



HIGH RESOLUTION VIDEO GRABBER



User's Manual

DA-70820 Rev. 3-0

FEDERAL COMMUNICATIONS COMMISSION

This device complies with Part 15 of the FCC Rules Operation is subject to the following two conditions: this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B Digital Device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiated radio frequency energy and, if not installed and used in accordance with the instruction, may cause harmful interference to radio communication. However, there is no grantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by tuning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Notice: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

CE DECLARATION

This device complies with CE . These limits are designed to provide reasonable protection against harmful interface in a residential installation.

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1.1 Introduction

Congratulations on your purchase of “**Video Grabber**”. The “**Video Grabber**”- New Generation USB2.0 Audio/Video grabber is the best ideal companion for your portable audio/video application. Now with Real-time MPEG 1/2/4 recording, you have a powerful video application on your hand. **Video Grabber** is the bridge between your computer and analog camera, VCR, camcorder or any other video source.

Video Grabber is small enough to fit in the palm of your hand and it is ideal for both notebook and desktop computers.

1.2 Features

- Small physical Wonder--Dimensions are (L)81mm x (W)30mm x (H)15mm
- Audio and video go through USB 2.0 bus (WinXP) for Audio/Video Synchronization and superior performance
- High speed USB 2.0 data transfer rate for superior audio/video recording
- Encoding MPEG 1 / MPEG 2 / MPEG 4 format directly, Ideal formats for video application
- Up to 25 fps motion capture capability at 720x576(PAL) & 30 fps at 720x480(NTSC)
- SnapShot function support
- Composite, S-Video analog input, NTSC, PAL and SECAM multi system support
- Recording period setup
- Support Brightness, Contrast, Hue, Saturation, Sharpness control
- Powerful video editing function include Motion Video Special Effects/ Title Effects/ Picture-in-Picture Effects/ Slow & Fast Motion Video Effects/ background music/ color background/ Transitional Effects
- Simple and Easy Direct burning function for Video to DVD making
- Plug & Play
- Low power consumption. Ideal for portable computer too
- No Battery---No need to install batteries or run off the wall adapter

1.3 Specifications

- Video input : One RCA composite, One S-Video.
- Video system : NTSC, PAL and SECAM multi system support.
- Audio input : For WinXP, go through USB; For Win2000, go through sound card.
- Motion capture : MPEG format up to 720x480@NTSC, and 720x576@PAL resolution; MPEG 4 format @320x240 resolution.
- Still image capture : JPG file format.
- Performance : Up to 25 fps at 720x576 for PAL, 30fps at 720x480 for NTSC.
- Power Source : 5VDC,350mA(max) through USB port.

1.4 Minimum System Requirements

- USB 2.0 equipped computer
- Pentium-4,1G or above
- 128MB of RAM
- Win2000 SP3 / WinXP SP2 / Vista
- Sound card

1.5 Package Contents

- DA-70820 USB 2.0 Audio/Video Grabber
- **Video Grabber** software CD
- **VideoWorks** editing software
- **Digital Converter** direct burning software
- User's manual

※ **Please make sure your computer has USB2.0 port correctly installed and functioning !! (Please update your WinXP to SP2 or Win2000 to SP3 or Win Vista above and updating USB2.0 host driver before installation to make sure computer's USB2.0 is functioning correctly)**

Steps : (1) Install Driver (see 2.2.1)
(2) Plug in Video Grabber hardware (see 2.2.3)
(3) Install Video Grabber AP software (see 2.3)

2.1 Hardware device description



USB 2.0 connector Audio L/R input Composite Video input S-Video input

USB 2.0 connector : Connect to USB 2.0 port of your computer

S-Video input : S-Video input from external A/V device(e.g.VCR)

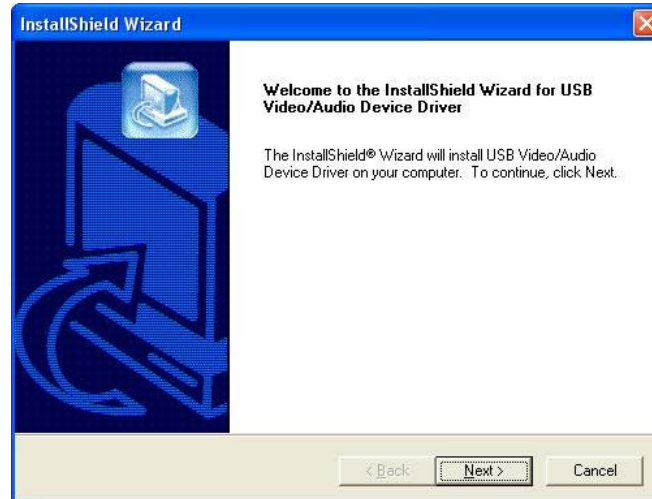
Composite video input : Composite video input from external A/V device(e.g.VCR)

Audio L/R input : Audio input from external A/V device **(In WinXP);**
(In Win2000 – recommend connect external A/V device audio to line-in of Sound card)

2.2 Driver Installation

❖ ***Do not connect Video Grabber to computer USB port before driver installation***

2.2.1. Please insert "**Multimedia Installation Kit**" CD-ROM into your CD-ROM drive; Run " **E:\Video Grabber\Driver\Setup.exe** "; (assuming CD-ROM drive in E drive)



Click "**Next**"

2.2.2. Complete Setup Wizard

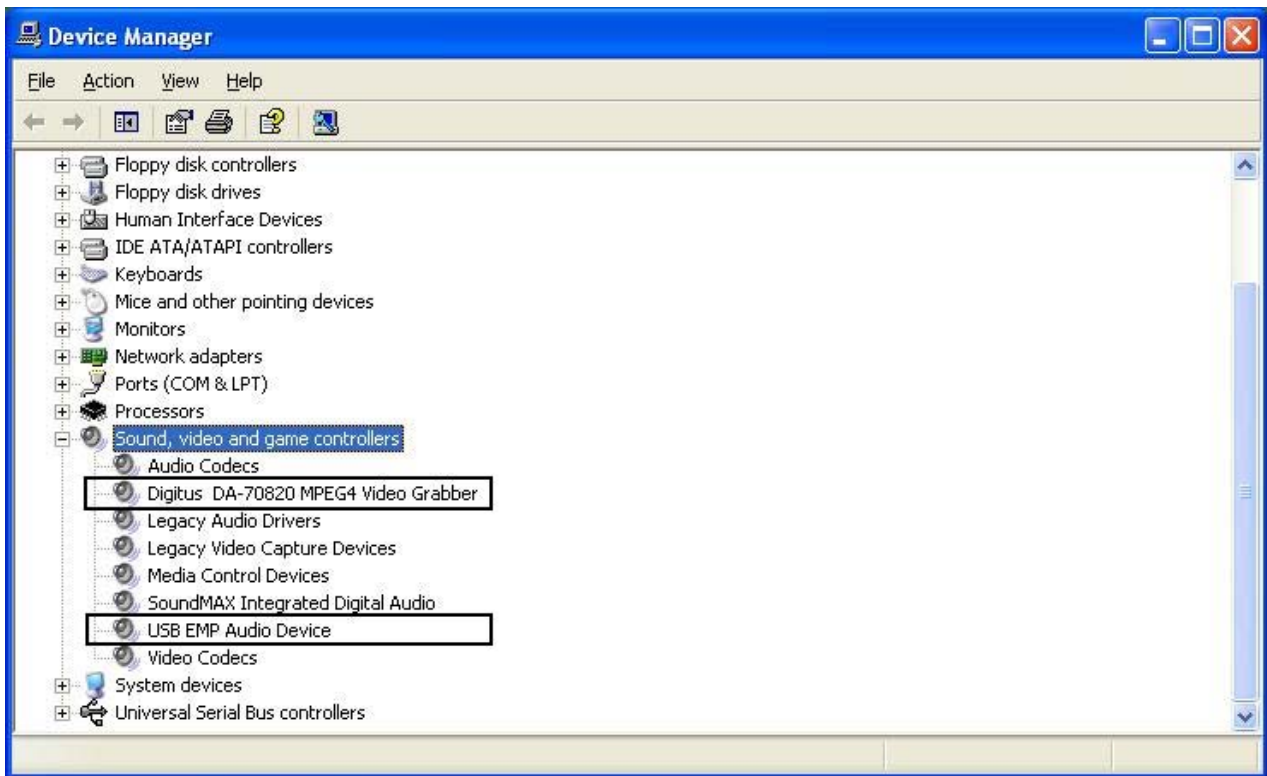


Click "**Finish**"

2.2.3. Complete Setup Wizard, please restart computer

2.2.4. After restart computer, plug the Video Grabber device into computer's USB2.0 port; System will detect new device and install completely.

2.2.5. Please check whether the Video Grabber driver was install successful in your computer; (Go to My Computer->Control Panel->System ->Hardware->Device Manager")



2.3 Application Software (Video Grabber) Installation

- 2.3.1. Please insert "**Multimedia Installation Kit**" CD-ROM into your CD-ROM drive; Run " **E:\Video Grabber\AP software\Setup.exe** "; (assuming CD-ROM drive in E drive)
- 2.3.2. Welcome to the InstallShield wizard; Click "**Next**"
- 2.3.3. Choose destination location; Click "**Next**"
- 2.3.4. Install **Windows Media Format 9 Series Runtime Setup**; Click "**Yes**"
- 2.3.5. License agreement; Click "**Yes**"
- 2.3.6. Finished Windows Media Format 9 Series Runtime installation; Click "**Ok**"
- 2.3.7. License for Windows Media Tools Setup; Click "**Yes**"
- 2.3.8. Windows Media Tools Setup; Click "**Next**"
- 2.3.9. Create folder; Click "**Yes**"
- 2.3.10. Installation Options; Click "**Next**"
- 2.3.11. Installation Directory; Click "**Finish**"
- 2.3.12. Setup Complete; Click "**OK**"
- 2.3.13. InstallShield Wizard Complete; Click "**Finish**"

After AP software install, You can find three icons show on screen



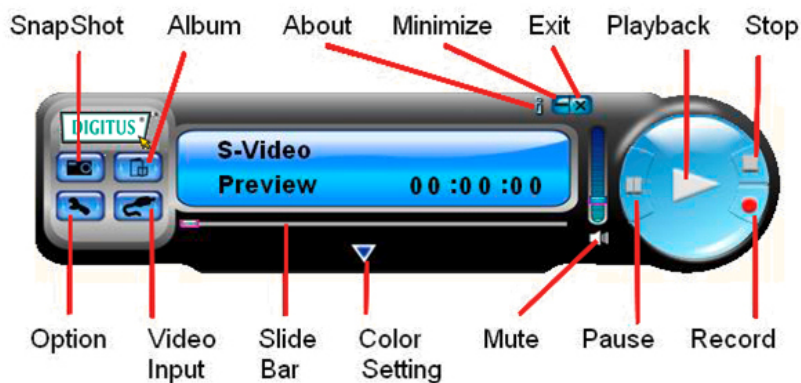
Video Grabber : Video Grabber software main program

Record Files : Click to see your record files

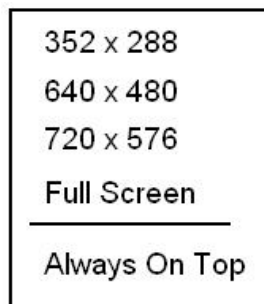
Snapshot : Click to see your capture still image files

3.1. Starting : Please click the "**Video Grabber**" icon

After starting application, you can see video window as below



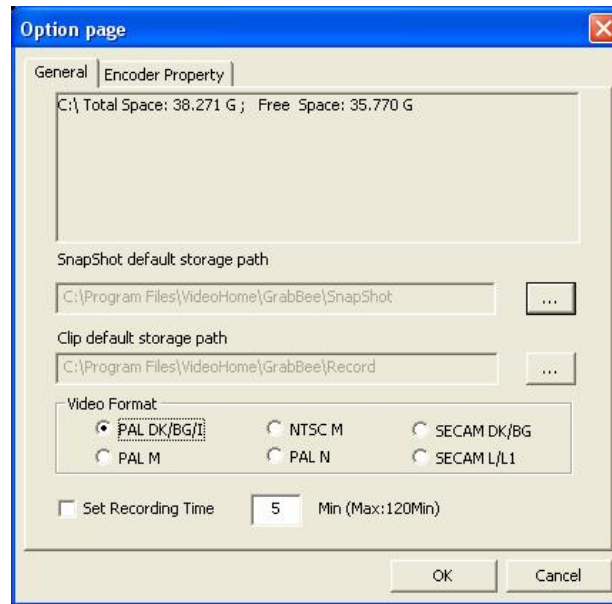
3.2. Preview : Please move mouse cursor into Preview window and right click, function menu will appear as below



Resolution : There are 4 resolution video preview you can select
NTSC mode : 352x240, 640x480, 720x480, Full screen
PAL mode : 352x288, 640x480, 720x576, Full screen

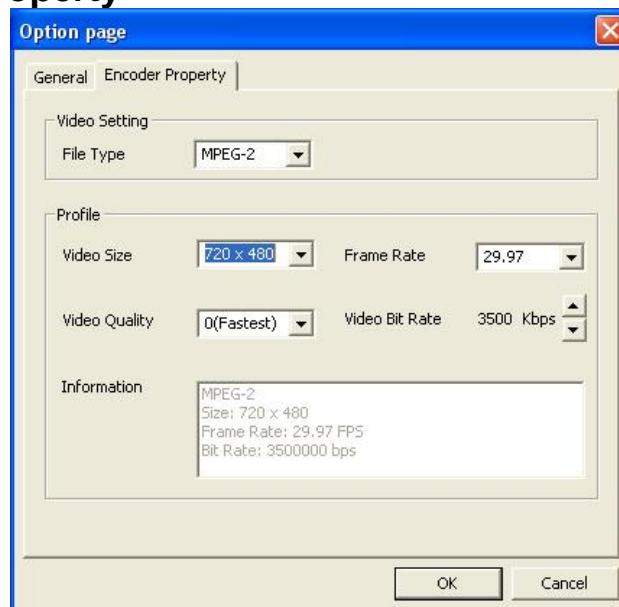
3.3. Option : After you make setting, please click “Ok”.

3.3.1. General



- (a) Hardisk space information
- (b) Snapshot default storage path : The location to save captured image files
- (c) Clip default storage path : The location to save recorded video files
- (d) Video Format : Choose correct video input
- (e) Set Recording Time : Recording length setting

3.3.2. Encoder Property



- (a) Video Setting : Recording file format MPEG-1, MPEG-2, VCD, SVCD, DVD, WMV selection(if you want make DVD burning,

please choose DVD mode)

(b) Profile : Video Size, Frame Rate, Video Quality, Video Bit Rate setting; Information column will show your setting

3.4. Video Input : Switch between Composite or S-Video input.

3.5. Slide Bar : Move to any video position during playback.

3.6. Color Setting : Brightness/Contrast/Hue/Saturation adjustment.

3.7. Mute : Volume On/Off

3.8. Pause : Pause the playback file

3.9. Record : When you click this button, start to record video, after you click “**Stop**” button, a table will be shown, and ask you rename or save the file, default file name is “**Mddhmmss**”.

M : Month (Jan->1, Feb->2....Oct->O, Nov->N, Dec->D)

dd : Date

hh : Hour

mm : Minute

ss : Second

3.10. Stop : Stop Recording and Playback;

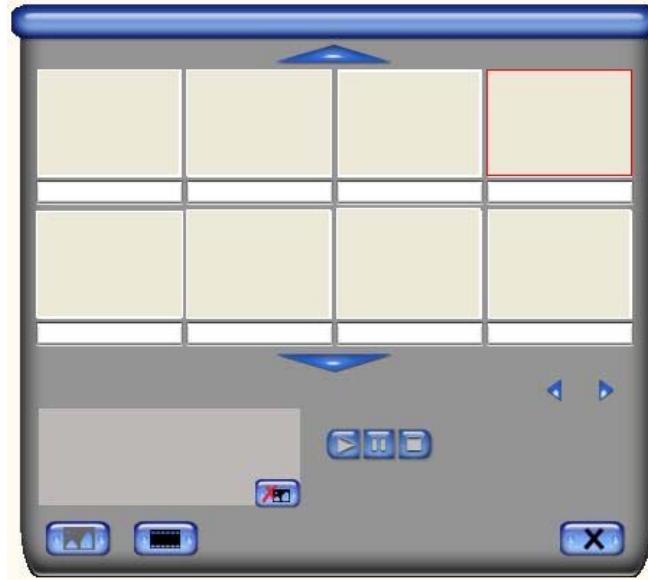
3.11. Playback : Play the recorded file

3.12. SnapShot : Image capture resolution is same as Preview mode resolution, after you click, the table show as below



M : Month (Jan->1, Feb->2....Oct->O, Nov->N, Dec->D)
dd : Date
hh : Hour
mm : Minute
ss : Second
n : Number

3.13. Album :



This Album will show all capture files include image and video, please click “**Clips**” or “**Images**” to find all list, you can find each file information or preview the recording video in this window

3.14. Full Screen mode : Double left click inside video window to switch between full screen and previous screen size

- A1 :** (a) Make sure you enable USB2.0 in the motherboard BIOS setup
(b) Please make sure that your system has the latest USB2.0 host driver.
For Win XP, please upgrade to Service Pack 2 or above.
For Win2000, please upgrade to Service Pack 3 or above.
For Win Vista, please upgrade to the latest Service Pack.
- Q2 :** Why can not see video display
- A2 :** (a) Maybe your video system setup is incorrect, please check your hardware connection (**see page 3; 2.1 Hardware device description**) and choose the correct video system (**see page 11; 3.11.1. Tuner**)
(b) Please make sure your system got the latest USB2.0 host driver.
For Win XP, please upgrade to Service Pack 1 or above.
For Win2000, please upgrade to Service Pack 3 or above.
- Q3 :** Why is the resolution always 320x240 in preview mode
- A3 :** Because you plugged Video Grabber in USB1.1 port or though your USB port is 2.0, but didn't upgrade USB2.0 driver, please make sure USB port is USB2.0 and upgrade the USB2.0 host driver from Microsoft Website
- Q4 :** Why does the system show “**High Speed device plug into Full speed USB port...**”
- A4 :** (a) Please make sure your system support USB2.0 hardware port.
(b) Please make sure that your system install USB2.0 Host driver already
- Q5 :** Why do I get unstable video during preview and recording ?
- A5 :** If you are using Ultra DMA hard disk, please updated latest driver of IDE ATA/ATAPI controller.
Some motherboard bundled driver is not latest version, we suggest that you use XP system bundled driver.
- Q6 :** Why can not hear anything during preview mode?
- A6:** In WinXP, Audio go through Video Grabber (please see 3.11.2.)
In Win2000, the audio go through sound card Line-in, please check your sound card setting.

- Q7 :** How can I get minimum number of dropped frames during video capture ?

A7 : The best recording performance depends on your computer system performance, but you can also take some steps as below to improve the performance

- (a) Try lowering the resolution format you record.
- (b) Enable hard disk drive DMA ; Go to **My Computer->Control Panel ->System->Hardware->Device Manager->Disk drives** to setup
- (c) Keep a larger free space in the Hardisk.
- (d) Use a hardisk drive with speed of more than 7200 rotation per minute
- (e) Disable Power Management in BIOS
- (f) Disable Power Saving mode of monitor
- (g) Close some resident programs of your system
- (h) Defrag your hardisk
- (i) Do not run other program during recording

Q8 : I can preview video but when recording, the system crashed/hanged

A8 : (a) Please install DirectX 9.0 or above.

- (b) Maybe your VGA card driver is incompatible with direct draw
please update new VGA driver
- (c) Your system residents too many programs which occupies the memory,
Please close unnecessary programs
- (d) Please lower the hardware accelerator, you can go to
My Computer->Control Panel->Display->Settings->Advanced->Performance to adjust it.

Q9 : When start the Video Grabber software, program close

A9 : Please check the sound card driver was installed successful

Note:

In the event of incorrect installation and improper use in a residential area, the device may cause disruptions in radio devices and other electronic devices. Proper use means that the device is operated with shielded connector cables as far as possible, for network products also with shielded cables of category 5e and higher. The device was tested and lies within the limits for computer accessories of class A according to the requirements of EN 55022.

Warning !

This is a class A device. This device can cause radio interference in residential areas; in this case, the operator may be required to perform and bear the costs for appropriate measures.

Conformity Declaration:

The device fulfils the EMC requirements of EN 55022 class A for ITE and EN 55024. Devices with external or built-in power supply also fulfil the requirements of EN 61000-3-2 and EN 61000-3-3. The basic protection requirements of the “EMC Directive” 89/336/EEC are therefore fulfilled. The CE conformity has been certified. The corresponding declarations are available from the manufacturer.

Trademarks:

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