

TCB Response

Subject: CS01349 TMC Radio Pty Ltd. FCC ID: SOJSRM9000AC TCB Findings

4. Some of the schematics files are labeled with "UW" as in the previous application, rather than "AC". Please verify this is correct and not a mix up between devices. If there are missing pages please supply them as well.

The SRM9000 schematic set consists of nine sheets.

Four of these sheets are frequency band dependent (numbers 4, 5, 6 and 7).

The other five sheets (2, 3, 8, 9 and 10) are common to all frequency bands.

Our reference set of schematics is based on our SRM900UW version and so the common schematics show the UW designation on those sheets.

5. The alignment procedure shows 1W and 5W power level options. If these will be used and requested to be on the grant of equipment authorization, then at least the RF power output levels must be measured with these power settings.

We only request approval for 25W power output.

6. Please specify the DC voltages and currents in the final RF amplifier stage of the device.

The DC voltage for the final RF amplifier stage is 13.8 volts nominal. The typical current for this stage is 4.0 amps.

7. Please clarify which document is the "technical product description" mentioned in the confidentiality request. Is this the "Service Manual"? If not please supply the document.

The technical product description is contained in Section 3 of the Service Manual.

10. Pg 19 Part 90:F1D-25kHz plot makes use of "Mask B". Please clarify why emission "Mask C" has not been used for this operation. Is this mode making use of audio low-pass filter?

F1D uses the same audio Low Pass Filter as used for speech.

The two FFSK data tones are in-band audio tones of 1200Hz and 1800Hz and are transmitted at 60% of peak system deviation.

Hence the use of Mask B and not Mask C.

13. Please specify the RBW and the VBW used for radiated and conducted spurious emissions tests both above and below 1GHz frequency.

Measurements have been carried out using a measuring receiver with the following bandwidths

Below 1000 MHz: Quasi peak detector with a 120 kHz bandwidth

Above 1000 MHz: An average detector with a 1 MHz bandwidth

14. In the transient frequency behavior plots for 12.5 and 25kHz channel spacing, during the "t2" of the turn-on plot, the device appears to exceed the maximum permitted frequency difference limit of 6.25 and 12.5kHz respectively. Also during "t1" of the turn-on and "t3" of the turn-off plots, the frequency difference appears to overshoot the screen and therefore exceed the limit. Please clarify.

This transmitter meets the transient frequency requirements for both 12.5 and 25 kHz channel spacing.

The plots display both the amplitude and frequency response of the device.

The green plot is the frequency response of the transmitter and it is this trace which provides the transient frequency behaviour information.

The black trace is the amplitude response of the transmitter and has been provided for information purposes only and should be ignored.

In future I will only provide the green trace and not the black one.

Hopefully a closer inspection will verify that only very small transient responses were observed as shown by the green trace.