

Product FAQs

Trimble Geospatial Division

1 March 2023

Trimble EM940 Frequently Asked Questions

Installation

Can I install the Trimble® EM940 Empower radio module while the device it is to be mounted to is powered on?

It is strongly recommended to power off the device prior to installation, or removal, of the module. This will ensure that the proper start up sequences are done and the driver software is properly activated when the device is powered up. It is possible for the module to not be recognized by application software if the drivers are not properly activated.



How tight should the screws be tightened?

Snug. There is no specific torque value published. When the screw head bottoms out against the module housing, and the force increases significantly when trying to turn the screw more, it is tight enough. There should be no movement when you grip the module and wiggle it.

Do I need to run the Empower Hub when I have installed the module?

No. The Empower Hub software can be used to verify the installation, check the serial number and the firmware version number. The software can also notify you of available firmware updates. But, it is not required to be launched prior to using the module. There is an automatic process that will launch the appropriate driver when the module is installed.

What type of screwdriver should I use?

Any #1 Philip's head (crosstip) screwdriver will work. The current metal stylus included with the TSC7, TSC5, and T7 handhelds has an included screwdriver under the removable tip. Other kits come with a #1 screwdriver.

<http://surveypartners.trimble.com>

www.geospatialtrimble.com

My device has two Empower bays, does it matter which one I use?

No, it does not matter which bay you use. Use whichever one is more comfortable or convenient for you.

How do I get the radio configured and working?

Your application software is used to do all the configurations necessary and to activate the radio for use. Trimble Access™ and Trimble SiteWorks software are the primary applications to use. More may be added in the future.

Software

What is the Empower Hub software?

The Empower Hub software is installed at the factory on all Trimble devices that are equipped with Empower bays. It is used to verify the module is installed correctly, provide information about the module, and to notify you if there are firmware updates that can be installed. There is also a service that runs called “Empower Hub” that provides the program interface to the module so your applications can access the module.

What is a “Module Support Package”

The Module Support Package (MSP) is the driver software that enables the specific features in the Empower Module to be available to applications to use. Each Empower Module has its own, unique Module Support Package. For Android devices, the Google Play Store can be used to update versions. For Windows OS devices, access the Trimble Mobile Computing Solutions Portal to download new versions of the MSP. mcs.trimble.com

Radio Use

Which antenna do I use?

It depends on which frequency band you want to use. The antenna with a single white stripe on it is used with the 450 MHz band and the antenna with the two green stripes is used with the 900 MHz band. Use of the correct antenna for the band you are using is critical for proper operation of the radio.

Do I need a license to operate this radio

EM940 supports two separate frequency bands. In the countries where the 900 MHz band is allowed, it is all license free. The UHF band (410–470 MHz called the ‘450’ band) requires a license

for any transmitter. That means you do have to have a license and assigned frequencies to use for your base transmitter. However, the EM940 is a receive-only radio and therefore does not need a license.

How do I know if the 900 MHz band is legal in my country?

In your application software when you configure the EM940 radio for use, the software will prompt you to select your region. If it is legal in the selected region to use the 900 MHz band, then there will be an option to configure that band. If it is not legal, then those options will be disabled and you will not be able to use them.

How do I set my licensed UHF channel frequencies?

Your application software will provide an interface for you to enter your channel frequencies.

Do I have to reenter my UHF channel frequencies?

The EM940 stores the entered frequencies in its internal memory. You should not need to reenter the frequencies once they are stored the first time. You can remove the module and reinstall it and the frequencies will still be there.

General

Where can I find replacement parts like new antennas?

Your local dealer carries replacement parts. Check the EM940 Product Bulletin for part numbers.

Should I leave the module installed if I am not using it?

You can leave the module on the device if you desire. It will use a small amount of power while attached and not in use.

Do I need to install a license to unlock the module functionality?

No additional licensing is required to access the module's features.