Setting Control Functions

Setting Control Functions

Remote Control

- Setting the GPIB
- Remote Control Using HTTP

Display

- Turning off the Date/Time Display
- Turning off the LCD Screen Backlight
- Calibration of the Touch Screen

Others

- Initial Source Port Control function
- Band Wait Function
- Checking the product information
- Activating Software Option
- Locking the Front Keys, Keyboard, and/or Mouse (Touch Screen)
- Setting the Beeper (Built-in Speaker)
- Setting the preset function
- Exit/Restart E5061B Measurement Application
- Overload Detection and Power Trip Function

Setting the GPIB

- Setting talker/listener GPIB address of E5061B
- Setting system controller (USB/GPIB interface)

Other topics about Setting Control Functions

This section describes how to set the interface necessary to use the GPIB (General Purpose Interface Bus) of the E5061B.

Setting talker/listener GPIB address of E5061B

When controlling the E5061B using GPIB commands from the external controller connected to the GPIB connector, you need to set the talker/listener GPIB address of the E5061B.

Follow these steps to make this setting:

- 1. Press System > Misc Setup > GPIB Setup> Talker/Listener Address.
- 2. Enter the address using the ENTRY block keys on the front panel.

Setting system controller (USB/GPIB interface)

When controlling an external device from the E5061B, connect the USB port of the E5061B and the GPIB port of the external device through the USB/GPIB interface.

NOTE Do not connect two or more USB/GPIB interfaces.

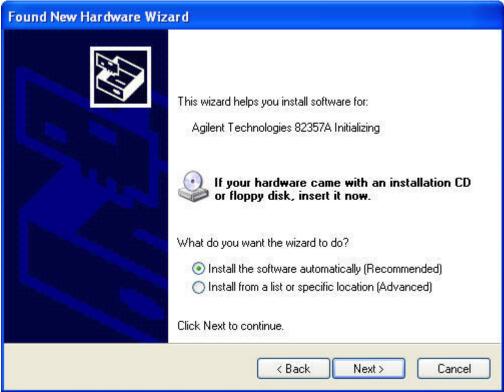
Follow these steps to set the USB/GPIB interface:

1. Connect the USB port of the E5061B to the USB/GPIB interface.

2. Select No, not this time, then click Next >.



3. Select Install the software automatically (Recommended), then click Next >.



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4. Click Finish.

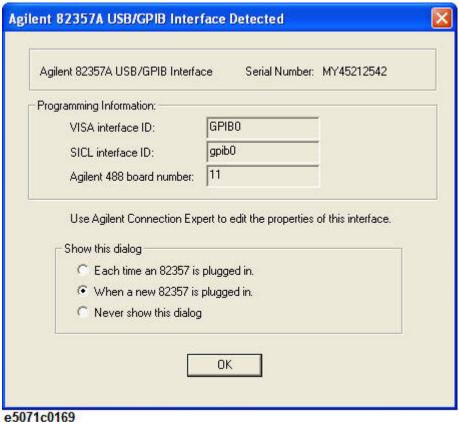


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5. The Found New Hardware Wizard appears again. Repeat step 2 to 4.



6. Select **When a new 82357 is plugged in**, then click **OK**.

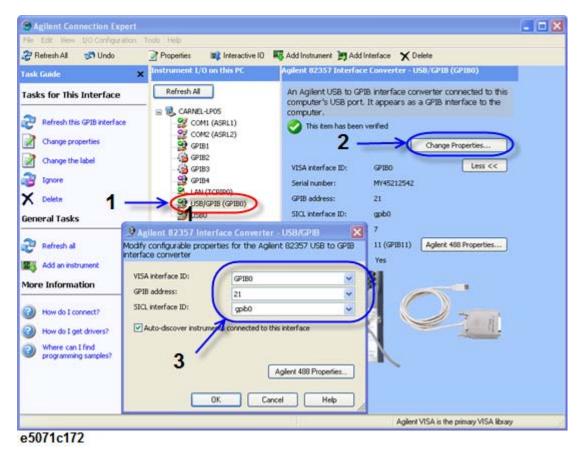


Select When a new < USB device > is plugged in. or Never show this dialog instead of Each time a USB devices is plugged in..

Changing the setting of the USB/GPIB interface

If you need to check/change the setting of the USB/GPIB interface after connecting the USB/GPIB interface, follow these steps:

- 1. Press System > Misc Setup > GPIB Setup > System Controller Configuration.
- 2. The Agilent Connection Expert appears. (You can also execute Agilent Connection Expert from Task bar or Start menu in Windows.)



- 3. Select USB/GPIB (GPIBx)
- 4. Click Change Propetries....
- 5. Change the setting of USB/GPIB interface.

Remote Control Using HTTP

- Enabling Web Server
- Browser Web Control

Other topics about Setting Control Functions

You can access the web page installed in the E5061B by using the hypertext transfer protocol (http) and the E5061B's IP address from the external PC's web browser. This function is called web-enabled analyzer. Through the built-in web page, you can control the E5061B remotely and display the measurement screen on external PCs.

The following browsers are recommended:

• Internet Explorer 6.0 and later

Enabling Web Server

Network Configuration

To use web server, you have to configure the E5061B's network correctly. For detailed information on configuration and notes, see Configuring the Network.

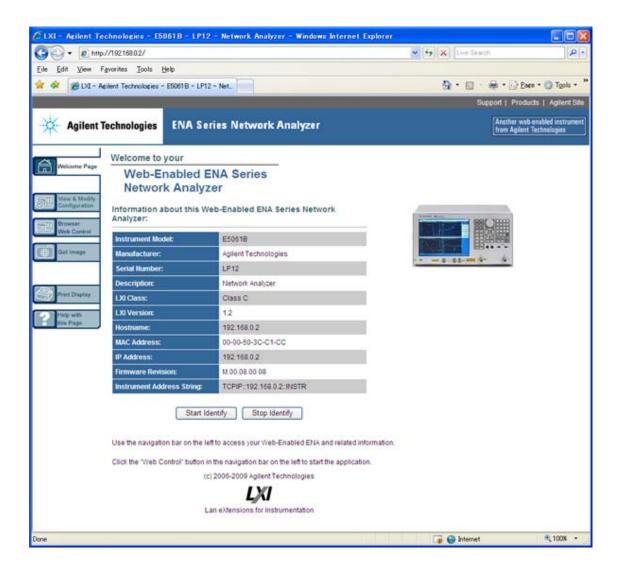
Enabling Web Server

Enable the web server for the E5061B so that it may allow access from an external PC. Follow these steps:

- 1. Press System > Misc Setup > Network Setup.
- 2. Click Web Server to turn it ON.

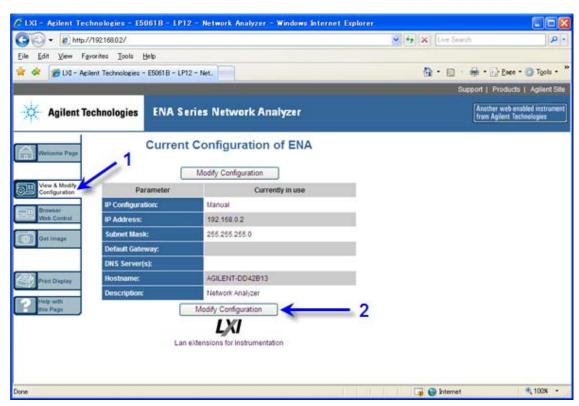
Access from an external PC

- 1. Execute web browser on your PC.
- 2. Check IP address of the E5061B.
- 3. Enter IP address of the E5061B in the address bar and press Enter. The following screen appears:

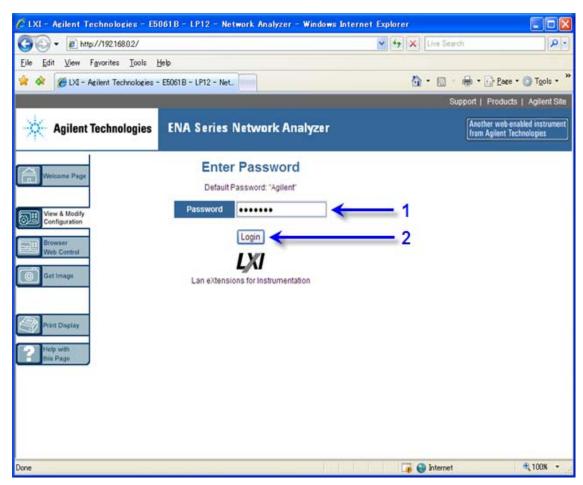


To change LAN (TCP/IP) configration of you ENA.

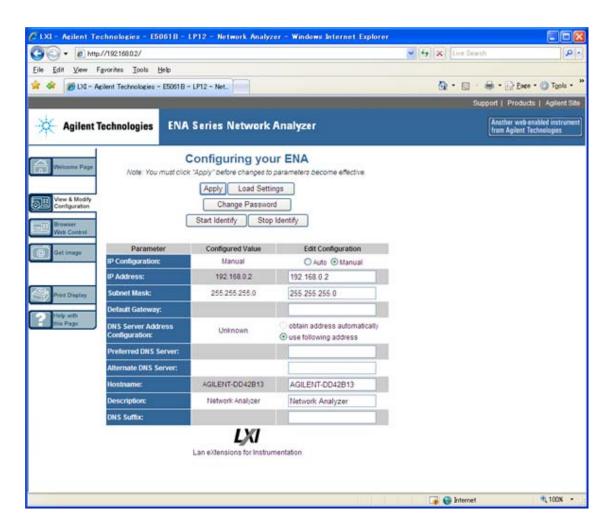
1. Click **View & Modify Configuration** (1 in the Figure below). The following screen appears:



2. Click **Modify Configuration** (2 in the Figure above). Modifying this setup affects the Windows Internet Protocol (TCP/IP) property. The following screen appears:



3. Enter the password (Default: "Agilent") in the Password field (1 in the figure above) and click **Login** (2 in the figure above). The following screen appears:



Browser Web Control

Browser Web Control function allows you to control your E5061B from web browser. This function is executed by the VNC server.

The external PC must have the Java Runtime Environment installed otherwise the Browser Web Control function might not work properly. To install Java Runtime Environment, see http://www.java.com.

The following is a description of how to start the VNC server configuration. Visit the web site at http://www.realvnc.com for information on the password setting procedure and VNC server.

- 1. Press System > Misc Setup > Network Setup.
- 2. Click **VNC Server Configuration** to start the VNC Server Properties.
 - VNC server configuration. The default password at factory shipment is blank.

Turning on/off the Date/Time Display

The date/time display in the instrument status bar can be switched ON/OFF using the following procedure.

- 1. Press System > Misc Setup > Clock Setup.
- 2. Click **Show Clock** to toggle the date/time display ON/OFF.

Turning off the LCD Screen Backlight

You can switch OFF the backlight (illumination) of the LCD screen of the E5061B. This extends the life of the backlight when it is used continuously over a long period.

Turning OFF the LCD Screen Backlight

- 1. Press System > Backlight to switch the backlight ON/OFF.
- 2. Switching OFF the backlight causes the indications on the LCD screen to be almost invisible.
- 3. The backlight that has been switched OFF can be turned ON again by pressing any key from the front panel.

Other topics about Setting Control Functions

Calibration of the Touch Screen

When you have executed system recovery on the E5061B, you have to calibrate the touch screen. Follow the procedure described below to calibrate the touch screen.

- 1. Press System > Service Menu > Test Menu > Adjust Touch Screen.
- 2. The touch screen calibration screen appears.
- Touch the x mark on the upper left with your finger. The mark x also appears on the lower left, upper right, and lower right. Touch the x marks in that order with your finger.
- 4. Touching all the four locations described above with your finger automatically concludes the touch screen calibration.

With no operation on the touch screen calibration screen for a preset time, it automatically closes and the previous measurement screen reappears.

Initial Source Control Function

The E5061B stops to output RF/LF signal source and DC Bias while the measurement is hold. (when Initial Source Control is ON, default setting). This function allows you to output signal source and DC Bias even while the measurement status is in hold.

- RF/LF Signal
 - 1. Press System > Service Menu > Init Src Ctrl > RF Out to turn OFF.
- DC Bias
 - Press System > Service Menu > Init Src Ctrl > DC Bias to turn OFF.

Band Wait Function

This function can set a wait time for each band in a sweep. This function allows you to make more stability measurement when the DUT need a time to stabilize.

Press System > Service Menu > Band Wait , then enter the required time.

Checking the product information

- Checking the serial number and options
- Checking the Firmware Revision
- · Checking the HDD Revision

Other topics about Setting Control Functions

Checking the serial number and options

The serial number and software options of the E5061B can be checked using the following procedure. See Options for the option displayed in this dialog.

- 1. Press **System** > **Firmware Revision**.
- 2. The Firmware Revision dialog is displayed. It provides information about the installed Options, Serial Number, IP Address, Mac Address and USB ID.

Checking the Firmware Revision

The revision number of the firmware installed in the E5061B can be checked using the following procedure.

- 1. Press **System** > **Firmware Revision**.
- 2. The Firmware Revision dialog is displayed.

Checking the HDD Revision

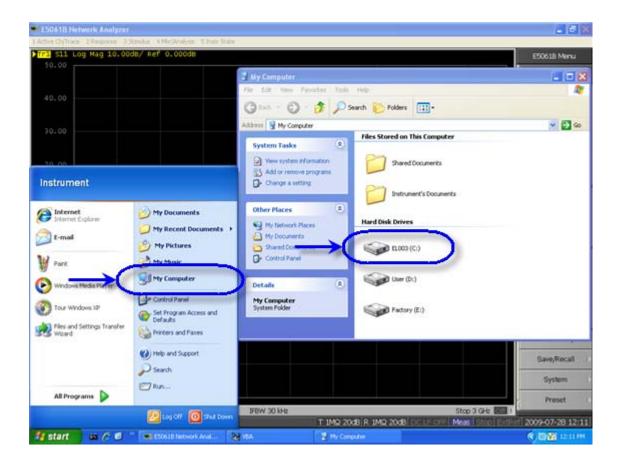
- 1. Press **System** > **Firmware Revision**.
- 2. The Firmware Revision dialog is displayed.
- 3. HDD revision is shown at HDD image.

For more information, refer to HDD Revision History.

At the firmware revision A.1.xx, the HDD revision is not displayed at the Firmware Revision dialog box.

The HDD revision for the revision A.1.xx can be checked using **Start** > **My Computer** > **C**: drive label. For example, the HDD version of the E5061B in the figure below is EL003.

E5061B



Activating Software Option

- Activating Option
- Backing Up License Key File

Other topics about Setting Control Functions

Activating Option

The software options can be purchased separately to enhance the E5061B measurement functionality. When you purchase the software option upgrade kit, Agilent provides the software entitlement certificate.

- 1. Get the license number at http://www.agilent.com/find/softwarelicense.
- 2. Press System > Service Menu > Enable Options and then select option which you want to activate.
- 3. Type the relevant 12 character long license key sent by Agilent in the Key Code entry dialog box, then click Enter.
- 4. Check the installed option according to Checking the product information.

Backing Up License Key File

The license keys are kept in a text file (.lic) located at **RECOVERY(E):\LICENSE\gen.lic**. Even if you lost the file, you can activate the option again if you have the license number. You can re-create the license number at http://www.agilent.com/find/softwarelicense with your software entitlement certificate.

Locking the Front Keys, Keyboard, and/or Mouse (Touch Screen)

You can lock (disable) the front keys, keyboard, and/or mouse (touch screen). This feature prevents erroneous operation caused by inadvertently touching any of these devices.

Locking the Front Keys, Keyboard, and/or Mouse

- 1. Press System > Misc Setup > Key Lock.
- 2. Click the corresponding key to switch the lock ON/OFF.

Softkey	Function
Front Panel & Keyboard Lock	Switches the lock of the front panel keys and keyboard ON/OFF.
Touch Screen & Mouse Lock	Switches the lock ofr the touch screen and mouse ON/OFF.

You cannot use a locked device to unlock that same device. To unlock the front panel keys, keyboard, touch screen and mouse that have been locked, press the Standby switch to turn OFF the power supply and then turn it ON again. When setting at power-on, the front panel keys, keyboard, touch screen and mouse are all in unlocked condition.

Setting the Beeper (Built-in Speaker)

- Setting the Operation Complete Beeper
- Setting the Warning Beeper

Other topics about Setting Control Functions

The E5061B has a built-in speaker that emits a beep tone. The beeper allows you to make two types of settings.

Туре	Function
Operation complete beeper	Emits a beep tone to inform the user that operations have completed.
	 When calibration data measurements are done
	When data storage has completed
Warning beeper	Emits a beep tone to prompt the user to use caution.
	 When an instrument error occurs (An error message appears at the same time.)
	When a limit test fails

The operations complete beeper emits slightly longer than the warning beeper.

Setting the Operation Complete Beeper

- 1. Press System > Misc Setup > Beeper > Beep Complete to switch the operation complete beeper ON/OFF.
- 2. Clicking **Test Beep Complete** allows you to hear and check the beep tone of the operation complete beeper.

Setting the Warning Beeper

- 1. Press **System** > **Misc Setup** > **Beeper** > **Beep Warning** to switch the warning beeper ON/OFF.
- 2. Clicking **Test Beep Warning** allows you to hear and check the beep tone of the warning beeper.

Setting the preset function

- Showing/hiding the confirmation buttons when presetting
- Setting the user preset function
- Saving a user-preset instrument state

Other topics about Setting Control Functions

Showing/hiding the confirmation buttons when presetting

The preset function can be executed without displaying the **OK** and **Cancel** softkey buttons when pressing the preset button of the E5061B.

- 1. Press System > Misc Setup > Preset Setup.
- 2. **Confirm** to toggle ON (show)/OFF (hide) the confirmation buttons.

Setting the user preset function

You can save the instrument state of the E5061B into a file in the mass storage, and then recall it with the preset function to reproduce that state.

If no user preset instrument state is stored, you cannot set the user preset function.

- 1. Press System > Misc Setup > Preset Setup > State.
- 2. Use one of the following keys for the desired setting.

Softkey	Function
Factory	Specifies the normal preset function.
User	Specifies the user-preset function.
Cancel	Returns to the softkey display in one upper level.

Saving a user-preset instrument state

To execute the user-preset function, you must have a preset setting file that has been saved. Follow these steps to save a preset instrument state of the E5061B.

1. Press Save/Recall > Save State > User Pres.

Exit/Restart E5061B Measurement Application

Pressing **System** > **Service Menu** > **Exit** shuts down the firmware of E5061B.

Pressing System > Service Menu > Restart Firmware restarts the firmware of the E5061B.

Overload Detection and Power Trip Function

An overload detection and Power Trip function is a safety feature to protect your E5061B from over-input. When an overload is detected, the measurement is aborted and the settings are changed as shown below, then the "Ovld Protection" is displayed on the instrument status bar.

RF Out: OFF

Port Coupling: AC

DC Bias: OFF

Gain-Phase Input Attenuator: 20 dB

• Gain-Phase Input Impedance: 1 $M\Omega$

The softkey labels which setting have been affected have (**Protected**) sign (e.g. **RF OUT** / **OFF (Protected)**).

The overload occurs when DC current is over:

- Ports 1 and 2: 40 mAdc
- Ports R and T (Gain-Phase): 100 mAdc

When the overload occurs, remove the cause of the over-input. Then press System > Overload Recovery > Clear Overload Protection. This softkey is not only to clear the protection status but also to set the former setting before you have overload.

The softkeys under **System** > **Overload Recovery** menu is identical with the same label softkeys under the other menu. For example, **System** > **Overload Recovery** > **RF Out** is identical with **Sweep Setup** > **Power** > **RF Out**. These softkeys help you to see the setting at a glance.

If changing the setting, such as attenuator: 0dB, causes overload, you can observe which setting have been changed and change them quickly at the softkeys under **System** > **Overload Recovery**. Changing the setting also clears the protection status.