

SERVICE BULLETIN Land Mobile Division

SUBJECT Programming New 30-Series Radios	DATE 9/23/93																	
<p><u>First Time Programming - All 30-Series Models</u> During initial programming of new, out-of-the-box 30-series models, an error message of “Model Type Mismatch. Overwrite OK?” is likely to occur during programming. This is a result of the Quality Control test program in the radio not containing any model information. When this error message occurs, simply reset the radio to the program mode, select “OK” on the PC, and press return.</p> <p>Please note that if the radio configuration or channel/ alphanumeric is changed at a later date, the error message will appear again; due to any difference between the original and the newer configuration. When this occurs, verify that the model selected on the PC program matches the (new) radio configuration and overwrite the new model type as described above.</p> <p><u>Dual Head Models</u> When programming a 30-series radio in the “Dual Head” configuration, with alphanumerics installed, it is necessary to write the information to the radio twice. This will insure that both control heads receive the model and alphanumeric information. Head #2 will not enter the program mode. Once the radio (via head #1) has been programmed, reset it to the program mode, and select “Write to radio” on the PC again.</p> <p><u>The Radio Display During Programming</u> When writing data to the radio, the radio display changes from “PROGRAM”(in the KCH-4) or “PG”(in the KCH-3) to the available memory of the radio, counting down as it is programmed. The starting number while counting down indicates the channel or alphanumeric capacity of the radio. When programming is completed, the radio will indicate “END”(on the KCH-4) or “EN”(on the KCH-3). The starting numbers which should be displayed for the different radio combinations are as follows:</p> <table border="1" style="margin-left: auto; margin-right: auto; border-collapse: collapse;"><thead><tr><th style="text-align: center;">Front Panel</th><th style="text-align: center;">Starting Display</th><th style="text-align: center;">Radio/Memory Combination</th></tr></thead><tbody><tr><td rowspan="4" style="text-align: center; vertical-align: middle;">KCH-3</td><td style="text-align: center;">4K</td><td style="text-align: center;">32 channel basic - no alphanumerics</td></tr><tr><td style="text-align: center;">16K</td><td style="text-align: center;">99 channel basic - no alphanumerics</td></tr><tr><td style="text-align: center;">8K</td><td style="text-align: center;">32 channel - with alphanumerics</td></tr><tr><td style="text-align: center;">20K</td><td style="text-align: center;">99 channel - with alphanumerics</td></tr><tr><td rowspan="2" style="text-align: center; vertical-align: middle;">KCH-4</td><td style="text-align: center;">8K</td><td style="text-align: center;">32 channel basic - alphanumeric</td></tr><tr><td style="text-align: center;">32K</td><td style="text-align: center;">160 channel - with alphanumerics</td></tr></tbody></table>		Front Panel	Starting Display	Radio/Memory Combination	KCH-3	4K	32 channel basic - no alphanumerics	16K	99 channel basic - no alphanumerics	8K	32 channel - with alphanumerics	20K	99 channel - with alphanumerics	KCH-4	8K	32 channel basic - alphanumeric	32K	160 channel - with alphanumerics
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<p>If a “Check Connection. Retry or Cancel?” error occurs after programming has begun and the display is counting down, double check to make sure that the model selected on the PC matches the radio. A check connection error under these circumstances would indicate that the model and programming selected on the PC exceeds the available memory that the radio is equipped with; and one or the other must be changed accordingly.</p> <p style="text-align: right;"><i>continued on other side.....</i></p>																		

Please note that the jumpers associated with the channel or alphanumeric expansion instruct the microprocessor what the memory complement is, and where to begin counting down from. Any time that the radio memory is changed, the associated jumpers (KCH-3:R18, KCH-4:R33, & radio control unit:R156) must be correctly selected in order for programming to occur successfully.

KCH-3				KCH-4			
32B*	99B	32A	99A	32F*	160F		
Y	N	Y	N	Y	N	IC109 (on control unit)=X24C04PI	Only in "radio 1" in dual band configurations
N	Y	N	Y	N	Y	IC109 (on control unit)=X24C16PI	
Y	N	Y	N	Y	N	R156 (on control unit) installed	
N	N	Y	Y	N/A	N/A	IC3 (in KCH-3) = X24C16PI	In both control heads in dual head configurations
Y	Y	N	N	N/A	N/A	R18 (in KCH-3) installed	
N/A	N/A	N/A	N/A	Y	N	IC3 (in KCH-4) = X24C04PI	
N/A	N/A	N/A	N/A	N	Y	IC3 (in KCH-4) = X24C16PI	
N/A	N/A	N/A	N/A	Y	N	R33 (in KCH-4) installed	

*="BASIC" (initial configuration before channel/alpha expansion)

Reading Radio Programming Information

The radio model type information is used to identify and translate the programming information into a format compatible with the radio microprocessor. Since the test program contained in a new-out-of-the-box radio does not contain model type information, it is impossible for the KPG-7D to translate; and therefore read the radio. If attempting to read a new radio, which has not yet been programmed, the error message "**Model Type Mismatch. Retry or Cancel?**" will appear. The new radio must first be reprogrammed to include the model type information before it can be read using the KPG-7D. If one of the components which affects the radio model type is changed, the radio must be reprogrammed accordingly so that the radio microprocessor and KPG-7D can properly read and translate the programmed data.

SUMMARY

To program or read the radio, first place the radio in the program mode. Hold KEY 1 and turn the radio on. Release KEY 1 when "PG"(KCH-3) or "PROGRAM"(KCH-4) appears.

To re-enter the program mode after "EN"(KCH-3) or "END"(KCH-4) is displayed, press KEY 2 momentarily (without turning power off). "PG" or "PROGRAM" will then re-appear in the radio display.

To clear an error message on the radio display if it occurs during programming or reading, press KEY 2 momentarily (without turning power off). "PG" or "PROGRAM" will then re-appear in the radio display.

