



raditeq

Firmware Update Installation Guide

Raditeq
Firmware update



www.raditeq.com

Raditeq Firmware Installation Guide

This product manual pertains to the update of Raditeq Products using the RadiCentre® system.
Models: All plug-in equipment for the RadiCentre® made by Raditeq.

Read this manual carefully before operating the product and make sure all the safety instructions are strictly followed.

For all specifications of this specific product, please refer to the data sheet of the product which can be found at www.raditeq.com

Please keep this manual close at hand when you operate your new Raditeq product(s).

Please contact your local reseller if you have any questions.

Supplier Information

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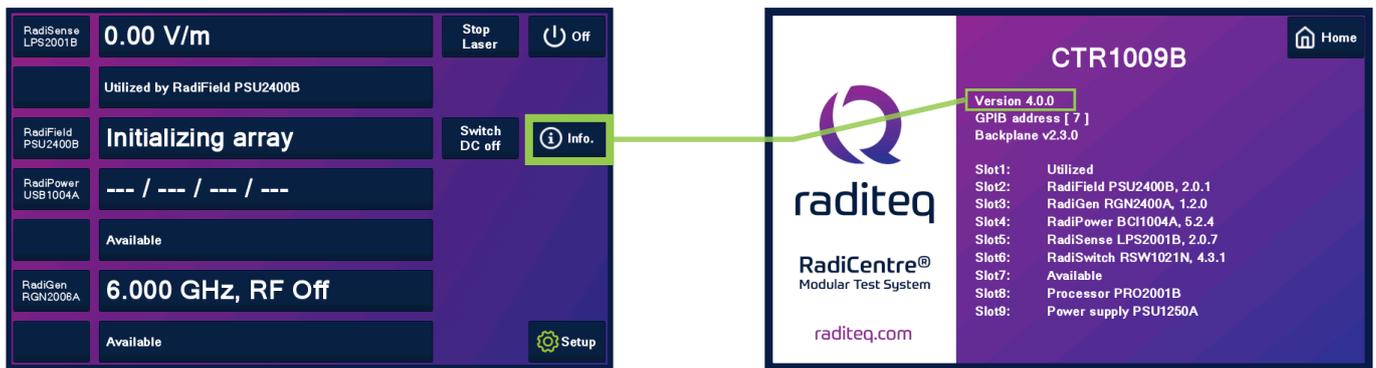
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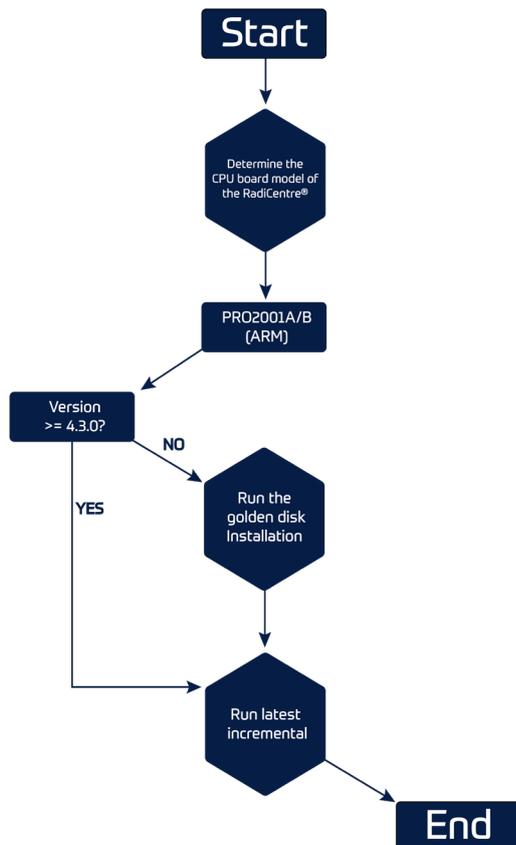
Introduction & RadiCentre® version

This installation guide serves as a guide for RadiCentre® users seeking assistance in installing and updating the firmware of Raditeq’s Plug-in card. Prior to proceeding with the installation, it is recommended to verify the current version of your RadiCentre® Firmware.

The version of the RadiCentre® can be located under the Info section.



Now that the version is determined a flowchart need to be followed (see next page). On this chart it shows which steps need to be made to be



ARM CPU

If the current version of the ARM CPU is equal or higher than 4.3.2 one can directly install/run the latest incremental version.

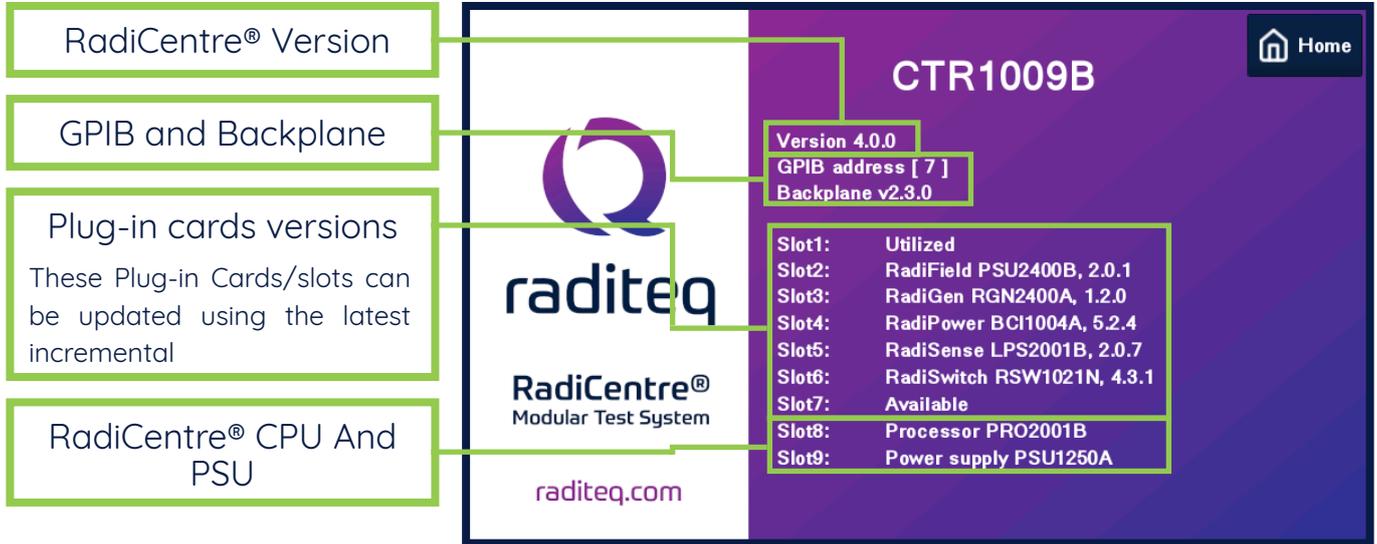
If it lower than 4.3.2 the golden disk installation first needs to be ran first before the new incremental can be installed.

Please refer to the chapter: ‘Golden Disk update’ (see table of content) and the golden disk download available on:

<https://www.raditeq.com/softwareupdate>.

Raditeq Device Firmware

The RadiCentre® firmware updates the RadiCentre® the plug-in cards and sensors connected to the plugin cards present in the RadiCentre®. This includes the CPU card.



The screenshot displays the RadiCentre® interface for a CTR1009B system. The interface includes a home button in the top right corner. The main content area is divided into two sections: a left sidebar with the Raditeq logo and 'RadiCentre® Modular Test System' branding, and a right panel showing system details. The right panel lists the system version (4.0.0), GPIB address (7), and backplane version (v2.3.0). Below this, a table lists the status and details for nine slots.

Slot	Status	Details
Slot1	Utilized	
Slot2	Utilized	RadiField PSU2400B, 2.0.1
Slot3	Utilized	RadiGen RGN2400A, 1.2.0
Slot4	Utilized	RadiPower BCI1004A, 5.2.4
Slot5	Utilized	RadiSense LPS2001B, 2.0.7
Slot6	Utilized	RadiSwitch RSW1021N, 4.3.1
Slot7	Available	
Slot8	Utilized	Processor PRO2001B
Slot9	Utilized	Power supply PSU1250A

Necessary Items

To perform updates on your Raditeq products, the following items are required:

- An fat32 formatted USB key.
- A PC with internet connectivity to download the incremental update and access the USB key.
- The incremental file necessary for the update process.

The latest incremental file can be downloaded from: <https://www.raditeq.com/softwareupdate>

To ensure successful updates, it is important to verify the proper connections of plug-in cards and ensure that the instrument is powered on.

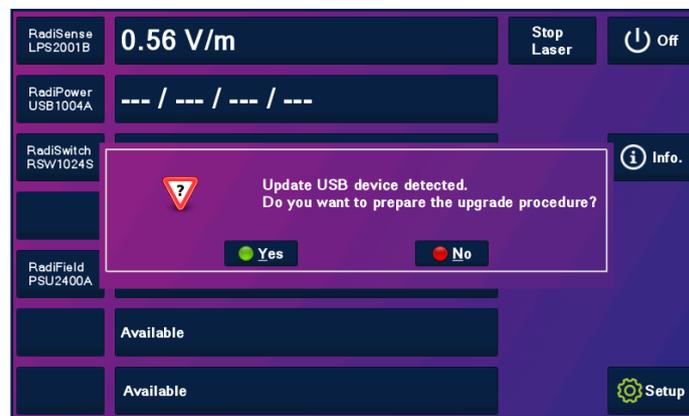
Specifically, in the case of the RadiSense® related updates, it is necessary to have the RadiSense® Probe connected and the LASER turned on. If the LASER is not turned on both devices cannot be updated.

How to install/update the RadiCentre® firmware

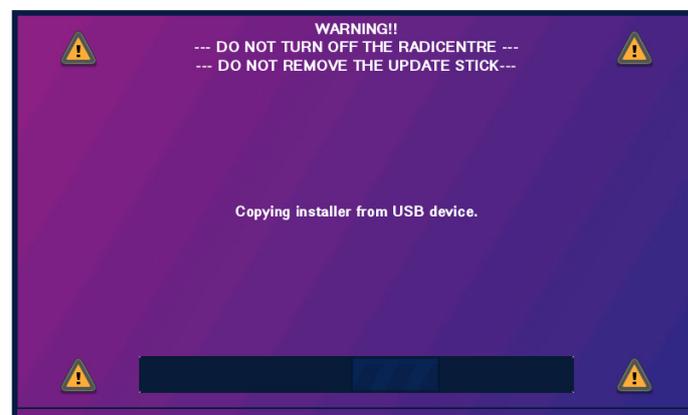


Caution: It is crucial to maintain the operational state of the RadiCentre® during the following process by refraining from turning it off, unplugging it, or restarting it. Only after the update has been successfully installed the RadiCentre® may be powered off or restarted.

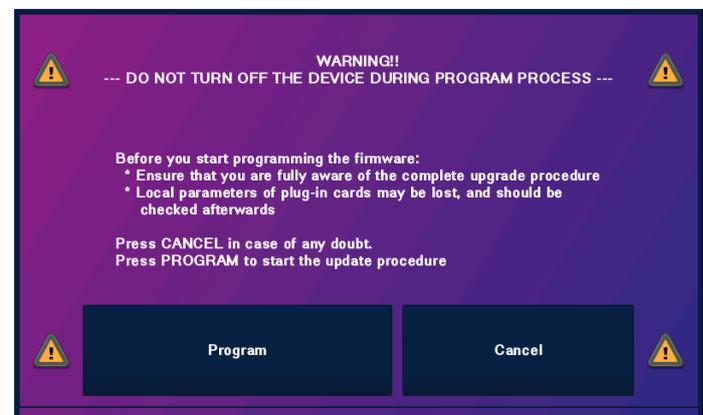
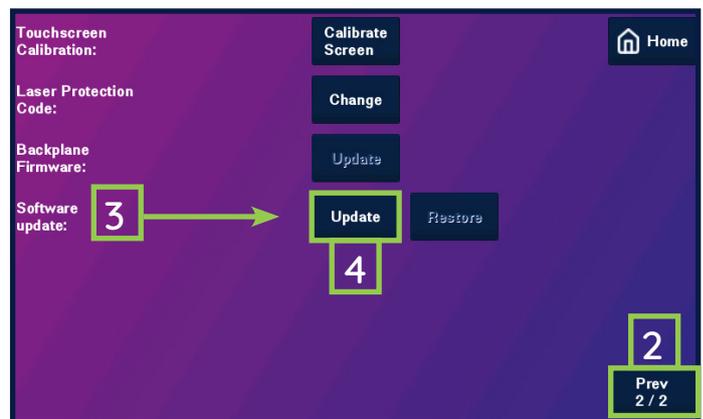
1. Start by downloading the latest incremental update from the official Raditeq website at: <https://www.raditeq.com/softwareupdate>.
2. Transfer the downloaded incremental file onto a fat-32 formatted USB stick, ensuring that it is the only file present on the root of the USB stick.
3. Insert the USB stick with the incremental update into the appropriate port of the RadiCentre®. A small box will appear on the RadiCentre® screen, prompting you to confirm the update.



4. Power on the RadiCentre® and patiently wait for the main screen to display.
5. Press 'YES' when prompted to load the incremental update onto the RadiCentre®, and allow sufficient time for the loading process to complete.



6. At this point, the RadiCentre® will present a list of devices that can be updated using the latest incremental update. Devices eligible for upgrade will be displayed in white text and can be selected by tapping on them. Multiple devices can be updated simultaneously. When updating a RadiSense® and/or LPS card, ensure that the LASER is turned on.
7. If the Update menu is not visible or closed, it can be accessed through the following steps on the RadiCentre®:
 - 1. Go to Setup.
 - 2. Navigate to Page.
 - 3. Select Software update.
 - 4. Choose Update.



8. Select the device(s) to be updated and click the update button.
9. It is important to refrain from removing the USB stick or turning off the RadiCentre® during the installation process to prevent potential malfunction.
10. Once the installation is completed, the USB stick can be removed. Your devices have now been successfully updated!

Golden Disk Installation

The Golden Disk is an installation that upgrades the software of the RadiCentre. These upgrades are significant and crucial for the performance of the RadiCentre. Due to the size and importance of these upgrades, updating the RadiCentre itself requires a separate file and installation method, distinct from regular software updates.

Before the golden disk can be used the golden disk needs to be created.

Downloading the Golden disk .IMG file

The golden disk comes in the form of an Image file. This image file is not directly usable and first need to be written on an empty USB memory stick.

Download the IMG file here: <https://www.raditeq.com/softwareupdate>

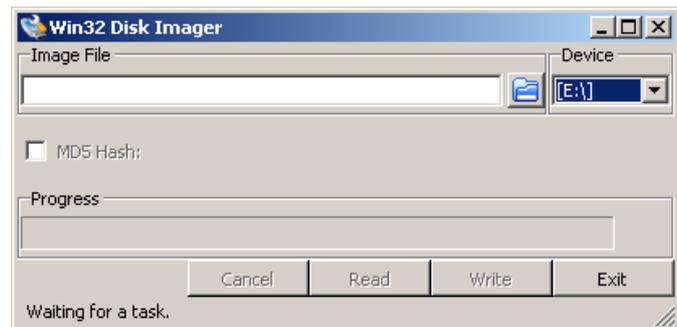
Select the latest Golden disk version and save the file to your PC. Now the creation of the golden disk can begin.

Creating a Golden disk USB stick

Download the program win32-image-writer from: <https://sourceforge.net/projects/win32diskimager/>

Unzip the files to a temporary directory or on desktop and start the program.

1. Select the correct the device (USB) under the device. **(MAKE SURE THE USB stick IS EMPTY!)**
2. Select the image file that has just been downloaded, you are creating a new one so type in the name, e.g. the version or golden disk.
3. Press 'write'
4. The image file is now created on disk.



Installing the golden disk on the RadiCentre

1. Installing a golden disk update will reset your RadiCentre® to the default options of the system. Therefore please write down information that is important to the current setup such as, the IP & GPIB configuration parameters.
2. **Ensure RadiCentre is turned OFF:** Make sure that the RadiCentre device is powered off before proceeding with any further steps.
3. **Insert the USB stick:** Insert the USB stick into the USB slot on the RadiCentre device.
4. **Boot or Start RadiCentre:** Turn ON the RadiCentre device to initiate the boot or startup process. This action will trigger the upgrade or restoration process to the Golden disk version of the RadiCentre.
5. When the installation is completed the RadiCentre will restart. A touchscreen calibration screen will be shown. Follow the instructions on the screen.
6. Reconfigure the IP and GPIB configuration. Also re-enter the slot labels if applicable.

Following these steps results in the installation latest golden disk has been on your RadiCentre® Unit.

Troubleshoot USB Detection Issue (If Necessary):

If the RadiCentre does not start normally, it may indicate that the USB key is not detected. This means that: the USB key was not correctly installed/written. Or that the USB key is corrupt or the USB connector is broken. Contact your local reseller for more information.



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