

L4610A PRM-34B Radio Test Set Users Guide

The PRM-34B is simple to use and quickly performs the required Operational Checks to insure a radio is fully operational. This guide will help you identify the different components of the Radio Test Set (RTS), provide a brief description of the operating features, and provide step-by-step instructions on how to test a SINCGARS radio.

L4610A PRM-34 Identification

Antenna Connector

Connection to the Antenna or to a Dummy Load

Display \

On Power-up:

Displays a message showing the RTS is outputting a Receiver Test Signal, and also displays the results of the Battery Self Test

During the Transmitter Test:

Displays the following:

- Frequency (in MHz)
- Forward Power (in Watts)
- Reverse Power (in Watts)



Radio Connector

Connection to the Radio's Antenna Connector

Connector Cover

Protects the RF Connectors when not in use

On / Off Button

To Turn ON:

• Press and hold for 1.5 seconds then release

To Turn OFF:

- Press and hold until RTS Turns
 Off (~5 seconds)
- RTS Turns OFF automatically after 120 seconds of inactivity

L4610A Modes of Operation

ON / OFF Modes *

ON Press and hold the ON/OFF button for 1.5 seconds, to turn the RTS ON.

OFF Press and hold the ON/OFF button for 5 seconds until the RTS turns OFF The RTS turns OFF automatically after 120 seconds of inactivity

*Note: The RTS powers-up in the Receiver Test Mode

• Receiver Test Mode (Sensitivity/Squelch Measurement)

Upon Power-up, anytime a signal is not present on the Radio Connector Port, the Radio Test Set outputs a 30 to 85 MHz (@ 5 MHz Intervals) Complex FM modulated signal for the Receiver Test Mode.

• Transmitter Test Mode (Frequency, Forward Power, and Reverse Power Measurements)

When a signal of 0.05 Watts or higher is detected, the RTS automatically switches to the Transmitter Test Mode and displays Frequency, Forward Power and Reverse Power Measurements.



L4610A PRM-34B Radio Test Instructions

The following table provides step-by-step user instructions on how to perform the Receiver and Transmitter Operation Checks of the SINCGARS Radio Tests. These tests are simple to perform, and shows how easily and quickly a radio can be tested.

Testing a SINCGARS Radio with the PRM-34B Radio Test Set		
Step	Instructions	Results
1	 Connect the Radio to the PRM-34B Radio Test Set Connect the supplied BNC cable from the Radio's ANT connector to the RTS's Radio connector. Connect a RF Cable from the RTS's ANTENNA connector to a dummy load. 	N/A
2	Setup the Radio's test conditions • Set the Radio for the following setup: - Single Channel Mode (MODE to SC) - Squelch ON (FCTN to SQ ON) - Push to Talk (COMSEC to PT) - RF Power to Hi (RF PWR to HI) - Set Channel to 54000	N/A
3	Perform the Receiver Checks (Sensitivity / Squelch Measurements) • Turn the PRM-34B Radio Test Set ON Note: The RTS automatically powers up in the Receiver test mode and outputs the RF Signal for the Receiver Tests.	Test Tone should be heard in Handset
4	Perform Transmitter Checks (Frequency, Forward Power, and Reverse Power) • Press the Headset's Push To Talk (PTT) Switch: Note: The PRM-34B detects the Radio's output signal, automatically switches to the Transmitter test mode, and displays the measurement results. FREQ 54.001 MHz FUD 2.62 WATTS RVS 0.87 WATTS PRM-34B Display Example	Frequency 53998 to 54002 MHz FWD PWR 2.5 Watts Minimum
End	Tests are Complete	
	1 cata are complete	<u> </u>



www.agilent.com/find/contactus

© Agilent Technologies, Inc. 2008, 2009

Product specifications and descriptions in this document subject to change without notice.

Printed n USA, April 28, 2009