



DS-4308MDI-E
Audio/Video Decoding Card
User Manual

Version 6.5
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Model
DS-4308MDI-E

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Chapter 1 Product Description

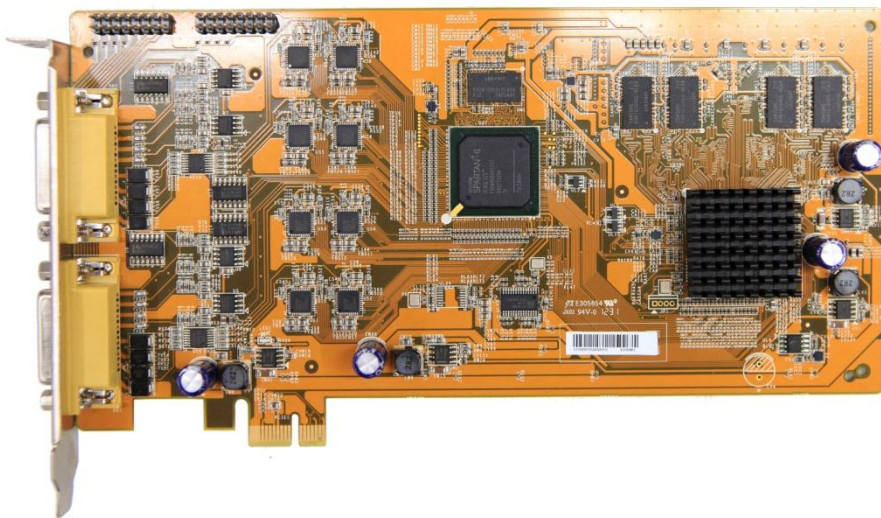
1.1. Product Description

HIKVISION DS-4308MDI-E decoding card supports up to WD1 video decoding, and outputs decoded video/audio data through BNC interfaces. The card can be plugged onto a PC motherboard and construct a PC-based decoding system together with management software, and meets different requirements of surveillance applications consequently.

Order Model

DS-4308MDI-E

Product Snapshot



1.2. Technical Specification

Model	DS-4308MDI-E
Supported Video Input	MPEG-4, H.264 , MJPEG, HIK H.264
Video Decoding Capability	<p>Real time decoding of :</p> <p>Standard H.264: 11-ch WD1/800x600 13-ch 4CIF 16-ch 2CIF/DCIF/CIF/QCIF</p> <p>MPEG-4: 16-ch 4CIF 16-ch 2CIF/DCIF/CIF/QCIF</p> <p>HIK H.264: 5-ch 4CIF 16-ch 2CIF/DCIF/CIF/QCIF</p> <p>Or up to 16-ch non-real-time decoding of WD1/800x600/ 4CIF/ 2CIF/DCIF/CIF/QCIF</p>
Video Output Interface	8 BNC (1.0Vp-p, 75Ω), up to 16 screen-split for each BNC output
Decoding Frame Rate	Up to 25 fps (PAL) / 30 fps (NTSC)
Supported Audio Input	OggVorbis, G-711, MPEG1 Layer 2
Audio Decoding Capability	4-ch PCM audio, mono
Audio Output Interface	BNC (Linear level, 600 Ω)
PCI Standard	PCI-Ex1 2.0
Dimensions (mm)	213 × 102
Power Consumption	< 13.5 w

1.3. Product Features

- 16 decoding channel
- Up to WD1 decoding resolution
- 8 video/audio output channel, up to 16 screen-split display for each video output
- Multiple input video standards (MPEG-4, H.264 , MJPEG, HIK H.264)
- Multiple input video packet type (ES, PS RTP and HIK)
- Multiple input audio standards (OggVorbis, G-711, MPEG1 Layer 2)

1.4. Developing Support

- Support Windows7/2008/Vista/2003/XP/2000 and Linux OS
- Support mix-use with other HIKVISION card models in 1 PC
- Up to 5 DS-4308MDI-E cards can be installed in 1 PC
- Provide driver, SDK and open-source demo for secondary developing

Chapter 2 Product Performance

- **DS-4308MDI-E**

Real time decoding of :

Standard H.264:

11-ch WD1/800x600

13-ch 4CIF

16-ch 2CIF/DCIF/CIF/QCIF

MPEG-4:

16-ch 4CIF

16-ch 2CIF/DCIF/CIF/QCIF

HIK H.264:

5-ch 4CIF

16-ch 2CIF/DCIF/CIF/QCIF

Or up to 16-ch non-real-time decoding of WD1/800x600/ 4CIF/ 2CIF/DCIF/CIF/QCIF

Notice

1. All the performance testing is done under normal office scene with color camera input, and the recording performance may differ according to the surveillance scene.
2. Please kindly refer to <http://www.hikvision.com> or contact HIKVISION technical support for the latest updates of card performance.
3. Performance may be slightly different according to the card number and PC HD read/write efficiency.

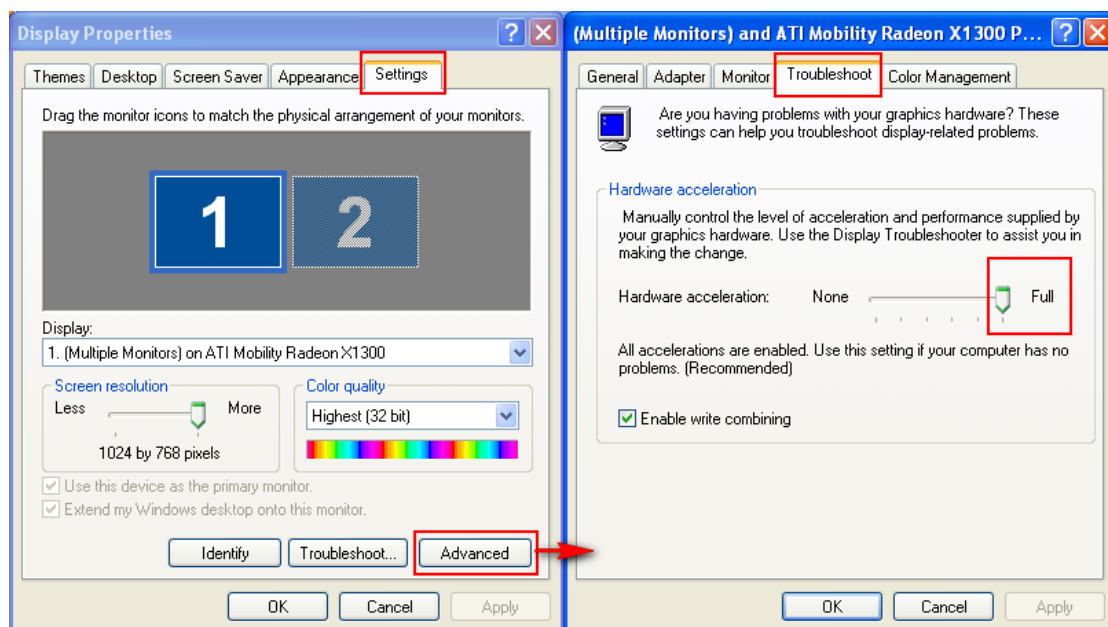
Chapter 3 Compatible Software/ Hardware Configuration

3.1. Operating System

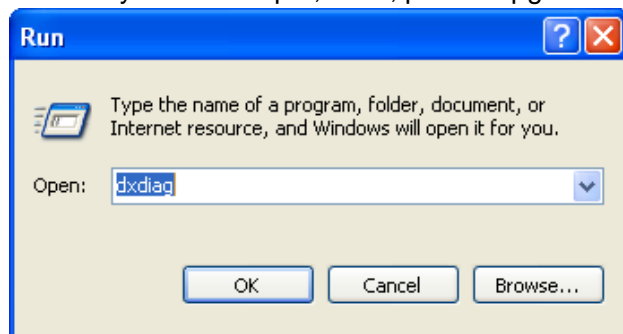
The DS-4308MDI-E card works in Windows7/ 2008/ Vista/ 2003/ XP Operating System installed with DirectX version 8.1 or higher version, or Linux Operating System.

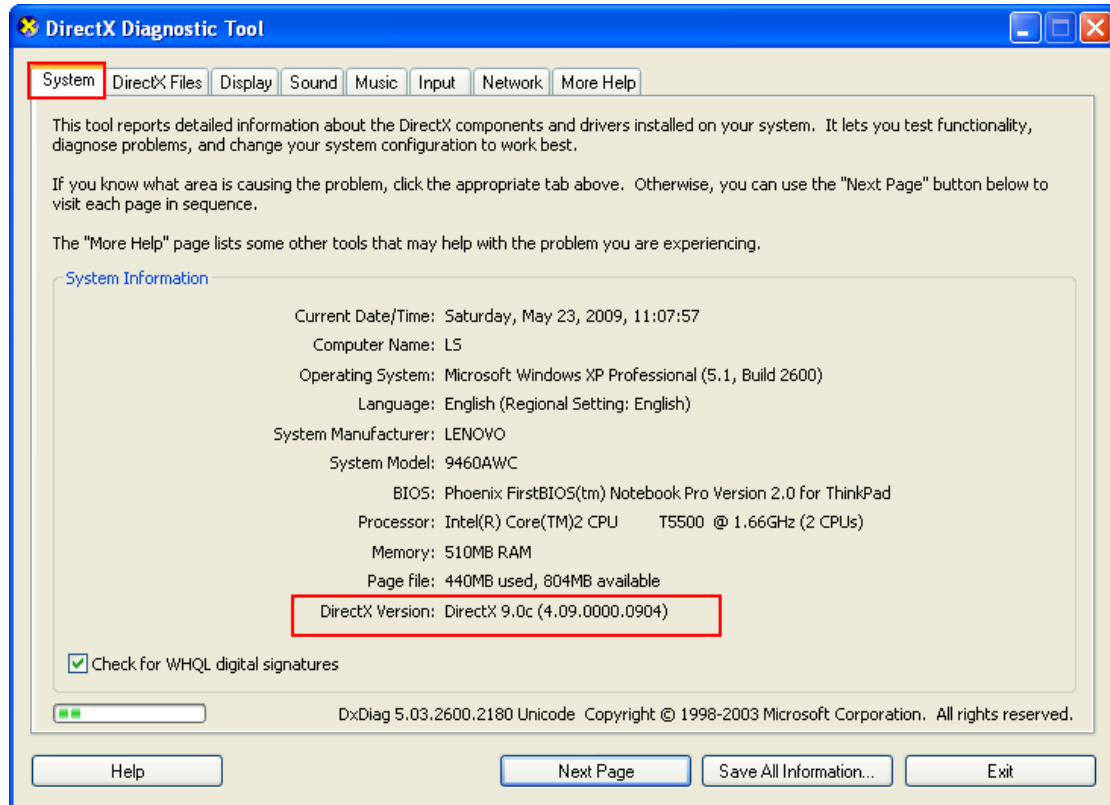
For Windows 2003 OS, please kindly follow the operation steps below.

1. Right click on Windows Desktop-> Select "Properties" ->Settings-> Advanced-> Troubleshoot->and drag "Hardware Acceleration" to "Full".

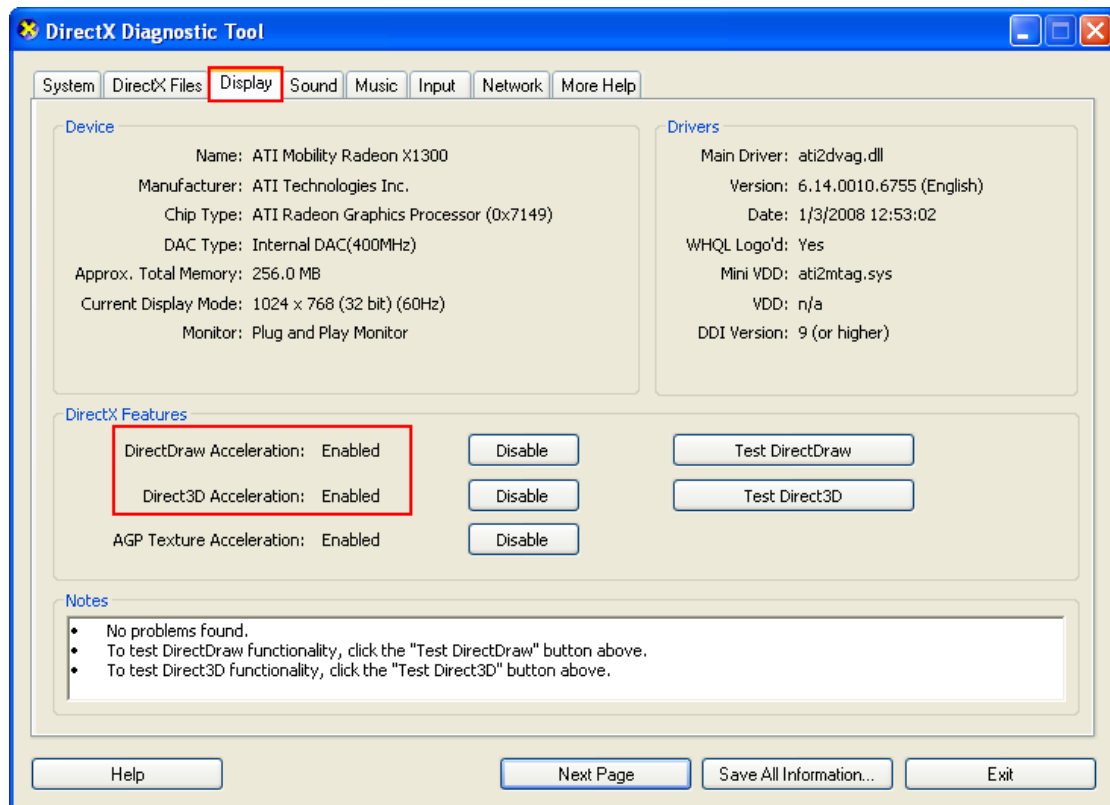


2. Click "Start"-> "Run" of Windows task bar, input "dxdiag" and enter DirectX diagnosing program. Please check if DirectX version is above 8.1. If yes, please kindly refer to step 3; if not, please upgrade it to version higher than 8.1 first.





3. Enable "DirectDraw" and "Direct3D" options in the "Display" column.



3.2. CPU and Motherboard

It is suggested to use motherboard with Intel Core2, Core4, i3, i5 or i7 CPU.

And it is suggested to use motherboard from reliable manufactures such as Intel, Asus, Gigabyte, Microstar, etc.

Tested motherboard models compatible with DS-43xx series card are listed as following.

ASUS P8H61

ASUS P8P67 LE

ECS H67H2-M

ASUS P8H61 PLUS

Etc.

Note:

Please refer to HIKVISION website (<http://www.hikvision.com>) for up-to-date hardware compatibility information under 'Support > FAQ'

3.3. System Memory

≥1G

Note:

Larger memory size is required when the card number installed in the PC increases.

3.4. Display Adapter

To support high resolution live view/ record function of the card, it is suggested to use a high performance display adapter. Please kindly refer to the list below for tested models of compatible display adapters. Please notice that the driver of these display adapters must support BLT function.

Nvidia GeForce GTX 560

AMD Radeon HD 6700 / Radon HD 6900

ATI Radeon HD 4800 / Radeon X1600 Pro / Radeon HD3450

Nvidia GeForce GTS 250 / GeForce GTS 450

GeForce 8600GT

Sapphire HD6950

Yeston R2400PRO-HM256GD3

3.5. Power Supply

≥400W

Chapter 4 Driver Installation

To install the card to your PC, please kindly follow these steps below:

1. Insert the card into an empty PCI-E slot.
2. Turn on the PC and start Windows.
3. Windows Hardware Wizard detects the card and is populated automatically. Please ignore the wizard window.
4. Locate to the folder of DS-43xx Driver, and run "Driver Install.exe". The Driver Install dialog box will be displayed on screen.



5. Click "Install or Update Driver" to install/update the driver, and a Windows dialog box will be displayed on screen.



6. Click "Continue Anyway" to continue the hardware installation.

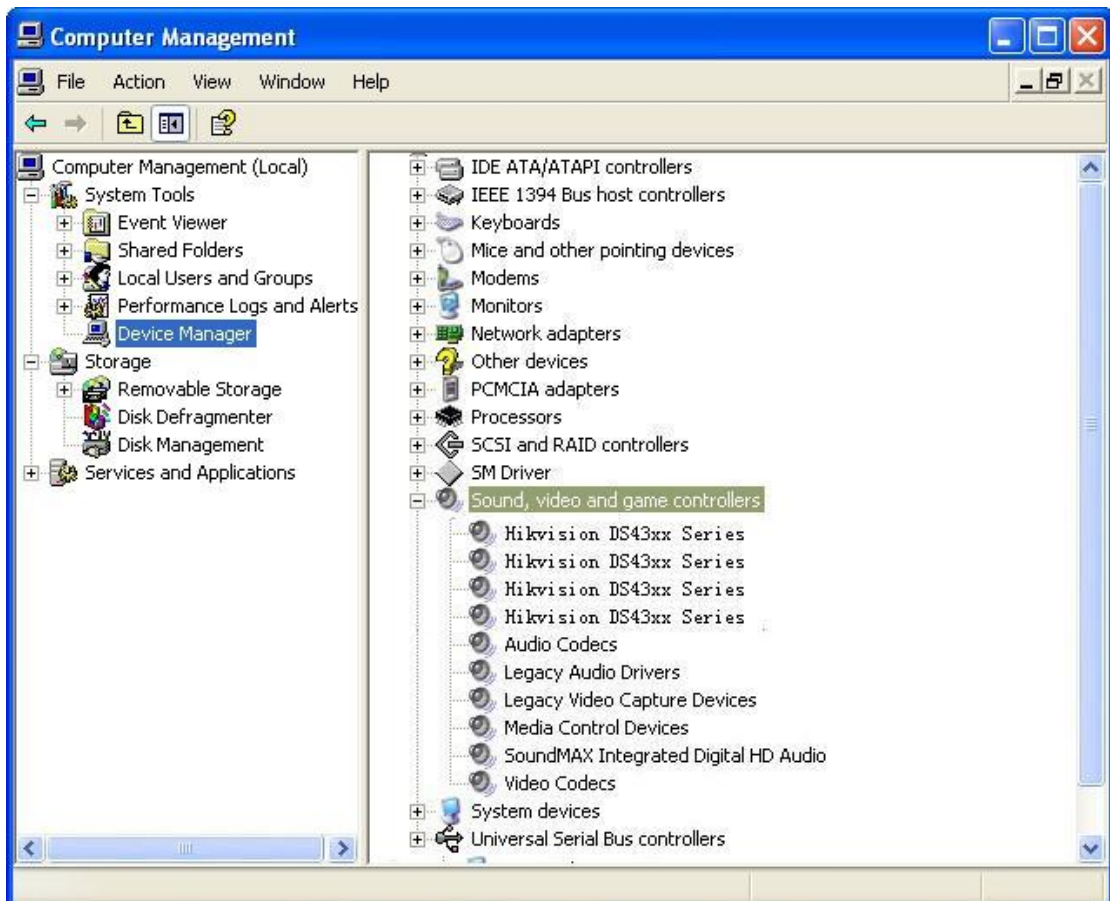
Note:

If there is more than 1 card installed in the PC or more than 1 DSP in one card, users may need to repeat step 5 & Step 6.

7. When the installation is done, this message will appear: Driver Installed Successfully!



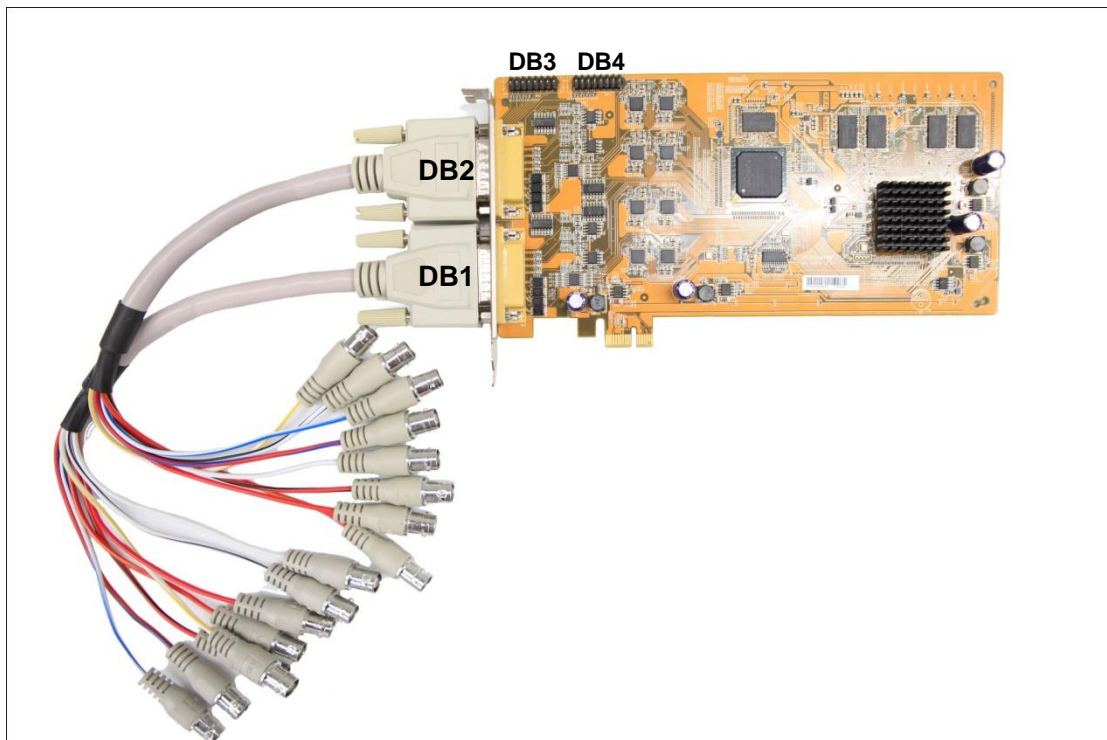
8. After "Driver install success" message popup during driver installation, there will be "Hikvision DS43xx Series" displayed in the list "Sound, Video and Game Controller" of Windows Device Manager as below. The total number of this item is equal to the total DSP number on the cards installed inside the PC.



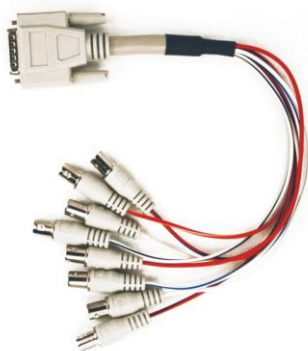
Chapter 5 Cable Connection and Pin Definition

5.1. DS-4304MDI-E Accessories and Connection

DS-4308MDI-E Connection



4ch video + 4ch audio connection cable (2 units for each card)



Description:

VID1~VID4 stand for “video 1~video 4” when connected to DB1, and “video 5~video 8”

when connected to DB2;

AID1~AID4 stand for “audio 1~audio 4” when connected to DB1, and “audio 5~audio 8” when connected to DB2.

DB1	video 1~video 4; audio 1~audio 4
DB2	video 5~video 8; audio 5~audio 8

5.2. DS-4304MDI-E Video/Audio Output Pin Definition

Each DS-4308MDI-E card has 2 DB 15-pin female connectors (labeled DB1 and DB2), and each DB15 connector supports 4ch video output and 4ch audio output.



DB1

DB2

Pin Definition for DB1& DB2

DB1		DB2	
1	Video1	1	Video5
2	Video2	2	Video6
3	Video3	3	Video7
4	Video4	4	Video8
5	Audio1	5	Audio5
6	Audio2	6	Audio6
7	Audio3	7	Audio7
8	Audio4	8	Audio8
9	GND	9	GND
10	GND	10	GND
11	GND	11	GND
12	GND	12	GND
13	GND	13	GND
14	GND	14	GND
15	GND	15	GND

Users can also input video/audio via the on-board pins DB3 and DB4.

Pin2, 4, 616 (DB3) Pin2, 4, 616 (DB4)



Pin1, 3, 515 (DB3) Pin1, 3, 515 (DB4)

Please refer to the Pin Definition Table next page for detail description.

Pin Definition for DB3& DB4

DB3		DB4	
1	Video1	1	Video5
2	GND	2	GND
3	Video2	3	Video6
4	GND	4	GND
5	Video3	5	Video7
6	GND	6	GND
7	Video4	7	Video8
8	GND	8	GND
9	Audio1	9	Audio5
10	GND	10	GND
11	Audio2	11	Audio6
12	GND	12	GND
13	Audio3	13	Audio7
14	GND	14	GND
15	Audio4	15	Audio8
16	GND	16	GND