



Product Safety and RF Energy Exposure Booklet for Piccolo Interface Units

The Piccolo Interface Unit (PIU) and Piccolo-XR unit are devices which are most commonly used in fixed installations.



Caution

BEFORE USING THIS PIU, READ THIS BOOKLET WHICH CONTAINS IMPORTANT OPERATING INSTRUCTIONS FOR SAFE USAGE AND RF ENERGY AWARENESS AND CONTROL INFORMATION AND OPERATIONAL INSTRUCTIONS FOR COMPLIANCE WITH RF ENERGY EXPOSURE LIMITS IN APPLICABLE NATIONAL AND INTERNATIONAL STANDARDS. ALSO READ THE OPERATIONAL INSTRUCTIONS FOR SAFE USAGE.



RF Energy Exposure Awareness and Control Information and Operational Instructions

NOTICE: The PIU and Piccolo-XR devices are authorized for general population consumer use.

The PIU and Piccolo-XR use electromagnetic energy in the radio frequency (RF) spectrum to provide communications between two or more users over a distance. They use radio frequency (RF) energy or radio waves to send and receive data. RF energy is one form of electromagnetic energy. Other forms include, but are not limited to, sunlight and x-rays. RF energy, however, should not be confused with these other forms of electromagnetic energy, which when used improperly, can cause biological damage. Very high levels of x-rays, for example, can damage tissues and genetic material.

Experts in science, engineering, medicine, health, and industry work with organizations to develop standards for safe exposure to RF energy. These standards provide recommended levels of RF exposure for both workers and the general public. These recommended RF exposure levels include substantial margins of protection.

All Motorola PIUs and Piccolo-XR units are designed, manufactured, and tested to ensure they meet government-established RF exposure levels. In addition, manufacturers also recommend specific operating instructions to users of PIUs and Piccolo-XR units. These instructions are important because they inform users about RF energy exposure and provide simple procedures on how to control it.

Please refer to the following websites for more information on what RF energy exposure is and how to control your exposure to assure compliance with established RF exposure limits:

<http://www.fcc.gov/oet/rfsafety/rf-faqs.html>

<http://www.osha.gov/SLTC/radiofrequencyradiation/index.html>

Federal Communication Commission (FCC) Regulations

The FCC rules require manufacturers to comply with the FCC RF energy exposure limits for PIUs and Piccolo-XR units before they can be marketed in the U.S.

Compliance with RF Exposure Standards

Your Motorola PIU and Piccolo-XR are designed and tested to comply with a number of national and International standards and guidelines (listed below) for human exposure to radio frequency electromagnetic energy. **The PIU and Piccolo-XR comply with the IEEE (FCC) and ICNIRP exposure limits for uncontrolled RF exposure environments.** In terms of measuring RF energy for compliance with these exposure guidelines, **your PIU and Piccolo-XR generate measurable RF energy only while they are transmitting, not when they are receiving or in standby mode.**

Your Motorola PIU and Piccolo-XR comply with the following RF energy exposure standards and guidelines:

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J
- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada) Safety Code 6. Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999
- Australian Communications Authority Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard, 2003
- ANATEL ANNEX to Resolution No. 303 of July 2, 2002 "Regulation of limitation of exposure to electrical, magnetic and electromagnetic fields in the radio frequency range between 9 KHz and 300 GHz" and "Attachment to resolution # 303 from July 2, 2002"

RF Exposure Compliance and Control Guidelines and Operating Instructions

To ensure compliance with the uncontrolled environment exposure limits, always adhere to the following procedures.

Guidelines

- User awareness instructions should accompany device when transferred to other users.
- Do not use this device if the operational requirements described herein are not met.

Operating Instructions

- Transmit only when people are at a minimum distance of 8 inches (20 centimeters) away from the device and its antenna. Keeping the PIU and the Piccolo-XR at a proper distance is important because RF exposures decrease with increasing distance from the antenna.

Approved Accessories

- Use only Motorola-approved supplied or replacement antennas, batteries, and accessories. Use of Non-Motorola approved antennas, batteries, and accessories may exceed the FCC (IEEE) and ICNIRP RF exposure guidelines.

Additional Information

For additional information on exposure requirements or other training information, visit <http://www.motorola.com/rfhealth>.

Compliance and Control Guidelines for Two-Way Radios Installed as Fixed Site Control Stations

As with all fixed site antenna installations, it is the responsibility of the licensee to manage the site in accordance with applicable regulatory requirements.

Electromagnetic Interference/Compatibility

NOTE: Nearly every electronic device is susceptible to electromagnetic interference (EMI) if inadequately shielded, designed, or otherwise configured for electromagnetic compatibility.

Facilities

To avoid electromagnetic interference and/or compatibility conflicts, turn off your PIU and Piccolo-XR in any facility where posted notices instruct you to do so. Hospitals or health care facilities may be using equipment that is sensitive to external RF energy.

Operational Warnings



WARNING

Potentially Explosive Atmospheres

(Explosive atmospheres refers to hazard classified locations that may contain hazardous gas, vapors, or dusts.)

Turn off your PIU and Piccolo-XR prior to entering any area with a potentially explosive atmosphere.

Do not remove, install, or charge batteries in such areas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

The areas with potentially explosive atmospheres referred to above include fueling areas such as below decks on boats, fuel or chemical transfer or storage facilities, and areas where the air contains chemicals or particles such as grain, dust or metal powders. Areas with potentially explosive atmospheres are often, but not always, posted.



WARNING

Blasting Caps and Blasting Areas

To avoid possible interference with blasting operations, turn off your PIU and Piccolo-XR when you are near electrical blasting caps, in a blasting area, or in areas posted: "Turn off two-way radio." Obey all signs and instructions.

Operational Cautions



Caution

Antennas

Do not use any PIU or Piccolo-XR that has a damaged antenna. If a damaged antenna comes into contact with your skin, a minor burn can result.

Batteries

All batteries can cause property damage and/or bodily injury, such as burns, if a conductive material such as jewelry, keys, or beaded chains touches exposed terminals. The conductive material may complete an electrical circuit (short circuit) and become quite hot. Exercise care in handling any charged battery, particularly when placing it inside a pocket, purse, or other container with metal objects.

A modification changes the unit's hardware from its original design configuration. Modifications can only be made by the original product manufacturer.

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