

## SERVICE BULLETIN

Land Mobile Division

SUBJECT: TK-250 &amp; TK-350 Firmware Update Procedure

DATE: 10/25/95

Current microprocessor technology used in the TK-250 & TK-350 is "Flash ROM". This allows the radio operating firmware (essentially, the radio "personality") to be updated through the same port used for radio data programming. Opening the radio and replacing parts (as was required in older designs) is not necessary. All that is required is a floppy disk which contains the firmware file, and the programming cable & computer that is normally used to program the radio. Be careful during firmware programming for the TK-250/350 in that the TK-250/350 firmware is not compatible with that used by the TK-353.

When a firmware update is made available, the following information can be used for installation.

Read the radio programming with the KPG-23D then check "Edit", "Feature Options". Set "main programming" to "Enable", then re-program the radio.

Exit the KPG-23D program, then place the firmware disk in the computer floppy disk drive. Select that drive, then type: "PROGRAM 1" <ENT>; where 1 corresponds to the COM port that the programming cable is plugged in to (i.e. "PROGRAM 1").

File Model	Edit	Feature option	F1=Help
Basic 32ch	Test Key s Scan Featu Embed	Time out timer : [ 60]sec	File:KPG23D.V1B
P Ch		Power save : [Off ]	
No Receive		power on tone : [Yes]	
1		Control tone : [Yes]	
2		warning tone : [Yes]	
3		sel.call alert tone : [Yes]	
4		sel.call alert led : [No ]	
5		Dtaf encode sidetone : [Yes]	
6		Busy led : [No ]	
7		close : [Disable]	
8		test mode : [Disable]	
9		self programming : [Disable]	
10		main programming : [Disable]	
11		2-tone decodes...	
12		dtmf decodes...	
13		dtmf Encodes...	
14		dtmf prestored number...	
15			
16			

Arrows:Move Space,F2:Sel Alt:Abort Esc:Main

Busy Shift ←

The following screen will appear on the computer:

```
TK-250/TK-350 Operating Software Update

Prepare KPG-8/KPG-22 and the transceiver to be updated as follows:

1. Connect the KPG-8/KPG-22, Programming Interface Cable, to the Computer
   the same way as you would for transceiver programming.

2. Connect the KPG-8/KPG-22 to the transceiver.

3. Press and hold LAMP & SCAN key while turning the transceiver on.
   Hold the LAMP & SCAN key for 2 seconds.

4. Release the key. The display indicates blinking "PROG".

Ready to perform the radio software update.
Press any key to continue . . .
```

**NOTE:**  
With "main programming" enabled, the firmware revision in the radio can be verified by performing steps 3 & 4 **only**; then pressing the TA key. After viewing the revision, turning the radio off, then on, will restore normal operation.

Press the enter key. The computer screen will indicate that data is being sent to the radio. When completed, the computer will indicate: "Update Complete. Confirm the LCD displays "nnnn" and the TX LED is ON." (The "nnnn" will be the checksum for the firmware which is now in the radio.)

At this point, the firmware update is complete and the radio can be checked then returned to the customer. It is recommended, however, that "main programming" under "Feature Options" in the KPG-23D be re-programmed as "Disabled" before returning the radio to the customer.