PD251-007, PD251-020
Computer Module For
PDI-P26, P32, P40 Televisions

Document Number: PD196-147R3

EULA

By accepting delivery of PDi Communication Systems, Inc. integrated computers and installing these computers, you agree to be bound by Microsoft's End-User License Agreement (EULA). A copy has been provided with the computer module. (See Appendix A at the end of the manual).

WARNINGS

This symbol is intended to alert the user of the presence of un-insulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

SAFETY INSTRUCTIONS

INSTRUCTIONS

Be sure to read, follow, and keep these instructions. Heed all the warnings.

MAINTENANCE AND SERVICING

Servicing is required when the apparatus has been damaged in any way: the I/O cable or plug has been damaged, liquid has been spilled on the apparatus, objects have fallen into it, the apparatus has been exposed to rain or moisture, it does not operate normally, or it has been dropped.

CAUTION: These servicing instructions are for use by qualified service personnel only. To reduce the risk of electric shock, DO NOT perform any servicing other than what is in the operating instructions, unless you are qualified to do so.

RAIN AND MOISTURE WARNING: To avoid the hazards of fire or electrical shock, DO NOT expose this apparatus to rain or moisture.

WET LOCATION: Apparatus SHOULD NOT be exposed to dripping or splashing. Objects filled with liquids, such as vases, SHOULD NOT be placed on the apparatus.
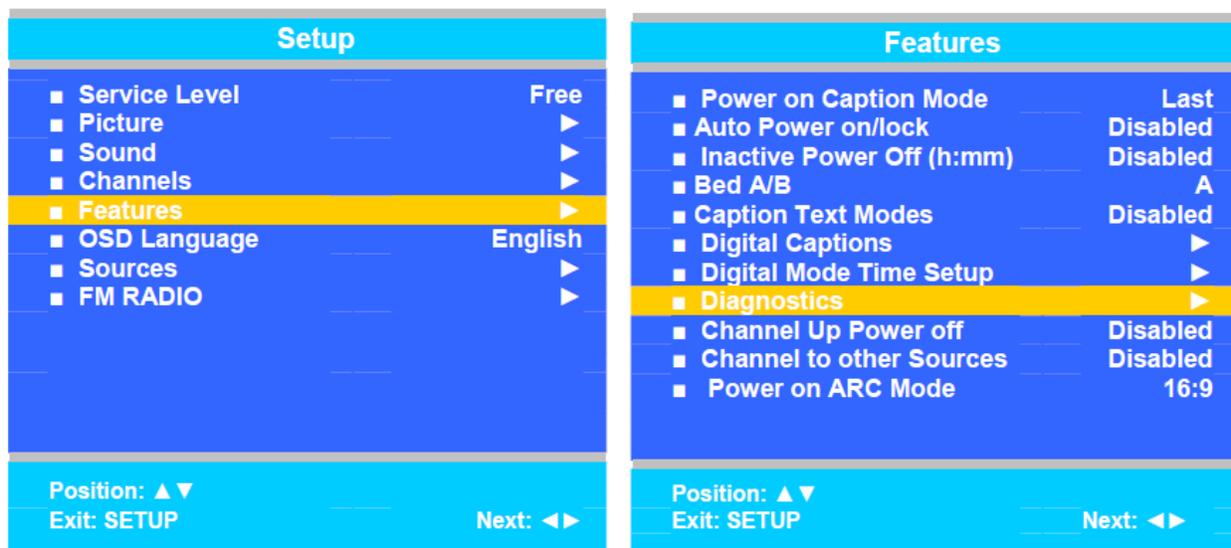
OXYGEN ENVIRONMENT WARNING: DO NOT use in an oxygen tent or an oxygen chamber. Such use ma cause y a fire hazard.

CLEANING AND DISENFECTION: Clean the exterior of this apparatus by removing dust with a lint-free cloth.

PRODUCT MODIFICATION: DO NOT attempt to modify this product in any way without written authorization. Unauthorized modification could void the user's authority to operate this product.

Firmware

Check the TV's main firmware by using a programming remote, part number PD108-420. It must have at least version 2.39 or higher to be compatible with the computer module.

Setup

■ Service Level	Free
■ Picture	►
■ Sound	►
■ Channels	►
■ Features	►
■ OSD Language	English
■ Sources	►
■ FM RADIO	►

Position: ▲▼
Exit: SETUP   Next: ◄►

Features

■ Power on Caption Mode	Last
■ Auto Power on/lock	Disabled
■ Inactive Power Off (h:mm)	Disabled
■ Bed A/B	A
■ Caption Text Modes	Disabled
■ Digital Captions	►
■ Digital Mode Time Setup	►
■ Diagnostics	►
■ Channel Up Power off	Disabled
■ Channel to other Sources	Disabled
■ Power on ARC Mode	16:9

Position: ▲▼
Exit: SETUP   Next: ◄►

1. Press SETUP to enter the Setup menu.
2. From the Setup menu, press CH▲ or CH▼ to highlight Features.
3. Press VOL► to select it.
4. Press the CH▲ or CH▼ to highlight Diagnostics.
5. Press VOL◄ or VOL► to select it.
6. Press the SETUP button to exit.

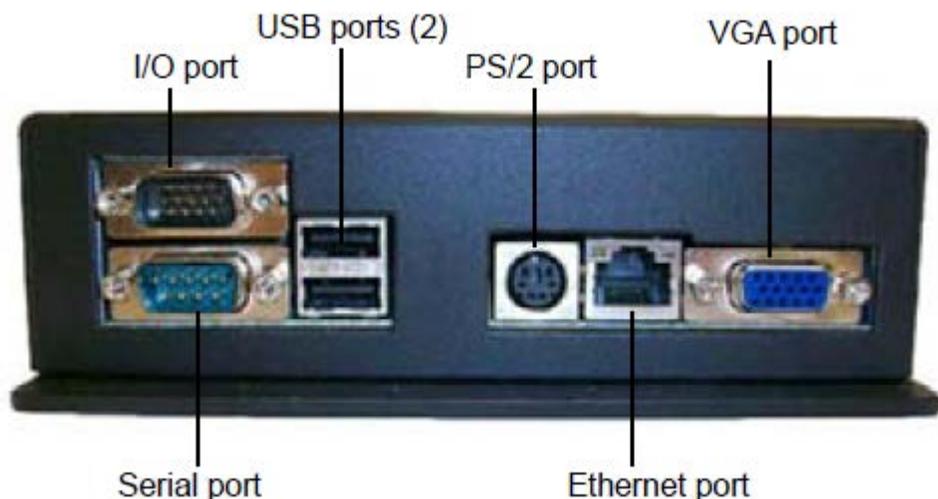   **NOTE:** The Diagnostics menu is read only, but each item can be highlighted by pressing CH▲ or CH▼.

   NOTE: The firmware can be upgraded. Please contact PDi Communication technical support for information about updating the firmware.

Diagnostics

■ Field On Hours	25
■ Field Power Hours	28
■ IO Firmware VSN	2.7
■ Main Firmware VSN	2.39

Position: ▲▼
Exit: SETUP   Next: ◄►

Connection Ports

The computer module has several ports for connecting hardware.

I/O and VGA ports: These ports will be used to connect to the TV. (See Computer Module Installation on page 6).

Serial port: You can connect devices with a serial connector, such as printers, to this port.

USB ports: You can connect different types of USB-based hardware to either of these two ports, such as mice, keyboards, and MP3 players. External CD/DVD-ROM drives may also be connected.

PS/2 port: You can connect a PS/2 mouse, or keyboard to this port.

Ethernet: The Ethernet port may be used to connect to a local network.

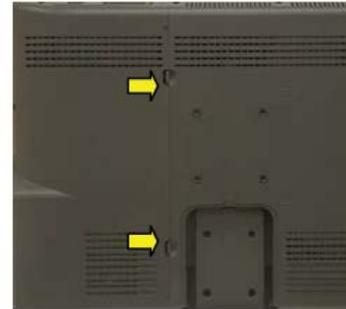**WiFi:** Some models are equipped with 802.11n for wireless networking capabilities.

Computer Module Installation:

The computer module for the P26/P32/P40 TV is designed to mount in the top slot in the rear of the TV set, allowing easy access to several standard computer ports. (See the connection ports section on page 5).

⚠️ **WARNING:** Unplug the power cord from the AC power before installing module. Failure to remove power will result in equipment damage.
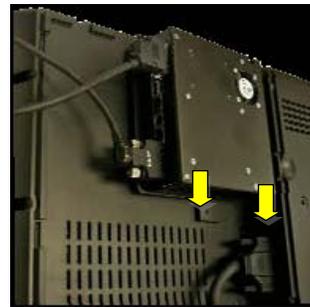
1. Unplug the power cord from the TV or at the wall outlet.

2. Remove the side panel by pressing on the two plastic tabs.

3. Connect the I/O and VGA connectors into their respective ports on the computer module and tighten the thumb screws on both connectors.

I/O Port

VGA port

4. Slide the computer module into the top position so the ports are facing the outer edge of the side of the TV.

5. Line up the screw hole on the module with the screw hole that is just above the vents.

6. Use a Phillips screwdriver to secure the module with the screw that came with it.

7. Connect the other end of the cable to one of the connectors on the side of the TV. Tighten with the thumb screws on both sides of the cable.

NOTE: It is easier to connect the cable to the lower connector on the TV.

Attaching Panel Accessory

The computer module comes with a panel accessory that has a USB connector and an Ethernet connector. The panel accessory allows the computer module to be used with the rear panel mounted to the TV.

⚠ **NOTE:** The following instructions assume that you have mounted the computer module and the rear panel is still removed.
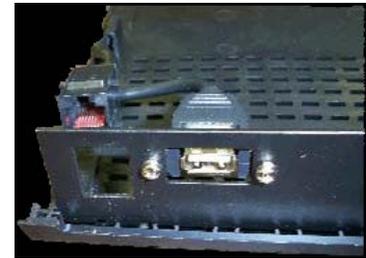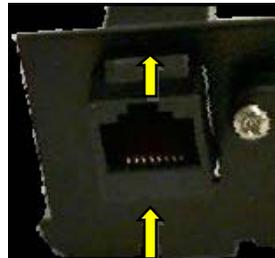
1. Use a Phillips screwdriver to remove the panel accessory that is at the bottom of the panel.

2. Attach the panel accessory that came with the computer module by inserting it in the slot where the other panel accessory was located.
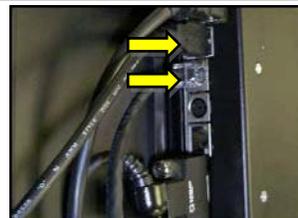
3. Remove the Ethernet connector from the panel accessory by pressing up on the bottom clip and pushing the Ethernet connector out of the back of its slot. Be sure to secure the panel accessory and panel with your other hand.

   ⚠ **NOTE:** This step can also be done before the panel accessory is inserted into the slot on the panel.

4. Now that the Ethernet connector is removed, secure the panel accessory to the panel with the two screws you removed from the other panel accessory.

5. Reinsert the Ethernet connector into its slot on the panel accessory.

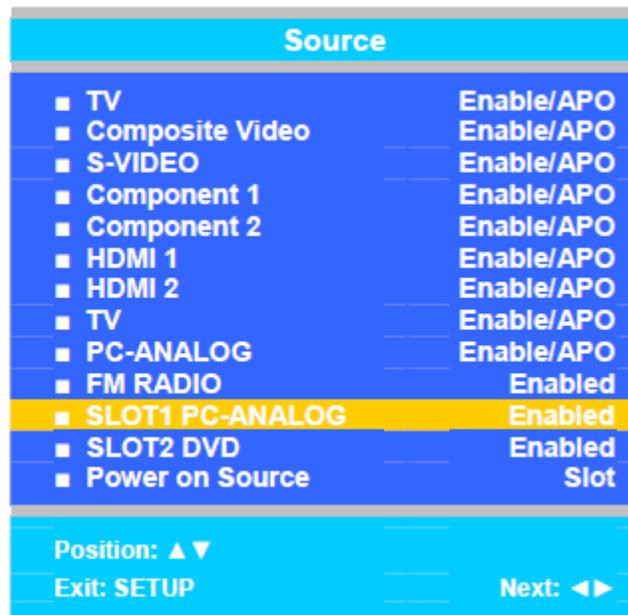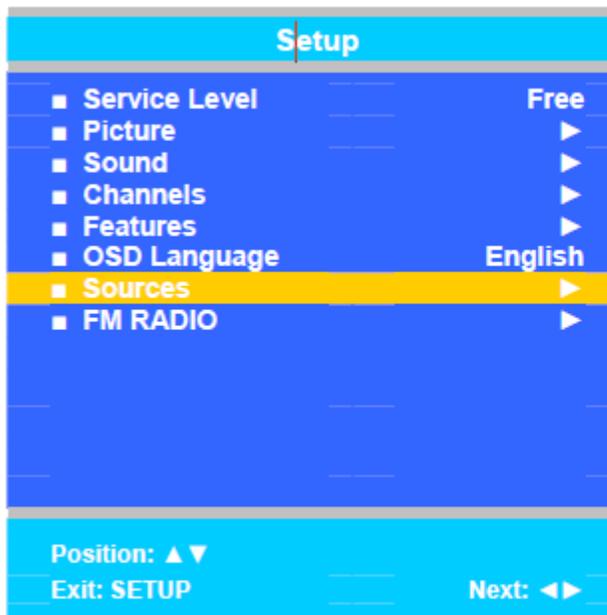6. Connect the USB and Ethernet cables to one of their corresponding ports on the computer module.

7. Place the rear panel on the back of the TV. On models that have screws, secure it with two screws,

Enabling/Disabling Computer Module

The TV's SLOT 1 OR SLOT 2 need to be enabled before the computer can be booted. "PC-ANALOG" will be to the right of the SLOT menu item you need to enable. Follow the below procedure with a programming remote, part number PD108-420.

⚠️ The computer module must be installed before following this procedure.

Setup
- Service Level — Free
- Picture ▶
- Sound ▶
- Channels ▶
- Features ▶
- OSD Language — English
- **Sources** ▶
- FM RADIO ▶

Position: ▲▼
Exit: SETUP   Next: ◄►

Source
- TV — Enable/APO
- Composite Video — Enable/APO
- S-VIDEO — Enable/APO
- Component 1 — Enable/APO
- Component 2 — Enable/APO
- HDMI 1 — Enable/APO
- HDMI 2 — Enable/APO
- TV — Enable/APO
- PC-ANALOG — Enable/APO
- FM RADIO — Enabled
- **SLOT1 PC-ANALOG** — **Enabled**
- SLOT2 DVD — Enabled
- Power on Source — Slot

Position: ▲▼
Exit: SETUP   Next: ◄►

1. Power the TV.
2. Press SETUP on the remote.
3. Press CH▲ or CH▼ to highlight Sources
4. Press the VOL► button to select it.
5. Press the CH▲ or CH▼ to highlight SLOT1 or SLOT 2 (the one with PC-ANALOG next to it).
6. Press VOL► to change the source status to Enabled/APO.
7. Press the SETUP button to exit.

Initial Setup

1. Be sure the SLOT 1 or 2 PC-ANALOG source is enabled under the SETUP menu. (See the Enabling/Disabling computer module setting section on page 8)
2. To switch from TV to computer mode, press the TV/AV button, located on the right side of the TV or on the programming remote, PD108-420, until the SLOT 1 or 2 PC-ANALOG source is active.
3. The computer will boot to the desktop.

NOTE: A mouse or a keyboard must be connected to the computer in order to operate it.

NOTE: The P26/32/40 computer module does not come with virus-protection software preinstalled. PDi Communication Systems, Inc. strongly recommends installing virus-protection software

NOTE: Default user accounts are not restricted in any way. PDi Communication Systems, Inc. strongly recommends creating a user account with limited privileges.

NOTE: Be sure that Windows Firewall is enabled to help protect against internet threats.

Understanding Default Computer Accounts

A "**pdi user**" account has been setup as the Administrative account. The computer will boot into a default account: "**user**". This account has no restrictions imposed on it. It is recommended that you use a third party utility to assist in imposing further restrictions on public accounts.

NOTE: *The "**user**" account does not have a password.*
*The "**pdi user**" account has a password: "**computer123**"*

Turning Off Computer

Windows XP will go through a shutdown process automatically when the TV is turned off.
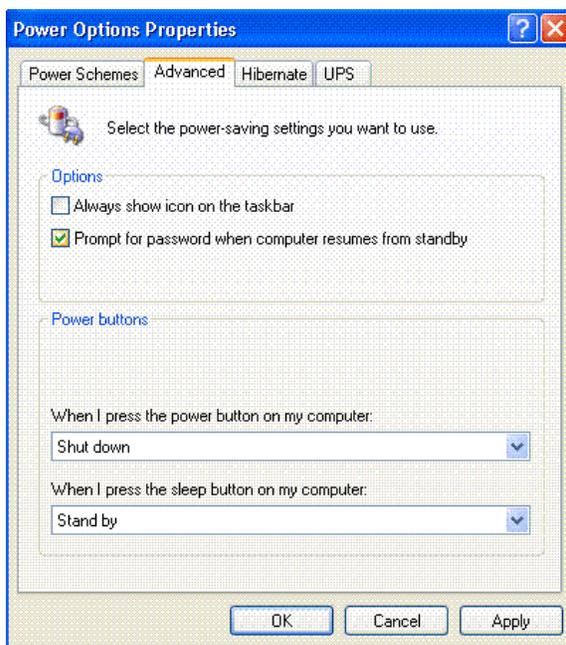
Before pressing the power button, check to be sure the computer is set to shut down when the power button is pressed. Use these steps to check this.

In Category View
1. Click the Start button.
2. Click Control Panel.
3. Click Performance and Maintenance at the bottom of the first column of icons.
4. Under the "or pick a Control Panel icon" section, click Power Options.
5. Select the "Advanced" tab in the "Power Option Properties" window.
6. If it is set, then Shut down will appear in the "When I press the power button on my computer" dropdown menu in the "Power buttons" section. If "Shut down" is not the selected item, then select it from the dropdown menu.
7. Click OK.
8. Close out of all open windows.

IN CLASSIC VIEW
1. Click the Start button.
2. Click Control Panel.
3. Click Power Options Icon.
4. Select the "Advanced" tab in the "Power Option Properties" window.
5. If it is set, then Shut down will appear in the "When I press the power button on my computer" dropdown menu in the "Power buttons" section. If Shut down is not the selected item, then select it from the dropdown menu.
6. Click OK
7. Close out of all open windows.

NOTE: A forced shutdown will occur 2 minutes after turning off the TV if Windows has not automatically shut down before then.

NOTE: Be sure the computer has shut down before removing power from the TV. This can be done by manually shutting down Windows, instead of relying on the automatic shutdown.

Restoring Windows to Factory Default
If the operating system becomes corrupt, it can be restored to factory defaults.

Warning: This process will destroy all data and settings on the disk. It cannot be undone.
1. Attach a USB keyboard to the computer
2. Turn on the computer and within the first 5 seconds, select "Boot Recovery Image".
3. At the login prompt enter the username "pdisystem" and password "computer123".
4. Click "Login".
5. If the username and password are accepted, then click "Start System Restore Process".
6. Follow the prompts to continue the restoration process.
7. After the computer reboots, it will be reset to factory defaults.

Other Information

For information about setting up a P26/P32/P40 TV, please review the P26/P32/P40 Quick Start Guide.

APPENDIX A

Microsoft Software License Terms for:

Windows XP Embedded and Windows Embedded Standard Runtime

These license terms are an agreement between you and PDi Communication Systems. Please read them. They apply to the software included on this device. The software also includes any separate media on which you received the software.

The software on this device includes software licensed from Microsoft Corporation or its affiliate.

The terms also apply to any Microsoft
- Updates
- Supplements
- Internet-based services
- Support services

for this software, unless other terms accompany those items. If so, those terms apply. If you obtain updates or supplements directly from Microsoft, then Microsoft, and not PDi Communication Systems, licenses those to you.

As described below, using some features also operates as your consent to the transmission of certain standard computer information for Internet-based services.

By using the software, you accept these terms. If you do not accept them, do not use or copy the software. Instead, contact PDi Communication Systems to determine its return policy for a refund or credit.

If you comply with these license terms, you have the rights below.

1. **Use Rights.**
   You may use the software on the device with which you acquired the software.

2. **Additional Licensing Requirements and/or Use Rights.**
   a. **Specific Use.** PDi Communication Systems designed this device for a specific use. You may only use the software for that use.
   b. **Other Software.** You may use other programs with the software as long as the other programs
      - Directly support the manufacturer's specific use for the device, or
      - Provide system utilities, resource management, or anti-virus or similar protection.

   Software that provides consumer or business tasks or processes may not be run on the device. This includes email, word processing, spreadsheet, database, scheduling and personal finance software. The device may use terminal services protocols to access such software running on a server.

   c. **Device Connections.**
      - You may use terminal services protocols to connect the device to another device running business task or processes software such as email, word processing, scheduling or spreadsheets.
      - You may allow up to ten other devices to access the software to use.
      - File Services,
      - Print Services,
      - Internet Information Services, and
      - Internet Connection Sharing and Telephony Services.

   The ten connection limit applies to devices that access the software indirectly through "multiplexing" or other software or hardware that pools connections. You may use unlimited inbound connections at any time via TCP/IP.

3. **Scope of License.** The software is licensed, not sold. This agreement only gives you some rights to use the software. PDi Communication Systems and Microsoft reserve all other rights. Unless applicable law gives you more rights despite this limitation, you may use the software only as expressly permitted in this agreement. In doing so, you must comply with any technical limitations in the software that allow you to use it only in certain ways. For more information, see the software documentation or contact PDi Communication Systems. Except and only to the extent permitted by applicable law despite these limitations, you may not:

   - Work around any technical limitations in the software;
   - Reverse engineer, decompile or disassemble the software;
   - Make more copies of the software than specified in this agreement;
   - Publish the software for others to copy;
   - Rent, lease or lend the software; or
   - Use the software for commercial software hosting services.

   Except as expressly provided in this agreement, rights to access the software on this device do not give you any right to implement Microsoft patents or other Microsoft intellectual property in software or devices that access this device.

   You may use remote access technologies in the software such as Remote Desktop to access the software remotely from another device. You are responsible for obtaining any licenses required for use of these protocols to access other software.

- Remote Boot Feature. If the PDi Communication Systems enabled the device Remote Boot feature of the software, you may

  (i)   use the Remote Boot Installation Service (RBIS) tool only to install one copy of the software on your server and to deploy the software on licensed devices as part of the Remote Boot process; and
  (ii)   use the Remote Boot Installation Service only for deployment of the software to devices as part of the Remote Boot process; and
  (iii)   download the software to licensed devices and use it on them.

  For more information, please refer to the device documentation or contact PDi Communication Systems.

- Internet-Based Services. Microsoft provides Internet-based services with the software. Microsoft may change or cancel them at any time.

  (i)   **Consent for Internet-Based Services.** The software features described below connect to Microsoft or service provider computer systems over the Internet. In some cases, you will not receive a separate notice when they connect. You may switch off these features or not use them. For more information about these features, visit

           http://www.microsoft.com/windowsxp/downloads/updates/sp2/docs/privacy.mspx.

  By using these features, you consent to the transmission of this information. Microsoft does not use the information to identify or contact you.

  (ii)   **Computer Information.** The following features use Internet protocols, which send to the appropriate systems computer information, such as your Internet protocol address, the type of operating system, browser and name and version of the software you are using, the language code of the device where you installed the software. Microsoft uses this information to make the Internet-based services available to you.

      - **Web Content Features.** Features in the software can retrieve related content from Microsoft and provide it to you. To provide the content, these features send to Microsoft the type of operating system, name and version of the software you are using, type of browser and language code of the device where the software was installed. Examples of these features are clip are, templates, online training, online assistance and Appshelp. These features only operate when you activate them. You may choose to switch them off or not use them.

      - **Digital Certificates.**   The software uses digital certificates. These digital certificates confirm the identity of Internet users sending X.509 standard encrypted information. The software retrieves certificates and updates certificate revocation list. These security features operate only when you use the Internet.

      - **Auto Root Update.** The Auto Root Update feature updates the list of trusted certificate authorities. You can switch off the Auto Root Update feature.

      - **Windows Media Player.** When you use Windows Media Player, it checks with Microsoft for:

      (a) Compatible online music services in your region;

(b) New versions of the player; and

(c) Codecs if your device does not have the correct ones for playing content. You can   switch off this feature. For more information, go to:

http://Microsoft.com/windows/windowsmedia/mp10/privacy.aspx.

Windows Media Digital Rights Management. Content owners use Windows Media digital rights management technology (WMDRM) to protect their intellectual property, including copyrights. This software and third party software use WMDRM to play and copy WMDRM-protected content. If the software fails to protect the content, content owners may ask Microsoft to revoke the software's ability to use WMDRM to play or copy protected content. Revocation does not affect other content. When you download licenses for protected content, you agree that Microsoft may include a revocation list with the licenses. Content owners may require you to upgrade WMDRM to access their content. Microsoft software that includes WMDRM will ask for your consent prior to the upgrade. If you decline an upgrade, you will not be able to access content that requires the upgrade. You may switch off WMDRM features that access the Internet. When these features are off, you can still play content for which you have a valid license.

(iii)   **Misuse of Internet-based Services**. You may not use these services in any way that could harm them or impair anyone else's use of them. You may not use the services to try to gain unauthorized access to any service, data, account or network by any means.

4. **Windows Update Agent (also known as Software Update Services).** The software on the device includes Windows Update Agent ("WUA") functionality that may enable your device to connect to and access updates ("Windows Updates") from a server installed with the required server component. Without limiting any other disclaimer in this Microsoft Software License Terms or any EULA accompanying a Windows Update, you acknowledge and agree that no warranty is provided by MS, Microsoft Corporation or their affiliates with respect to any Windows Update that you install or attempt to install on your device.

5. **Product Support.** Contact PDi Communication System for support options. Refer to the support number provided with the device.

6. **Backup Copy.** You may make one backup copy of the software. You may use it only to reinstall the software on the device.

7. **Proof of License.** If you acquired the software on the device, or on a disc or other media, a genuine Certificate of Authenticity label with a genuine copy of the software identifies licensed software. To be valid, this label must be affixed to the device, or included on or in PDi Communication System's software packaging. If you receive the label separately, it is not valid. You should keep the label on the device or packaging to prove that you are licensed to use the software. To identify genuine Microsoft software, see http://www.howtotell.com.

8. **Transfer to a Third Party.** You may transfer the software only with the device, the Certificate of Authenticity label, and these license terms directly to a third party. Before the transfer, that party must agree that these license terms apply to the transfer and use of the software. You may not retain any copies of the software including the backup copy.

9. **Not Fault Tolerant. The software is not fault tolerant. PDi Communication Systems installed the software on the device and is responsible for how it operates on the device.**

10. **Restricted Use.** The Microsoft software was designed for systems that do not require fail-safe performance. You may not use the Microsoft software in any device or system in which a malfunction of the software would result in foreseeable risk of injury or death to any person. This includes operation of nuclear facilities, aircraft navigation or communication systems and air traffic control.

11. **No Warranties for the software. The software is provided "as is". You bear all risks of using it. Microsoft gives no express warranties, guarantees, or conditions. Any warranties you receive regarding the device or the software do not originate from, and are not binding on, Microsoft or its affiliates. When allowed by your local laws, PDi Communication Systems and Microsoft exclude implied warranties of merchantability, fitness for a particular purpose and non-infringement.**

12. **Liability Limitations. You can recover from Microsoft and its affiliates only direct damages up to two hundred fifty U.S. Dollars (U.S. $250.00). You cannot recover any other damages, including consequential, lost profits, special, indirect or incidental damages.**

This limitation applies to:

- **Anything related to the software, services, content (including code) on third party internet sites, or third party programs; and**
- **Claims for breach of contract, breach of warranty, guarantee or condition, strict liability, negligence, or other tort to the extent permitted by applicable law.**

It also applies even if Microsoft should have been aware of the possibility of the damages. The above limitation may not apply to you because your country may not allow the exclusion or limitation of incidental, consequential or other damages.

13. **Export Restrictions.** The software is subject to United States export laws and regulations. You must comply with all domestic and international export laws and regulations that apply to the software. These laws include restrictions on destinations, end users and end use. For additional information, see www.microsoft.com/exporting.

14. **Authorized Number of Installations of Software = 1 per system.**