

Installing the Hardware and Software

Hardware Installation

Depending on the model purchased, hardware components may include:

Video capture card (GV card)

BNC video extension card (4-cam to 16-cam models)

Watchdog (GV-600 or above)

Real-time display card (optional)

Audio extension card (optional)

16-channel audio recording card (optional)

GV-NET Card

GV-NET I/O Card

GV-NET

GV-IO

GV-RELAY

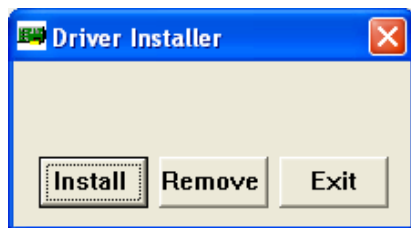
GV-Data Capture Box

IR Remote Control

Installing Video Capture Card (GV card) to PC

To install the GV card to your PC, follow these steps:

1. Insert the GV card into an empty PCI slot.
2. Turn on your PC and start Windows.
3. The Hardware Wizard in Windows detects this newly installed card and appears. Ignore the wizard window and keep on the following step.
4. Insert the installation CD into the CD-ROM drive.
5. Execute DrvInst. exe from the Driver folder. This brings up the Driver Installer dialog box.



6. Click Install to install the driver. When the installation is done, this message will appear: *Install Successfully*.
7. Click Exit to close the dialog box.

Note: In Windows XP, the wizard window will disappear after the installation is completed. In Windows 2000, close the wizard window manually.

To remove the GV card from your PC, follow these steps:

1. Execute DrvInst. exe from the Driver folder in the CD. This brings up the Driver Installer dialog box.
2. Click Remove to uninstall the driver. When the uninstallation is done, this message will appear: *Uninstall Successfully*.
3. Click Exit to close the dialog box.

Tip: To check if the driver is installed properly, go to Device Manager and see if the following components are listed. Depending on the model purchased, you may see:

Model	Components	Notes
GV-250	GV250 Audio GV-250 Video Capture	
GV-600-4	GV600_4 Video Capture # A GV600_4 Audio # A	
GV-600	GV600V2 (or GV600V3) Audio # A GV600V2 (or GV600V3) Video Capture # A	
GV-650	GV650 (or GV650V3) Audio # A - # B GV650 (or GV650V3) Video Capture # A - # B	
GV-750	GV750 Audio # A - # C GV750 Video Capture # A - # C	
GV-800-4	GV800_4 Video Capture # A - # D GV800_4 Audio # A - # D	
GV-800	GV800V2 (or GV800V3) Audio # A - # D	

GV800V2 (or GV800V3) Video Capture # A		
- # D		
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GV-900	GV900 Audio # A - # H	
	GV900 Video Capture # A - # H	
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GV-1000	GV1000 16Ch 480fps Capture Board	Audio feature in GV-1000 is optional that only comes with the purchase of GVA16 card.

Connecting the BNC Extension Card

Connect the BNC extension cards to the GV card as illustrated below:

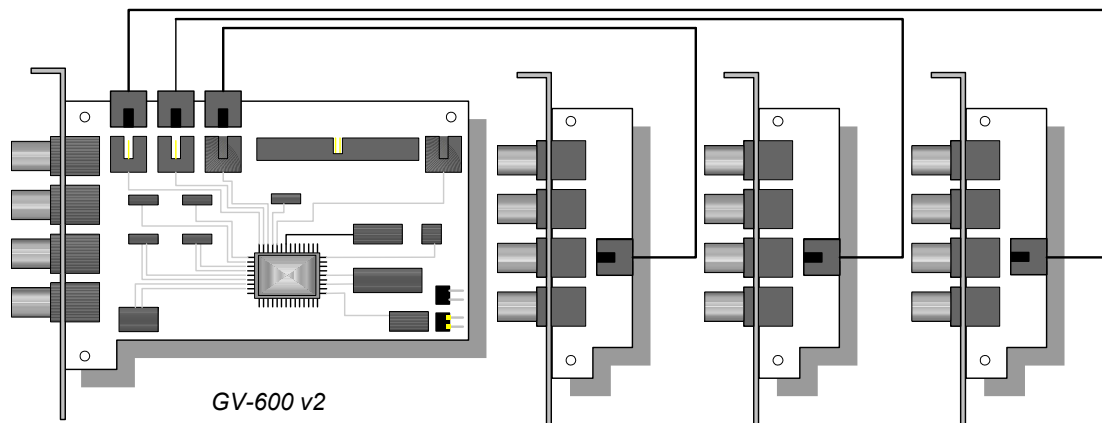


Figure 1-1 Connecting the BNC extension cards to GV card.

Connecting the D-type Video Extension Cable

Connect the D-type video extension cables to the GV card as illustrated below. Color matters!

Please only plug black cables to cam 1-8, blue to cam 9-16.

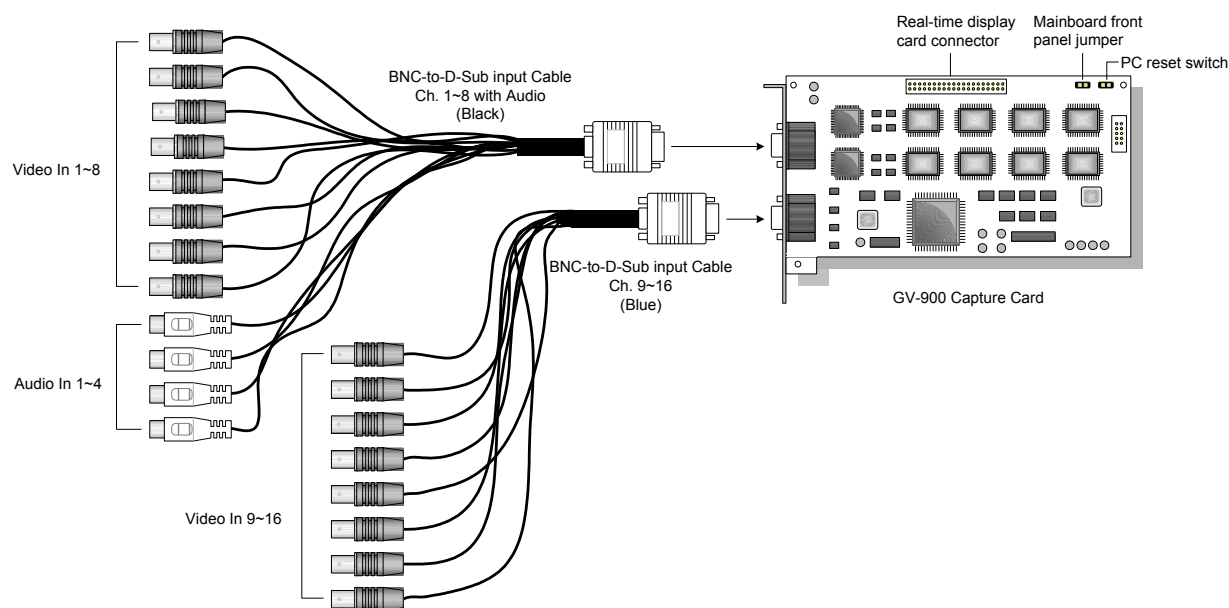


Figure 1-2 Plug the correct color cables to the capture card

Depending on the model purchased, you may or may not receive the cable with the white Audio In.

Connecting Watchdog

Using the watchdog in GV card to reboot the host computer, a connection must be made from the GV card to the motherboard. Perform the following steps to connect watchdog to motherboard:

1. Connect the jumper wire, supplied with the GV card, between Motherboard Reset Pins jumper on the GV card and the Reset pins on the host motherboard, as shown in figure 1-3.

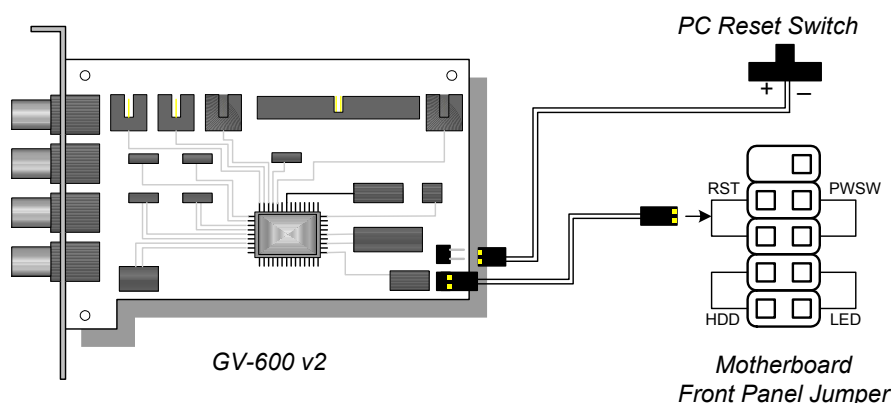


Figure 1-3 Connecting the watchdog to motherboard

2. If PC has a Reset switch, the switch's jumper wire should already be connected to the motherboard's reset pins. Remove the switch wire from the motherboard pins and connected them to the Reset Button jumper on the GV card.

Connecting Real-time Display Card (DSP card)

The following precautions must be taken when installing a DSP card:

- The DSP card does not support VIA chipset motherboards.
- The DSP card requires a minimum GeForce 2 MX200 VGA card.

Functions you would expect from a DSP card:

- Displays monitoring screen in total 480fps.
- Output to TV monitor through TV output, as shown in Figure 1-4.

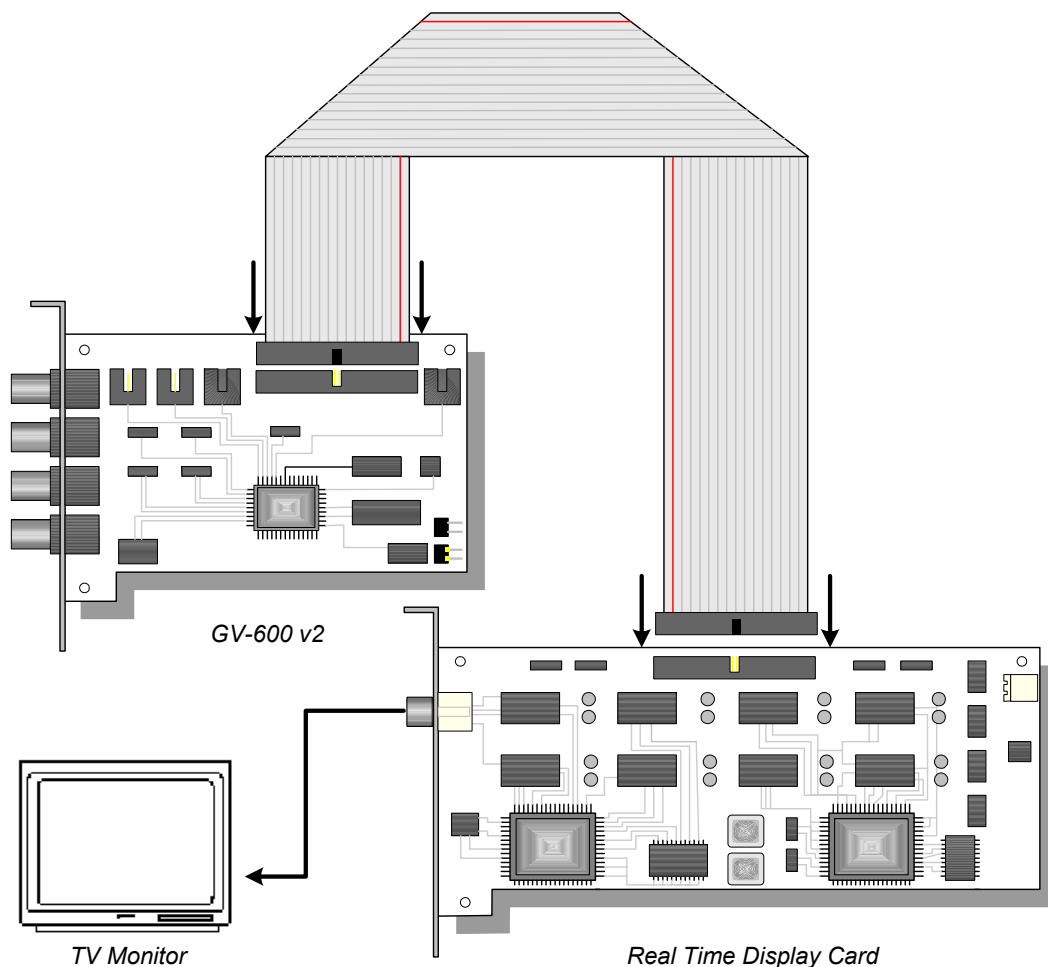


Figure 1-4 Connecting the DSP card to the video capture card and to TV monitor

To install a DSP card, follow these steps:

1. Connect the ribbon cable to the DSP card and to the video capture card, as illustrated in Figure 1-4.
2. Install the driver, supplied in the installation CD, from the root directory \Driver\GVDSP.

Connecting Audio Extension Card

Depending on the model purchased, an audio extension card may record up to 4 audio channels. To install an audio extension card, plug the output cord in the audio extension card into the audio input connector in the GV card, as illustrated in Figure 1-5.

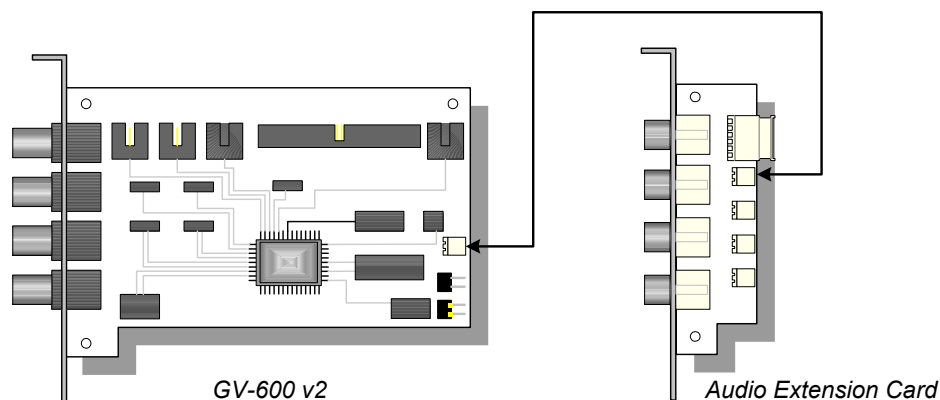


Figure 1-5 Connecting an audio extension card to the video capture card

Connecting 16-Channel Audio Recording Card (GV-A16)

GV-A16 is an optional item available for purchase. It works with GV card to record 16-channel audio, and to provide full duplex audio communications system, allowing voice communications between on-site and remote user. GV-250 is the only model not supporting the GV-A16 card. Figure 1-6 shows how to connect GV-A16 card:

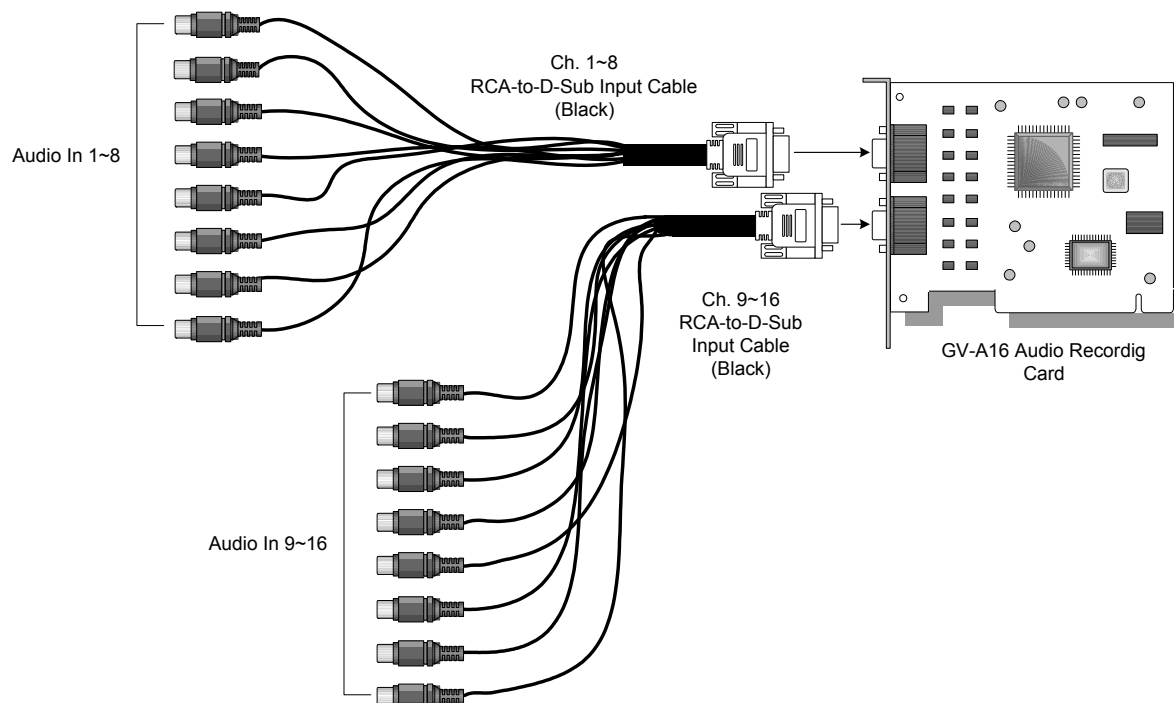


Figure 1-6 Connecting GV-A16 card for the system to record audio

Connecting GV-NET Card and GV-NET/IO Card

Models	Functions	Cables Included
GV-NET Card:	RS-485 / RS-232 interface converter. Supports all GV-System models	RJ-11 to DB9 Cable x 1 Power Supply Cable x 1
GV-NET/IO Card:	RS-485 / RS-232 interface converter Digital Input x 4 Relay Output x 4 Supports GV-600 v3.0, 650 v3.0, 800 v3.0, 900 v1.11 and 1000 v1.21 only.	20P Ribbon Cable x 1 RJ-11 to DB9 Cable x 1 Power Supply Cable x 1

GV-NET card and GV-NET/IO card may be purchased additionally to support external alarms and sensors. Figure 1-7 shows how to connect the GV-NET card to PC.

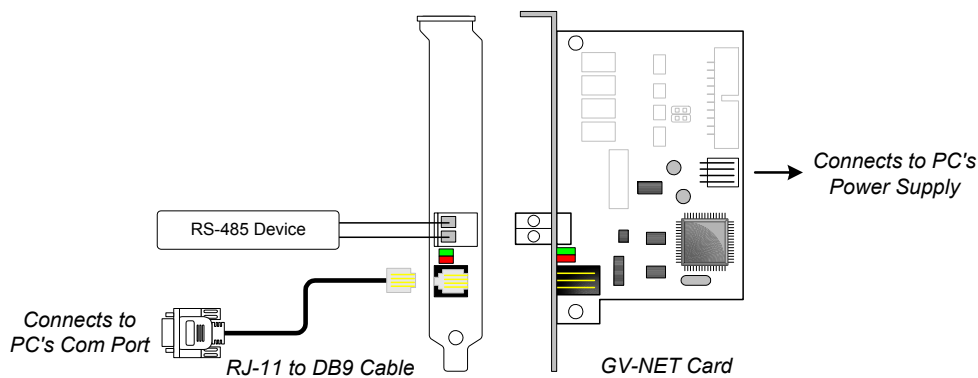


Figure 1-7 Connecting GV-NET Card

Before inserting the GV-NET/IO card to a PCI slot, make sure to connect the 20P ribbon cable to the video capture card as shown in Figure 1-8. Connect one of the PC's power cables to the power input connector.

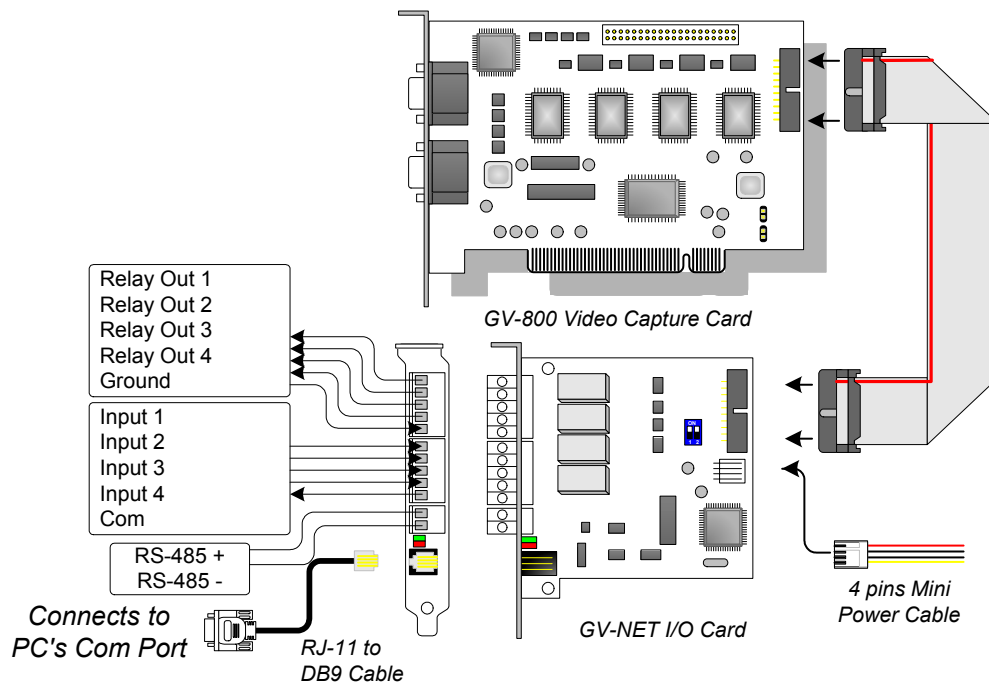


Figure 1-8 Connecting GV-NET/IO Card to GV card

Note: GV-NET Card only provides RS-485/RS-232 data conversion; connection to the GV capture card is not required.

Connecting GV-NET, GV-IO, and GV-RELAY Modules

GV-NET

A bridge between GV-I/O and the PC, connecting to GV-I/O via RS-485 and to PC via RS-232. Each GV-NET can connect up to 9 GV-I/O modules and 18 GV-RELAY modules.

GV-I/O

A digital input-output controller with 8 input points and 16 output points. Each GV-I/O can connect up to 2 GV-RELAY modules. Up to 8 input devices can be connected to a GV-I/O.

GV-RELAY

A relay output unit with 8-point relay outputs used as a circuit switch for sending on and off signals to controls, gates, lights and/or alarms. Up to 8 output devices can be connected to one GV-RELAY. Up to 2 GV-RELAY modules can be connected to 1 GV-I/O module.

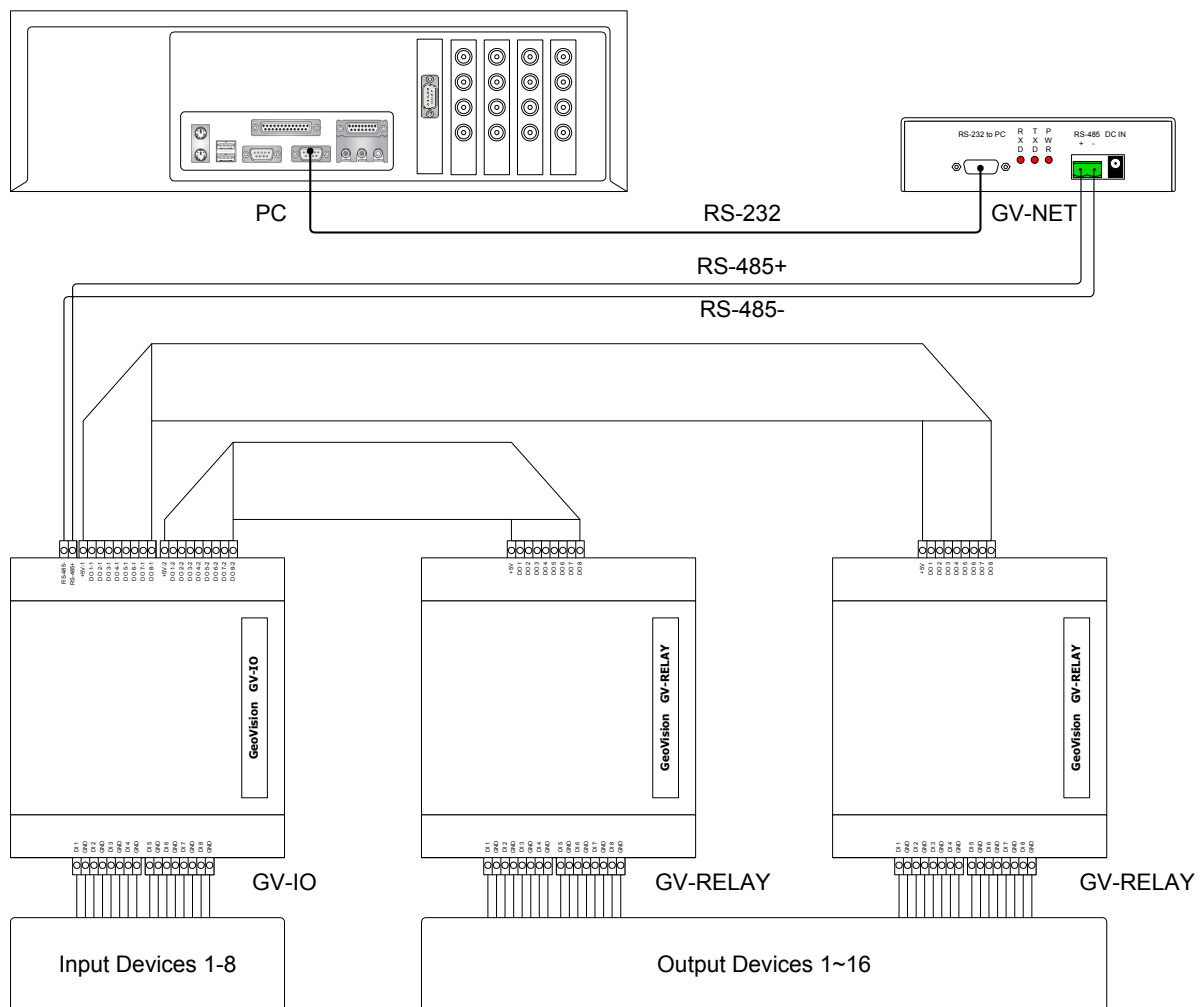
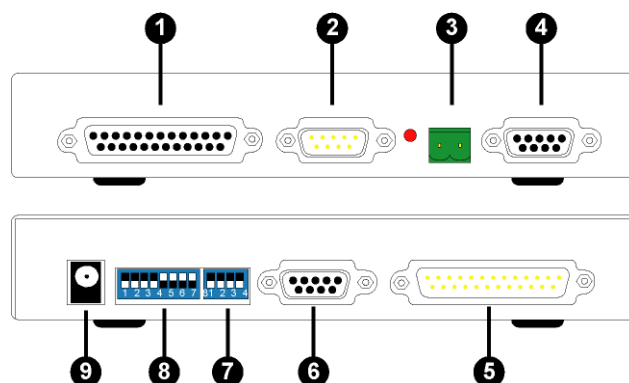


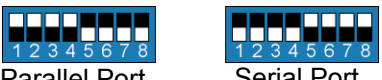


Figure 1-9 Connecting between GV-System, GV-NET, GV-IO, and GV-RELAY

Connecting GV-Data Capture Box

The purpose of the GV-Data Capture box is to intercept the signal from the POS system/cash register to the printer, duplicate the signal and transmit it to GV-system. The GV-Data Capture box is designed to interface different POS systems with GV-systems.



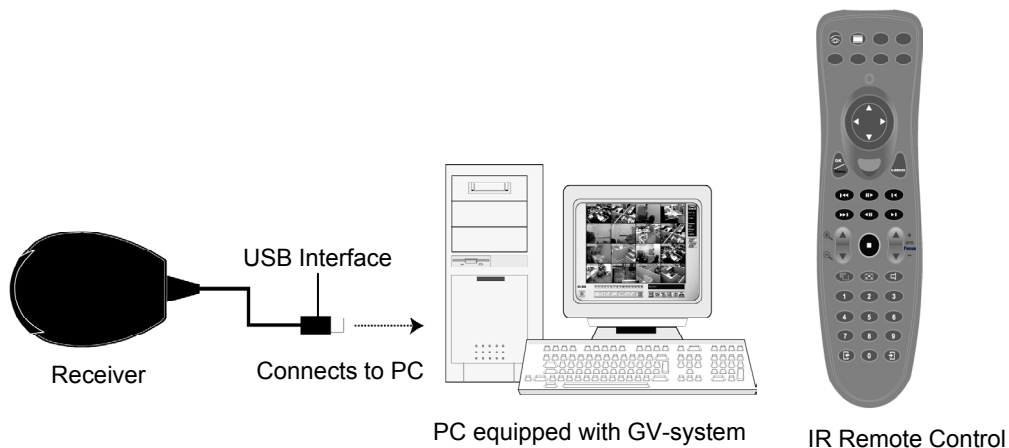
1	25 pins parallel connector	Connect to a parallel printer
2	9 pins D-Sub Male connector	Connect to a serial printer
3	2 pins RS-485 connector	Connect to GV-NET box or GV-NET card
4	9 pins D-Sub RS-232 connector	Connect to a GV-System COM port
5	25 pins parallel connector	Connect to a parallel type POS System
6	9 pins D-Sub female connector	Connect to a serial type POS system
7	The 4-position baud-rate setting switch is for configuring the parallel connection only. It is not necessary to configure baud rate in GV-Data Capture when you're using a serial type POS system.	 1200 bps 2400 bps 4800 bps 9600 bps  19200 bps 38400 bps 57600 bps 115200 bps
8	The 8-position DIP switch is a hardware switch for selecting between the serial and parallel connection.	 Parallel Port Serial Port
9	5V DC-IN	

Note: The default baud-rate is set to 9600 bps and the default DIP switch is set for the serial port.

Connecting IR Remote Control

Plug the receiver into a USB port. Immediately you are able to use the remote control. For details about using the remote control, see *IR Remote Control User Manual* attached with the products.

Note: There are three types of remote controls, A, B and C type. Type A remote control can only be used with Type A receiver. It can't be used to Type B or C receiver.



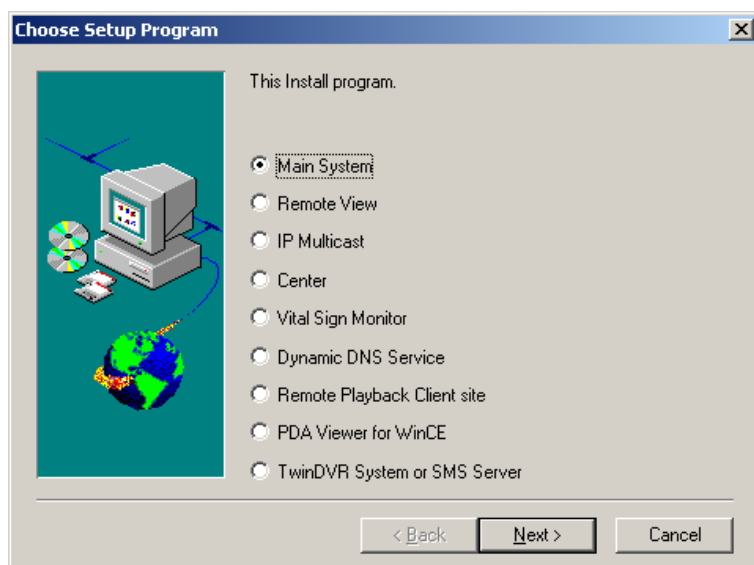
Software Installation

The Installation CD includes the following applications:

Applications	Sub Applications
Main System	
Remote View	
IP Multicast	
Center:	Center V2
	Dispatch Server
Vital Sign Monitor	
Dynamic DNS Service	
Remote Playback Client Site	
PDA Viewer for WinCE	
TwinDVR System or SMS Server	

To install any of the above applications, follow these steps:

1. Insert the installation CD.
2. Run Setup.exe in the CD-ROM root directory.
3. From the Choose Setup Program menu, choose the application you wish to install.



4. Follow the on-screen instructions to complete the installation.

To uninstall the GV-system, follow these steps:

1. Close Main System and remote applications.
2. Close any open programs because the computer will be restarted during the uninstallation process.
3. Click Start, point to Programs, choose the GV folder, and then click Uninstall GV-system.

Note: Uninstalling the system will **not** delete video files and log files previously saved in the PC.