Exhibit VIII

User Information and User Manual

1) User Card/Booklet

- 3 pages, contains important information for safe usage and RF energy awareness and control.

2) User Manual Enhanced PowerPad Portable Data Terminal

- 36 PDF pages total, 25 numbered pages.

Please find the information required by Part 15.19, 15.21 & 15.105 on page iv of the Owners Manual or page 6 of this PDF file.

Note: Items 1 & 2 above follow this cover page

Exhibit 8

MOTOROLA

> **HANDHELD DATA TERMINALS**
>
> **HDT-700 E & Enhanced PowerPad**

Safety and General Information

> **IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION.**
>
> **READ THIS INFORMATION BEFORE USING YOUR HANDHELD DATA TERMINAL.**

RF Operational Characteristics

Your data terminal contains a radio frequency transmitter to convey the information you wish to send as well as occasional automatic signals used to sustain connection to the wireless network, and a receiver which enables you to receive communication and connection information from the network.

For data radio terminals that have been approved as intrinsically safe, read the instructions and information on intrinsic safety in this booklet.

PORTABLE RADIO PRODUCT OPERATION AND EME EXPOSURE

Your Motorola radio product is designed to comply with the following national and international standards and guidelines regarding exposure of human beings to radio frequency electromagnetic energy (EME):

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J
- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998

- Ministry of Health (Canada) Safety Code 6. Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999
- Australian Communications Authority Radio communications (Electromagnetic Radiation - Human Exposure) Standard 2003.
- ANATEL, Brasil Regulatory Authority, Resolution 256 (April 11, 2001) "additional requirements for SMR, cellular and PCS product certification."

To assure optimal radio product performance and make sure human exposure to radio frequency electromagnetic energy is within the guidelines set forth in the above standards, always adhere to the following procedures:

Body-worn operation

To maintain compliance with FCC RF exposure guidelines, if you wear a radio product on your body when transmitting, always place the radio product in **a Motorola approved holster or carry case for this product**. Use of non-Motorola-approved accessories may exceed FCC RF exposure guidelines.

For additional information on RF exposure awareness information, visit the following Motorola website: www.mot.com/rfhealth.

Electro Magnetic Interference/Compatibility

> **NOTE: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed or otherwise configured for electromagnetic compatibility.**

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your radio data terminal in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Aircraft

When instructed to do so, turn off your radio data terminal when on board an aircraft. Any use of a radio data terminal must be in accordance with applicable regulations per airline crew instructions.

6802970C29-O

July, 2003

Please retain for future use

Medical Devices

Pacemakers

The Advanced Medical Technology Association (AdvaMed) recommends that a minimum separation of 6 inches (15 centimeters) be maintained between a hand-held wireless radio data terminal and a pacemaker. These recommendations are consistent with those of the U.S. Food and Drug Administration.

Persons with pacemakers should:

- ALWAYS keep the radio data terminal more than 6 inches (15 centimeters) from their pacemaker when the radio data terminal is turned ON.
- Do not carry the radio data terminal in the breast pocket.
- Turn the radio data terminal OFF immediately if you have any reason to suspect that interference is taking place.

Hearing Aids

Some digital wireless radio data terminals may interfere with some hearing aids. In the event of such interference, you may want to consult your hearing aid manufacturer to discuss alternatives.

Other Medical Devices

If you use any other personal medical device, consult the manufacturer of your device to determine if it is adequately shielded from RF energy. Your physician may be able to assist you in obtaining this information.

WARNING

Operational Warnings

For Vehicles With an Air Bag

Do not place a portable radio product in the area over the air bag or in the air bag deployment area. Air bags inflate with great force. If a portable radio is placed in the air bag deployment area and the air bag inflates, the radio product may be propelled with great force and cause serious injury to occupants of the vehicle.

Potentially Explosive Atmospheres

Turn off your radio data terminal prior to entering any area with a potentially explosive atmosphere, unless it is a radio data terminal type especially qualified for use in such areas as "Intrinsically Safe" (for example, Factory Mutual, CSA, UL, or CENELEC). Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

> NOTE: The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, areas where the air contains chemicals or particles, such as grain, dust or metal powders. Areas with potentially explosive atmospheres are often but not always posted.

Blasting Caps and Blasting Areas

To avoid possible interference with blasting operations, turn off your data radio terminals when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio" Obey all signs and instructions.

Caution

Operational Cautions

Batteries

All batteries can cause property damage and/or bodily injury, such as burns if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

Accessory Safety Information

IMPORTANT:

SAVE THESE ACCESSORY SAFETY INSTRUCTIONS

- Before using any battery or battery charger, read all the instructions for and cautionary markings on (1) the battery, (2) the battery charger, which may include a separate wall-mounted power supply or transformer, and (3) the radio product using the battery.
- Do not expose any battery charger to water, rain, or snow.

⚠ **WARNING**	**To reduce the risk of injury, charge only the rechargeable batteries listed in the Accessories section of this manual. Other types of batteries may burst, causing personal injury and damage.**

- To reduce the risk of damage to the cord or plug, pull by the plug rather than the cord when you disconnect the battery charger from the power source outlet.
- Do not operate any battery charger with a damaged cord or plug - replace them immediately.
- Battery chargers may become warm during operation, but not hot. If it becomes hot to the touch, unplug it from the power outlet immediately and discontinue its use.
- Use of a non-recommended attachment to a battery charger may result in a risk of fire, electric shock, or injury to persons.
- Make sure the battery charger power cord is located so that it will not be stepped on, tripped over, or subjected to damage or stress.
- An extension cord should not be used with any battery charger unless absolutely necessary. Use of an improper extension cord could result in a risk of fire and electric shock. If an extension cord must be used, make sure that:
    - The pins on the plug of the extension cord are the same number, size, and shape as those on the plug of the charger.
    - The extension cord is properly wired and in good electrical condition.
    - The cord size is 18AWG for lengths up to 100 feet and 16AWG for lengths up to 150 feet.
    - To reduce the risk of injury, charge only the rechargeable batteries listed in the Accessories section of this manual. Other types of batteries may burst, causing personal injury and damage.

Owner's Manual

Enhanced
PowerPad

Handheld
Data
Terminal

MOTOROLA
intelligence everywhere™

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EPS – 34440- B

This warranty applies within the fifty (50) United States, the District of Columbia and Canada.

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Commercial Warranty

Limited Warranty

MOTOROLA COMMUNICATION PRODUCTS

I. What This Warranty Covers And For How Long

MOTOROLA INC. ("MOTOROLA") warrants the MOTOROLA manufactured Communication Products listed below ("Product") against defects in material and workmanship under normal use and service for a period of time from the date of purchase as scheduled below:

PowerPad units	One (1) Year
Product Accessories	One (1) Year

Motorola, at its option, will at no charge either repair the Product (with new or reconditioned parts), replace it (with a new or reconditioned Product), or refund the purchase price of the Product during the warranty period provided it is returned in accordance with the terms of this warranty. Replaced parts or boards are warranted for the balance of the original applicable warranty period. All replaced parts of Product shall become the property of MOTOROLA.

This express limited warranty is extended by MOTOROLA to the original end user purchaser only and is not assignable or transferable to any other party. This is the complete warranty for the Product manufactured by MOTOROLA. MOTOROLA assumes no obligations or liability for additions or modifications to this warranty unless made in writing and signed by an officer of MOTOROLA. Unless made in a separate agreement between MOTOROLA and the original end user purchaser, MOTOROLA does not warrant the installation, maintenance or service of the Product.

MOTOROLA cannot be responsible in any way for any ancillary equipment not furnished by MOTOROLA which is attached to or used in connection with the Product, or for operation of the Product with any ancillary equipment, and all such equipment is expressly excluded from this warranty. Because each system which may use the Product is unique, MOTOROLA disclaims liability for range, coverage, or operation of the system as a whole under this warranty.

II. General Provisions

This warranty sets forth the full extent of MOTOROLA's responsibilities regarding the Product. Repair, replacement or refund of the purchase price, at MOTOROLA's option, is the exclusive remedy. THIS WARRANTY IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. IMPLIED WARRANTIES, INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. IN NO EVENT SHALL MOTOROLA BE LIABLE FOR DAMAGES IN EXCESS OF THE PURCHASE PRICE OF THE PRODUCT, FOR ANY LOSS OF USE, LOSS OF TIME, INCONVENIENCE, COMMERCIAL LOSS, LOST PROFITS OR SAVINGS OR OTHER INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PRODUCT, TO THE FULL EXTENT SUCH MAY BE DISCLAIMED BY LAW.

III. State Law Rights

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LIMITATION ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION OR EXCLUSIONS MAY NOT APPLY.

This warranty gives specific legal rights, and there may be other rights which may vary from state to state.

IV. How To Get Warranty Service

You must provide proof of purchase (bearing the date of purchase and Product item serial number) in order to receive warranty service and, also, deliver or send the Product item, transportation and insurance prepaid, to an authorized warranty service location. Warranty service will be provided by Motorola through one of its authorized

warranty service locations. If you first contact the company which sold you the Product, it can facilitate your obtaining warranty service. You can also call Motorola at 1-888-567-7347 US/Canada.

V. What This Warranty Does Not Cover

A. Defects or damage resulting from use of the Product in other than its normal and customary manner.

B. Defects or damage from misuse, accident, water, or neglect.

C. Defects or damage from improper testing, operation, maintenance, installation, alteration, modification, or adjustment.

D. Breakage or damage to antennas unless caused directly by defects in material workmanship.

E. A Product subjected to unauthorized Product modifications, disassemblies or repairs (including, without limitation, the addition to the Product of non-Motorola supplied equipment) which adversely affect performance of the Product or interfere with Motorola's normal warranty inspection and testing of the Product to verify any warranty claim.

F. Product which has had the serial number removed or made illegible.

G. Rechargeable batteries if:

•any of the seals on the battery enclosure of cells are broken or show evidence of tampering.
•the damage or defect is caused by charging or using the battery in equipment or service other than the Product for which it is specified.

H. Freight costs to the repair depot.

I. A Product which, due to illegal or unauthorized alteration of the software/firmware in the Product, does not function in accordance with MOTOROLA's published specifications or the FCC type acceptance labeling in effect for the Product at the time the Product was initially distributed from MOTOROLA.

J. Scratches or other cosmetic damage to Product surfaces that does not affect the operation of the Product.

K. Normal and customary wear and tear.

VI. Patent And Software Provisions

MOTOROLA will defend, at its own expense, any suit brought against the end user purchaser to the extent that it is based on a claim that the Product or parts infringe a United States patent, and MOTOROLA will pay those costs and damages finally awarded against the end user purchaser in any such suit which are attributable to any such claim, but such defense and payments are conditioned on the following:

A. that MOTOROLA will be notified promptly in writing by such purchaser of any notice of such claim;

B. that MOTOROLA will have sole control of the defense of such suit and all negotiations for its settlement or compromise; and

C. should the Product or parts become, or in MOTOROLA's opinion be likely to become, the subject of a claim of infringement of a United States patent, that such purchaser will permit MOTOROLA, at its option and expense, either to procure for such purchaser the right to continue using the Product or parts or to replace or modify the same so that it becomes noninfringing or to grant such purchaser a credit for the Product or parts as depreciated and accept its return. The depreciation will be an equal amount per year over the lifetime of the Product or parts as established by MOTOROLA.

MOTOROLA will have no liability with respect to any claim of patent infringement which is based upon the combination of the Product or parts furnished hereunder with software, apparatus or devices not furnished by MOTOROLA, nor will MOTOROLA have any liability for the use of ancillary equipment or software not furnished by MOTOROLA which is attached to or used in connection with the Product. The foregoing states the entire liability of MOTOROLA with respect to infringement of patents by the Product or any parts thereof.

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tribution, or reverse engineering of such MOTOROLA software or exercise of rights in such MOTOROLA software is permitted. No license is granted by implication, estoppel or otherwise under MOTOROLA patent rights or copyrights.

VII. Governing Law

This Warranty is governed by the laws of the State of Illinois, USA.

EPS – 48759 – O

FCC INTERFERENCE WARNING

The FCC requires that manuals pertaining to Class A and Class B computing devices must contain warnings about possible interference with local residential radio and TV reception. This warning reads as follows:

NOTE: This equipment has been tested and found to comply with limits for a Class B digital device, pursuant to Part 90 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial or residential environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

This device complies with Part 90 of the FCC Rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference.

(2) This device must accept any interference received, including interference that may cause undesired operation.

FCC Grant of Equipment Authorization

Radio	Network	FCC ID	Freq Band	Rated Power
GPRS	W-WAN	IHDT56DB1	824.2-848MHz / 1850.2-1909.8MHz	0.6W / 1W
Bluetooth	W-PAN	AZ489FT7006	2402 - 2480MHz	1.15 mW

For detailed product safety and RF exposure refer to Safety and General Information leaflet, Motorola publication Number 6802970C29.

Caution: Changes or modifications made in the radio terminal, not expressly approved by Motorola, will void the user's authority to operate the equipment.

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Motorola and the Motorola stylized M logo are registered trademarks of Motorola, Inc.

FlashFile is a registed trademark of Intel Corporation.

CompactFlash is a registed trademark of SanDisk Corporation.

Microsoft and PocketPC 2003 are registered trademarks of Microsoft Corporation.

The Bluetooth trademarks are owned by their proprietor and used by Motorola, Inc. under license in the U.S. and other countries.

All other product or service names are the property of their respective owners.

Contents

Introduction

Motorola congratulates you on your purchase of the Enhanced PowerPad Handheld Data Terminal! Its unique functionality and features make this state-of-the-art ruggedized Personal Digital Assistant (PDA) superior for use in a wide range of applications.

Note that in this manual the Enhanced PowerPad is also referred to as PowerPad.

This manual covers the basic setup operations and use of the PowerPad terminal. Since your PowerPad applications are designed by your company or organization, this manual does not cover any of the software applications resident in your PowerPad. For software applications description, refer to the specific application manual or contact your company or organization representative for instructions.

The PowerPad network communication and power charge is through a Universal Office Dock (UOD) unit. Note that this manual briefly mentions the UOD. For detailed installation and operation of the UOD, refer to UOD User Manual, Motorola P.N. 98-08901C59.

What is the PowerPad Terminal

The PowerPad handheld data terminal is a ruggedized device, designed for field applications where fast data acquisition is required.

The PowerPad carries the functionality of a state-of-the-art Personal Digital Assistant (PDA) that enables portable access to mobile applications, such as mobile messaging, queries and Computer Aided Dispatch.

It contains a variety of options, including built-in barcode scanner (for 1D and 2D labels), Bluetooth® and General Packet Radio Ser-

vice (GPRS) radios, all with internal antennas for increased ruggedization.

The 3.5" color touch screen with front-light illumination enables easy access to various applications and signature capture in all light conditions. The IrDA port serves for data exchange between the PowerPad and data network using the Universal Office Dock (UOD) unit.

The PocketPC 2003®-based operating system supports multimedia and audio applications, using a built-in microphone, speaker and buzzer. A removable CompactFlash (accessed only by service) is used for memory expansion and operating system updates.

The PowerPad is powered by a 7.2V 1800 mAh Lithium-Ion battery pack that supports 12 hours of typical operation. The battery is fully recharged within three hours, using the UOD unit.

Unpacking

The PowerPad package includes the following items:

- One PowerPad unit
- One 7.2V 1800 mAh Li-ion battery pack
- One Stylus pen
- This Owner's Manual
- Safety and General Information leaflet, Motorola P.N., 6802970C29

Carefully unpack each item from the shipping carton. Check all items for shipping damage, and check that you have received all items ordered. If there is damage or missing items, retain the shipping carton for inspection.

The battery is shipped from factory uncharged and not installed. Charge the battery fully for 24 hours before using the PowerPad for the first time.

The PowerPad is shipped with a plastic film, protecting the screen. Before usage, remove the film and use a soft cloth to buff the display. This ensures smooth gliding of the Stylus pen over the surface.

PowerPad Parts

LED Indicator
(see page 11)

Touch Sensitive
Screen

Barcode Scanner Key
(see page 15)

Navigation Key
Panel (see page
13)

Alphabet Keys
(see page 13)

Speaker

Numeric Keys
(see page 13)

Power Button
(On/Off/Suspend)
(see page 11)

Microphone

Figure 1. PowerPad - Front View

Note that the gray and blue colors in picture are for illustration clarity purposes only and do not reflect the actual color of the unit.
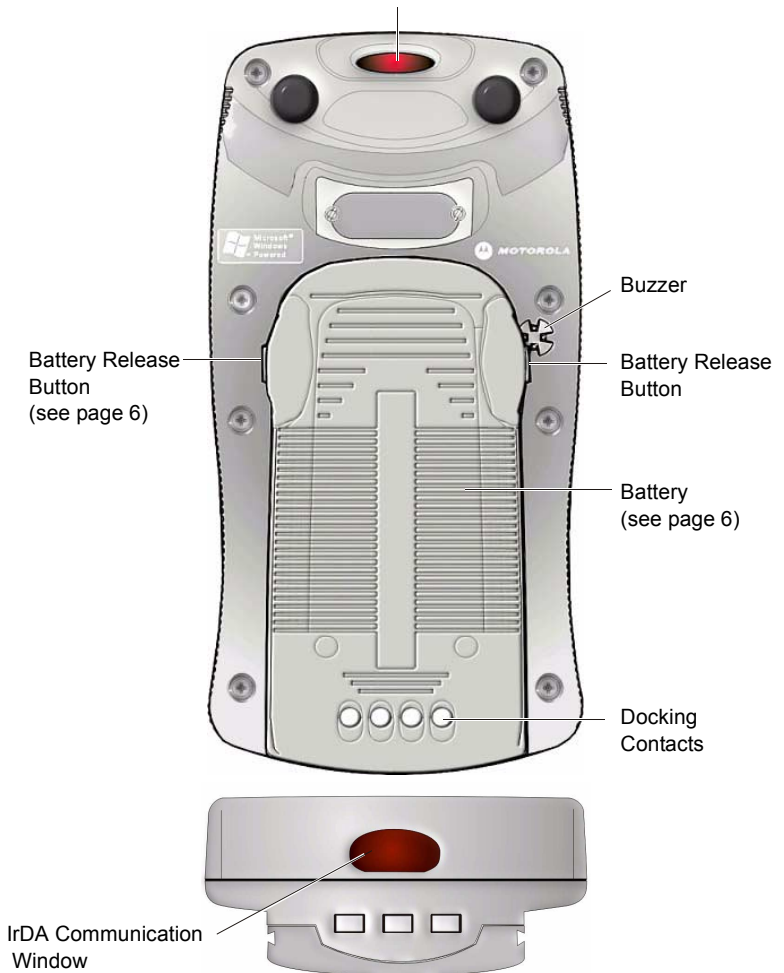
Barcode Scanner LASER Window (see page 15)

Buzzer

Battery Release
Button
(see page 6)

Battery Release
Button

Battery
(see page 6)

Docking
Contacts

IrDA Communication
Window

Figure 2. PowerPad - Back View

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Charging the Battery

The battery is shipped from the factory uncharged and not installed. Charge the battery before using the PowerPad for the first time.

Battery Installation and Removal

Important Note: The PowerPad enables you to replace batteries without losing information stored in its memory. To avoid losing information stored in the memory, a charged battery must be installed within 8 hours after removing the empty battery. **Do not remove battery while the LED indicator of the PowerPad shows red**.

To install the battery:

1. Insert the battery, bottom end first, into the battery compartment (see Figure 3).

Release Buttons

Figure 3. Battery Installation and Removal

2. Carefully press the battery top downward until it clicks into place. When PowerPad is powered by battery installation for the first time, see note in "Turning On the PowerPad" on page 11.

To remove the battery:

1. Turn the PowerPad off by holding the Power button pressed (see Figure 1), for at least four seconds.

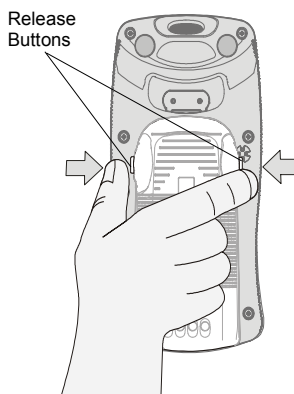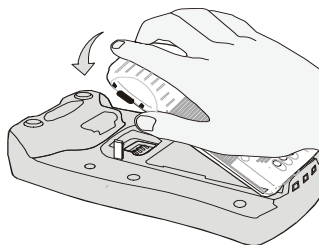2. Press the Release Buttons on the battery sides (see Figure 3) and pull the away battery from the PowerPad.

The Universal Office Dock (UOD) Unit

The UOD unit is used for charging the PowerPad battery and communicating with the PowerPad through an IrDA port. Each UOD unit has nine slots. Each slot may accommodate either a PowerPad with a battery attached, or a battery (stand-alone). Each of the nine slots has a status LED with an associated number. The LEDs are laid out in the same order as the slots. When a slot is empty, its corresponding LED is Off. When a battery or a PowerPad with a battery is inserted to a slot, the slot LED turns On, indicating the battery charge (see Table 1). The battery power can also be tested by pressing the battery power TEST button (see Figure 5).
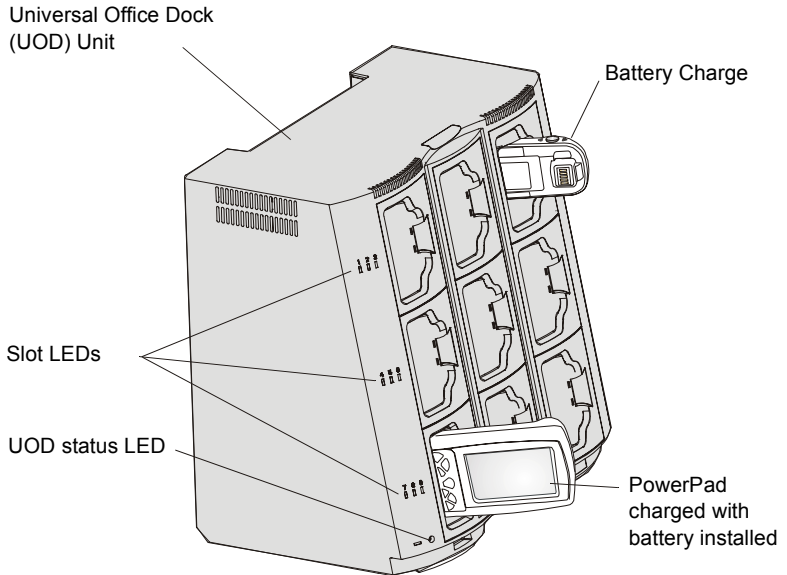
Universal Office Dock
(UOD) Unit

Battery Charge

Slot LEDs

UOD status LED

PowerPad
charged with
battery installed

Figure 4. Universal Office Dock (UOD) Unit

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Table 1 shows the status of a UOD slot LED during battery charge.

Table 1: Status of a UOD Slot LED During Battery Charge

Slot LED Status	Indication
No Light	No device inserted.
Blinking Amber	Battery temperature out of tolerance and charging has been temporarily stopped.
Solid Amber	PowerPad Battery is being charged.
Solid Green	PowerPad Battery is at least 90% charged after 2.5 hours and fully charged after 3.
Solid Red	PowerPad Battery is not fully charged after 3 hours of charging, and is considered failed.

First Time Battery Charge

The first time battery charge ensures maximum start capacity for the battery. Charge your new battery for at least 24 continuous hours before using it or until the LED indicator of the UOD shows green. During the charge, the LED indicator of the PowerPad shows green and blinks quickly. The UOD charges your battery effectively when it is at room temperature [approx. 68°F (20° C)]. Battery charging temperature range is 32°F to 113°F (0°C to 45°C).

To test the power capacity of the battery; press the TEST pad on back side of the battery and view the power level indicator.

Figure 5. Battery Power Test

Routine Battery Charge

A battery is charged to 90% of its full capacity after approximately two and a half hours, and is fully charged after three hours, excluding out-of-range periods. During the charge, the LED indicator of the PowerPad shows green and blinks quickly. Note that the PowerPad can be in either On, Off or Suspend mode while charging.
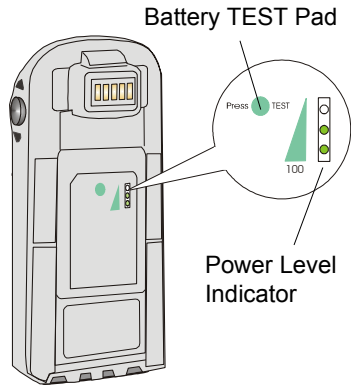
Important: The battery will not charge if the PowerPad or battery is not properly locked inside the UOD slot.

Battery Maintenance

The performance of the rechargeable battery delivered with your PowerPad depends on the way the battery is treated. Therefore, to comply with the Motorola warranty for batteries and to assure high performance and a long life for your Motorola rechargeable battery, please read and follow the maintenance rules stated below.

Battery Storage

Do not store your battery where the temperatures exceed 140°F (60°C) or fall below 4°F (-20°C).

New Lithium-Ion batteries (i.e. batteries that have never been charged before) may be stored for up to 3 months in well-ventilated, cool and dry areas without significant loss in lifespan.

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Batteries which have already been charged and then stored for more than 2 months should be recharged before use.

Extending Battery Life

A battery is an expendable part and may need replacing during the life of the PowerPad. To ensure maximum service life of your PowerPad, always replace the battery with a genuine Motorola replacement.

Your UOD will charge your battery effectively when it is at room temperature [approx. 68°F (20° C)]. Battery charging temperature range is 32°F to 113°F (0°C to 45°C).

Using the PowerPad

Turning On the PowerPad

Press the Power button to turn On the PowerPad (see Figure 6) - when turned On, the last displayed screen will be shown again.

Note: The PowerPad powers On immediately when the battery is installed for the first time or after Cold Reset (see page 16) - the Motorola logo will show for about 30 seconds and you will be required to follow on-screen alignment (calibration) instructions.

Turning Off the PowerPad

When the PowerPad is On, hold the Power button pressed (see Figure 6) for at least four seconds.

Suspend Mode

When the PowerPad is On, press the Power button (see Figure 6) to enter Suspend mode. During Suspend mode the display turns off and the LED indicator slowly blinks green. To resume operation, press the Power button again.

In Suspend mode, battery power is saved by turning off the display and computer sections of the PowerPad. During Suspend mode, the GPRS and Bluetooth radios continue to operate. When the Power-Pad resumes operation, it returns to the screen shown prior to Suspend mode.

When the battery is removed (see "Battery Installation and Removal") from the PowerPad during operation, the PowerPad enters Suspend mode automatically. To resume operation, press the Power button. Use Suspend mode as often as possible to save battery power.

LED Indicator Function

LED shows red - do not remove battery.

LED slowly blinks green - PowerPad in Suspend mode.
LED quickly blinks green - PowerPad is charged in UOD unit.

Using the Keyboard

Key Assignment

Figure 6 describes the PowerPad keyboard.

Note: Key assignment may vary by application. Therefore, your keyboard may not function as described.
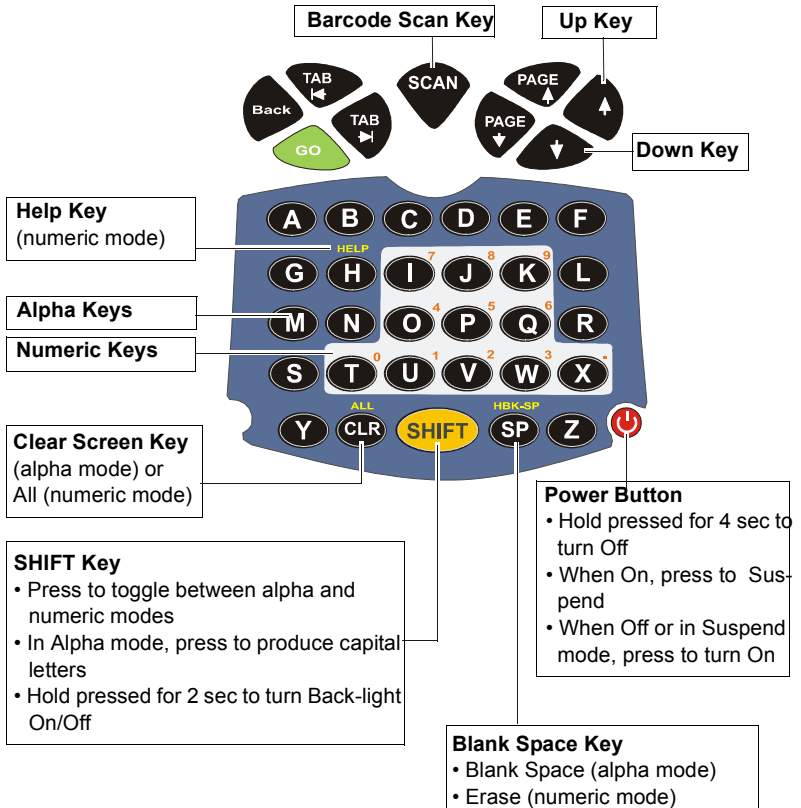

Barcode Scan Key

Up Key

Down Key

Help Key
(numeric mode)

Alpha Keys

Numeric Keys

Clear Screen Key
(alpha mode) or
All (numeric mode)

Power Button
• Hold pressed for 4 sec to turn Off
• When On, press to Suspend
• When Off or in Suspend mode, press to turn On

SHIFT Key
• Press to toggle between alpha and numeric modes
• In Alpha mode, press to produce capital letters
• Hold pressed for 2 sec to turn Back-light On/Off

Blank Space Key
• Blank Space (alpha mode)
• Erase (numeric mode)

Figure 6. PowerPad - Key Function

Action Keys

Table 2 describes the action keys combinations.

Table 2: Action Keys Combinations

Action	Key Combination
Lower Case to Upper Case Letters (default is lower case)	SHIFT + any alphabet key
Audio Recording	SHIFT + SP + R
Audio Volume	Increase: SHIFT +SP + UP Decrease: SHIFT + SP + DOWN
Touch Screen Calibration	SHIFT + SP + C
Warm Reset (see also "Resetting the PowerPad")	H + CLR + GO
Display Front light Intensity	Increase: SHIFT + UP Decrease: SHIFT + DOWN
Virtual Keyboard	Open/Close: SHIFT + SCAN
Keyboard Back light Intensity	Increase: SHIFT + PAGE UP Decrease: SHIFT + PAGE DOWN
PocketPC 2003 Menu	SP + SCAN

Scanning with the PowerPad

The PowerPad has an integrated Laser scanner which gathers data by scanning barcodes. The PowerPad is equipped with a SCAN trigger button, designed for both left-handed and right-handed users (see Figure 7). The button is located at the center of the terminal navigation key panel.

To scan 1D (one dimensional) barcodes; aim the scanner at the barcode and press the SCAN trigger button (see Figure 7). To scan 2D barcodes; aim the scanner at the barcode top, press the SCAN trigger button and move the beam vertically down on the barcode (see Figure 7). Ensure that the red scan beam covers the entire barcode area. A beep sound indicates a successful decode.

LASER LIGHT
DO NOT STARE INTO BEAM
CLASS 2 LASER PRODUCT

LUMIERE LASER
NE PAS REGARDER LE RAYON FIXEMENT
PRODUIT LASER DE CLASSE 2

MAXIMUM OUTPUT OF LASER RADIATION: 0.9 MW
PULSE DURATION (SCANNING TIME) : 5 sec
EMITTED WAVELENGTH : 650 NM
IEC 60825 - I : 1993 + AI : 1997 + A2 : 2001

18° Scan Angle

SCAN Trigger Button

1D Barcode Scanning

2D Barcode Scanning
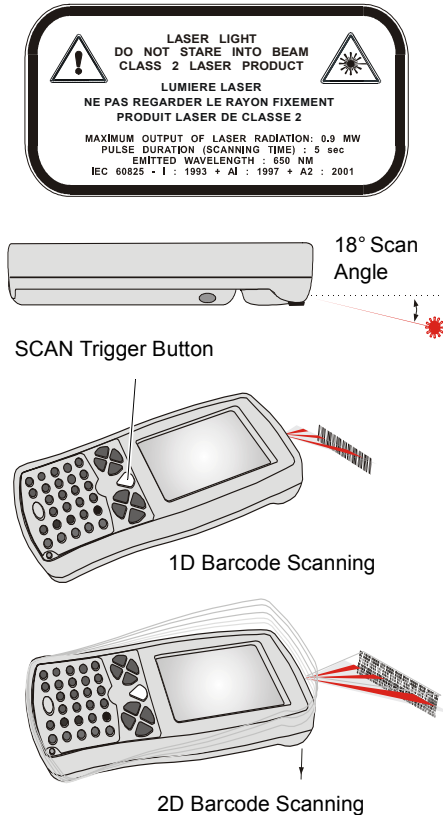
Figure 7. Scanning with the PowerPad

Using the Stylus Pen

The Stylus pen selects items and enters information. Use the pen as you use your PC mouse.

- To open and select screen items, tap on the item with the pen.
- To drag text or image items, hold the pen on the item and drag across the screen.
- To see a list of actions available for a specific item, tap-and-hold the pen on an item. When the pop-up menu appears, tap the action you want to perform.

Resetting the PowerPad

You may need to reset your PowerPad; for example, you may reset due to communication cut-off, or if the operating system stops responding.

If your PowerPad stops responding, do the following actions:

Figure 8. Warm Reset

Warm Reset

Important Note: When the PowerPad is warm reset, all recorded information remains stored in memory.

Simultaneously, press keys **H + CLR + GO** (see Figure 8); the PowerPad will function again.

If your PowerPad still does not respond, perform "Cold Reset":
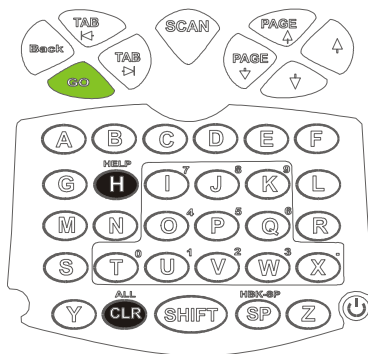
Cold Reset

Cold reset restarts the PowerPad by erasing all stored records and entries.

Do Not perform Cold reset unless Warm reset fails to solve your problem.

Cold reset is performed by removing the battery and inserting the Stylus tip into the hole located on the back side of the Power-Pad (see Figure 9).
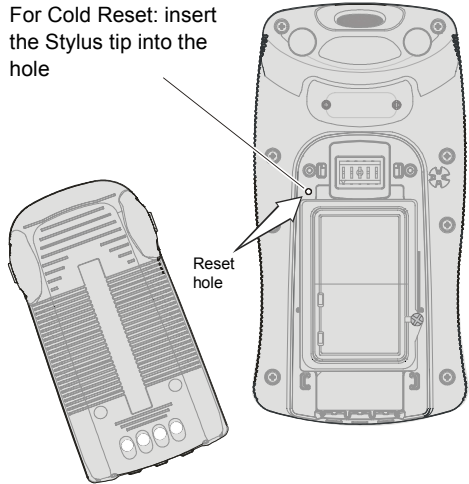
For Cold Reset: insert the Stylus tip into the hole

Reset hole

Figure 9. Cold Reset

Maintaining the PowerPad

In order to maintain your PowerPad in good working order:

• Do not scratch the screen. Use only Motorola supplied stylus pen with the touch screen.
• Never use a pen or pencil or any sharp object on the screen.
• Although your PowerPad is water and dust resistant, do not expose it to rain or moisture for long periods of time.
• Protect your PowerPad from temperature extremes. Do not leave the PowerPad on the dashboard of a car on a hot day, and keep the PowerPad away from hot places.
• Do not drop your PowerPad or subject it to strong impact.
• Do not store or use your PowerPad in any location that is extremely dusty, damp or wet.

- If the battery contacts, screen or surface of the PowerPad become dirty, use a soft lint free cloth moistened with diluted Isopropyl Alcohol (IPA) solution to remove dirt. The Isopropyl Alcohol (IPA) can be diluted with water up to 20%.

Accessories

The following Motorola approved accessories are for use with your terminal.

Table 3: Accessories

Motorola Approved Accessory	Part Number
Battery	FTN6032A
Stylus	FLN9805A
Holster	FHN6498A

It is the responsibility of the user to use only the approved accessories supplied for this product, as detailed in Table 3 . Motorola is not responsible for the use of accessories not approved for this product.

For more information on the availability of these accessories, please call your company supplier.

Troubleshooting

Table 4: Troubleshooting the PowerPad

Problem	Cause	Solution
PowerPad does not turn On	Battery is not installed properly or not charged	Ensure proper battery installation in PowerPad. Charge or replace the battery
	PowerPad in Suspend mode	Press the Power Button
Battery does not charge in UOD	PowerPad is not locked in UOD	Reinstall PowerPad in UOD. Lock the PowerPad properly in UOD. (See that the UOD LED is On and charge for three hours)
	PowerPad or UOD Dock contacts are not clean	Clean contacts and remove dust and objects from within the UOD
	Battery temperature is out of range	Ensure that the battery temperature range is 32°F to 113°F (0°C to 45°C)
	Bad battery	Replace battery
PowerPad does not detect scan input	LASER beam does not cover the entire barcode symbol	Scan again and make sure that the entire barcode symbol is covered
	Unreadable barcode	Be sure the barcode symbol is not covered or damaged

Table 4: Troubleshooting the PowerPad

Problem	Cause	Solution
PowerPad does not respond	Problem in Power-Pad operating system or communication network	Execute Warm reset by simultaneously pressing soft keys H+CLR+GO for at least one second; the PowerPad should function again. If PowerPad still does not respond, perform Cold rest (see "Resetting the Power-Pad" on page 16). The operation system will reboot after about 30 seconds
Incomplete or no data transmission between PowerPad and UOD		
	Communication software was incorrectly installed or configured	Refer to the UOD user manual or see your system administrator
	IrDA communication window is obscured	Make sure that the IrDA window of the PowerPad is clean and has a clear line of sight with the IrDA window of the UOD

Safety Instructions

Laser Safety

- DANGER - LASER LIGHT WHEN OPEN, AVOID DIRECT EYE EXPOSURE
- CAUTION - LASER LIGHT - DO NOT STARE INTO BEAM
- CLASS II LASER PRODUCT, 650 nm LASER, 0.9 mW MAX. OUTPUT, COMPLIES WITH 21 CFR 1040.10 & 1040.11, IEC60825-1:1993 + A1:1997 + A2: 2001
- Do not aim the beam at a human eye
- Press the "SCAN" button only when the aperture is aimed at the barcode
- CAUTION - Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure

Battery Warnings and Disposal

PowerPad On-board Aircraft

Always remove the battery from the PowerPad when shipped via air. Any use of the PowerPad must be in accordance with applicable regulations per airline crew instructions.

Battery Disposal

Batteries must be recycled or disposed of properly in accordance with local requirements. Recycling facilities may not exist in all areas. Please contact your local environmental agency for more information regarding proper disposal.

To Prevent Injury Or Burns

- USE ONLY SPECIFIED BATTERIES AND CHARGERS.
- DO NOT DISPOSE OF ANY BATTERIES IN FIRE, AS THEY MAY EXPLODE!
- DO NOT PUNCTURE OR ALLOW METAL TO CONTACT THE BATTERY TERMINALS.
- DO NOT DISPOSE OF IN WATER.
- DO NOT DISASSEMBLE.
- DO NOT STORE ABOVE 140°F (60°C) OR BELOW 4°F (-20°C)

SPECIFICATIONS

PHYSICAL SPECIFICATIONS

Weight	22.67 oz (642 g)
Dimensions	Width x Length x Depth: 4.1 x 8 x 1.9" (104 x 202 x 48 mm)

ELECTRICAL SPECIFICATIONS

Processor type	Intel SA1100 running at 206MHz
Memory	Flash: 32 MB, SDRAM: 64 MB
Non-Volatile Memory	Compact Flash 128 MB
Display	3.5" color, transflective, native portrait LCD with front illumination. Resolution: 240 x 320 pixels (1/4 VGA) Viewing angle ± 35° in both X and Y axis. Viewing area smaller by about 2 mm all around
Touch Screen	65,000 signatures (<1% linearity change) 65,000 to 85,000 signatures (<4% linearity change) Operating force < 100 grams with stylus
Keyboard	39 keys: 8 Navigation keys, Scan key, 28 alphanumeric keys and Power On/Off key. Software controlled backlighting (On/Off only)
Status Indicator	Tricolor LED, Software controlled

Audio	Microphone: For Mono sound recording
	Speaker: Mono
	(Bluetooth audio support as a remote microphone and speaker)
	Beeper: Piezo buzzer with adjustable tones, maximum sound level is 85 db for audio notification of proper scans
Personal Area Network (PAN)	Bluetooth RF communication to wireless phones and accessories
Barcode Scanner	2D high-speed LASER (manual scan) support for common barcode symbologies including PDF417
Main Battery	Lithium-Ion, 7.2V, 1800 mAh supporting 12 hours typical operation. Fully recharged within 3 hours in UOD.
Backup Battery	Rechargeable Lithium coin cell, 90 mAh for 8 hours retention of real-time clock and DRAM memory
SOFTWARE	
Operating System	PocketPC 2003
Program Loader	Via IrDA port or Bluetooth radio
Power Management	As supported by PocketPC 2003: On, Idle, Hibernate, Docked (2), Battery Out

Communication

Personal Area Network (PAN): Bluetooth RF communication to wireless phones and accessories

Wireless Wide Area Network (WWAN): Data-only GPRS compatible dual-band for USA (850 MHz & 1900 MHz)

Infra-red (IrDA): supporting SIR 9.6K/bits to 115.2 kbit/s and FIR 4 Mbit/s data rates. All PocketPC 2003 IR layers

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HOW TO REACH US:
Commercial, Government and Industrial Solutions Sector

1301 E. Algonquin Road,
Schaumburg, IL 60196

Tel: 1-888-567-7347 (inside the US)
Tel: 1-847-576-5000 (outside the US)

Visit our Web site at

www.motorola.com