



*PCC-1*

# **EyeStar 2**

## **User's Manual**





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Doc. No. 149-001957  
First Edition

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To obtain optimal results from Microtek scanning software and user's manual, you should be familiar with Windows concepts such as pointing, clicking, dragging, and selecting from menus and dialog boxes.

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FCC ID: EF9 PCC-1

TOK 73 F030



### Federal Communications Commission (FCC) Statement

This equipment (Trade name: EyeStar 2 Digital Camera, Model name: PCC-1) 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 generates, 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 measures:

- Reorient or 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.

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FCC ID: E.F.1000-1



### Caution

To assure continued FCC compliance:

- Any changes or modifications not approved by the guarantee of this device could void the user's authority to operate the equipment.
- The user must use shielded interface cable.
- FCC Label Compliance Statement:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.



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## Quick Start Guide

### Up and running EyeStar 2 in 7 steps

1. Turn off your computer power.
2. Connect EyeStar 2 to your PC printer port, keyboard jack, and keyboard. Refer to page 9.
3. Power up your computer, immediately begin to set up the BIOS mode (EPP, ECP, et. al.). Refer to page 3.
4. Check to be sure of the LED indicator on EyeStar 2 is lit.
5. Insert CD-ROM, and install EyeStar 2 driver program.
6. Restart your computer.
7. Choose an application program from VocalTec Internet Phone, mmPhone, and iPhoto Express.



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## Important

### More Parallel Printer Modes

EyeStar 2 release version 1.2 implements more parallel printer modes. Other than EPP mode, you may select EPP, "EPP + ECP", and SPP modes.

### Technical Support

Microtek continuously updates functions of EyeStar 2 software. The most updated EyeStar 2 driver program can be obtained through Microtek's web site, as stated below.

<http://www.microtekusa.com/>





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## Introduction

Microtek's **EyeStar 2** is a **digital camera** that connects right to your PC's printer port and brings real-time video communications capabilities to your PC.

If you have connected to internet, with EyeStar 2 and the associate VocalTec Internet Phone software, you chat with, and see, anyone in the world for just the cost of your local internet. Further still, you can join the hottest new technology of real-time global video communications. Video conferencing has never been so easier and affordable before.

With the bundled Ulead iPhoto Express software, you can also capture video or snapshots with your family and friends. Make impressive greetings cards, calendars, or invitations. EyeStar 2 makes it simple to add still or moving images to your web pages, or send pictures to friends and colleagues via e-mail.



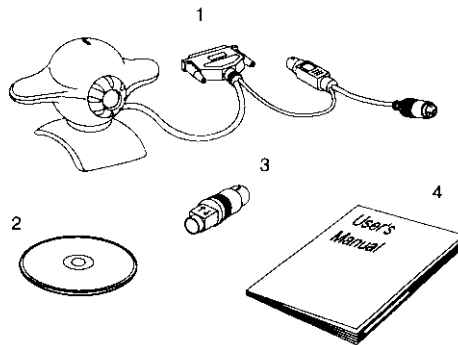
## Basic Requirements

- Pentium and above, or compatibles
- Microsoft Windows 95
- 16 MB RAM
- At least 40 MB hard disk with 15 MB available
- Super VGA color display with high colors or better



## Unpack your digital camera package

Open your camera package and check the components against the packing list provided.



1. EyeStar 2 (with cable-kit)
2. EyeStar 2 software CD-ROM
3. Keyboard adapter
4. User's Manual and Warranty Card

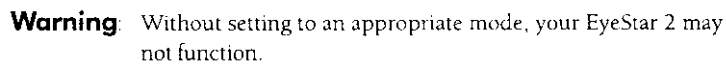


## Set up your computer

EyeStar 2 runs under 4 modes:

- EPP (Enhanced Parallel Port)
- ECP (Extended Capabilities Port)
- EPP + ECP
- SPP (Standard Parallel Port)

You should set your computer to one of the above available modes. This setting is required to do it only once.



**Warning:** Without setting to an appropriate mode, your EyeStar 2 may not function.

To do the mode setting on your computer, follow these steps:

1. Power up your computer.
2. When computer is started, a screen message will tell you to press a key for mode changing. In most cases, this key is the *Del* key on your keyboard. As you hit this key several times, a screen shows you the selections for BIOS settings.

**Note** *Some computers will require you hit some other keys simultaneous, instead of the Del key. Refer to the documentation came with your computer.*



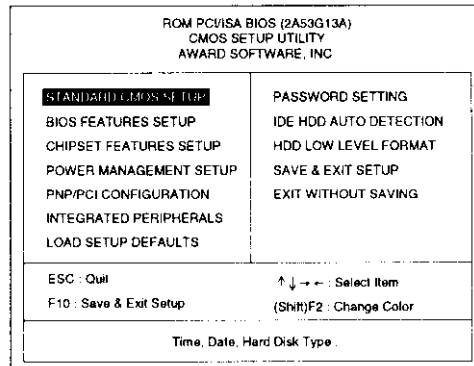
3. Find the parallel port BIOS setting, set it to one of the four modes: EPP, ECP, "ECP+EPP", and SPP.
4. The onboard parallel port I/O should be set to either 378h or 278h (378h is recommended).
5. Save the changing you have made, restart your computer to make the settings taking affect.



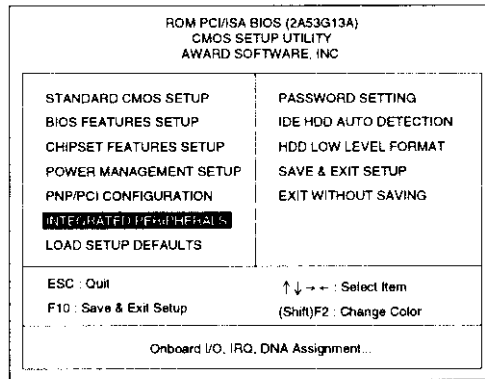
## Parallel Port mode setting (using EPP mode as an example)

While you are powering up the computer, on your computer keyboard hit the Del key several times, this procedure will display the BIOS setting screen.

The following illustration is an example of what the BIOS setting home menu should look like. **However, this may vary depending on the BIOS in your computer.** If you experience difficulty setting EPP mode, consult your computer dealer.

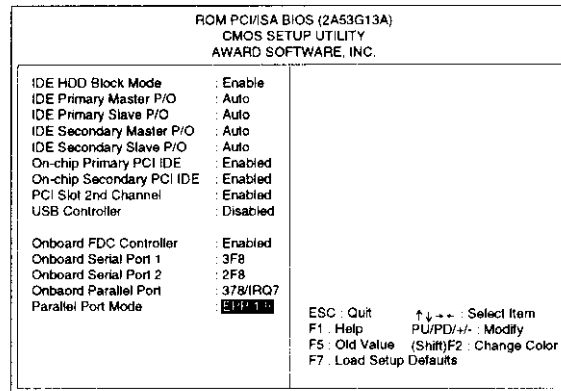


On your keyboard, press the **Arrow Down** key to select "Integrated Peripherals" option.



Press the **Enter** key to continue.

At the "Parallel Port Mode" option, select "EPP 1.9", "EPP 1.7", or "EPP". If these selections do not appear, press **PageUp** or **PageDown** key to select.



Press the **Esc** key. This will return you to the BIOS setting home menu.

On your keyboard, press the **F10** function key. The screen will ask whether you want to save the changes you have made and restart the computer.

Press **Y**, then the **Enter** key. Your computer is now set to the EPP mode. You will only have to change the setting to EPP once, unless anyone alters this setting.



## Keyboard and Cable Connections

The EyeStar 2 cable-kit includes EyeStar 2, adapter plug, and the 25-pin printer port connector.

Depending on the PC and keyboard you have, you may have three possible connection ways. During keyboard and connection procedure, you should turn off the power of your PC, and remove the existing keyboard connector from your PC.

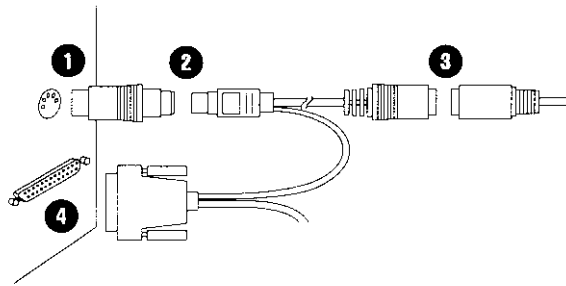






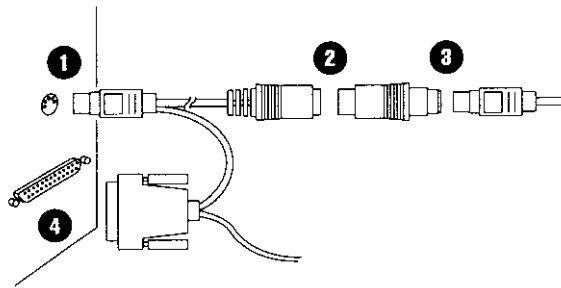
### Case 1 Standard PC

1. Connect the Adapter Plug to your PC.
2. Connect the Cable-kit to the Adapter Plug.
3. Reconnect the keyboard connector to the socket end of the Cable-kit.
4. Connect EyeStar's 25-pin printer port connector to the parallel printer of your PC.



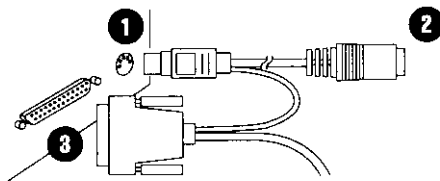
## Case 2 PS/2 type keyboard

1. Connect the small end of Cable-kit to your PC
2. Connect the Cable-kit to the Adapter Plug
3. Reconnect the keyboard connector to the socket end of the Cable-kit.
4. Connect EyeStar's 25-pin printer port connector to the parallel printer of your PC.



### Case 3 Notebook PC

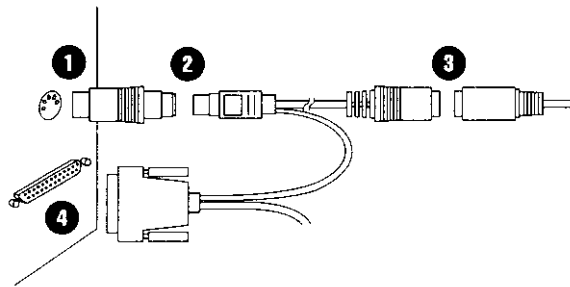
1. Connect the small end of Cable-kit to your Notebook PC
2. The big end of the Cable-kit is left open.
3. Connect EyeStar's 25-pin printer port connector to the parallel printer of your PC.



## Hardware Installation

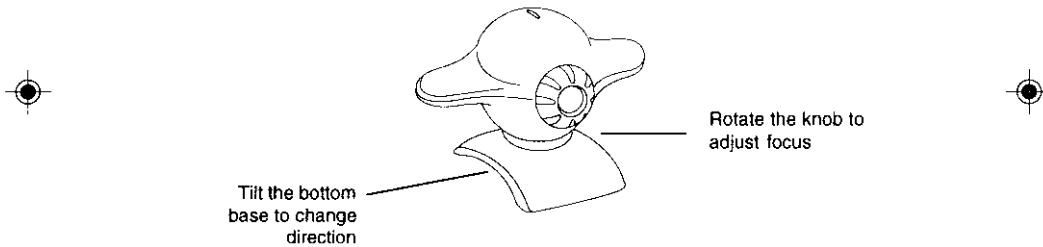
The EyeStar 2 cable kit is designed to be installed to your PC. The installation procedure in this section uses Case 1 (see page 9) configuration as an example. To install, follow these steps:

1. Turn off the power of your computer.
2. Disconnect keyboard connector at the back of the computer (shown as bullet 1), then reconnect it by using the EyeStar 2 big end connector instead (shown as bullet 2).

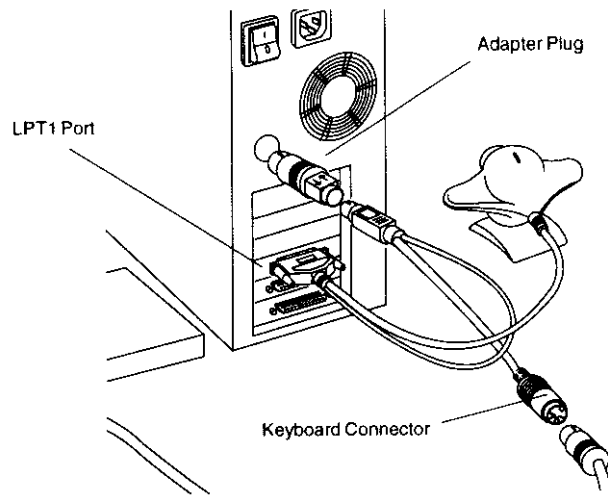




3. Connect your original keyboard connector to the socket-end of the EyeStar 2 cable (shown as bullet 3).
4. Disconnect the parallel printer cable from the parallel port of your computer, and connect the 25-pin end of the EyeStar 2 parallel port connector (shown as bullet 4).
5. Turn the lens of the EyeStar 2, pointing to your target. The basement of the EyeStar 2 base allows you make adjustment in up, down, left, and right.

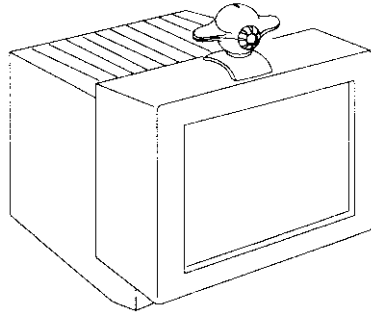


6. The finished configuration is illustrated below.



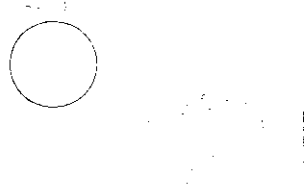


7. Move your EyeStar 2, let the camera points to you.



## Software Installation



1. Place the EyeStar 2 driver program CD-ROM into your CD-ROM drive.



2. The EyeStar 2 software menu automatically appears. Select the program you want to install. If the EyeStar 2 software program menu does not appear, click **Start**, select **Run**, type **C:\Cdsetup.exe**, and click **OK**.





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3. Click to select EyeStar 2 driver program. The EyeStar 2 driver program will guide you step by step, until the installation is complete. **At this moment, you should click to select *Restart* to activate the driver programs.**

**Warning:** Without installing the EyeStar 2 driver program, your EyeStar 2 will not work.

4. Next, click to select one of the three applications: VocalTec Internet Phone, mmPhone, and Ulead iPhoto Express.
- The **Internet Phone** is a video-conference software. If you have connected to internet, with a microphone connected to your PC, you can chat with anyone in the world who is currently on the internet. To use VocalTec Internet Phone, you should enter the registration number (in this manual).
  - The **mmPhone** is a shareware software with similar function like VocalTec Internet Phone.
  - The **iPhoto Express** is an image editing software. You can use this software to images for internet home page, or create greeting cards or calendar of your personal style.
5. Install Adobe Acrobat Reader.

Adobe Acrobat Reader is the program for reading your online documentation and user's manual. VocalTec Internet Phone user's manual *iphone4.pdf* is located in the *\document* directory of your CD-ROM.



### **Technical Support**

Microtek's provides technical support and continuously implements driver programs.  
For more information, visit Microtek's web site at:

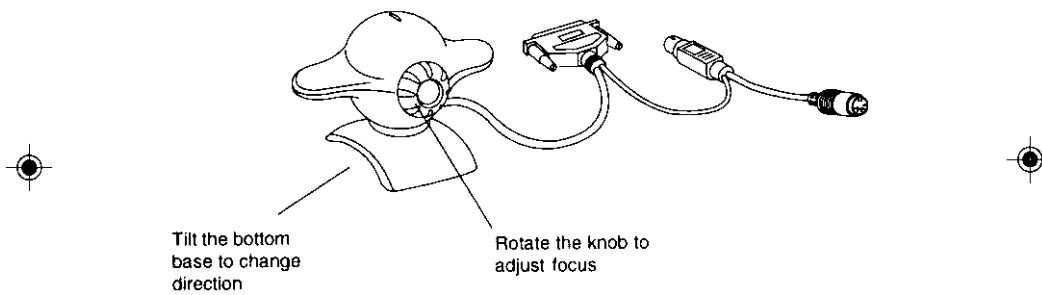
<http://www.microtekusa.com>

E-mail: [info@megasrc.com](mailto:info@megasrc.com)



## Adjusting EyeStar 2 digital camera

Your EyeStar 2 allows manually adjust full directions of the camera (up, down, left, and right). You can also manually adjust the focus by rotating the knob around the lens.



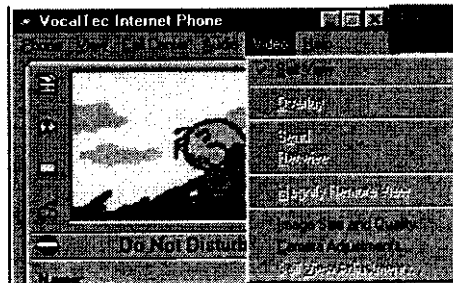
## Test your EyeStar 2

### Test VocalTec Internet Phone

1. Restart your computer.
2. Connect to internet, either by using a modem to dial up, or corporate internet system.
3. Click the Start button, then select VocalTec Internet Phone 4. Wait a while, your image is shown on the screen at real-time.



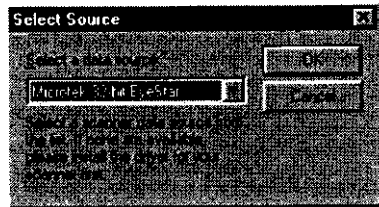
4. To set the image quality or adjust image, choose the Video Menu.



5. For further information of the VocalTec Internet Phone, refer to the user's manual *iphone4.pdf* which is located in the *Document* directory of your EyeStar 2 CD-ROM.

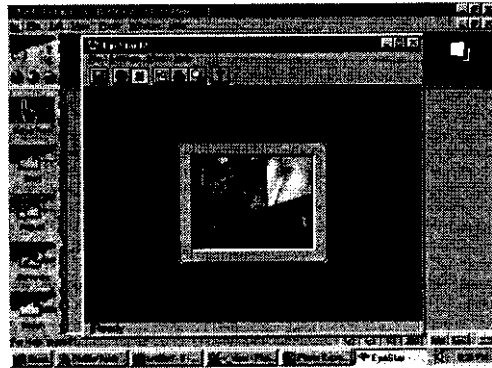
### Test iPhoto Express

1. Restart your computer.
2. Click the Start button, then select iPhotoExpress.
3. Choose the Select Source command from the File menu of iPhotoExpress. Select "Microtek 16-bit EyeStar 2"



4. Choose the Acquire Image command from the File menu.

The screen should show you live images that captured by EyeStar 2. Installation of EyeStar 2 is now completed.





## Troubleshooting

If the image is not shown, check these items:

- Check the cable connections.
- Your computer should be set to the appropriate mode, the I/O address of LPT1 should be set to 378h or 278h without IRQ conflict.

## EyeStar 2 Driver Commands

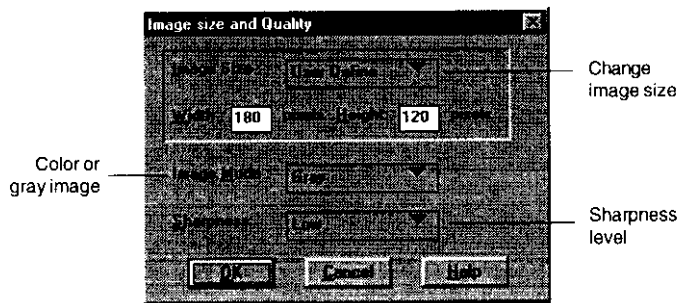
EyeStar 2 driver is not a stand-alone software; rather, it is a plug-in module inside applications such as iPhoto Express or VocalTec Internet Phone. When you execute iPhoto Express, choose Acquire Image command, EyeStar's menu displays. Command menus include full features of EyeStar 2, the most commonly used commands can be accessed by clicking the selected Toolbar icon, and live images are shown on the image screen. For VocalTec Internet Phone, choose the "Image Size and Quality" command or "Camera Adjustments" command from the Video menu.





### Set image size and quality

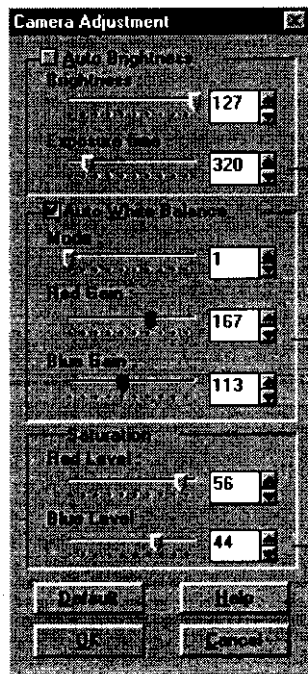
The **image size** and quality setting function allows you select image size, color/gray image and sharpness. This setting is made through the Settings command or by clicking the equivalent toolbar icon.



### Adjust camera

The Adjust Camera function allows you modify image for Brightness setting, white balance, and Saturation. To change the setting, either drag the indicator level, or type the required value in the entry box.











Brightness and exposure time

White balance and color adjustments

Saturation level



How do I...	Icon/Function Key	Menu command
Save a snapshot file as another file name		File menu Save As
Snapshot a picture		File menu Take Picture
Halt the live picture		File menu Pause
Set image size and quality		Settings menu Image Size and Quality
Adjust camera		Settings menu Camera adjustment
Zoom toggle (full size and double size)		Settings menu Toggle

## Specification

Product	EyeStar 2
Model number	PCC-1
Type	Digital PC camera
Hardware Interface	Parallel Printer Port ECP, EPP, "ECP+EPP", Nibble Mode
Resolution	Full Mode: 640 (H) x 480 (V) pixel Half Mode: 320 (H) x 240 (V) pixel Quarter Mode: 160 (H) x 120 (V) pixel Quarter(2x) Mode: 160 (H) x 120 (V) pixel QCIF Mode: 176 (H) x 144 (V) pixel sub-QCIF Mode: 128 (H) x 96 (V) pixel User-defined
Color Support	24-bit RGB, Gray 16-bit RGB, YUV422 (capture driver only)
Speed of Scanning	30 frame/sec (160 x 120) (Under: Pentium 166 CPU, 32MB RAM, ECP+EPP, DMA Mode)
Optical view angle	Horizontal: 48.9 degrees Diagonal: 60.7 degrees Vertical: 36.5 degrees



Mechanical view angle

Swivel: 360 degrees  
Tilt: 30 degrees (max., elevation)  
30 degrees (max., depression)

Focus

Manual (adjustable)

Compatibility OS

Windows 95

Software interface

Video for Windows driver  
TWAIN driver

Power supply

DC 5V, from PC keyboard connector  
without adapter

Power consumption

1.2W

White balance

Auto/Manual

Exposure

Manual

Dimensions (WxHxL)

114 mm x 78 mm x 80 mm

Weight

600g

Color

Color/Gray



## Declaration of Conformity

Supplier:

Name: Microtek International Inc.  
Address: No. 6 Industry East Rd. 3  
Science-Based Industrial Park  
Hsinchu, Taiwan 300, R.O.C.

Declares that:

Type of Equipment: PC Digital Camera  
Model Number: PCC-1

Complies with the following:

Standards	Directive
EN60950	73/23/EEC 93/68/EEC
	(Low Voltage Directive)
EN50081-1, EN55022 class B	89/336/EEC
EN55082-1, IEC 1000-4-2	(EMC Directive)
IEC 1000-4-3	
IEC 1000-4-4	

Person responsible for making this declaration:

Don Kai Chiang  
(Name, Surname)  
R & D Center, Vice President  
(Position/Title)  
Hsinchu      9/9/97      Don Kai Chiang  
(Place)      (Date)      (Legal Signature)



**Note**

VocalTec Internet Phone registraton number:

