SENSAR

Network Security Camera

User Guide

FCC Notice

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 any that causes undesired operation.

EEC Notice

This product conforms to emissions product standards EN55022, class B and EN50082-1 (1992) of the European Economic Community.

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1 Introduction

Today's digital world requires us to access and protect computer information and interact securely with computer systems. The use of passwords has long been the most popular method for accomplishing these tasks. . .until now. Sensar has introduced a personal identification system which allows you to conveniently and securely identify yourself to your PC and the Internet.

It all starts with an image of your eye—iris recognition. The Sensar camera captures an image of your iris and creates an identifying template of 256 bytes. This is your enrolled digital code and is stored in a database. When verification of your identity is then requested, the camera will take another image of your eye, digitally encode it, and compare it to your enrolled digital code. If they match, then your identity has been verified.

Iris recognition is called a biometric because it is a measurable physical characteristic. With 266 measurable characteristics, the iris is the most unique, data rich physical structure on the human body -- substantially more unique than a fingerprint, which has about 35 measurable characteristics. And, unlike other measurable human features the patterns in the iris do not change over time. Research shows the matching accuracy of iris recognition is greater than that of DNA testing.

No two people on earth have the same irises. In fact, even the left iris and right iris of the same person have different identifiable patterns. These characteristics are so unique no two eyes are the same. . . not even your own.

System Requirements

- 486 processor or better
- Sound card / speakers

Parallel Port version

- Microsoft Windows 95, Windows NT 4.0 or later versions

USB version

- USB (Universal Serial Bus Port) equipped Pentium IBM compatible
- Microsoft Windows 95 or 98

To find out if your version of Windows 95 is USB compliant, right-click the "My Computer" icon and select Properties. The System should be 4.00.950B (Windows 95B) or later. Windows 98 is USB compliant. If you are running Windows 95B and USB is not available, you need to execute a program from your Windows 95 installation CD. Your Windows 95 CD should say on it "With USB Support." Open the Windows Explorer and go to the directory Drivers\USB\Enduser.. Double click on the file USBSUPP.EXE to install USB support to Windows 95. If you do not find this file in this location, go to the Start Menu and select Find–Files or Folders and search for USBSUPP.EXE on the CD. To find out more about the Universal Serial Bus standard, visit the USB Website at www.usb.org.

2 Software Installation

To install the USB or Parallel Port version of the camera software, please follow this procedure:

1. Insert the camera CD into your CD-ROM drive. Run the program INSTALL.EXE located in the root directory of the CD. Follow the instructions as they appear on your screen.

3 Hardware Installation

Parallel Port version

1. Make sure the power to your computer is off.
2. Remove the printer cable from your PC, if installed.
3. Connect the camera cable to the printer port.
4. Connect the printer cable to the adapter cable.
5. Remove the keyboard cable from your PC
6. Install the cable with the round male connector into the keyboard port on your PC.
7. Install your keyboard cable (round male connector) into the cable with the round female connector.
8. Turn the power to your computer back on.
9. Run the camera software and verify that the unit is working properly.

USB version

1. Find the USB port on your computer.

2. Plug the flat rectangular end of the detachable USB cable into the USB port of your computer.
3. Plug the square end of the detachable USB cable into the rear of the camera.
4. Windows will automatically recognize the USB camera.
5. Run the camera software and verify that the unit is working properly.

If Windows does not recognize the camera then a problem exists. The most common problem for users installing a USB device for the first time is that the computer's BIOS does not have the USB hardware on the motherboard enabled. To rectify the problem you must restart the computer and enter the SETUP utility to enable the USB hardware on the computer's motherboard. After entering the SETUP utility there will be a peripheral or advance section which will allow you to enable the USB hardware. After enabling the USB, exit the SETUP utility making sure you SAVE the changes when exiting.

4 Getting Started

After you have finished installing the camera, you will need to enroll for the first time. Enrolling is the process of collecting four iris images and comparing them against each other. The best image is selected as your enrolled image and will be used in comparison checks during all future verifications.

The first person to use the system has administration rights. An Administrator can enroll other people, delete enrollments, and uninstall the software. The Administrator can also enroll other people as Users or Administrators. Users do not have administration rights.

1. Start the Enrollment software and enter the information as it prompts you.
2. Focusing—the user must position his/her eye about four inches away from the lens before a focused image can be taken. To do this consistently every time, you will see a ball of light when looking into the lens which gets bigger or smaller as you move toward or away from the window. The goal is make the ball of light approximately the same size as the target window and, therefore, achieve the correct focused position.
3. The camera can be placed on an elevated level surface or you can pick up the camera with your hand. Keeping your eyes wide open, place your eye in the focus position and listen for four shutter sounds from your speakers. These are the four images being taken. If needed, cover the opposite eye to aid in image

taking. If no sound occurs, first check your sound setup. Next, try moving your eye closer or farther away from the lens slightly. The system will timeout after 10 seconds if it finds no suitable images and you may need to start enrolling again. The key points are to place your eye in focus and to keep your eye as wide open as possible. Another suggestion is to try changing the position of your head to obtain a better view of your eye.

4. Once you have succeeded in enrolling your eye (you may choose to enroll both eyes if you wish), use the verify feature to verify your eye image. In this operation, only one image will be taken and compared to your enrolled image. If they match, then you will have verified your eye. Place your eye in focus and you will hear a "ding" sound to signal that you have been verified successfully. If it does not work, try the same suggestions as in the enrolling process.

NOTE: Do not place your fingers or anything else over the black window during any portion of the enrollment or verification process.

Congratulations! You can now use the Network Security Camera for securing access to your computer, a computer network, or to a website on the Internet.

5 Troubleshooting