

Dosimetry Radio

instructions for use



Introduction

The dosimetry radio is used as a wireless communication device for connection to dosimeters. The dosimetry radio implements a custom radio interface specific for dosimeter communication.

For communication with host the dosimetry radio uses a standard USB connection. The device is designed as a standard HID and no drivers are needed if used with a standard computer and operating system.

Installation

No drivers are needed and the dosimetry radio can be used on Windows/Linux computers as well as custom communication devices that are intended to communicate with dosimeters.

Follow the instructions below to install the dosimetry radio:

1. Connect the dosimetry radio to any free USB host port on computer / communication device.

The radio is now detected by any software designed for communication with dosimeters.

If the dosimetry radio is installed in a custom communication device and not a standard computer please make sure that the device is in power off state before radio is connected.

Configuration

No configuration is possible on the dosimetry radio.

Safety

Important safety directions

If the product is not functioning correct or damage is visible, please contact your Unfors RaySafe representative, who will take appropriate actions in order not to create harm. Handle the product with care. Make sure that the product is used and stored in a secured environment to prevent unauthorized access.

Maintenance & faults

WARNING Do not use the product for any application until you are sure that the user routine-checks have been satisfactorily completed, and that the periodic maintenance of the product is up to date. If any part of the product is known (or suspected) to be defective or wrongly adjusted, DO NOT USE the product until a repair has been made. Operation of the product with defective or wrongly adjusted components could expose the user or the patient to radiation or other safety hazards. This could lead to fatal or other serious personal injury.

Safety awareness

WARNING Do not use the product for any application until you have read, understood and know all the safety information, safety procedures and emergency procedures contained in this Safety section. Operation of the product without a proper awareness of how to use it safely could lead to fatal or other serious personal injury.

Adequate training

WARNING Do not use the product for any application until you have received adequate and proper training in its safe and effective operation. If you are unsure of your ability to operate this product safely and effectively, DO NOT USE IT. Operation of this product without proper and adequate training could lead to fatal or other serious personal injury.

Safety devices

Warning Never attempt to remove, modify, override or frustrate any safety device on the product. Interfering with safety devices could lead to fatal or other serious personal injury.

Intended use and compatibility

Warning Do not use the product for any purpose other than those for which it is intended. Do not use the product with products other than that which RaySafe recognizes as compatible. Operation of the product for unintended purposes, or with incompatible products, could lead to fatal or other serious injury.

Electrical safety

WARNING Do not remove covers or cables from this product. Dangerous electrical voltages are present within this product. Removing covers or cables could lead to serious or fatal personal injury. Covers or cables should only be removed by qualified and authorized service personnel. Use this product in rooms or areas that comply with all applicable laws (or regulations having the force of law) concerning electrical safety for this type of product. Electrically isolate this product from the mains electrical supply before cleaning, disinfecting or sterilizing it.

Mechanical safety

WARNING Do not remove covers from this product. Removing covers could lead to serious or fatal personal injury. Covers should only be removed by qualified and authorized service personnel. In this context, qualified means those legally permitted to work on this type of medical electrical product in the jurisdiction(s) in which the product is being used, and authorized means those authorized by the user of the product.

Explosion safety

WARNING Do not use this product in the presence of explosive gases or vapors.

WARNING Do not use flammable or potentially explosive disinfecting sprays.

WARNING Use of this product in an environment for which it was not designed can lead to fire or explosion.

Fire safety

Use of electrical product in an environment for which it was not designed can lead to fire or explosion. Fire regulations for the type of medical area being used should be fully applied, observed and enforced. Fire extinguishers should be available for both electrical and non-electrical fires.

WARNING Only use extinguishers on electrical or chemical fires, which are specifically labeled for those purposes. Using water or other liquids on an electrical fire can lead to fatal or other serious personal injury. If it is safe to do so, attempt to isolate the product from electrical and other supplies before attempting to fight a fire. This will reduce the risk of electric shocks.

Electrostatic discharge (ESD)

CAUTION Always wait at least ten seconds after the product is switched OFF before switching the product back to ON.

CAUTION Always use proper static procedures, protection, and product prior to opening and during handling of this product. This product contains components that are electrostatic sensitive. Failure to use ESD procedures may cause damage to these components. Such damage to components is not covered by Unfors RaySafe warranties.

ESD can amount to a significant voltage, which may cause damage to PCBs or other system components.

ESD damage is cumulative and may not be apparent at first, as indicated by a hard failure, but can cause degraded performance. Therefore, always use proper ESD handling procedures. ESD can result from low humidity conditions, use of electrical equipment on carpeting, linens, and clothing.

Electromagnetic Compatibility (EMC)

This product complies with relevant international and national laws and standards on EMC (electromagnetic compatibility) for this type of product when used as intended. Such laws and standards define both the permissible electromagnetic emission levels from equipment and its required immunity to electromagnetic interference from external sources.

Other electronic products exceeding the limits defined in such EMC standards could, under unusual circumstances, affect the operation of the product.

- Information Technology Equipment (ITE) need special precautions regarding EMC, and need to be installed and put into service according to EMC information provided in the accompanying documents.
- The use of accessories and cables other than those specified may result in increased emission or decreased immunity levels.
- The product should not be used adjacent to or stacked with other products and that if adjacent or stacked use is necessary, it should be observed to verify normal operation.

This equipment is intended for use in a hospital environment. Operation in other than hospital environments may compromise electromagnetic compatibility.

The real product complies with part 15 of the FCC Rules. Operation is subject to the following conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications to the equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Industry Canada license-exempt RSS standard(s).

Operation is subject to the following two conditions: (1) This device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

This class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

The product have been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Product disposal

Unfors RaySafe is concerned to help protect the natural environment, and to help ensure continued safe and effective use of this product, through proper support, maintenance and training.

Therefore Unfors RaySafe products are designed and manufactured to comply with relevant guidelines for environmental protection. As long as the product is properly operated and maintained, it presents no environmental risks. However, the product may contain material, which could be harmful to the environment if disposed of incorrectly. Use of such material is essential to performing the functions of the product, and to meeting statutory and other requirements.

This section of these Instructions for Use is directed mainly at the user/owner of the product.

Passing the system on to another user if this product passes to another user, it must be in its complete state, including all product support documentation.

Make the new user aware of the support services that Unfors RaySafe provides for installing, commissioning and maintaining the product.

Before passing on the product or taking it out of service, all data must be (backed up elsewhere if necessary, and) unrecoverable be deleted on the product.

It must be remembered by all existing users that passing on electrical products to new users may create serious technical, medical and legal (e.g. on privacy) risks. Such risks can arise even if the product is given away. Existing users are strongly advised to seek advice from their local Unfors RaySafe representative before committing themselves to passing on any product. Alternatively, contact the manufacturer.

Once the product has been passed on to a new user, a previous user may still receive important safety-related information, such as bulletins and field change orders. In many jurisdictions, there is a clear duty on the previous user to communicate such safety-related information to new users. Previous users who are not able or prepared to do this should inform Unfors RaySafe about the new user, so that Unfors RaySafe can provide the new user with safety-related information.

Final disposal of the system

Final disposal is when the user disposes of the product in such a way that it can no longer be used for its intended purpose(s).

In the European Union (the WEEE directive), label indicates that this product should not be disposed of with household waste.

This product should be disposed of at an appropriate facility to enable recovery and recycling.

Unfors RaySafe supports users in:

- Recovering reusable parts.
- Recycling of useful materials by competent disposal companies.
- Safe and effective disposal of product.

For advice and information, contact your Unfors RaySafe Service Organization first, or otherwise the manufacturer.