



**XI100XE HD Capture Adapter
User's Guide**

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1 Preface

Thank you for purchasing XI100XE HD capture adapter!

The XI100XE is featured with small and exquisite bulk, superior performance and flexible characteristics. The XI100XE can capture one High-Definition video signal and one stereo analog audio signal. Video input can connect with HDMI, YPbPr, Composite Video Broadcast Signal (CVBS), Separate Video(S-Video).

The user's guide will provide with necessary instruction for proper use of XI100XE HD capture adapter.

2 Minimum Hardware Configuration

- Intel Core Solo
- 1G of RAM
- Available PCI-Express x1 expansion slot on mainboard

3 Recommended Hardware Configuration

- Intel Core i5
- 2G of RAM
- Available PCI-Express x1 expansion slot on motherboard

4 System Requirements

System should be one of the following systems (x 86 version or x64 version):

- Microsoft Windows XP
- Microsoft Windows Server 2003

- Microsoft Windows Vista
- Microsoft Windows Server 2008
- Microsoft Windows 7
- Microsoft Windows Server 2008 R2

5 Hardware and Driver Installation

Please refer to "XI100XE Installation Guide" to install the hardware and the driver.

6 Connection of Video Input

6.1 HDMI Signal

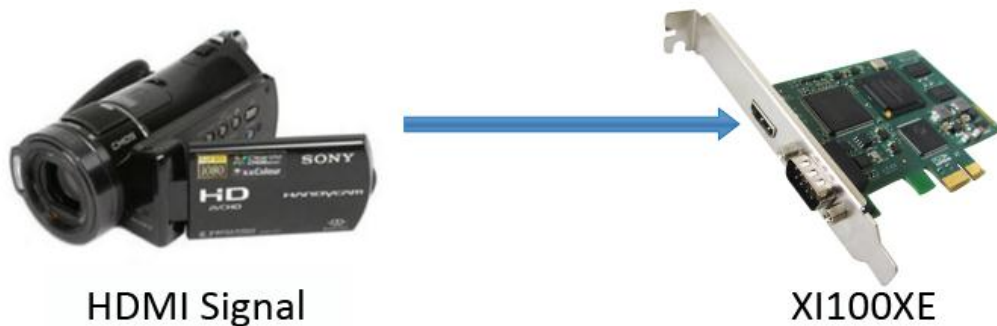


Figure 1, HDMI signal connection sketch map

6.2 YPbPr Signal

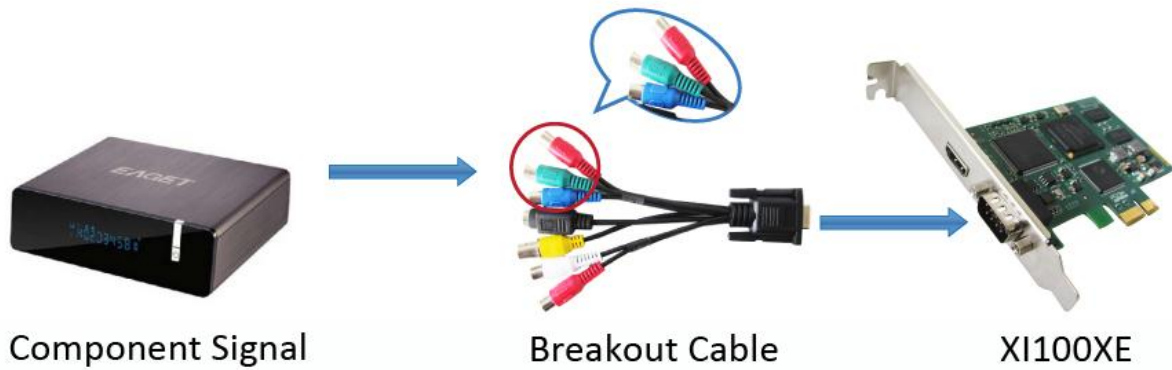


Figure 2, 6.2 YPbPr signal connection sketch map

6.3 Composite Video Broadcast Signal (CVBS)

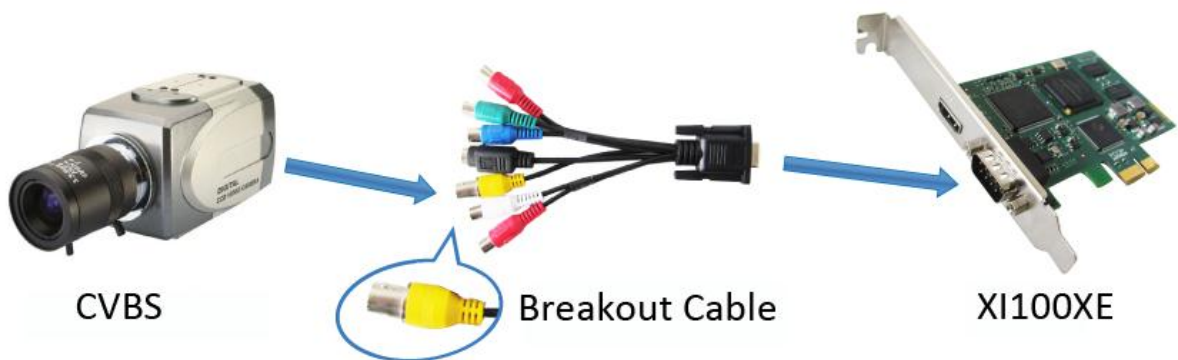


Figure 3, composite video broadcast signal connection sketch map

6.4 S-Video Signal

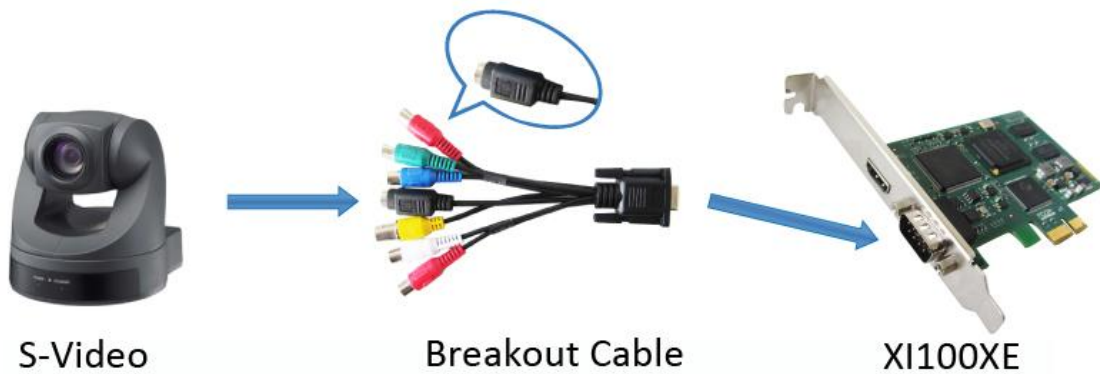


Figure 4, S-Video signal connection sketch map

7 Connection of Audio Signal

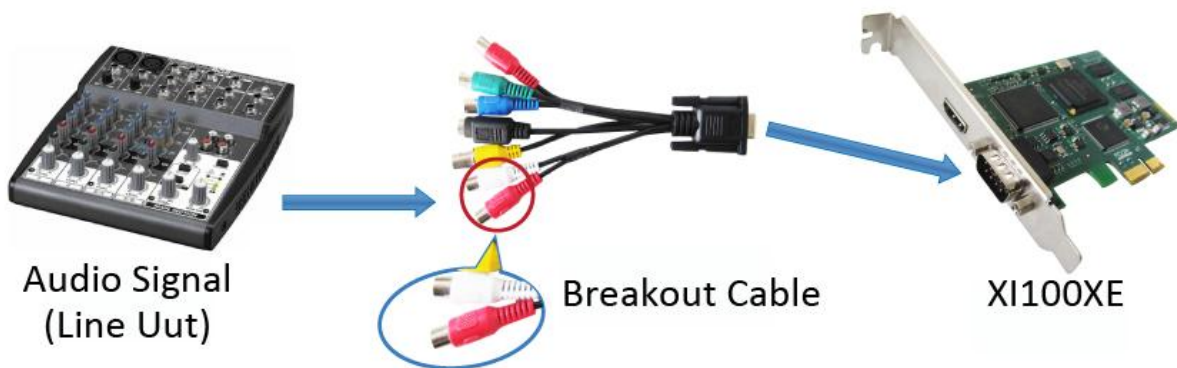


Figure 5, audio line in signal connection sketch map

Notes: The audio signal input is up to " **Line in** " level standard, if you need to connect microphone , must connect microphone with microphone input of "**microphone amplifier**" or "**mixer**" , and then "**microphone amplifier**" or "**mixer** "output is connected to the interface.

8 Video Capture Device Instruction

XI100XE is based on Microsoft DirectShow interface, one video capture device will be increased in operating system after installation:

- HD Video (XI102XE Adapter 1)

XI100XE not only offers basic options, such as image brightness, contrast, hue, saturation, Gamma and so on, but also provides additional options for setting function. You can use "**Filter Properties dialog window**" in DirectShow to set these options.

8.1 Display "Filter Properties Dialog Window" In Common

Software

AMCAP: Double click "**AmCap.exe**", choose HD video device "**HD Video (XI100XE Adapter1)**" in "**Devices**" menu, then click "**Video Capture Filter ...**" in "**Settings**" menu, pop-up "**Filter Properties dialog window**".

8.2 "Device" Instruction

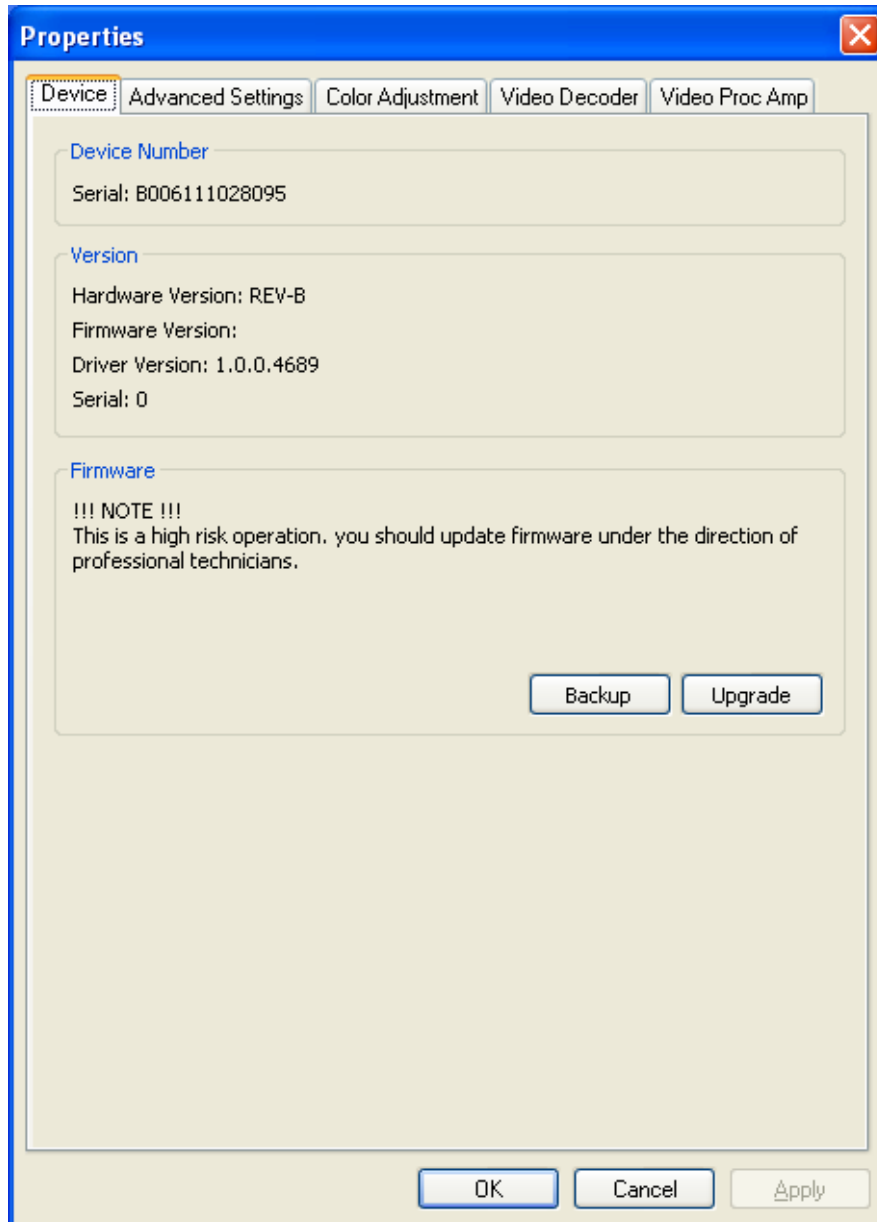


Figure 6, Device Properties tab

Device Number: display serial of card, the number should be accorded with the barcode on the card.

Version: display related version number, versions include hardware version, firmware version, driver version, and device serial. You may request user to provide relevant version number when you solve problems.

Firmware: if new features need to upgrade the firmware, we should first backup it and then upgrade the firmware.

Notes: The different versions of the firmware and hardware cannot be mixed together,

or else it will get error when upgrade. Additionally, do not power outage in the process of firmware upgrade, otherwise it will lead to upgrade firmware fail, then XI100XE will not work. You have to return XI100XE back to factory for being repaired.

8.3 "Advanced Settings" Instruction

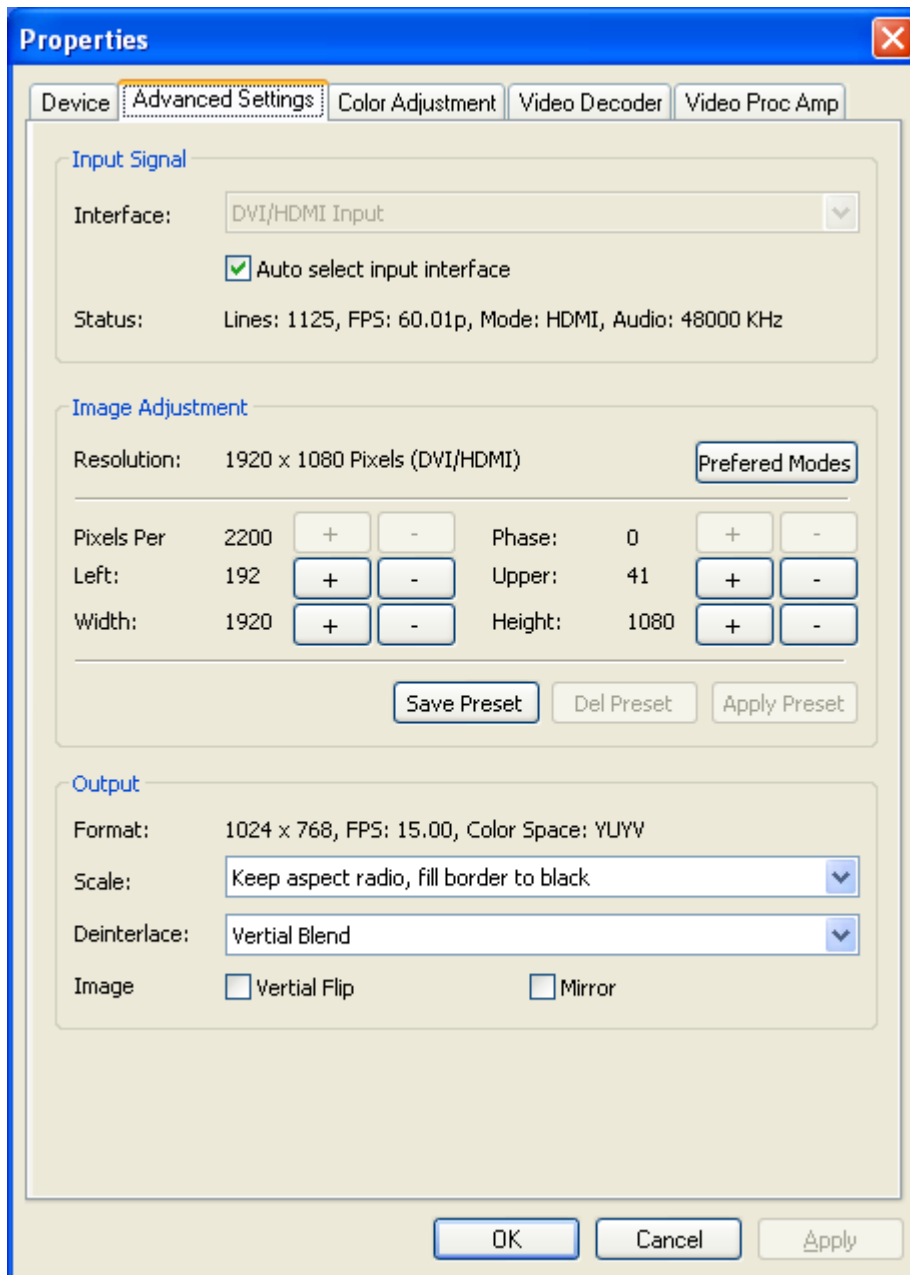


Figure 7, "Advanced Settings" page

8.3.1 Input Signal

8.3.1.1 Input Interface

By default, check “Auto Select Input Interface”, supporting input interface includes: DVI / HDMI input, YPbPr input, CVBS input, S-Video input.

Notes: when “Auto Select Input Interface” is selected, if HDMI and YPbPr input interfaces both have signal access, then HDMI input is preferred. You must select CVBS and S-Video input manually, otherwise it will be identified with YPbPr input.

8.3.1.2 Signal Status

The relevant parameters of signal are shown, such as total number of rows, frame rate (p is progressive scan, i is interlaced), mode, audio frequency.

8.3.2 Image Adjustment

By default, image is auto, but auto cannot achieve desired effect, such as black border, unclear image, picture which needs clipping, it must be adjusted manually. After adjustment, you can save the preset. Then you can apply preset values without adjustment when the same signal accesses.

For example as VGA signal adjustment:

- **Black border adjustment:** Through adjust left margin and top margin to eliminate black border. Every time you can adjust 1 pixel.
- **Image clipping:** Through adjust image width, height, left margin and top margin to achieve desired requirement. Increasing/reducing width of image starts from right, increasing/reducing height of image starts from below.
- **Skills of image clipping as follows:**
 1. Set scale full output image to confirm whether clipping adjustment is appropriate.
 2. Cut off left margin of image: firstly increase left margin, then reduce image width.
 3. Cut off right margin of image: reduce image width.
 4. Cut off top margin of image: firstly reduce image height, and then increase

top margin.

5. Cut off lower margin of image: reduce image height.

After image adjustment completes, click "**Save Preset**" to save current adjustment; click "**Del preset**" to delete preset you saved; click "**Apply Preset**" to apply the saved preset to current settings.

8.3.3 Image Output

Display output format of current image, set image zoom scale, deinterlace and image flipping.

- Format: display output image size, frame rate, color format.
- Scale: if image size is not unified with user setting, we provide three ways, full output image and keep aspect ratio, fill border to black and keep aspect ratio, clip border. Full output image and keep aspect ratio is default.
- De-interlace: vertical blend, motion adaptive. Motion adaptive is better, but it takes up high CPU usage, also you can choose “disabled”.

Image: offer two ways, vertical flip and mirror.

8.4 "Color Adjustment" Instruction

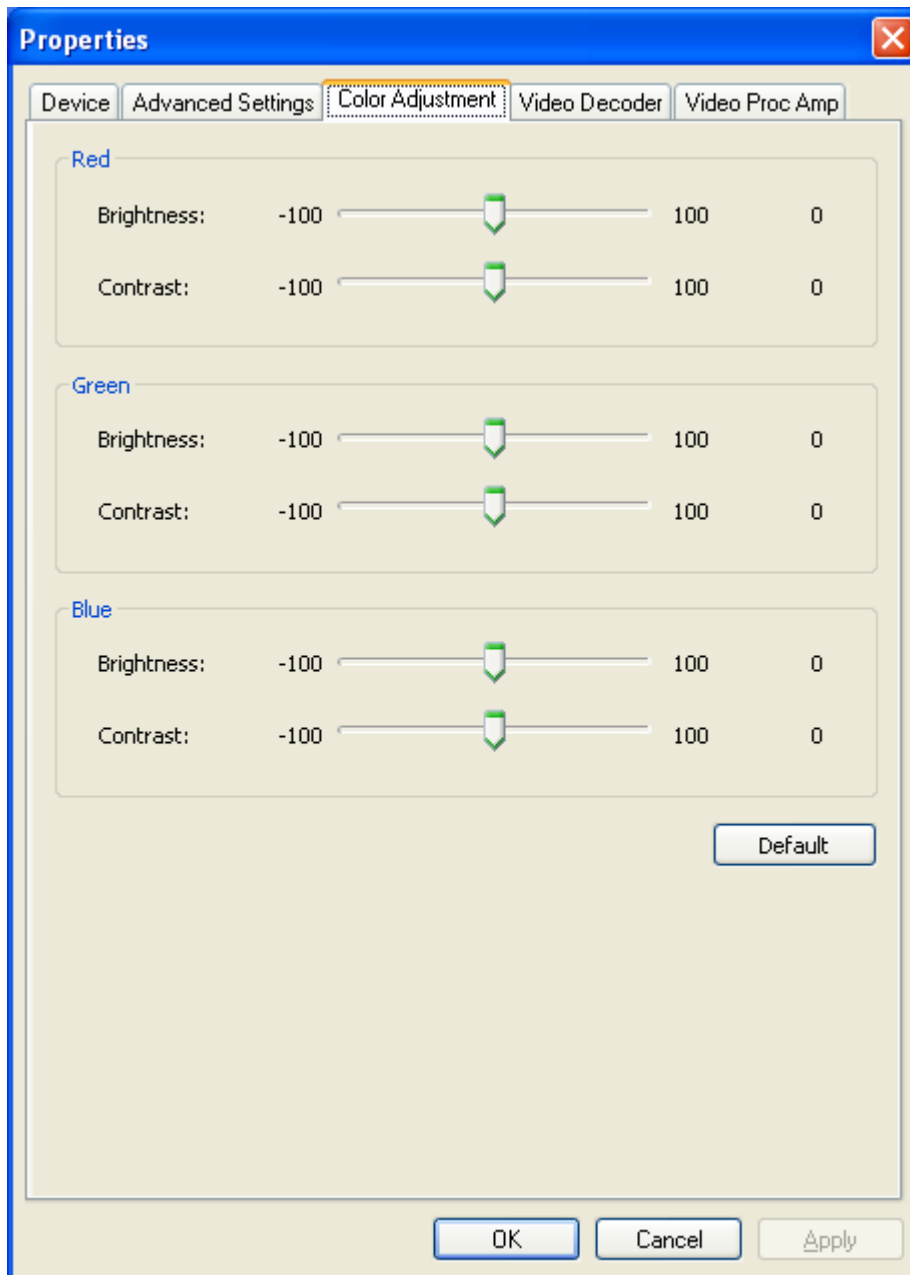


Figure 8 , "Color Adjustment" properties page

Here can be adjusted R, G, B brightness and contrast separately, click "**Default**" to restore default values.

9 Video Formats Setting

Driver is redefined "**Filter Output Pin**" interface and unified standard for SD and

HD. Output resolution can be any size, even special resolution which is cut.

9.1 Display "Filter Output Pin" In Common Software

- **AMCAP:** Double click "AmCap.exe", choose HD video device "HD Video (XI100XE Adapter1)" in "Devices" menu, then click "Video Capture Pin ..." in "Settings" menu, pop-up "Filter Output Pin".

9.2 "Out Format" Instruction

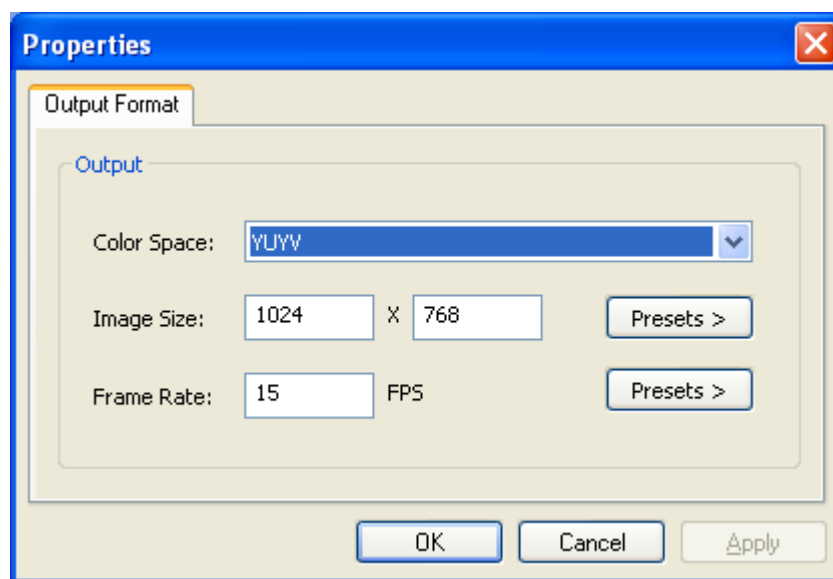


Figure 9, ""properties page

Color Space: offer five color formats, YUYV, UYVY, I420, RGB 24 Bits, and RGB 32 Bits.

Image Size: set image size of output, it can be written manually, or select output resolution from "Presets", the bold font resolution at the top is the same as capture image, it is the best resolution.

Frame Rate: set output frame rate, it can be written manually, or select from "Presets". If application software is set output frame rate, now setting is no effect, when you open again, it will return frame rate in application software.

10 Audio Capture Device Instruction


XI100XE is based on the Microsoft DirectShow interface. After installation in operating system, the relevant audio devices will be added on. Any software which is compatible with DirectSound, DirectShow can use the recording device for capturing sound, and then recorded as voices that HDMI and analog line are mixed. Also "**Volume**" and "**Mute**" in HDMI and analog line can be independently controlled.

10.1 Windows XP, Windows 2003

The name of audio capture device under Windows XP, Windows 2003:

- Audio (XI100XE Adapter 1)

Through system "**Volume Control**" to adjust recording volume, specific steps as follows:

1. In system notification icon area on right corner double-click " " button to pop-up "**Open Volume Control**" window.
2. Open "**Options**" menu, select "**Properties**" menu item.
3. In "**Mixer**", select "**Audio (XI100XE Adapter x)**", click "**OK**" button.
4. Corresponding volume control project will be displayed, this time you can operate volume and "**quiet**" according to your requirement.

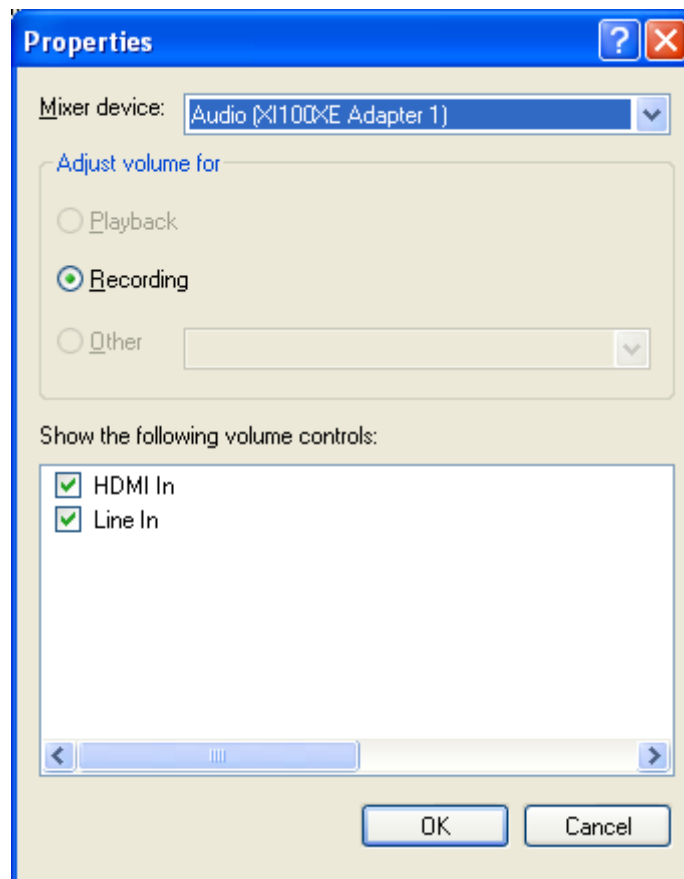



Figure 10 , Windows XP/2003 "VolumeControl"- "Properties" dialogue

10.2 Windows Vista, Windows 7, Windows 2008, Windows 2008 R2

Under such operating systems, each capture card will show two audio capture devices:

- HDMI In (XI100XE Adapter 1)
- Line In (XI100XE Adapter 1)

Through system "**Volume Control**" to adjust the recording volume, specific steps as follows:

1. In system notification icon area on right corner right-click "" button, select "**Recording devices**" in pop-up menu.
2. In pop-up list which displays recording device, select "**HDMI In**" or "**Line In**", click "**Properties**" button, system will pop up device properties dialog window.
3. In Properties dialog box, select "**Levels**" property page, then you can operate

volume control and "Quiet" according to your requirement.

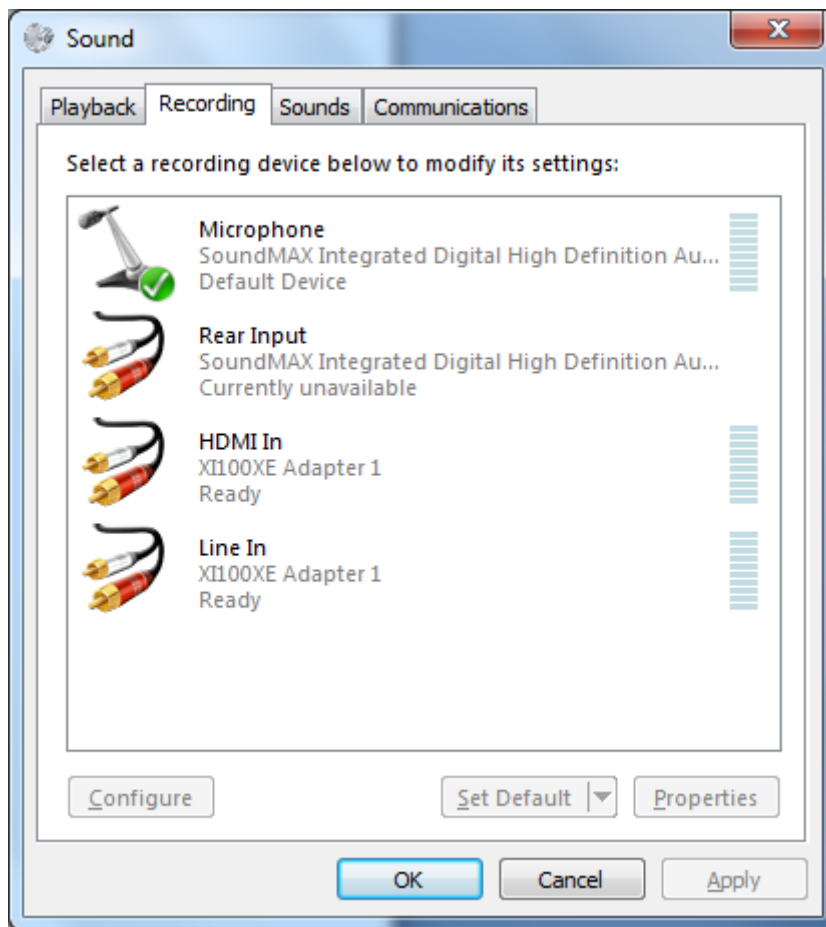


Figure 11, Windows Vista/7 recording device properties dialog windows

11 Compatible Software Instruction

XI100XE can be compatible with variety of audio and video capture software which is based DirectShow interface, and audio capture software which is based DirectSound interface, such as:

- Windows Media Encoder
- Adobe Flash Media Live Encoder
- Real Producer Plus
- Video LAN for Windows