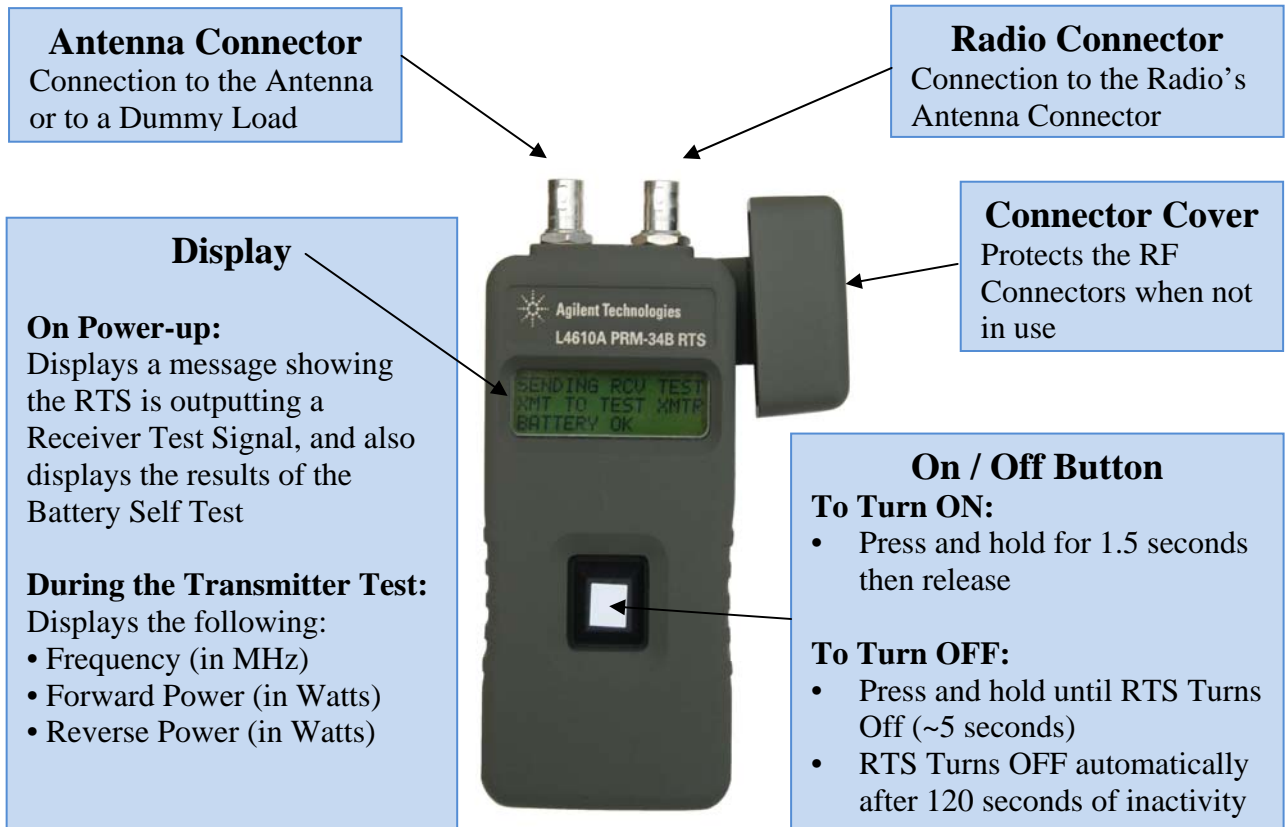




## ***L4610A PRM-34B Radio Test Set Users Guide***

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-34B Identification***



### ***L4610A PRM-34B 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.

<b>Testing a SINCGARS Radio with the PRM-34B Radio Test Set</b>		
<b>Step</b>	<b>Instructions</b>	<b>Results</b>
1	<p><b>Connect the Radio to the PRM-34B Radio Test Set</b></p> <ul style="list-style-type: none"> <li>• Connect the supplied BNC cable from the Radio's <b>ANT</b> connector to the RTS's <b>Radio</b> connector.</li> <li>• Connect the radio's antenna cable to the RTS's <b>ANTENNA</b> connector (A dummy load can be used in place of the antenna).</li> </ul>	N/A
2	<p><b>Setup the Radio's test conditions</b></p> <ul style="list-style-type: none"> <li>• Set the Radio for the following setup: <ul style="list-style-type: none"> <li>- Single Channel Mode (MODE to <b>SC</b>)</li> <li>- Squelch ON (FCTN to <b>SQ ON</b>)</li> <li>- Push to Talk (COMSEC to <b>PT</b>)</li> <li>- RF Power to Hi (RF PWR to <b>HI</b>)</li> <li>- Set Channel to <b>75000</b></li> </ul> </li> </ul>	N/A
3	<p><b>Perform the Receiver Checks</b> (Sensitivity / Squelch Measurements)</p> <ul style="list-style-type: none"> <li>• Turn the PRM-34B Radio Test Set <b>ON</b></li> </ul> <p><i>Note: The RTS automatically powers up in the Receiver test mode and outputs the RF Signal for the Receiver Tests.</i></p>	Test Tone should be heard in Handset
4	<p><b>Perform Transmitter Checks</b> (Frequency, Forward Power, and Reverse Power)</p> <ul style="list-style-type: none"> <li>• Press the Headset's Push To Talk (PTT) Switch :</li> </ul> <p><i>Note: The PRM-34B detects the Radio's output signal, automatically switches to the Transmitter test mode, and displays the measurement results.</i></p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <pre> FREQ  74.999  MHZ FWD   2.65   WATTS RVS   0.76   WATTS </pre> </div> <p style="text-align: center;"><i>PRM-34B Display Example</i></p>	<p><b>Frequency</b> 74998 to 75002 MHz</p> <p><b>FWD PWR</b> 2.5 Watts Minimum</p> <p><b>RVS PWR</b> &lt; 1/3 of FWD PWR</p>
End	<b>Tests are Complete</b>	



**Agilent Technologies**

[www.agilent.com/find/contactus](http://www.agilent.com/find/contactus)

© Agilent Technologies, Inc. 2008, 2009

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

Printed in USA, June 09, 2009