NETGEAR®

802.11ac USB WiFi Adapter (A6100)

User Manual

July 2013

350 East Plumeria Drive
San Jose, CA 95134
USA

Support

Thank you for choosing NETGEAR.

After installing your device, locate the serial number on the label of your product and use it to register your product at *https://my.netgear.com*. You must register your product before you can use NETGEAR telephone support. NETGEAR recommends registering your product through the NETGEAR website. For product updates and web support, visit *http://support.netgear.com*.

Phone (US & Canada only): 1-888-NETGEAR.

Phone (Other Countries): Check the list of phone numbers at *http://support.netgear.com/general/contact/default.aspx.*

NETGEAR recommends that you use only the official NETGEAR support resources.

Trademarks

Contents

Set Up Your Wireless USB Adapter

1

This chapter describes how to set up the 802.11ac USB WiFi Adapter (A6100) and includes the following sections:

- *USB Adapter Placement and Performance*
- *NETGEAR genie Desktop Icon*
- *NETGEAR genie Home*
- *Join a Wireless Network with NETGEAR genie*
- *Install a Standalone Driver without NETGEAR genie*

For help installing your USB adapter, see the installation guide that came in the package. The installation is also available at the NETGEAR Download Center at *downloadcenter.netgear.com*.

Note: For more information about the topics covered in this manual, visit the support website at *support.netgear.com*.

Note: Firmware updates with new features and bug fixes are made available from time to time on *downloadcenter.netgear.com*. Some products can regularly check the site and download new firmware, or you can check for and download new firmware manually. If the features or behavior of your product do not match what is described in this guide, you might need to update your firmware.
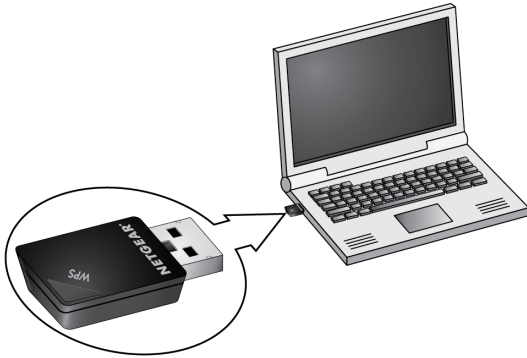
USB Adapter Placement and Performance

You can position the USB adapter to best suit your own environment and to ensure maximum performance.

Attach the USB Adapter to Your Computer

➢ **To attach the USB adapter directly:**

Connect the USB directly into a USB port on your computer.

NETGEAR genie Desktop Icon

When you install your USB adapter, the NETGEAR genie icon appears in the Windows system tray and on the desktop. You can click this icon to open NETGEAR genie to make changes or connect to a different wireless network. The color of the icon indicates the strength of your wireless connection:

White. 3–5 bars (strong connection)

Yellow. 1–2 bars (weak connection)

Red. 0 (zero) bars (no connection)

If you remove your USB adapter, NETGEAR genie is not available, and the icon is not displayed. When you insert the USB adapter again, the icon returns.

NETGEAR genie Home

When you launch NETGEAR genie, the Home screen displays.

This screen shows you at a glance if you are connected to a network, and if you have Internet access. The following options are available:

- **Select Language**. If more than one language is available, you can select a language from this drop-down list. NETGEAR genie screens are displayed in the language that you select.

- **Home button**. The currently selected Home screen. You can click the **Home** button to return here from a different screen.

- **Join a Network button**. View a list of wireless networks and join a network.

- **Other button**. View more information or check for software updates.

- **Help**. Display the help.

Status Bar
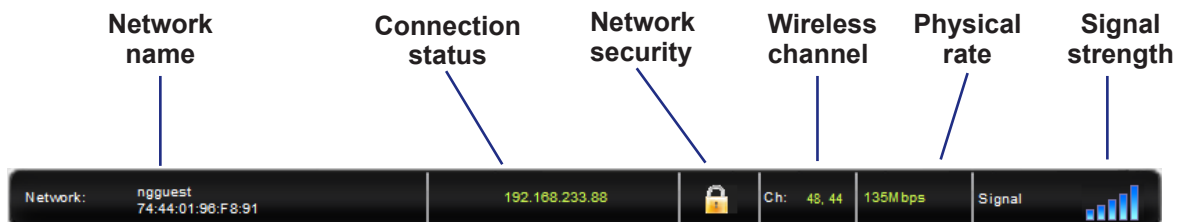
The status bar is at the bottom of the screen:

Figure 1. Status bar

The following information is displayed:

- **Network name**. The network name (SSID) of the wireless network to which the USB adapter is connected.
- **Connection status**. The connection status is one of the following (this status is also shown in the diagram in the middle of this screen):
  - Connected to the Internet
  - Connected to the Router
  - No Connection
- **Network security**. The lock symbol shows whether the network you are connected to uses wireless security. An open lock indicates an open network without wireless security, such as one that you might use in a coffee shop.
- **Wireless channel**. The wireless channel of the network to which the USB adapter is connected.
- **Physical rate**. The physical transmission rate for wireless communication.
- **Signal strength**. The strength of the wireless signal. Three to five bars indicate a good signal. One or two bars indicate a weak signal.

Join a Wireless Network with NETGEAR genie

In NETGEAR genie, click the **Join a Network** button to display the following screen:
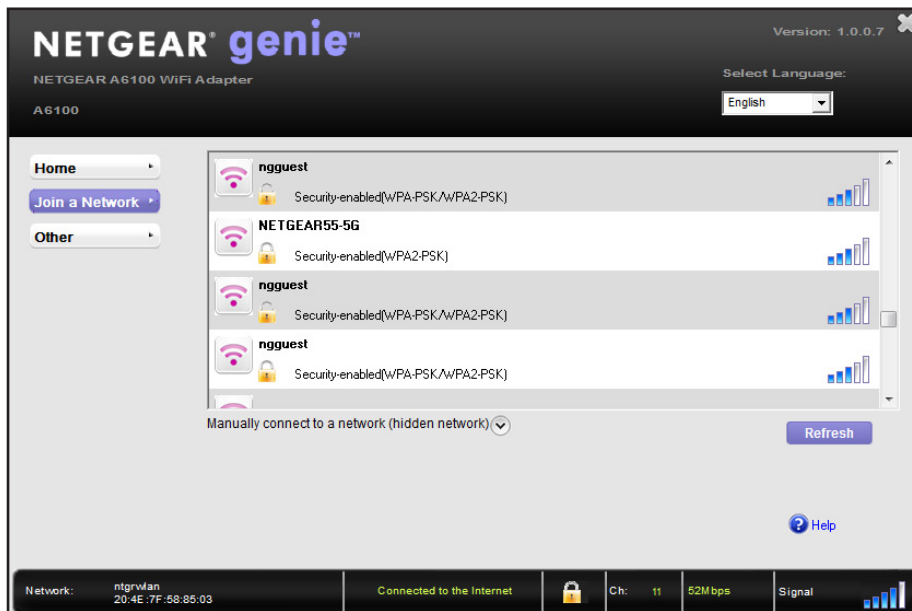
The following information, link, and button are displayed:

- **Network list**. View the wireless networks in the area. Click a network to select it.
- **Manually Connect to a network**. Click this link to join a network without viewing it on the network list, or to connect to a hidden network. A hidden network does not broadcast its wireless network name (SSID).
- **Refresh**. Click this button to scan for available networks in the area.

Network Details

From the Join a Network screen, you can view more details about a specific network.

➢ **To view network details:**

1. In the network list, click a network to select it.
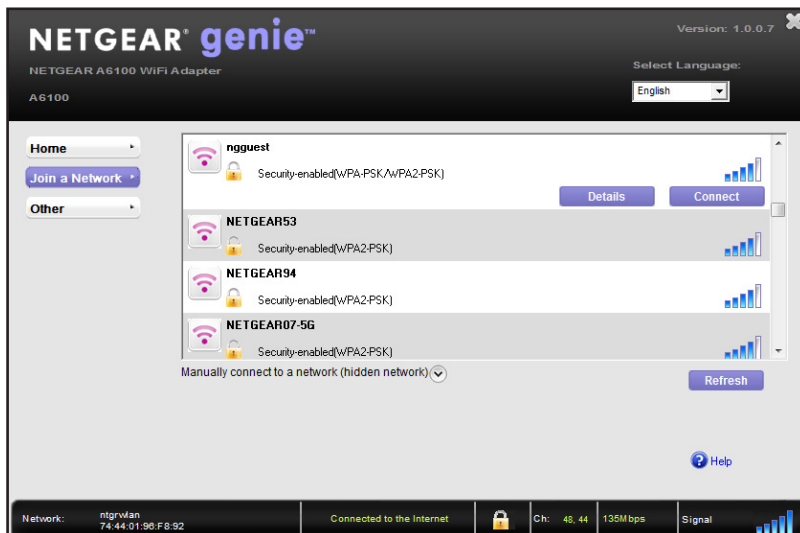
2. Click the **Details** button to display a screen similar to the following one:
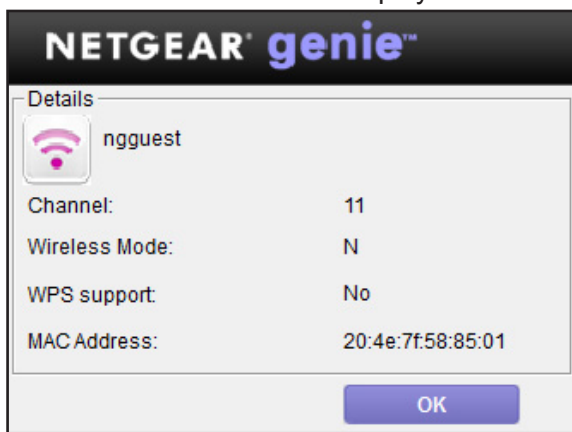
The following information is displayed:

- **Network name (SSID)**. The name assigned to a wireless network. As a security measure, some wireless access points do not broadcast their SSIDs. In such cases, the network is hidden. The name (SSID) field is blank even though the rest of the information is displayed.

- **Channel**. The channel on which the wireless network operates. NETGEAR recommends that you choose a network that uses a different channel from that of neighboring networks.

- **Wireless Mode**. The wireless technology used for the router or access point, such as N, A, G, B, or AC.

- **WPS support**. Identifies whether the router or access point for this network supports WPS (Wi-Fi Protected Setup).

- **MAC address**. The unique hardware address of the wireless device broadcasting this information. Typically, the wireless device is a wireless router or access point.

Join a Network or Connect to a Different Network

If your wireless network supports WPS, you can use WPS to join a wireless network. Or you can join a wireless network from this NETGEAR genie screen.

- **WPS**. Press and hold the **WPS** button on the side of the USB adapter for 3 seconds. Then within 2 minutes, press the **WPS** button on your wireless router or access point.

- **NETGEAR genie**. Click your wireless network to select it from the list, and click **Connect**. If the network is secure, enter its password or network key.

After the USB adapter joins the network, it automatically saves the network connection information to a Windows profile. Windows profiles can be used by genie and the Windows utility. If there is no change in the network information, the next time you launch NETGEAR genie, it automatically connects to the network you previously joined.

➢ **To use WPS to join a wireless network:**

1. Press and hold the **WPS** button on the side of the USB adapter for 2 seconds.
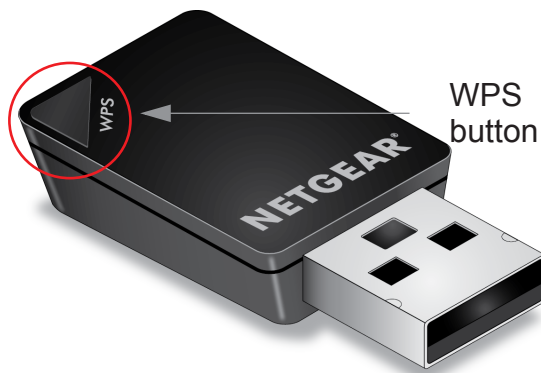
WPS button

2. Then within 2 minutes, press the **WPS** button on your wireless router or access point.

   The USB adapter joins the network, which can take a few minutes. Your settings are saved in a profile.

➢ **To select and join a wireless network:**

1. From NETGEAR genie, click **Join a Network**.
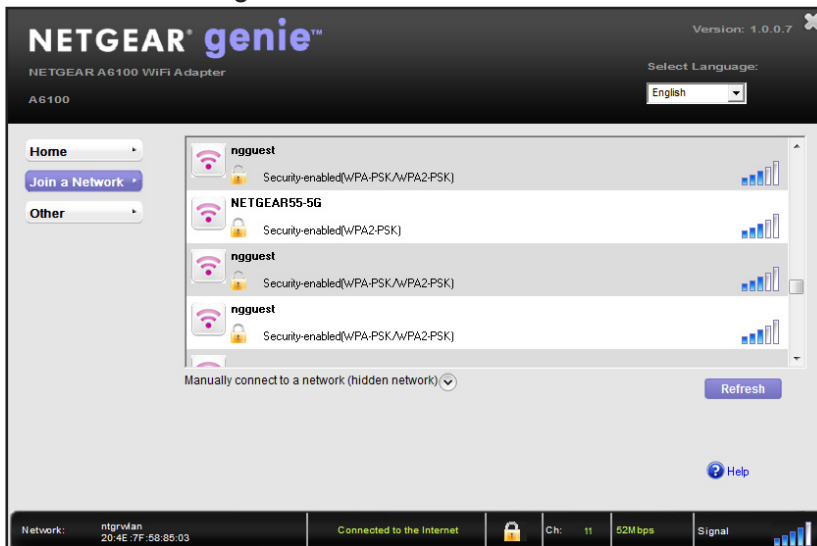
2. Look for the network you want to join in the list on this screen.

   If you do not see your network, you might need to scroll down to view more networks.

   If the network name is not displayed, that indicates a hidden network that does not broadcast its SSID. Use the manual method to connect to a hidden network. See *Join a Hidden Network* on page 11.

   Select the network that you want to join.
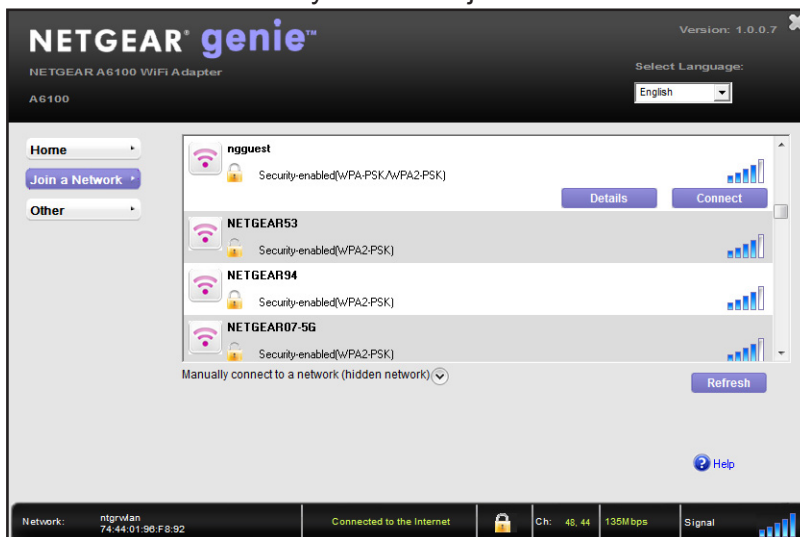
3. Click the **Connect** button.

4. If the wireless network is secure, enter the network password.

   The USB adapter joins the wireless network. This process could take a few minutes.

Join a Hidden Network

A hidden network does not broadcast its SSID.

1. From NETGEAR genie, click **Join a Network**.
2. Select the **Manually Connect to a network (for hidden networks)** link.
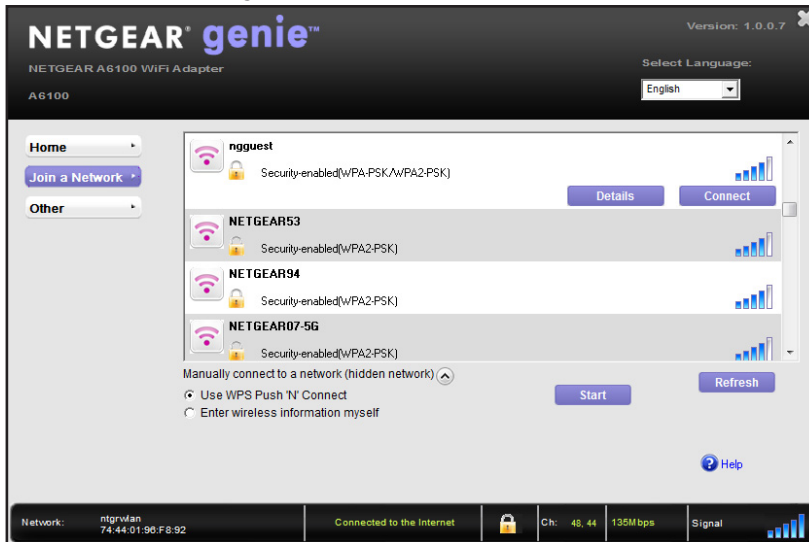
You can use WPS to connect, or enter the wireless information yourself.

➢ **To manually connect using WPS:**

1. Click the **Start** button.

    A pop-up window displays WPS instructions telling you to press the WPS button both on the USB adapter and the router.

2. Press the **WPS** button on your USB adapter.
3. Go to your wireless router or access point, and press its **WPS** button.

➢ **To manually connect without WPS:**

1. Select the **Enter wireless information myself** radio button.
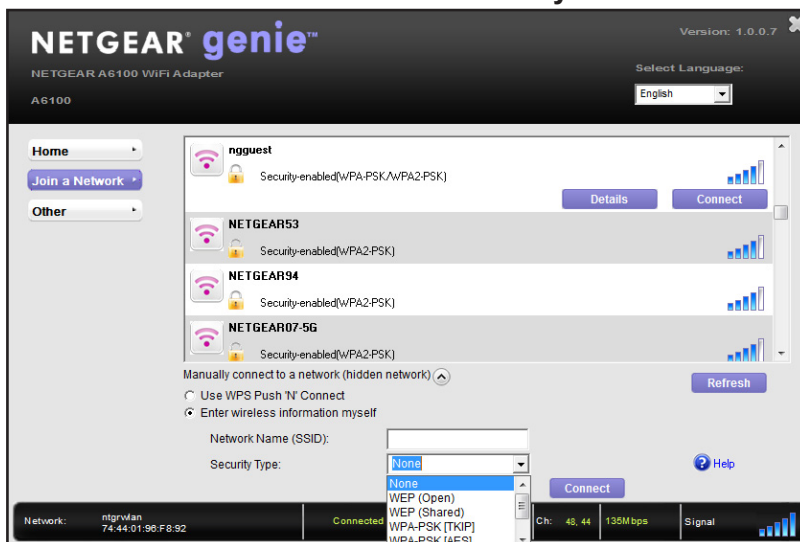
There are four security types that can be displayed for the network: None, WEP, WPA-PSK, and WPA2-PSK.

- **None**. There is no password.
- **WEP**. The password (key) is a 10 or 26 hexadecimal digit.
- **WPA-PSK**. The password (passphrase) is 8–63 characters in length or a 64 hexadecimal digit.
- **WPA2-PSK**. The password (passphrase) is 8–63 characters in length or a 64 hexadecimal digit.

2. In the fields provided, type the network name (SSID), select the security type, and type the passphrase (password).

Note: NETGEAR genie does not let you select the WPA or WPA2 security type. Windows 8, Windows 7, and Windows Vista, use the Windows WLAN Autoconfig service to enter WPA or WPA2 credentials to join the network. For Windows XP, use the Wireless Zero Configuration service to enter WPA or WPA2 credentials to join the network.

Install a Standalone Driver without NETGEAR genie

For Windows 8, Windows 7, and Windows Vista, you can install the Windows driver without the NETGEAR genie and use the Windows WLAN Autoconfig service to join a network. For Windows XP, you can install the Windows driver without the NETGEAR genie and use the Wireless Zero Configuration service to join a network.

➢ **To install the standalone driver and join a network:**

1. Insert the resource CD in your computer CD drive.

   If the CD main screen does not display, browse the files on the CD and double-click **autorun.exe**. The Welcome screen displays:

2. Click **Install Windows Standalone Driver**.

   The driver installs on your computer.

3. Either insert the USB adapter into a USB port on your computer, or connect it with the USB cable that came in the package.

4. Use the Windows WLAN Autoconfig service to join a network.

   (For Windows XP, use the Wireless Zero Configuration service.)

Maintenance 2

This chapter includes the following sections:

- *Other Screen*
- *Remove the genie Software*
- *Frequently Asked Questions (FAQs)*

Other Screen

In NETGEAR genie, click the **Other** button to display the following screen:
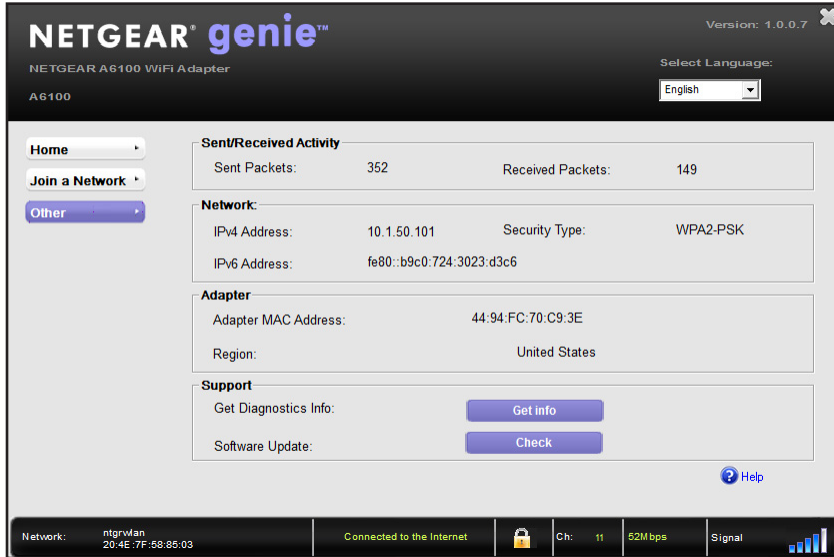
Sent/Receive Activity

- **Sent Packets**. Total number of packets sent during communication with the wireless network.
- **Received Packets**. Total number of packets received during communication with the wireless network.

Network

- **IPv4 Address**. The IPv4 address assigned to this USB adapter. The IPv4 address can change if you disconnect from the network and rejoin it later.
- **IPv6 Address**. The IPv6 address assigned to this USB adapter. The IPv6 address can change if you disconnect from the network and rejoin it later.
- **Security Type**. Wireless security used for the USB adapter to connect to the current wireless network.

Adapter

- **Adapter MAC Address**. The Media Access Control (MAC) address of this USB adapter. The MAC address is a unique 48-bit hardware address assigned to each wireless device. As a security measure, some wireless networks restrict access based on a list of known MAC addresses. If you try to join such a network, you have to provide your USB adapter's MAC address (shown here) to the network administrator before you can connect.

- **Region**. The region setting for the USB adapter. Wireless channels in use depend on the country or region. Your USB adapter automatically scans approved channels for your region when it checks to see which networks are available in your area. Governments regulate the channels used for wireless transmission. Operating the USB adapter in a different region might violate local laws.

Support

- **Get Diagnostics Info**. Click the **Get Info** button if support has directed you to do so. The genie displays the System Information screen and starts collecting system information, IP information, client driver and profile information, and site survey information.

- **Software Update**. You can check for software updates at the NETGEAR website. Click the **Check** button, and the genie displays the Live Check screen and checks for available software upgrades. If new software is found, the USB adapter software is automatically updated.

> **Note:** During the software update process, the old software version is removed and all saved profiles are deleted before the new software version is installed. When the software update process is complete, the USB adapter no longer connects to the network automatically. You need to join the network as described in *Join a Wireless Network with NETGEAR genie* on page 7. (If you do not use the NETGEAR genie, see *Install a Standalone Driver without NETGEAR genie* on page 13.)

Help

Click the **Help** button to display help.

Remove the genie Software

You can remove the USB adapter software in several different ways:

- **Uninstall**. In Windows, select **Start > All Programs > NETGEAR A6100 genie > Uninstall NETGEAR A6100 Software**.

- **Control Panel**. Follow the appropriate instructions for your Windows operating system:
  - **Windows 8**. Move the pointer to the left bottom corner of the screen to display the Windows pop-up Start menu. Right-click your mouse button, select **'Program and Feature' to Uninstall**, and select **NETGEAR A6100 genie**.
  - **Windows 7**. Select **Start > Control Panel > Programs and Features**, and then select **NETGEAR A6100 genie**. Click **Uninstall** and follow the screen prompts.

- **Windows Vista**. Select **Start > Control Panel > Programs and Features**, and then select **NETGEAR A6100 genie**. Click **Uninstall/Change** from the top menu and follow the screen prompts.

- **Windows XP**. Select **Start > Control Panel > Add or Remove Programs**, and then select **NETGEAR A6100 genie**.

Frequently Asked Questions (FAQs)

The USB adapter LED is not lit.

The USB adapter is not inserted securely in the USB port (or USB cable if used) or the A6100 software is not installed.

- Remove and reinsert the USB adapter.
- Check the Windows device manager to see if the USB adapter is recognized and enabled. Reinstall the A6100 software, if necessary.
- Insert the USB adapter in a different USB port on your computer if one is available.

I do not see the ![icon] icon.

Check to make sure that your USB adapter is inserted in the USB port. If it is removed, then the icon is not displayed. When you insert the USB adapter into the USB port, the icon returns to your desktop and the Windows system tray.

I cannot connect to a wireless network.

- Make sure that your USB adapter is inserted securely into the USB port on your computer or the USB cable if you are using it. The USB adapter LED should light or blink (see *NETGEAR genie Desktop Icon* on page 5 for details).
- Click the ![icon] icon to open NETGEAR genie. The following screen displays if the USB adapter cannot connect to the network that you selected:

- If the network uses wireless security, you need to either know the wireless security settings or use Push 'N' Connect if the network supports WPS. Some networks also restrict use to only computers or wireless devices with known MAC addresses. If that is the case, on the NETGEAR genie screen, click **Other** to find the MAC address for your USB adapter and provide it to the network administrator.

When I connect to the network, I cannot access the Internet.

Click ![N] to open NETGEAR genie. The following screen displays if the USB adapter can connect to the network that you selected but you cannot access the Internet:

Make sure that you are connected to the correct network. If you are, then check to see if the router's Internet connection is working. If the router's Internet connection is not working, restart the modem, router, and computer.

When I connect to the network, I cannot access shared resources such as printers.

- Make sure that the router or access point is physically connected to the Ethernet network.
- Make sure that the IP addresses and the Windows networking settings are configured correctly.

Do the USB ports go into a sleep mode if there is no traffic?

The USB devices do go into sleep mode if a USB feature called Selective Suspend is enabled, which it is by default. If this feature is enabled, and the connected USB devices to go into Selective Suspend mode, the network disconnects. To prevent this type of network disconnection, you can disable Selective Suspend.

➢ **To disable Selective Suspend mode:**

1. Select **Start > Control Panel > Hardware and Sound > Power Options > Edit Plan Settings > Change Advanced Power Settings > USB Settings**.
2. Change the setting for Selective Suspend mode to **Disabled**.

How can I improve the speed of my wireless connection?

You can use the USB cable and USB adapter that came in the package to position the USB adapter for better wireless communication.

The connection speed can vary depending on the type of USB port on your computer, the capacity of the router or access point for the wireless network, and the type of Internet connection. You can view the throughput in the status bar at the bottom of the Smart Wizard screen.

- If the throughput is 54 Mbps, you could be connected to an 802.11g network, or the wireless-N network could be set with WPA (TKIP) security.

  When WPA (TKIP) security mode is configured on the router or access point, WiFi regulations allow the USB adapter to connect only at up to 54 Mbps. For a faster connection, configure the security for the router or access point as WPA2 or WPA + WPA2 mixed wireless security. The connection speed still depends on the wireless capacity of the router or access point.

- If you do not have a USB 2.0 port on your computer, the throughput is limited to the 14 Mbps of the older USB 1.1 standard.

How can I view the IP address for the USB adapter?

Click the   icon to open NETGEAR genie. Then click the **Other** button to view the IP address.

No IP address is assigned to the USB adapter.

IP address assignment can be lost if you upgraded your USB adapter software and did not reboot your computer. To correct this problem, either restart your computer, or connect to a different access point.

Technical Specifications and Factory Default Settings

A

This appendix covers the following topics:

- *Technical Specifications*
- *Factory Default Settings*

Technical Specifications

The following table provides technical specifications for the USB adapter.

Table 1.

Feature	Description
Antenna	1 PIFA antenna
Standards	• 802.11ac draft 2.0 • 802.11n • 802.11g • 802.11b • 802.11a
Radio data rate	Autosensing
Frequency	• 2.4 GHz to 2.5 GHz CCK and OFDM Modulation • 5 GHz OFDM, 802.11n MCS0-7, and 802.11ac MCS0-9 coding scheme
Encryption	• WPA2-PSK [AES] • WPA-PSK [TKIP] • 40-bit (also called 64-bit) WEP data encryption • 128-bit WEP data encryption
Power	5V bus powered
Bus interface	USB 2.0, compatible with USB 1.1
Provided drivers	• Microsoft Windows 8 • Microsoft Windows 7 • Microsoft Vista • Microsoft Windows XP (32/64-bit)
Dimensions	37 x 20 x 8.1 mm (1.46 x 0.79 x.0.32 in.)
Weight	5 g (0.18 oz)
Operating temperature	0–40°C (32–104°F)
Emissions	FCC, CE

Factory Default Settings

The following table lists the default settings of your USB adapter.

Table 2.

Default Settings	
Wireless communication	Enabled
Country/region	United States (varies by region)
Operating mode	802.11ac draft 2.0, 802.11n, 802.11a, 802.11g, or 802.11b
Data rate	• Up to 450 Mbps with a router or access point that supports 802.11ac • Up to 150 Mbps with a router or access point that supports 802.11n

Notification of Compliance

NETGEAR Adapters

B

Regulatory Compliance Information

This section includes user requirements for operating this product in accordance with National laws for usage of radio spectrum and operation of radio devices. Failure of the end-user to comply with the applicable requirements may result in unlawful operation and adverse action against the end-user by the applicable National regulatory authority.

This product's firmware limits operation to only the channels allowed in a particular Region or Country. Therefore, all options described in this user's guide may not be available in your version of the product.

Europe – EU Declaration of Conformity

Products bearing the CE marking comply with the following EU directives:

- EMC Directive 2004/108/EC
- Low Voltage Directive 2006/95/EC

If this product has telecommunications functionality, it also complies with the requirements of the following EU Directive:

- R&TTE Directive 1999/5/EC

Compliance with these directives implies conformity to harmonized European standards that are noted in the EU Declaration of Conformity.

For indoor use only. Valid in all EU member states, EFTA states, and Switzerland.

This device may not be used for setting up outdoor radio links in France and in some areas the RF output power may be limited to 10 mW EIRP in the frequency range of 2454 - 2483.5 MHz. For detailed information the end-user should contact the national spectrum authority in France.

FCC Requirements for Operation in the United States

FCC Information to User

This product does not contain any user serviceable components and is to be used with approved antennas only. Any product changes or modifications will invalidate all applicable regulatory certifications and approvals

Devices operating within the frequency range of 5.15–5.25GHz are for indoor use only.

FCC RF Radiation Exposure and SAR Statements

SAR Statement

This product has been tested for body-worn Specific Absorption Rate (SAR) compliance. The FCC has established detailed SAR requirements and has established that these requirements have been met while the product was installed in a host notebook computer. The SAR limit set by the FCC is 1.6 W/kg.

RF Exposure Information

The radio module has been evaluated under FCC Bulletin OET 65C (01-01) and found to be compliant to the requirements as set forth in CFR 47 Sections, 2.1093, and 15.247 (b) (4) addressing RF Exposure from radio

frequency devices. This model meets the applicable government requirements for exposure to radio frequency waves. The highest SAR level measured for this device was 1.17 W/kg.

This product complies with the US / Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

SAR compliance has been established in typical laptop computer(s) with USB slot, and product could be used in typical laptop computer with USB slot. Other application like handheld PC or similar device has not been verified and may not compliance with related RF exposure rule and such use shall be prohibited.

The USB dongle transmitter is approved for use in typical laptop computers. To comply with FCC RF exposure requirements, it should not be used in other devices or certain laptop and tablet computer configurations where the USB connectors on the host computer are unable to provide or ensure the necessary operating configurations intended for the device and its users or bystanders to satisfy RF exposure compliance requirements.

Note: The country code selection is for non-US model only and is not available to all US model. Per FCC regulation, all WiFi product marketed in US must fixed to US operation channels only.

FCC Declaration of Conformity

We, NETGEAR, Inc., 350 East Plumeria Drive, San Jose, CA 95134, declare under our sole responsibility that the 802.11ac USB WiFi Adapter (A6100) complies with Part 15 Subpart B of FCC CFR47 Rules.

Operation is subject to the following two conditions:

• This device may not cause harmful interference, and
• This device must accept any interference received, including interference that may cause undesired operation.

FCC Radio Frequency Interference Warnings and Instructions

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following methods:

• Reorient or relocate the receiving antenna.
• Increase the separation between the equipment and the receiver.
• Connect the equipment into an electrical outlet on a circuit different from that which the radio receiver is connected.
• Consult the dealer or an experienced radio/TV technician for help.

Canadian Department of Communications Radio Interference Regulations

This digital apparatus (802.11ac USB WiFi Adapter (A6100)) does not exceed the Class B limits for radio-noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

This Class [B] digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe [B] est conforme à la norme NMB-003 du Canada

Industry Canada

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

Caution:

(i) The device for operation in the band 5150–5250 MHz is only for indoor use to reduce the potential for harmful interference to co-channel mobile satellite systems;

(ii) The maximum antenna gain permitted for devices in the bands 5250–5350 MHz and 5470-5725 MHz shall comply with the e.i.r.p. limit.

(iii) The maximum antenna gain permitted for devices in the band 5725–5825 MHz shall comply with the e.i.r.p. limits specified for point-to-point and non point-to-point operation as appropriate.

(iv) Users should also be advised that high-power radars are allocated as primary users (i.e. priority users) of the bands 5250–5350 MHz and 5650–5850 MHz and that these radars could cause interference and/or damage to LE-LAN devices.

Advertissement

Le guide d'utilisation des dispositifs pour réseaux locaux doit inclure des instructions précises sur les restrictions susmentionnées, notamment :

(i) Les dispositifs fonctionnant dans la bande 5150–5250 MHz sont réservés uniquement pour une utilisation à l'intérieur afin de réduire les risques de brouillage préjudiciable aux systèmes de satellites mobiles utilisant les mêmes canaux;

(ii) Le gain maximal d'antenne permis pour les dispositifs utilisant les bandes 5250–5350 MHz et 5470–5725 MHz doit se conformer à la limite de p.i.r.e.;

(iii) Le gain maximal d'antenne permis (pour les dispositifs utilisant la bande 5725–5825 MHz) doit se conformer à la limite de p.i.r.e. spécifiée pour l'exploitation point à point et non point à point, selon le cas.

(iv) De plus, les utilisateurs devraient aussi être avisés que les utilisateurs de radars de haute puissance sont désignés utilisateurs principaux (c.-à-d., qu'ils ont la priorité) pour les bandes 5250–5350 MHz et 5650–5850 MHz et que ces radars pourraient causer du brouillage et/ou des dommages aux dispositifs LAN-EL.

Radiation Exposure Statement

The product complies with the Canada portable RF exposure limit set forth for an uncontrolled environment and are safe for intended operation as described in this manual. The further RF exposure reduction can be achieved if the product can be kept as far as possible from the user body or set the device to lower output power if such function is available.

Déclaration d'exposition aux radiations:

Le produit est conforme aux limites d'exposition pour les appareils portables RF pour les Etats-Unis et le Canada établies pour un environnement non contrôlé.

Le produit est sûr pour un fonctionnement tel que décrit dans ce manuel. La réduction aux expositions RF peut être augmentée si l'appareil peut être conservé aussi loin que possible du corps de l'utilisateur ou que le dispositif est réglé sur la puissance de sortie la plus faible si une telle fonction est disponible.

Interference Reduction Table

The following table shows the recommended minimum distance between NETGEAR equipment and household appliances to reduce interference (in feet and meters).

Household Appliance	Recommended Minimum Distance (in feet and meters)
Microwave ovens	30 feet / 9 meters
Baby Monitor - Analog	20 feet / 6 meters
Baby Monitor - Digital	40 feet / 12 meters
Cordless phone - Analog	20 feet / 6 meters

Household Appliance	Recommended Minimum Distance (in feet and meters)
Cordless phone - Digital	30 feet / 9 meters
Bluetooth devices	20 feet / 6 meters
ZigBee	20 feet / 6 meters