



What to do... Problems Connecting After Updating GV 56K or V.90 PC Card to ROM 2.200

Introduction:

This document provides information about what to do if you've updated your Global Village GV 56K or V.90 PC Card modem to the ROM 2.200 firmware version and have problems maintaining a connection to your Internet Provider or other online service. If you use OT/PPP or other communication software that reports the error message "Communicating at an Unknown Rate," download document #2331, "What to do... OT/PPP Reports 'Communicating at an Unknown Rate'." If you use a TelePort Flex/V.90 or X2 modem and have problems connecting after updating your modem to the 2.200 ROM (Flex/V.90) or V.90 ITU standard (X2) then download the appropriate document from the **Online Support Tips** section of the index.

Your Internet Service Provider (ISP) or other service may be using a version of V.90 server software that is older than the V.90 firmware your modem was updated with. Or you may be using a dial up number that uses server equipment not yet updated to the ITU V.90 standard. Before troubleshooting, do the following:

- Check with your ISP to be sure your modem is connecting to V.90 compliant equipment
- Try using an alternate V.90 dial-up telephone number (if available)

If you still have problems connecting, then read on.

1. In order to complete the steps, you will need to identify which modem you have by its serial number. The serial number is located on the bottom of your PC Card modem on a sticker next to a bar code.

See Example 1.

PB32J7X0



Example 1

Use the serial number/modem type table below to identify your modem. Once you've identified your modem type, follow the appropriate instructions.

Modem serial number begins with...	Modem Type
P	K56Flex
G	V.90

NOTE: Some of the following instructions below are of a general nature. If you need specific assistance with your communication software, please contact the manufacturer of that software for support.

2. **K56Flex:** If your modem connected fine prior to updating it to 2.200, then you will need to use the **PC Card_K56_ROM_Update3** updater located on our website at <http://www.globalvillage.com/> under the Software Locator to “backflash” your modem to a previous version of firmware.

Once you have download and launched the updater program, click on the Change to K56Flex button in the lower right hand corner. This will change the firmware in your modem from version 2.200 back to the K56Flex firmware version 1.201. If your modem had previously been updated to firmware version 2.085 and connected fine, then after flashing it to Flex, click on the **Change to V.90** button to flash it back up to firmware version 2.085.

V.90: Because V.90 modems have 2MB chipsets holding both the V.90 and Flex protocols, they can't be "backflashed" to their shipping version of firmware, 2.061. Also, because firmware version 2.200 aggressively attempts to make a V.90 connection first (whereas 2.061 attempted a Flex connection first), the modem must be told to attempt a connection first using the K56Flex protocol. The AT command **+MS=56** must be added at the end of the communication software's (e.g. OT/PPP, FreePPP or AOL) initialization string. An example of a complete initialization string with the +MS command added might look like this: **AT&F1W2+MS=56**

NOTE: If you use a GV V.90 PC Card and OT/PPP or Apple Remote Access, then you can download the **GV V.90 Flex Preferred** script from our website at: http://www.globalvillage.com/support/Flex_Preferred_script.html.

3. Try using your modem with your communication software again. If your modem can now successfully connect at 56K speeds*, then continue using your modem as instructed above. If you have “backflashed” your modem or configured your communication software using the workaround AT command and still cannot make or maintain a connection or cannot connect at 56K speeds* (whereas your modem could connect at 56K speeds prior to updating it to ROM 2.200) then we believe your modem is defective you should repair or replace your modem.

*56K connection speeds are defined as any speed above 33600.