



Wednesday, November 07, 2001

Federal Communications Commission
Washington, DC

RE: Equipment ID: B3TG25RPV100

Dear Sir,

It has been brought to our attention that documents Datron provided in support of the certification process make reference to certain accessory items not certified as part of this filing.

To correct this oversight, Datron has removed references to these items from the affected data sheets and will not offer them for sale until such time they are certified. I am attaching the modified pages from the Service Manual to indicate the corrected areas. Specifically, paragraph 4.1.2.1 concerning antennas and paragraph 4.1.3.1 concerning batteries have been modified.

With reference to requirements concerning RF Radiation Exposure notices, Datron has added a label to the exterior of the radio, warning users of the hazard. The engineering release document showing this label, its text and placement is included with this letter. Additionally, Datron has added cautionary text to both the user and service manuals indicating the RF hazard. The sample document showing this text is included with this letter. It will be incorporated when the manuals are printed for the first time.

Request for additional detail on modulation method and parts listing are also included.

Datron hopes these actions correct the areas of concern noted.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark Allen".

Mark Allen
Vice President, Engineering

Changes to the Guardian Portable Radio Service Manual (G25APK003) include:

Section 4.1.2.1 Standard Broadband Antenna was removed.

Section 4.1.2.2 Low-Band Narrowband Antenna was re-indexed.

Section 4.1.2.3 Mid-Band Narrowband Antenna was re-indexed.

Section 4.1.2.4 High-Band Narrowband Antenna was re-indexed.

Section 4.1.3.1 NiCAD Rechargeable Battery was removed.

Section 4.1.3.2 NiMH Rechargeable Battery was re-indexed.

Guardian™ Portable Radio

Model G25RPV100

Service Manual G25APK003

Revision A.1



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APCO Project 25 Compliant

CHAPTER 4: RADIO SET AND ACCESSORIES

4.1 System Description

The Guardian consists of the following components:

- Transceiver Module
- Control/Display Module
- Antenna
- Battery

For available accessories, contact a Datron Guardian representative.

4.1.1 Portable Radio

The Guardian is a handheld battery-operated transceiver capable of providing secure and non-secure communications over a 136-174 MHz RF range. The portable radio includes an LCD, dual-tone multiple-frequency (DTMF) keypad, emergency push button, speaker/microphone, multi-function side connector, three programmable function side keys, sixteen -position channel select rotary knob, on/off/volume rotary knob, three-position programmable toggle switch, antenna connector, battery connector, and an LED status indicator. The Guardian features adjustable power output ranging from 0.1 to 5W. Operational modes include:

- a. Clear analog voice FM, 12.5 and 25 kHz
- b. DES CVSD modulation voice, 25 kHz, 12 kbps
- c. Project 25 clear digital voice, 12.5 kHz
- d. DTMF over-dial

4.1.2 Antennas

There are 3 antennas to use with the Guardian. The antennas are connected to the radio by a Sub-Miniature series A (SMA) connector.

4.1.2.1 Low-Band Narrowband Antenna

The Guardian low-band helical antenna is designed for the 136-150 MHz frequency range, with nominal impedance of 50 ohms. The antenna's part number is G25APA001.

4.1.2.2 Mid-Band Narrowband Antenna

The Guardian mid-band helical antenna is designed for the 150-162 MHz frequency range, with nominal impedance of 50 ohms. The antenna's part number is G25APA002.

4.1.2.3 High-Band Narrowband Antenna

The Guardian high-band helical antenna is designed for the 162-174 MHz frequency range, with nominal impedance of 50 ohms. The antenna's part number is G25APA003.

4.1.3 Battery

4.1.3.1 NiMH Rechargeable Battery

A rechargeable NiMH battery is an optional power source for the radio. The battery is a self-contained unit connected to the back of the radio by a reliable snap-lock mechanism. The battery has a capacity of 4,000 mA·h and at room temperature provides over 10 hours of battery life at the 5W transmit power level with a standby, receive, and transmit duty cycle of 90:5:5.

LED	Indication
Red	High temperature exceeded
Flashing red	Over-discharged battery

LED	Indication
Flashing yellow	Under-temperature battery
Yellow	Normal charge
Green	Charge successfully completed
Flashing red/green	Charge error

Note: The battery fuel gauge is not operable while the battery is charging. It refreshes approximately thirty seconds after the radio is removed from the charger.

4.1.4 Guardian PC Programmer

The G25AXR010 Guardian Programming Kit is a Windows 95/98/NT-compatible software program capable of loading or modifying programming information into the radio from a PC. It includes software, a detailed user's guide, and an RS-232 compatible programming/cloning cable. The cable connects the PC serial port to the radio side connector. See the Guardian G25AXK001 Programming Manual for a complete description of PC programming. The PC programmer is capable of programming the following settings:

BANK	Bank tag
	Special channels: Priority channels 1 and 2, emergency channel, and home channel.
	Zones/available zones
ZONE	Zone tag
	Scan list
	Channels/available channels
CHANNEL	Channel tag
	Channel type
	Bandwidth
	Receive only option
	Options: Scanlist, talkaround, and locked.
	Encryption: Enable, and key
	Transmit Power: High and low RF power levels.
	Receive and Transmit Parameters: Operating frequencies, P25 NAC (digital), talkgroup (digital), squelch mode/value (analog), and shadow channels.

Exhibit

**Changes to Guardian Service Manual (p/n G25APK003)
&
Guardian Operator Manual (p/n G25APK001)**

**Page added inside front cover of
Each explaining RF exposure.**

Insert the following page behind the front cover of the Guardian service manual (G25APK003).

User and Installer RF Exposure Caution

Caution: This radio has been tested and complies with the FCC RF exposure limits for occupational/controlled exposure environments. This radio is restricted to occupational use and work-related operations, where the operator must have knowledge to control RF exposure conditions. When transmitting, hold the radio in a vertical position at a distance of 2.5 cm from mouth, and at least 1.5 cm from head and body. Do not transmit for more than 50% of the duty cycle. Transmitting for more than 50% of the duty cycle can cause the FCC RF exposure compliance limits to be exceeded. Only use Datron authorized accessories.

Insert the following page behind the front cover of the Guardian operator manual (G25APK001).

User and Installer RF Exposure Caution

Caution: This radio has been tested and complies with the FCC RF exposure limits for occupational/controlled exposure environments. This radio is restricted to occupational use and work-related operations, where the operator must have knowledge to control RF exposure conditions. When transmitting, hold the radio in a vertical position at a distance of 2.5 cm from mouth, and at least 1.5 cm from head and body. Do not transmit for more than 50% of the duty cycle.

Transmitting for more than 50% of the duty cycle can cause the FCC RF exposure compliance limits to be exceeded. Only use Datron authorized accessories.