Appendix D - EUT User's Manual

User's Manual.

FCC NOTICE

> **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 UNDERSIRED OPERATION.**

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 communication. 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 difference from that to which the receiver is connected.
- Consult the dealer of an experienced radio/TV technician for help.

NOTE: This unit was tested with shielded cables on the peripheral devices. Shielded cables must be used with the unit to insure compliance.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

User's manual of CF1$^{\mathbf{O}}$ GPS Receiver

Fig. 1   CF1 GPS

Fig. 2   CF1 GPS Receiver connected with PDA.

How to install and use CF1$^{\mathbf{O}}$.

Your CF1 supports plug and play.

1. If your PDA or laptop PC has a CompactFlash™ type I slot* and the slot is empty, just plug your CF1 into the slot and turn on the PDA. If your laptop PC doesn't have a CompactFlash™ type I slot but a PCMCIA slot, then you can use an adapter to connect your CF1 to your laptop PC.

    *There are two types of CompactFlash™ slots; type I and type II.   Your CF1 matches with type I not type II. Type II slot is slightly bigger than type I.

2. Using your software* hosting CF1, you need to set up the COM port connected with CF1 as follows:

Baud rate:	4800 bps
Data bit:	8 bit
Parity:	None
Stop bit:	1
Flow Control:	None

    *If you don't have the software, you can also use the Hyper terminal program of Windows 95/98® to see NMEA0183 navigation data on your PDA.

3.   Allow 60 to 90 seconds for Cold Start* after you turn on your CF1.

    *Time for Cold Start changes according to the satellite visibility, reception environments and the signal strength. Some hints for the best reception is described in the next section.

How to receive GPS signals using CF1$^{\mathbf{O}}$.

Your CF1 with PDA should be outside to get GPS signals well. For the best reception of GPS signals, lines of sight between GPS antenna inside your CF1 and the GPS satellites should be guaranteed. As shown in Fig. 3, you need to maintain your PDA in 25° with the horizontal direction so that the top surface of your GPS antenna

could be in the horizontal position. The reception may not be good under the tree or near buildings where part of the sky is not open and thus lines of sight are not secured. If you use CF1 in motion, the reception of your CF1 may change as the change of its surroundings.

As all the GPS receivers, your CF1 needs to get GPS signals from at least three satellites at a time to calculate the location in a two dimensional space and four satellite signals at a time to get the location in a three dimensional space.

 The GPS satellite system is a low earth orbiting satellite system. So GPS satellites are moving around all the time in the sky, sometimes near the zenith or sometimes near the horizon. The GPS system is designed to be visible at least four satellites in the sky all the time anywhere on the earth.

Fig. 4 Position of CF1 GPS Unit Best Signal Reception

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