USB ISDN TA

Quick Installation Guide

Doc No.: 120501-03

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Introduction

The USB ISDN TA

ISDN (Integrated Service Digital Network) is the most convenient and economical way to use the existing copper wire for both voice and data communication.

With the USB ISDN TA, data transmission rate can reach up to 128K. It can not only provides 128K transmission but also allows voice conversation and fast Internet Access simultaneously.

The USB ISDN TA is a low cost USB ISDN modem for applications like INTERNET ACCES and FAX capabilities. EASY access due to plug and play features via USB bus and low cost due to host processing concept and remote powering via USB bus features.

System Requirements

- An USB port
- A CD-ROM drive
- Microsoft Windows 98/2000/ME/XP

Package Contents

- One USB ISDN TA
- One Standard USB Cable
- One ISDN Cable
- One Compact Disc

Getting to Know the USB ISDN TA

The Adapter's Ports

- **ISDN Port:** connects to an ISDN cable
- **USB Port:** connects to an USB cable

The Adapter's LEDs

- **Power:** glows green when the software driver is well installed in your computer
- **B1:** glows green when transmitting / receiving data in 64 Kbps speed mode
- **B2:** glows green when transmitting / receiving data in 128 Kbps speed mode

Installing the USB ISDN TA

Installing the USB ISDN TA & Cabling

1. Insert the USB cable's square end into the adapter's USB port.
2. Insert the rectangular end of the USB cable into the USB host port on your PC.

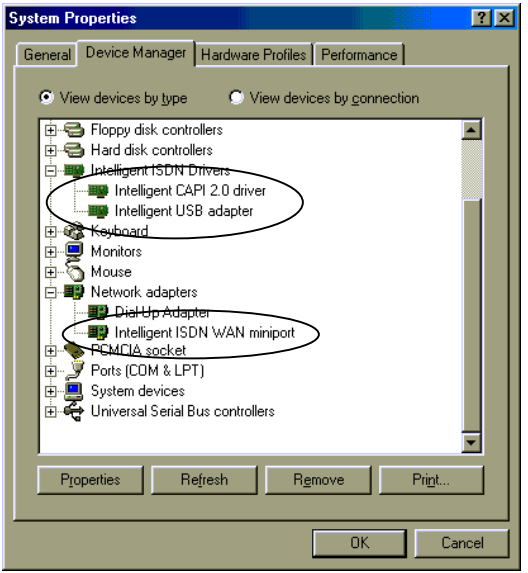
Connecting to an ISDN Network

1. Connect one end of an ISDN cable into the adapter's ISDN port.
2. Connect the other end of the ISDN cable into S/T port on NT1 ISDN device.

Windows 98 Installation

1. Connect the rectangular end of the USB cable into the USB host port of your computer, and the square end into the USB port of your network adapter. Windows 98 will automatically detect the device. Click **Next** to continue.
2. Select **Search for the best driver for your device (Recommended)** and click **Next.**
3. Insert the device driver into your CD-ROM drive. Select **Specify a location**, direct Windows 98 to the location where the driver stored and click **Next.** Windows 98 will search for the suitable driver for the software installation need.
4. Click **Next.** Windows 98 will start copying necessary files onto your system.
5. Click **Next.**
6. Select the switch protocol that your telephone company uses and click **Next.**
7. Enter the telephone numbers that your ISP provided and click **Next.**
8. Click **Finish.**
9. When asked to supply the original Windows 98 CD-ROM, you need to insert it into your compact disc drive. Click **OK.**
10. Click **Finish** to complete the software installation.
11. To verify if your network adapter exists in your computer and well enabled, you can perform the following steps.

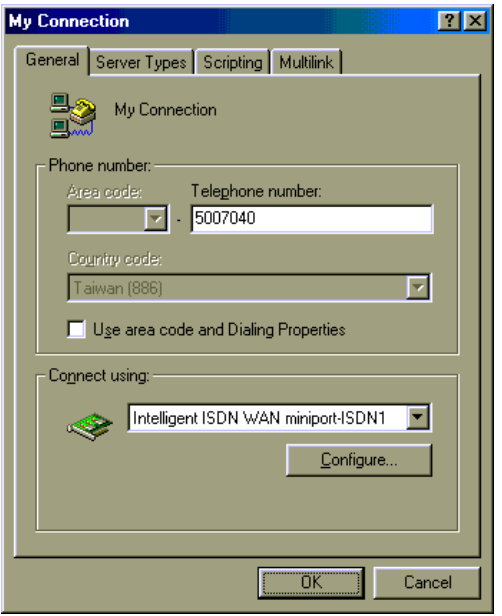
12. Go to **Start, Settings, Control Panel, Systems** and then **Device Manager.**
13. Click **Intelligent ISDN Drivers** and **Network adapters** to expand. If **Intelligent CAPI 2.0 driver, Intelligent USB adapter** and **Intelligent ISDN WAN miniport** are found, that means your network adapter exists and enabled. If not, consult your distributor for technical support.



Dial Up to Internet

1. Go to **My Computer, Dial-Up Networking.** Double-click the **Make New Connection** icon.

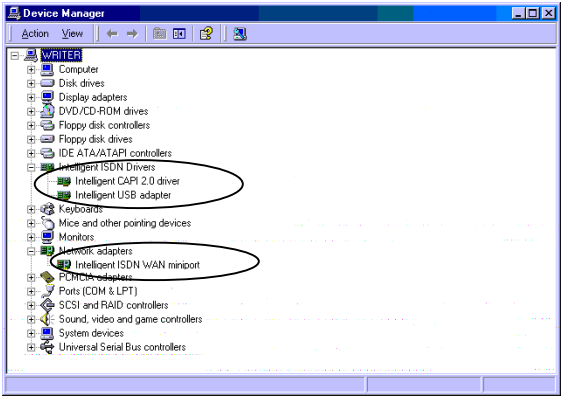
2. Name your connection appropriately, select your network adapter and click **Next.**
3. Enter the Telephone number that your ISP provided and click **Next.**
4. Click **Finish** to complete the connection setup.
5. When the **My Connection** icon appears, right-click the icon and select **Properties.**
6. Click to clear the **Use area code…**check box, make appropriate settings as the following figure and click **OK.**



7. Enter the **User name** and **Password** that your ISP provided and click **Connect**, then you will be able to surf the Internet.

Windows 2000 Installation

1. Connect the rectangular end of the USB cable into the USB host port of your computer, and the square end into the USB port of your network adapter. Windows 2000 will automatically detect the device. Click **Next** to continue.
2. Select **Search for a suitable driver for my device (recommended)** and click **Next.**
3. Select **Specify a location** and click **Next.**
4. Insert the device driver into your CD-ROM drive. Click **Browse,** direct Windows 2000 to the location where the driver stored and click **OK.**
5. Click **Next.** Windows 2000 will start copying necessary files onto your system.
6. Click **Finish** to complete the software installation.
7. To verify if your network adapter exists in your computer and well enabled, you can perform the following steps.
8. Go to **Start, Settings, Control Panel, Hardware** and then **Device Manager.**
9. Click **Intelligent ISDN Drivers** and **Network adapters** to expand. If **Intelligent CAPI 2.0 driver, Intelligent USB adapter** and **Intelligent ISDN WAN miniport** are found, that means your network adapter exists and enabled. If not, consult your distributor for technical support.



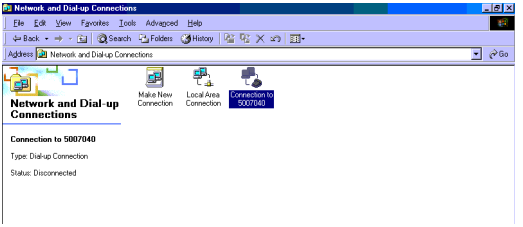
Dial Up to Internet

1. Go to **Start, Settings, Control Panel, Network and Dial-up Connections.** Double-click the **Make New Connection** icon. When the following figure appears, click **Next** to continue.
2. Select **Dial-up to the Internet** and click **Next.**
3. Select **I want to set up…**and click **Next.**
4. Select **I connect through a phone line and a modem** and click **Next.**
5. Select your network adapter and click **Next.**
6. Click to clear the **Use area code…**check box, enter the Telephone number that your ISP provided and click **Next.**
7. Enter the **User name** and **Password** that your ISP provided and click **Next.**
8. Click **Next.**

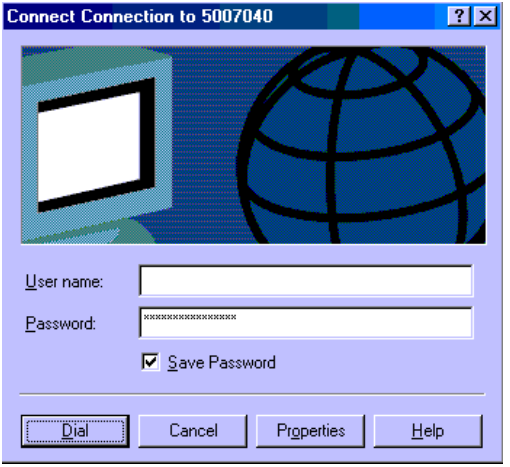
9. Select **No** and click **Next.**

10. Click to clear **To connect to the Internet…**check box and click **Finish.**

11. Double-click the connection icon that you set up.



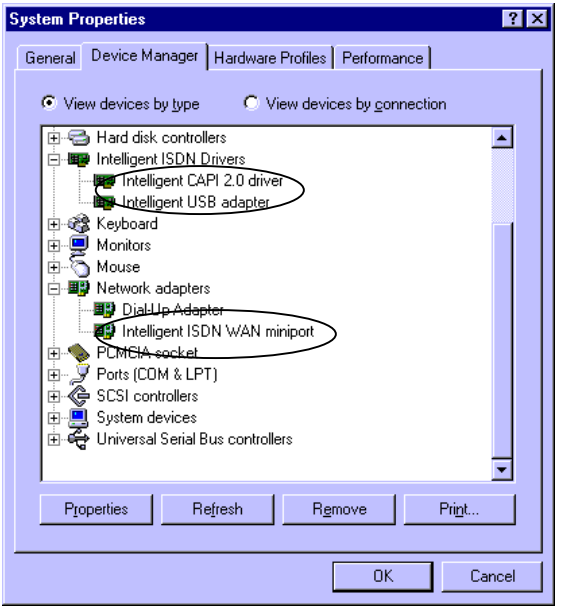
12. Click **Dial**, then you will be able to surf the Internet



Windows ME Installation

1. Connect the rectangular end of the USB cable into the USB host port of your computer, and the square end into the USB port of your network adapter. Windows ME will automatically detect the device. Insert the device driver into your CD-ROM drive, select **Automatic search for…**and click **Next.** Windows ME will search for appropriate driver and copy necessary files onto your system.
2. Click **Finish.**
3. When the **ISDN Configuration** windows appears, click **Next.**
4. Select appropriate **Switch Protocol** and click **Next.**
5. Enter the **Phone numbers** that your ISP provided and click **Next.**
6. Click **Finish** to complete the software installation.
7. To verify if your network adapter exists in your computer and well enabled, you can perform the following steps.
8. Go to **Start, Settings, Control Panel, Systems** and then **Device Manager.**
9. Click **Intelligent ISDN Drivers** and **Network adapters** to expand. If **Intelligent CAPI 2.0 driver, Intelligent USB adapter** and **Intelligent ISDN WAN miniport** are found,

that means your network adapter exists and enabled. If not, consult your distributor for technical support.

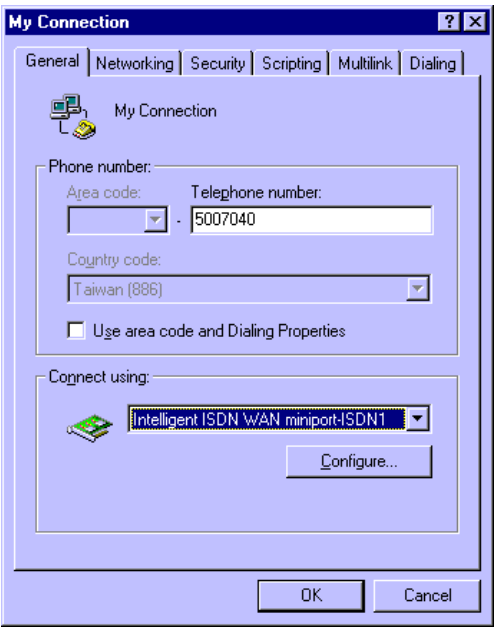


Dial Up to Internet

1. Go to **Start, Settings, Dial-Up Networking.** Double-click the Make New Connection icon.
2. Name your connection appropriately, select your network adapter and click **Next.**
3. Enter the Telephone number that your ISP provided and click **Next.**
4. Click **Finish** to complete the connection setup.

5. When the **My Connection** icon appears, right-click the icon and select **Properties.**

6. Click to clear the **Use area code…**check box, make appropriate settings as the following figure and click **OK.**



7. Enter the **User name** and **Password** that your ISP provided and click **Connect**, then you will be able to surf the Internet.

Windows XP Installation

1. Connect the rectangular end of the USB cable into the USB host port of your computer, and the square end into the USB port of your network adapter. Windows XP will detect the new device and prompt you to insert the network device driver. Insert the device driver into the CD-ROM drive of your system, select **Install the software automatically (Recommended)** and click **Next** to continue.

2. Windows will start searching for the appropriate driver for the installation. When the screen appears as below, click **Continue Anyway** to proceed.

3. Wait for seconds while Windows copies the appropriate driver to your system.

4. Click **Finish** to complete the software installation.

5. To verify if your network adapter exists in your computer and well enabled, you can perform the following steps.

6. Go to **Start, Control Panel, System, Hardware** and then **Device Manager.**

7. Click **Intelligent ISDN Drivers** and **Network adapters** to expand. If **Intelligent CAPI 2.0 driver, Intelligent USB adapter** and **Intelligent ISDN WAN miniport** are found, that means your network adapter exists and enabled. If not, consult your distributor for technical support.

Dial Up to Internet

1. Go to **Start, Control Panel, Network Connections.** Double-click the **Create a new connection** icon. When the following figure appears, click **Next** to continue.
2. Select **Connect to the Internet** and click **Next.**
3. Select **Set up my connection manually** and click **Next.**
4. Select **Connect using a dial-up modem** and click **Next.**
5. Select your network adapter and click **Next.**
6. Name your connection appropriately and click **Next.**
7. Enter the Telephone number that your ISP provided and click **Next.**
8. Enter the **User name** and **Password** that your ISP provided and click **Next.**
9. Click **Finish** to complete the connection setup.
10. Double-click the connection icon that you set up.
11. Click **Dial**, then you will be able to surf the Internet

Appendix

Specifications

Application

- Answering Machine with BVRP or RVS-COM
- Euro File Transfer with BVRP or RVS-COM
- Fax with BVRP or RVS-COM
- Internet Access
- Phone with BVRP or RVS-COM

Hardware Interface

- ISDN S/T
- USB

LED

- Power
- B1
- B2

OS

- Windows 98
- Windows 2000
- Windows ME
- Windows XP

Switch Protocol

- DSS1: Euro-ISDN

Software Interface

- CAPI 2.0
- ISDN WAN Miniport

S/T ISDN Interface

- Support OSI level 1 conform to UIT-T I.430 for basic access at S and T interfaces (ETSI 300012/ANSI T1.605)
- Line interface transformer direct drive
- Full-duplex transmission at 192kbps on separate transmit and receive twisted pairs using alternate mark inversion (AMI) line coding
- 2 B channels at 64kbps each plus 1 D channel at 16kbps
- All I.430 wiring configurations supported including passive bus for TE'S distributed point to point and point to multipoint
- Multiframe support
- Analog part: included with adaptive detection threshold and equalizer

USB Interface

- USB 1.0 specification full compliance, 1.1 specification compatibility (1.1 power management compliance), 12 Mbps full speed
- On-chip USB transceiver with digital PLL
- 6 isochronous endpoints for B1, B2, D channels data. interrupt endpoint for I430
- Isdn protocol and data.control endpoint for USB standard plus vendor specific request
- Communication device class and vendor

requests

- Bus or self powered application (pin programmable)
- Onnow power management (D0, D2, D3) suspend mode compliance
- Pin programmable high/low power USB device registration, wake-up capability, USB device identification

General

- USB hot plug and play interface
- Control access and interrupt handling provided through the USB interface
- All FIFOS and FIFOS management needed in-cluded for USB/ISDN data processing
- Internal PLL to generate the USB 48MHz clock from a 15.36MHz crystal
- Internal regulator for 3.3V generation from USB bus 5V
- 48 pin TQFP package
- 0.35 micron HCMOS 6 process