

# **User's Manual**

## **(Transmitter Operating Instructions)**

The applying LMA transmitter device is an easy access adapter for users with plug and play structure, so users don't have to take care for any special operation. The instructions shown from the next page are the only ones provided to users that are displayed on LCD screen of the host PC (ThinkPad X41 Tablet Series).

## Wireless connections

You can connect to the Internet without connecting a wire to your computer by setting up a wireless access point or residential gateway. A wireless access point does not connect you to the Internet directly. Instead, it connects to a wired connection such as a cable modem, a DSL modem, or a phone line.

Certain wireless technologies are being used to connect to an access point. Wireless LAN (the IEEE 802.11 standard) and Bluetooth technologies work similarly for wireless networking.

To connect to an access point, you will need several pieces of information. You will need to know the network name (obtain this from your administrator), and your MAC address (which should have come with your computer or wireless networking card). You may also need to set up encryption. Contact your administrator for your network name and encryption settings. You may need to register your MAC address with your network administrator before connecting to your company network. A residential gateway is the consumer version of an access point. Consult your residential gateway instructions for setup.

Be careful to disable the wireless function when you are not using it because it uses power even when you are not connected to the network. Some models have an integrated Wireless LAN and/or Bluetooth antenna and hardware. If your computer did not come with integrated wireless, you can purchase a PC Card as an option. Wireless LAN gives you a high-speed connection to an access point.

If your computer comes with the built-in wireless networking card, refer to [Making wireless LAN connections](#) for more information.

## Making wireless LAN connections

You can stay connected to your network while you are in the office, in a meeting room, or at home, with no need for a wired connection. Some ThinkPad(R) models come with a built-in wireless networking card and a configuration utility to help you make wireless connections and monitor the status of your connection.



**Attention:** If you carry your ThinkPad computer with the wireless LAN feature into an airplane, you need to disable it before boarding. To disable it, refer to the instructions in [Enabling or disabling the wireless feature](#).

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**Note:** Some models come with a wireless networking card and a wireless LAN configuration utility built-in. If your computer does not come with these features, you can purchase the wireless networking card as an option. For more information, refer to [Finding options from IBM](#).



**Note:** If you use the computer in tablet mode, do not cover the UltraConnect(TM) wireless antennas built into the display.

## Wireless networking setup

To use the built-in wireless networking card (the IEEE 802.11 standard) to communicate, click this button to start [IBM\(R\) Access Connections](#), and follow the instructions on the screen.

 **Note:** Before you start setting up wireless networking connections by using Access Connections, obtain a Network Name (SSID) and your encryption information from your network administrator.



IBM Access Connections, a connectivity assistant program, can easily enable one network adapter and disable the other adapters on demand. After setting up your wireless networking connection, you can use the program to quickly switch the network settings.

## Wireless security features

Advances in wireless technology require that we manage your security more reliably than ever. Therefore, IBM has extended its IBM Embedded Security Subsystem to encompass virtually all of our ThinkPad(R) and desktop computer lines. This security subsystem helps protect data, hardware, network access and communications - both wired and wireless - on select ThinkPad and desktop PCs.

The IBM Embedded Security Subsystem provides hardware-based protection of critical security information, including passwords, encryption keys, and electronic credentials. It also helps identify computer users involved in transactions, and helps establish that data transmissions are authentic, confidential and intact.

IBM Security and Privacy Services for wireless risk assessment and wireless solution design can help you assess the risks based on your business needs, identify your information risk position, and integrate security strategies, policies, and architectures to help you achieve your wireless e-business objectives. To effectively manage risk on an ongoing basis, organizations must have a sound security strategy. By understanding threats and vulnerabilities at an early stage, we can help define the necessary scope and features of your wireless e-business security infrastructure.

For more information on IBM's wireless security offerings, click the following link:

<http://www.pc.ibm.com/us/think/thinkvantagetech/security.html>

## Checking wireless connection status

You can check the signal strength and status of your wireless connection either by opening IBM Access Connections, or by double-clicking the **IBM Access Connections** wireless status icon in the system tray.

The Access Connections wireless status icon displays the signal strength and status of your wireless connection as follows:



No link or a very poor one



Usable but weak link



Strong link



Wireless radio is disabled



**Note:** If you have trouble in making a connection, try moving your computer closer to your wireless access point.

See Also

## Enabling or disabling the wireless feature

To enable or disable the wireless feature, press Fn+F5. A list of wireless devices appears in the Wireless Radio Control window. You can turn the feature on and off with a single click.


You can also enable or disable the feature by the following procedures.

To enable the wireless feature, do as follows:

1. Click the Access Connections wireless icon in the system tray.
2. Click **Turn Wireless Radio On**.

To disable the wireless feature, do as follows:

1. Click the Access Connections wireless icon in the system tray.
2. Click **Turn Wireless Radio Off**.

 **Note:** You can also use the [Tablet Shortcut Menu](#) to enable or disable the wireless feature if you are using your computer in tablet mode.

 **Note:** To use the Access Connections wireless icon or the Fn+F5 key combination for enabling or disabling the wireless feature, select **Enabled** for the Internal Wireless Device in the BIOS Setup Utility. If you have selected **Radio off**, neither the Access Connections wireless icon nor the Fn+F5 key combination for the wireless radio control will work.

## Wireless upgradeable ThinkPad models

Depending on the model, your ThinkPad(R) computer might be wireless upgradeable. This means that your computer has an antenna that can support wireless LAN access when wireless LAN access points are available. Wireless devices are available from IBM: [Finding options from IBM](#).

## Installing the software in Windows XP and Windows 2000

To use an option Card with your ThinkPad computer, first you need to install the software necessary to run it. Do the following:

1. Start your operating system. Log on with a user ID authorized as an administrator.
2. Insert the Installation CD into the CD-ROM or DVD drive of your ThinkPad computer. The Welcome screen appears.
3. Click **Next**. The Select Packages screen appears.
4. The program detects if any of the software components have already been installed. All listed components are selected automatically if none of the components have been installed already. If you clear any of the check boxes on the menu screen, the corresponding components will not be installed.
5. Click **Next**, and follow the instructions on the screen.

After you have installed the software, you need to configure wireless network connection. Start the IBM Access Connections and follow the instructions on the screen.