Radio Communication Products

Fechnical Support

27Dec 2000 7030bp123

AR7030

Subject. Failure to power down once battery option fitted.

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We have had one report of an AR7030 failing to power down from the front panel when using a BP123 battery option. The fault shows various symptoms, when switching the set off, it may switch itself back on again after a couple of seconds or at worst, lock up completely. This does not occur when the normal power supply is used with the set.

The problem appears to be confined to newer sets.

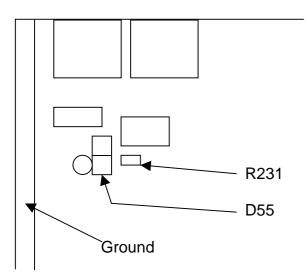
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Older sets have no problem regardless of the age of microprocessor fitted. Newer sets appear to be OK with 12A microprocessors (an unlikely situation) but may display the problem with 14A, 16B and 18B versions.

The problem appears to be due to the switch off delay (or its decay) time of the 5V line supplying the microprocessor. No changes have taken place with the programmed delay time, so differences must be due to manufacturer changes or tolerance differences within components in later sets. Different micro batch codes may also be a factor.

The problem can, however, be easily overcome by the addition of a small delay in the supply switching control line. This is done by the addition of a 22uf capacitor between the junction of R231 / D55 to ground.

R231 is located close to the battery connector, J11, just in front of relay, RL5. Connect capacitor between end closest to D55 and any suitable ground.



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