

OM200

User Manual

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1 Purpose

The purpose of this guide is to describe the basic features of the OM200.

2 Introduction

2.1 What is a OM200

- The OM200 is a wireless tracking device which operates on the CDMA network using assisted GPS for location.
- It is worn by offenders or minimum security prisoners on the leg so that they can be tracked by law enforcement.

2.2 How does a OM200 work

- It establishes a data connection through either the cellular or the PCS band similar to a mobile phone.
- A user can send a SMS message through an internet connection or a mobile phone to the device by calling its phone number. The device gets its location and send it back to the user via the CDMA network.

3 Getting Started

3.1 Battery Tips

Battery life depends on the network, signal strength, temperature, features, and accessories you use.

- Always use Sendum Original batteries and battery chargers. The warranty does not cover damage caused by non-Sendum batteries and/or chargers.
- New batteries or batteries stored for a long time may take more time to charge.
- When charging your battery, keep it near room temperature.
- When storing your battery, keep it uncharged in a cool, dark, dry place, such as a refrigerator.
- Never expose batteries to temperatures below -10°C (14°F) or above 45°C (113°F). Always take your device with you when you leave your vehicle.
- It is normal for batteries to gradually wear down and require longer charging times. If you notice a change in your battery life, it is probably time to purchase a new battery.

Contact your local recycling center for proper battery disposal.

Warning: Never dispose of batteries in a fire because they may explode.

Before using your device, please read the battery safety information in the *Safety and General Information* section included in this guide.

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3.2 *Installing the Battery*

The battery is inaccessible by users

3.3 *Removing the Battery*

The battery is inaccessible by users

3.4 *Charging the Battery*

New batteries are shipped partially charged. Before you can use your device, install and charge the battery as described below. Some batteries perform best after several full charge/discharge cycles.

3.4.1 *Charging using the OM200 Device*

Simply attached the Sendum charger into the device and plug the AC adapter to the AC outlet.

4 *Provisioning Your Device*

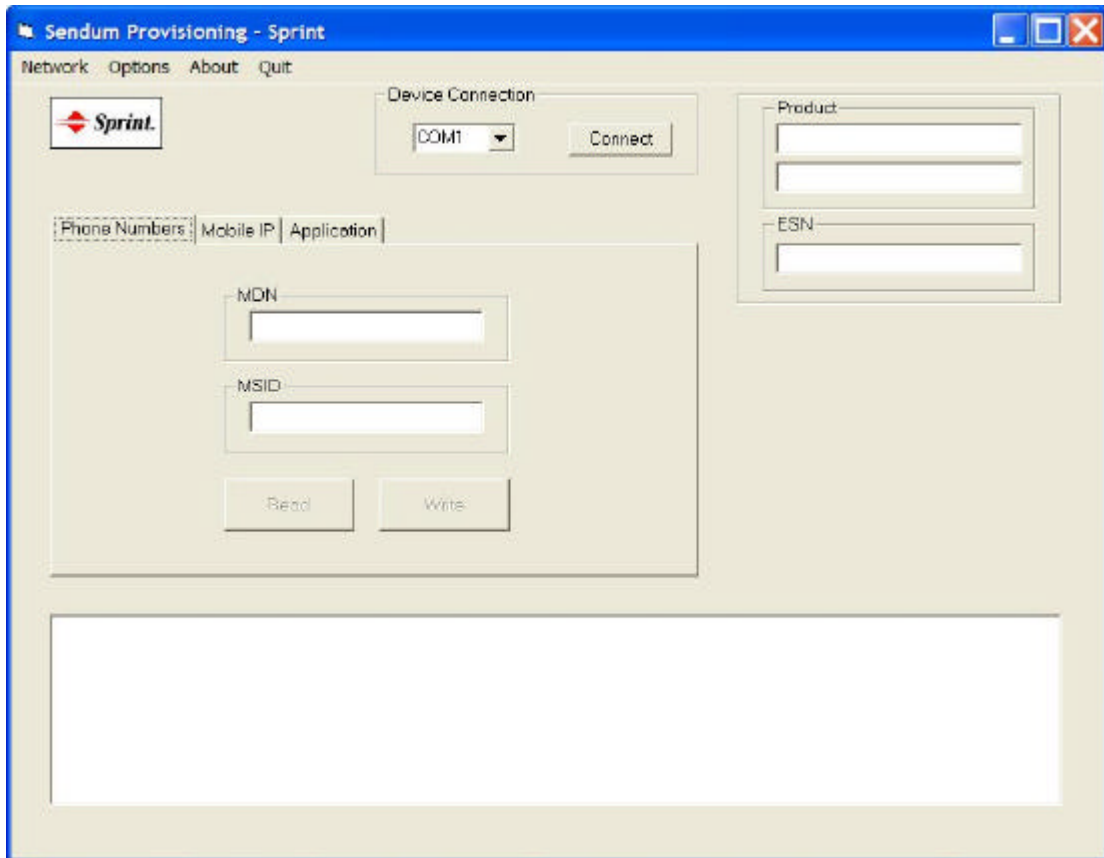
- Connect your device using the sendum USB cable. If problem communicating with the device. Use the following documents for troubleshooting:



DEX00003 (DOC
QUALCOMM USB I

- Open the Sendum Provisioning Tool. Should look like:

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- Select the com port that the device is communicating, then press "Connect". The ESN will be shown.
- If the device is already provisioned, the "Read" button is used to check.
- Now all provisioning parameters can be entered into the appropriate boxes.
- Press "Write" to load into the device.

5 OM200 Command Set

The OM200 supports the following commands. There are sent to the device using SMS messages:

//BREW:0x12345678:PSW2,PROVISION,PDE,<ip_address>:<port>

Sets the PDE address used by the device. In control plane architectures, this is the address of the Control Plane Server. In user plane architectures, this is the address of the actual PDE.

//BREW:0x12345678:PSW2,PROVISION,APP,<ip_address>:<port>

Sets the APP address of used by the device. All messages from the device are sent to this IP address.

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//BREW:0x12345678:PSW2,COMMAND,STATUS

Causes the device to send a status report.

//BREW:0x12345678:PSW2,COMMAND,LOCATE

Causes the device to locate itself and send a location report.

//BREW:0x12345678:PSW2,REPORT,STATUS,<interval>

Causes the device to send a status report every <interval> seconds.

//BREW:0x12345678:PSW2,REPORT,LOCATION,<interval>

Causes the device to send a location report every <interval> seconds.

The device sends the following messages to the APP IP address:

**@RESPONSE,<MDN>,PSW2,RESPONSE,STATUS,BATTERY=<0..255>,
TEMPERATURE=<0..255>**

Indicates device status.

@RESPONSE,<MDN>,PSW2,RESPONSE,LOCATE,FOUND

Indicates that the device found itself. This is in response to a command to locate the device. Actual location results are returned from the PDE and vary from carrier to carrier.

6 Locating Your OM200

In order to **Locate** your VT100, send it the following SMS message:

PSW1, LOCATE, 0

6.1 Frequent Tracking

In order to **Track** (repeated locating) your VT100, send it an SMS message in the following format:

PSW1, LOCATE, X

where the value of **X** is specified according to the following table:

1	wait 15 seconds before locating again
2	wait 30 seconds before locating again
3	wait 45 seconds before locating again
4	wait 60 seconds before locating again

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5	wait 75 seconds before locating again
6	wait 90 seconds before locating again
7	wait 105 seconds before locating again
8	wait 120 seconds before locating again
9	wait 135 seconds before locating again

To stop **Tracking** your VT100 in this mode, send it the following SMS message:

PSW1, LOCATE, 0

6.2 *Periodic Tracking*

In order to **Track** (repeated locating) your VT100, send it an SMS message in the following format:

PSW1, REPORT, X

where the value of **X** is specified according to the following table:

1	wait 15 minutes before locating again
2	wait 30 minutes before locating again
3	wait 45 minutes before locating again
4	wait 60 minutes before locating again
5	wait 75 minutes before locating again
6	wait 90 minutes before locating again
7	wait 105 minutes before locating again
8	wait 120 minutes before locating again
9	wait 135 minutes before locating again

To stop **Tracking** your VT100 in this mode, send it the following SMS message:

PSW1, REPORT, 0

6.3 *Fast Tracking*

In order to **Track** (repeated locating) your VT100, send it an SMS message in the following format:

PSW1, FIND

Your VT100 will wait three seconds before locating again.

To stop **Tracking** your VT100 in this mode, send it the following SMS message:

PSW1, STOPFIND

7 Using the Diagnostic Tool

With the unit connected, open the Sendum Diagnostic Tool:

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The screenshot shows the 'Sendum Diagnostics' application window. It features a blue title bar and a standard Windows-style interface. The main area is divided into several functional sections:

- GPS:** Includes input fields for Latitude, Longitude, HEPE, Speed, and Tracking. There are checkboxes for 'Locating' and 'GPS Position'.
- Position Determination Session:** Contains checkboxes for 'Active', 'PDE Connection', 'Transmit', and 'Receive'.
- IP:** A section with checkboxes for 'ASM Sent', 'ASM Received', 'PRD Sent', 'PRD Received', and 'Simple IP', each followed by a text input field.
- Power Management:** Includes checkboxes for 'Charging' and 'Full Charge', and a 'Battery Level' input field.
- Temper Detection:** Features checkboxes for 'Strap Detect', 'Strap Found', 'Ambient Light', and 'Temper Switch'.
- Temperature:** Has a temperature input field and a 'Switch' checkbox.
- Brow Application:** Includes an 'Auto Load' checkbox and 'Read' and 'Write' buttons.
- ESN, MGD, ND, SD:** A vertical stack of four text input fields.
- Signal Level:** A single text input field.
- Operation Mode:** A group of radio buttons for 'Sleep', 'Cellular', 'PCS', and 'GPS'.
- Connection State:** Two text input fields labeled 'Text1' and 'Text2'.
- Device Connection:** A dropdown menu set to 'COM1' with 'Connect' and 'Quit' buttons.

At the bottom of the window, there is a status bar with the text 'Sendum Diagnostic Tool Version Alpha 1.0.4 Copyright 2015 Sendum Wireless Corporation'. To the right of this is a vertical stack of buttons: 'Send SMS', 'DEPART', 'Log To File', 'RESET', and 'Clear SMS'. Further right is a dropdown menu and a large text area labeled 'Incoming SMS'.

8 Troubleshooting

Email your requests to supports@sendum.com

9 Exposure to Radio Frequency (RF) Signals

Your Dual Band Wireless Tracking Device is a radio transmitter. It is designed and manufactured not to exceed the emission limits for exposure to radio frequency (RF) energy set by the Federal Communications Commission (FCC) for the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on the safety standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies.

The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health.

The exposure standard for wireless Devices employs a unit of measurement known as Specific Absorption Rate (SAR). The SAR limit set by the FCC is 1.6 W/kg¹. SAR tests are conducted using standard operating positions specified by the FCC with the Device transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the Device while operating can be well below the maximum value. This is because the Device is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output of the Device.

Before a new model Device is available for sale to the public, it must be tested and certified by the FCC to insure that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ankle and worn on body) as required by the FCC for each model. While there may be differences between SAR levels of various Devices and at various positions, they all meet the government requirement.

The FCC has granted an Equipment Authorization for this model Device with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this model Device is on file with the FCC and can be found on the FCC website (<http://www.fcc.gov/oet/fccid>) after searching the FCC ID printed in the label on the Device.

The highest SAR value for this model Device when tested for use at the ankle is 0.403 W/kg, and when worn on the body, as described in this user guide, is 1.175 W/kg.

¹ In the U.S. and Canada, the SAR limit for mobile Devices used by the public is 1.6 Watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.

10 Important Safety and Legal Information

IMPORTANT INFORMATION ON SAFE AND EFFICIENT OPERATION. READ THIS INFORMATION BEFORE USING YOUR DEVICE.

- Never attempt to disassemble your OM200. If service or repair is required, return the device to an authorized Sendum service centre.
- Always use Sendum provided accessories. Use of incompatible equipment could result in fire, electric shock, or bodily injury.
- Never allow children to play with your OM200.

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- Never store or transport flammable liquids, gases, or explosive materials in the same compartment as your OM200 or any of its accessories.
- Always secure your OM200. Never place the device on the passenger seat or anyplace else in the vehicle where it can become a projectile during collision or sudden stop.
- Never expose your OM200 to high temperatures, such as those found near a heater. This can cause heat damage to the plastic components, the electronic components, and the backup battery.
- Never drop your OM200 or expose it to violent impact or shock. This can cause mechanical damage.
- Never use harsh chemicals, cleaning solvents, or strong detergents to clean your OM200.
- Never attempt to dispose of your OM200 by throwing it into a fire.
- Your OM200 is not to be operated in body-worn applications. Keep your OM200 twenty (20 cm) centimeters or more from a human body when operating.
- Ensure your OM200 is powered off prior to shipping by air.
- Do not proceed into areas posted “Turn off two-way radio”, such as blasting areas.
- Do not install your OM200 in the area over an airbag. If the airbag inflates, serious injury could result.

10.1 RF Energy Interference/Compatibility

Note: Nearly every electronic device is susceptible to RF energy interference from external sources if inadequately shielded, designed, otherwise configured for RF energy compatibility. In some circumstances your OM200 may cause interference.

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 or more 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.