# VectorStar<sup>™</sup> 2300-531-R MS464x Instrument Test Software

### MS4642A/B, 10 MHz to 20 GHz, K Connectors MS4644A/B, 10 MHz to 40 GHz, K Connectors MS4645A/B, 10 MHz to 50 GHz, V Connectors MS4647A/B, 10 MHz to 70 GHz, V Connectors

This quick start guide provides a brief overview of the installation and use of the Anritsu 2300-531-R MS464x Instrument Test Software for use with the VectorStar MS4640A/B Series Vector Network Analyzer. For additional information on performance verification, troubleshooting, and repair, refer to maintenance manual (P/N 10410-00268 for the MS4640A, P/N 10410-00320 for the MS4640B). Also, refer to the Product Information, Compliance, and Safety, P/N10100-00063. All VectorStar documents are accessible from the VectorStar product page: http://www.anritsu.com/en-us/products-solutions/products/ms4640b-series.aspx

Use of the instrument test software requires installation to a Windows 7 or XP compatible PC and a GPIB connection from the controller PC to a VectorStar VNA set to a GPIB address of 6. The software provides on-screen procedural instructions for each of the selected automated tests. The following is a list of required equipment for completing all of the available tests:

Instrument	Critical Specification	Recommended Manufacturer and Model           Anritsu Model MF2412B		
Frequency Counter	Frequency: 10 MHz Input Impedance: 50 Ohm			
Frequency Reference	Frequency: 10 MHz	Symmetricom Model RubiSource T&M		
Power Meter	Power Range: -70 to +20 dBm	Anritsu Model ML2438A		
Power Sensor	Frequency: 70 kHz to 70 GHz Connector Type: V	Anritsu Model SC7770		
Adapter	Type: N (m) to K (m)	Anritsu Model 34NK50 Anritsu Model 34VFKF50		
Adapter	Type: V (f) to K (f)			
Adapter	Type: V (f) to V (f)	Anritsu Model 33VFVF50C Pasternack Model PE9718 Anritsu Model 3652A or 3652A-1		
Adapter	Type: N (m) to V (m)			
Calibration Kit	Connector Type: K			
Calibration Kit	Connector Type: V	Anritsu Model 3654D or 3654D-1		
RF Cable	Frequency: DC to 40 GHz Connector Type: K (m) to K (f)	Anritsu Model 3670K50-2		
F Cable     Frequency: DC to 70 GHz Connector Type: V (m) to V (f)       Coaxial Cable     Type: BNC (m) to BNC (m) Impedance: 50 Ohm Length: 0.6 meter		Anritsu Model 3670V50A-2 Any		
				Computer
GPIB Cable	IEEE 488.2 compliant	Anritsu Part Number 2100-2		

#### Table 1. Equipment Required for Automated Tests

Note

This software application supports only National Instruments GPIB hardware.



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#### 1. Installing the Test Program

- **1.** Insert the USB Memory Device into the USB slot.
- 2. Open Windows Explorer, browse to the USB Drive, and double click on Startup.htm.
- **3.** The Verification Software navigation page (Figure 1) should then appear.
- 4. On the navigation page, click and read the Software License Agreement.
- 5. On navigation page, click Install VectorStar Test Software.
- **6.** Follow the dialog box instructions to complete the software installation.



Figure 1. Anritsu MS464x Instrument Test Software Menu

## 2. Launching the Test Program

- 1. To launch the test program, double-click on the Anritsu MS464x Test Program desktop icon shown in Figure 2.
- 2. Alternatively, select Start | Programs | Anritsu Company | Anritsu MS464x Test Program.

When the test program first runs, the software queries the GPIB bus for connected instruments. When complete, the software presents a dialog box for you to enter your company name and your user name. Then the Anritsu MS464x Instrument Test Main Screen (Figure 2) shows the connected instrument model and serial number.

#### 3. User Interface Overview

Figure 2 identifies the main components of the test software user interface.



3.	Test data display area.	6.	Software control buttons.
2.	On-screen instructions.	5.	Selectable performance verification tests.
1.	Instrument and current test information area.	4.	Current test progress.

Figure 2. Anritsu MS464x Instrument Test Program User Interface

#### 4. Running the Performance Verification Software

Select a performance test from the list and click **Continue**. The on-screen instructions will guide you through the test. Tests can be selected and run sequentially or in any order. To abort a test, click **Cancel Test**.

Test results are stored in plain text format on the hard drive of the PC Controller to the following folder:

C:\Anritsu MS464xA Test Data

or

C:\Anritsu MS464xB Test Data

The MS464x Test software creates a file for Pass/Fail information named: **123456.SVC**, where 123456 is the serial number of the VNA. If the software locates an existing SVC file of the same instrument in the Anritsu MS464xA/B Test Data folder, you must decide whether to continue storing data to the existing SVC test record or to start a new SVC record.

Each individual test result is also saved to a file in text format with a name that includes the serial number and the name of the test. For example: **123456\_NoiseFloorS21.DAT**.

SVC and DAT files can be opened with any common text editor such as Notepad.





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