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## AR7030 technical bulletin 006

## Pre amp instability

It has been found that on a small number of units that the pre-amp has a tendency to "take off" and oscillate. The pre-amp is active in the +10dB, -10dB and -30dB ATT positions and the symptoms will appear in any of these settings. The symptoms will manifest themselves with varying degrees of severity. In extreme cases they will show as very unstable heterodynes all the way up and down the band, sometimes the pre-amp will only be excited into oscillation by strong input signals and at other times the problem will only be noticed by an abnormal increase in background noise level when the pre-amp is switched on.

The cure for this problem is very simple and involves the fitting of a 47R resistor in series with the base connection of the pre-amp transistor. The pre-amp transistor is a metalled can device Q16 located near the right hand side of the set close to the front end filters and switching relays. The modification is carried out on the underside of the main board by breaking the track to the base connection of Q16 and inserting the 47R resistor as shown in the diagram below.



This modification should be carried out on a case by case basis, it is incorporated into all production units from March 1997. If any problem persists with the preamp after completing the modification please contact us.

End