

# GV-900A

One GV-900A Card provides up to 32 video channels and 8 audio channels, recording up to 240 / 200 fps (NTSC / PAL) in total with H.264 software compression.

## Minimum System Requirements

|              |             |                                                                       |                                   |
|--------------|-------------|-----------------------------------------------------------------------|-----------------------------------|
| OS           | 32-bit      | Windows 7 / 8 / 8.1 / 10 / Server 2008                                |                                   |
|              | 64-bit      | Windows 7 / 8 / 8.1 / 10 / Server 2008 R2 / Server 2012               |                                   |
| CPU          | GV-900A     |                                                                       | Pentium 4, 3.0 GHz with Dual Core |
|              | GV-900A x 2 |                                                                       | Core i5-750, 2.66 GHz             |
| RAM          |             | 2 x 1 GB Dual Channels                                                |                                   |
| HDD          | GV-900A     |                                                                       | 160 GB                            |
|              | GV-900A x 2 |                                                                       | 500 GB                            |
| Graphic Card |             | AGP or PCI-Express, 800 x 600 (1280 x 1024 recommended), 32-bit color |                                   |
| DirectX      |             | 9.0c                                                                  |                                   |

## Packing List

1. GV-900A Card x 1
2. 1-16 Cams with 4-Port Audio DVI-Type Cable x 2 / 1-8 Cams with 4-Port Audio DVI-Type Cable x 2 / 1-4 Cams with 4-Port Audio DVI-Type Cable x 2
3. Hardware Watchdog Jumper Wire x 1
4. Software DVD x 1

**Note:** The two **1-16 Cams with 4-Port Audio DVI-Type** cables are supplied with the GV-900A card with 32 video inputs, the two **1-8 Cams with 4-Port Audio DVI-Type** cables are supplied with the GV-900A card with 16 video inputs and the two **1-4 Cams with 4-Port Audio DVI-Type** cables are supplied with the GV-900A card with 8 video inputs.

## Connecting One GV-900A Card

Here we use the GV-900A Card of 8 channels to illustrate the connection.

- Connect the video / audio cables into the DVI ports of the GV-900A Card.
- Connect the supplied Hardware Watchdog Jump Wire (Figure 3).

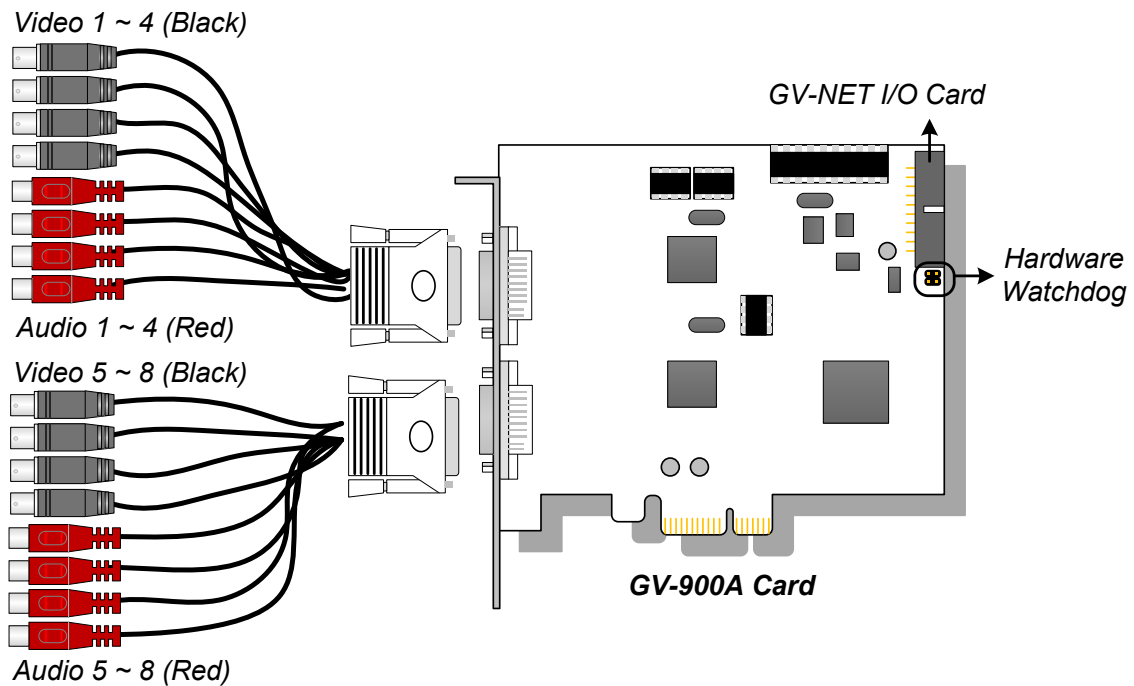


Figure 1

## Connecting Two GV-900A Cards

You can install two GV-900A Cards for up to 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.

- **Hardware Watchdog Connection:** Connect the supplied Hardware Watchdog Jump Wire to the Master Card only (Figure 3).
- **Accessory Card Connections:**
  - ⊙ GV-NET/IO Card: Connect the card to the Master Card only.

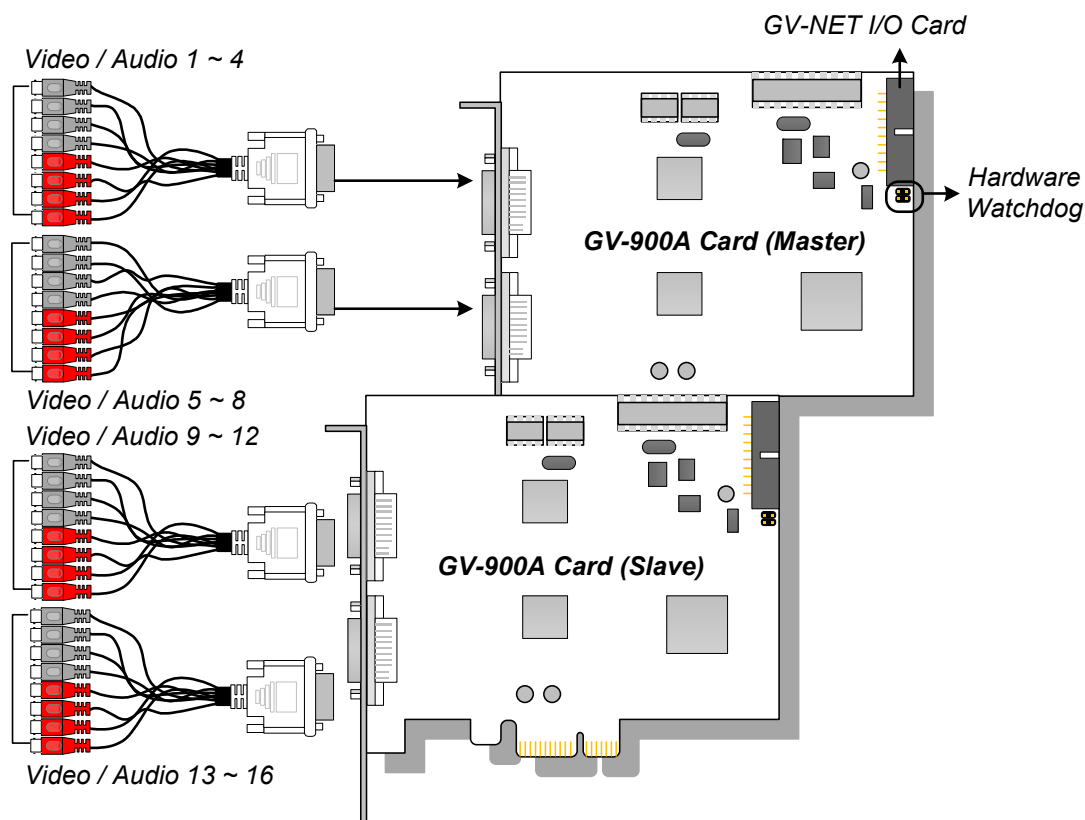


Figure 2

## Connecting Hardware Watchdog

Insert the Hardware Watchdog Jumper Wire to the 2-pin connectors on the Card. The (+) pin on the Card must connect to the Reset (+) pin on the motherboard, and the (-) pin on the Card to the Ground (-) pin on the motherboard. Ensure the connection is correct; otherwise the hardware watchdog will not work.

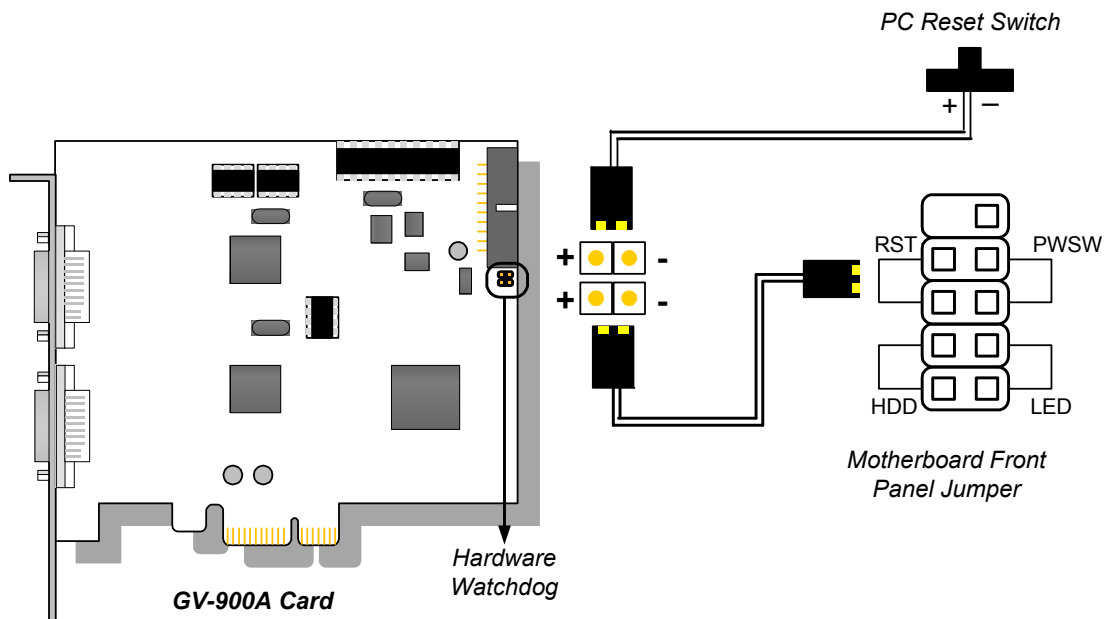


Figure 3

**Note:** To locate the motherboard's Reset (+) pin and (-) pin, please refer to the motherboard's user manual.

## Installing Drivers

After installing the GV-900A 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-900A card.

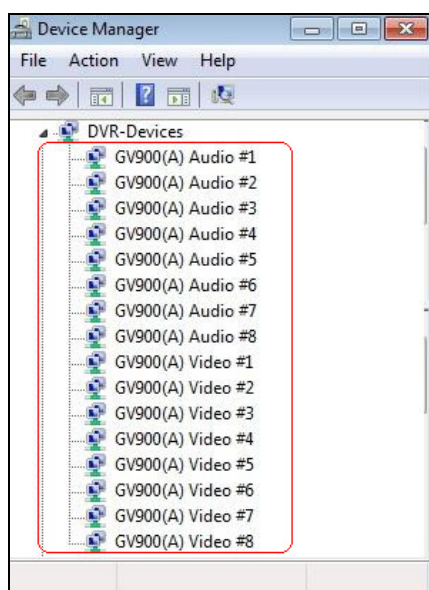


Figure 4

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

| GV-900A Card     | Entry                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                              |
|------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Single-card mode | GV900(A) Audio #1 ~ 8<br>GV900(A) Video #1 ~ 8                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                              |
| Two-card mode    | GV900(A) Audio #1<br>GV900(A) Audio #1<br>GV900(A) Audio #2<br>GV900(A) Audio #2<br>GV900(A) Audio #3<br>GV900(A) Audio #3<br>GV900(A) Audio #4<br>GV900(A) Audio #4<br>GV900(A) Audio #5<br>GV900(A) Audio #5<br>GV900(A) Audio #6<br>GV900(A) Audio #6<br>GV900(A) Audio #7<br>GV900(A) Audio #7<br>GV900(A) Audio #8<br>GV900(A) Audio #8 | GV900(A) Video #1<br>GV900(A) Video #1<br>GV900(A) Video #2<br>GV900(A) Video #2<br>GV900(A) Video #3<br>GV900(A) Video #3<br>GV900(A) Video #4<br>GV900(A) Video #4<br>GV900(A) Video #5<br>GV900(A) Video #5<br>GV900(A) Video #6<br>GV900(A) Video #6<br>GV900(A) Video #7<br>GV900(A) Video #7<br>GV900(A) Video #8<br>GV900(A) Video #8 |

## Specifications

|                          |     |      | GV-900A                                                                                       | GV-900A x 2                              |
|--------------------------|-----|------|-----------------------------------------------------------------------------------------------|------------------------------------------|
| Interface                |     |      | PCI-E (x1)                                                                                    | PCI-E (x1) x 2                           |
| Input Type               |     |      | DVI                                                                                           |                                          |
| Video Input              |     |      | 8, 16, 32 Cams                                                                                | 16, 24, 32 Cams                          |
| Audio Input              |     |      | 8 Channels                                                                                    | 16 Channels                              |
| Recording Rate           | CIF | NTSC | 8-port: 240 fps<br>32-port: 240 fps                                                           | 8+8 port: 480 fps<br>16+16 port: 480 fps |
|                          |     | PAL  | 8-port: 200 fps<br>32-port: 200 fps                                                           | 8+8 port: 400 fps<br>16+16 port: 400 fps |
|                          | D1  | NTSC | 8-port: 240 fps<br>32-port: 120 fps                                                           | 8+8 port: 480 fps<br>16+16 port: 240 fps |
|                          |     | PAL  | 8-port: 200 fps<br>32-port: 100 fps                                                           | 8+8 port: 400 fps<br>16+16 port: 200 fps |
| Display Rate             | CIF | NTSC | 8-port: 240 fps<br>32-port: 240 fps                                                           | 8+8 port: 480 fps<br>16+16 port: 480 fps |
|                          |     | PAL  | 8-port: 200 fps<br>32-port: 200 fps                                                           | 8+8 port: 400 fps<br>16+16 port: 400 fps |
|                          | D1  | NTSC | 8-port: 240 fps<br>32-port: 120 fps                                                           | 8+8 port: 480 fps<br>16+16 port: 240 fps |
|                          |     | PAL  | 8-port: 200 fps<br>32-port: 100 fps                                                           | 8+8 port: 400 fps<br>16+16 port: 200 fps |
| Video Resolution         |     | NTSC | 704 x 480, 704 x 480 De-interlace,<br>640 x 480, 640 x 480 De-interlace, 352 x 240, 320 x 240 |                                          |
|                          |     | PAL  | 704x 576, 704 x 576 De-interlace,<br>640 x 480, 640 x 480 De-interlace, 352 x 288, 320 x 240  |                                          |
| Video Compression Format |     |      | Geo MPEG4, Geo H264                                                                           |                                          |
| Audio Format             |     |      | 16 kHz / 16-bit, 32 kHz / 16-bit                                                              |                                          |
| GV-NET/IO Card Support   |     |      | Yes                                                                                           |                                          |
| Dimensions (W x H)       |     |      | 120 x 112 mm / 4.7 x 4.4 in                                                                   |                                          |