
LAND MOBILE PRODUCTS SECTOR PSB # 730-A 1301 E. ALGONQUIN RD APC # 388/398/684 SCHAUMBURG. IL 60196 EXPIRES: N/A (708) 576-0180

Subject: 900 MHZ MSF5000 AUDIO ISSUES AND SPECIAL ALIGNMENT PROCEDURE

MODELS AFFECTED: C65/85 GFB7206/5203AT

In some areas within PSB730 there is a possible negative side affect from doing the corrective action listed for fixing the noise present on transmit signal.

The noise present on transmit signal issue relates to **ÓÑÉÑÍÑÕÑÌÑÑÁÑÑÓÑÕÑ ÒÑÕÑÁÑÕÑÉÑÌÑÎÑÕÑ ÌÑÎÑÎÑÛÑÎÁ** Do not perform the fixes outlined in PSB730 or this addendum PSB730A on stations that are not **ÓÑÉÑÍÑÕÑÌÑÑÁÑÑÓÑÕÑÎÁ**

In PSB730 the instructions tell you to clip pin 3 of U831 on the station's secure station control board (SSCB) to block a noise path. In simulcast stations there are several unused paths that get removed from the circuit when pin 3 of U831 is removed, but one signal path that may be needed is also removed--the PL encode audio path. This path is used to inject an internally generated 10 HZ square wave, used in some systems during the mod comp adjustment. If you use the 10 HZ square wave for alignment of the system, **ÄÑÌÑ ÎÑÌÑÕÑ ÄÑÌÑÉÑÐÑ ÐÑÉÑÌÑ óÁ ÌÑÆÑ ÕÑøóÁñÁîÁ** Instead, you can remove resistor R8108 on the SSCB. This will keep available the PL encode audio path while removing all prior circuitry.

If you use a dynamic signal analyzer to make your station/system alignments you generally do not use the internally generated 10 HZ square wave and pin 3 of U831 can be safely removed. However, it still may be best to remove R8108 instead of clipping pin 3 because the station may someday need the internally generated 10 HZ square wave for alignment. Also, before clipping any pins or removing parts you should try to bring all unused EEPOTS in the transmit audio path to 00 (typically EEPOT 4 and possibly EEPOTS 7 and E) along with making sure the line 2 cancellation jumper (JU4205) on the TTRC board is set correctly. An incorrect jumper setting can result in feedback-generated noise.

All 900 mhz simulcast systems should be checked for these problems, as they can cause significant customer dissatisfaction. Please contact product services for a special labor authorization to cover warranty charges by referencing this psb #.