



GD3080 User Guide



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Identification: GD3080

Copyright Notice

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This product is available for purchase under General Dynamics Itronix's standard terms and conditions of sale. General Dynamics Itronix hardware products may be reconditioned, or be manufactured from parts and components that may be new, used, rebuilt, or recycled and in some cases, the hardware product may not be new and may have been previously installed. In any event, General Dynamics Itronix warranty terms apply.

Trademark and Patent Notice

Itronix is a registered trademark of General Dynamics Itronix.

Microsoft® is registered trademarks of Microsoft Corporation.

ENERGY STAR® is a registered trademark of the U.S. Environmental Protection Agency. As an ENERGY STAR® partner, General Dynamics Itronix has determined this computer meets ENERGY STAR® program requirements for computers.

Compliance Statements

FEDERAL COMMUNICATION COMMISSION 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 the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. 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 to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC CAUTION

To assure continued compliance, (example - use only shielded interface cables when connecting to computer or peripheral devices) any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

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

IMPORTANT NOTE

FCC RADIATION EXPOSURE STATEMENT

This equipment has been tested and complies with FCC RF exposure limits set forth for the General Population/Uncontrolled exposure environment.

LOCAL RESTRICTION OF 802.11A/B/G/N RADIO USAGE

CAUTION Due to the fact that the frequencies used by 802.11a/b/g/n wireless LAN devices may not yet be harmonized in all countries, 802.11a/b/g/n products are designed for use only in specific countries, and are not allowed to be operated in countries other than those of designated use. As a user of these products, you are responsible for ensuring that the products are used only in the countries for which they were intended and for verifying that they are configured with the correct selection of frequency and channel for the country of use. Any deviation from permissible settings and restrictions in the country of use could be an infringement of national law and may be punished as such.

FCC RADIO FREQUENCY INTERFERENCE REQUIREMENTS

This device is restricted to indoor use due to its operation in the 5.15 to 5.25 GHz frequency range. FCC requires this product to be used indoors for the frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems. High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

WARNINGS AND CAUTIONS

WARNING It is important that only authorized General Dynamics Itronix personnel attempt repairs on General

Dynamics Itronix equipment as this might void any maintenance contract with your company. Unauthorized service personnel might be subject to shock hazard on some General Dynamics Itronix equipment if removal of protective covers is attempted.

The product you have purchased is powered by a rechargeable battery. The battery is recyclable and, under various state and local laws, it may be illegal to dispose of this battery into the municipal waste stream. Do not crush the battery or place it in a fire. Check with your local solid-waste officials for details on recycling options or proper disposal.

CAUTION Internal components of the GD3080 computer will be damaged if exposed to contaminants. When dust covers, or the bottom access panel are open on the computer, shield the unit from all contaminants such as liquids, rain, snow, and dust.

Internal radio(s) may have an individual FCC Identifier which are not applicable to this configuration. Only the FCC ID shown on the label located on the bottom of the computer is applicable. The computer must not be co-located or operating in conjunction with any other antenna or transmitter than specified in the filing.

This device may contain a WLAN radio transmitter, and a PAN radio transmitter. When using the WLAN transmitter, a minimum separation distance must be maintained between the upper right and left edges of the display screen and all users/bystanders. The WLAN/PAN transmitter should be turned off before carrying the computer to comply with FCC RF exposure requirements.

In the event of problems, you should contact your equipment supplier in the first instance.

This product is intended to be supplied by a Listed Power Unit and output rated 12V DC input voltage, 4.16A.

CAUTION Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Sous la réglementation d'Industrie Canada, ce transmetteur radio ne peut fonctionner en utilisant une antenne d'un type et un maximum (ou moins) gain approuvées pour l'émetteur par Industrie Canada. Pour réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisis de manière que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas ce qui est nécessaire pour une communication réussie.

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Le fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

Compliance Statement for Canada

CAUTION: Industry Canada - Class B

This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the interference-causing equipment standard entitled "Digital Apparatus," ICES-003 of Industry Canada.

Cet appareil numérique respecte les limites de bruits radioélectriques applicables aux appareils numériques de Classe B prescrites dans la norme sur le matériel brouilleur: "Appareils Numériques," NMB-003 édictée par l'Industrie. (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

Under Industry Canada regulations, this radio transmitter may only operate using an antenna of a type and maximum (or lesser) gain approved for the transmitter by Industry Canada. To reduce potential radio interference to other users, the antenna type and its gain should be so chosen that the equivalent isotropically radiated power (e.i.r.p.) is not more than that necessary for successful communication.

Sous la réglementation d'Industrie Canada, ce transmetteur radio ne peut fonctionner en utilisant une antenne d'un type et un maximum (ou moins) gain approuvées pour l'émetteur par Industrie Canada. Pour réduire le risque d'interférence aux autres utilisateurs, le type d'antenne et son gain doivent être choisis de manière que la puissance isotrope rayonnée équivalente (PIRE) ne dépasse pas ce qui est nécessaire pour une communication réussie.

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Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Le fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne peut pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

RF exposure warning: The equipment complies with RF exposure limits set forth for an uncontrolled environment. The antenna(s) used for this transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

L'équipement est conforme aux limites d'exposition aux RF établies pour un environnement non contrôlé. L'antenne (s) utilisée pour ce transmetteur ne doit pas être co-localisée ou fonctionner en conjonction avec une autre antenne ou transmetteur.

This device is restricted to indoor use due to its operation in the 5.15 to 5.25 GHz frequency range. IC requires this product to be used indoors for the frequency range 5.15 to 5.25 GHz to reduce the potential for harmful interference to co-channel Mobile Satellite systems. High power radars are allocated as primary users of the 5.25 to 5.35 GHz and 5.65 to 5.85 GHz bands. These radar stations can cause interference with and/or damage this device.

Ce dispositif est limité à une utilisation en intérieur à cause de son fonctionnement dans la gamme 5,15 à 5,25 GHz. IC exige que ce produit soit utilisé à l'intérieur de la gamme de fréquence 5,15 à 5,25 GHz pour réduire les risques d'interférence nuisible à la co-canal systèmes mobiles par satellite. Radars à haute puissance sont désignés comme utilisateurs principaux de l'5,25 à 5,35 GHz et 5,65 à 5,85 GHz. Ces stations radar peuvent provoquer des interférences avec et/ou endommager l'appareil.

Safety Information

- Enclosed with each GD3080 notebook computer is the radio specific safety information. Do not proceed without reviewing the information provided in that document.
- Do not proceed beyond a WARNING or CAUTION until the indicated conditions are fully understood and met.
- Read these instructions carefully. Following these guidelines will help prevent damage to your computer and help protect your personal safety.
- Read and follow all warnings and instructions marked on the product and noted in this documentation.
- The first time you use your computer, we recommend that you carefully read the section on **Power Management** to familiarize yourself with basic battery information and ensure optimum performance
- **CAUTION** This notebook computer is designed (only) to be used with the Manufacturer provided dedicated AC Adapter or Vehicle Adapter.
- Unplug the computer from the power outlet before cleaning. Use a damp cloth for cleaning. Aerosols, solvents, or strong detergents are not recommended cleaning solutions and may void your warranty. For system decontamination recommendations please contact your service technician.
- Slots and openings in the computer case are for ventilation purposes. Do not block or cover these openings or the system could overheat.
- Do not place the product on a soft surface such as a bed, sofa, or rug where the ventilation slots and openings may be blocked.
- Do not place this product near or over a radiator or heat register.
- Do not place this product in a built-in installation unless proper ventilation is provided.
- Do not store the computer at temperatures above 167°F (75°C) or below -67°F (-55°C).
- Do not step on or place anything on the power cord.
- Do not slam the display lid when you close it.
- Do not place any object on top of the computer when the display is closed.
- If you use the computer with an extension cord, ensure that the total ampere ratings of all the devices sharing the extension do not exceed the rating of the extension cord or the rating of the wall outlet.
- Do not push foreign objects into the computer through any of the slots or openings. Dangerous voltages are present, which could cause electric shock, fire, or damage sensitive components.
- The computer is designed to withstand spills. If a spill occurs, power off the computer and wipe it down before continuing to use the computer.
- For best results, use a power strip with a built-in surge protector. Do not use inferior extension cords as this may result in damage to your computer.
- FAA regulations require that all transmit/receive devices be turned off during flight. If you have radios in your computer (including GPS) and your computer is equipped with a radio on/off switch, please use it to turn your radios off during flight. If you have radios and you do not have a switch to turn the radios off, either leave your computer off during flight or contact your help desk for assistance.

Service and Upgrade Safety and Precautions

- Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks and may void your warranty. Refer all servicing to qualified service personnel.
- Unplug this product from the wall outlet and refer servicing to authorized service personnel under the following conditions:
 - When the power cord or plug is damaged or frayed .
 - If the product does not operate normally when the operating instructions are followed. Adjust only those controls that are covered by the operating instructions since improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal condition.
 - If the product exhibits a distinct change in performance, indicating a need for service.
- Do not upgrade or service this computer without prior authorization from the manufacturer. Damage caused by servicing that is not authorized may void your warranty.
- Before performing any manufacturer authorized service or upgrade, first follow these instructions:
 - Prevent damage from static electricity by following ESD precautions.
 - Place the computer on a clean, flat surface.
 - Turn off the computer and disconnect the power supply.
 - Undock the computer if it is in a docking device (such as an office dock or vehicle dock).

- Disconnect any attached peripherals.
- Disconnect any attached network, telephone or telecommunication line.
- Remove any media in your computer's slots or bays.
- Remove the battery (See **Battery Removal**).
- Remove the SSD (See **SSD Removal**).

Battery Pack Safety and Precautions

- **WARNING!** There is danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries promptly and according to the manufacturer's instructions.
- **WARNING!** Batteries may explode if not handled properly. Do not disassemble, open, puncture or dispose of battery packs in a fire. The battery pack could burst or explode releasing hazardous chemicals.
- **WARNING!** Keep battery packs away from children.
- Observe the safety instructions printed on the battery.
- Only use approved Lithium-Ion (extended -- 56.24Whr) battery packs with your computer and replace the battery pack only with the approved part.
- Do not abuse, deliberately pierce, or subject the battery pack to excessive impact.
- Immediately discontinue use of the battery if it appears damaged or abnormal in any way, consult your local provider for advice.
- Do not immerse the battery pack in liquid.
- Do not short together the battery connections. Do not store the battery pack with metallic objects due to the risk of short circuit.
- Battery chemical leakage is harmful. In the unlikely event of battery leakage; DO NOT TOUCH. In case of accidental contact with the eyes or skin, immediately wash with running water and seek medical advice. In the case of accidental ingestion, seek immediate medical attention.
- Dispose of used batteries according to local regulations. Recycle if at all possible.
- Avoid exposing batteries to extremely hot or cold temperatures for long periods. To prevent possible damage to the battery, the GD3080 does not allow the battery to charge if the internal temperature of the battery gets too low (< 5°C or < 41°F) or too high (> 50°C or > 122°F).
- Follow **Battery Tips** for use and storage.

Your new GD3080 features the most innovative advances in portable computing technology. It combines state-of-the-art ergonomics and a rugged, durable architecture to provide you with a Tablet PC that is compact, powerful, and easy to use virtually anywhere.

Designed for a wide range of business productivity applications, the GD3080 is an ideal choice for mobile workers who are on the go throughout the day. It offers flexibility, durability and dependability along with ruggedness and portability to make it quick and easy to transport to any work location, indoors, outdoors, or in your vehicle.

This document contains all the information you need to set up and use your new Tablet PC.

Unpacking Your System

After opening the package, carefully inspect the contents. Contact your dealer if any items are missing or appear damaged. The shipping carton should contain a GD3080 Tablet PC with the following features and parts:

Standard Parts

- GD3080 Tablet PC
- AC Adapter and Power Cord
- (1) Digitizer Pen with Tether
- (5) Pen Replacement Tips and (1) Removal Tool
- Cleaning Cloth
- GD3080 Quick Start Guide

Standard Features

- 8.4" XGA (1024X768) TFT LCD sunlight-viewable DynaVue™ Active Matrix Color **Display**
- Display with two touch functions, an active digitizer touch panel and a passive touchscreen
- Seven (7) **Hot keys**
- Internal 56K V.92 V.92/K56 flex **Fax/Modem**
- RF ON/OFF **button**
- Internal Gigabyte **Ethernet** LAN
- Lithium-Ion **Battery**
- Two (2) **USB** 2.0 Ports
- One Type II **PC Card** Slot
- One Type II **Compact Flash** Slot
- **Audio** Jacks for external speakers and microphone
- Internal Speaker and Microphone
- **Multi-I/O Expansion Connector**
- **Second Battery** Connector (to attach the optional second battery)
- Microsoft® Windows® XP Tablet PC Edition 2005
- 3-year limited warranty
- **DDR Memory**

- Hard Drive Heater
- Solid State Drive

Optional Accessories

The following items are normally optional, but some vendors may include them in the standard package. Some items may not be available in some countries, or some vendors may choose not to carry all the items. A complete list of optional peripherals and accessories is listed on the [General Dynamics Itronix website](#).

- Carry Case
- **POGO Desk Mount**
- **Second Battery**
- **External USB Floppy Disk Drive**
- **External USB DVD/CD-RW Drive**
- **RJ-11 Cable**
- Shoulder Strap
- Tip and Ring Cable
- USB 2.0 Port Replicator
- USB to Serial Cable

CAUTION When purchasing any of the accessories listed above, purchase only those accessories that are approved for use with your computer. The above accessories are proprietary items. Your system vendor can obtain these approved accessories. If you use items that are not approved for use with this computer, you may cause your computer to malfunction, or to emit or receive electromagnetic radiation in excess of local regulations. For non-proprietary accessories such as PC Cards or printers, ensure that the accessory functions properly in your computer before making the purchase. Your system vendor may be able to recommend reliable brands and models.

Where to Look For Information

About Your GD3080 Tablet PC

This User Guide describes the key elements and functions of your computer. Read it thoroughly before you begin using your GD3080 and refer to it when needed.

Please refer to the **Service and Support** section if you have more questions or need more help.

About Windows® XP

For extensive information and help about Windows®, from the **Start** Menu, click on either of the following:

- **Help and Support**. View extensive **Tablet PC Help**. From here you can also view several Tablet PC Tutorials.
- **Get Going with Tablet PC**. Learn the basic information about using your Tablet PC.

About Windows® 7

For information and help with Windows® 7, select **Start, Help and Support, How to get started with your computer**. You can also browse or search help topics to learn more about using the Windows® 7 Operating System.

Precautions


You can use your computer under a wide range of environmental conditions. However, to ensure long use and continued high performance, consider the following factors when setting up your computer:

- Follow all warnings and instructions noted in this documentation, including the **notification** section.
- Follow all warnings and instructions noted in **Windows® Help and Support**, found on the **Start** Menu.
- The first time you use your computer, we recommend that you carefully read the section on **Power Management** to familiarize yourself with basic battery information and ensure optimum performance.
- **WARNING!** There is danger of explosion if the battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.
- **CAUTION** Internal components of the GD3080 will be damaged if exposed to contaminants when doors are open on the computer. Shield the unit from all contaminants such as liquids, rain, snow, and dust.
- Unplug the computer from the power outlet before cleaning. Use a damp cloth for cleaning. Do not use aerosols, solvents, or strong detergents.
- Some vents and openings in the computer case are for ventilation purposes. Do not block or cover these openings or the system could overheat.
- There is a label on the bottom of the GD3080 containing information on the power requirements of this system. These requirements must be followed. If you are unsure of your local power supply, consult your dealer or local power company.
- Do not step on or place anything on the power cord.
- If you use the computer with an extension cord, ensure that the total ampere ratings of all the devices sharing the extension do not exceed the rating of the extension cord or the rating of the wall outlet.
- Unless instructed, never push foreign objects into the computer through any of the slots or openings. Dangerous voltages are present, which could cause electric shock, fire, or damage sensitive components.
- For best results, use a power strip with a built-in **surge protector**. Do not use inferior extension cords as this may result in damage to your computer.
- Do not operate the GD3080 at temperatures above 140°F (60°C) or below -4°F (-20C).

- Do not store the GD3080 at temperatures above 167°F (75°C) or below -67°F (-55°C).

Startup Problems

If your computer does not start properly, try these solutions:

- Connect the AC adapter to charge the battery if it is not charged.
- NOTE** The **Power Status LED** should be solid blue and the **Power LED** on the AC adapter should be lit if the AC adapter is connected and functioning properly. Additionally, one of the power icons should appear in the task tray.
- If the AC adapter is connected, make sure the electrical outlet you are using works.
 - Check to make sure the **battery is installed** and charging properly.
 - If the battery does not begin charging, remove the battery, connect the AC adapter, and turn on the computer by pressing the power button; then reinstall the battery. The **Battery Status LED**  is orange while the battery is charging.

The **Troubleshooting** section lists additional solutions you can try.

Best Practices for the GD3080

Follow these recommended practices to maximize the service life of the equipment and provide resolution to common issues.

*General Daily Operations**Missing Case Feet, Port Covers and Doors*

- Inspect for broken, loose or missing parts and fasteners.
- Missing port covers or doors create contaminant entry points which may lead to system failure.
- Replacement port covers, doors, and case feet are available as field kits. Contact your support representative for order requests.

Screen Cleaning:

The GD3080 display, with proper usage and cleaning, will last for the anticipated field life of the product (3 to 5 years) without significant degradation in view ability or function.

- For mild cleaning tasks use the micro-fiber cleaning cloth provided with your unit. Tougher contaminants such as oily fingerprints may require light dampening with clean water, and will be effective for most contaminants without damaging the screen surface. This method should always be tried before stronger solutions are considered.
- For tougher cleaning tasks, a mixture of isopropyl alcohol and Water (50/50) used with the cleaning cloth is effective and will not damage the touchscreen surface.
- Never use paper products such as paper towels or wipes to clean the display surface. Paper products are abrasive and act much like fine sandpaper causing irreversible damage to the screen surface and anti-glare hard coat.

- Both replacement Display Cleaning Cloths and approved Display Cleaning solution are available as Field Kits. Contact your support representative for order requests.

Screen Overlay Use:

A screen overlay is recommended for environments with high contaminant potential.

- A screen overlay provides protection from damage caused by use of foreign objects or surface contaminants, and maximizes the useful life of the screen surface.
- Worn, scratched, or otherwise damaged screen overlays can be replaced.
- Contaminants on the screen overlay surface should be removed by following the same cleaning methods noted above.
- The screen overlay has a negligible impact on overall display brightness/viewability and provides enhanced screen clarity while maximizing the screen surface useful life.
- Screen overlays are available as field kits. Contact your support representative for order requests.

Use of the Touchscreen Stylus:

If your GD3080 has the optional integrated touchscreen use the included stylus. Foreign objects such as ball point pens or hand tools should never be used for touchscreen input; they will cause damage to the screen surface.

- A clean finger tip can be used for touchscreen input without damaging the screen surface. Fingertip use may introduce contaminants to the touchscreen surface and increase periodic screen cleaning requirements.
- Replacement styluses are available as field kits. Contact your Support Representative for order requests.

NOTE Available field kits can be ordered through the iCare Servenet Portal, or by contacting the **Client Care Center (CCC)** at 800-638-9270, option 2. Access to the iCare Servenet Portal requires a User Name and Password. Portal access will be setup upon request.

Ensure that the computer is operated and stored within its specified temperature range.

- Operating Temperature -4° F to 140° F (-20° C to 60° C)
- Storage Temperature -67° F to 167° F (-55° C to 75° C)

Conserve battery charge when possible to maximize battery life during daily use.

Partial discharge/charge cycles are preferred compared to draining the battery completely and recharging.

Avoid prolonged exposure to temperature extremes.

- Cold temperature extremes may result in reduced available energy from the battery. This energy is recoverable as the battery

warms to a nominal temperature of 68° F (20°C).

- Prolonged exposure to high temperatures can result in a permanent reduction in available energy from the battery.
- Battery charging is disabled below 32° F (0°C) and above 113° F (45°C) to protect the lithium-Ion cells in the battery.

Power Down

Exit all applications, and shutdown or reboot at the end of each work day. If the computer is left powered overnight, ensure that all applications are closed and perform a restart prior to beginning daily operations.

- This practice ensures that all applications (and system resources used by those applications) are reinitialized each work day.
- Unless an application is specifically designed for 24/7 operation, a daily practice of restarting (resetting) an application can minimize the potential for a wide variety of operational anomalies often perceived as a hardware failure.

Tips for New Owners

- Read the **Troubleshooting** section for common questions and answers about the GD3080
- Take the Windows® tutorials
 - **FOR WINDOWS® XP:** select **Get Going with Tablet PC** from the **Start** Menu.
 - **FOR WINDOWS® 7:** select **Tablet PC Tutorials**.
- Take responsibility for backup. Back up files often. Users who need to manage large amounts of data may wish to use backup devices such as a ZIP drive.
- Don't leave passwords anywhere on your Tablet PC or carrying case
- Be careful when placing your Tablet PC on an airport security conveyor belt. In most airports, security conveyor belts are safe for computers. If you are not sure, ask the security staff. You should keep a close eye on your computer.
- Tape your business card to the Tablet PC and accessories. In the workplace, Tablet PCs and accessories may often look exactly alike, leading to equipment mix ups. Prevent such mix ups by placing your name on your equipment.
- Use a lock. For added security, consider purchasing a Kensington lock to secure the Tablet PC to a desk or table.
- Develop ergonomic work habits. The science of ergonomics studies the relationship between health and a suitable work environment. For more information on ergonomics, contact your nearest computer bookstore, or local library. The Internet also has information on this and other related subjects.

NOTE Using a computer for extended periods of time with a poor workstation setup or incorrect work habits can cause health problems.

Power Management

Power Management Applications:

The use of Windows® Power Management or GD3080 Power Saver (if equipped) applications is recommended to provide maximum battery run time and prolong battery service life. Default settings allow the GD3080 to enter a Standby/Suspend state after a set period of inactivity. Extending or disabling the Standby/Suspend time-out period will increase power consumption and reduce operational time on battery power.

The GD3080 will resume/wake from standby state by pressing the **Power Button**.

Display backlight power settings:

Extending or disabling the display backlight time-out period increases power consumption and reduces operational time on battery power. The display backlight will resume power with keyboard or cursor activity.

Shutdown:

Shutdown the GD3080 when it will not be used for extended periods to conserve battery power. Depending on the configuration of the GD3080 there are specific considerations:

- Basic Configuration – No PC Card devices, RF Modems or external device connections. When using a basic configuration unit, there are no special considerations for power management.
- Integrated RF Devices – Disable integrated or user installed RF devices when not in use as they can consume battery power unnecessarily
- Externally connected devices – Some externally connected devices may be powered by the GD3080. It is best to exit any application utilizing these devices prior to powering off. Restarting the application should reinitialize the device. Externally connected devices or peripherals using GD3080 battery power may result in reduced battery run times.

File Management

BACKUPS: It is good practice to backup essential data and files periodically. Any data or files stored in volatile memory (RAM) can be lost in the event of a hard reset or unexpected shutdown. Contacts, tasks, calendar, email, and documents should be safeguarded against loss.

Battery Charging

- Charge the battery at room temperature (approximately 68° F [20° C]) for best results. Charge acceptance is optimum at this temperature and requires the least amount of time to fully recharge. At room temperature the GD3080 battery requires approximately 3 - 3.5 hours to recharge from a fully discharged state.

- Charge the GD3080 Battery at the end of each work day:
 1. Exit all applications and power off.
 2. Connect to external power; verify external power LED.
 3. Verify charge indicator LED.
- At the beginning of each work day, check for battery charge status (recommend fully charged)
- During each work day:
 1. Connect AC charger or vehicle power adapter whenever possible.
 2. Verify charging indicator LED.

Storage

Storing the GD3080 for five (5) days or less

- Install the battery pack and connect the GD3080 to external power and allow the battery pack to fully charge. The charging LED will be solid orange while charging and green when battery charging is complete.
- Shut down the GD3080 and store in a cool, dry location.

Storing the GD3080 for longer than five (5) days.

- Lithium-Ion batteries can be permanently damaged if the GD3080 is stored for extended periods requiring battery replacement.
- If the computer will be stored for more than 5 days, backup files and data, fully charge the battery, and then discharge it to 40% and remove the battery.
- The GD3080 and battery should be stored in a cool, dry location.

When storing Lithium-Ion battery packs for extended periods, consider these factors

- Fully charged Lithium-Ion battery packs deteriorate faster than partly discharged ones. For ideal storage, charge the packs to 100% and then discharge them to a 40% charge before storage.
- Do not allow stored Lithium-Ion packs to discharge completely, as this may permanently damage them. Stored packs should be recharged to 40% capacity every six (6) months.
- Storing packs at temperatures near 0°C (45°F) slows down self-discharge and battery aging; packs that are stored for a long period should be kept at low temperatures where practical.

NOTE Store batteries as close as practical to 0°C (45°F) without allowing the batteries to freeze or reach 0°C (32°F).

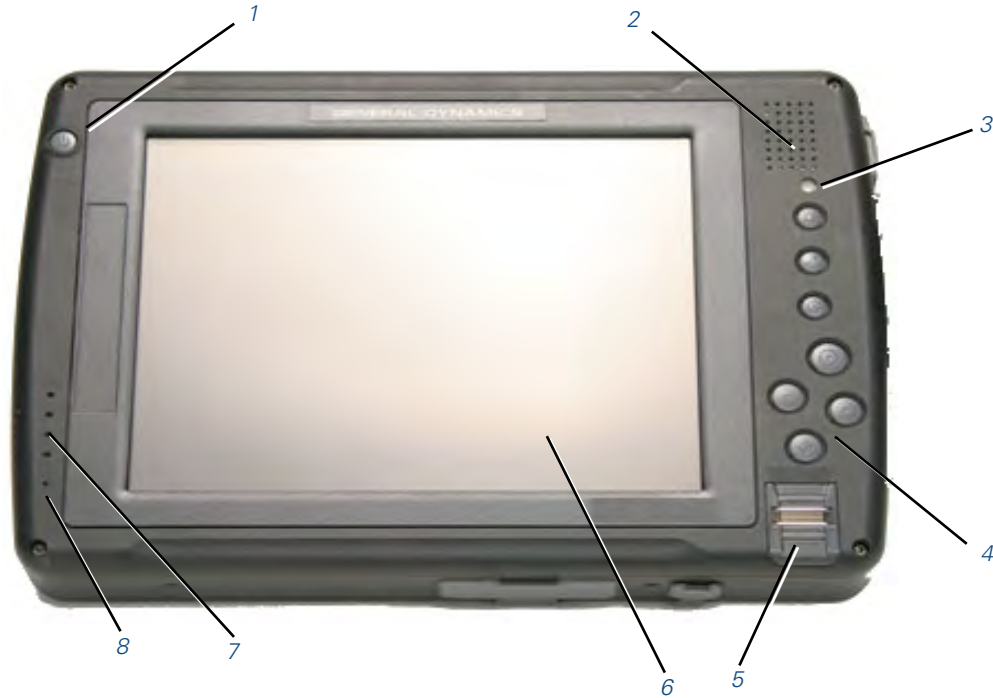
- If you store battery packs at normal ambient temperatures, use the following charge policy to maintain battery pack condition:
 - Store batteries within the temperature range of 15°C to 30°C (59°F to 86°F).
 - Charge installed packs every 5 days to maintain their charge capacity.
 - Charge uninstalled packs every six (6) months to 100%, then discharge to 40% and return to storage.

Troubleshooting

These are basic troubleshooting tips. For more complete help with troubleshooting, see the **Troubleshooting** section.

- Battery Power – Battery does not charge
- Battery Power – Short run time
- Lock-ups
 - Determine if the digitizer, touchscreen, or keypad inputs are recognized.
 - Attempt to close any programs that are not responding (press the **SECURITY** key, **Task Manager**).
 - If **Task Manager** does not list any suspect programs/applications, perform a reboot.
 - Restart applications and try the specific operation again.
 - If the **Shut down** Menu does not respond, press and hold the power button for approximately 10 seconds to perform a forced shutdown. **NOTE** Any unsaved data will be lost when using this shutdown method.
- RF Communications
 - If coverage is historically good at a location, check the signal strength. Reposition the computer slightly to increase signal strength. Wait approximately five (5) minutes. Determine if there is RF activity. Applications provided with RF devices generally provide diagnostic capability.
 - If not resolved, exit all applications, restart the applications, and try RF communications again.
 - If not resolved, connect external power and perform a restart.
 - Restart applications and try RF communications again.
- Additional Information is Available
 - The GD3080 Getting Started Guide included with the original shipment packaging.
 - The GD3080 factory installed Windows® image includes a resident help file with a link on the desktop; alternately Help can be accessed via the following path: **Start -> All Programs -> Mobile Computer Tools**.
 - Please contact your support representative for any additional questions.

Front View



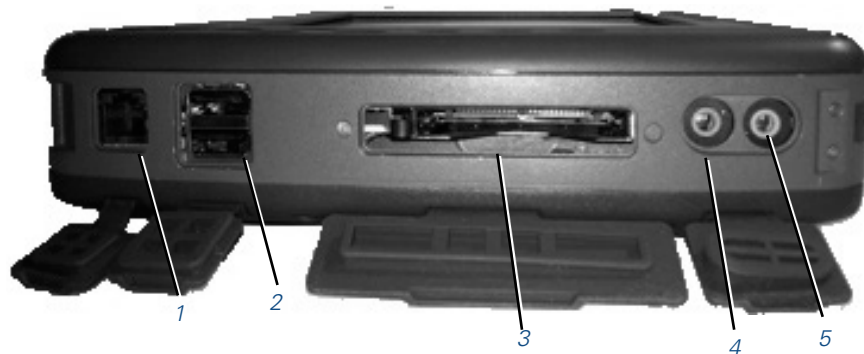
#	Feature	Description
1	Power Button	Press this button to turn the unit on or off or to hibernate.
2	Speaker	Use the integrated speaker for audio output
3	Ambient Light Sensor	When enabled, the Ambient light sensor adjusts the display backlight in response to ambient light conditions. It is disabled by default. See Display and Pen Basics for more information.
4	Hot Keys	Speeds common functions such as changing the display orientation
5	Fingerprint Scanner	Optional fingerprint scanner for additional security.
6	Display	8.4" XGA (1024X768) outdoor transmissive display with digitizer control panel and optional touch screen
7	LED Status Indicators	The LEDs light up when a particular function of the computer is active
8	Microphone	Use the sealed, integrated microphone for audio input

Left Side View



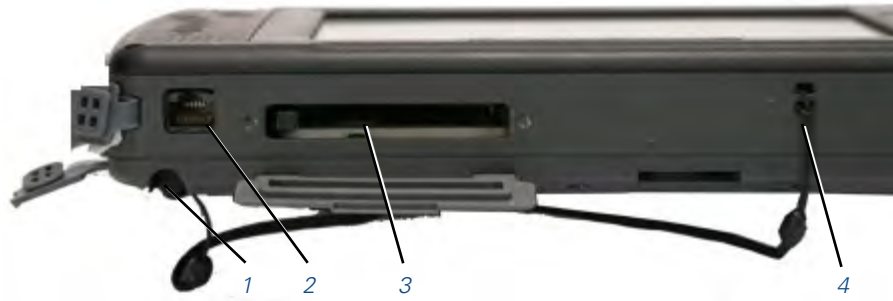
Feature	Description
Security Slot	Your computer has a security slot that can be used with a standard laptop locking device, such as a Kensington Lock.

Right Side View



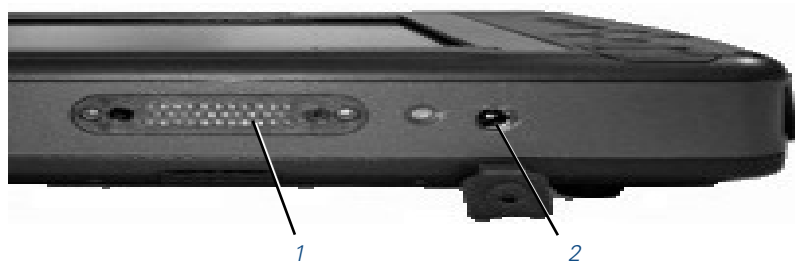
#	Feature	Description
1	Fax/modem RJ-11 Jack	The fax/modem can transmit data using the 56 Kbps V.90 or V.92 protocol, and send and receive faxes at 14.4 Kbps.
2	2 USB 2.0 ports	The universal serial bus (USB) enables you to attach keyboards, a mouse, scanners, printers and other USB devices. USB devices can be chained together on a single cable.
3	CF Slot	Housing for (optional) GPS electronics and antenna or CF slot for compact flash cards and devices.
4	Audio-Out Jack	Connect external speakers or a stereo headset to this jack to listen to multimedia (mono only).
5	Audio-In Jack	Connect a microphone to this jack to record audio.

Top Edge View



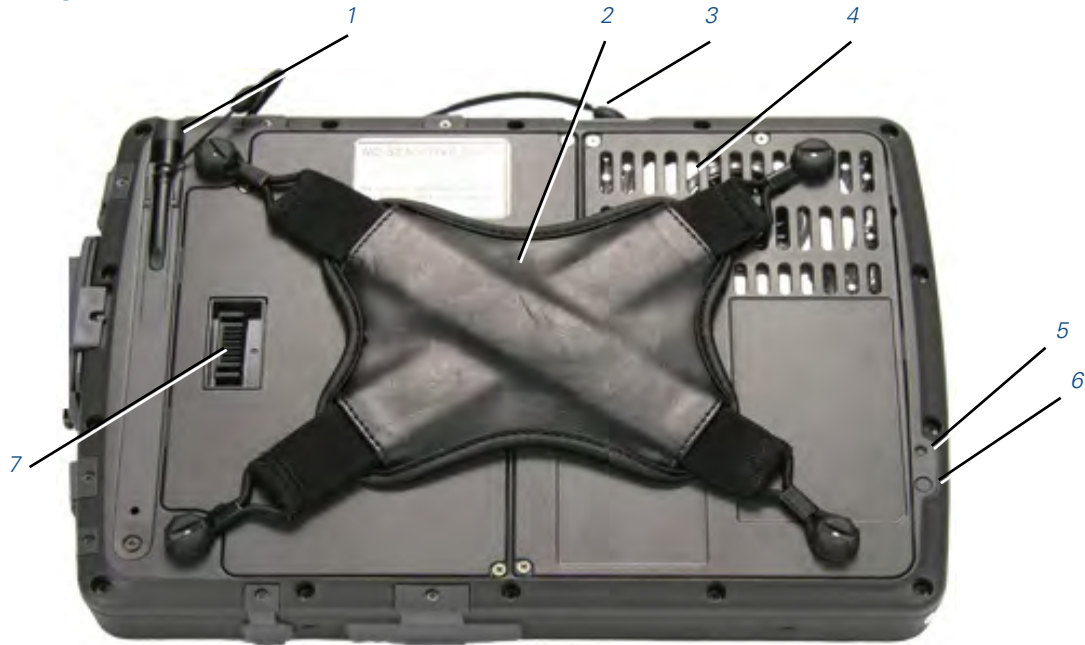
#	Feature	Description
1	Pen Storage Slot	Store the pen / stylus here when not using it.
2	LAN RJ-45 Jack	With an Ethernet LAN (Local Area Network) you can make LAN connections without installing PC cards. Connection speed is 10/100/1000 Mbps.
3	Type II PC Card Slot	The PC card slot supports 32 bit CardBus 2.1 interface as well as Zoom Video when in landscape orientation. You can use this slot with PC card radios.
4	Pen Tether Slot	Thread your pen tether through this slot.

Bottom Edge View



#	Feature	Description
1	POGO 32 Pins Connector	Use this POGO connector with the desk mount.
2	DC-in Jack	Power the Tablet PC by connecting the AC adapter or vehicle adapter.

Back View



#	Feature	Description
1	Pen / Stylus Slot	Use the pen provided with your Tablet PC to navigate and input on the touch panel display. Store it in the slot when not using it.
2	Hand Strap	Allows GD3080 to be held with one hand (optional device).
3	Pen Tether	Attach a pen tether to the tether slot to keep the pen with the Tablet PC.
4	Thermal Grate	Covers the fan. Do not cover this grate while using the GD3080.
5	Master Reset Key	Use the stylus tip in this hole to perform a hard reset of your GD3080. You will then need to press the power button to restart the computer. CAUTION Any unsaved files or data will be lost during a hard reset.
6	RF ON/OFF Button	This button enables/disables WLAN, Bluetooth, and GPS radios.
7	Second Battery Connector	Attach a second, external battery to this connector to extend battery life.













Buttons and Hot Keys

The GD3080 has seven Hot Keys to speed common functions. Additionally, it has a **Power Button**, an **RF On/Off Button**, and a **Master Reset Key**.




#	Icon	Hot Key	Description
1		Rotate Key	Use this key to switch between portrait and landscape orientation on the display. It rotates the screen in 90° increments. You can also program it to execute a specific function. NOTE You will need to calibrate the display for each orientation and choose a primary orientation. Some applications may not display as well in portrait orientation. For example, you may need to scroll right to view all the contents on the page.
2		Security Key	Press this key like you would press CTRL+ALT+DEL on a desktop computer.
3		Escape Key	Press this key to go back or escape to the previous context or window. You can also program it to execute a specific function.
4		OK/Enter Key	Press this key just like you would press the ENTER key on a desktop computer. For example, use this key to execute a command, implement an action, navigate deeper or move forward through content.
5		Line Up Key	Press this key to move the cursor up one line. You can also program it to execute a specific function.
6		Line Down Key	Press this key to move the cursor down one line. You can also program it to execute a specific function.
7		Function Key (Fn)	Press this key in combination with another key to perform more functions. See the standard key combinations listed below.

FN and Hot Key Combinations

Function Key	Icons	Description
FN + LINE UP	 	Page up
FN + LINE DOWN	 	Page down
FN + OK/ENTER KEY	 	Speaker volume down
FN + ESCAPE	 	Speaker volume up
FN + SECURITY	 	Display brightness down
FN + ROTATE	 	Display brightness up


Programming Hot Keys

You can program the **ESCAPE**, **ROTATE**, **LINE UP** and **LINE DOWN** hot keys to perform specific functions. To program one of these hot keys, do the following:

1. Select the **Buttons / Device / Brightness Properties** icon  in the taskbar.
2. Then, select the **Tablet Button** tab. This allows you to associate any of the above listed buttons with any .exe or .com in the system.



Power Button

The **POWER BUTTON**  is located at the top left corner above the display when the unit is in landscape orientation. Press this button to turn the unit on or off or hibernate.

RF ON/OFF Button

This button is located on the **back** of the Tablet PC. It turns off Bluetooth® and disables WLAN and GPS radios.

Master Reset Key





The **MASTER RESET KEY** is located in a recessed hole on the back of the Tablet Ph. To perform a hard reset, insert the end of a paper clip into this hole. You will then need to press the **POWER BUTTON** to restart the computer.

CAUTION Any unsaved files or data will be lost during a hard reset.

LED Status Indicators

The GD3080 has four LED (Light Emitting Diode) status indicators located left of the display when the unit is in landscape orientation. The LEDs light up when a particular function of the computer is active. LED numbers are from top to bottom when the Tablet PC is in landscape orientation.



#	Icon	LED	Light	Description
1		Wireless Radio Status LED	Solid Blue	Integrated radio(s) are powered on
2		HDD Status LED	Blinking Green	Accessing the hard disk drive
3		Battery Status LED	Green	Fully charged
			Orange	Charging
			Red	Battery capacity is less than 10%
4		Power Status LED	Solid Blue	Unit is turned on
			Blinking Blue	Unit is suspended

NOTE LEDs can be disabled by using the **BIOS Setup Utility** to activate **Stealth Mode**.

Display and Pen Basics

Your GD3080 has an 8.4" TFT XGA outdoor viewable DynaVue™ transmissive display with digitizer control panel and touch screen. It is an active matrix color display with integrated graphics capabilities that provides excellent readability both indoors and outdoors.

Using the Pen / Stylus

Use the pen/stylus provided with your GD3080 Tablet PC like you would use a mouse on a desktop PC.



The following common mouse functions can all be performed with your pen:

SINGLE-CLICK: Tap once with the pen

DOUBLE-CLICK: Tap twice with the pen.


RIGHT-CLICK: In **Digitizer Mode**, tap while holding down the button on the pen. In Touch Screen Mode, tap and hold.

MOUSE-ROLLOVER: In **Digitizer Mode**, hover your pen above the display. For example, when you roll your mouse over an icon you see a popup description of the icon. Hover your pen over the icon to see this description.

In addition to these mouse functions, you can use the pen to draw or write in some Tablet PC applications.

CAUTION Use only the pen included with the unit. Never use sharp, hard, or abrasive implements on the touch panel such as ball point pens, pencils, or keys. They could damage the screen.

Changing the Display Orientation

You can change between landscape and portrait orientation by pressing the **Rotate Hot Key** . Each time you press the key, the screen rotates 90° counter-clockwise. You can also change the orientation via the input panel by tapping **CTRL+ALT** and then selecting one of the arrow keys.

NOTE Not all configurations support 360° rotation and some applications may not display properly in portrait orientation.

Calibrating the Display


Your GD3080 has two touch modes, **Digitizer** and **Touchscreen**. To calibrate the display for the mode you are using:

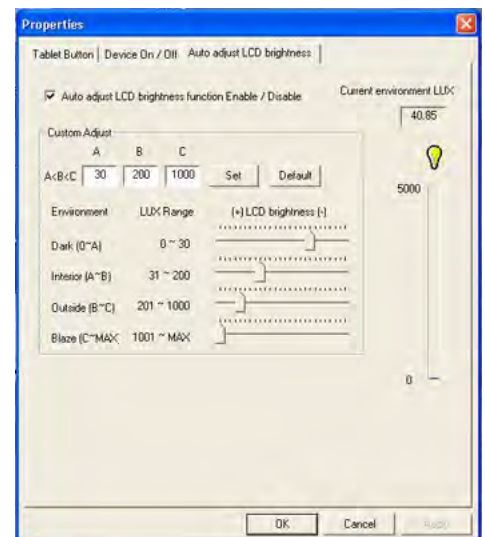
1. Ensure you are in the mode you want to calibrate.
2. From the **Start** Menu, select **All Programs, Mobile Computer Tools, Tablet Calibration**.
3. Follow the on screen instructions.

Ambient Light Sensor

Your Tablet PC display has an ambient light-sensor near the display. It automatically dims the display backlight in low light conditions. When enabled, this feature conserves battery power.

To enable or disable the ambient light sensor, perform the following:

1. Select the **Buttons / Device / Brightness Properties** icon  in the taskbar.
2. Select the **Auto adjust LCD brightness** tab.
3. From the **Auto adjust LCD brightness** tab you can activate or deactivate the auto brightness adjust. You can also choose the backlight brightness level for four different categories of ambient light level: dark, indoor, outside, and blaze.



Adjusting Screen Brightness






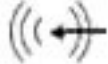



If you have trouble reading your display, you can adjust the screen brightness using hot keys. An on-screen brightness bar pops up to show the brightness levels when you press one of the following:

- Press **FN+ROTATE**   to increase brightness
- Press **FN+SECURITY**   to decrease brightness

NOTE If the **Auto Adjust Brightness** function is enabled, the backlight adjustment may change depending on ambient light conditions.

See **Maintenance and Storage** for information on how to clean the display.

Ports and Connectors

Icon	Ports and Connectors	Connection	Location
	RJ-11	Phone line/modem (internet and fax)	Right Side
	RJ-45	Ethernet	Top Edge
	DC-in	AC adapter (power)	Bottom Edge
	2 USB Universal Serial Bus 2.0	USB peripherals such as a mouse or printer	Right Side
	POGO 32 Pins Connector	Desk mount	Bottom Edge
	Audio In	Microphone	Right Side
	Audio Out	Speakers or headphones	Right Side
	PC Card Slot	Type II PC Cards	Top Edge
	Compact Flash Slot	Compact Flash Cards	Right Side

Disk Drives

Your GD3080 comes with several components for reading and writing (recording) information.

The Hard Disk Drive (HDD)

The hard disk drive provides high-capacity storage and fast access. The operating system and most programs are stored here. Your GD3080 identifies the hard disk drive as drive C:. Your hard disk drive may include an optional hard drive heater to allow operation in certain environments. There is also a solid state hard drive option.

Card Slots

You can also use the **PC Card Slot** and **Compact Flash Card Slot** for additional data storage.

Optional External Drives

The GD3080 has three Universal Serial Bus (USB) external drive options that may be connected to the Tablet USB ports. You do not have to power down the Tablet PC to connect any of these drives because they are “hot pluggable.”

- **USB Floppy Disk Drive (FDD):** The floppy disk drive provides a convenient way of storing and transferring small files. It uses standard 3.5-inch, 1.44 MB disks.
- **USB CD-ROM DRIVE:** The CD-ROM drive can be used to read data from CDs, including audio or video CDs.
- **USB DVD / CD-RW:** The DVD / CD-RW drive is a read/write drive. It can be used to write data to a recordable CD. It can also read data from DVDs and CDs, including audio or video disks.

NOTE The GD3080 identifies the drive with the letter following the highest partition letter. For example, if your highest drive partition is drive E:, the DVD/CD-RW or CD-ROM will be assigned to drive F:. However, the floppy drive will always get assigned to drive A: or B:.

Precautions for Handling DVDs and CDs

Keep these precautions in mind when handling DVDs and CDs.

- Always hold the disk by the edges; avoid touching the surface of the disk
- Use a clean, dry, cloth to remove dust, smudges, or fingerprints. Wipe from the center outward
- Do not write on the surface of the disk
- Extremes in temperature may damage disks. Store disks in a cool dry place
- Do not use benzene, thinners, or cleaners with detergent to clean DVDs or CDs. Only use cleaning kits designed for DVDs or CDs
- Do not bend or drop the disks
- Do not place objects on top of disks
- Do not expose to direct sunlight for long periods

Computer Security

Your computer includes several different security features to help prevent theft and protect data. These include a security slot, multiple levels of password protection, an optional fingerprint scanner, and stealth mode.

Security Slot

A security slot located on the left side of the computer lets you connect a Kensington compatible computer security lock. You can connect the computer to an immovable object to prevent theft. Insert the lock into the notch and turn the key to secure the lock. Some keyless models are also available. See the documentation that comes with your lock for more information.

Passwords

Passwords protect your computer from unauthorized access. When set, no one can access the computer without entering the correct password.

There are three types of passwords you can set:

- **SUPERVISOR PASSWORD** secures your computer against unauthorized entry to critical parameters in the BIOS Utility
- **USER PASSWORD** secures your computer against unauthorized use, and allows limited access to the BIOS Utility
- **HARD DISK PASSWORD** protects your data by preventing unauthorized access to your hard disk, even if the hard disk is physically removed from the computer and installed in another computer

NOTE Do not forget your setup and hard disk password! If you forget your password, please get in touch with your dealer or an authorized service center.

Fingerprint Scanner (Optional)

The optional swipe style fingerprint scanner can be used for all standard security uses. The optional fingerprint scanner provides a greater level of security and convenience for your GD3080 and your private data. Use the fingerprint scanner instead of passwords for the following:

- Logging in to your Tablet PC
- Logging into secure websites or when opening password protected applications
- Providing encryption security for individual files

Fingerprint Scanner Software

Before using the fingerprint scanner, you must first install compatible software. There are various software packages available.

CAUTION Before installing any third party software, ensure it is approved for use with your Tablet PC.

NOTE When accessing some secure websites, you may need to specify you are using the scanner instead of a password. Refer to the fingerprint scanner software documentation for setup instructions.

Stealth Mode

Your computer has a Stealth Mode feature for users who may need to use it where light or sound could be dangerous or disruptive, such as military personnel. Enabling **Stealth Mode** allows you to disable sound and light features such as system beeps, the fan, and the display backlight. Refer to the **BIOS Setup Utility** section to configure the Stealth Mode feature.

Trusted Platform Module (TPM)

The TPM can be enabled or disabled in the System BIOS utility under the **Advanced, Trusted Computing** section. TPM provides a platform root of trust which uniquely identifies a particular platform and provides various crypto capabilities including hardware-protected storage. See the TPM vendor's help files for more information.



Your GD3080 is equipped with a full array of ports and connectors, including standard input/output (I/O) ports for quickly and easily adding peripherals such as a USB printer. Refer to documentation included with individual devices for details on connecting these devices to your computer. Along with the standard ports found on most computers, your computer also includes modem and LAN ports for advanced communications technology.

CAUTION Keep port doors closed when not in use. Internal components of the GD3080 will be damaged if exposed to contaminants. When dust covers, the PC card door, or the bottom access panel are open on the computer, shield the unit from all contaminants such as liquids, rain, snow, and dust.

Attaching Power

You can operate the computer while the battery is charging on external power or on battery power.



Attaching the AC Adapter

1. Connect the supplied AC adapter power cord to the AC adapter.
2. Connect the AC adapter to the DC power port on your computer.
3. Connect the AC adapter power cord to an AC outlet.

Alternately, you can attach the optional **vehicle adapter**.

Turning the GD3080 On and Off

To turn on the computer

Press the **Power Button**  once, and then give the system time to respond. The **Power LED**  should illuminate and the unit should boot into Windows®.

To turn off the computer

WINDOWS® XP: From the **Start** menu, select **Turn Off Computer**, then select **Turn Off**.

WINDOWS® 7: From the **Start** menu, select **Turn Off Computer**, then select **Turn Off**.

NOTE If you need to leave the system for a short time, or if you want to conserve battery power, you can put the computer into hibernation mode by pressing the power button. See **Managing Power** for additional information.

CAUTION Shutting down the computer improperly could result in lost or corrupted data.

Ethernet

The Ethernet LAN Local Area Network (RJ-45 Jack) on the **top edge** of the computer enables you to make LAN connections without installing PC cards. Connection speed is 10/100/1000 Mbps.

Internet and Fax

The fax/modem RJ-11 jack can transmit data using the 56 Kbps V.90 or V.92 protocol, and send and receive faxes at 14.4 Kbps. In some countries, local regulations may not permit the use of the fax/modem designed for this system. In this case, you may use a PCMCIA modem.

CAUTION Plug your modem into an analog telephone jack only. Most homes use analog lines. Do not use digital lines, such as PBX and ISDN systems found in many offices. Digital lines may damage your modem. If you are unsure as to the type of port you have to plug into, contact your building superintendent. Simple detection and protection devices are also available at most computer stores and should be used to protect the GD3080.

NOTE Port access to connect the modem is disabled for the Australian market.

Attaching USB Devices

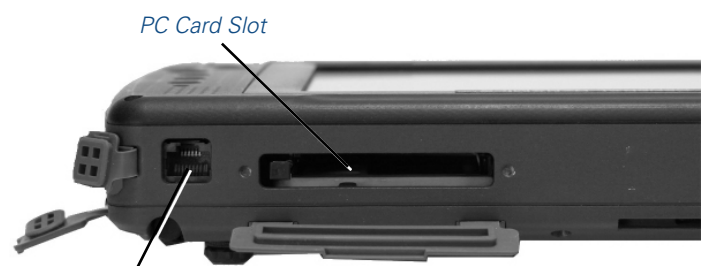
The two Universal Serial Bus (USB) 2.0 ports enable you to attach USB devices such as keyboards, a mouse, scanners, and printers.



RJ11 / Internet Fax

Using PC Cards

The GD3080 has a Type II PC Card Slot located on the top side of the computer. It supports 32 bit CardBus 2.1 interface as well as Zoom Video™ when in landscape orientation. You can use this slot to interface between your GD3080 and a variety of communications devices, such as network adapters, SCSI adapters, fax/modems, and PC card radios. It can also provide additional data storage capacity.



Ethernet


Installing a PC Card

1. The top side of a PC Card is usually identified with a label. Insert the card into the slot with the top up and the edge with pinhole contacts going in first. You will feel some resistance as the card slides into the back of the slot.
2. PC Cards require drivers, or a program that allows the operating system to use a specific device. Many drivers are included with Windows®, but if not, you will be prompted to install the driver included with your card.

NOTE Please read the instructions included with individual PC Cards. Some cards may be inserted with power on, while others require that the computer be turned off.

Ejecting a PC Card

For Windows® XP and Windows® 7:

1. First, exit the application using the card.
2. Left-click on the **Safely Remove Hardware icon**  on the taskbar and stop the card operation.
3. Press the slot eject button once to pop it out; then press it again to eject the PC Card.

Using Compact Flash Cards

Your GD3080 can use Type 1 Compact Flash Cards for secure data storage. If you store any user-installed application programs and associated data on Compact Flash, these programs and data will not be lost after a hard reset. Files stored on Compact Flash Cards can be created, deleted, moved and amended in exactly the same manner as files stored in memory. The Compact Flash slot is also used to house the optional GPS radio and antenna.




Installing a Compact Flash Card

1. Open the Compact Flash port cover on the right side of the computer.
2. Position the Compact Flash Card with the label facing up and carefully insert it into the socket. Your GD3080 should automatically detect most Compact Flash Cards.

Ejecting a Compact Flash Card

For Windows® XP and Windows® 7:

1. First, exit the application using the card.
2. Left-click on the **Safely Remove Hardware icon**  on the tray taskbar and left click on the Compact Flash Card operation.
3. Press the slot eject button once to pop it out; then press it again to eject the Compact Flash Card.

Audio

Your GD3080 has integrated audio as well as audio jacks so you can connect external audio components.



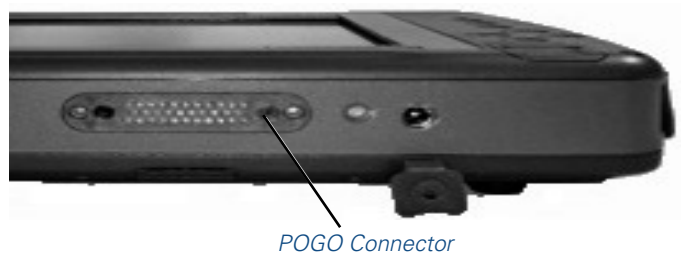
#	Feature	Description
1	Microphone	Integrated microphone for audio input
2	Speaker	Integrated speaker for audio output
3	Headphone jack	Connect external speakers or a stereo headset
4	Microphone jack	Connect an external microphone for audio recording

Changing the Volume

- Use the volume function keys: **FN + ESC** = Volume Up; **FN + OK** = Volume Down, or
- Open the **Windows®** volume control program by double-tapping the **Speaker icon**  in the taskbar.

Attaching to the Desk Mount

Use the POGO connector to connect the **Desk Mount** or custom external devices.



The GD3080 has superior wireless capabilities. Depending on your configuration, it supports up to four optional wireless radio technologies: PC card wireless technologies; Bluetooth, Wireless LAN (WLAN), and GPS.

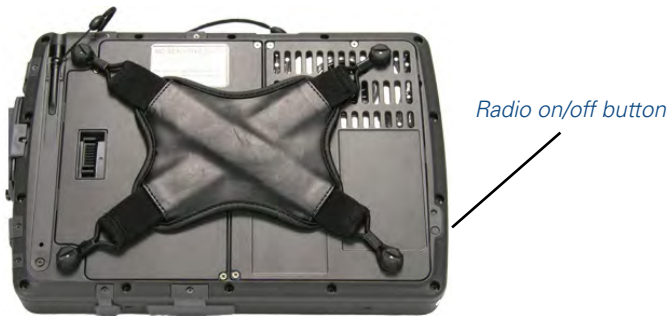
Each GD3080 comes standard with three antennas for wireless communication; two WLAN and one Bluetooth. GPS and PC Card radio antenna are **optional accessories**.

Use only the supplied or an approved antenna(s). Unauthorized antennas, modifications, or attachments could impair data quality, damage the cord, or result in violation of FCC regulations.

Your GD3080 has an RF ON/OFF button on the **back**. This can be used to turn off Bluetooth and disable WLAN, WWAN, and GPS radios. The radios can also be enabled or disabled in the **BIOS** on the **Advanced tab, Extended Configuration**.

Turning Off Radios with the Radio On/Off Button

1. Turn your Tablet PC over so you are looking at the back of the unit.
2. Press the radio **On/Off button**.



Bluetooth Radio (optional)

The GD3080 includes an integrated Class 1 Bluetooth® option. Its maximum range is about 100 meters.

Read About Bluetooth

Bluetooth® systems create a personal-area network (PAN), that may fill a room or may encompass no more distance than that between the cell phone on a belt-clip and the headset on your head.

When Bluetooth® capable devices come within range of one another, an electronic conversation automatically takes place to determine whether they have data to share or whether one needs to control the other. The devices form a network.

Once this network is established, the devices randomly hop frequencies in unison so they stay in touch with one another and avoid other networks that may be operating in the same room.

Applying wireless LAN technology to desktop systems provides an organization with flexibility impossible with a tradi-

tional LAN. Desktop client systems can be located in places where running cable is impractical or impossible. Desktop PCs can be redeployed anywhere within a facility as frequently as needed, making wireless ideal for temporary workgroups and fast-growing organizations.

Electromagnetic Interference (EMI)

- Electromagnetic Interference (EMI) is generated by switching circuitry closets or Uninterruptable Power Source (UPS) systems found near computer rooms and can block the radio signal.
- Look for significant sources of electromagnetic radiation. The problem may emanate from a source between location and the radio base station.

When to Use Landline Communication

If the tips above do not improve radio signal strength, switch to landline communication. Switching to landline communication is faster than searching for and trying to improve the radio signal.

WLAN Radio (optional)

The GD3080 may include an integrated Wireless Local Area Network (WLAN) capability. See the radio help file on your computer desktop for more information.

Read About WLAN

WLAN provides all the features and benefits of traditional LAN technologies, such as Ethernet, without the limitations of wires or cables. It enables mobility and flexibility without compromising connectivity for today's mobile user.

GPS (optional)

Your GD3080 may include a Global Positioning System (GPS). The GPS is a worldwide radio-navigation system formed from a constellation of satellites and their ground stations. These satellites are used by the GPS as reference points to calculate positions accurate within five meters.

The GD3080 uses Dynamic Power Management (DPM) so you can reduce the amount of energy used, especially during periods of inactivity. It is powered by a smart Lithium-ION battery pack. A CMOS coin battery maintains the Real Time Clock and CMOS memory. There is also an optional second external battery pack that effectively doubles your battery powered runtime.

Battery Installation and Replacement

Over time, the battery's capacity gradually decreases. We recommend that you replace your battery when you notice that it begins to store significantly less charge. Change the main battery pack as follows (you may want to print this topic for reference).

CAUTION The GD3080 battery and unit are only weather sealed when the battery is properly installed and the battery door is closed. Shelter the computer when you install or replace the battery. To prevent damage when the unit is in use, keep the battery door closed with all screws in place and secured tightly.

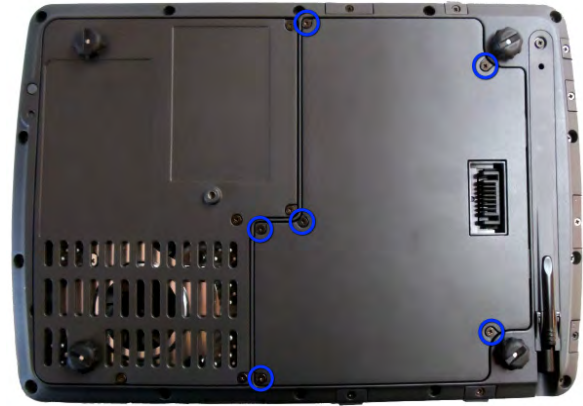
Installing the Battery

CAUTION The GD3080 should always be shut down prior to battery removal, because data may be lost when the battery is removed.

1. Turn off the computer.
2. Unplug the power supply if connected.
3. Turn the computer upside down.
4. Remove the three screws on the secondary battery, if installed and remove the battery.



5. Using a Phillips screwdriver, remove the six screws from the battery cover and remove the battery cover.



CAUTION Internal components of the GD3080 will be damaged if exposed to contaminants. When dust covers, the PC card door, or the bottom access panel are open on the computer, shield the unit from all contaminants such as liquids, rain, snow, and dust.

6. Using the tab on the battery, lift the battery pack up and out of the battery bay.
7. Orient the replacement battery correctly and insert it into the battery compartment, making sure it is fully seated.
8. Replace the battery cover over the battery bay and install the six screws.
9. Install the secondary battery if equipped.
10. Completely charge the battery before using the Tablet PC on battery power.

NOTE When the battery is installed and the computer is connected to AC power it starts charging automatically. At moderate temperatures, approximately 70° Fahrenheit (21°C), the battery will be fully charged in 3-5 hours. In warmer or cooler temperatures, the battery can take much longer to fully charge. Battery calibration is disabled if the temperature is > 122°F (50°C) or < 41°F (5°C).

Replacing the Real Time Clock Battery

The Real Time Clock has a replaceable coin battery located under the battery pack. Only replace with the same coin cell type as the original.



1. Remove the battery pack.
2. Lift the coin battery out of the holder.
3. Install a new coin battery with the positive terminal up.
4. Re-install the battery pack.

A Field Kit is available - visit the [General Dynamics Itronix](#) website for a full list of available kits.

Battery Calibration

The battery calibration process fully charges, discharges, and recharges the battery. This allows the Windows® battery gas gauge to accurately monitor battery status.

It is recommended you calibrate your battery:

- The first time you use it
- After it has been stored for awhile
- If the gas gauge has become inaccurate.
- For optimum performance, we recommend calibrating the battery and optional secondary battery every three months

You can calibrate your main battery or optional second external battery from the BIOS Setup Utility. You can also calibrate the main battery from within Windows®.

Windows® Level Battery Calibration

FOR WINDOWS® XP: To run the **Battery Calibration** program from **Windows®**, select **Start, Programs,** and **Mobile Computer Tools.**

After starting calibration, the **Battery Calibration** application requires no further input from the user. The calibration consists of four steps:




1. Partial Discharge.
2. Charge: The battery is fully charged to 100 %.
3. Discharge and calibrate: First, the battery is discharged all the way down to zero. Then the battery is 'calibrated' but not charged. You may stop the process after this point and let the battery charge outside of the battery calibration application.
4. Charge: If the battery calibration continues running, the battery will fully charged to 100%.

NOTE The unit will not go into suspend mode while Battery Calibration is running.

CAUTION Do not disconnect AC power while Battery Calibration is running. If AC remains disconnected for more than two minutes, the application will terminate.

CAUTION Do not remove the battery while Battery Calibration is running. Doing so will cause the application to terminate immediately.


BIOS Level Battery Calibration

1. Plug in the AC adapter.
2. Restart the computer and when the startup screen appears, press the **OK/ENTER**  hot key. This starts the **Setup Utility**.
3. Select the Setup function "**Battery Calibration**": Press the **LINE UP**  or **LINE DOWN**  keys to select the option
4. Press the **OK/ENTER** key to continue.
5. Next, choose which battery you want to calibrate, the primary battery or optional secondary battery.
6. You will be prompted to make sure the AC adapter and Battery are present. Do this and then Select **Yes** to begin "battery auto-learning."

Battery calibration takes from 10 to 16 hours, depending on how much power the battery already contains. You can speed up calibration by starting with a fully charged battery.

NOTE External power is required for battery calibration.

Battery Charging

When you use the AC adapter to connect your GD3080 to a power outlet, the internal battery automatically begins to recharge. While the battery is charging, the **Battery Status LED**  turns orange after 6-12 seconds and stays solid orange until the battery is fully charged. When the battery is fully charged, the LED will turn green.

If your computer is turned off, a fully discharged battery takes about 3 hours to recharge. If your computer is turned on and is not in suspend mode, it takes about 3-5 hours to recharge the battery. Refer to the following table:

	CHARGING	DISCHARGING
System On	3-5 hours	3 hours
System Off (Suspend to RAM and Suspend to Disk)	3 hours	–

NOTE A fully charged Lithium-Ion battery can run the Tablet PC for approximately 3 hours of normal use. (According to **Battery Mark** benchmark tests.) Use of external devices, such as the wireless radio, cause increased battery consumption.

If a second external battery is attached to your GD3080, this battery will begin charging once the main battery is fully charged.

Using the Battery

About the Battery

The battery is a Lithium-Ion “smart” battery. It contains a temperature sensor and a memory device that stores information about the battery, such as how much charge is left and how many times it has been recharged. The parameters for the “management” of the battery are also kept in the battery’s memory. The life expectancy will depend strongly on the care of the battery, the individual usage pattern and the GD3080’s specific configuration.

CAUTION Shutdown the computer and remove from external power before removing the battery to prevent potential loss of data.

The battery pack is most efficient at room temperature. However, its efficiency fails as the temperature varies from that range. The following chart shows approximate capacity values with respect to temperatures.

Temperature	Capacity
-10°C	50%
0°C	80%
20°C	100%
45°C	100%
55°C	80%

To prevent damage, the charge circuitry is turned off for temperatures that are too high (above approximately 115°F or 46°C) or too low (below approximately 32°F or 0°C). Your GD3080 is equipped with a fan to remove heat from the processor.

CAUTION The thermal grate gets warm during use of the GD3080. Do not block the flow of air to the thermal grate.

NOTE A “cold-soaked” battery has an even lower capacity and may not power a unit.

Monitoring Battery Power

There are two ways to monitor how much power the battery has left:

1. Hover your pen over the battery icon in the taskbar to check your battery power status. The status will show as a pop-up.
2. Alternately, select **Start, Control Panel**. If you are in Category View, select **Performance and Maintenance**, and then select **Power Options**. If you are in Classic View, select **Power Options** and then tap the **Power Meter** tab to see how much battery power remains.

NOTE If you do not see the battery icon, enable it in **Start, Control Panel, Power Options**. Choose the Advanced tab and select “**Always show icon on the taskbar.**”

Low Battery Alarms

CAUTION When battery power is low, the alarm beeps or displays a warning on your screen. Take immediate action, such as saving files or connecting to the AC adapter, or data may be lost.

When the computer alerts you that the battery is low, immediately do one of the following:

1. Connect the AC power adapter
2. Save your work and then select **Shut Down** from the **Start** menu
3. Turn off the computer and replace the discharged battery with a charged battery (See **Battery Charging**).

NOTE Do not restart the computer until you have connected to an AC adapter or replaced the discharged battery with a charged battery.

Refer to **Battery Tips** for more information about how you can conserve battery power. Refer to **Managing Power** for information about how you can setup your computer to effectively manage power for your unique use patterns.

Managing Power

Your computer has power management capability so you can reduce the amount of energy used, especially during periods of inactivity. Effective use of power management options can greatly conserve and extend your battery life. The power management unit monitors system activity, such as the hard drive, keyboard, mouse, or any devices attached to a port. If it does not detect activity for a period of time, the computer stops some or all of these devices in order to conserve energy.

Your computer employs a power management scheme that supports ACPI (Advanced Configuration and Power Interface), allowing for maximum power conservation and maximum performance at the same time. Windows® handles all power-saving chores for your computer.

For more information search for **Power Options** in Microsoft® **Help and Support**.

Low-Power States

Your computer can enter three different low-power states to conserve power: **Standby/Sleep**, **Hibernate** and **Power Off**. These states can be entered manually or after a period of inactivity.

Standby/Sleep

Most devices in the system are powered off, but the contents of system memory are retained. **Standby/Sleep** is sometimes referred to as **Suspend to RAM**. When the computer returns from standby mode, the desktop appears with the same files and programs open as when the computer was suspended. Resume time is very quick.

Hibernate

Hibernate, or **Suspend to Disk**, is similar to **Standby**, except that the current state of the computer is copied to the hard disk in a special file. After this occurs, all devices in the computer are turned off. When the computer returns from hibernation, the desktop appears with the same files and programs open as when the computer was suspended. Hibernation saves more power than standby, but takes slightly longer to resume.

Power Off

All applications are closed and the system is shutdown.

Entering Low-Power States


From the **Start Menu**, select **Shut Down** to display a dialog that allows you to manually enter low-power states.

Battery Tips


Tip 1. Avoid Excessive Heat and Cold

- Your battery will last longer during the day if it is used, charged and stored between 50°F and 86°F (10°C and 30°C).
- Charge the battery nightly where the temperature will remain around 68°F (20°C). Your battery may not last as long through the day if you charge it at higher or lower temperatures.
- Allow unrestricted airflow while the computer is connected to external power. Make sure that the fan inlet and outlet are unobstructed.
- Avoid exposing batteries to hot or cold temperatures for long periods.





How your battery behaves in warm conditions

- To prevent possible damage to the battery, the system may not allow a charge if the battery temperature is above 122°F (50°C), such as in a closed, unattended vehicle during the summer. In this case, the **Battery Power Indicator**  may indicate that the computer has stopped charging your battery; however, your battery may not be fully charged.
- If possible, turn off or suspend your computer while the battery is charging in a warm environment to avoid over-heating.
- In warmer temperatures, your battery may take much longer to fully charge.

How your battery behaves in cold conditions

- When using a battery in cold conditions, the battery capacity may drain significantly faster.
- To prevent possible damage to the battery, the system will not allow a charge if the battery temperature is below 41°F (5°C), such as in a closed, unattended vehicle during the winter. In this case, the **Battery Power Indicator**  may indicate that the computer has stopped charging your battery; however, this does not necessarily mean that your battery is fully charged.
- In cooler temperatures, your battery can take much longer to fully charge.

Tip 2. Prevent Wasted Power

- Manually turn off or suspend your computer whenever you are not using it.
- Reduce the screen brightness. Decrease brightness by pushing **FN + ROTATE**  + .
- Increase brightness by pushing **FN + SECURITY**  + .
- Use the AC adapter or vehicle adapter whenever possible.
- Select either the **Portable/Laptop** or **Max Battery** power scheme. Both of these power schemes help to conserve battery power. **Max Battery** provides the most battery conservation by always keeping the processing speed lower. However, this may affect your application performance. **Portable/Laptop** automatically adjusts the processing speed as required by your applications.

- When running on battery power, make sure your system suspends automatically after a few minutes of inactivity. PC Cards, radios, custom applications, or modified system settings may affect this.
- Remove PC Cards and unplug peripherals when you are not using them. They may draw power from the system even when not in use.
- Avoid operating the fax/modem, or audio and video applications when using battery power. Operating a fax/modem, video, or audio equipment increases the computer's power requirements.
- Don't use screen savers as they draw excessive current, especially "3D" screen savers.
- Avoid or minimize using applications that keep the CPU busy a large percentage of the time. The following will help you determine if your system is running such applications:

Identifying power wasting programs

To determine if applications or processes are keeping the CPU busy

1. Start the **Task Manager** utility. To open the **Windows® Task Manager**, right-click an empty space on the taskbar, and then select **Task Manager**.
2. Select the **Performance tab** to view running applications and the **Process tab** to view running processes.
3. Watch the CPU usage. It is okay if the processor usage is occasionally 100 percent, but if it is 100 percent most of the time, this may indicate a problem.

What to do if applications are keeping the CPU busy

- If possible, close applications that keep the CPU busy when you are not using them.
- Turn off or suspend your computer whenever you are not using it. This will help to conserve power.
- Install the **Mobile System Monitor** utility. This utility throttles the CPU when running on battery power. You can set the throttle level to 25%, 50%, 75% or 100%.

Throttling may affect application performance. Some applications keep the CPU busy waiting for user input or radio messages. Throttling the CPU will unlikely affect the performance of these applications. Other applications, especially graphics-intensive mapping, video and DVD playback applications, may be visibly slower if you throttle the CPU. You will want to adjust the throttling to an acceptable level.

TO INSTALL MOBILE SYSTEM MONITOR

1. Select **Start, Run...**
2. Enter the following command: "C:\Drivers\Throttle\Setup.exe"

After installing this utility, you can set the throttle level by right-clicking the **Mobile System Monitor** icon in the System Tray area of the Taskbar.

Inform your organization's help desk. They may have an updated version of the application.

Tip 3. Calibrate Your Battery

Over time, the accuracy of the **Windows®** battery gas gauge may be affected by repeated charging and discharging of the battery. Calibrating the battery every three or four months helps to keep the gas gauge accurate. For information on calibrating the battery, refer to **Battery Calibration**.

Tip 4. Get a Good Charge

- Your computer will charge more quickly if it is turned off or suspended.
- In warmer or cooler temperatures, your battery can take much longer to fully charge.
- If your battery is charged in a cold (less than 41°F/5°C) or very warm (greater than 122°F/50°C) environment, it is possible that the Battery Charge LED will indicate that the charge has stopped; however, this does not necessarily mean that your battery is fully charged.

Tip 5. Prevent Data Loss

Follow these guidelines to prevent data loss when removing your battery or storing your computer:

- You will lose data if you remove the battery while the computer is operating or suspended. To prevent this, shutdown your computer or put it into hibernate (suspend-to-disk) mode before removing your battery.
- If you plan to store your computer for more than a few days, shutdown your computer. Remove the battery before storing the computer.

Tip 6. Clean Terminals


Dirty terminals can be a cause of charging problems. Clean battery terminals with a cotton swab dipped in isopropyl alcohol. Make sure that the alcohol has evaporated before reinstalling the battery.

Tip 7. Storing Batteries




- Store the battery within the recommended temperature range: 10°C to 30°C (50°F to 86°F).
- Unused or stored batteries can lose power over time. When you install a battery that has not been used for awhile, connect external power to the computer and fully charge your battery.
- Battery calibration may increase the capacity of a battery stored for a period of time. For information on calibrating the battery, refer to **Battery Calibration**.
- It is recommended that the battery is recharged every six months while in storage.

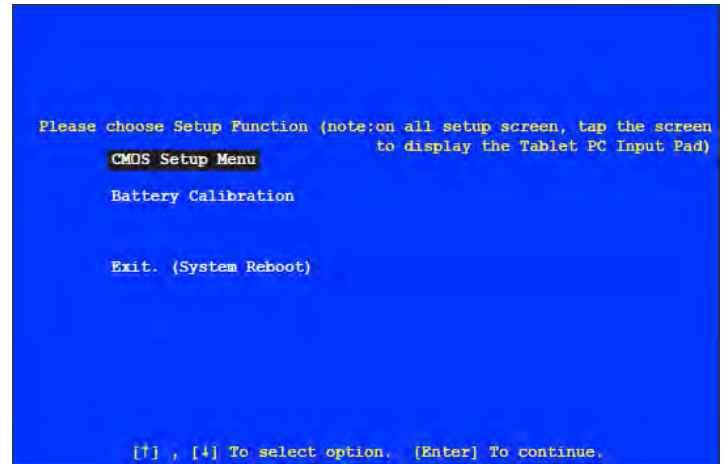
The BIOS Setup Utility allows you to configure your computer's basic settings. When you turn your computer on, the system reads this information to initialize the hardware so that it will operate correctly. You can use the BIOS Setup Utility to change your computer's start-up configuration. For example, you can change your system's security routine.

Starting the BIOS Setup Utility

You can only start the Setup Utility shortly after the computer has been turned on. When you see the message "**Press Enter button to enter SETUP**" display at the bottom of the screen, press the **OK/ENTER** key .

You will then see the following screen:

Use your **LINE UP**  or **LINE DOWN**  hot keys to highlight "**CMOS Setup Menu**" and press the **OK/ENTER**  key. The system will start the Setup Utility and display the main menu of the utility.



CAUTION Incorrect settings can cause your system to malfunction. To correct mistakes, return to Setup and restore the Setup Defaults by going to the **Exit** Menu and selecting "**Load Optimal Defaults**".

Navigation and Help

The Menu Bar

The **Setup Utility** has five menu options in the **Menu Bar** (1) at the top of the window. To navigate between the screens you must tap on the screen with the pen/stylus to see the Tablet PC Input Pad and use the arrow keys or attach a USB keyboard.

The Tablet PC Input Pad is used to navigate through BIOS screens:

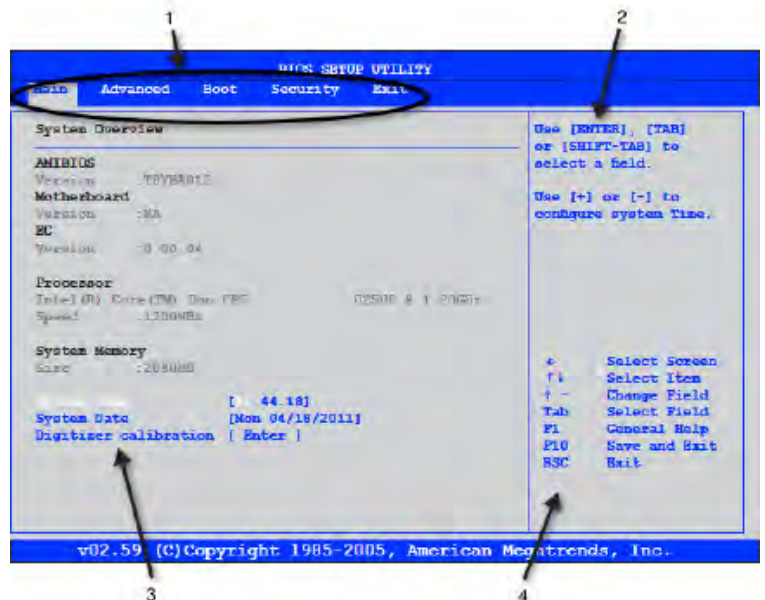
MAIN Use for basic system configuration

ADVANCED Use to set the advanced features

BOOT Use to select the sequence of boot devices that are searched to load an operating system.

SECURITY Use to set user and supervisor passwords

EXIT Use to exit the current Setup session



The Field and General Help Windows

THE FIELD HELP WINDOW (2) is on the right side of each menu. It displays the help text for the currently selected field. This text updates as you move the cursor from field to field.

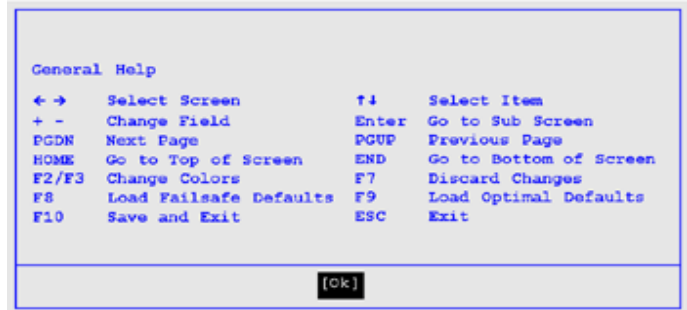
THE FIELD LIST (3) is on the lower left side of the **BIOS Setup Utility** screen. It displays the actual field titles and entry fields for the BIOS settings.

THE NAVIGATION MENU (4) is on the lower left side of the **BIOS Setup Utility** screen. It displays the navigation keys used with an external keyboard.

NOTE The **Field Help Window** refers to keys that are only available via an external USB keyboard. If you do not have an external keyboard attached to your GD3080, use the **Setup Utility's** Tablet PC Input Pad described below:

The **GENERAL HELP WINDOW** describes the Tablet PC *Input Pad* keys and their functions. You can access it by selecting F1 on the Tablet PC *Input Pad*. However, the following keys are not available during Setup unless you have an external USB keyboard attached to the Tablet PC:

HOME
F2/F3
F8
END



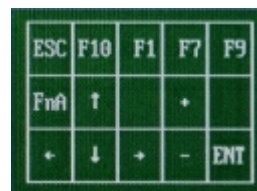
Tablet PC Input Pad

The **Setup Utility** has a unique Tablet PC *Input Pad* that appears when you hover over or tap your pen anywhere on the screen. Use the Tablet PC *Input Pad* to navigate between setup screens, between fields on each screen and to make any field changes. To avoid making unintentional field changes, we recommend you do not open the panel from the bottom right side of your screen. Instead, tap anywhere on the left side of the display.

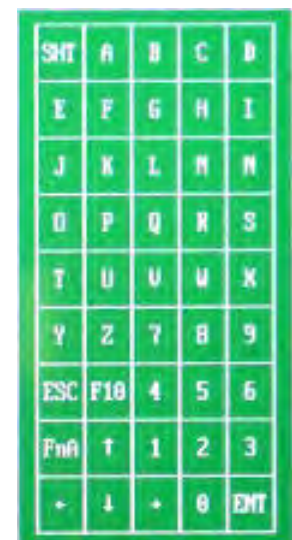
To navigate between the five menu screens, tap the left or right arrows on the input pad. To toggle through the fields, tap the up and down arrows. Alternately, you can use the **LINE UP** and **LINE DOWN** hot keys to toggle through the fields. Press the **OK/ENTER** key to view a list of options for each field.

If you need to input characters, tap **FNA** on the Tablet PC Input Pad to expand it to a larger Tablet PC Input Pad that includes characters. Press **FNA** again to return to the small input pad.

NOTE The Tablet PC *Input Pad* disappears after a few seconds of inactivity and when you change screens.

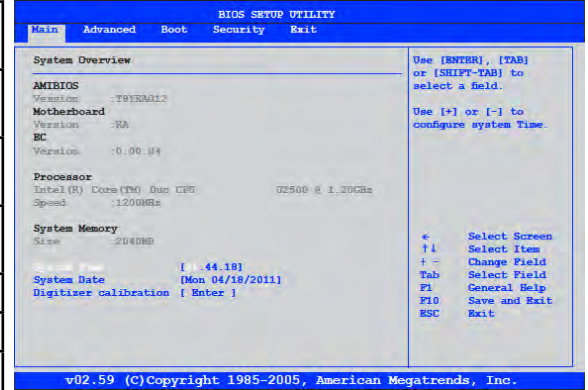


The Tablet PC Input Pad



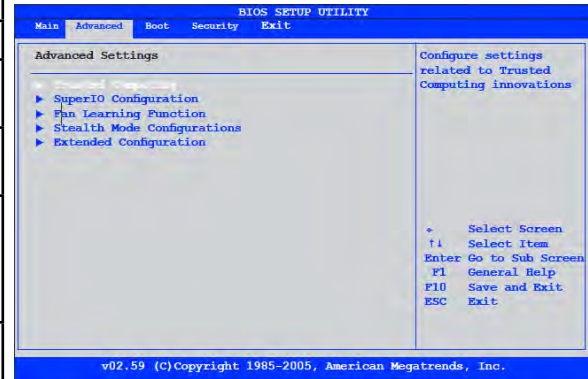
The Main Menu

Field	Setting	Function
AMIBIOS	For information only	Version
Motherboard	For information only	Version
Processor	For information only	Type and Speed
System Memory	For information only	Size
System Time	HH:MM:SS	Configure system time
System Date	MM/DD/YYYY	Configure system date
Digitizer Calibration	Opens the Digitizer Calibration Utility	Begins the digitizer calibration. Once you have calibrated the display, the computer will restart.



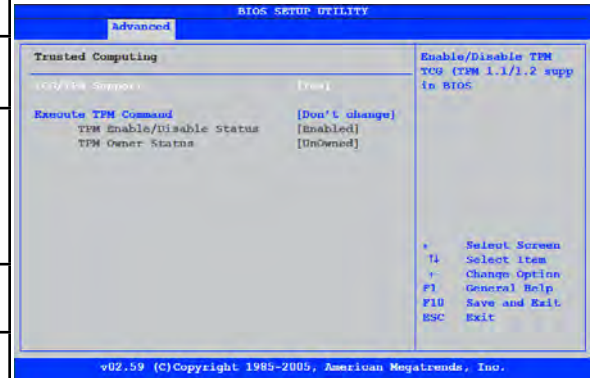
The Advanced Menu

Field	Setting	Function
Trusted Computing	Sub-Menu	Configure settings related to TPM
SuperIO Configuration	Sub-Menu	Configure I/O port interrupt and IRQ settings
Fan Learning Function	Sub-Menu	Fan Learning Function will take 2 minutes to finish procedure
Stealth Mode Configurations	Sub-Menu	Depending on Stealth Mode setting, LED, FAN Beeps, LCD Brightness, Audio and Wireless devices will keep silent when you need
Extended Configuration	Sub-Menu	Other special function settings including low battery beep, radio wakeup, etc.



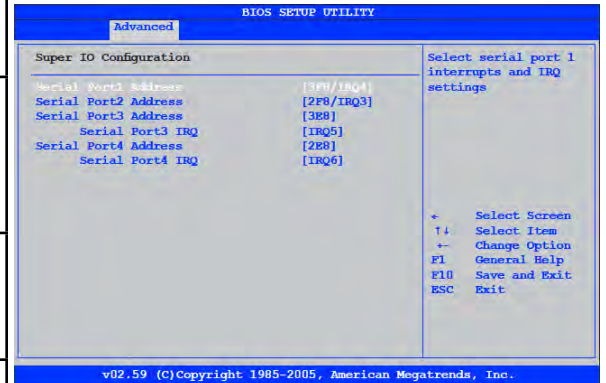
Trusted Computing

Field	Setting	Function
TCG/TPM Support	Yes No	Enable/Disable TPM TCG (TPM 1.1/1.2) support in BIOS
Execute TPM Command	DON'T CHANGE Disabled Enabled	Enable (Activate) / Disable (Deactivate) / Don't change (leave settings in last configuration) Enable (Activate) / Disable (Deactivate) Command to TPM
TPM Enable/Disable Status	Disabled	This displays the current status of the TPM
TPM Owner Status	Unowned	This displays the current Ownership status of the TPM



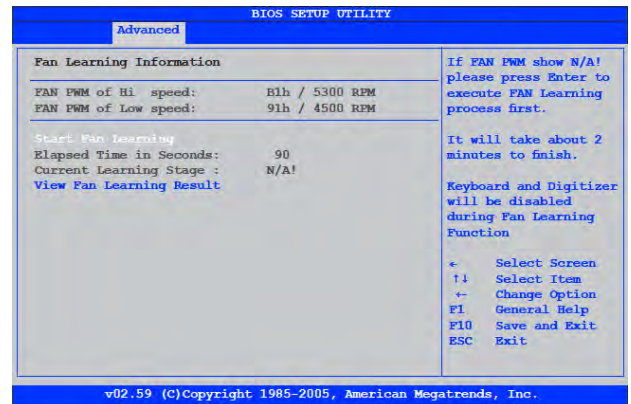
SuperIO Configuration

Field	Setting	Function
Serial Port1 Address	Disabled 3F8/IRQ4 3E8/IRQ4 2E8/IRQ3	Select serial port 1 interrupts and IRQ settings
Serial Port2 Address	Disabled 2F8/IRQ3 3E8/IRQ4 2E8/IRQ3	Select serial port 2 interrupts and IRQ settings
Serial Port3 Address	Disabled 3F8 2F8 3E8 2E8	Sets address for serial port 3
Serial Port3 IRQ	IRQ4 IRQ5 IRQ10 IRQ11	Sets IRQ for serial port 3
Serial Port4 Address	Disabled 3F8 2F8 3E8 2E8	Sets address for serial port 4
Serial Port4 IRQ	IRQ3 IRQ6 IRQ10 IRQ11	Sets IRQ for serial port 4



Fan Learning Function

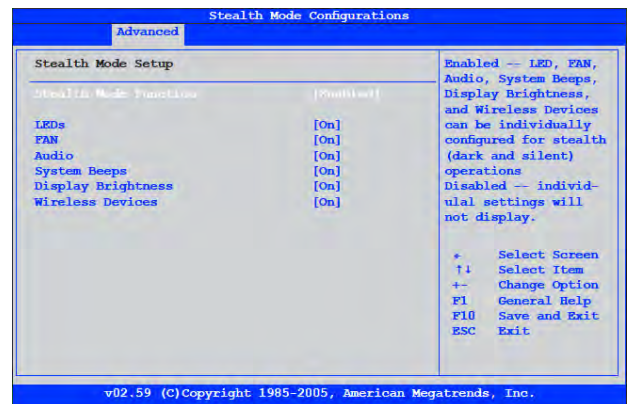
The purpose of the **Fan Learning Function** is to calibrate the fan's performance. The fan's throughput will be decreased over time and the **Fan Learning Function** adjusts the fan's efficiency allowing the fan to operate properly.



Stealth Mode Setup

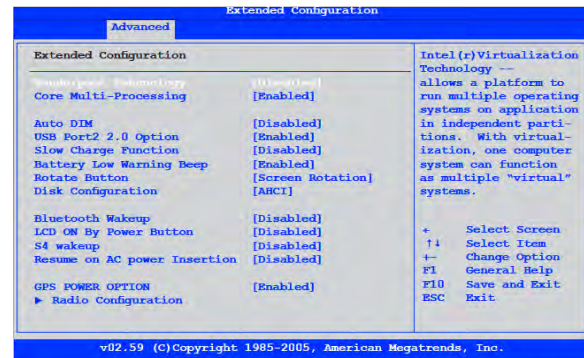
The GD3080 has stealth mode capability so it can be used in an environment where sound and light could be dangerous to the user.

If stealth mode is set to **Disabled**, the LEDs, fan, system beeps, audio, display brightness, and wireless devices operate normally. If stealth mode is Enabled, you can individually set each option to **On** or **Off**.



Option	Stealth Mode Function Disabled	Stealth Mode Function Enabled	
		On	Off
LEDs	LEDs function as normal	All LEDs function normally	LEDs remain off (not lit)
FAN	Fan functions as normal	Fan functions normally	FAN does not run (beware of overheating the unit)
AUDIO	Audio functions as normal. (The default volume level is set to mid range.)	Audio volume levels are maintained when unit powers up	Audio volume is set to zero when unit powers up
SYSTEM BEEPS	Beeps are heard during POST.	System beeps (battery low, no boot device)	System beeps are disabled
DISPLAY BRIGHTNESS	The default brightness level is mid range.	Brightness levels are maintained when unit powers up	Brightness levels set to zero when unit powers up
WIRELESS DEVICES	Wireless devices function as normal.	All wireless devices are turned on when unit powers up	All wireless devices are turned off when unit powers up

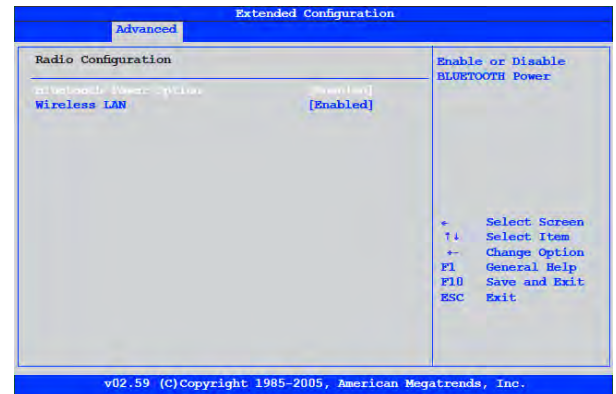
Extended Configuration



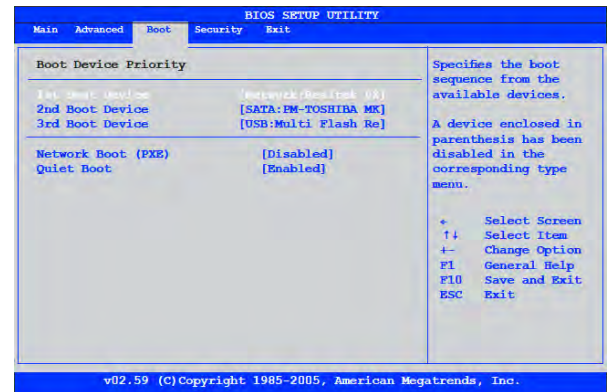
Field	Setting	Function
Vanderpool Technology	ENABLED Disabled	Intel (r) Virtualization Technology -- allows a platform to run multiple operating systems an application in independent partitions. With virtualization, one computer system can function as multiple "virtual" systems.
Core Multi-Processing	ENABLED Disabled	Enabled -- Use multi-processing core Disabled -- Use only one processor core
Auto DIM	DISABLED Enabled	Enabled -- Display will dim slightly when on battery power. Disabled -- Display brightness will not dim when on battery power.
USB Port2 2.0 Option	ENABLED Disabled	Enabled = bottom/backside USB port is USB 2.0 Disabled = bottom/backside USB port is USB 1.1
Slow Charge Function	DISABLED Enabled	Enabled -- Slow charge function is enabled Disabled -- Battery charges at normal rate
Battery Low Warning Beep	ENABLED Disabled	Enabled -- System will sound 3 beeps every 10 seconds if battery charge drops below 7% Disabled -- System will not sound if battery is low
Rotate Button	SCREEN ROTATION Backlight Toggle	Screen Rotation -- Pressing Rotate button will rotate screen. Backlight Toggle -- Pressing Rotate button will toggle the backlight on and off.
Disk Configuration	IDE AHCI	IDE Combined -- Standard IDE Configuration Mode AHCI Mode -- Advanced Configuration Mode for SATA drive
Bluetooth Wakeup	DISABLED Enabled	Enabled -- System will awake up from standby if a Bluetooth signal is detected Disabled -- System will not awake up from standby if a Bluetooth signal is detected
LCD ON By Power Button	DISABLED Enabled	Enabled -- If display is set in OS to turn off, it will turn back on with power button during runtime. Disabled -- Display will not turn on with power button during runtime; pressing button will cause the unit to hibernate.
S4 Wakeup	DISABLED Enabled	Enabled -- System will awake up from standby if S4 signal is detected Disabled -- System will not awake up from standby if a S4 signal is detected
Resume on AC power Insertion	DISABLED Enabled	Enabled -- System will wake from standby or hibernation state when AC power is inserted. Disabled -- System will not wakeup when AC power is inserted. Power button will cause unit to hibernate if pressed.
GPS Power Option	DISABLED Enabled	Turn on/off GPS
Radio Configuration	Sub-Menu	Radio function settings, including Bluetooth and Wireless LAN
OSPM Performance Counter	0 1	Select the following timers for OS power management to be used: 1 = OS uses ACPI Power Management Timer 0 = Allow OS to use either ACPI Management Timer or Internal Processor Clock

Radio Configuration

Field	Setting	Function
Bluetooth Power Option	ENABLED Disabled	Enable or disable Bluetooth power
Wireless LAN	ENABLED Disabled	Enable or disable Wireless LAN

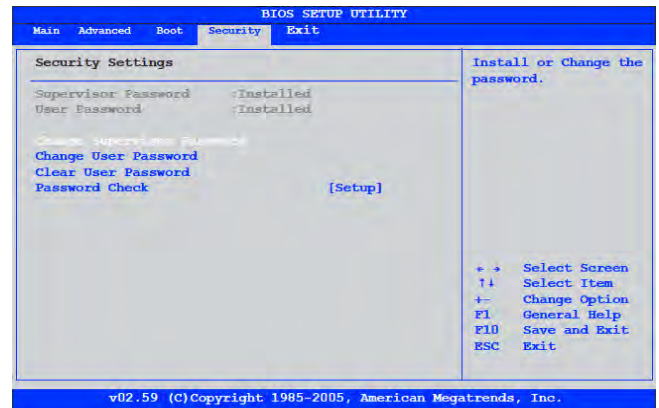


The Boot Menu



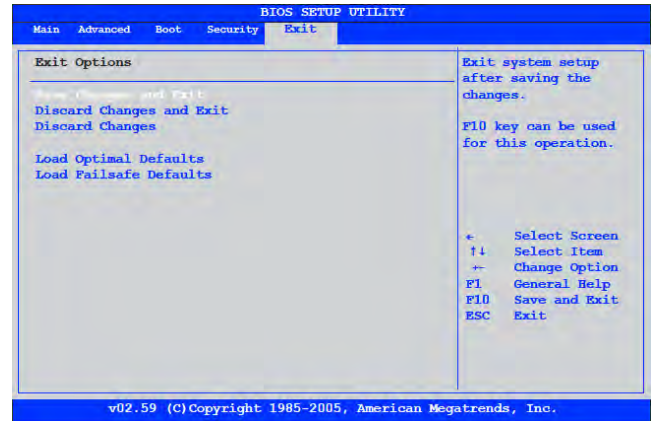
Field	Setting	Function
1st Boot Device (multiple devices may be displayed)	Removable Dev. CD/DVD HDD: SATA:PM-TOSHIBA MK Network:Realtek Boot Agent USB Device Disabled	Specifies the boot sequence from the available devices. A device enclosed in parenthesis has been enabled in the corresponding type menu. Removable Devices = FDD CDROM = CDROM Realtek Boot Agent = Ethernet boot NOTE There are a variety of boot devices available, only currently installed options are displayed
Network Boot (PXE)	Enabled DISABLED	If Enabled boot from the network becomes available.
Quiet Boot	ENABLED Disabled	If Disabled: Displays normal POST messages. If Enabled: Displays OEM Logo instead of POST messages.

The Security Menu



Field	Setting	Function
Supervisor Password	Installed NOT INSTALLED	Information Only
User Password	Installed NOT INSTALLED	Information Only
Change Supervisor Password	N/A	Install or Change the password
Change User Password	N/A	Install or Change the password
Clear User Password	N/A	Clears/Removes the User Password (NOTE: This option only displays if a User Password has been installed)
Password Check	SETUP Always	Determines when a password is required by the system. NOTE This option only displays if password(s) are installed

The Exit Menu



Field	Screen	Function
Save Changes and Exit		Exit system setup after saving the changes. F10 key can be used for this operation
Discard Changes and Exit		Exit system setup without saving any changes. Esc key can be used for this operation.
Discard Changes		Discards changes done so far to any of the setup questions. F7 key can be used for this operation.
Load Optimal Defaults		Load Optimal Default values for all the setup questions. F9 key can be used for this operation.

The GD3080 is rugged and weather resistant. Handle it with the normal care required by any sophisticated electronic equipment, and the computer will provide reliable service even under harsh field conditions.

Follow the guidelines in this section to care for your unit.

Battery Maintenance and Storage

Maintaining Batteries

Follow these guidelines to maintain performance of Lithium-Ion (Li-ion) batteries.

- Avoid exposing batteries to extremely hot or cold temperatures for long periods. To prevent possible damage to the battery, the GD3080 does not allow the battery to charge if the internal temperature of the battery gets too low (< 5°C or < 41°F) or too high (> 50°C or > 122°F).
- Charge the battery nightly where the temperature will remain around 20°C (68°F).
- Re-calibrate your battery every three months or when your battery performance degrades.

Storing Batteries

- Store the battery within the recommended temperature range: 10°C to 30°C (50°F to 86°F).
- Unused or stored batteries can lose power over time. When you install a battery that has not been used for awhile, connect external power to the computer and charge the battery.
- After storage, battery calibration may increase its capacity.

Tablet PC Maintenance and Storage

Maintaining Your Tablet PC

Follow these guidelines to help maintain the condition and performance of your computer.

- Turn off the computer when you are not using it.
- Charge the batteries daily or whenever their capacity is low.
- Operate the computer within the recommended temperature ranges of -23°C to +60°C (-9.4°F to +140°F).

Care and Cleaning

PHYSICAL INSPECTION Periodically inspect the computer and accessories for wear, damage, loose or missing parts. Identifying and correcting potential problems early can help reduce the need to return the unit for service.

OUTSIDE CASE Like all tools, the outside of the computer will get dirty with use. The case is made of painted magnesium and polycarbonate blend (plastic) doors and covers. These areas can be cleaned with a solution of one part mild cleanser and one part water. Do not use ammonia, abrasive cleaners, or bleach as this may damage the unit. To clean the outside case,

follow the procedure below.

1. Disconnect external power and turn off the computer.
2. Using a soft, dry cloth (do not use paper products because they can scratch the surface, add a small amount of cleaning solution to the cloth and clean the computer case.
3. Wipe off any excess liquid with a soft cloth.

DISPLAY Periodically inspect the display to make sure the brightness function is operating properly and that all pixels are operational. To clean the display assembly, use the same cleaning solution and procedure described earlier for the outside case. In some cases, you can use a small amount of isopropyl alcohol to remove streaks or smears. Use a soft, clean cloth to clean the display. Do not use paper products because they can scratch the screen. A Display Cleaning Kit is available.

EXTERNAL POWER CONNECTOR The external power connector may sometimes be exposed to moisture and/or contamination causing an unreliable connection to the external power source. Clean the connector using a cotton swab dipped in isopropyl alcohol.

RJ-11/ RJ-45 / USB CONNECTORS Make sure these connectors are operating properly. During normal use, the connector pins can get dirty or become broken, bent, or pushed out of place. Clean the connector with a cotton swab dipped in isopropyl alcohol.

I/O PORTS Make sure the audio and Multi-IO ports are operating properly. Periodically inspect the ports for damage or contamination, and make sure their covers are attached and closed when not in use. The I/O covers can be replaced without returning the unit for service. Contact your local support person for more information.

PC CARD DOOR AND CONNECTOR Whenever possible, make sure this door is closed and latched properly. When the PC Card door is closed, it provides a watertight seal for the PC Card socket. Shield the area from all contaminants such as liquids, rain, snow, and dust when the door is open.

Make sure the PC Card connector is operating properly by reading from or writing to a PC Card.

Storing Your Computer

If you plan to store the computer, please follow the storage guidelines listed below.

- Files and data should be saved before storing the computer.
- Contact your organization's help desk about the procedure for backing up files or data.
- Exit all applications and use the appropriate procedure to exit from your operating system.
- Turn off the computer by going to the Start menu and selecting Shutdown.
- Remove the battery from the unit and store it in a dry place.

- Store the computer within the recommended temperature ranges of -55°C to +75°C (-67°F to +167°F).
- If you use PC cards, refer to the manufacturer's instructions you received with the card for storage and care information.

Data Backup

Regularly backup your data to ensure the greatest data integrity, provide the fastest recovery options, and minimize downtime.

After you have installed all applications and have your computer configured as desired, create a backup of drive C: using the **Hard Disk Backup and Recovery Utility**. Then use the **Windows® Backup Utility** frequently to backup data. It is recommended you set the backup utility to run automatically.

Saving Important System Information

By default your computer is set up to automatically save certain critical information, such as the registry, on a regular basis. This information is saved as a restore point. You can also create restore points manually by using the **System Restore Utility**. Select **Start, All Programs, Accessories, System Tools, System Restore**. Then, follow the instructions in the Wizard.

Backing Up Files in Windows® XP:

Select **Start, All Programs, Accessories, System Tools, Backup**. You can schedule backups to run automatically on a regular basis. To set this up, talk to your help desk or IT department.

Backing Up Files in Windows® 7:

Select **Start, Control Panel**. Under **System and Security** select **Back up your computer**. From here you can set up backup, create a system image or create a system repair disc.

Backing Up Drive C:

You can make an exact copy of drive C: and save the backup image on the Recovery Partition of your hard disk (usually drive D:). In the future, you can restore drive C: to its previous state if it becomes corrupted. To make a backup copy of drive C:, use the **Hard Disk Backup and Recovery Utility**. Select **Start, All Programs, Mobile Computer Tools, Hard Disk Backup and Recovery**. You will be prompted for additional information.

NOTE The **Hard Disk Backup and Recovery Utility** is only available on computers configured with a recovery partition.

Data Recovery

There are several methods to restore your data. Start with the least destructive and fastest recovery options, listed below in the order in which you should restore data.

1. Restore system information.

2. Restore a backup using the **Windows® Backup Utility**.
3. Restore the entire contents of drive C:

Option 1: Restoring System Information

Windows® XP:

If you have problems with your system, restore system information to an earlier state, or **Restore Point**. Select **Start, All Programs, Accessories, System Tools, System Restore**. Then, follow the instructions in the Wizard.

Windows® 7:

Select **Start, Control Panel, System and Maintenance, Backup and Restore Center**. On the **Tasks** menu on the left-hand side of the screen select **Repair Windows® using System Restore**.

Option 2 : Restoring a Backup

Windows® XP:

Select **Start, All Programs, Accessories, System Tools, Backup**. Then follow the instructions in the wizard to restore files and settings.

Windows® 7:

Select **Start, Control Panel, System and Security**. Under **Backup and Restore** select **Restore files from backup**. From here you can select a backup file to restore.

Option 3: Restoring Drive C:

If you used the **Hard Disk Backup and Recovery Utility** to create a backup disk image you can use it to restore drive C:.

CAUTION Restoring a previously saved disk image overwrites the entire contents of drive C:. Before running this process, save your data to another location, such as a USB flash drive.

NOTE The **Hard Disk Backup and Recovery Utility** is only available on computers configured with a recovery partition. If it is not available, you will either need to contact your company's help desk about obtaining a recovery CD or return your unit for service.

Windows® XP:

Select **Start, All Programs, Mobile Computer Tools, Hard Disk Backup and Recovery** and follow the prompts.

Windows® 7:

Select **Start, Control Panel, System and Security**. Under **Backup and Restore** select **Restore files from backup** then select **Recover system settings or your computer**.

The GD3080 has several equipment and accessory options to further enhance your mobile computing experience.

A complete list of optional peripherals and accessories is listed on the General Dynamics Itronix website.

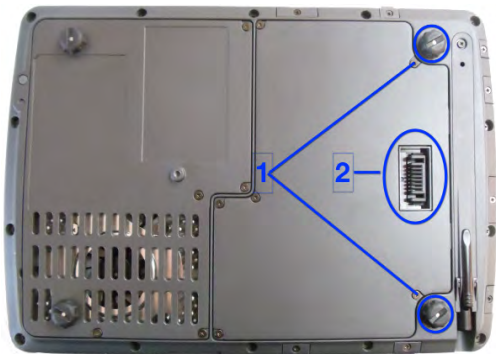
CAUTION When purchasing any additional accessories, purchase only those accessories that are approved for use with your Tablet PC. Some accessories are proprietary items and can be obtained through your system vendor. If you use items that are not approved for use with this Tablet PC, you may cause it to malfunction, or to emit or receive electromagnetic radiation in excess of local regulations. For non-proprietary accessories such as PC Cards or printers, ensure that the accessory functions properly with your computer before making the purchase. Your system vendor may be able to recommend reliable brands and models.

Second Battery

For longer battery life, you can attach an optional second, external battery to the connector on the back of the Tablet PC. The external battery connector is sealed against the Tablet case.

Attaching a Second Battery

1. Remove the two left feet (1) on the back of the unit.
2. Line up the second battery connector (2) with the connector on the external battery.



3. Press until battery is firmly seated.



4. Tighten the three screws to secure the battery in place.

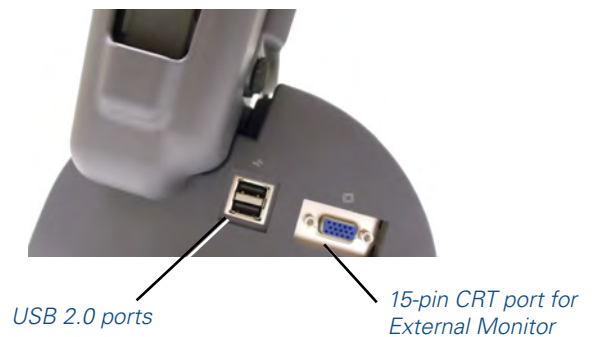
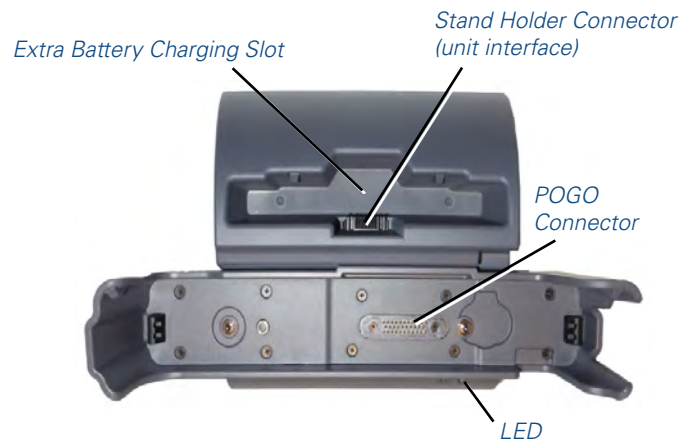


5. Screw the feet into the battery for safekeeping.
6. Use the **Setup Utility Calibration** program to calibrate the battery.

Desk Mount

The GD3080's desk mount enables you to experience desktop functionality with your GD3080. The desk mount includes the following ports:

- Stand POGO connector (this is the unit interface)
- DC in
- 2 USB 2.0 ports
- 15-pin CRT port for an external monitor
- Extra battery charger
- RJ45 connector



To use the desk mount:

1. Ensure the port cover on the extension slot is open and the port cover for the AC power is closed.
2. Line up the bottom of the unit with the guides and press down while feeding the rubberized I/O port cover through the opening provided. The unit will automatically lock into place.



3. Apply external power to the desk mount. The LED in the front of the desk mount will light along with the Power Status LED on the GD3080.

The desk mount includes a slot so you can simultaneously charge the main battery and an additional battery.

NOTE Power must be applied to the dock for the ports to function.

To detach the desk mount:

1. Release the latch located on the lower left hand corner of the desk mount to detach the GD3080.



2. Pull straight up to remove the GD3080 from the desk mount.

Memory Upgrade

Adding memory allows the computer to operate faster, handle more tasks simultaneously, and work more efficiently with large files. Users who increase memory demands by adding additional programs may notice slower operating speeds. Adding memory offsets this slowdown. The Tablet PC includes a memory card slot for adding additional memory.

Calculate memory size by adding the size of the memory module to the existing built-in memory. For example: 128 MB (module) + 128 MB (built-in memory) = 256 MB Total. The maximum memory configuration is 1.2 GB.

Inserting a Memory Card

If you add memory to your GD3080, it will automatically detect the change in RAM (Random Access Memory) capacity when it restarts. You can verify RAM capacity has changed in the **BIOS Setup Utility** or in Windows®:

1. **SETUP:** Press the **OK/ENTER** key during boot-up. Then select **CMOS Setup** menu. This screen shows the amount of system memory.
2. **FOR WINDOWS® XP:** Right click (tap and hold) on **My Computer** and select **properties**. The bottom of the **System Properties, General** tab lists the memory detected by Windows®.
3. **FOR WINDOWS® 7:** Click on **Start**, select **Computer** and select **System properties**. The bottom of the **System properties**, tab lists the installed memory detected by Windows®.

CAUTION Only use memory cards approved for use in your Tablet PC. Failure to do so may void your warranty.

Surge Protection

A large number of computer and high technology equipment damage is directly related to AC power and telephone line problems. These problems can include surges, spikes, noise, interference, and weather-related problems, which in turn can cause glitches, hang-ups, crashes, performance slow downs, and down time with computer equipment. The market is flooded with hundreds of AC power line surge suppressors advertising high performance surge protection; only a few of them actually provide adequate protection.

Selecting the Right Surge Protection

Consider the level of quality you need when selecting a surge suppressor. This depends on factors such as surge environment, the type of equipment to be protected, and the quality of the electrical wiring and service.

Surge Environment

Surge environment refers to the damage potential from electrical surges in a particular geographical area. A high quality suppressor should be used if there is frequent lightning activity in the area and the location service is fed by overhead utility poles.

Type of Equipment to be Protected

If the computer is equipped with a modem, the modem should also be surge protected. Protecting the power line without protecting the modem line provides only partial protection.

Quality of Electrical Wiring and Service

Wiring should be up to current NEC standards and have verified good AC grounds. It is important that your computer system be plugged into a grounded AC outlet when charging and that all peripherals connected to your system reference the same AC ground.

Equipment Selection

There are a number of companies that sell quality surge suppressors. When you are looking for a surge suppressor, consider these options.

- Expect to pay at least \$50 for a good quality surge suppressor.
- The surge suppressor should be a UL 1449, 497, and 1283 listed for surge suppression, modem surge protection, and RFI/EMI noise filtering respectively.
- The surge suppressor should have diagnostic LEDs that verify good AC ground, proper wiring, and proper surge operation. On/off switches that light are not recommended since they can produce electrical noise.
- The Joule ratings should be a minimum of 480 Joules for the AC surge circuit.
- The Joule ratings should be a minimum of 240 Joules for the modem.
- The modem surge circuit should present low capacitance to the modem line or it will slow the transmission rate. Capacitance should be specified at less than 50 picofarads.
- Quality surge suppressor manufacturers generally offer a life-time warranty.
- Consider obtaining a protected equipment coverage policy which insures the equipment in the event of surge damage.
- The devices that will be attached to the computer also need to be surge protected.

We are committed to providing you world class support services that ensure the lowest total cost of ownership for your hardware investment. The icareServices program will help you maximize end user productivity and decrease overall system operating cost.

Client Care Center (CCC)

General Dynamics Itronix Client Care Center – The CCC is an internal central point for telephone warranty support for all General Dynamics Itronix products. Our Technical Service Representatives know your product and provide input and support for problem resolution.

One call to the convenient Client Care Center number at (1-800-638-9270, Opt 2) allows a single entry point of access to meet all your needs.

You may also use the web portal at www.gd-itronix.com/CCC. The CCC receives calls from 5am-5pm Pacific Daylight Time, Monday through Friday (except on holidays). Sorry, 1-800 numbers ARE NOT accessible from Mexico.

Technical Service Representatives provide the following support services:

- Product troubleshooting
- RMA origination for service return
- RMA status check on product service
- Check status warranty/service kit orders
- Coordinate requests for product upgrades
- Wireless Radio registration
- icareServeNet registration and training

General Dynamics Itronix offers service uplift programs for clients who wish to expand their support coverage beyond the basic warranty. Coverage and details of these programs are available online at www.gd-itronix.com

Product Support - Downloads

It is easy to get the software updates you need to keep your configuration current and get the most from your product. Click [here](#) to get current downloads.

NOTE Downloads are listed by model and product number (GD3080).

This section is designed to help you determine and fix problems you might encounter while operating the GD3080.

Try the following steps in order:

1. First, look through the categories in this section for a solution.
2. If you do not find a solution for your problem here, try one of the resources listed below under "For More Help."
3. If you are having a problem with a computer application, use the online help that comes with the application to find a solution.
4. If you still cannot resolve your problem, contact the help desk at your organization.

For More Help

- Windows® Help is already installed on your system. To access this information, select **Start, Help and Support**.
- Take the Windows® Tutorials. Select **Start, Get Going with Tablet PC**.
- Third-party Windows® manuals are available from your local bookstore.

Applications

My application locks up, acts strangely, or produces a General Protection Fault (GPF) error

- Press **CTRL+ALT+DEL** to start the **Logon Protector**, then select the **Task Manager**. Click the **Applications** tab on the **Task Manager** and look for the application that is having problems. If the application is hung, the **Status** column will say "**Not Responding**" after the task name. Click on the unresponsive task/application, then click the **End Task** button.
- If you have tried to resolve the problem and your application still does not respond, you may need to restart your computer.

To restart your computer:

USING WINDOWS® XP: Select **Start, Shut Down, Restart**.

USING WINDOWS® 7: Select **Start, Shut Down, Restart**.

- If the computer does not restart, the keyboard may be locked up. Hold the **Power Button** for ten seconds or use the reset on the bottom of the unit.
CAUTION! This will result in a loss of all unsaved data.
- The data on the hard disk could be corrupted. Run CHKDSK.
- Windows® may be out of memory or resources. You can try to close some open programs to free up some memory or exit Windows® and restart Windows® by selecting **Start, Shut Down, Restart**.

Communications programs don't seem to work or they lock Windows®

When you first try to use your communications application, the system responds with a message asking if you want to install


the modem. Answer "Yes" to this question and follow the instructions on the screen to install it.

When I rotate the display to portrait orientation my application does not work or does not display correctly

Some applications do not display or work properly in portrait orientation due to the rugged nature of your Duo-Touch's display screen. Use these applications in landscape orientation.

Batteries

The battery does not charge

- To prevent possible damage to the battery, the system will not allow a charge if the battery temperature is extremely hot or cold (such as in a closed, unattended vehicle). If possible, charge the battery in a location with a moderate temperature of around 20°C (68°F).
- If possible, turn off the computer while the battery is charging.
- If the battery is new or has been stored for a week or more, follow this procedure:
 1. Make sure the computer is turned off.
 2. Unscrew and open the battery cover, then remove the battery.
 3. Connect the AC adapter to the computer and an AC wall outlet, and then turn on the computer by pressing the Power Button. The **Power Status LED** will be solid blue when connected to external power.
 4. Let the computer complete the boot process. Then reinstall the battery and replace the battery door.
 5. Allow the system to remain idle for one hour with the AC adapter connected to the computer. The **Battery Status LED**  is orange when the battery starts charging.
 6. If the battery still fails to charge after an hour, remove the battery, wait several seconds, and then install it again.
 7. If the battery does not begin charging within several minutes, return the unit for service.

The batteries take much longer than seven hours to charge

Under moderate temperatures, about 21°C (70°F), the computer's battery takes approximately 3 hours to completely charge while suspended and 3-5 hours to charge while powered on. Under extremely cold or hot temperatures, however, the battery can take up to 16 hours to fully charge.

The batteries don't last very long

As your battery ages, the maximum capacity that it can hold naturally decreases, and even the best maintained batteries eventually need to be retired. Consider replacing the battery if you are not getting the usage you need from it.

The gas gauge isn't full after charging the battery

- This may indicate that the charging process terminated prematurely.
- **Calibrate the battery** to align the gas gauge with the battery capacity.

The gas gauge reads "full," but the charging indicator light is still lit

If you charge your battery daily, rely on the gas gauge reading to determine battery capacity. The charging process may continue even if the gas gauge reads full. External power can be removed because the battery is virtually full.

My battery seems to have less and less capacity

- If your battery is new, or if you are using it for the first time, you will need to calibrate it prior to using it.
- As your battery ages, the maximum capacity that it can hold naturally decreases, and even the best maintained batteries eventually need to be retired. Consider replacing the battery if you are not getting the usage you need from it.

Hard Disk*The hard disk will not spin up so the computer can't boot up*

This occurs if the unit is exposed to extremely low temperatures. This is not a hardware failure associated with the hard disk. Allow the computer to warm to room temperature. The minimum cold or soft boot temperature is 5°C (41°F).

I can't save files because the disk is full

Report this situation to your supervisor or your organization's help desk.

Disk Read Error

Any card in the PC card socket except for a properly formatted memory card will cause this error since it is trying to read the PC card.

Hard disk recovery

Your hard disk may have a recovery partition containing a copy of the original drive C: factory disk image. If you have a recovery partition, you can access it from Windows® or from a bootable USB floppy or CD:

To recover your hard disk from Windows®

From within Windows®, select **Start, All Programs, Mobile Computer Tools, Hard Disk Recovery**.

To recover your hard disk

1. Attach an external USB keyboard and an external USB floppy or CD-ROM drive with the unit turned off.
2. Press **F11** while the unit is booting up to get to the **Boot Menu**.
3. Select **Disk Recovery** from the menu.

Landline Modems*The modem doesn't work*

- When you first try to use HyperTerminal or similar application, the system responds with a message asking if you want to install the modem. Answer "Yes" to this question and follow the instructions on the screen to install it.
- Make sure the communication settings are correct in your application. Refer to the online Help for your application.

The modem doesn't dial a number

Check these things:

- If you are using an external modem, make sure the cables are attached correctly.
- Make sure your communications parameters are correct in your application. Refer to the online Help for your application.

The modem dials and receives an answer but does not establish a connection

- You may have incorrect parameters selected for your application to talk with the remote modem. Refer to the online Help for your application.
- You may need to adjust your modem's baud rate or protocol selection.

Communications programs such as HyperTerminal don't seem to work or they lock Windows®

- If you are using the internal modem, be sure to specify the proper communications port .
- When you first try to use HyperTerminal or similar application, the system responds with a message asking if you want to install the modem. Answer "Yes" to this question and follow the instructions on the screen to install it.

The modem dials and the answering modem generates tone, but our modem does not begin the training sequence to establish a connection

Although the problem may appear to originate from the computer, the source of the problem is the answering modem. Try setting up the answering modem to generate the correct V.22 tone, which can usually be done by sending an AT command to the modem.

Miscellaneous

The computer shuts off unexpectedly

- The computer has entered suspend mode Suspend mode. Press the power button to resume.
- The battery capacity may be low. Connect external power to charge the battery, or replace the battery with a fully charged one.
- The battery contacts may be dirty. Turn off the computer, remove the battery, and clean the contacts.

The speaker volume is too high or too low

Increase the volume by pressing **FN+ESCAPE**; decrease the volume by pressing **FN+OK/ENTER KEY**.

The computer won't turn on

- The battery may not be installed properly, or it may not be fully charged. Make sure a fully charged battery is properly installed.
- Connect external power to charge the battery if it is not charged.
- If you are using the AC adapter, check the electrical outlet you are using to make sure it is working properly.
- If the GD3080 does not turn on, restart the computer by holding down the Power Button for at least 10 seconds and then release it.
- If the Power Button does not work to reset the unit, press the **Master Reset Key** on the back side of your GD3080.

The computer won't turn off

Press and hold the **Power Button** for at least 10 seconds.

The computer enters suspend mode too quickly

When there is no activity for a period of time, the computer turns off or enters suspend mode. To extend this time, use the **Power Management** program and increase the non-activity time to enter suspend.

The computer doesn't automatically suspend

- Check to make sure the COM ports are off. For example, exit any application that uses COM ports.
- Make sure external power is not connected. Depending on power settings, some systems will not suspend automatically when they are connected to external power.
- Make sure the standby time is set properly in the **Power Management** program.

The system date and time are incorrect

Reset the correct date and time by choosing the **Date/Time icon** from **Control Panel** and making the appropriate changes.

I receive an "out of memory" error message

- Too many applications may be running at the same time. Close applications you don't need.
- If you're using desktop wallpaper, set wallpaper to None. To do this, choose **Display** from **Control Panel** and make the appropriate change.
- Make sure you have enough space on your hard disk . Contact your supervisor or your organization's help desk for assistance.
- Set up a permanent swap file. Contact your supervisor or your organization's help desk for assistance.

Holding down the Power button to reset the computer doesn't always work

- Try resetting the computer again. If this doesn't work, press the **SECURITY KEY**.
- Alternately, use your stylus tip to press the **Master Reset Key** on the back of the unit.
- If none of these solutions work, remove all power, including the battery pack, and allow the unit to remain idle for ten minutes. After ten minutes, connect external power and retry.

PC Cards

I can't remove the PC card

- Press the ejector button located inside the PC card door on the side of the computer. The button will pop out. Press the ejector button again to eject the PC card. Slide the card out.
- If the ejector button malfunctions when you press it, release the button and then press it again.


Disk Read Error

Any card in the PC Card socket except for a properly formatted memory card will cause this error since it is trying to read the PC Card.

The system does not recognize the PC Card CD-ROM when it is inserted into the PC Card socket

- There is a delay of 10 to 15 seconds before the CD-ROM drive is recognized.
- Drivers may not be installed. Contact your organization's help desk for assistance.

The computer locks up when I remove the PC card

Before you remove the card, select the **PC card icon**  on the taskbar (in the tray area near the clock in the lower right corner), and choose "Stop [card name] card."

Pen / Display

When I try to use the pen on my display, nothing happens

- If you cannot select objects accurately with the pen, you may need to recalibrate the display. Select **Start, All Programs, Mobile Computer Tools, Tablet Calibration**. Then follow the on screen instructions.
- If you are using a conventional pen/stylus, verify you are in touch screen mode. To do this, press the **LINE UP** and **LINE DOWN** arrow keys simultaneously. You will hear one beep when entering **Touch Screen Mode** and two beeps when entering **Digitizer Mode**.
- Check the tip of your pen/stylus. It should be replaced when worn. Five replacement tips and a tip removal tool are provided in your package.

The display warps or pillows in high humidity

The computer remains functional; however, moving the computer to a more suitable environment will allow the display to recover.

The touch screen doesn't respond after a suspend

The touch screen needs a few seconds to work after a suspend. Wait a moment and try again.

I cannot change the orientation

Your screen resolution may be set too low. To adjust screen resolution, follow these instructions:

FOR WINDOWS® XP: Increase screen resolution by selecting **Start, Control Panel, Display Properties**. Then select the **Settings** tab and adjust the resolution.

FOR WINDOWS® 7: Select **Start, Control Panel, Appearance and Personalization**. Adjust the resolution by selecting **Adjust Screen Resolution** under the **Display** heading.

NOTE Not all configurations support 360° rotation.

The display performance is slow

The temperature may be too cold. Move the computer to a warmer operating environment.

I can't read the display

- Adjust the brightness level up by pressing **FN+ROTATE** and adjust it down by pressing **FN+SECURITY**.
- Your display may be turned off. Tap once on the display with your pen.
- If that doesn't work the automatic power-saving mode may have shut off (suspended) the computer. Press the power button to resume.

The underlined, inverse, and hypertext characters are difficult to read on the screen

Change the color scheme.

FOR WINDOWS® XP: From the **Start** Menu select the **Control Panel**. Choose **Display** and then tap the **Appearance** tab to make changes to the color scheme.

FOR WINDOWS® 7: From the **Start** Menu select the **Control Panel**. Choose **Appearance and Personalization** and select **Change the theme** under the **Personalization** heading to make changes to the color scheme.

I can't see the cursor while using the DOS editor

Press **INSERT** on the input panel to change from insert mode to overwrite mode and to enable a block cursor. When it defaults to insert mode, the DOS editor uses an underline cursor which is less visible than the block cursor for overwrite mode.

The display appears to have random pixels darkened after scrolling

Contact your supervisor or your organization's help desk for information about correcting this problem.

I changed my display resolution, but I see no difference on the screen

Try restarting your computer for the changes to take effect.

The display cuts off the right side of the application or page in portrait mode

Some applications do not display properly in portrait mode. For example, you may need to scroll to the right to see all of the contents on the page. For best visibility, use the landscape orientation to operate most applications.

FAQs

How do I calibrate the pen/display?

1. First ensure you are in the mode (digitizer or touch screen) and orientation (landscape or portrait) you want to calibrate.
2. Select **Start, All Programs, Mobile Computer Tools, Tablet Calibration**.
3. Follow the on screen instructions.

How do I change the main battery?

1. Turn off the Tablet PC and remove external power.
2. Turn the unit over and remove the cover screw with a Phillips screwdriver.
3. Lift out the battery and replace it with a new battery.
4. Screw the cover on and press the power button .

How do I adjust the speaker volume?

You can change speaker volume by tapping the volume icon in the Windows® taskbar or by using the following hot key combinations:

- Press **FN+ESCAPE** to increase volume
- Press **FN+ENTER** to decrease volume

How do I clean the display screen?

To clean the display assembly, use the same cleaning solution and procedure described earlier for the outside case. In some cases, you can use a small amount of isopropyl alcohol to remove streaks or smears. Use a soft, clean cloth to clean the display. Do not use paper products because they can scratch the screen.

How do I change the display screen's brightness?

- Press **FN+ROTATE** to increase display brightness.
- Press **FN+SECURITY** to decrease display brightness.

How do I change the display orientation?

You can change between landscape and portrait orientation by pressing the **ROTATE HOT KEY**. You can also change the orientation via the input panel by tapping **CTRL+ALT** and then selecting one of the arrow keys.

NOTE Some applications may not display properly in portrait orientation.

How do I switch between Digitizer and Touch Screen modes?

USING HOT KEYS: Press the **LINE UP** and **LINE DOWN** hot keys simultaneously to switch the display between digitizer and touch screen modes while in Windows®. You will hear one beep for touch screen mode and two beeps for digitizer mode.

USING WINDOWS®:

1. Select the **Buttons / Device / Brightness Properties** icon in the taskbar.
2. Select the **Device On / Off** tab.
3. Select the **Digitizer / Touch Screen** button to change between digitizer and touch screen modes.

How long will the battery last?

The main Lithium-Ion battery lasts approximately 3 hours with normal use. You can increase your runtime on battery power by using a **second external battery**.

How do I optimize the GD3080 for left handed use?

- You can select a left-handed preference. Select **Start, Control Panel, Tablet and Pen Settings**. Then select the **Settings** tab and check **Left-handed** in the **Handedness and Menu** location fields.
- You can change the screen orientation 90°, 180°, or even 270°. See the answer to "How do I change the display orientation?" above.
- You can change the hand strap on the back of the Tablet PC for the use that best suits you.

Where can I find the user manual?

- Start the computer and launch the desktop shortcut for **GD3080 Help**.