

GV-1120A, GV-1240A, GV-1480A

GV-Combo A Card (GV-1120A, GV-1240A and GV-1480A) are the three-in-one combo cards, providing one single card solution for 16 video / audio recording, real-time display and TV-out display.

Minimum System Requirements

OS	32-bit	Windows XP / Windows Vista / Windows 7 / Windows Server 2008		
	64-bit	Windows 7 / Windows Server 2008		
CPU	GV-1120A	Pentium 4, 3.0 GHz with Hyper Threading Turbo Mode: Pentium 4, 3.0 GHz, Dual Core		
	GV-1120A x 2	Pentium 4, 3.0 GHz, Dual Core Turbo Mode: Core 2 Quad, 2.4 GHz		
	GV-1240A	Pentium 4, 3.0 GHz, Dual Core Turbo Mode: Core 2 Duo, 3.0 GHz		
	GV-1240A x 2	Core 2 Duo, 2.53 GHz Turbo Mode: Core 2 Quad, 2.8 GHz		
	GV-1480A	Core 2 Duo, 3.0 GHz Turbo Mode: Core 2 Quad, 2.4 GHz		
	GV-1480A x 2	Core 2 Quad, 2.4 GHz Turbo Mode: Core i7-920, 2.66 GHz		
	RAM	GV-1120A / 1240A / 1480A	Windows XP	2 x 512 MB Dual Channels
			Windows Vista / 7 / Server 2008	2 x 1 GB Dual Channels
		GV-1120A x 2 / 1240A x 2 / 1480A x 2	2 x 1 GB Dual Channels	
	HDD	GV-1120A	80 GB / Turbo Mode: 120 GB	
		GV-1120 A x 2	160 GB / Turbo Mode: 250 GB	
		GV-1240A	120 GB / Turbo Mode: 160 GB	
GV-1240A x 2		250 GB / Turbo Mode: 320 GB		
GV-1480A		250 GB / Turbo Mode: 320 GB		
GV-1480A x 2		500 GB / Turbo Mode: 750 GB		
Graphic Card	AGP or PCI-Express, 800 x 600 (1280 x 1024 recommended), 32-bit color			
DirectX	9.0c			

Packing List (D-Type)

- | | |
|--------------------------------|---|
| 1. GV-Combo A Card x 1 | 6. 9-16 D-Type Audio Cable x 1 |
| 2. Audio Extension Card x 1 | 7. Internal Power Y Cable x 1 |
| 3. 1-8 D-Type Video Cable x 1 | 8. Hardware Watchdog Jumper Wire x 1 |
| 4. 9-16 D-Type Video Cable x 1 | 9. Software DVD x 1 |
| 5. 1-8 D-Type Audio Cable x 1 | 10. Surveillance System Quick Start Guide x 1 |

Packing List (DVI-Type)

- | | |
|---|--|
| 1. GV- Combo A Card x 1 | 6. Internal Power Y Cable x 1 |
| 2. 1-8 DVI-Type Video plus TV Out Cable x 1 | 7. Hardware Watchdog Jumper Wire x 1 |
| 3. 9-16 DVI-Type Video Cable x 1 | 8. Software DVD x 1 |
| 4. 1-8 DVI-Type Audio Cable x 1 | 9. Surveillance System Quick Start Guide x 1 |
| 5. 9-16 DVI-Type Audio Cable x 1 | |

Connecting One GV-Combo A Card (D-Type)

- Plug the Audio Extension Card in the assigned connectors on the GV-Combo A Card.
- Connect D-Type video and audio cables to the GV-Combo A Card and Audio Extension Card respectively.
- Connect the supplied Hardware Watchdog Jump Wire (Figure 5).
- Connect the PC's internal power supply to the GV-Combo A Card.
- Connect the TV monitor to the GV-Combo A Card if needed.

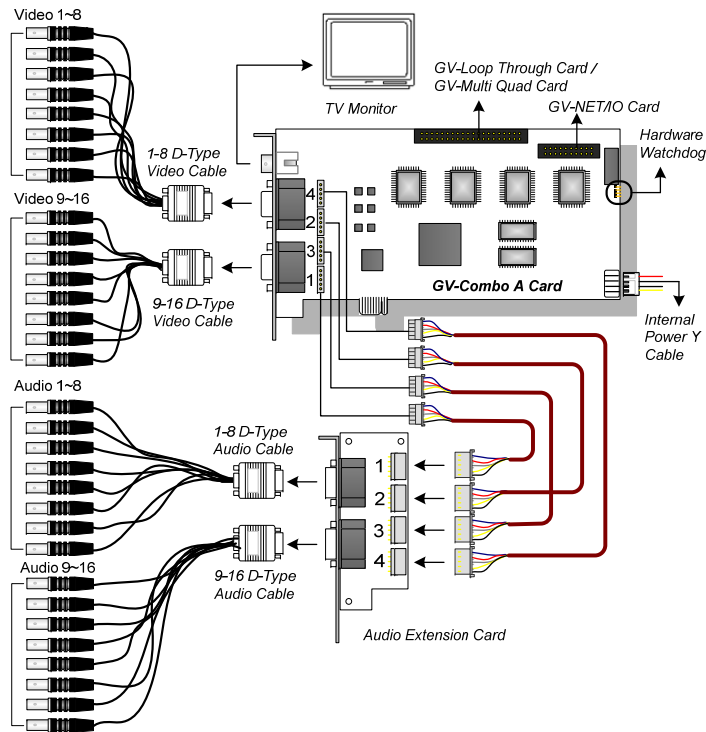


Figure 1

Note: The Card only works when it connects to PC's power supply using the supplied Internal Power Y Cable.

Connecting One GV-Combo A Card (DVI-Type)

- Connect the DVI video and audio cables to the GV-Combo A Card.
- Connect the supplied Hardware Watchdog Jump Wire (Figure 5).
- Connect the PC's internal power supply to the GV-Combo A Card.
- Connect the DVI TV Out cable to the TV monitor if needed.

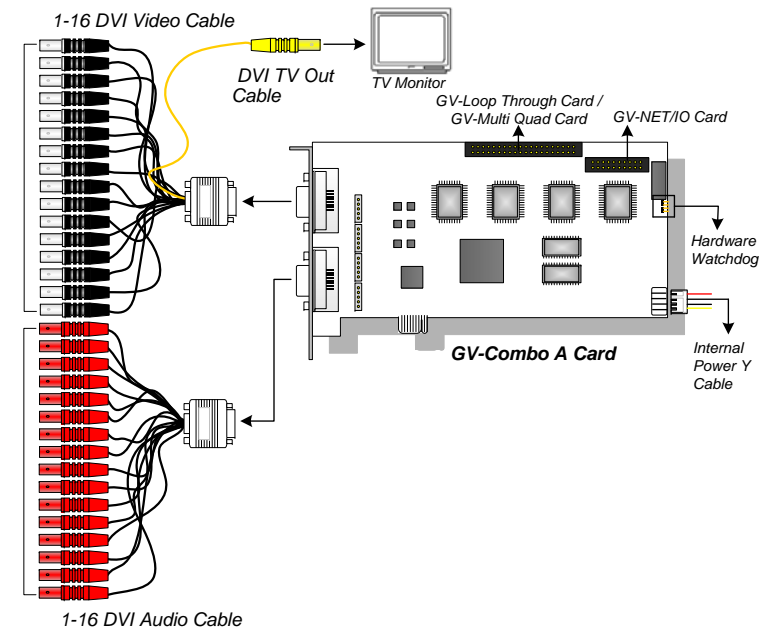


Figure 2

Note: The Card only works when it connects to PC's power supply using the supplied Internal Power Y Cable.

Connecting GV-NET/IO Card to GV-Combo A Card

Connect the GV-NET/IO Card to the 20-pin GV-NET/IO port on the GV-Combo A Card. Some GV-Combo A Cards are built in two 20-pin ports. Ensure to connect the GV-NET/IO Card to the correct port as illustrated below.

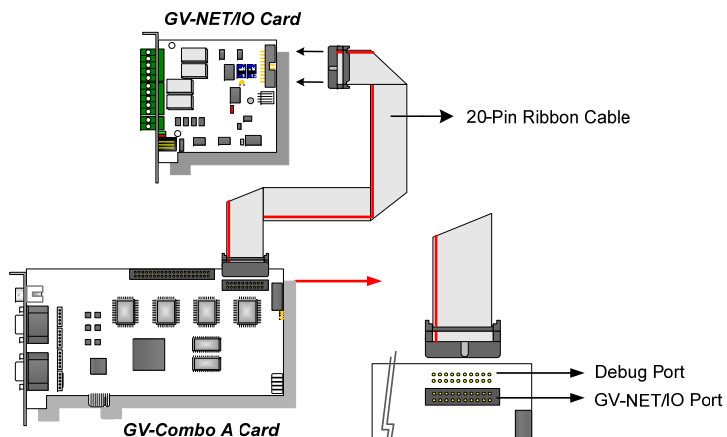


Figure 3

Note: If the GV-NET/IO Card is connected to the Debug port, it may lead to the GV-NET/IO Card to be damaged, or the GV-Combo A Card to burn out, causing Video Lost or an error message of "can't find keypro" to pop up.

Connecting Two GV-Combo A Cards

You can install two GV-Combo A Cards of the same model for up to 32 channels. Master Card is the card with 1-16 channels and Slave Card is that with 17-32 channels. Normally, the card attached to the lower PCI-E slot number will act as Master, and the card attached to the higher PCI-E slot number will act as Slave.

- **TV Output Connection:** The RCA connector in the Master Card is for displaying 1-16 channels, and the one in the Slave Card is for displaying 17-32 channels.
- **Hardware Watchdog Connection:** Connect the supplied Hardware Watchdog Jump Wire to the Master Card only (Figure 5).
- **Accessory Card Connections:**
 - ⊙ GV-NET/IO Card: Connect the card only to the Master Card.
 - ⊙ GV-Loop Through Card: Connect the card for each video capture card.
 - ⊙ GV-Multi Quad Card: Only connect one card to any of two video capture cards.

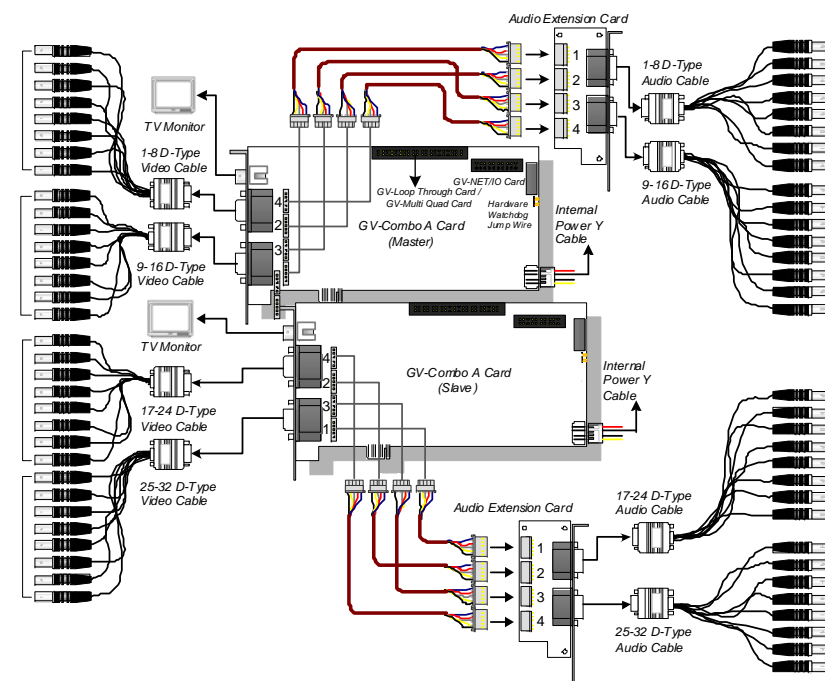


Figure 4

Connecting Hardware Watchdog

Insert the Hardware Watchdog Jumper Wire to the 2-pin connectors on the Card and on the motherboard as illustrated below. Ensure the connection is correct; otherwise the hardware watchdog will not work.

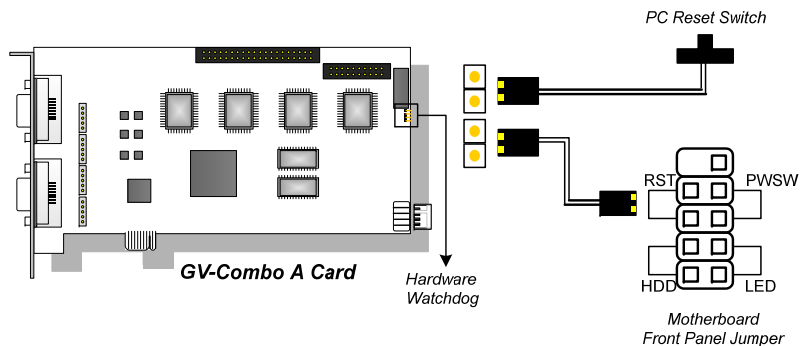


Figure 5

Installing Drivers

After installing the GV-Combo A Card in the computer, insert the software DVD. The DVD will run automatically and an installation window will pop up. Select **Install or Remove GeoVision GV-Series Driver**, and select **Install or Remove GeoVision GV-Series Card Drivers** to install card drivers.

To verify the drivers are installed correctly, go to Windows Device Manager and see if their entries are listed. The image below is an example of installing one GV-Combo A card.

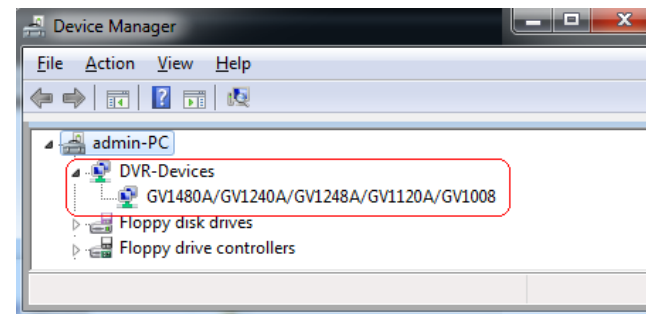


Figure 6

Expand the **DVR-Devices** field, you can see:

Card Model		Entry
GV-1120A	Single-card mode	GV1480A/GV1240A/GV1248A/GV1120A/GV1008
	Two-card mode	GV1480A/GV1240A/GV1248A/GV1120A/GV1008 GV1480A/GV1240A/GV1248A/GV1120A/GV1008
GV-1240A	Single-card mode	GV1480A/GV1240A/GV1248A/GV1120A/GV1008
	Two-card mode	GV1480A/GV1240A/GV1248A/GV1120A/GV1008 GV1480A/GV1240A/GV1248A/GV1120A/GV1008
GV-1480A	Single-card mode	GV1480A/GV1240A/GV1248A/GV1120A/GV1008
	Two-card mode	GV1480A/GV1240A/GV1248A/GV1120A/GV1008 GV1480A/GV1240A/GV1248A/GV1120A/GV1008

Specifications

		GV-1120A	GV-1240A	GV-1480A	
Interface Type		PCI-E (x1)			
Input Type		D-Type, DVI			
Video Input		8, 12, 16 Cams	8, 16 Cams	16 Cams	
Audio Input		8, 12, 16 Channels	8, 16 Channels	16 Channels	
TV Output		D-Type: RCA Connector DVI: BNC Connector			
Recording Rate	CIF	NTSC	120 fps	240 fps	480 fps
		PAL	100 fps	200 fps	400 fps
	D1	NTSC	80 fps	120 fps	240 fps
		PAL	72 fps	100 fps	200 fps
	Turbo VGA	NTSC	120 fps	240 fps	416 fps
		PAL	100 fps	200 fps	400 fps
	Turbo D1	NTSC	120 fps	240 fps	352 fps
		PAL	100 fps	200 fps	320 fps
Display Rate	CIF	NTSC	480 fps		
		PAL	400 fps		
	D1	NTSC	480 fps		
		PAL	400 fps		
Video Resolution		NTSC	704 x 480, 704 x 480 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 240, 320 x 240		
		PAL	704 x 576, 704 x 576 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 288, 320 x 240		
Video Compression Format		Geo MPEG4, Geo H264			
Audio Compression Format		AAC (16 kHz / 16 bit)			
GV-Multi Quad Card Support		Yes			
GV-Loop Through Card Support		Yes			
GV-NET/IO Card Support		Yes			
Dimensions	D-Type	179 x 112 mm / 7.04 x 4.41 in			
	DVI-Type				
Note: Turbo Mode is only applied in VGA and D1 resolutions.					

		GV-1120A x 2	GV-1240A x 2	GV-1480A x 2	
Interface Type		PCI-E (x1) x 2			
Input Type		D-Type, DVI			
Video Input		16, 20, 24, 28, 32 Cams	16, 24, 32 Cams	32 Cams	
Audio Input		16, 20, 24, 28, 32 Channels	16, 24, 32 Channels	32 Channels	
TV Output		D-Type: RCA Connector DVI: BNC Connector			
Recording Rate	CIF	NTSC	240 fps	480 fps	960 fps
		PAL	200 fps	400 fps	800 fps
	D1	NTSC	160 fps	240 fps	480 fps
		PAL	144 fps	200 fps	400 fps
	Turbo VGA	NTSC	240 fps	480 fps	832 fps
		PAL	200 fps	400 fps	800 fps
	Turbo D1	NTSC	240 fps	480 fps	704 fps
		PAL	200 fps	400 fps	640 fps
Display Rate	CIF	NTSC	960 fps		
		PAL	800 fps		
	D1	NTSC	960 fps		
		PAL	800 fps		
Video Resolution		NTSC	704 x 480, 704 x 480 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 240, 320 x 240		
		PAL	704 x 576, 704 x 576 De-interlace, 640 x 480, 640 x 480 De-interlace, 352 x 288, 320 x 240		
Video Compression Format		Geo MPEG4, Geo H264			
Audio Compression Format		AAC (16 kHz / 16 bit)			
GV-Multi Quad Card Support		Yes			
GV-Loop Through Card Support		Yes			
GV-NET/IO Card Support		Yes			
Dimensions	D-Type	179 x 112 mm / 7.04 x 4.41 in			
	DVI-Type				
Note: Turbo Mode is only applied in VGA and D1 resolutions.					