



Response for Request for information (request sent 12/12/01) for

Re: FCC ID ARURPV516A

Applicant: RELM Communications Inc

Correspondence Reference Number: 21473

731 Confirmation Number: EA811923

1.) Please provide justification for Section 22.

Relm is requesting Part 22 Certification to be consistent with other similar products of theirs that they have certified over the years. For these types of products for Relm/BK Radio (Both Relm and BK Radio are related companies), they have always certified under Parts 22, 74, 80, and 90. One recent projects certified was under FCC ID: K95GPH51. This product is similar to the unit currently being certified.

2.) Provide a list of Channel Numbers and the corresponding Channel Frequencies that the device is capable of using under US operation? This should be a comprehensive list and may have to be furnished by the manufacturer. Section 80.203.

The RPV516A operates from 150 to 174 MHz and in 2.5 kHz and 6.25 kHz steps. See uploaded files for possible operating frequencies

3.) Please indicate compliance with Section 90.203, programming requirements. The end user cannot alter the frequencies or place the unit in program mode. The factory and authorized dealers can alter (program) frequencies by one of three ways:

- a. Using a PC and editor software.
- b. Cloning from radio to radio through a cloning cable.
- c. External hand held programmer that plugs into the side port of the unit.

4.) Please provide frequency stability for battery end-point.

An updated Frequency Stability file was submitted on October 26, 2001. The manufacturer considers 6.0 VDC to be the end point of the battery.

5) Which band did you submit, narrow or wide for Transient Frequency Behavior. Please submit Section 90.214 data for both deviation levels.

We have resubmitted data for both. Please see revised data.

6) The Audio Response plots you have submitted, on pages 22 and 23 of test report is not acceptable. Please send plots showing per Section 2.1047(a).

We have resubmitted data. Please see revised data.

7) Please submit low pass filter response per Section 2.1047(a).

[We have resubmitted data. Please see revised data.](#)

8.) Probe conversion factors used for muscle tissue SAR measurements. Certified conversion factors were only found for head simulating liquid in the posted exhibits. Please also provide a statement justifying any cases where the probe calibration was performed at different frequencies and with different tissue parameters than used for testing. Please include an analysis of the expected variation on the SAR value. Alternatively please provide new SAR data using a probe calibrated at corresponding test frequencies and with test tissue dielectric parameters

[See updated SAR files](#)

9.) Provide attestation statement that liquid depth was at least 15 cm for all tests. If available please provide Z-axis scan SAR data for the highest SAR test points.

[See updated SAR files](#)

10.) Recalculated SAR values and SAR plots for all test points using measured liquid parameters if possible without additional testing. Targets parameters were apparently used as noted on the provided SAR plots. If not possible please provide analysis showing the expected effects on the SAR values if the measured parameters had been used.

[See updated SAR files](#)

11.) Revised user manual to include warning/cautions statements (not "Important Information.....") to alert users that this device is not approved for use by the general population as it only meets the higher exposure limit for occupational use. It should clearly indicate that these specific requirements are for meeting FCC RF exposure compliance, therefore, it is not optional. The device is approved to operate in typical PTT mode not exceeding a 50% duty factor, as it would not comply with RF exposure limits at higher duty factors. The specific body-worn operating requirements, as tested, must be described to users for satisfying compliance. Other body-worn operating conditions that have not been tested are not approved for use with this device as they may not comply and should be avoided. It should also clearly state that users are required to have appropriate training to control their exposure condition and duration to satisfy the higher occupational exposure limit before using this device.

fore using this device.

[The EUT met with general/uncontrolled limits with 100% duty cycle. Please see updated SAR files for further information. We have provided an updated manual since the original one was preliminary.](#)

12.) A warning label for attachment to the exterior of the radio clearly warning any user of a radiation hazard and referring the user to the related operation training section in the manual.

[The manufacturer would like to know if this still necessary since the EUT meet with general/uncontrolled limits with 100% duty cycle as given in the SAR information. if it is still required, must this label be a permanent style label, or may this be a removable label from user once the unit is opened or used?](#)

13.) Please confirm weather or not there are other antennas used for this device.
No, there are no other antennas being used.