

PRODUCT ADVISORY LETTER NO.: CF46-99003A

DATE: 7/15/99 (revised 8/5/99)

AFFECTED PRODUCT(S): TCF-10B Receiver units with the Self-Adjusting Receiver (prior to 7/9/99) and Logic Module (shipped prior to 2/22/99).

AFFECTED MODULE(S): FSK Receiver/Disc module (style # - CO20-RXVMN-202), RCVR Logic module [CF20-RXLMN-001 (2 Freq) Version PLCLOB04, or CF20-RXLMN-002 (3 Freq) Version PLCLOA04]. The label on the RCVR Logic module's integrated circuit U15 denotes this as PLCLOB rev 4 and PLCLOA rev 4 respectively.

PROBLEM(s) corrected by Receiver Firmware Version 2.60 and Logic update:

- 1. The carrier level meter and indicating lights may occasionally discontinue indicating a signal. This may be reset by either pushing the "SET" button to enter the user programming function of the unit, then canceling out or by turning the unit off then back on again.
- 2. The TCF-10B Receiver (CO20-RXVMN-202) noise clamp has a drop out time of 50 ms. When coupled with the Logic Card (CF20-RXLMN-001 or CF20-RXLMN-002), the unit may incorrectly block for extensive periods when a trip is being called for under certain noise conditions. The Logic Cards shipped prior to 2/22/99 had a guard before trip timer of less than 60 ms.

PROBLEM corrected by Firmware Version 2.70:

1. When utilizing the external Carrier Level Output driving circuit, some units experience a drop in the dB reading of the external meter when depressing the "SET" button for final installation.

RECOMMENDATION: - Pulsar recommends the corrective action listed below be taken for **ALL** CO20-RXVMN-202 Receiver modules and CF20-RXLMN-001 and CF20-RXLMN-002 Logic modules shipped prior to the date listed above. Please also see PAL - CC46-99002 for the TC-10B Receiver module.

CORRECTIVE ACTION: Call Pulsar at phone # 800-785-7274 to discuss plans to upgrade your modules that best suit your schedule and method. Attached is a listing of your orders that, according to our records may be affected by this problem. We recommend that you verify the completeness of this list to be sure all affected units are upgraded. If you have not experienced the problem #3 listed above, or are not using an external meter to monitor carrier level AND have upgraded to Firmware Version 2.6, it is not required to upgrade to Firmware version 2.7.

TECHNICAL DETAILS:

- 1. The receiver input can be influenced by transients that propagate on the coax cable. This can cause the Carrier Level Indicator to blank out and may shut down the receiver. To eliminate this susceptibility, the Receiver Module Firmware has been updated.
- 2. The noise clamp acts as a means to prevent false tripping due to noise. For a directional comparison unblock system, it is more desirable that this be shorter, allowing for increased dependability of the system. Therefore with the switch setting SW1-3 set to "ON', the noise clamp dropout is reduced to 10 ms. The switch should be set "OFF" in Direct Transfer Trip Applications, extending the dropout delay to 50 ms for a more secure system. This addition coupled with the updated EPLD (electronic programmable logic device) on the logic module, will correct this problem. The updated EPLD changes the guard before trip timer to be approximately 120 ms. In a three-frequency system, the receiver SW1-3 should be set "ON" and the Logic Module CF20-RXLMN-002 should be Version PLCLOA05 to accommodate both the Unblock and DTT noise requirements.

Pulsar Technologies appreciates your past support. We want to continue to provide you the best service possible. Please help us by letting us know if future notices should be sent to another individual.

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