computer runs on a high-performance, AMD Geode LX800 processor. It is supplied with 8 MB of Flash ROM memory, 1 GB of SDRAM, and operates on Microsoft's Windows XP Tablet PC Operating System. It features an 8.4" SVGA (800x600) All-Light Readable touch screen, and weighs in at just over 3 pounds. The **Optimist 3HD** also contains ports to connect peripheral modules and devices, such as flash memory cards and printers. Detailed specifications are listed in the chart below.

Hardware	Specifications
Processor	AMD Geode LX800
Operating System	Microsoft Windows XP Tablet PC Edition
Flash ROM	8 MB
SDRAM	1 GB
Expansion Slots	One PCMCIA, Three USB 2.0
Display	8.4" 800 x 600 Resolution All-Light Readable Touchscreen
Audio	Internal Speaker and Microphone, External Jacks for Headphone & Microphone
Batteries	Lithium-Ion
USB	Three USB 2.0 Ports
Size (H x W x D)	9.4" x 7.9" x 1.8" (24 x 20 x 4.6 cm)
Weight	3.5 Pounds (1.6 Kg)

## Power Specifications

The primary source of power for the **Optimist 3HD** are the internal battery packs. A DC-in jack connects the AC adapter with the **Optimist 3HD** to recharge the battery packs. Follow all precautions listed in this manual when using, charging or disposing of batteries.



### **CAUTION:** FIRE AND BURNING WARNING

Severe personal injury and equipment damage can result by not following proper charging procedures. Recharge the device using only the AC adapter designated for **Optimist 3HD**.



## Optimist 3HD's 8.4" Display Screen

**Optimist 3HD's** specially enhanced display screen makes it a premium choice. It provides SVGA (800x600) resolution on an All-Light Readable transmissive touch screen, while keeping power draw to a minimum.

The stylus for the **Optimist 3HD** touch screen display is located in the upper right corner of the panel. Instead of using a mouse, the **Optimist 3HD** uses a touch screen, but a USB mouse is supplied for convenience.



### **CAUTION:** LCD SCREEN DAMAGE WARNING

Touching with non-recommended objects and exposing to moisture may damage the screen.

## Device Compatibility

In addition to using the touch screen and virtual keyboard for input, the **Optimist 3HD** is also compatible with most USB mice, keyboards, and USB devices designed for use with Windows XP. The functionality of the **Optimist 3HD** can be expanded with PCMCIA and/or Compact Flash (CF) cards. CF cards are available at most computer retailers and are designed to carry out a number of different functions. Extra memory is easily added with CF cards.

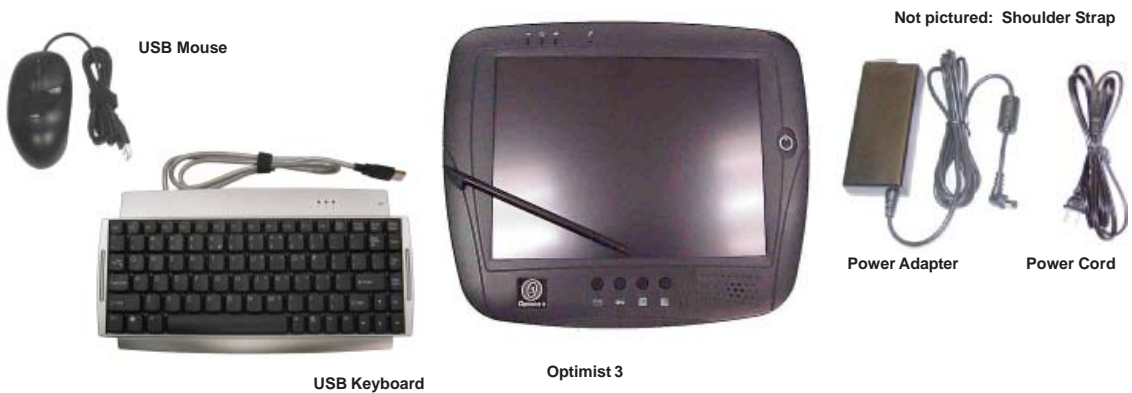
## Windows XP Tablet PC

The **Optimist 3HD** display runs on a Microsoft Windows XP Tablet PC platform. Windows XP Tablet PC allows users of mobile devices, (such as the **Optimist 3HD**) access to the newest Microsoft technology. One benefit **Optimist 3HD** users will notice is the ability to use most any peripheral device or program that is compatible with Windows XP without re-compiling drivers or software. Most USB and CF hardware designed for use with Windows XP will be compatible with the **Optimist 3HD**.

The Microsoft XP Tablet PC operating system also offers the convenience of a familiar interface. Because XP Tablet PC is based on Windows XP home and Professional editions, **Optimist 3HD** users will find the interface to be very similar, if not identical in most areas to the standard Windows XP interface. Most tasks are completed through the same procedures on both operating systems. Users of Windows XP should have no trouble becoming comfortable with the **Optimist 3HD** and XP Tablet PC OS.

## Unpacking the Optimist 3HD

As you unpack your **Optimist 3HD**, please check the box to make sure that all of the items you ordered are present and in good condition. If any item is missing or damaged, contact your authorized ZYGO dealer, or call ZYGO Industries, Inc. toll free (U.S. and Canada) at (800) 234-6006.



## Charging the Batteries

The batteries will need to be charged prior to using the **Optimist 3HD** with battery power. The batteries may not be fully charged when you receive the **Optimist 3HD**. The AC adapter may be connected to the **Optimist 3HD** and it may be used while its batteries are being charged.



To charge the batteries, plug the A/C adapter directly into the DC-in plug on the right side of the **Optimist 3HD**.

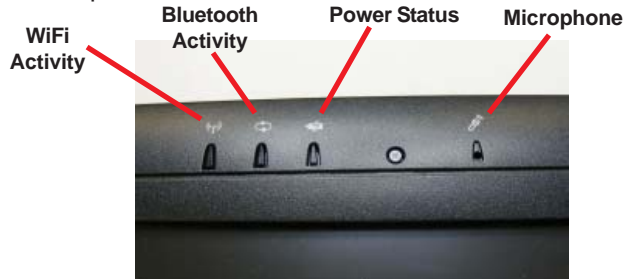
When fully discharged, the **Optimist 3HD** will take a little more than 2 hours to fully recharge the internal batteries. When possible, completely discharge the Optimist 3's internal batteries before recharging it again.



**NOTE:** Before using the batteries for the first time, make sure you read the “**Special Battery Cautions**” on page 3.

## LED Indicator Lights

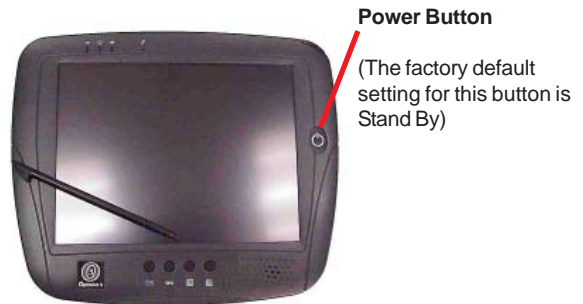
There are three LED indicators on **Optimist 3HD**. They are located on the upper left hand corner of the panel.



- The LED on the left is reserved for WiFi Activity, and is not used on the **Optimist 3HD**.
- The LED in the middle shows Bluetooth Activity, and is not used on the **Optimist 3HD**.
- The LED on the right is the “Power Status LED”. When the **Optimist 3HD** is connected to the AC adapter, this LED will blink as the unit is charging. When the batteries are fully charged and the unit is still connected to AC power, the LED will stay on continuously. When running on battery power, this LED indicates whether the unit is on or off. When the LED is illuminated, the unit is on, and when the LED is off, the unit is off.

## Powering Optimist 3HD on/off

When the **Optimist 3HD** is powered on, it can be put into two different power-off modes. It can be put into a Stand By mode, or it can be powered completely off. Stand By mode allows you to quickly put the unit to sleep and keep your applications open. When the unit is in Stand By, turning it back on will not take as long as a full boot. Stand By mode is useful when you are setting the unit down for a short period of time and wish to conserve battery power.



## Turning on the Optimist 3HD

To turn on the **Optimist 3HD**, momentarily push the power button on the right side of the unit's front panel.

## Turning off the Optimist 3HD



### To completely turn off the Optimist 3HD:

1. Use the stylus to tap the Start button, and choose Shutdown.
2. Choose Turn Off from the three selections that appear.

This is the best way to turn the unit off, as it saves all settings, and shuts down all attached hardware devices properly, to avoid damage. It is recommended that all work be saved before turning off the unit.

If the **Optimist 3HD** has stopped responding to the stylus or the keyboard, and you cannot press the Start button, you can power the unit off by holding the power button down for 5-7 seconds. When the screen goes black, the unit has shut down.

### Putting the Optimist 3HD into Stand By mode:

**NOTE:** The factory default setting for the power button is Stand By.

- To put the unit into Stand By mode, just momentarily press the power button while the unit is running. This will put the unit into Stand By. It is recommended that all the data in your open programs be saved before going into Stand By.
- To resume from Stand By mode, momentarily press the power button again.



## Using the Stylus

Using the stylus on the touch screen will be your primary means of interaction with the **Optimist 3HD**. The stylus is located in the upper right hand corner of the panel. To remove the stylus simply slide the stylus to the right until it is fully detached from the panel.

Use the stylus to tap the icon, menu item, or button that you wish to activate. The moment you tap the screen, the mouse pointer will move to that point, just as if you had used a standard computer mouse to move the pointer. If the mouse pointer does not move to the exact place that you tap with the stylus, you may need to recalibrate the touch screen. (See *Calibrating the Touchscreen*, under *Advanced Functions of the Optimist 3HD*).



## Activating the On-screen Keyboard

When using the **Optimist 3HD**, you will often need to enter text or numbers, or to perform a function that requires the use of a keyboard. The **Optimist 3HD** provides an On-screen Keyboard that can be used to enter information in this manner.

### Launching the on-screen keyboard

Press the left-most button in the group of four buttons on the front of the **Optimist 3HD** below the screen (located above the keyboard icon), and the On-screen Keyboard will appear. To type, simply use the stylus to tap the desired keys.

### Closing the on-screen keyboard

To close the keyboard, press the On-screen Keyboard button again. When you need to perform a right click function with the touch screen, you will need to use the Right Button window.



Keyboard



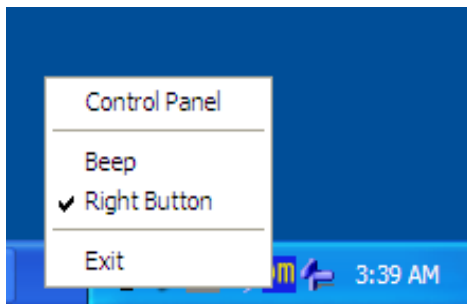
Character Pad



Writing Pad

## To Invoke the Right Button Window:

1. Click once on the PenMount icon in the system tray (see picture). The PenMount menu will appear.



2. If there is not a check mark beside the Right Button item, click on Right Button to open the Right Button window. You will see a small window appear with a picture of a mouse.
3. To perform a right click, first use the stylus to tap the mouse icon, and then tap the location on the screen you wish to right click.

# Advanced Functions of the *Optimist 3HD* **3**

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## Front Panel Buttons



### **1 – On-screen Keyboard**

Pressing **Button 1** will open the unit's on-screen keyboard, which includes handwriting recognition options.

### **2 – Windows Task Manager**

Pressing **Button 2** will open the Windows Task Manager.

### **3 – Screen Rotation**

Pressing **Button 3** will alternate the display between portrait and landscape views.

### **4 – System Utility**

Pressing **Button 4** will bring up the System Utility window with the following:

- **Calibration:** Use to calibrate the touch screen.
- **Communication Status:** Describes the status and properties of WiFi and Bluetooth.
- **Brightness:** Permits adjustment of the screen brightness.
- **Volume:** Permits adjustment of the unit's output volume.
- **Power Source:** Describes the status of the the unit's batteries.



# Calibrating the Touch Screen Feature

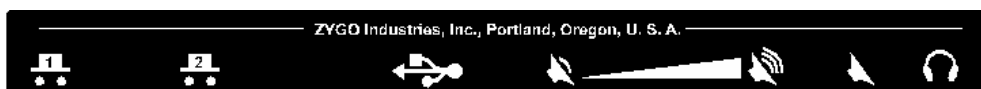
If the calibration on the touch screen seems off, it may need to be recalibrated.

To recalibrate:

Press the 4th Front Panel Button to bring up the System Utility Window.  
Using the stylus, tap the Touch Calibration button and follow the on-screen instructions.

## Optimist 3HD Switch Inputs

**Optimist 3HD** integrates 2 scan-switch inputs thus eliminating the need for an external switch adapter. The switch inputs expect a normally open switch. The communication software recognizes when the switch(es) are closed. No special drivers are required.



Switch 1 (F1)      Switch 2 (F2)

**Switch 1 simulates the F1 key and Switch 2 simulates the F2 key.**

Here are a few pointers for setting up your software to make use of the switch inputs...

### The Grid 2

User Settings/Input Settings/Switch/Connection/Switch Adapter: Keyboard F1-F8.  
Switch 1 (Primary Switch) = F1  
Switch 2 (Accept) = F2

Connect 1 or 2 switches and press them to test.

### BM/SDP

Dynamic Boards/Access Method/Auto Scan/Key Click. Press either Switch 1 or Switch 2 to change the selection to F1 or F2.

### VS Communicator

Settings/Input Method/Key-controlled scan/Select Keys: Choose F1 for Key 1 and choose F2 for Key 2.

## Adding Software

You can add and remove software on the **Optimist 3HD** just as you would a Windows XP machine.

## Adding Peripherals

The **Optimist 3HD** supports most standard peripherals that are made for use with Windows XP home or professional editions. The Windows XP Tablet PC operating system allows the **Optimist 3HD** to take advantage of this convenience. The USB ports on the side of the display and on the top of the bottom-pack are USB 2.0 compatible, and will support most USB 2.0 devices designed for Windows XP home or professional editions. The PCMCIA slot on the **Optimist 3HD** will also accept Windows XP compatible devices, and should work with the same drivers that are designed for use with Windows XP home or professional editions. To install drivers for a particular hardware device, follow the directions included with the device for installing to a standard Windows XP machine.

## Notes:

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