Ritron Model(s):	DMR callbox RQX-417DMR mainboard
Current Firmware Revision:	9S1N4305
Revision Update:	05/27/2025

RQX-417DMR mainboard firmware revision history:

9S1N4305 released: 05/27/2025

9S1N4305 fixed a manufacturer auto test problem, which may lock up the unit after the power supply is switched from 12V to 4.5V. The lock-up reason is that the *00 reset command did not reset the DMR board reliably after the power supply was switched from 12V to 4.5V. The DMR board reset is implemented with a power off and on. The power off time is too short, and the power supply is not completely off before the power supply is switched back on. After the power off time is changed from 30ms to 108ms, this problem is solved.

This problem is seen only during manufacturer auto test; customers will not see a difference between 9S1N4303 and 9S1N4305.

9S1N4303 released: 12/15/2021

9S1N4303 support both MKL27Z128VFT4 and MKL25Z128VFT4 processors. on Rev B PCB, and external oscillator circuitry needs to be populated. The new firmware needs to work with Ver 1.0.8.01 or newer PC programmer.

9S1N4302 released: 02/21/2020

Update radio to support 3.125 kHz channel steps.

If programmed frequency has MSB set then 3.125 kHz channel steps are used, otherwise 6.25 kHz (UHF) and 2.5 kHz (VHF) channel steps are used.

3.125kHz VHF Frequency calculation = Dec2hex (((Frequency / 3.125 kHz) - 30,000) + 32768)

3.125kHz UHF Frequency calculation = Dec2hex (((Frequency / 3.125 kHz) - 125,000) + 32768)

All default radio programming will remain at 6.25kHz (UHF) and 2.5kHz (VHF) so that updated radios can use existing programmer.

Update slope calculations when 3.125 kHz channel steps are used.

Frequency Tables are updated as follows:

UHF Table Frequency 121 is invalid and no longer available

VHF Table Frequency 35 is added at 154.5475 MHz

VHF Table Frequency 36 is added at 152.9000 MHz

RQX-DMR User Manual to be updated to reflect these changes.

9S1N4301 released: 12/13/2017

Initial release.