



**Western Multiplex**

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**STATEMENT THAT TSUNAMI (UNII) RADIOS MUST BE PROFESSIONALLY  
INSTALLED AND SO IS EXEMPT FROM THE ANTENNA RESTRICTIONS OF FCC PART  
15.203, INCLUDING INFORMATION ON ANTENNAS USED FOR TESTING**

This letter is submitted with regards to professional installation of the Tsunami (UNII) radio and the antennas used for testing. The Tsunami (UNII) radios must be professionally installed and so is exempt from the antenna restrictions of FCC Part 15.203. The Tsunami (UNII) radio is a product manufactured by Glenayre Western Multiplex in Sunnyvale, California.

The Tsunami (UNII) radio is to be certified for operation under Part 15.407 of the FCC Rules in the 5.25-5.35 GHz and 5.725-5.825 GHz band. This equipment is designed for point-to-point communications and will only carry data signals using a 100BaseT interface. Due to the unique requirements of installation and integration of these systems, typical consumers or businesses will not have the proper training required for successful implementation of these systems.

The Tsunami (UNII) is not designed for use by the general public, and will be sold as follows:

- either through the Glenayre Western Multiplex sales force to professional communications users in the following categories : electric power utilities, cellular telephone operating companies, personal communication service operating companies, regional Bell operating companies, oil and gas exploration and transmission companies, railroad companies, federal, state and local government agencies, or
- through designated and professionally trained Glenayre Western Multiplex Value Added Resellers (VARs) to business users under individual reseller agreements.

These companies will either use their professional telecommunications engineering staff to carry out the installation or will subcontract to professional installation firms. On occasion, a professional installation firm will purchase the Tsunami (UNII) radios directly.

The Tsunami (UNII) radio will be used for fixed, permanent or temporary, outdoor links requiring the use of directional antennas at 5.2-5.8 GHz or 5.8GHz which tend to be mounted on towers. These antennas will have narrow beamwidths and require professional installers to align them.

In addition, the Tsunami (UNII) radio must be set up for the specific line interface required during installation. This procedure must be carried out by a qualified professional installer for the equipment to operate properly.

The output power of the Tsunami (UNII) radio will be adjusted to meet any applicable EIRP limits by the professional installer during installation. The method of adjusting the output power is described in the manual written for use by professional trained installers.

The Tsunami (UNII) radio is a full duplex device with a common transmit and receive port. The addition of an external amplifier to boost the transmit power would disable the receive signal, thus rendering the Tsunami (UNII) radio inoperable. In addition, high power amplifiers (not generally available at 5.2-5.8 GHz) cannot be used without ensuring that signal saturation does not occur (because this would produce unrecoverable deterioration of the receive signal). Thus, the addition of an amplifier could not be accomplished by a non-professional installer.

The Tsunami (UNII) radio is typically sold without an antenna, and the customer and/or installation engineer chooses from commercially available antennas. From time to time, Glenayre Western Multiplex may sell a commercially available antenna along with the Tsunami (UNII) radio upon customer request.

A handwritten signature in black ink, appearing to read 'Ken Ruppel', is positioned above the printed name.

Ken Ruppel

Director, Product Management