



TECHNICAL NOTE TN-1035

External interfacing to the TM8000 AUX_GPI inputs

15 June 2005

Applicability

This Technical Note applies to the TM8000 Mobile radios.

1. Interfacing

AUX_GPI interfacing

An issue raised recently was a failure of the protection diode D723 in the TM8100 Ignition Sense input circuit AUX_GPI3 (Pin 4).

Investigation of this has found the IGN_SENSE supply to Pin 4 can power the TM8000 if the +13v8 DC supply is lost (such as a blown fuse) and if the user subsequently transmits, D723 fails.

The suggested work-around here is to insert a 1K ohm ¼ Watt leaded resistor in series with the +13v8 Ignition sense supply (to Pin 4 in the D-range is easiest) and the vehicle ignition supply.

Fitting of the resistor will prevent D723 going short circuit under a fault condition where either the fuse blows.

This also prevents the radio getting its supply from back-feeding through the IGN_SENSE supply.

This fix also applies to AUX_GPI1 (Pin 12) and AUX_GPI2 (Pin 5) if they are used.

An update of the PCB to include a series 1K ohm in the AUX_GPI circuits will appear in the longer term with re-spins of the TM8000 Logic boards.

Compliance Issues

None.

CSO Instruction

Inform all technical and service staff of the changes to the TM8000 Hardware.

2. Issuing Authority

Name and Position of Issuing Officer

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Distribution Level

Associate.

Document History

Original Release	15 June 2005	GCB
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