Installing Two Cards
(GV-600, GV-650, GV-800)

You can install two video capture cards of the same model for a total of 32 channels. For example, 2 x GV-650 Cards (16 channels) = 32 channels.

You can also implement two video capture cards of different channels. For example, GV-650 Card (12 channels) + GV-650 Card (16 channels) = 28 channels.

Packing List

❶ *GV-600/650/800 Card x 2*

❷ *Black and White D-Type Cable for Video and Audio x 2*

❸ *Blue D-Type Cable for Video x 2*

❹ *Hardware Watchdog Jumper Wire x 1*

❺ *Software DVD x 1*

❻ *Feature Guide x 1*

❼ *Installation Guide x 1*

Rules to Use Two Cards

GV Video Capture Cards have two interface types: PCI and PCI Express (PCI-E). When you install two video capture cards, ensure they are installed in the right slots as instructed in the following tables.

Card Combination	V3.20 and later	V4.20 and later	
V3.20 and later	X	X	
V4.20 and later	X	GV-600 (V4)	PCI x 2
		GV-650 (V4)	PCI x 2
			PCI-E x 2
			PCI x 1+ PCI-E x 1
		GV-800 (V4)	PCI-E x 2
			PCI x 1+ PCI-E x 1

1. The V3.20 (and later) Cards or the combination of V3.20 and V4.20 (and later) Cards do not support two cards.
2. For GV-600 (V4) Cards, it is required to use two PCI slots.
3. For GV-650 (V4) Cards, you can use two PCI slots, two PCI Express slots, or the combination of PCI and PCI Express slots.
4. For GV-800 (V4) Cards, it is required to use two PCI Express slots, or the combination of PCI and PCI Express slots.

Note:

1. GV-800_4A Card does not support two cards.
2. PCI-E GV-650 (V4) and GV-800 (V4) Cards have x1 interface which can be inserted into the PCI Express x1, x4, x8 or x16 slot.

Connections

1. **Master and Slave Cards**

   Master Card is the GV Video Capture Card with 1-16 channels and Slave Card is the one with 17-32 channels. Normally, the card attached to the lower PCI slot number will act as Master, and the card attached to the higher PCI slot number will act as Slave.

2. **For the user of two GV-600 Cards**

   Two GV-600 Cards only support two audio channels. Connect microphones to Audio 1 connector of the Master Card, and Audio 5 connector of the Slave Card.

3. **For the user of two GV-650 Cards**

   Two GV-650 Cards only support four audio channels. Connect microphones to Audio 1 and Audio 2 connectors of the Master Card, and Audio 5 and Audio 6 connectors of the Slave Card.
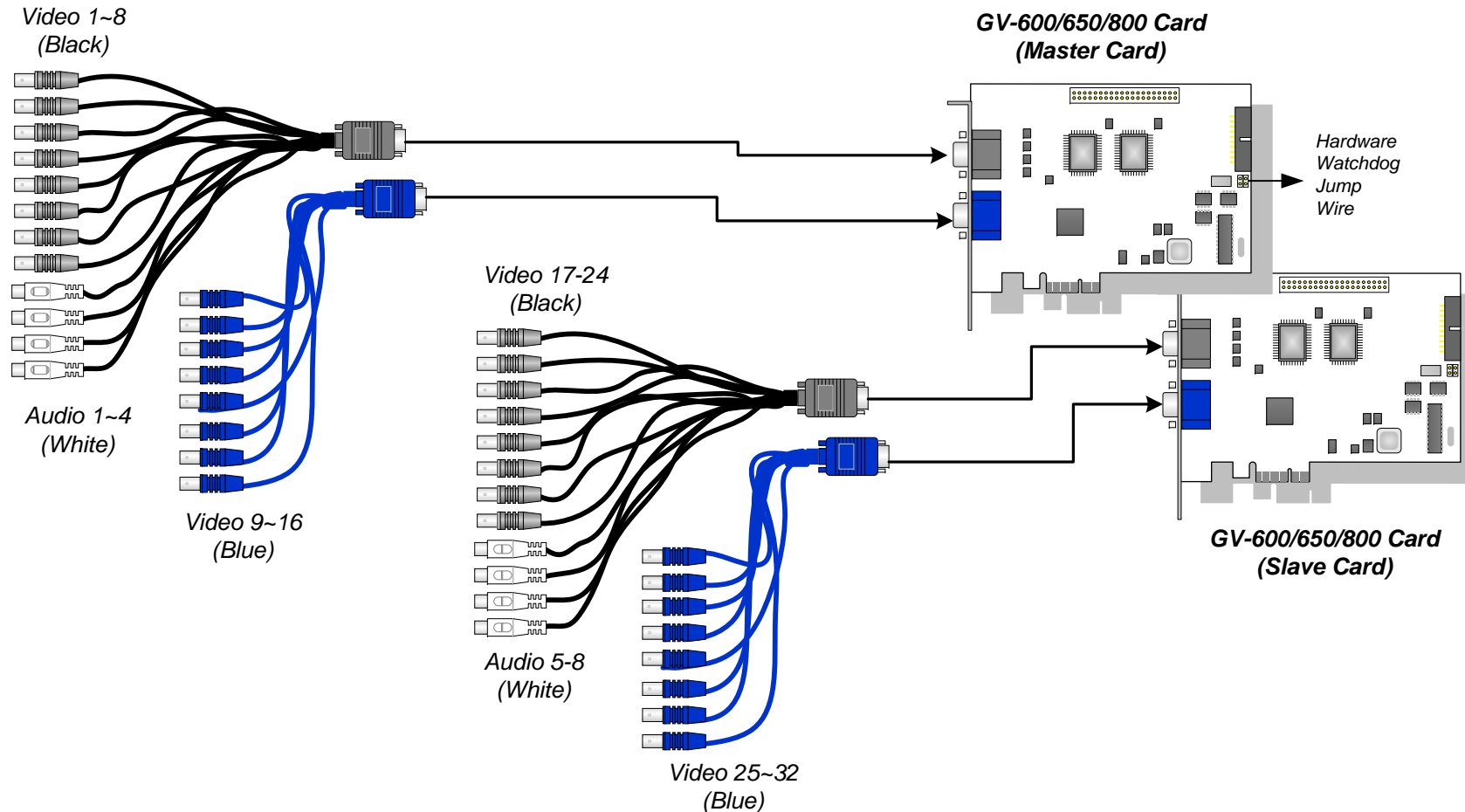
4. **Hardware Watchdog Connection**

   Connect the supplied Hardware Watchdog Jump Wire to the Master Card.

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.

Video 1~8 (Black)

Audio 1~4 (White)

Video 9~16 (Blue)

Video 17-24 (Black)

Audio 5-8 (White)

Video 25~32 (Blue)

GV-600/650/800 Card (Master Card)

Hardware Watchdog Jump Wire

GV-600/650/800 Card (Slave Card)

Specifications

			GV-600 x 2	GV-650 x 2	GV-800 x 2
Input Type			BNC / D-Type	BNC / D-Type	D-Type
Video Input			32 (Max)	32 (Max)	16, 20, 24, 28, 32
Total Recording Rate	CIF	NTSC	60 fps	120 fps	240 fps
		PAL	50 fps	100 fps	200 fps
	D1	NTSC	30 fps	60 fps	120 fps
		PAL	25 fps	50 fps	100 fps
Display Rate	CIF	NTSC	60 fps	120 fps	240 fps
		PAL	50 fps	100 fps	200 fps
	D1	NTSC	30 fps	60 fps	120 fps
		PAL	25 fps	50 fps	100 fps
Video Codec			Geo MPEG4, Geo MPEG4 (ASP), Geo H264, Geo H264 V2		
Video Resolution	NTSC		720 x 480, 720 x 480 De-interlace, 640 x 480, 640 x 480 De-interlace, 360 x 240, 320 x 240		
	PAL		720 x 576, 720 x 576 De-interlace, 640 x 480, 640 x 480 De-interlace, 360 x 288, 320 x 240		
Audio Input			2 (Ch 1, Ch 17)	4 (Ch 1-2, Ch 17-18)	8 (Ch 1-4, Ch 17-20)
GV-Multi Quad Card Support			O	O	O
GV-Loop Through Card			O	O	O
GV-NET/IO Card Support			O	O	O

Minimum System Requirements

	GV-600 x 2	GV-650 x 2	GV-800 x 2
OS	Windows 2000 / XP / Server 2003 / Vista		
Direct X	9.0c		
CPU	Pentium 4-2.6 GHz with HT	Pentium 4-2.8 GHz with HT	Pentium 4-3.0 GHz Dual Core
RAM	2 x 1 GB Dual Channels		
HDD	160 GB		
VGA	ATI Radeon X600 / NVIDIA 6200		ATI Radeon X1300 PCI-E / NVIDIA GeForce 7300 PCI-E

Note:

1. The hard disk space required to install GV-System must be at least 1 GB.
2. Currently GV Video Capture Cards are not compatible with VIA-series and ATI-series chipset motherboards, and 64-bit Windows operating system.