EUT : USB MODEM HUB

FCC ID : H52PT-3060

PURETEK INDUSTRIAL CO., LTD.

USER'S MANUAL

Pan-European Approval

The equipment has been approved in accordance with Council Decision 98/482/EC for pan-European single terminal connection to the public switched telephone network (PSTN). However, due to differences between the individual PSTNs provided in different countries, the approval does not, of itself, give an unconditional assurance of successful operation on every PSTN network termination point.

In the event of problems, you should contact your equipment supplier in the first instance.

Warning Notice to Australian Users

All telecommunications devices are required to be labelled with a Telecommunications Compliance Label, ensuring their compliance with ACA Technical Standards. To ensure continuing compliance to ACA Technical Standards, please ensure the following AT commands are maintained:

ATB0	(ITU/CCITT operation)
AT&G	(No Guard tone)
AT&P1	(33/36 pulse dial make/break ratio)
ATS0=0	(No answer or answer greater than 1 ring) or ATS0>1
ATS6=N	(Blind dial delay - acceptable range is 2-5 seconds)
ATS11=95	(DTMF period between 70-255ms)

A total of 3 calls attempts are allowed to a telephone number, with a minimum period between calls of 2 seconds: if the call doesn't connect after 3 attempts, 30 minutes must expire before automatic redialling may be initiated.

Failure to set the modem (and any associated communications software) to the above setting may result in the modem being non-compliant with ACA Technical Standards. Under these circumstance a permit would no longer be valid, with the user subject to significant penalties under the Telecommunications Act.

The modem card must only be used in a data terminal equipment (DTE) e.g. computer, that has a screw down cover /lid. As unsafe voltages (TNV) exist on the modem card, disconnect the modem card from the telephone line while the cover (lid) of the DTE (computer) is removed.

Caution

1. While installing the internal modem card, please ensure there is at least 2mm of air gap between the PCB card and other components in the DTE.

2. For Safety reasons, only connect a Telephone marked with a Telecommunications Compliance Label to the phone port.

3. For Safety reasons, only connect equipment with a Telecommunications Compliance

Label. This includes customer
equipment previously labelled,
permitted or certified.

Notice for New Zealand Users

- The grant of a Telepermit for a device in no
  way indicates Telecom acceptance of
  responsibility for the correct operation of
  that device under all operating conditions.
  In particular the higher speeds at which
  this modem is capable of operating cannot
  always be expected on network designed
  to delivery voice telephony be customers.
  Failure to operate should not be reported
  as a fault to Telecom.

- In addition to satisfactory line conditions a
  modem can only work properly if:

  - It is compatible with the modem at the
    other end of the call and

  - The application using the modem is
    compatible with the application at the
    other end of the call. E.g. accessing the
    Internet requires suitable software in
    addition to a modem.

- This equipment shall not be used in any
  manner which could constitute a nuisance
  to other Telecom customers.

- Some parameters required for compliance
  with Telecom's PTC Specifications are

dependent on the equipment (PC) associated with this modem. The associated equipment shall be set to operate within the following limits for compliance with Telecom Specifications:

- Not more than a total of 10 call attempts shall be made to the same number for any single manual call initiation within a 30 minutes period.

- There shall be at least 60 seconds between call attempts to the same number.

- Automatic calls to different numbers shall be not less than 5 seconds apart.

Immediately disconnect this equipment should it become physically damaged, and arrange for its disposal repair.

• The correct settings for use with this modem in New Zealand are as following:

ATB0	(CCITT operation)
AT&G2	(1800 Hz guard tone)
AT&P1	(Decadic dialling make-break ratio = 33% /67%)
ATS0 = 0	(not auto answer)
ATS11 = 65	(DTMF dialling on/off duration = 65 ms)
ATX2 (U.S.A)	(dial tone detect, but not can progress detect)

v

- When used in the Auto Answer mode, the S0 register must be set with a value between 2 and 10. This ensures:

  - A person calling your modem will hear a short burst of ringing before the modem answers. This confirms that the call has been successfully switched through the network.

  - Caller identification information (which occurs between the first and second ring cadances) is not destroyed.

- This equipment does not fully meet Telecom's impedance requirements. Performance limitations may occur when used in conjunction with some parts of the network. Telecom will accept no responsibility should difficulties arise in such circumstances.

- It is recommended that this equipment be disconnected from the Telecom line during electrical storms.

- When relocating the equipment, always disconnect the Telecom line connection before the power connection, and reconnect the power first.

Note Please note that fault callouts caused by any of the above causes may incur a charge from Telecom.

General Conditions

As required by PTC 100, please ensure that this
office is advised of any changes to the specifica-
tions of these products which might affect
compliance with the relevant PTC specifications.
The grant of this Telepermit is specific to the above
products with the marketing description as stated
on the Telepermit label artwork. The Telepermit
may not be assigned to other parties or other
products without Telecom approval. A Telepermit
artwork for each device is included from which you
may prepare any number of Telepermit labels
subject to the general instructions on formal size
and colour quoted on the attached sheet. The
Telepermit label must be displayed on the product
at all times as proof to purchasers and service
personal that the product is able to be legitimately
connected to the Telecom network. The Telepermit
label may also be shown on the packaging of the
product and in the sales literature, as explained in
PTC 100.

Canadian DOC Notice

The Canadian Department of Communication label
identifies certified equipment. This certification
means that the equipment meets certain telecom-
munications network protective, operational, and
safety requirements. The Department does not
guarantee the equipment will work to the user
satisfaction.

Before installing the equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunication company. The equipment must also be installed using an acceptable method of connection. In some cases, the company inside wiring associated with a single line individual service may be extended by means of a certified connector assembly (telephone extension cord). The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations. Repair to certified equipment should be made by an authorized Canadian maintenance facility designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect the equipment. Users should ensure for their own protection that the electrical ground connections to the power utility, telephone lines, and internal metallic water pipe systems, if present, are connected together. This precaution may be particularly important in rural areas.

Caution
Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate.

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop which is used by the device, to prevent overloading. The termina-

tion on a loop may consist of any combination of devices subject only to the requirement that the total of the load numbers of all the devices does not exceed 100.

FCC Compliance

To comply with the applicable sections of FCC Rules and Regulations, Parts 68 and 15, please follow these instructions:

- Do not connect your modem to a party line or to a coin-operated telephone.

- If your modem should cause a problem on the telephone line, it should be disconnected from the line until it can be determined whether the modem or another device on the phone line caused the problem.

- Only the manufacturer can make repairs to the modem. Other repair methods will void your warranty.

- If you have an external modem, use a properly constructed shielded cable to connect it to your computer.

- If your telephone company asks for the following information, please make it available:

    - Modem manufacturer
    - Model of modem

- FCC Registration Number
- Ringer Equivalence Number (REN)

FCC Part 15

NOTE

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. This equipment generates, uses and can radiated 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 measures:

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

Shielded interface cables must be used in order to comply with emission limits.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Part 68 Notice

This equipment complies with Part 68 of the FCC rules. On the base of this unit is a label that contains, among other information, the FCC registration number and Ringer Equivalence Number (REN) for this equipment. If requested, this information must be given to your telephone company.

The REN is used to determine the quantity of devices you may connect to your telephone line and still have all of those devices ring when your number is called. In most, but not all areas, the sum of the RENs of all devices should not exceed five (5.0). To be certain of the number of devices you may connect to your line, as determined by the total RENs, you should call your local telephone company to determine the maximum RENs for your calling area.

If the telephone company suspects a problem with your telephone line is related to an add-on electronic device, such as your modem, they have the right to temporarily suspend your service. It is your responsibility to remove from the telephone line any malfunctioning electronic communications equipment to avoid damage to the telephone system.

If your equipment causes harm to the telephone network, the telephone company may discontinue your service temporarily. If possible, they will notify you in advance. But if advance notice is not practical, you will be notified as soon as possible. You will be informed of your right to file a complaint with the FCC. Your telephone company may make changes to its facilities, equipment, operations, or procedures that could affect the proper functioning of your equipment. If they do, you will be notified in advance to give you an opportunity to maintain uninterrupted telephone service.

The telephone company may ask that you disconnect this equipment from the network until the problem has been corrected or until you are sure that the equipment is not malfunctioning.

This equipment may not be used on coin service provided by the telephone company. Connection to party lines is subjected to state tariffs.

If you experience trouble with this telephone equipment, please contact your place of purchase for information on obtaining service or repairs.

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Introduction

The Voice / Fax / Data USB Modem with 3 ports HUB connects your computer to Internet, BBS, and other fax modems. 3 ports HUB allows you to connect other USB devices . This manual describes the features, installation procedures and AT commands.

Features

This device supports the following communication standards. ITU-T is known as CCITT.

Data

- ITU-T V.90 :
- ITU-T V.34, V.32bis, V.32, V.22bis, V.22, V.21, V23
- Bell 103 & 212A
- V.42bis & MNP 5 (Data compression)
- V.42 & MNP2-4 (Error correction)

Fax

- V.17 (14400bps FAX)
- V.29 (9600bps FAX)
- V.27ter (4800bps FAX)

Voice

- Voice/Audio mode (Answering Machine)
- HUB fully compliant with USB specification V1.1

System Requirements

- USB Port on PC
- Windows™ 98
- 16MB RAM
- Pentium 233MHz up CPU

Package Checklist

The package contains the following items:

- One USB modem
- One piece of phone cable
- One CD
- The USB modem user's manual
- USB Cable
- Power adaptor

If any of these items are missing or damaged, please contact your dealer or sales representative for assistance.
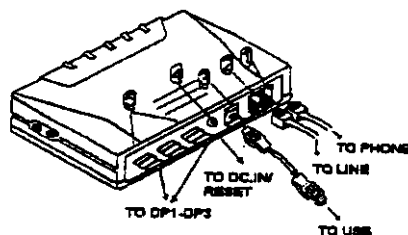
Installations

This chapter describes how to install this device .

Hardware Installation

Phone   : Telephone jack (to telephone set)
Line   : Line jack
USB   : USB Connector to PC
DC.IN/RESET   : Power jack and RESET
DP1-DP3   : USB port for other USB devices

Note In case this device is down, please unp lug and connect power plug (DC-IN/ RESE)again to reset it .

1. Plug end of power adaptor to DC-IN/RESET marked ④; plug another end of power adaptor to wallplug .

2. Plug tone end of USB cable to USB jack marked ③ .

3. Plug one end of telephone line to LINE jack marked ② ; plug the other end to phone outlet .

4. To use telephone and the modem on the same line, plug one end of the optional phone cable into the PHONE jack marked ① ; plug the other end into your telephone .Lift the telephone handset and listen for a DIALTONE to check the connection.

5. Plug the other end of USB cable to PC USB port .

6. Hardware installation is completed now, please refer "Installation procedures for Windows 98 " to continue installation .

7. The PWR, lights should light up .

P.S.

- When other USB device are using this device, NEVER remove power plug .

- You can connect other USB devices to DP1- DP3 marked ⑤ .

Installation Procedures for
Windows™ 98

1. When hardware installation complete,
   Win 98 will auto detect your USB Hub,
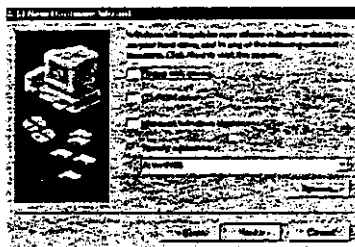   the following dialog box will appear,
   click " Next ".
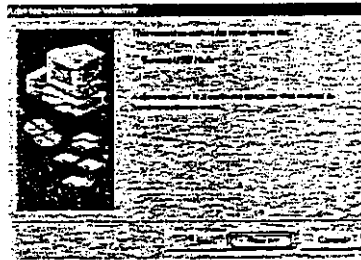
2. Select the Search for the best driver for
   your device (Recommended) option, then
   click " Next ".
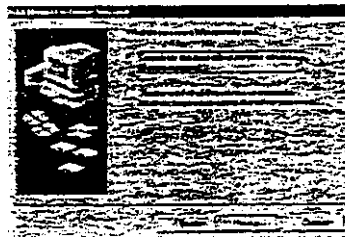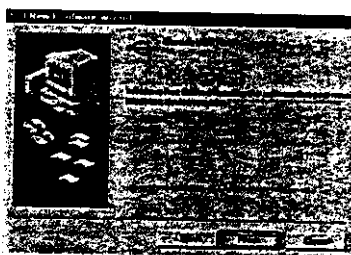
3. Please click " Next ".

4. (1) Please click " Next ". (2) During copying files,USB Hub driver will require you insert the Win 98 CD-ROM, then click " OK ".
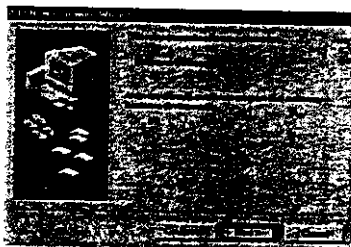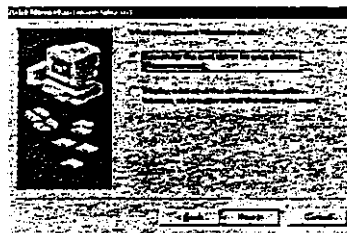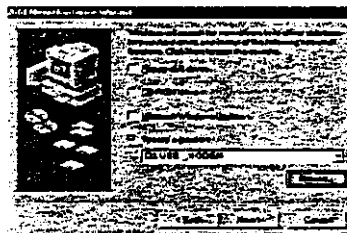

5. Click " Finish ".

6. After the installation of USB Hub was completed, your system will detect Unknown Device and the following message will appear. click " next " .

7. Select the Search for the best driver for your device (Recommended) option, then click Next.

3. Place the CD containing driver for Win 9X into your CD ROM drive. Specify the location of the modem driver, e.g., E:\USB_MODEM Click Next.
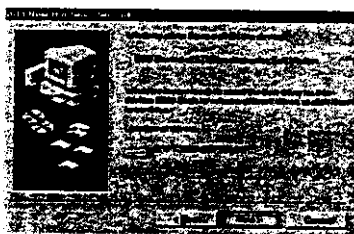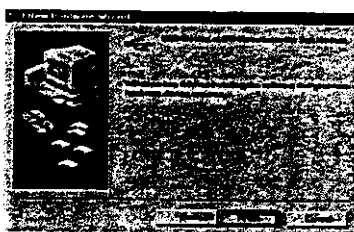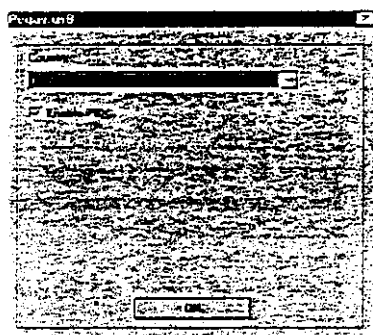

9 Windows will locate your driver. Click Next.

10. The installation has been completed. Click Finish.

11. Please choose country, then click " OK ".
The installation has been completed .

Communication Software Installation

To install the communication software, refer to the manual contained on the provided CD.

Commands

Most people use the communication software programs to tell modems what to do. Therefore, you may not use the commands in this chapter. However, if you prefer to communicate with your modem directly, you can type the commands described below.

This chapter describes how to work in the terminal mode.

Note   The CD bundled in your fax modem package contains details on AT commands (file path: X:\USB_MODEM\AT_COMMAND.PDF).

Typing Commands

- Use the BACKSPACE key to delete typing errors.

- Every command (except A/ and + + +) must begin with the **AT** or **at** prefix and be entered by pressing the <Enter> key. For example, to execute the **V** command, you would type **ATV** and press the <Enter> key.

- When you see an *n*, replace the *n* with one of the letter or numeric options listed for that command. For example, for the *En* command, you might type **ATE1**.

- All defaults are based on the &F Hardware Flow Control template load in NVRAM when the modem is shipped.

AT Commands

A/   Re-executes the last issued command. Used mainly to redial.

A   Go off-hook and attempt to answer a call.

ATS?   **Read Selected S-Register.** This command reads and displays the selected S-Register. An S-Register can be selected by using the ATSn command.

Dn   **Dial**
0-9   DTMF digits 0 to 9
P   Pulse (rotary) dial
T   Tone dial
W   Wait for second dial tone (X3 or higher); linked to S6 register.
^   Toggles calling tone enable/disable.

En   **Command Echo**
E0   Disable command echo
E1   Enable command echo

Hn   **Disconnect (Hang-up)**
H0   Hang up (goes on-hook)
H1   Go off-hook

In   **Identification**
I0   Report product code

I1	Modem name
I2	SW Provider / SW version
I3	Chip Vendor
I4	Modem active profile
I5	Stored profile 0
I6	Stored profile 1
I7	Display stored phone numbers

M*n* **Speaker Control**

M0	Speaker is always off
M1	Speaker ON until CONNECT
M2	Speaker is always on.
M3	Speaker off during dialing and receiving carrier and turn speaker on during answering.

O*n* **Return to On-Line Data Mode**

O0	Go on-line
O1	Go on-line and retrain

P **Set Pulse Dial**
(for phone line that does not support touch-tone dialing)

S*r*=*n* **Set Register *r* to *n***

S*n*? Display contents of S-Register *n*

V*n* **Result Code Form**

V0	Numeric codes
V1	Verbal codes

Z*n* **Soft Reset and Restore Profile**

Z0	Restore stored profile 0 after warm reset.

Z1   Restore stored profile 1 after warm
        reset.

&C*n*   **Control Carrier Detect (CD) Signal**
&C0   CD override
&C1   Normal CD operations

&D*n*   **DTR Option**
&D0   Ignore an on-to-off transition of DTR.
&D1   Switch to on-line command mode
        without disconnection.
&D2   Normal DTR operations.
&D3   Modem re-initialized. &Y determines
        which profile is loaded.

&F*n*   **Load Factory Configuration**
       (Profile)
&F0   Restore factory configuration 0
&F1   Restore factory configuration 1

&W*n* **Store Current Configuration**
&W0   Store the current configuration as
        profile 0.
&W1   Store the current configuration as
        profile 1.

+MS   **Select Modulation**
       This command selects the modulation,
       optionally enables or disables
       automode, and optionally specifies the
       lowest and highest connection rates
       using one to four subparameters.

       The format is:

AT+MS=<Modem>,<automode>,<min_rate>,
<max_rate>

modem	Modula-tion	Data Rates (bps)
22	V.22	1200
122	V.22bis	2400, 1200
32	V.32	9600, 4800
132	V.32bis	14400, 1200, 9600, 7200, 4800
34	V.34	33600, 31200, 28800, 26400, 24000, 21600, 19200, 16800, 14400, 12000, 9600, 7200, 4800, 2400
90	V.90	56000, 54667, 53333, 52000, 50667, 49333, 48000, 46667, 45333, 42667, 41333, 40000, 38667, 37333, 36000, 34667, 33333, 32000, 30667, 29333, 28000
103 212	Bell 103 Bell 212	300 1200

<automode>	Option Selected
0	Automode disabled
1	Automode enabled

For example:

AT+MS=34,1,300,33600

Where: 34 : select V.34
1 : automode enabled
300 : min_rate data speed
300 bps
33600 : max_rate data speed
33600 bps

S-Register Definitions

S0   **Number of Rings to Auto-Answer**
The number of rings the modem waits
for before it auto answers.
Range: 0-255 (rings)
Default: 0

S6   **Wait Time before Blind Dialing**
The time to pause after off-hook
before   blind dialing.
Range: 2-255 (U.S.)
Default: 2 (Country dependent)

S7   **Waiting Time before Carrier Detect**
The time to wait for a carrier from the
remote modem before hanging up.
Range: 1-255
Default: 50 (seconds)

S8   **Pause Time For Dial Delay**
The time to pause for the pause dial
modifier, "Comma".
Range: 0-255
Default: 2 (seconds)

S9   **Carrier Detect Response Time**
The time a signal is detected an
qualified as a carrier. This timing lets
your modem ignore spurious signals
that are the same frequency as the
carrier. Higher S9 values reduce the
chance of a carrier being detected.

Range: 1-255
Default: 6 (0.6 second)

S10 Lost Carrier To Hang Up Delay
The time the modem waits before
hanging up for carrier loss.
Range: 1-255
Default: 14 (1.4 seconds)

S11 DTMF Tone Duration
The time for DTMF tone dialing and
the time between the tone spacing.
Range: 50-255
Default: 95 (0.95 second, country
dependent)