IR-200F IrDA Mainboard Adapter

The VScom IrDA Mainboard Adapter enables infrared wireless data communication by connecting the IrDA dongle to the built-in mainboard IR header connectors of your desktop computer. The adapter provides fast and reliable wireless connectivity between desktop computer and IrDA compliant mobile peripheral devices including notebooks, PDAs, handheld and pocket PCs, digital cameras, cellular phones, printers, etc.

The IrDA Mainboard Adapter provides the cost economical way to add IrDA port to your desktop computer. With the built-in IR support on most Pentium based mainboards, the IR-200F enables the infrared feature of the IrDA-capable mainboards. The IrDA dongle attaches to the mainboard's IR header connectors via signal wires from provided bracket kit. The IrDA Mainboard Adapter is with metal base that allows the adapter sitting firmly on your table. The adjustable IrDA panel design allows you to beam the data of the mobile devices from different angle and direction. The adapter is powered by the mainboard, and no external power adapter is required.

The adapter uses Windows default built-in drivers of Windows 98, SE, ME, 2000 & XP. No extra manufacturer's drivers installation are required, and thus ensures 100% compatibility with Windows. By adding the IrDA Mainboard Adapter to your computer, your PC is infrared enabled and is ready to communicate with a world of applications and devices.

Hardware Installation

1. Turn off your computer.
2. Remove the system cover, and install the back panel bracket.
3. Consult your mainboard manual to find the IrDA pin assignments of the IR header on the mainboard.
4. Connect the signal wires of IR-200F to the mainboard IR header according to the IrDA pin assignments on the mainboard. Be sure to connect each signal wire to the IR Pin Header correctly , as per the colour of the wire vs. signal specified as follows:

Colour of Signal Wires	Mainboard's IR Pin Header
RED	VCC (+5V)
	NC
GREEN	IRRX
BLACK	GND
YELLOW	IRTX

Note: The IR PIN Header signals may vary with different mainboards. They may not list in the same sequence as above. You need to consult your mainboard manual to find the correct signal assignments specific to the mainboard of your computer.

BIOS Setup

You need to enable "UART2 Use Infrared" setting through the BIOS Setup to activate the infrared feature on your system mainboard . The second serial port , COM2, is directed to use for IrDA.

1. Enter BIOS Setup program by pushing down "Del" or "F1" during booting up of your computer.
2. Select "Chipset Features Setup" or "Integrated Peripherals".
3. Set "Onboard serial port 2: "2F8H/IRQ3"
4. Set "UART2 Use Infrared" to "Enabled". (The default setting is Disabled.)
    With some mainboards, you have to set:
    "UART Mode Select" to "IrDA".
    "UR2 Duplex Mode" to "Half".
5. You may need to set the serial port 2 on some type of mainboards if the following options are available :
    "RX, TX active" = "Hi, Hi"
    "Delay"= "Enabled"
    IR Function Duplex= Half
6. If your computer supports ACPI, you need set ACPI to "Disable".

Windows 98 / 98 SE / ME / 2000 / XP Driver Installation

During driver installation, Windows may ask for files that are located on the Windows 98/98SE CD. You will need to have Windows 98 / 98SE CD available. Some PC's have the Windows CAB files already archived on the hard drive and will not require the actual CD.

Normally, when you finish the above steps and reboot the computer, Windows will automatically detect the hardware and install the required drivers. You can use the IrDA port after Windows install the driver for IR-200F.

If in case your computer cannot detect the hardware after reboot, followings are the example of how to add IR-200F manually in Windows 98 by using "Add New Hardware".

1. Go to "Control Panel" and double click "Add New Hardware"
2. Click "Next" twice.
3. Select "No, the device isn't in the list". Click on "Next"
4. Select "No, I want to select Hardware from the list".
5. Select "Infrared Devices", and click on "Next" twice.
6. The "Infrared Transceiver" lists show some options. Choose "Generic Infrared Port", and click on "Next"
7. You need to select the COM port to which the infrared device is connected physically. Choose "COM2". Click on "Next".
8. Click on "Finish".

Checking Installation in Windows 98 & SE

You can now verify the installation by double-clicking on the "My Computer" on the Desktop. The "Infrared Recipient" icon is added to the "My Computer" Folder. The Infrared Recipient allows for file transfer between computers.

In the Control Panel, an "Infrared" icon is added.
In the System Tray on the Taskbar, an icon of "Infrared Monitor" is added.

The listings of "IrDA PnP Serial Port (*PNP0510)" under "Network adapters" and "Virtual Infrared COM Port" and "Virtual Infrared LPT Port" under "Ports" indicate the network driver for the IrDA Mainboard Adapter has been properly installed.

To Enable Infrared Communications
- Double click the IrDA icon in the system tray in the lower right corner of your screen to bring up the "Infrared Monitor". The infrared communication could be in the disabled state.
- Click on "Options" then check "Enable infrared communication" box.
- Set the connection speed up to 115.2K bps, and check "Limit connection speed to"
- Click "Apply" to start infrared communication service.
- Click "Status" to check the current status. The "Infrared Monitor" indicates it is currently searching for available infrared device within range. Your computer is now fully IrDA enabled.

File Transfer over Infrared
- Point the IrDA Mainboard Adapter at the Infrared Port on the other computer.
- Both systems detect each other and connect.
- The "Infrared Monitor" icon in the system tray on the Taskbar is activated.
- Double-click on the "Infrared Recipient" icon in "My Computer". The "Infrared Transfer" panel opens up and displays "One available Infrared device is within range."
- The connected Infrared device is shown in the panel.
- To transfer file, click on the "Send Files…" button.
- Locate the folder from "Look in" and select the files to be sent.
- Click on the "Open" button.
- The file is now transmitted to the other computer.
- The received files in another computer are stored in "My Received Files" of "Received Files".

To Turn on Infrared Monitor Sounds
1. Open the "Infrared Monitor" dialog box.
2. Click the "Preferences" tab.
3. Make sure "Play sounds before devices in range and interrupted communication" is selected.

- You can open the "Infrared Monitor" dialog box by clicking "Start", pointing to "Settings", clicking "Control Panel", and double clicking "Infrared".

- To turn off Infrared Monitor sounds, make sure "Play sounds for devices in

range and interrupted communication" is cleared.

- **If your computer has a sound card, you can double-click the "Sounds" icon in "Control Panel" to change which sounds are assigned to Infrared Monitor events.**

To be Notified when Infrared Communication is interrupted
1. **Click the "Infrared" icon on the taskbar.**
2. **Click the "Preferences" tab**
3. **Select "Play sounds when available devices come within range and when communication is interrupted".**

Checking Installation in Windows 2000 & XP

You can now verify the installation by looking at the listings in the Device Manger. (Go there by Start-Settings-Control Panel-System-Hardware-Device Manager).

The listings of "Built-in Infrared Device" under "Infrared Devices" indicate the drivers for the IR-200F has been properly installed. In the Control Panel, a "Wireless Link" icon is added.

The plug-and-play icon in the device tray at the lower right hand corner of the desktop indicates the IR-200F device is currently plugged in. Double click on the icon reveals that the IR-200F device is working properly.

File Transfer over Infrared
To send a file from the computer connected with IrDA Mainboard Adapter :
- **Point the IrDA Mainboard Adapter at the Infrared Port on the other computer.**
- **Both systems detect each other and connect.**
- **The "IR" icon in the system tray on the Taskbar is activated.**
- **A "Wireless Link" icon appears on the Desktop.**
- **Double-click on the "IR" icon, or "Wireless Link" icon, will bring up the Wireless Link dialog box.**
- **Locate the folder from "Look in" and select the files that you want to send.**
- **Click on the "Send" button.**
- **If the notebook or other computer is running Windows 2000 or ME, the file will not be sent until permission to receive the file is confirmed on the notebook or other computer. When asked "Do you want to accept this file ?", click "Yes".**
- **The file is now transmitted to the other computer. The "IR" icon in the System Tray changes to show actual file data transfer.**

To receive a file from the other computer running Windows 2000 :
- **Select a default folder to "received files". The default folder is the "Desktop".**
- **To select a new default folder, double-click on the "Wireless Link".**
- **Click on the "Properties" button to bring up the dialog box.**
- **The default location for received files is displayed. Click on "Browse" button.**
- **Select a folder of your choice or the "My Received Files" folder.**
- **Click "OK" to set the new default folder.**
- **Click "OK" to accept the new default folder to store received files.**

Checking Installation in Windows ME

You can now verify the installation by looking at the listings in the Device Manger. (Go there by Start-Settings-Control Panel-System-Hardware-Device Manager).

The listings of "Infrared Communication Device" under "Infrared devices" are added to indicate the drivers for the IrDA Mainboard Adapter has been properly installed. In the Control Panel, a "Wireless Link" icon is added.

The plug-and-play icon in the device tray at the lower right hand corner of the desktop indicates the IrDA Mainboard Adapter is currently plugged in. Double click on the icon reveals that the IrDA Mainboard Adapter is working properly.

File Transfer over Infrared

To send a file from the computer connected with IrDA Mainboard Adapter :
- Point the IrDA Mainboard Adapter at the Infrared Port on the other computer.
- Both systems detect each other and connect.
- The "IR" icon in the system tray on the Taskbar is activated.
- A "Wireless Link" icon appears on the Desktop.
- Double-click on the "IR" icon, or "Wireless Link" icon, will bring up the Wireless Link dialog box.
- Locate the folder from "Look in" and select the files that you want to send.
- Click on the "Send" button.
- If the notebook or other computer is running Windows ME or 2000, the file will not be sent until permission to receive the file is confirmed on the notebook or other computer. When asked "Do you want to accept this file ?", click "Yes".
- The file is now transmitted to the other computer. The "IR" icon in the System Tray changes to show actual file data transfer.

IR HotSync Operations with PDA of Palm OS

Instead of using cradle, you can use the IR port of your PDA to perform HotSync operations with the desktop PC connected with IR-200F.

After the installation of the IR-200F, you need to check the port used by your computer for infrared communication.

To Check the COM Port Used for Infrared Communication
1. In the Windows taskbar, click Start-Setting-Control Panel.
2. Double click Infrared.
3. Click the Options tab.
4. Select Enable infrared communication.
    The COM port displayed in the drop-down box is the port where IR-200F is attached. It should be different from any port used by the HotSync Manager
5. Make a note of which COM port is listed as "Providing application support on COMx and LPTx". (The x is the Port Number. Normally, it's COM4 and LPT3). You need this COM port information to configure the HotSync Manager for infrared communication.
6. Deselect any other check boxes in the Options tab.
7. Click Apply and OK.
8. Go to HotSync Manager and specify the simulated port used for infrared communication.

Configuring HotSync Manager for Infrared Communication
1. Click the HotSync Manager icon in the Windows system tray.
2. Make sure "Local" is checked on the menu.
3. Choose Setup.
4. Click the "Local" tab.
5. In the Serial Port drop-down box, select the COM port that was given as the simulated port in the Options tab of the Infrared Monitor. (For example, if the COM Port listed as providing application support on COM4, then select COM4 in the Serial Port drop-down box).
6. Click "OK".
7. The HotSync Manager is now configured to communicate with the simulated port defined for infrared communication. You cannot use your cradle again until you reconfigure the HotSync Manager to communicate with the port defined for cradle synchronization.
8. Now, you are ready to perform an IR HotSync operation.

Performing an IR HotSync Operation
1. In the Application Launcher, tap the HotSync icon.
2. Tap Local.
3. Tap the pick list below the HotSync icon and select IR to a PC/Handheld.
4. Position the IR port of your PDA within a couple of inches of the IR-200F.
5. Tap the HotSync icon to start the IR HotSync operation.

IR Sync Operations with Pocket PC of Windows CE

After the installation of the IR-200F, you need to configure ActiveSync on your computer.

Configuring ActiveSync for Infrared Communication
1. From the ActiveSync file menu, select "Connection Settings".
2. Check the box labelled "Allow serial cable or infrared connection to this COM port:"
3. Click "OK"
4. From the drop-down box select "Infrared Port". If your Pocket PC is connected to the desktop computer via USB or Ethernet connection, the drop-down box will be greyed out. You need to disconnect the PDA from the USB cable or cradle to enable the selection.

Performing an IR Sync Operation
1. Turn on your Pocket PC, and point the infrared port to IR-200F.
2. Tap on "Start".
3. Tap on "Program", and then on "Connections"
4. Tap on "IR ActiveSync".
5. A box appears on the screen showing "Connect to Infrared Port". The pocket PC is searching for infrared connection.
6. The connection between your pocket PC and IR-200F is established. A series of high-pitched beeps sound.
7. The synchronization begins.
8. To disconnect when synchronization finishes, move the Pocket PC away to break the IR connection.

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Manual Part No.: M004