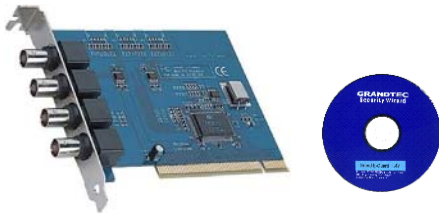


# Chapter 1 Welcome to Grand X-Guard (4 Port ) ( Digital Record + Remote Surveillance )

## 1.1 Introduction

Grand X-Guard PC-based surveillance system allows you to connect up to 4 video signals and display or record on your PC through TCP/IP, IPX (Internet/Intranet) and modem communication protocols. The system supports Windows 2000/Windows XP. The system uses motion detection technology and Microsoft Video Compression, only the moving objects will be recorded. The compression rate, up to 300:1, can save time and costs of continuous recording unlike traditional surveillance systems.



## 1.2 Specification

- Hardware: Grand Bt878 Video Capture Card
- Fully PCI 2.1 compliant
- Supports the following video formats which including NTSC-M · NTSC-Japan · PAL-B,D,G,H,I · PAL -M · PAL-N, SECAM · PAL-NC.
- Supports 4 composite video or BNC input connectors.
- Bundled with the following Software:
  - ◇ Grand X-Guard (Record and Display)
  - ◇ Remote Camera System (Internet/Intranet or modem communication)
  - ◇ Grand File Database

## 1.3 Features

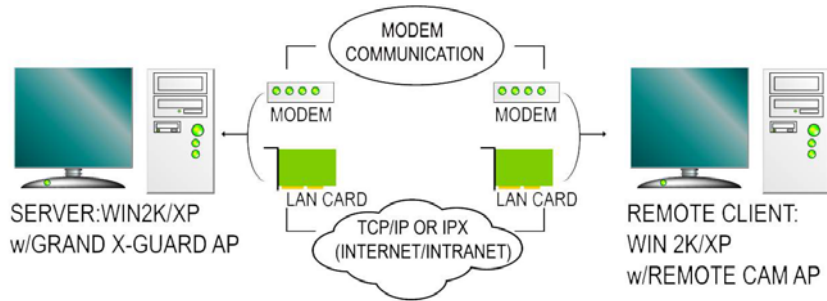
- Supports Windows 98/ME/2000/XP.
- Display and record each camera or any video signal simultaneously.
- Adjustable video source (brightness, contrast and etc.), quality, alarm, motion detection area.

- Motion Detection: watch for movement detected and record the video clips
- Preview size adjustable.
- Image quality and Compression ratio adjustable.
- Allow the users to define the environment that they do not wish to observe, by adjusting mask area and sensitivity.
- Video file database management, delete, backup or review.
- Storage Recyclable: When running out of disk space, you can delete the data of earliest date.
- Remote view through TCP/IP or IPX protocol (Internet/Intranet), fixed IP is recommended.
- Remote view through modem communication protocol.
- Supports following network architecture: T1,T3, ADSL, ISDN, PSTN, Cable modem, Hi building etc.
- Compression ratio (without motion detection)
  - High Image Quality:4:1
  - Low Image Quality:30:1
- Every camera frame rates:
  - Server: 4 port : 3.0 – 5.0 fps
  - Remote: 10/N fps (10-Base LAN)
  - Remote: 1~16fpm(modem communication)

## 1.4 System Requirements

- Intel Pentium II 500 or above, Pentium III 800 is recommended
- Microsoft Win98/ME/2000/XP.
- Audio output: sound card.
- Network: Ethernet network card or Modem.
- Hard disk space: Plenty of disk storage for recording. At least 20 GB.
- System RAM: 128 MB or above.
- Display card: 16 bit high color .

## 1.5 System Architecture



## 1.6 Package Contents

This package contains the following items:

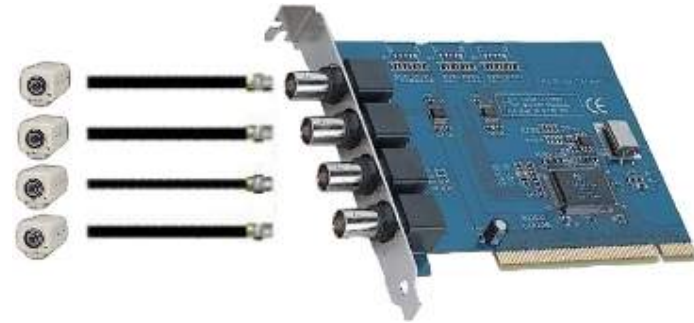
- Grand X-Guard PCI Card (4 port).
- User's Manual.
- Driver and application software Disc(4 port).

## Chapter 2 System Installation Procedures

### 2.1 PCI Card (878 Capture Card) Hardware Installation

Congratulations! You have the state-of-the-art video capture card to enhance your multimedia PC. Please follow the procedures to install the hardware.


1. Turn off the computer and open the casing.
2. Plug the Grand X-Guard to the available PCI slot on the motherboard perfectly and screw tightly.
3. Connect the camcorder or any composite video to RCA jack or BNC jack.
4. Put back the casing with screws fastened.



### Important!

If your system has already installed any other video capture card, you have to remove the old driver and the capture card. Because it will conflict with each other.

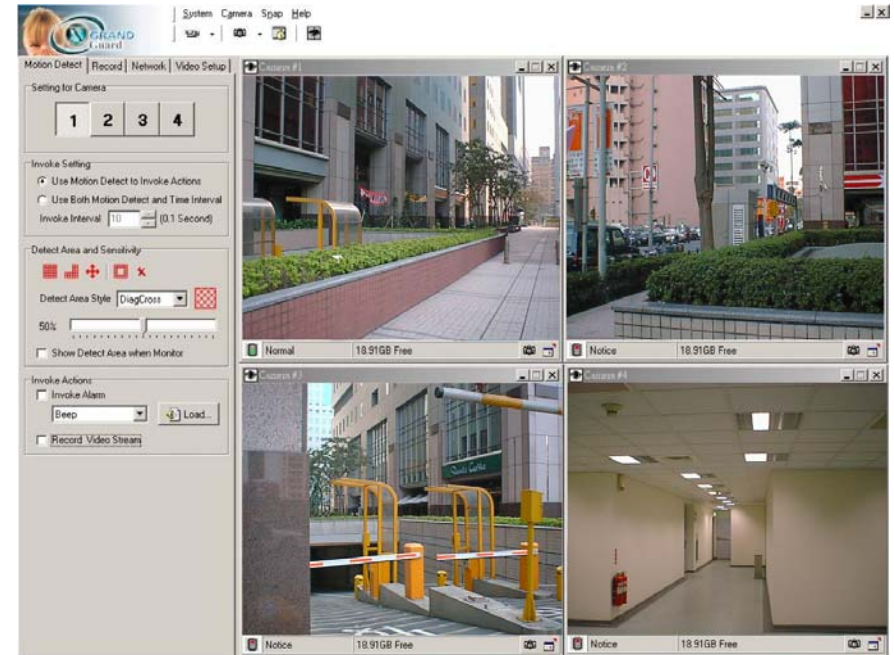
## 2.2. Software Installation

1. Power on the PC and start the software installation procedure.
2. The new hardware will be detected after entering Windows (2000/XP) OS system & the system will require to install the driver, please click  to close this dialogue.
3. Please insert the driver & software CD onto the CD-ROM drive and then you will see the window below & follow on-screen instructions to install your driver & software.



## Chapter 3 Surveillance System Operation Guide

### 3.1 Main Window



You must install the application from the CD. Then you can run the file "X-Guard.exe". Only the Server PC can run this software.

### 3.2 Monitor Window



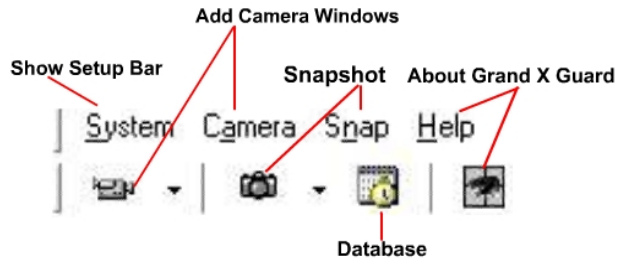
- **Record State** : When this icon displays red color, the monitor is recording now.
- **Snapshot**: Press this icon to open the Snapshot Window
- **Restore Window Size**: You can press this icon to restore the default window size

### 3.3 Snapshot Window

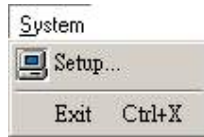


- **Save Picture** : Save this picture to a Bitmap file
- **Paste Picture**: Paste this picture to a clipboard.
- **Print**: Print this picture

### 3.4 Tool Bar Area



- **System Setup/Exit:** You can press the "System" button to setup camera properties or exit this system..



- **Add/Remove Camera:** You can press the "camera" button or icon to add or remove any camera.



- **Snapshot :** You can press the "Snap" button or icon to open Sanpshot Window .



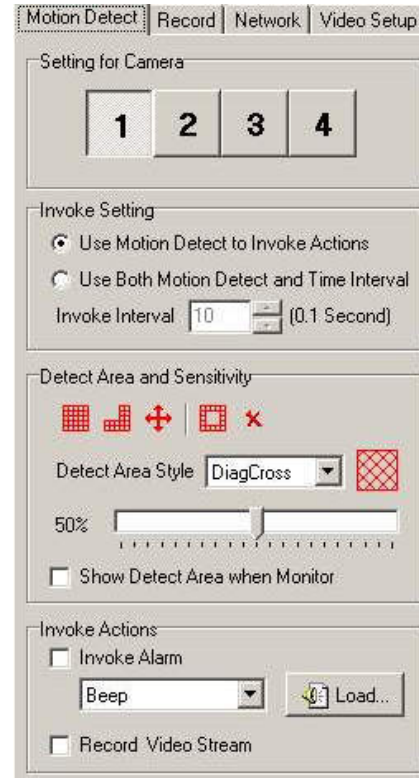
- **Help :** About Grand X Guard



### 3.5 Setupbar Table

You can change the system detail operation (motion, alarm, Enable/Disable remote function, camera standard setup, or recorded file path) from following tables. Press the "system" icon in the tool bar area to show or hidden the setupbar table.

#### 1. Motion Detect



- **Setting for Camera :** Choose the cameras to set performance or function .
- **Change the Invoke method :** This system have two invoke methods in order to record file or alarm. If you want to invoke with a interval time, you should disable the default method (Use Motion Detection to Invoke Actions).
- **Motion Detect Area :** Change the style of motion detect area as follows.



- **Add Detect Area :** Add detect area on monitor window
- **Remove Detect Area :** Remove detect area on monitor window
- **Select All :** Select all window client area on monitor window



- **Inverse Detect** : Invert detect area



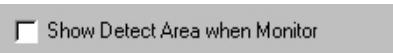
- **Clear All** : Clear all detect area



- **Change Area Style and Color** : You can change the area style and color



- **Change Sensitivity** : Drag the Slide Bar to change the motion detect sensitivity.



- **Show Detect Area on Monitor** : Select this checkbox to show or hide detect area on monitor.

- **Invoke Actions Choice** : If you enable the “Invoke Alarm” and “Record Video Stream” .When this camera are invoked ,this system will gave the alarm and record the video data. You can press the “Load” icon to change the alarm audio wav file.

## 2. Record

Motion Detect | **Record** | Network | Video Setup

Setting for Camera

1 2 3 4

Camera Name:  
Camera #1

Image Quality

Small File Large File

Low Medium High Maximum

Record Setting

Record File Path  
C:\Program Files\GrandTec\ Setup...

Recycle Disk Space

Recycling Limite 100 MB

Date/Time Information

Display Date/Time on Video

User Define Text Location #1

Location #1  
4/12/2001 AM 11:07:35

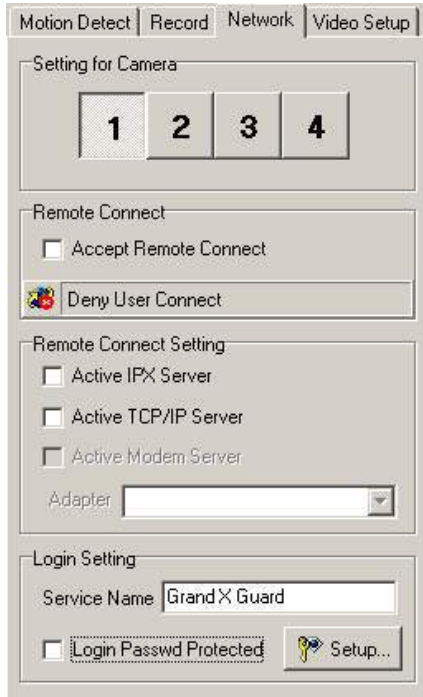
Transparent Background Color

- **Camera Name** : You can change the Monitor Window Name
- **Image Quality** : You can adjust the Image Quality
- **Record File Path** : Press the “Setup” icon to choose the file database location.

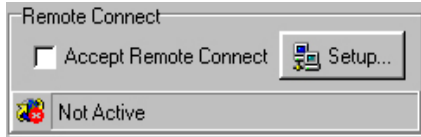


- **Date/Time Information** : Select Information text properties: Transparent, Background Color, and Font.

### 3. Network



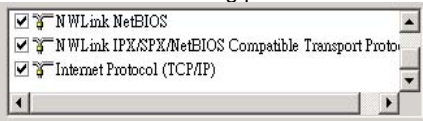
- **Accept Remote** : If you disable the “Accept Remote Connect” the video data of this camera will not send to the remote site



- Choose the Remote protocol



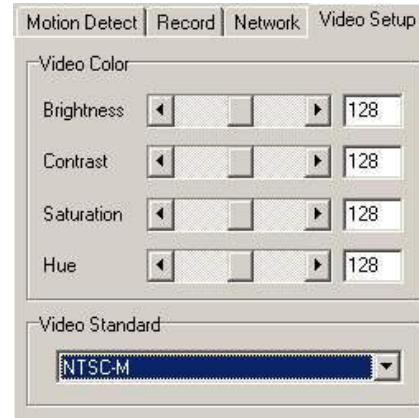
- You must make sure that you have installed the following protocols



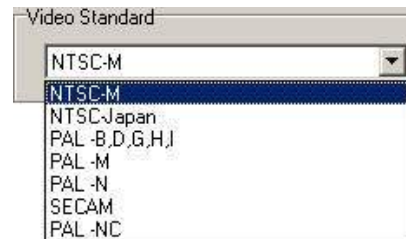
- You must make sure that you have installed any modem device.
- Setting your server name and password



### 4 Video Setup

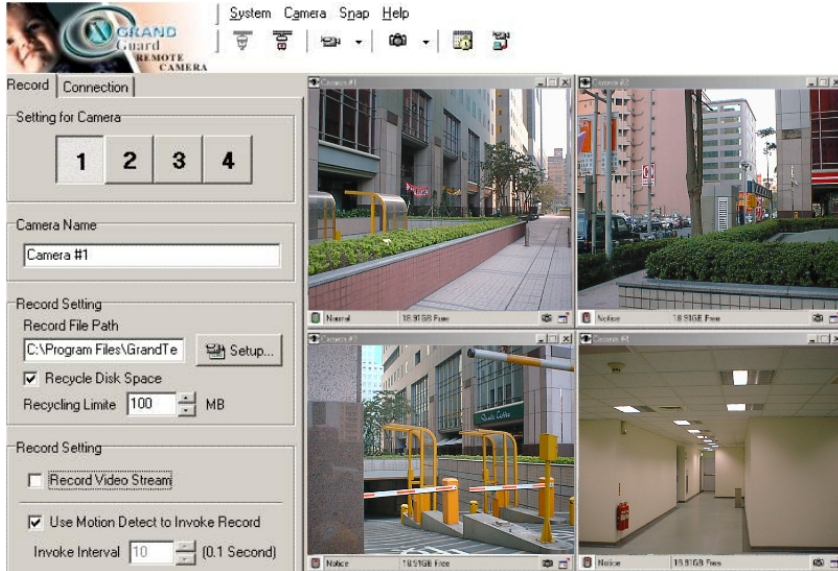


- Those slide bars for selecting the video brightness, contrast, saturation and Hue.



- **Video Standard** : Select input video standards. This video standard should be the same as the quad processor.

## Chapter 4. Remote Came Operation Guide

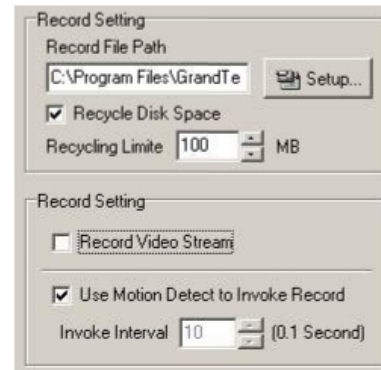




- You must install the application from the CD. Then you can run the file "Remote Came.exe"
- This software can run in many remote PC(Win2000/XP),but only one remote PC can connect to the Server PC(Grand X-Guard Software PC) at the same time.

### • A step by step to connect to the Server PC



1. Input the IP address(Server PC) in the "Connection Network Setup"
2. Please input the "Login Password". If the password is different from the Server PC ,the connection will turn down automatically.

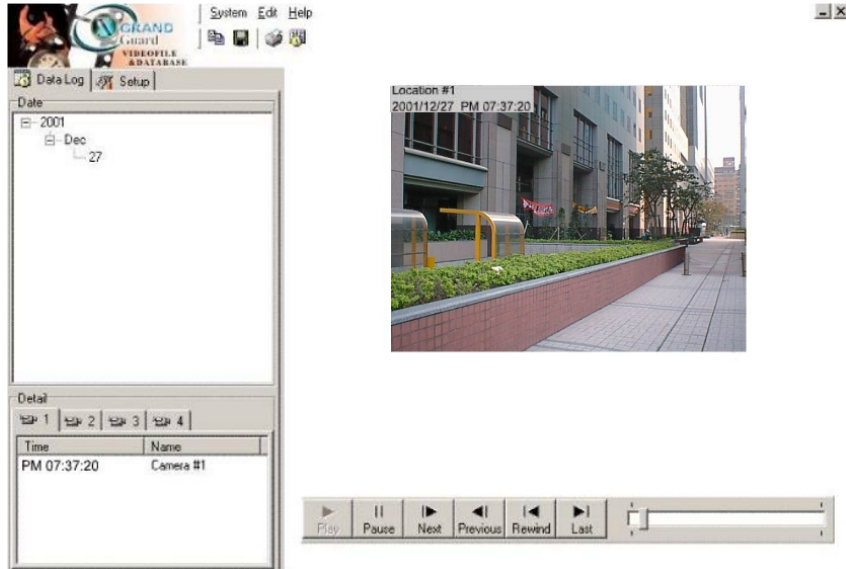


3. Then you must press the icon  to connect to the server.
4. If you want to disconnect, you should press the "disconnect icon" .
5. You can record the video data in the Remote PC

- **Remote Connect Setup** : Please input the password .The Remote Came Software will check the password in the "Network Setup" dialog box.

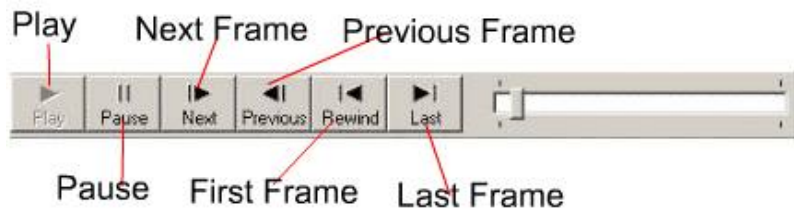


## Chapter 5. FileDB (Record Files Database) Operation Guide

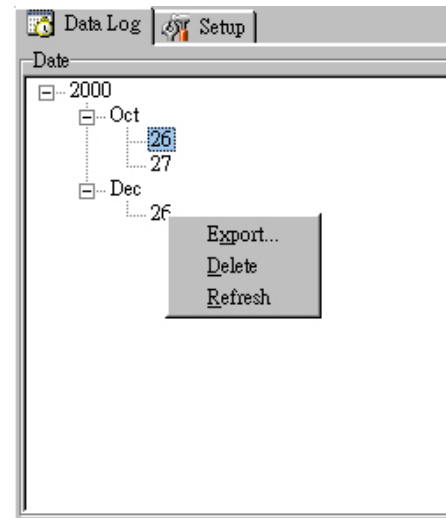


This application software is a powerful database manager .All the record file will be storage in this database. You can watch the record video data with this playback operation panel .The invoke action (motion detection or time interval) will create a new log and record on the tree manager.

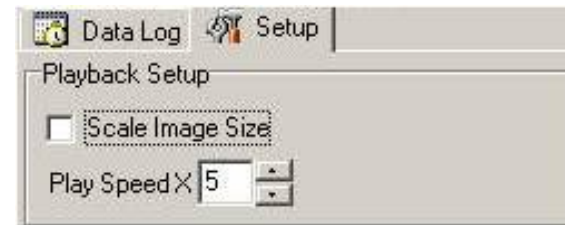
- **Playback Video** : Select the Camera number and its video date/time item then press the play button.
- **Playback Operation Panel Button**



- **Delete or Export those record video data** : Select the camera number and its video date/time item then press the mouse right button. The small dialog box will be popped up.
  1. Choose the "Export" item then this video data will be moved to another storage location.
  2. Choose the "Delete" item then this video data will be delete forever.
  3. Refresh this Data Log



- **Playback Setup**



The "Scale Image Size" is a special function to scale the frame.

If you want to watch the video data quickly ,you can change the "Play Speed X".

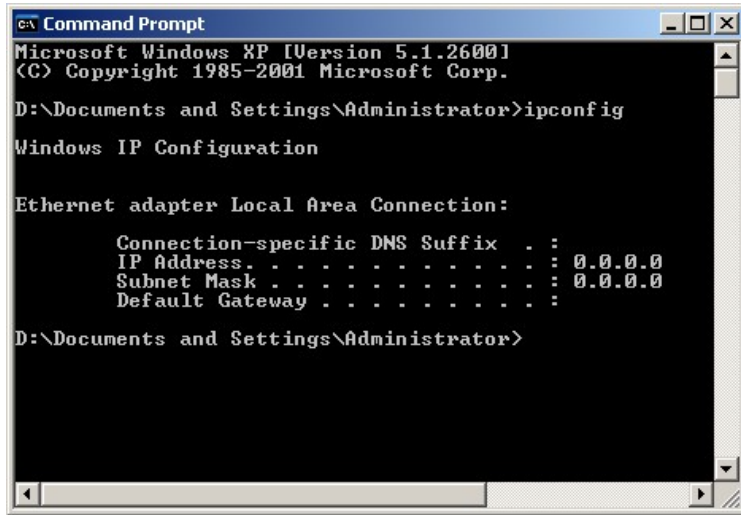
## Chapter 6. Troubleshooting

**Q: If you can not connect to a server**

- A:** a. Make sure you have installed the TCO/IP(or IPX/SPX) protocol both in the local(server) and remote site.
- b. Make sure your server PC have a real (fixed) IP address (Internet)
- c. If your IP address is virtual, then you should make sure that local and remote pc are in the same subnet (Intranet)

**Q: How to know your IP address**

- A:** Under the Command Prompt, please type the command "ipconfig" in win2000/XP OS.



**Q: Login Incorrect**

- A:** Please check the password again

When you need RMA or advanced technical service, please fill in this form as detailed as possible and FAX or Email to your dealer or service representative.

<b>Product S/N:</b>			
Name:			
TEL No.:		FAX No.:	
E-mail address:			
Full Address:			
Other add-on cards:			
Monitor:	Horizontal Freq.:	Hz to	KHz
	Vertical Freq.:	Hz to	Hz
Problem description:			