Quick Start Guide

70774
Instrument Test Software

MS202xB VNA Master™
MS203xB VNA Master™
MS202xC VNA Master™
MS203xC VNA Master™
S412E LMR Master™

This quick start guide provides a brief overview of the installation and use of the 70774 Instrument Test Software with the following Anritsu handheld analyzers:

- VNA Master Models:
  - MS2024B, MS2025B, MS2034B, MS2035B
  - MS2026C, MS2027C, MS2028C, MS2036C, MS2037C, MS2038C
- LMR Master Model:
  - S412E

Anritsu Company
490 Jarvis Drive
Morgan Hill, CA 95037-2809
USA

Part Number: 10580-00332
Revision: C
Published: May 7, 2018
Copyright 2010, 2018 Anritsu Company

1-1 Required Equipment

MS20xxC Series VNA Master

The required equipment varies depending on the Verification Kit and VNA Master that are being tested

The required equipment varies depending on the VNA Master models that are being tested. Table 1-1 lists the required equipment for the MS2026C, MS2027C, MS2028C, MS2036C, MS2037C, MS2038C VNA Master.

Table 1-1. Required Equipment for MS20xxC Series VNA Master

Required Equipment	MS2026C, MS2027C, MS2028C, MS2036C, MS2037C, and MS2038C (N Connector Test Ports)	MS2027C/MS2028C and MS2037C/MS2038C with Option 11 (K Connector Test Ports)
PC Controller Minimum Requirements	Microsoft Windows XP, 1 GB RAM, at least 20 MB of free hard disk space, USB 2.0 Type A port or Ethernet port	Microsoft Windows XP, 1 GB RAM, at least 20 MB of free hard disk space, USB 2.0 Type A port or Ethernet port
Software Driver	National Instruments VISA Runtime version 3.6 or later[a]	National Instruments VISA Runtime version 3.6 or later[a]
Instrument USB Driver	Anritsu USB Driver	Anritsu USB Driver
Interface Cable	If using USB, then use Anritsu 3-2000-1498 USB A-mini cable. If using Ethernet, then use Anritsu 3-806-152 Crossover Patch Cable (direct connection) or 2000-1371-R Ethernet Cable (via network hub/switch).	If using USB, then use Anritsu 3-2000-1498 USB A-mini cable. If using Ethernet, then use Anritsu 3-806-152 Crossover Patch Cable (direct connection) or 2000-1371-R Ethernet Cable (via network hub/switch).
M-F Through Cable	Anritsu 3670NN50-2	Anritsu 3670K50-2
M-M Adapter	Not Applicable	Anritsu 33KK50B
Male Calibration Tee	Anritsu OSLN50	Anritsu OSLK50
Female Calibration Tee	Anritsu OSLNF50	Anritsu OSLKF50

a.National Instruments VISA Runtime license is available from National Instruments as a stand-alone software package or as part of National Instruments GPIB adapter Hardware package. Please contact National Instruments for details.

1-2 Required Equipment

MS20xxB Series VNA Master and S412E LMR Master

The required equipment varies depending on the VNA Master and LMR Master models that are being tested. Table 1-2 lists the required equipment for the MS2024B, MS2025B, MS2034B, MS2035B VNA Master and the S412E LMR Master..

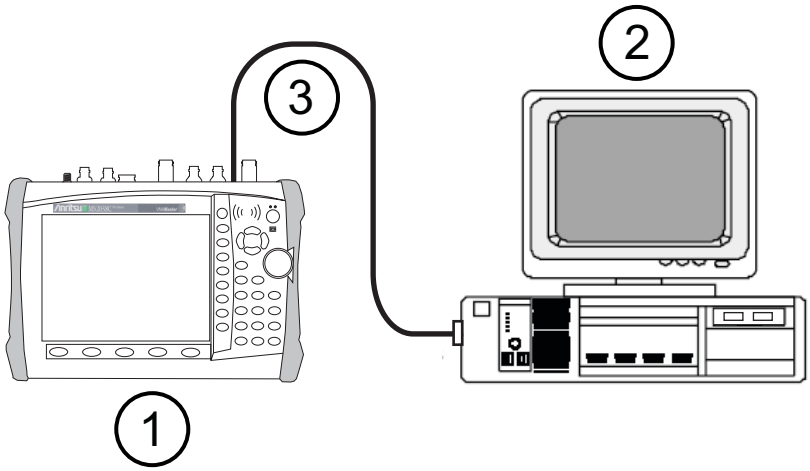
Table 1-2. Required Equipment for MS20xxB Series VNA Master and S412E LMR Master

Required Equipment	Recommended Manufacturer/Model
PC Controller Minimum Requirements	Microsoft Windows XP, 1 GB RAM, at least 20 MB of free hard disk space, USB 2.0 Type A port or Ethernet port
Software Driver	National Instruments VISA Runtime version 3.6 or later[a]
Instrument USB Driver	Anritsu USB Driver
Interface Cable	For VNA Master or LMR Master using USB Interface, use Anritsu 3-2000-1498 USB A-mini cable For VNA Master with Option 411 using Ethernet Interface, use Anritsu 3-806-152 Crossover Patch Cable (direct connection) or 2000-1371-R Ethernet Cable (via network hub/switch)
M-F Through Cable	Anritsu 15NN50-1.0B
Male Calibration Tee	Anritsu OSLN50-1
Female Calibration Tee	Anritsu OSLNF50-1

a.National Instruments VISA Runtime license is available from National Instruments as a stand-alone software package or as part of National Instruments GPIB adapter Hardware package. Please contact National Instruments for details.

1-3 PC Controller Ethernet Cable Connection to VNA Master

The basic connections between a PC and the VNA Master using Ethernet interface are shown in Figure 1-1.

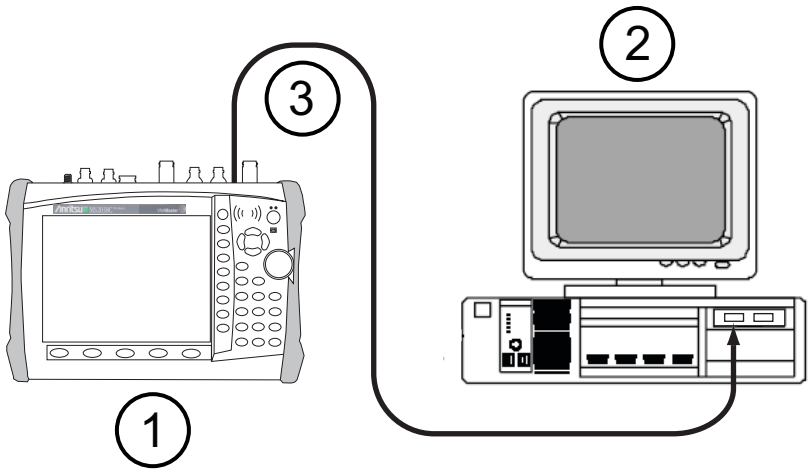


1	VNA Master MS20xxC
2	PC Controller
3	Ethernet Cable

Figure 1-1. Basic Connections Between PC and VNA Master Using Ethernet Interface

1-4 PC Controller USB Cable Connection to VNA Master/LMR Master

The basic connection between a PC and the VNA Master or the LMR Master using a USB interface is shown in Figure 1-2.



1	VNA Master MS20xxC or LMR Master S412E
2	PC Controller
3	USB A-mini Cable

Figure 1-2. Basic Connections Between PC and VNA Master/LMR Master Using USB Interface

1-5 Installing the Instrument Test Software Application

1. Download the 70774 Instrument Test Software from the Anritsu public website.
2. Unzip the downloaded file and double-click the AutoRun.exe file to display the Startup screen as shown in Figure 1-3.
3. Click the “Install Anritsu MS20XXB/MS20XXC/S412E Instrument Test Software” link on the Startup screen to begin the software installation.
4. Follow the dialog box instructions to complete the software installation.

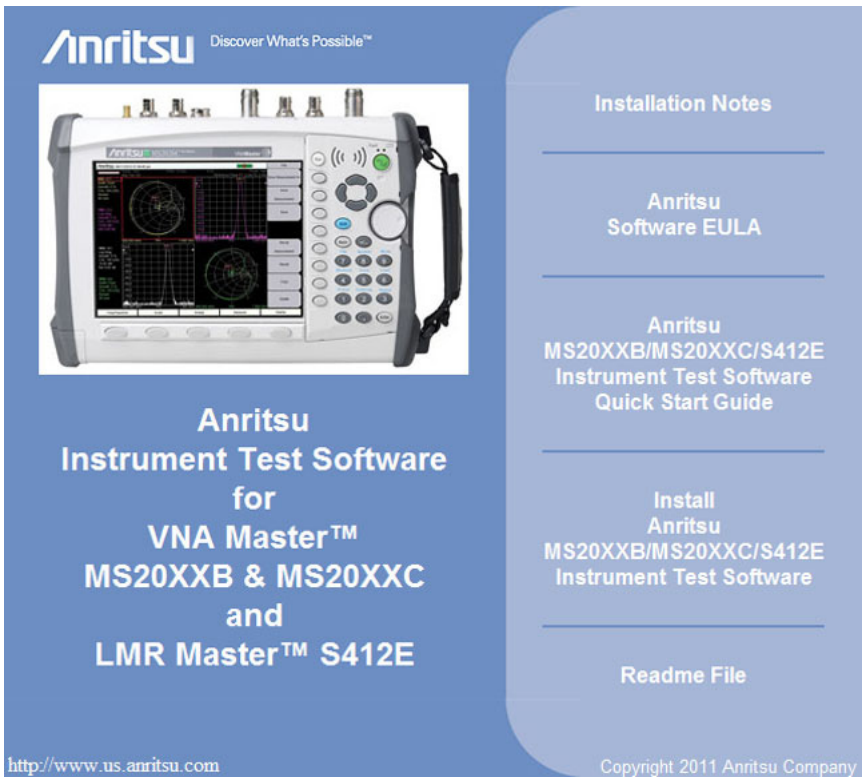


Figure 1-3. Instrument Test Software Startup Screen

1-6 User Interface Operation

Double-click the VNA Instrument Test Software desktop icon to launch the Instrument Test Software Application. Preliminary screens gather information about the VNA Master (or LMR Master) and the Calibration components. When done gathering information, the Test Software Main Screen appears. Not all areas may be initially available depending on setup and completion status.

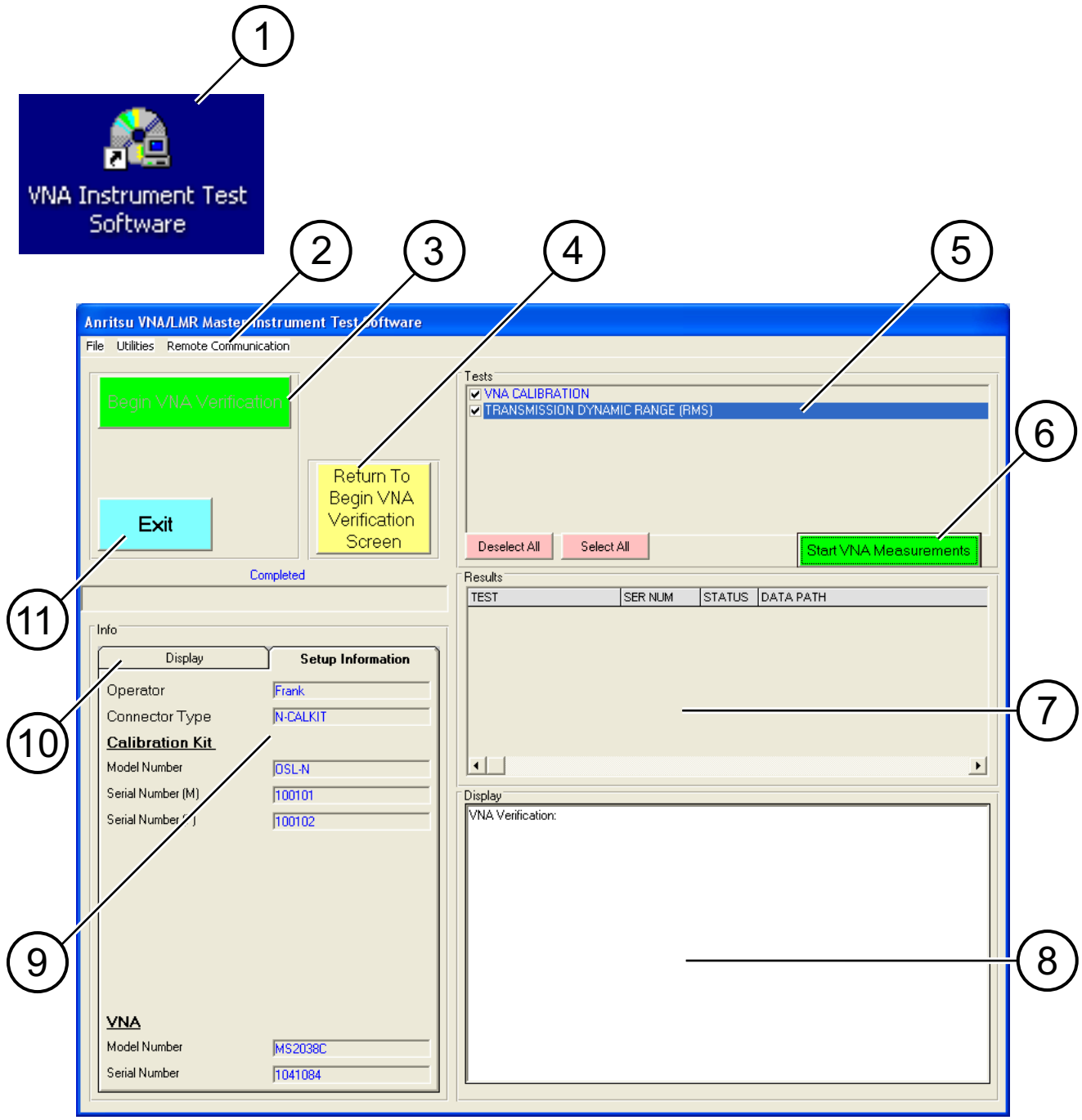


Figure 1-4. Instrument Test Software Main Screen

Numbered areas of the Test Software Main Screen are described in Table 1-3 on page 1-8.

Table 1-3. Numbered Items in Figure 1-4

1.	Instrument Test Software Desktop Icon.
2.	Menu Bar Functions – Menus for File, Utilities Report Printing, and Remote Communication.
3.	Begin VNA Verification Button – Starts setup process. When setup is complete, the button is unavailable.
4.	Return to Begin VNA Verification Screen Button – Restarts the setup procedure
5.	Tests Area – Allows all or some tests to be selected. As each test is completed, the checkbox is deselected.
6.	Start VNA Measurements – After the setup is complete, this button starts the selected tests.
7.	Results Area – As each test is completed, a color-coded row appears. Double-click the row to see the report.
8.	Display Area – A scrollable listing of key test events, file names, and test status.
9.	Setup Tab – Lists model information and serial numbers for all devices.
10.	Display Tab – Not shown here. Test Progress buttons display test completions. The Progress Bar shows individual test progress.
11.	Exit Button – Exits the Instrument Test application.

1-7 Instrument Test Software Calibration/Test Sequence and Report

The sequence is: VNA Calibration first, and then Transmission Dynamic Range (RMS) test.

After the test is complete, the software saves the test data to a file named TRANMISSION DYNAMIC RANGE (RMS).txt. This file is located in the C:\Anritsu VNA Verification\VNA_Reports\Model_Serial Number folder.

The test data report can be viewed and printed within the software application by selecting Utility Tool on the test software main screen. Other applications, such as word processors, can easily import the report data.

Anritsu prints on recycled paper with vegetable soybean oil ink.

Anritsu Company
490 Jarvis Drive
Morgan Hill, CA 95037-2809
USA
http://www.anritsu.com