

MT8870A

Universal Wireless Test Set

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1. Introduction

This startup guide provides basic information on how to set up the MT8870A.

1.1. Checking Attachments

When unpacking, check that none of the products listed in the attached component list are missing.

1.2. Requirements for Setting-up MT8870A

	Details
PC	PC with Windows® XP or Windows® 7 installed (details in section 2.1)
Ethernet cable	Category 5, 5e, or 6 UTP cable Both straight and cross cables supported
DVD MT8870A Universal Wireless Test Set	Supplied accessory

Useful if you have

RF Cable	RF cable with N-type connector (both ends) Used in Chapter 3 Checking Operations.
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1.3. Terms

The terms used in this guide are listed below.

Term	Description
MT8870A	Main unit Up to four modules can be installed in the front of the unit. This also refers to the whole unit including modules.
MU887000A	Module installed in MT8870A. This transmits and measures RF signals.
Chassis	This refers to the MT8870A main frame and is used when it needs to be distinguished from a module, such as on a menu screen.

2. Initial Configuration

Perform initial configuration for the MT8870A using the Utility Tool software.

The Utility Tool software is on the accessory DVD supplied with the MT8870A.

2.1. Hardware and Software Requirements

The following PC environment is required to run the Utility Tool.

- Microsoft® Windows® XP Professional Service Pack 3 Japanese/English or Microsoft® Windows® 7 Enterprise Service Pack 1 Japanese/English 32- and 64-bit versions
- Optical drive to read DVD-R
- Memory 1 GB or more
- HDD Free Space 200 MB or more
- Display resolution of 1024 x768 pixels or better
- PDF Viewer
- Interface*1 Ethernet or GPIB

*1 : Ethernet is recommended when setting up MT8870A by using Utility tool.

2.2. Installing Run Time

To use the Utility Tool, the following software is required. Download and install from the Web sites.

- Microsoft® .NET Framework 4.0 or 4.5

Note: Requires full setup version, not Client Profile version

Site: <http://www.microsoft.com/en-us/download/details.aspx?id=17851>

- NI-VISA™

Note: Requires NI-VISA 5.0.3 to 5.4.

Site: <http://www.ni.com/downloads/>

Compatibility between OS and .NET Framework is as below

OS	.NET Framework 4.0	.NET Framework 4.5
Windows XP	Compatible	Incompatible
Windows 7	Compatible	Compatible

Compatibility between .NET Framework and NI-VISA is as below

.NET Framework	NI-VISA 5.0.3 to 5.2	NI-VISA 5.3 to 5.4
.NET Framework 4.0	Compatible	Compatible
.NET Framework 4.5	Incompatible	Compatible

The full NI VISA installation with .NET Framework 4.0 language support option is required.

Follow the procedure below when the NI software is already installed, but do not install the .NET 4.0 language support option.

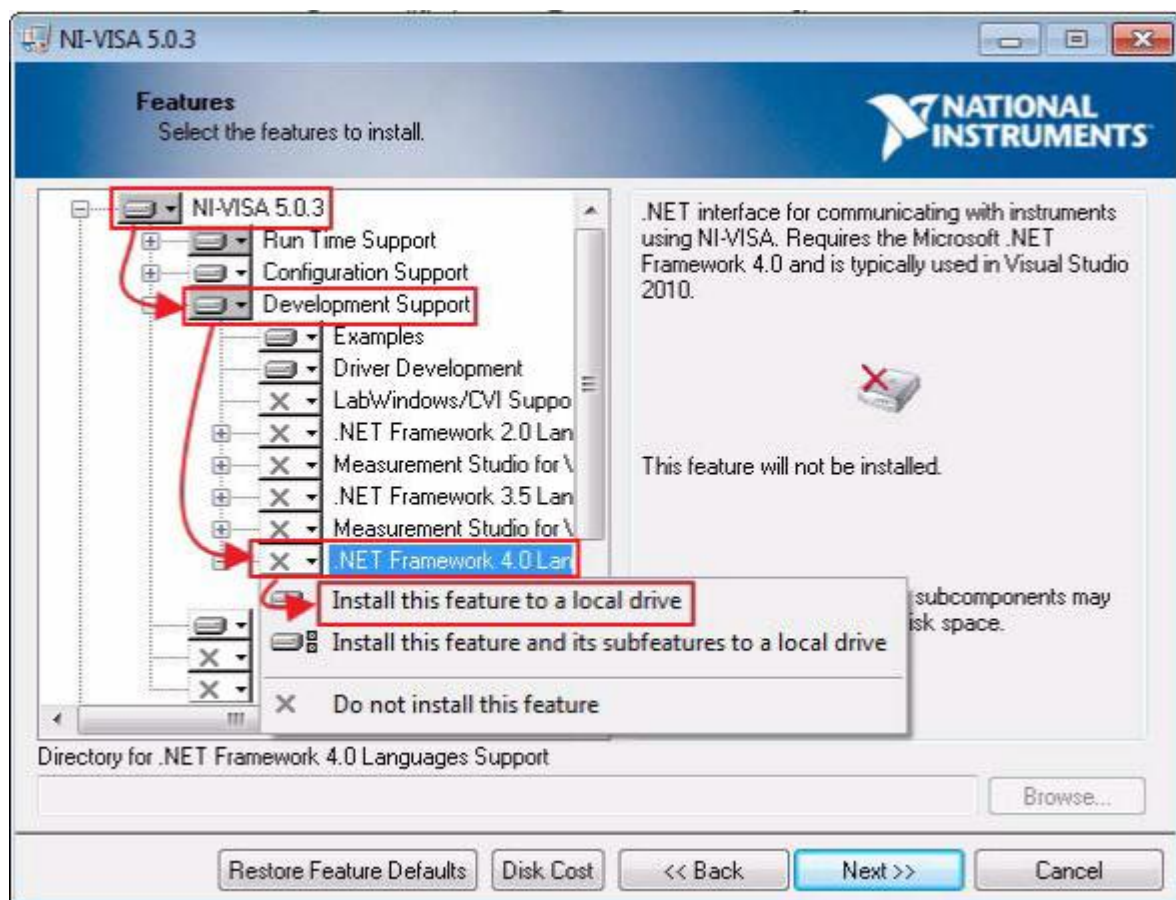
Windows XP

1. Click Windows **Control Panel > Add or Remove Programs**.
2. Select the **National Instruments Software** and click **Change/Remove**.
3. Select **NI-VISA 5.0.3** or **newer version** and click **Modify** to display the Window below.

Windows 7

1. Open the Windows **Control Panel > Programs and Features**.
2. Right-click **National Instruments Software** and click **Uninstall/Change**.
3. Select **NI-VISA 5.0.3** or **newer version** and click **Modify** to display the following window.

Install .NET Framework 4.0 Language Support regardless of the version of the installed .NET Framework.



2.3. Installing MT8870A Configuration Software (Utility Tool)

The Utility Tool installer and the operation manual are included on the DVD labeled MT8870A Universal Wireless Test Set. Load this DVD into the optical drive of the PC.

Run setup.exe in the path /MT8870A/Installer/MT8870A Utility Tool/setup.exe on the DVD. Follow the on-screen instructions to select the Utility Tool installation directory.

When installing NI-VISA 5.3, use Utility Tool v01.01.17 or newer.
Get the latest Utility Tool from the Anritsu Web site as described in Chapter 4.

2.4. Changing PC Network Configuration

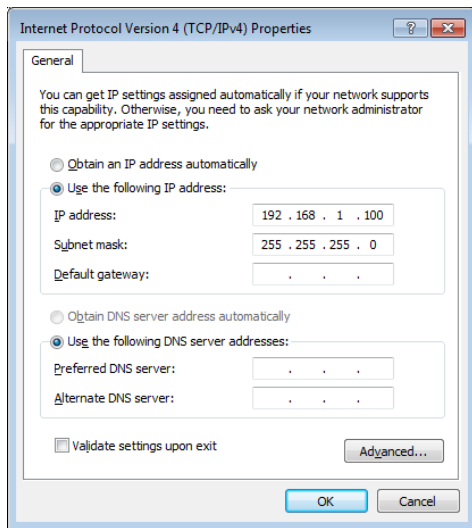
The Utility Tool can control the MT8870A via both GPIB and Ethernet, but functions requiring file transfer, such as updating firmware or installing waveform files can be used only with an Ethernet connection. It is best to use an Ethernet connection when performing initial configuration even when using GPIB control for system operation.

To control the MT8870A via Ethernet connection using the Utility Tool, the PC network configuration must match the MT8870A network configuration.

If the PC is connected to a company network, disconnect the Ethernet cable from the PC.

To set IP address:

Click **Control Panel > Network and Sharing Center > Change adapter settings > Local Area Connection > Properties > Internet Protocol Version 4(TCP/IPv4)**, and click **Properties** at the Internet Protocol Version 4(TCP/IPv4) window.



Since the MT8870A IP factory default is 192.168.1.x (where x is 1 to 4), change the IP address to 192.168.1.100 to match the network configuration.

Note: In this description, the PC IP address is set to 192.168.1.100, but any IP address in the range of 192.168.1.5 to 192.168.1.254 can be set.

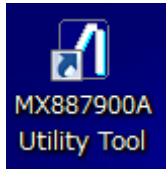
2.5. Starting Instrument

Connect the power cable to the MT8870A and press the **Power** button.

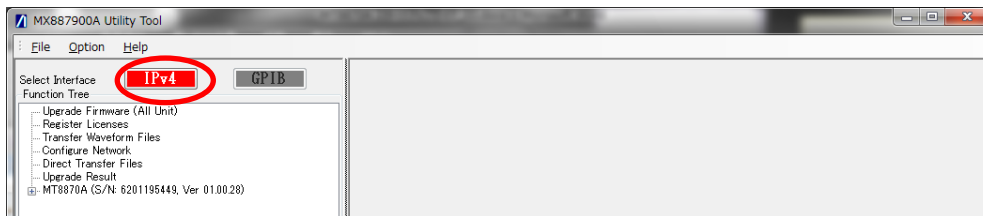
Connect the PC and MT8870A Ethernet connectors using an Ethernet cable.

The MT8870A has Ethernet connectors at front and back. Use either one.

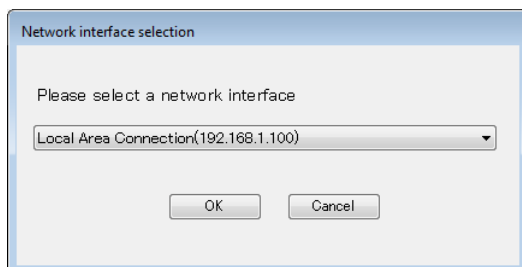
2.6. Starting Utility Tool



Double-click the Utility Tool icon on the PC desktop.



Click **IPv4** to display the Network interface selection screen showing the IP address configured in section 2.4.



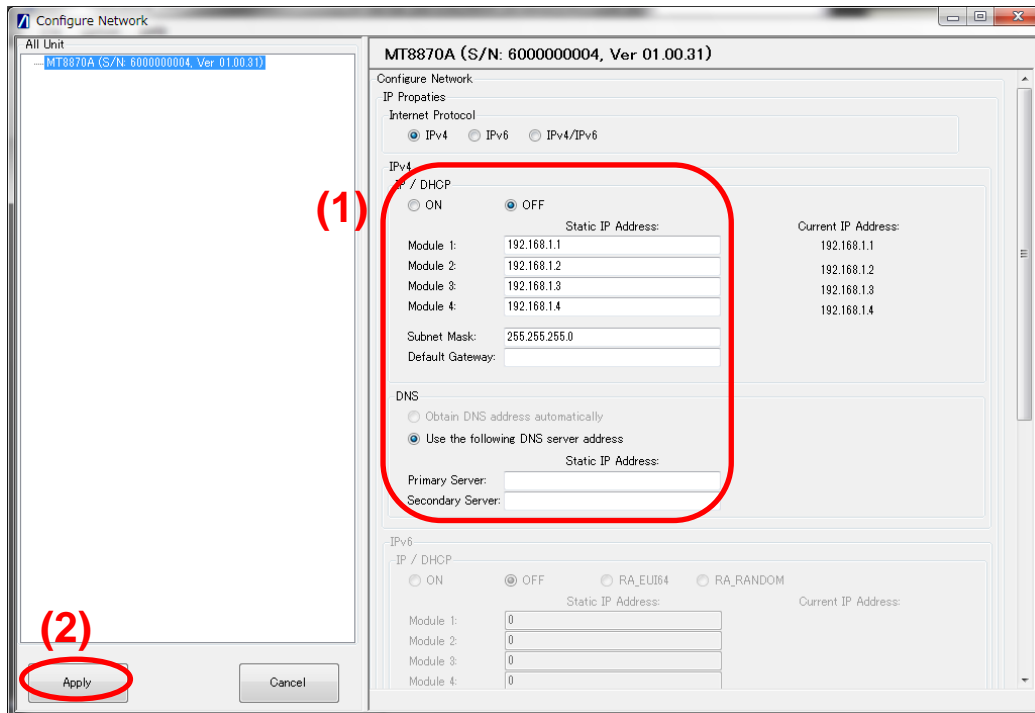
If the PC has two or more network interfaces, select the interface connected to the MT8870A.

2.7. Changing Network Settings

To change the IP address to match the network environment, configure the settings as described below.



Click **Configure Network** at the Select Interface Function Tree.



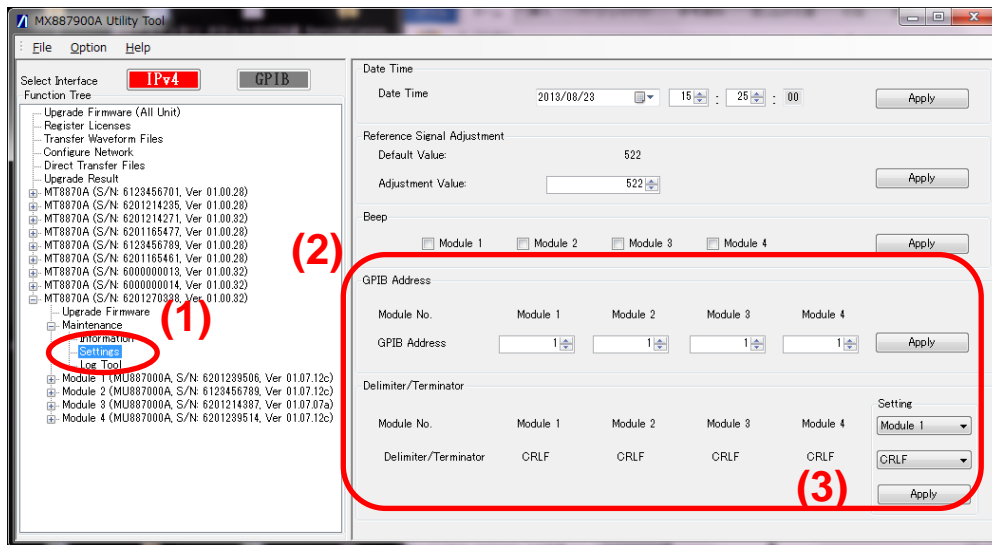
(1) Change the settings to match the network environment.

(2) Click **Apply** to set the new network settings at the MT8870A and restart it.

Quit the Utility Tool and change the PC network configuration to match the new MT8870A settings.

2.8. Changing GPIB settings

Configure the settings as described below to control the MT8870A over GPIB.

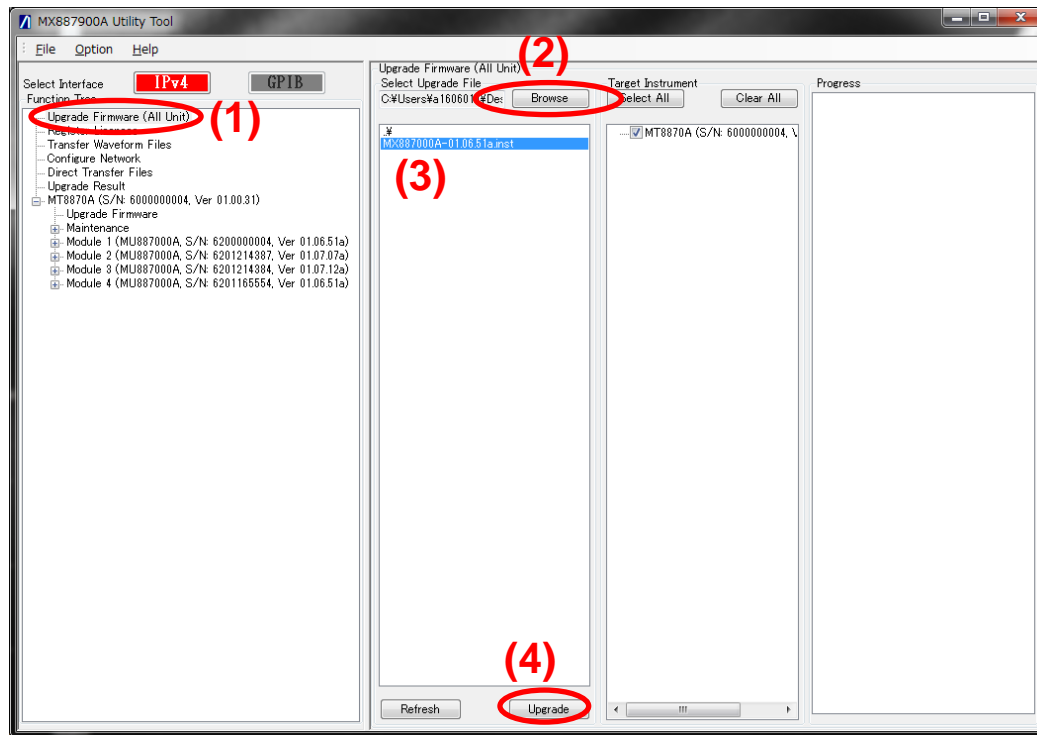


- (1) Select the chassis from the Select Interface Function Tree, and click **Maintenance - Settings**.
- (2) Set the GPIB address and Delimiter/Terminator for each module.
- (3) Click **Apply** to set the new GPIB settings at the MT8870A and restart it.

2.9. Upgrading Firmware

To use a different firmware version from the shipped version, upgrade the firmware as described below.

Note: See Chapter 4 for a description of how to get the new firmware.

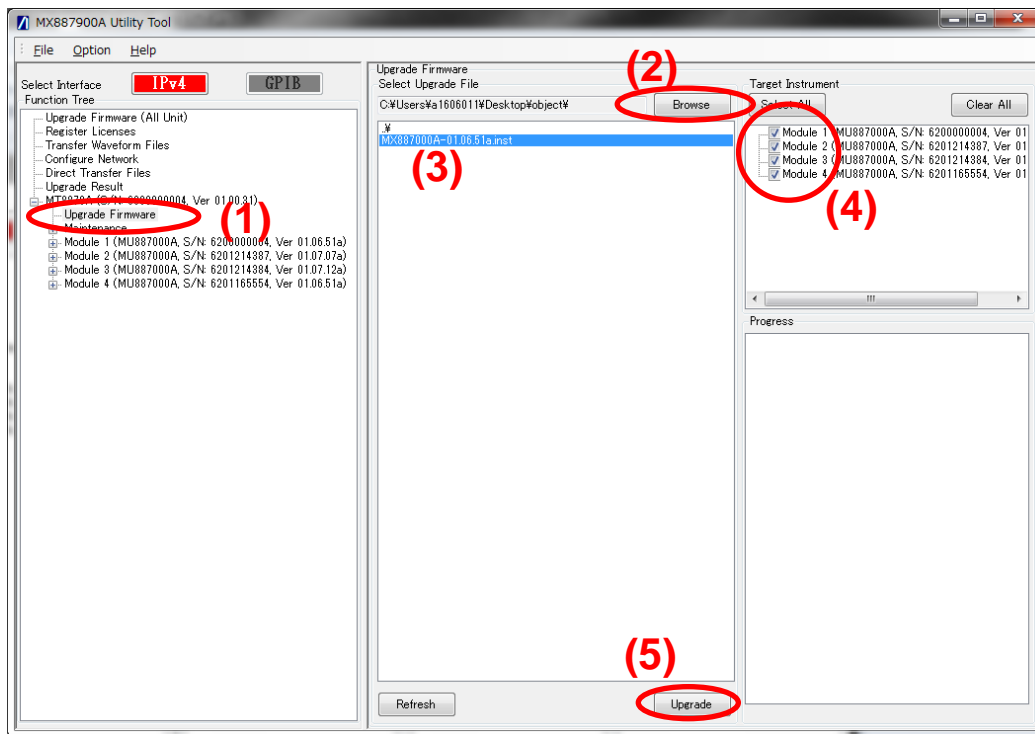


At the Select Interface Function Tree,

- (1) Select **Upgrade Firmware (All Unit)**.
- (2) Click **Browse** to select the directory containing the new firmware.
- (3) Select the firmware file.
- (4) Click **Upgrade**. The upgrading status appears on the Progress window. During upgrading, the status lamp 1 to 6 of the MU887000A blink.
- (5) When upgrading completes, the MT8870A reboots. Rebooting takes a few seconds.
- (6) When rebooting of the MT8870A completes, the result is displayed on the Progress window. Click OK to close the Progress window.

The firmware of all modules (MU887000A) installed in the MT8870A is upgraded.

To upgrade the firmware for specific modules:

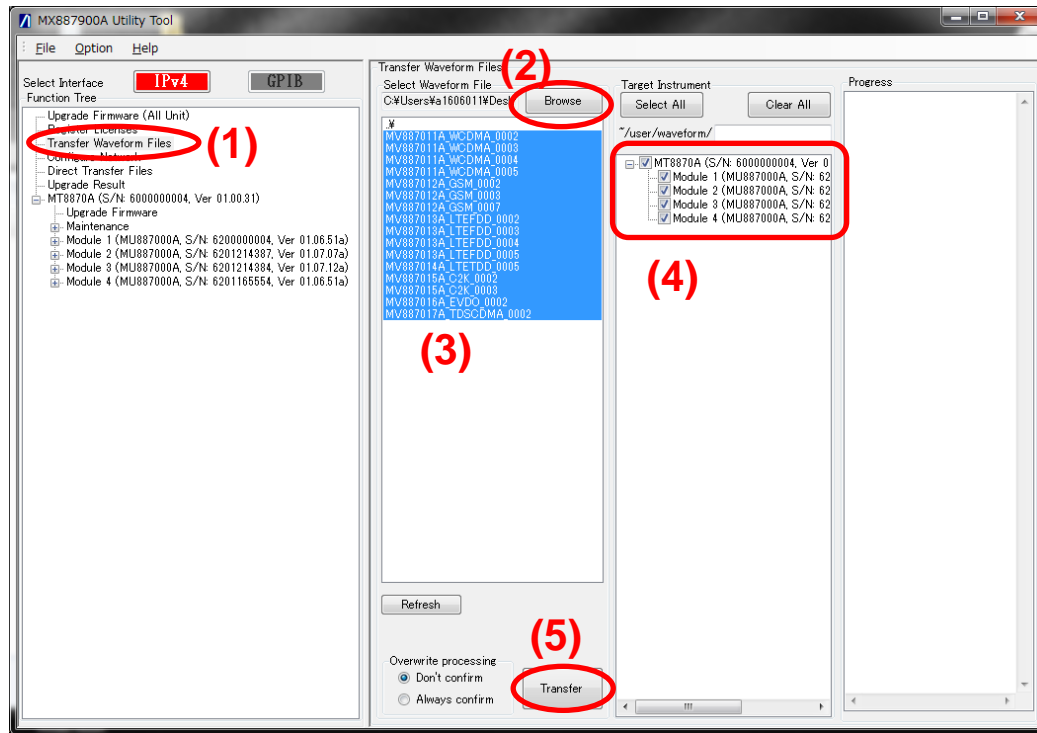


- (1) Select the chassis and click **Upgrade Firmware**.
- (2) Click **Browse** to select the directory containing the new firmware.
- (3) Select the firmware file.
- (4) Check/un-check the module(s) for firmware upgrading.
- (5) Click **Upgrade**.

2.10. Installing Waveform File

A waveform file matching the purchased waveform license is installed in each module at factory shipment.

Follow the steps below to install a waveform file not installed at factory shipment.



- (1) Select **Transfer Waveform Files**.
- (2) Click **Browse** to select the directory containing the waveform file.
- (3) Select the waveform file.
- (4) Select the destination module.
- (5) Click **Transfer**.

Note: The waveform file installed at factory shipment is included on the accessory DVD labeled Waveform.

2.11. Restoring PC Network Configuration

The initial configuration is now complete.

After finishing control of the MT8870A, restore the PC network configuration to the original settings.

3. Checking Operation

The MT8870A can be operated only by the remote commands described in the operation manual.

Remote commands related to analysis are described in each operation manual.

This section explains how to perform a simple operation check using the MT8870A control software (CombiView) on the attached DVD.

3.1. Installing MT8870A Measurement Control Software (CombiView)

Run the installers in the folder MT8870A/Installer/CombiView/ on the accessory DVD. See Chapter 2 in the PDF document mx880052a_opm_e_xxx.pdf in the folder /MT8870A/Manual/English for the installation instructions.

Install using this manual as a guide.

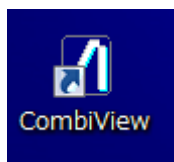
3.2. Checking Operation

Check the RF input and output by:

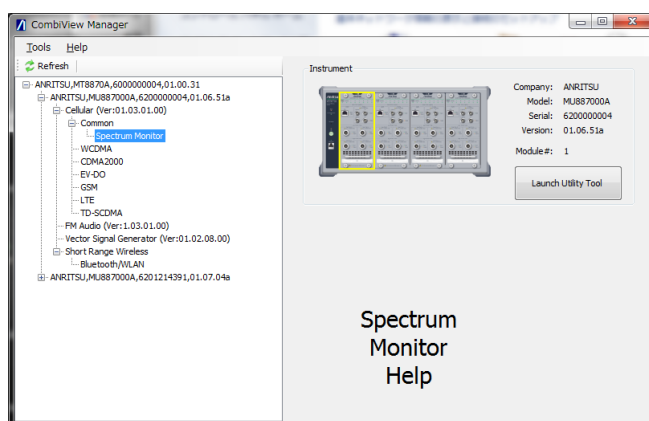
- Outputting a CW signal using the Vector Signal Generator function.
- Receiving the signal using the spectrum monitor function.

Connect an RF cable with N-type connector to Port3 and Port4 of the module.

3.2.1. Starting CombiView



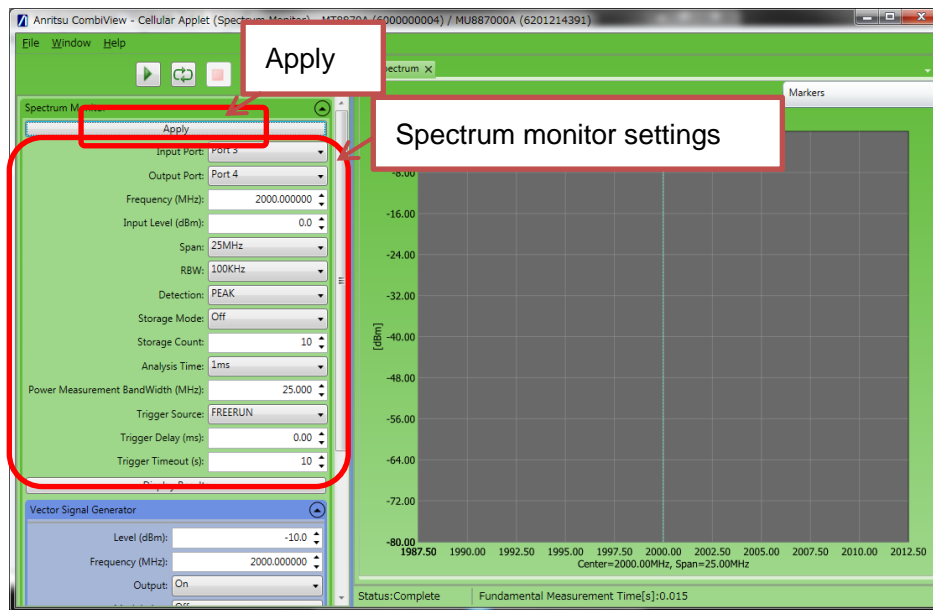
Double-click the **CombiView** icon on the PC desktop to start CombiView.



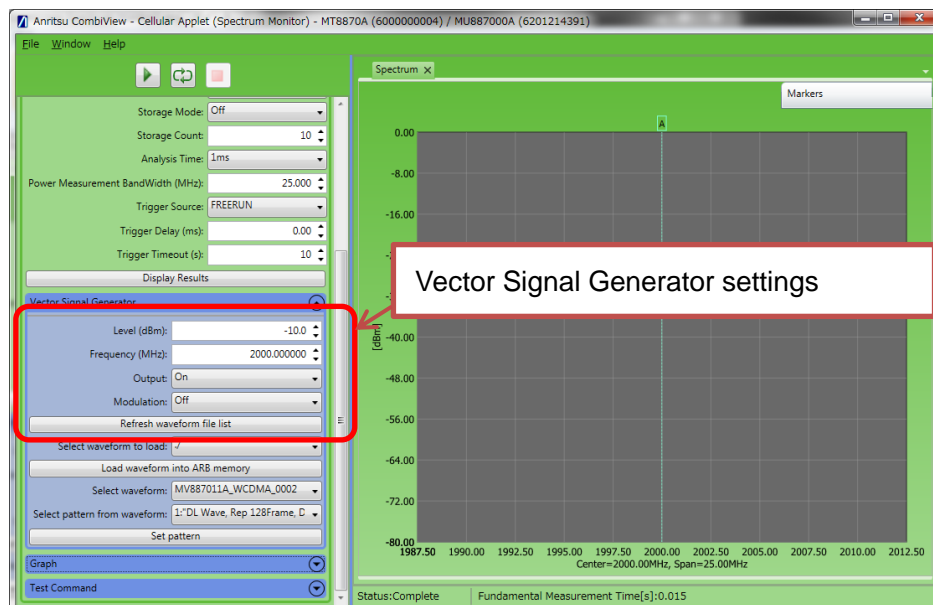
3.2.2. Checking Operation with Cellular Analysis License

The procedure for checking the MT8870A when using the registered Cellular analysis software is described below.

- 1) At the software selection screen, double-click **Cellular - Common - Spectrum Monitor** to display the Spectrum Monitor screen.
- 2) Set the parameters shown below.



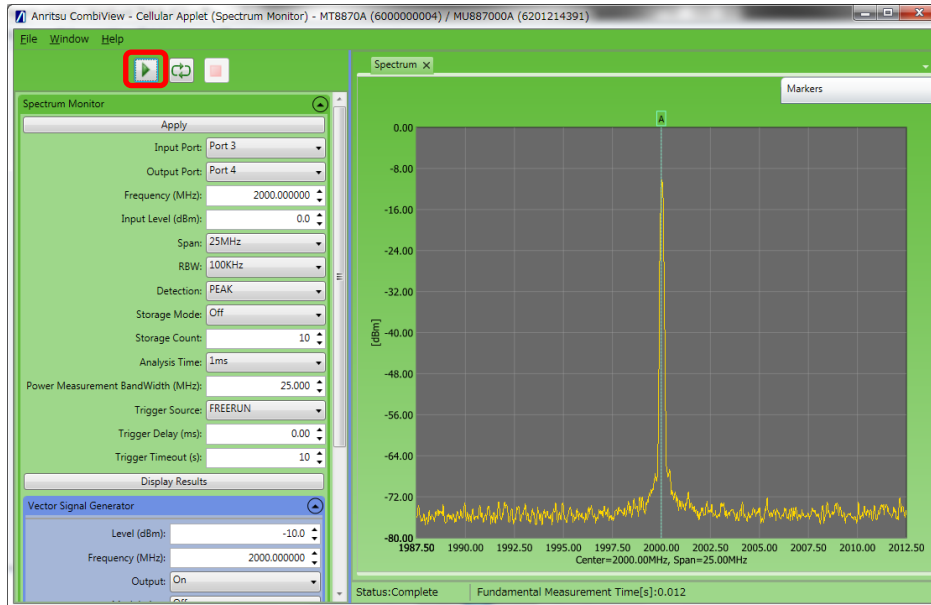
Next, configure the Vector Signal Generator.



Click **Apply** after configuring the Vector Signal Generator.

3) Click the measurement execution button (triangle symbol) at the top of the screen to perform measurement.

Check the displayed graph and confirm that the waveform has a peak.



This confirms RF signal output and measurement.

If the waveform does not have a peak, check the following:

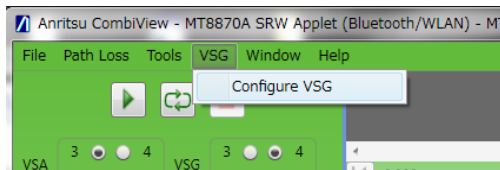
- RF cables connected to correct port set at Input Port/Output Port at Spectrum Monitor screen
- Level and Frequency settings of Spectrum Monitor match settings of Vector Signal Generator
- Modulation of Vector Signal Generator set to Off
- Output of Vector Signal Generator set to On

The method for checking performance is described in Chapter 7 of the PDF document labeled mu887000a_opm_e_xxx.pdf.

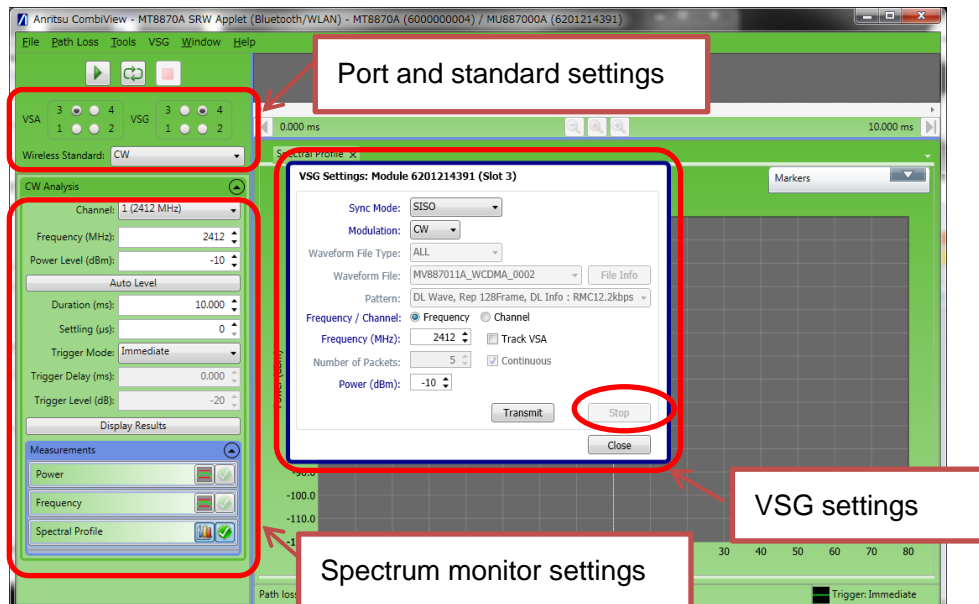
3.2.3. Checking Operation with Short Range Wireless Analysis License

The procedure for checking the MT8870A with the registered Short Range Wireless analysis software license is described below.

- 1) At the software selection screen, double-click **Short Range Wireless - Bluetooth/WLAN** to start the SRW Applet screen.
- 2) Select **Configure VSG** from the menu bar to display the Configure VSG screen.

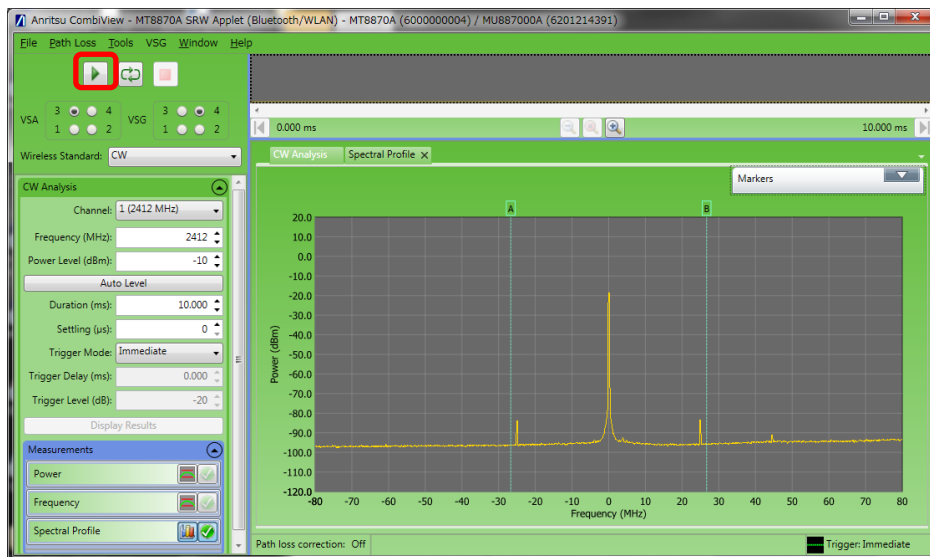


- 3) Set the parameters as shown below.



If the VSG configuration cannot be changed, click **Stop**.

After changing the VSG configuration, click **Transmit**, and then click **Close** to close the configuration window.



- 4) Click the measurement execution button (triangle symbol) at the top of the screen to perform measurement.

Check the displayed graph and confirm that the waveform has a peak.

This confirms RF signal output and measurement.

If the waveform does not have a peak, check the following:

- RF cables connected to correct port set at VSA/VSG Port in SRW Applet screen
- Power and Frequency settings of CW Analysis match VSG settings
- Modulation of VSG set to CW
- RF signal output started (Click **Transmit** at the VSG screen to check this.)

The method for checking performance is described in Chapter 7 of the PDF document labeled mu887000a_opm_e_xxx.pdf.

4. Information about Product Registration

Download the latest versions of various software and operation manuals by registering the user and product at the Anritsu Web site. A notification email is sent when software and operation manuals are updated.

4.1. If You Do Not Have Anritsu ID

First, register the user to obtain an Anritsu ID.

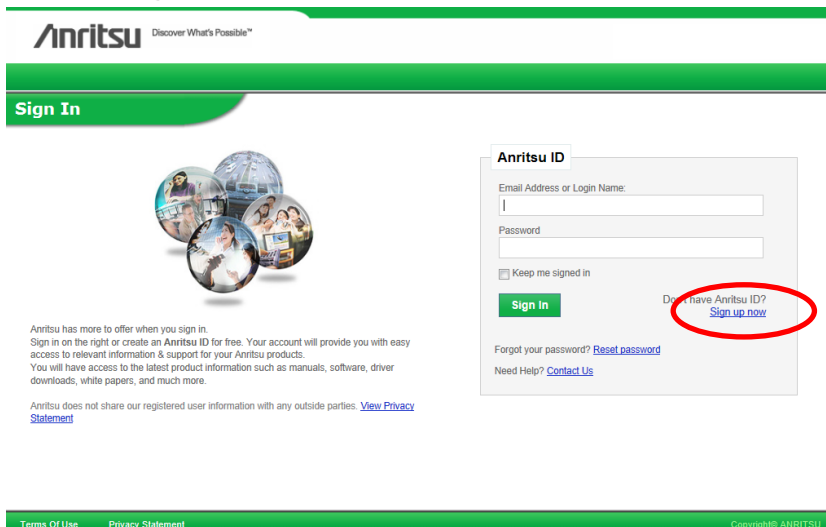
1) Visit

<http://www.anritsu.com/>

and Log-in to “My Anritsu”.



2) Click **Sign up now.**



Anritsu	Discover What's Possible™	My Anritsu ▶ Login
		Select a Country / Region ▶ United States
Search	Products & Solutions	Services & Support
Home > My Anritsu	Buy	About Anritsu
My Anritsu		Contact Us

Create an Anritsu Account

The fields indicated with an asterisk(*) are required to complete this transaction, other fields are optional. If you do not want to provide us with the required information, please use the "Back" button on your browser to return to the previous page, or close the window or browser session that is displaying this page.

First Name *	<input type="text"/>	Last Name *	<input type="text"/>
Job Title *	<input type="text"/>	Company *	<input type="text"/>
Phone *	<input type="text"/>	Fax Number :	<input type="text"/>
Address1 *	<input type="text"/>	Address2 :	<input type="text"/>
City *	<input type="text"/>	State *	--Select-- ▼
Postal Code *	<input type="text"/>	Country *	United States ▼
Email *	<input type="text"/>	Confirm Email *	<input type="text"/>

NEW Create a login name:
You now can log in with your email address or a login name.
The login name allows 6-8 characters. It must start and end with a digit or character and allows dashes (-), underscores (_) and periods (.).

Login Name :

Periodically Anritsu sends information to subscribing customers via e-mail
☒ I wish to receive these messages

7QTL

Enter the code shown:

Submit

4.2. Registering Product Information

Log-in to the Anritsu Web site using the Anritsu ID and register the product information. If you do not have an Anritsu ID, register for an Anritsu ID as described in section 4.1.

Go to <http://www.anritsu.com/> and follow the steps listed below to register the purchased MT8870A.

Log-in to “My Anritsu” and Select Register My Product

Input the Model Number and Serial Number.

The screenshot displays the Anritsu website's 'My Anritsu' section. A modal dialog box titled 'Register Your Product' is open, prompting the user to 'Please enter your product Information'. It contains two input fields: 'Model Number' and 'Serial Number', followed by a green 'Add' button. The background interface includes a navigation bar with links like 'Products & Solutions', 'Services & Support', and 'Buy'. A sidebar on the left lists account management options. The main content area shows 'My Products' and 'My Support' sections with various service links.

4.3. Downloading

The latest versions of software and operation manuals are available from the Anritsu Web site.


Navigate to the software download page shown below.

<http://www.anritsu.com/>

Log-in to “My Anritsu”.

Select My Registered Products.

- > Click **MT8870A - Software and Drivers View**
- > Click **Software Download Service**
- > Download.


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My Anritsu

Home > Software download

Software download

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[Japanese](#)
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Download Model List
Click the Model Number.

Model	Update	Support Contract Expiry Date
MT8870A	2013/08/02	-

If you can not find what you are looking for in the Download Model List, please try to register your products in the below.

Product Registration
Register more products by going to Product Registration. [\[Product Registration\]](#)

Home
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Register the Download Model at the first visit to the site.
Click **Product Registration** and input the information.

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Home > Software download

Software download

English
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Download Contact Us

Product Registration

This page allows customers to download their product firmware and the latest relevant software.
This service is provided in accordance with the relevant export laws of Japan and the USA.
Please note that in some cases this service may be available only to the original purchaser of the equipment.

[Notification]
Please note that for security purposes your e-mail address should include your name and your company/organizations domain.
If your e-mail address does not meet this format, we may ask you to register again using the preferred format.
Processing your application for changing e-mail address may take some time during which you will not be able to use the download service.
We apologize for any inconvenience this causes.

First Name: e.g. Taro
Last Name: e.g. Anritsu
Email:
Country: Select e.g. Japan
Zip Code: e.g. 243-8555
Address: e.g. 5-1-1 Onna, Atsugi-shi
Company: e.g. Anritsu Corporation
Section: e.g. Product Marketign Dept.
Tel: e.g. +81-46-223-9794

Registered Model

Select your product

Select your product from the list below and enter the serial number.
Even if you have several units of the same model, you do not need to repeat this process for each one.

Following firmware, release note and operation manual are available from the Anritsu public web site.

- MT9080/81/83 Series
- MT9090A (MU909011Ax)
- MT9090A (MU909014x15x)

For MD8470, MD8480, MD8490, a valid support contract is required before you can download software or operation manuals.
For the MD1230 and MP1590 product families, you will be able to obtain release notes after you register on this site. Software or Operation Manuals are only available through the purchase of an Annual Upgrade Service (Option 40).
To purchase this Option 40 or to inquire about support contracts for our products, please contact your local sales representative.

If you can not find what you are looking for in the drop down list, please click 'Download Contact Us'.

Model: <input type="text"/> MT8870A	Serial No: <input type="text"/>
Model: <input type="text"/> select	Serial No: <input type="text"/>
Model: <input type="text"/> select	Serial No: <input type="text"/>
Model: <input type="text"/> select	Serial No: <input type="text"/>
Model: <input type="text"/> select	Serial No: <input type="text"/>
Model: <input type="text"/> select	Serial No: <input type="text"/>
Model: <input type="text"/> select	Serial No: <input type="text"/>

Note:


OK
Back

Home

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The registration process may take 1 or 2 days to confirm the registered contents.

After registration has been completed, MT8870A will be listed in the Download Model List on the Software download page. When it appears, click **MT8870A**.


Discover What's Possible™

My Anritsu

Home > Software download

Software download

English
Japanese
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Download file list

MT8870A

Click and download only the files you need.
Please note the right-click menu "Save Background As..." is not available.

3 Manual

v_010566_20130509_Manual_ALL_E.zip (43.89MB)
English Operation Manuals.
v_010566_20130509_Manual_ALL_J.zip (70.34MB)
Japanese Operation Manuals.

4 Latest Version

CombiView_v010304_20130509.zip (4.64MB)
MU887000A_Platform_v010566_20130509.zip (35.53MB)
UtilityTool_v010110_20130509.zip (1.14MB)

5 Previous Version

CombiView_v010003_20120822.zip (3.60MB)
CombiView_v010208_20121214.zip (4.43MB)
MU887000A_Platform_v010024_20120817.zip (33.51MB)
MU887000A_Platform_v010316_20121211.zip (37.57MB)
UtilityTool_v010000_20120820.zip (1.52MB)
UtilityTool_v010107_20121212.zip (1.14MB)

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NI-VISA™ is a trademark of National Instruments Corporation.

● United States

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● Finland

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Fax: +7-495-935-8962

● United Arab Emirates

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Dubai, United Arab Emirates
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Fax: +971-4-3688460

● India

Anritsu India Private Limited

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