



MOTOROLA SOLUTIONS

RF Energy Exposure Training and Product Safety Information for Fixed Radio Transmitters



Motorola Solutions



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Caution

Before using this radio transmitter, read this booklet which contains important operating instructions.

Compliance with RF Exposure Standards

National and international regulations require compliance with the RF energy exposure limits for fixed radio transmitters before they can be operated. Your Motorola radio transmitter is designed, manufactured and tested to comply with all applicable national and international regulations for human exposure to radio frequency electromagnetic energy.

RF Energy Exposure Awareness and Control Information and Operational Instructions



Notice: This radio transmitter is intended for use in occupational/controlled conditions, where users are aware of their exposure and can exercise control over their exposure to meet the requirements in national and international regulations. This radio device is also authorized for general population, consumer use.

Operating Instructions

Table 1 lists the recommended lateral distance from properly installed antenna(s).

Table 1: Recommended Minimum Lateral Distance from Antenna(s)

People (bystander)	Minimum Lateral Distance
General Public	43.3 inches (110 centimeters)
Trained Personnel	43.3 inches (110 centimeters)



Notice: Trained personnel should be aware of the radio-frequency energy exposure, and should be able to control it, for instance by increasing the distance from the antenna(s).

Fixed Radio Transmitter Antenna Installation Guidelines

- Make sure to follow the antenna installation guidelines that are provided in this radio transmitter installation manual.
- Use only Motorola Solutions approved supplied antennas or a Motorola Solutions approved replacement antenna. Unauthorized antennas, modifications, or

attachments could damage the radio and may result in non-compliance with RF safety standards.

Guidelines and Operating Instructions for Radio Transmitters Installed as Fixed Site Control Stations

The antenna installation must comply with the following requirements in order to ensure optimal performance and compliance with applicable RF exposure limits.

- The antenna should be mounted outside the building on the roof or a tower if at all possible.
- It is the responsibility of the licensee to manage the site in accordance with applicable regulatory requirements. Actions such as site survey measurements, signage, and site access restrictions may be required in order to ensure compliance with RF exposure limits.

Operational Warnings

The following explains the operational warnings:

Potentially Explosive Atmospheres



Warning:

- Use of a radio transmitter that is not intrinsically safe in a potentially explosive atmosphere could result in a serious injury or death. You should only use a certified Intrinsically Safe radio transmitter in potentially explosive atmospheres.
- Explosive atmospheres refer to hazard classified locations that may contain hazardous gas, vapors, dusts, such as fueling areas 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.
- Make sure your radio transmitter is turned off prior to entering any area with a potentially explosive atmosphere unless it is a transmitter type specifically certified for use in hazardous location areas.
- DO NOT remove, install, or charge batteries in such areas, or remove or install antennas. Sparks in a potentially explosive atmosphere can cause an explosion or fire resulting in bodily injury or even death.

Batteries

If your radio transmitter is equipped with a primary or backup battery you must follow these instructions:

- Charge your battery using the approved Motorola Solutions charger.

- Use the battery in accordance with its water and/or dust Ingress Protection (IP) rating.
- Do not discard your battery into a fire.
- Do not replace the battery in any area labeled "Hazardous Atmosphere".
- Do not disassemble, crush, puncture, shred, or otherwise attempt to change the form of your battery.
- Do not dry a wet or damp battery with an appliance or heat source, such as a hair dryer or microwave oven.
- Do not allow conductive material such as jewelry, keys, or beaded chains to touch exposed battery terminals.

European Union(EU) Waste of Electrical and Electronic Equipment (WEEE) Directive



■ The European Union's WEEE directive requires that products sold into EU countries must have the crossed out trash bin label on the product (or the package in some cases). As defined by the WEEE directive, this cross-out trash bin label means that customers and end-users in EU countries should not dispose of electronic and electrical equipment or accessories in household waste. Customers or end-users in EU countries should contact their local equipment supplier representative or service centre for information about the waste collection system in their country.