

1 June 2012

Trimble 450MHz Radio Systems (USA Only)

Federal Communications Commission (FCC) Narrowbanding Requirement

The Federal Communications Commission (FCC) has dictated that on 1 January 2013 all radio users transmitting data between 421 and 512 MHz within the United States must operate within 12.5 kHz channel spacing or transmit using the bits per second (bps) setting of 19200 bps when using 25 kHz channel spacing.

Note: *If your radio system is currently using and/or capable of using 12.5 kHz channel spacing, then there is no requirement to contact the FCC regarding your existing license(s), as long as you have a valid license and operate within the narrowbanding strictures.*

Applying for a 25 kHz FCC License (USA Only)

In the event that your radio system is not capable of 12.5 kHz spacing, you must transmit at 19200 bps on a 25 kHz channel. To continue transmitting at 19200 bps with 25 kHz channel spacing, you must renew or modify your current license or apply for a new license using the FCC's Universal Licensing System (ULS) Service at <http://wireless.fcc.gov/uls/index.htm?job=home>. Alternatively, you can pay a licensing agency to apply, renew or modify your license. In either case you must perform a special step within the process (described below) to continue using 25 kHz channel spacing.

Note: *If your radio system is only capable of 25 kHz channel spacing and does not have a wireless mode that allows 19200 bps, then you must contact your local Trimble distributor for a replacement radio system.*

Before starting the application process for license renewal or modification, you should gather the following information on your license:

- Your FCC Registration Number (FRN)
- Your FCC Call Sign(s)
- The password associated with your FRN

Your FRN and call sign(s) are printed on your license. If you have forgotten your password, the FCC website has a way of retrieving it (<https://esupport.fcc.gov/password.htm>).

Application Procedures (25 kHz US Only)

1. Go to the FCC ULS website at: <http://wireless.fcc.gov/uls/index.htm?job=home>.
2. Once you are on the ULS website, you can click on the **LOG IN** button.

Note: *If you have not registered with the FCC on the ULS website, you will need to click on the REGISTER button and complete the registration process with the FCC.*

This document is for informational purposes only and is not a legally binding agreement or offer. Trimble makes no warranties and assumes no obligations or liabilities hereunder.

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3. Enter your *FCC Registration Number* and *Password*, then click on **SUBMIT**.
4. You are now at the FCC License Manager website, click on the appropriate link on the left margin of the page under the heading **My Licenses**.



5. Renewing or modifying a 25 kHz license or applying for a new 25 kHz license requires that you take a special step. On the **Application Information** page of the ULS site, you should check the answers as shown in red below and make sure to check **Yes** for the question “*Are attachments being filed with this application?*”

6. Create a Word or Notepad document with the following statement:

Operation complies with the narrowband equivalent efficiency standards under Section 90.203(j)(3) in that it supports a minimum data rate of 4800 bits per second per 6.25 kHz of channel bandwidth.

7. In addition, the attachment must include your radio’s FCC ID number, which will enable the FCC licensing staff to confirm that your radio operates in the narrowband-equivalent mode. The FCC ID number is printed on all Trimble radios or Trimble products with a radio. The FCC ID number is typically found on or near the product part number and serial number label. Or you can use the following table to determine your FCC ID number:

Model	FCC ID Number
HPB450	KEAPDL4535
PDL450/PDL450 Fixed	KEAPDL4520225
TRIMMARK III	JUP-9414-450
TDL450H	KEAADLP
TDL450L	KEAADLV
R4 (All)*	KEATNL450I
R6 (PN 60275-6x)*	ESMDS-TRM450
R6 (PN 60775-6x)*	KEATNL450I
R6 Model 2 (PN 73206-6x)*	KEATNL450I
R6 Model 3 (PN 84882-6x)*	KEATNL450I
R8 (PN 50158-6x)	ESMDS-TRM450
R8 Model 2 (PN 60158-6x)	ESMDS-TRM450
R8 Model 2 (PN 60250-6x)	KEATNL450I
R8 Model 3 (PN 67250-6x)	KEATNL450I

*These receiver/radio products are sold as receive only. If you have upgraded your product with the “UHF Transmit” option, and using it as a Base with channel spacing set to 25 kHz and wireless mode at 19200, you will need to update your license.

Checking the channel spacing of your current FCC License

If you are unsure whether you are currently licensed for 12.5 or 25 kHz channels, click **View Complete License** near the bottom of the page.

Find My Licenses [View Complete License](#)

Call Sign:

Don't See Your Licenses Here?

It's possible that your licenses have not been associated with your FRN. In order to manage a license using the License Manager, you must first [associate the license with your FRN](#).

[FCC](#) | [Wireless](#) | [ULS](#) | [CORES](#) | [Paying Fees](#)

Federal Communications Commission
445 12th Street SW
Washington, DC 20554

Then click the **Frequencies** tab on the **Complete License** page and then click the **Emissions** tab (see arrow below):

MAIN		ADMIN		LOCATIONS		FREQUENCIES		
Call Sign: <input type="text"/>				Radio Service: <input type="text"/>				
14 Frequencies for all locations 20 Frequencies per Summary Page				Filter Frequencies By Location: All Locations <input type="button" value="GO"/>				
[SC] = Special Condition [TP] = Termination Pending				Define View: General Buildout COSER Emission IRAC				
Frequency	Loc#	Ant#	Freq ID	Station Class	Units	Paging Rec.	Output Power	Maximum ERP

The first few characters in the emission designator code include a “K” that is surrounded by some numerals. Substitute a decimal point for the K and you have the maximum occupied bandwidth your license allows (in kilobits per second). If this number is less than 11.5 kbps, you have a narrowband license and must transmit in 12.5 kHz channels. If it is more than 11.5 kbps, you have a wideband license and after 12/31/12, you must transmit in 12.5 kHz channels or in 25 kHz channels but with a radio link rate ≥ 19200 bps.