125 Technology Parkway
Norcross, Georgia, US 30092

RF Exposure Compliance Statement

FCC 15.247(b)(4) & FCC 2.1091 Mobile Devices

LXE Model 6526

FCC ID: KDZLXE6526M

LXE Project No: 00-091

LXE 6526 Transceiver

The LXE 6526 is an OEM Direct Sequence Spread Spectrum product manufactured by Cisco Systems. It is IEEE 802.11b compliant and operates in the band of 2400-2483.5 GHz. The radio is capable of 4 data rates and self adjusts to the most appropriate rate depending on the performance required. The data rates are 11, 5.5, 2 and 1 Mbps, where 11 Mbps gives the maximum throughput for data transfer, and 1 Mbps gives the best coverage where only small data packets are sent.

The radio has 2 ports. The main port is TX/RX and the auxiliary port is RX only. The card can be used either with a single antenna scheme in the main port, or a diverse antenna scheme using both ports.

The conducted peak output power of the 6526 is 13.87dBm

Intended Use

The LXE 6526 transceiver is intended to be integrated into LXE terminals defined as mobile and portable according to section 2.1091 and 2.1093 respectively of the FCC rules. Portable terminals identified in this report are hand-held devices only and are not intended to be used on the body. Users instructions are being updated to inform the user of the correct way to use these device in such a manner as to maintain a distance of 20cm from the rest of the body. Detailed operating configurations and exposure conditions are included in the RF safety submittal of this filing.

A separate certification has been obtained for this same radio for LXE devices defined as portable that are intended to be used on the operators body. The FCC ID for this certification is KDZLXE6526P.

Terminals currently targeted for integration of the 6526 radio card are the MX1, MX2, 2325, 1380, 1390, VX1, VX2 and 1590. These terminals are LXE PC based mini-computers equipped with PCMCIA slots to accommodate the various radio cards offered, or they can be used as batch terminals with no radio card at all. For batch operations, the PCMCIA slots are utilized as memory or storage space enhancements.

All terminals have been evaluated to, and found to comply with, FCC Part 15, Subpart B, Class A, and in some cases Class B emission requirements.

Antennas

The table below describes each of the antennas and in which terminal they are to be used

	LXE Part Number	Mfg.	Mfg. P/N	Antenna Type	Gain (dBi)	Terminal Used With	Terminal Type	System EIRP (dBm)
Antennas Submitted With Original Application on 12/20/2000								
1	155104-0001	LXE	155104-0001	Omni	0	MX1	Hand-Held Only	13.87
2	153180-0001	Cushcraft	RTN2400SXR	Omni	0	1380/1390 VX1/VX2	Vehicle Mount	13.87
3	990004-0027	Huber&Suner	9090.16.0001	Omni	1.8	2325	Hand-Held Only	15.67
4	154591-0001	LXE	154591-0001	Patch	0	MX1	Hand-Held Only	13.87
5	None	Toko	DAC2450CT1	Omni	2.15	MX2	Hand-Held Only	16.02

Integrated Terminals - Hand-Helds

The MX1, 2325 and MX2 are intended soley for use in the operators hands. LXE offers no accessories with these terminals to allow them to be used on the body, except in the hands. Each of the user' manuals include the following statement :

LXE Model MX1

The LXE Model MX1 is a high end, vertical hand-held terminal (VHHT) typically used in industrial, warehouse or retail settings. The MX1 is equipped with a PCMCIA slot, bar-code scanner and optional RS232 port. The MX1 is used by the operators to track smaller quantities of inventory, order entry and other applications of this nature. The information gathered is then either downloaded via an RS232 link, or transmitted to an LXE Access Point via an RF link. The Access Points are connected to a wired LAN via an Ethernet connection.

LXE Model 2325

The LXE Model 2325 is the first generation of low cost, vertical hand-held terminal (VHHT) typically used in industrial , warehouse or retail settings. The 2325 is equipped with a PCMCIA slot, bar-code scanner and optional RS232 port. The 2325 is used by the operators to track smaller quantities of inventory, order entry and other applications of this nature. The information gathered is then either downloaded via an RS232 link, or transmitted to an LXE Access Point via an RF link. The Access Points are connected to a wired LAN via an Ethernet connection.

LXE Model MX2

The LXE Model MX2 is the next generation, low cost, vertical hand-held terminal (VHHT) typically used in industrial , warehouse or retail settings. The MX2 is equipped with a PCMCIA slot, bar-code scanner and optional RS232 port. The MX2 is used by the operators to track smaller quantities of inventory, order entry and other applications of this nature. The information gathered is then either downloaded via an RS232 link, or transmitted to an LXE Access Point via an RF link. The Access Points are connected to a wired LAN via an Ethernet connection.

Photographs showing the operating configurations and exposure conditions of each of the terminals have been submitted separately with this filing.

Based on the low output power of the radio, the limited gain of the antennas and the high SAR limits for the hands, we believe a SAR evaluation is not necessary for the hand-held terminals. However in an effort to advise the user of the potential risk of excessive exposure, we intend to include the following statement in each of the manuals:

Caution 	***This device transmits RF energy and is designed for hand-held operation only. Use of this device in a manner not consistent with the users instructions can increases the risk of excessive RF exposure.***

Integrated Terminals - Vehicle Mounts

1380 and 1390
LXE Model's 1380 and 1390 are DOS based Vehicle Mount Computers Terminals(VMT's). They are usually installed on forklift trucks and are used by the operator of the fork lift to track the inventory that is being moved about. The operator uses a laser scanner to scan bar codes on the inventory that is being moved. The information is then transmitted via the LXE 6526 transceiver to an access point that is wired to the LAN system via ethernet.

VX1 and VX2
The VX1 and VX2 are the next generation of DOS based Vehicle Mount Computers Terminals(VMT's). Upon release, they are designed to replace the 1380 and 1390 VMT's in service today. These ruggedized computer terminals are usually installed on forklift trucks and are used by the operator of the fork lift to track the inventory that is being moved about. The operator uses a laser scanner to scan bar codes on the inventory that is being moved. The information is then transmitted via the LXE 6526 transceiver to an access point that is wired to the LAN system via ethernet.

1590
The 1590 is a Windows based Vehicle Mount Terminal that serves the same functions of the other VMT's.

The 1380, 1390, VX1 and VX2 use the same antenna and when installed according to the installation guide, maintain a minimum of 20cm from the antenna to the general population. The following statement is included in the installation guide of each of the VMt's:

Caution 	***This device is intended to transmit RF energy. For protection against excessive RF exposure to humans and in accordance with FCC rules, this transmitter should be installed such that a minimum separation distance of at least 20cm is maintained between the antenna and the general population***

Sales brochures of the 1380, 1390 and 1590 have been uploaded that show a typical installation and/or use for these devices. The VX1 and VX2 are still in development and no literature or advertising material is available at this time however, they have the same form factor and use the same antenna as the VX1 and VX2 and can be represented for the purposes of this report by the 1380 and 1390 material.

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LXE Model MX1
with
LXE Model 6526 Transceiver

FCC ID: KDZLXE6526M

LXE Project No: 00-091

The LXE Model MX1 is a high end, vertical hand-held terminal (VHHT) typically used in industrial , warehouse or retail settings. The MX1 is equipped with a PCMCIA slot, bar-code scanner and optional RS232 port. The MX1 is used by the operators to track smaller quantities of inventory, order entry and other applications of this nature. The information gathered is then either downloaded via an RS232 link, or transmitted to an LXE Access Point via an RF link. The Access Points are connected to a wired LAN via an Ethernet connection.

Figure 1: LXE Model MX1

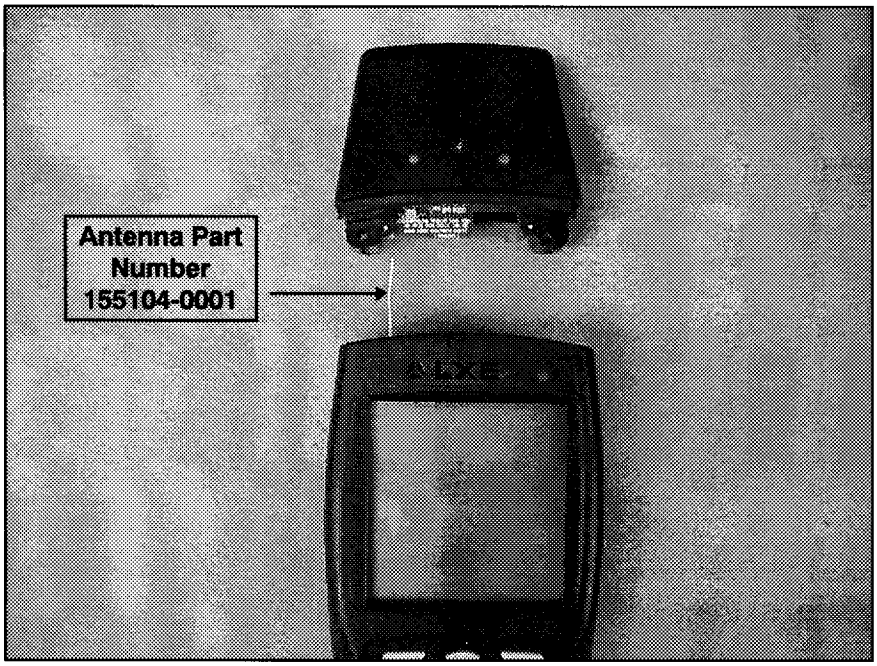

Figure 2: MX3 with end-cap removed exposing antenna

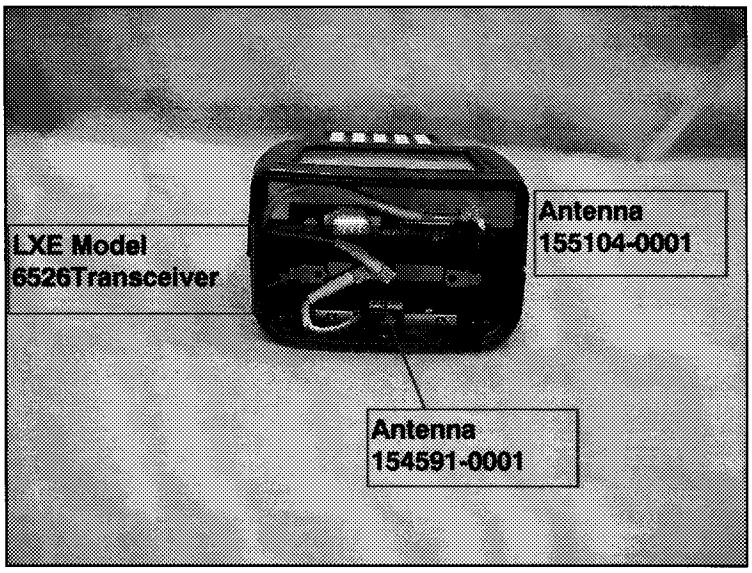

Figure 3: Internal view through end-cap

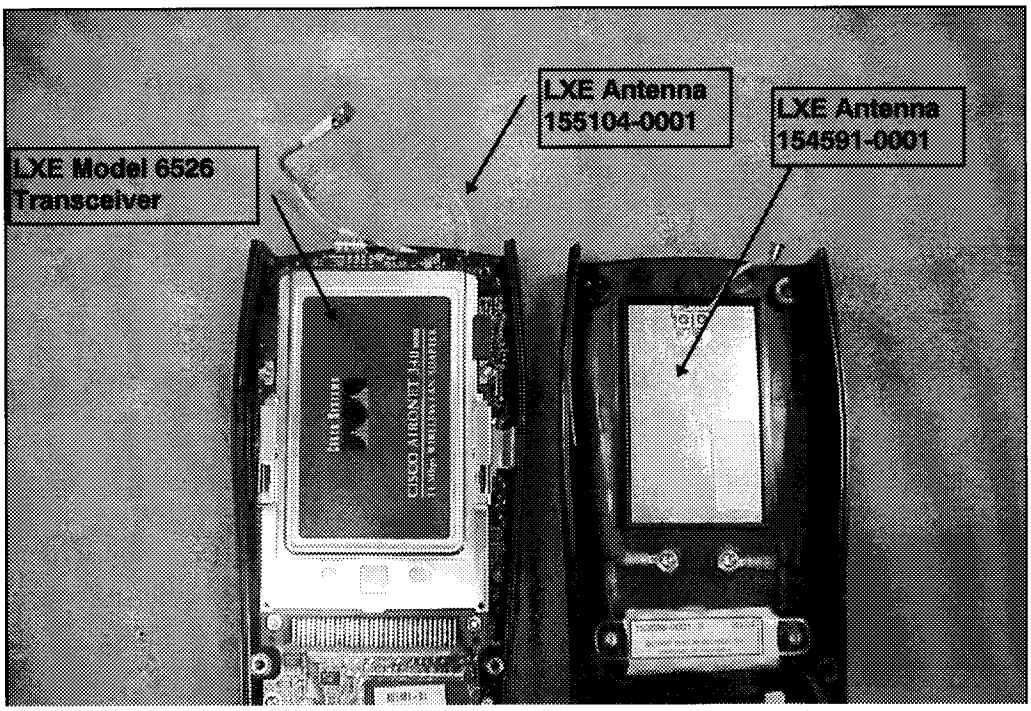

Figure 4: Internal view with back cover removed

Figure 5: Typical user operation

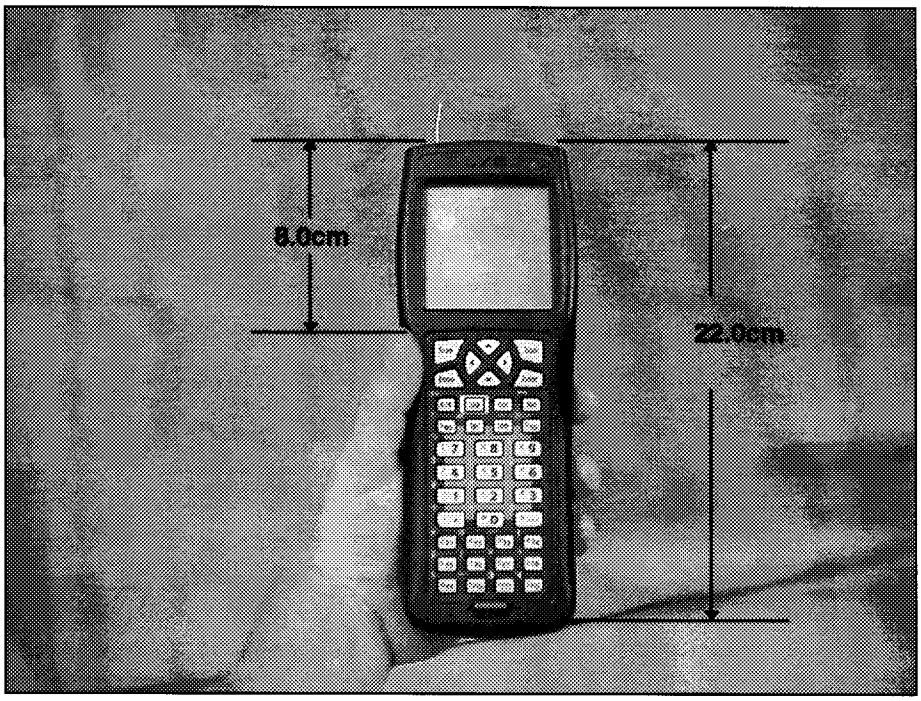

Figure 6: End-cap removed showing location of antenna 155104-0001relative to the user

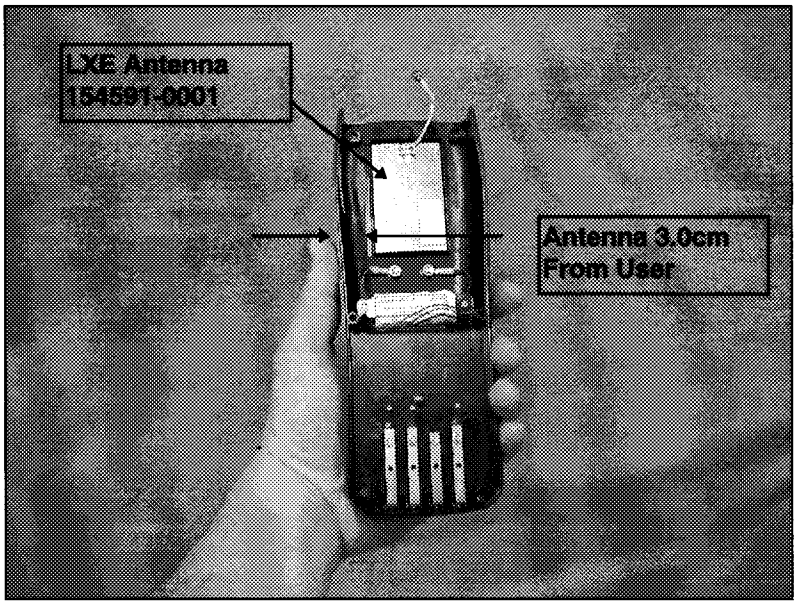

Figure 7: Location of antenna 154591-0001 relative to the user

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LXE Model MX2
with
LXE Model 6526 Transceiver

FCC ID: KDZLXE6526M

LXE Project No: 00-091

The LXE Model MX2 is low cost, vertical hand-held terminal (VHHT) typically used in industrial , warehouse or retail settings. The MX2 is equipped with a PCMCIA slot, bar-code scanner and optional RS232 port. The MX2 is used by the operators to track smaller quantities of inventory, order entry and other applications of this nature. The information gathered is then either downloaded via an RS232 link, or transmitted to an LXE Access Point via an RF link. The Access Points are connected to a wired LAN via an Ethernet connection.

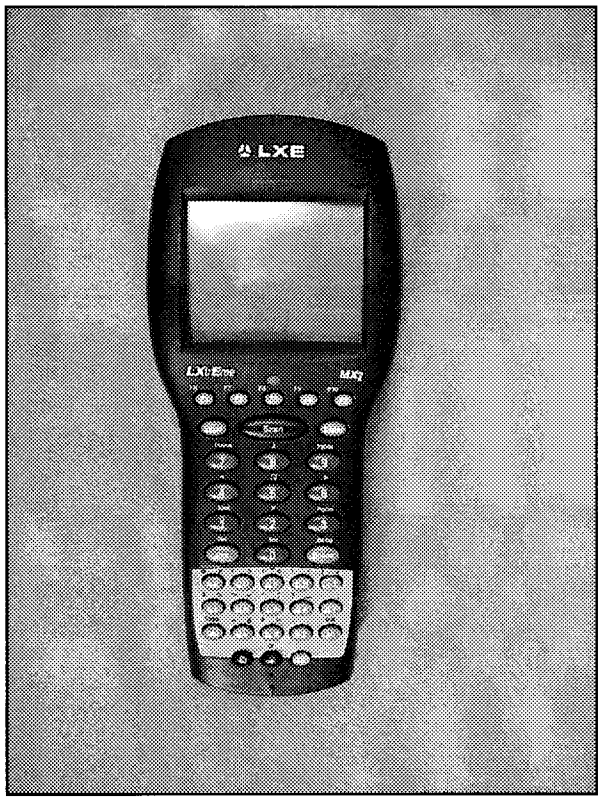

Figure 1: MX2 Front View

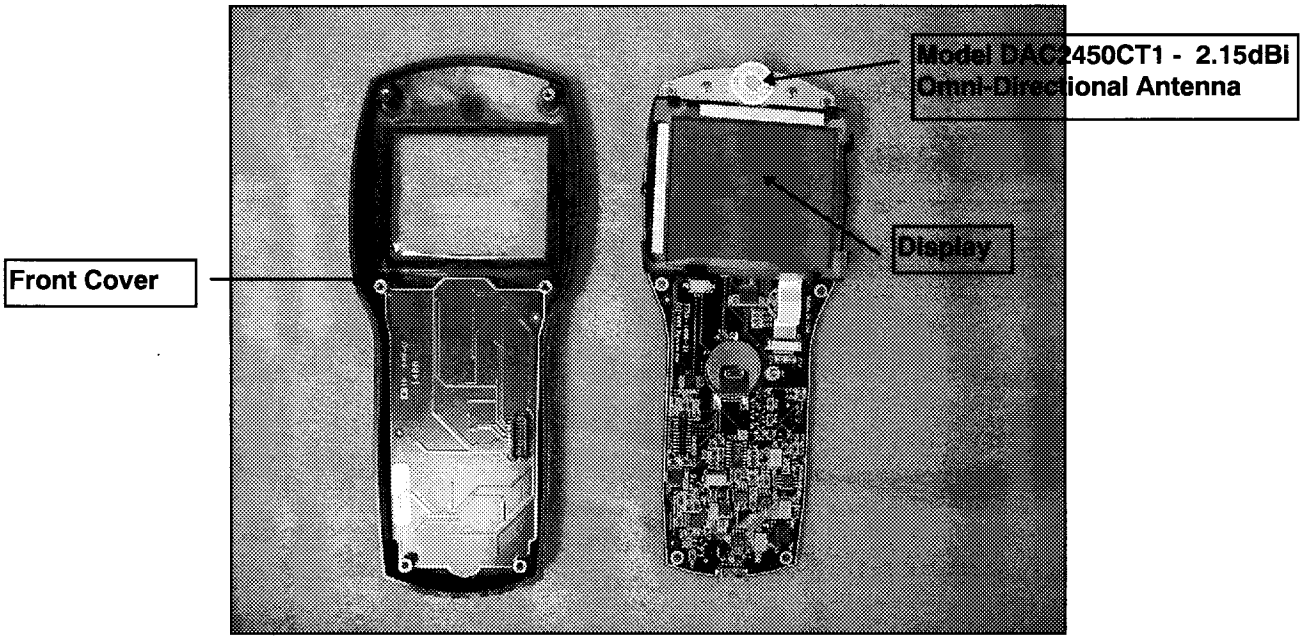

Figure 2: MX2 Opened - Front View with Antenna

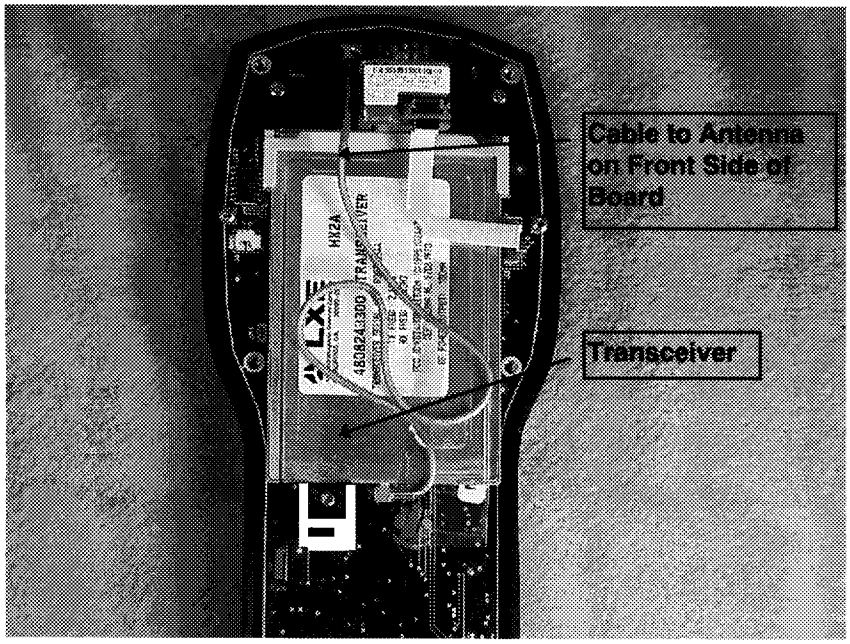

Figure 3: MX2 Opened - Rear View with Radio

Figure 4: Typical User Configuration

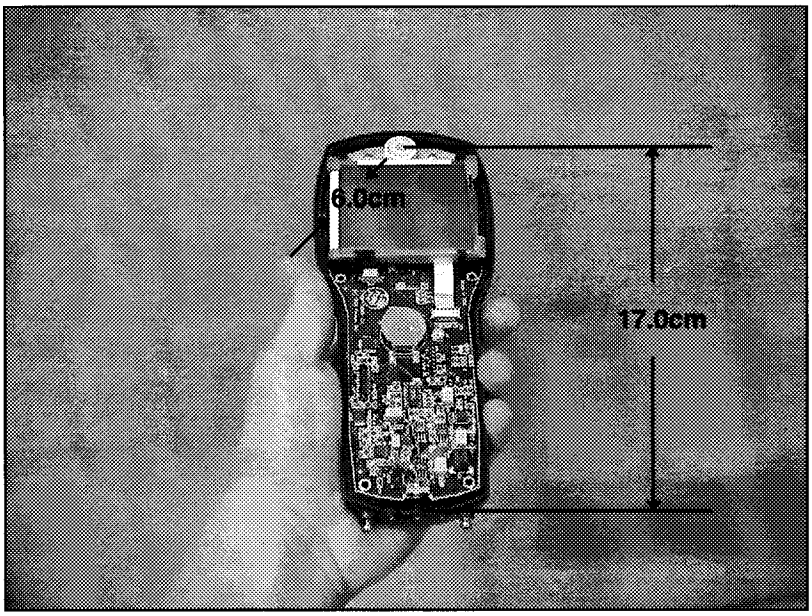

Figure 5: Antenna Location Relative to the User

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LXE Model 2325
with
LXE Model 6526 Transceiver

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The LXE Model 2325 is low cost, vertical hand-held terminal (VHHT) typically used in industrial , warehouse or retail settings. The 2325 is equipped with a PCMCIA slot, bar-code scanner and optional RS232 port. The 2325 is used by the operators to track smaller quantities of inventory, order entry and other applications of this nature. The information gathered is then either downloaded via an RS232 link, or transmitted to an LXE Access Point via an RF link. The Access Points are connected to a wired LAN via an Ethernet connection.

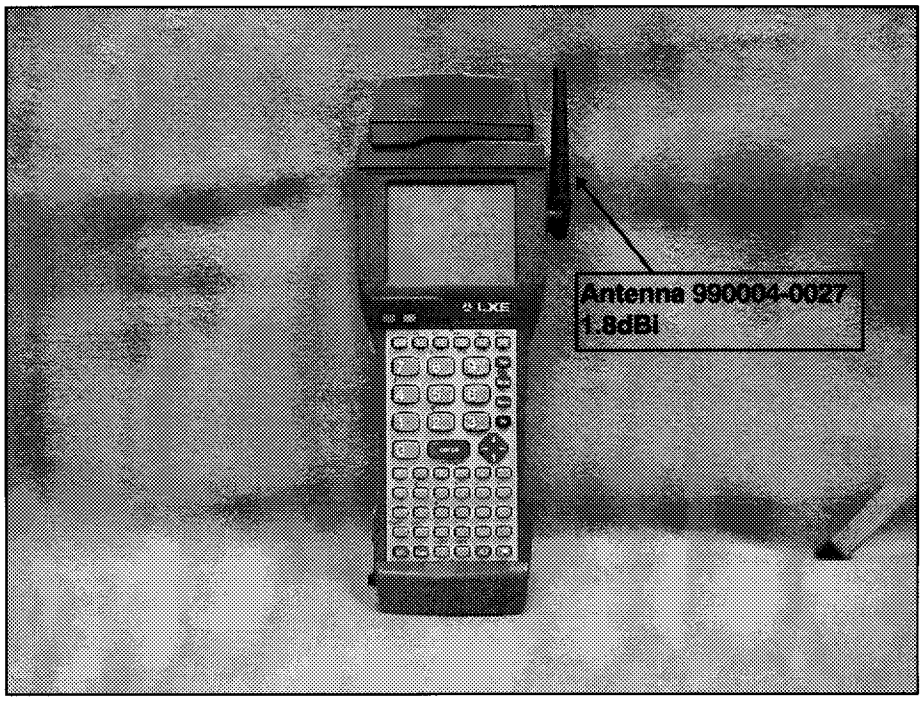

Figure 1: 2325 front view

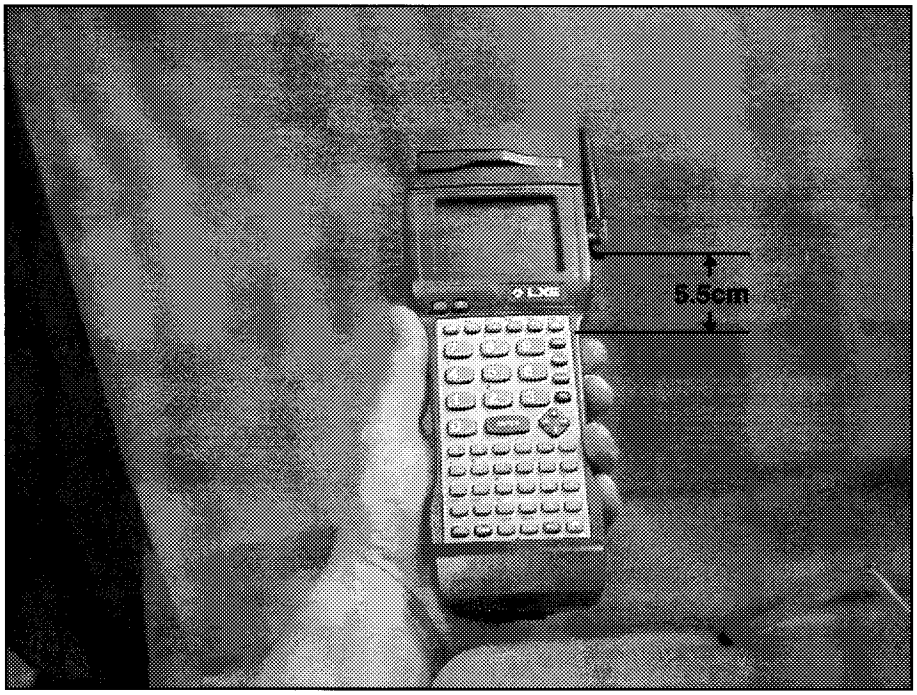

Figure 2: Typical user configuration

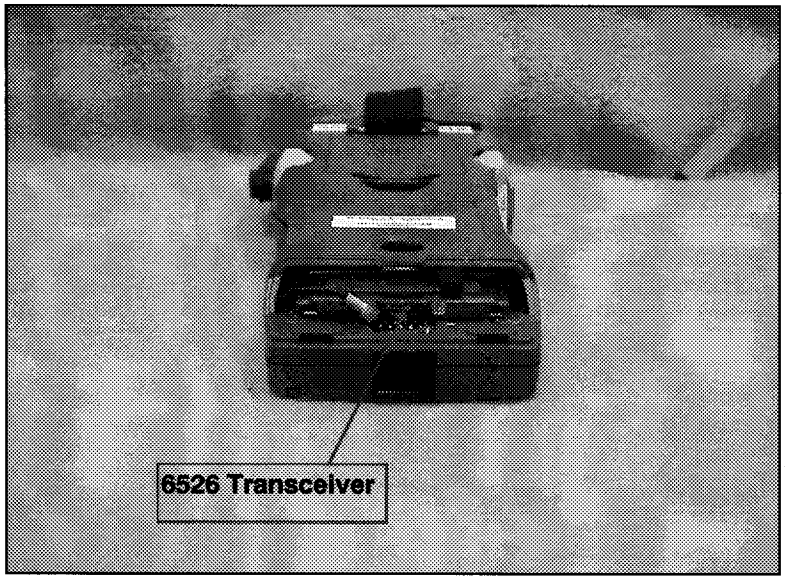

Figure 3: Location of transceiver installed in PCMCIA slot