Summary: The three most common problems reported when updating the 4000SSI receiver firmware version 7.21 and greater are: (1) the message, *Gauss based receiver, do not attempt to upgrade*, will be displayed; (2) the message, *Update Not Authorized*, will be displayed; and (3) your receiver will not respond to the UPDATE program, even though your serial numbers are in the *Serials* file. This TIP includes instructions for troubleshooting each of these problems.

1 What Are the Most Common Problems Reported When Updating the Firmware Version 7.21 and Greater?

The following are the three most commonly reported problems when updating the 4000SSI firmware version greater than 7.21 (i.e., versions 7.22, 7.23, and 7.24):

- The message, *Gauss based receiver, do not attempt to upgrade*, will be displayed (see section 2, below).

- The message, *Update Not Authorized*, will be displayed (see section 3, below).

- Your receiver will not respond to the UPDATE program, even though your serial numbers are in the *Serials* file (see section 4, below).

2 What to Do if You Get the Message, *Gauss Based Receiver, Do Not Attempt to Upgrade*

This problem occurs because the program that updates the 4000SSI firmware mistakenly identified the receiver as a Gaussed-based receiver, such as the original versions of the 4000SE receivers. To solve this problem, put the receiver in *Remote Monitor Active* status before you update the firmware by doing the following steps:

a. Turn off the receiver's power.

b. Hold down the "$^{MNO}5$" and "$^{PQR}6$" alphanumeric keys.

c. Turn on the power. The receiver will the display the following:

```
PPU Version 3.34   Apr 26 94

REMOTE MONITOR ACTIVE
```

d. Begin the update procedure from your PC.

3 What to Do if You Get the Message, *Update Not Authorized*

You may get this message after you start the UPDATE program. This problem occurs because the receiver's serial number is not in the binary encoded file, LOADER.BIN. To verify this problem, use the last five digits of your receiver's serial number, edit the file, SERIALS.XXX (where XXX is the firmware version number, e.g., 721), and check whether the serial number appears in this file. Sometimes these two files become out of sync and your serial number will appear in the SERIALS file rather than in the LOADER.BIN.

To resolve this problem, download and check the file, LATESTxxx.EXE (where xxx is the firmware version number, e.g., 721). If you need assistance resolving the problem, contact Trimble Customer Support (see section 3.2, below). The LATEST file contains serial numbers that were added to the LOADER.BIN file. When

serial numbers are added, you only need to download the updated LATEST file rather than all the update program files.

If your serial number is not in the LATEST file, go to section 3.2, below. If your serial number is in the LATEST file, go to section 3.3, below.

3.2 What to do if Your Serial Number Is Not in the LATEST File

If your serial number is not in the LATEST file, contact Trimble Customer Support. After verifying your firmware support agreement or other authorized firmware update, a Technical Support Representative will arrange to send you a new LOADER.BIN file via the Trimble FTP site.

There are four ways to contact Trimble Customer Support in Sunnyvale, California:

- e-mail: Trimble_Support@Trimble.com
- FAX: (408) 481-6020
- Tel.:   (800) SOS-4TAC (U.S. and Canada)
- Tel: (408) 481-6940 (outside U.S. and Canada)

We highly encourage you to submit inquiries by e-mail or FAX, as these can be handled the most quickly. Inquiries received by e-mail, FAX, or voice-mail after our business hours will be handled immediately the next business day.

When you contact Customer Support, please include the following information:

- The Trimble product name(s), any software or firmware version number(s), and if appropriate, the serial number(s).

- Your specific question or problem. Please include background information, such as the configuration of your datalogger or receiver, or the exact type, make, and configuration of your computer. If you have received an error message, please include the exact wording.

3.3 What to Do if Your Receiver Will Not Respond to the Update Program Even Though Your Serial Number Is in the LATEST File

This problem may occur because the 4000's serial port became hung up for one reason or another. In this case, perform a reset on the receiver, and then attempt to update the firmware.

To perform the reset, hold down the green [CLEAR] and [LOG DATA] keys and turn on the receiver. For details on this procedure, see page 233 of the *Application Guide* for the receiver and/or see the Trimble TIP, *How to Do a Hard Reset on a Series 4000 Receiver*.