

## **INSTALLATION AND INSTRUCTION MANUAL INCLUDING HUMAN EXPOSURE STATEMENT**

As required by § 2.1033(c)(3), here is a part of the User's Guide and Technical Manual" that describes modem features, installation, and operation.

Also provided, on page 16 of our User's Manual, is a statement addressing human exposure to radiofrequency radiation. This information is necessary to ensure that equipment installers, operators and users are made aware of the dangers of exposure to radiofrequency radiation and that the Modem is installed and operated in compliance with 47 CFR Part 24, Subpart E of the FCC Rules and Regulations. Pursuant to § 24.52 RF hazards, all emissions from the ~~DTS~~ Modem, both fundamental and unwanted, are subject to the radiofrequency radiation exposure requirements given in § 1.1307(b), § 2.1091 and § 2.1093, as appropriate.

For fixed transmitters, § 1.1307(b) requires the preparation of an Environmental Assessment (EA) if the transmitter would cause human exposure to levels of radiofrequency radiation in excess of the applicable limits given in § 1.1310. However, determination of compliance with these limits and preparation of an EA if they are exceeded is required only for licensed PCS facilities, operations and transmitters with the following characteristics:

1. non-building-mounted antennas: height above ground level to lowest point of antenna < 10m and total power of all channels > 2000 W ERP (3280 W EIRP)
2. building-mounted antennas: total power of all channels > 2000 W (3280 W EIRP)

"Fixed" in this context means that the device is physically secured at one location and is not able to be easily moved to another location. Since the modem transmits on a single channel with a maximum peak output power of 1.0 W (30 dBm) nominal, the maximum specified antenna gain of 7 dBi results in a maximum peak e.i.r.p. of 37 dBm (5.0 W), well below the level which would trigger a routine environmental evaluation. Therefore, in fixed applications, the modem is categorically excluded from performance of a routine environmental evaluation or preparation of an EA.

In § 2.1091(b), a mobile device is defined as a transmitting device designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's antenna and the body of the user or nearby persons. In accordance with § 2.1091(c), mobile PCS devices are categorically excluded from routine environmental evaluation for RF exposure prior to equipment authorization or use if their e.i.r.p. is less than 3 W (34.8 dBm).

The Modem user's manual requires a separation distance of at least 20 cm between the unit's antenna and the body of the user and nearby persons for all uses and applications, both mobile

and fixed. Furthermore, for mobile applications, the maximum e.i.r.p. will not exceed 2 W (33 dBm), in accordance with the requirements of § 24.232(b). Therefore, for mobile applications, the modem is categorically excluded from a routine environmental evaluation for RF exposure.

In all applications and uses, compliance with current FCC RF regulations limiting human exposure to radiofrequency exposure is dependent upon installation, operation and use of the equipment in accordance with all instructions provided.

## HUMAN EXPOSURE COMPLIANCE STATEMENT

The following statement addressing human exposure to the RF energy emitted by the Modem is included in the "User's Manual."

Pursuant to 47 CFR § 24.52 of the FCC Rules and Regulations, personal communications services (PCS) equipment is subject to the radiofrequency radiation exposure requirements specified in § 1.1307(b), § 2.1091 and § 2.1093, as appropriate.

Wavecom, Inc. certifies that it has determined that the Modem complies with the RF hazard requirements applicable to broadband PCS equipment operating under the authority of 47 CFR Part 24, Subpart E of the FCC Rules and Regulations. This determination is dependent upon installation, operation and use of the equipment in accordance with all instructions provided.

The Modem is designed for and intended to be used in fixed and mobile applications. "Fixed" means that the device is physically secured at one location and is not able to be easily moved to another location. "Mobile" means that the device is designed to be used in other than fixed locations and generally in such a way that a separation distance of at least 20 cm is normally maintained between the transmitter's antenna and the body of the user or nearby persons. The Modem is not designed for or intended to be used in portable applications (within 20 cm of the body of the user) and such uses are strictly prohibited.

To ensure that the ~~DTSA~~ Modem complies with current FCC regulations limiting both maximum RF output power and human exposure to radiofrequency radiation, a separation distance of at least 20 cm must be maintained between the unit's antenna and the body of the user and any nearby persons at all times and in all applications and uses. Additionally, in mobile applications, maximum antenna gain must not exceed 3 dBi.