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Package Contents



Contents of Package

- D-Link DUB-T210 USB 2.0 MPEG 1/2/4 Encoder / TV Tuner
- USB 2.0 Cable
- AV Cable
- Audio Cable(For Windows 2000 only)
- S-Video to RCA Converter
- Remote Control
- CD-ROM(containing Drivers, Installation Guide, Manual, Application Software and Warranty)
- D-Link Quick Installation Guide

If any of the above items are missing, please contact your reseller.

System Requirements

- CPU 1.2 GHz Processor or Above (CPU 2.4GHz Processor or Above is required for real-time recording)
- Microsoft Windows 2000 SP4/XP
- Microsoft-DirectX8.1 or above
- 256MB RAM or higher
- CD-ROM , CD-R/RW, DVD+R/RW, DVD-R/RW
- 16bit or higher level Sound-Card
- One Available USB2.0 Port
- PCI/AGP VGA Card with minimum 64MB RAM

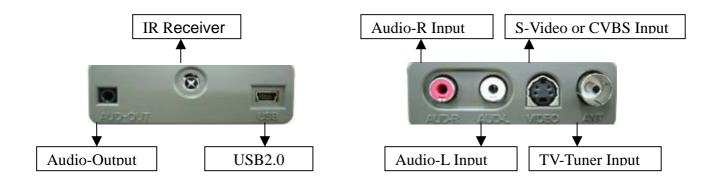
Introduction

The D-Link DUB-T210 is an advanced video capture and TV Tuner which provides you with a "high quality PC Theater" solution. The D-Link DUB-T210 allows you to capture 30 frames per second (fps) while giving you up to 720x480 resolution for a high quality video image on a PC or notebook using USB2.0. The DUB-T210 captures CD quality stereo audio with a 16 bit, 44.1KHz sampling rate and provides audio/video synchronization. The "Snapshot" function lets you catch 720x480 still images form your video source.

With the user-friendly program, TV Plus, you can easily transfer the captured audio/video bit stream into other standard formats such as AVI, MPEG4, VCD and DVD.

Please read the information below which is aimed to assist you in using the **TV PLUS** software with your **DUB-T210 MPEG Encoder TV Tuner**.

Getting To Know Your USB 2.0 MPEG 1/2/4 Encoder TV Tuner



Features and Benefits

- Full TV Function CATV/VHF/UHF
- Full Channel/ Auto-Scan Function
- DVD Quality(720x480-NTSC, 720x576-PAL)
- SVCD Quality(480x480-NTSC, 480x576-PAL)
- VCD Quality(352x240-NTSC, 358x288-PAL)
- Time-Shifting Recording
- Real-Time MPEG Compression
- Professional Snap-Shot 720x480 Still Image Capture(MAX)
- Analog to Digital Video Convert
- Pre-schedule a Recording Appointment of Your Favorite Show
- Audio Capture & A/V Synchronization Function
- Saturation/Contrast/Hue/Brightness Adjustment
- Create MPEG1/2/4 Movies
- Direct Burn-to-Disc of Recorded MPEG1 /2/4 with CD/DVD Burner
- Video Editing Software Include

In the following pages, you will be guided through the operation of the Application, TV PLUS The contents are divided into 5 parts, 1. Main Window

- 2. TVR
- 3. MPEG Encoder
- 4. Video Editor
- 5. Burn DVD

Welcome to TV PLUS

1. TV PLUS



Welcome to TV Plus

Thank you for choosing TV Plus, the application that takes full advantage of the capabilities of your DUB-T210.

TV Plus has many digital video applications.

Using honestech's very powerful MPEG encoding engine, you can capture, compress and save high quality full motion video in files 15 to 20 times smaller than their original size with no loss of video quality.

Finally, TV Plus makes it possible to edit and organize still and full motion media files.

With TV PLUS, you can:

- TV Plus" multi-media digital shell " makes it possible to manage and store photo, video and audio files in individual "albums." In addition, the highly integrated shell allows drag-and-dropping of files from album to album and from application to albums. The following MPEG based applications are included:
- "TVR" records high quality full motion video using your DUB-T210.
- "MPEG Encoder" is the "must-have" utility for converting and compressing AVI & DV-AVI files to MPEG-1 and MPEG-2 formats.
- "Video Editor" makes editing MPEG videos easy.
- "Burn DVD" creates DVD that can be played on a PC or DVD Player.

2. Main Window



The following main window are included:

- . Menu
 - 1. File: Add, Delete, Rename, Duplicate, Information, Refresh.
 - **2. Sort:** Sort by name, type, and date.
 - 3. Edit: Open Edit Window for photo files. Play back video files.
 - 4. Mail: Send selected file through E-mail application
 - 5. Import: Download pictures from dual-mode camera.
 - 6. Export: Copy selected files to other directory.

. Application Bar

- 1. TVR: TVR turns your PC into a full-featured digital video recorder for TV!
- 2. MPEG Encoder: MPEG Encoder converts AVI files into MPEG format
- 3. Video Editor: Video Editor makes editing MPEG videos easy
- **4. Burn DVD:** Burn DVD creates DVD that can be played on a PC or DVD player.

. Multimedia Data Window

- 1. Photo Editing: Either double-click on a photo file (BMP or JPEG) or highlight a photo then select the Edit menu to change the data window to photo edit window.
- 2.Video Viewing: Either double-click on a full motion video file (MPEG or AVI) or select the Edit menu to play back the selected video file.
- 3.Drag and Drop makes transferring files easy between data the window and other applications or among albums.

. Photo Edit Window

- 1. To edit a photo file (BMP or JPG), either double-click on the photo or highlight the photo and then click on the Edit menu (as in the above picture).
- 2. The following items cannot be used in editing mode: Album bar, Menu, Exit button.
- . Album Bar : This Bar displays existing albums and has buttons for managing albums (New,Delete,rename,Info)

3. TVR

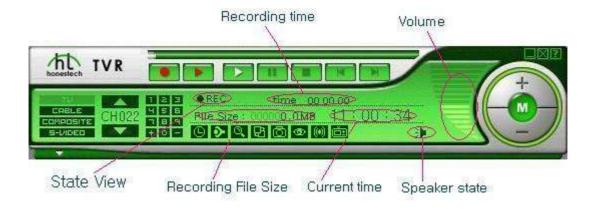
The TVR screen is composed of these 2 parts

. Display Window: Your source video input is displayed



. Informat Window

Display system state (REC, PLAY, TIME SHIFT), audio volume, speaker state, recording time, recording file size and current time.



3.1.FilePool function

Press the FilePool button to view the Recording List window, which has 3 additional function buttons.



3.1.1[Edit] button



- Click this button to edit the selected file.
- An editing function will be automatically executed.

Explain Editor Window



- Play button : (When selecting the areas) play the selected areas. (When not selecting the areas) play the overall files.
- 2. Pause button : Pause the recording.
- 3. Stop button : Stop the recording.
- 4. Move pre frame
- 5. Move next frame
- 6. Set the start point of area
- 7. Set the end point of area
- 8. Delete the selected area.
- 9. Save the selected areas as a file.

3.1.2.[Send mail] button



- Attach the selected file to e-mail, and send the e-mail
- Your e-mail program will be automatically executed so that you can check that the selected file is attached.

3.1.3. [List view] button



• Change the type of viewing in FilePool window. Three types of viewing will be rotated whenever you click.

3.1.3.1. Show preview and file name.



3.1.3.2. Show name only.

TVR TVR	
cap00.mpg cap01.mpg cap02.mpg cap03.mpg	
cap03.mpg	

3.1.3.3. Show file name, file size and recording time.

市	TVR		
	File cap00,mpg cap00,mpg cap02,mpg cap03,mpg	Size 1192K8 1099K8 1640K8 2212K8	Time 13:59:44 Dec-20-2001 13:59:48 Dec-20-2001 13:59:54 Dec-20-2001 14:00:24 Dec-20-2001

3.2. Record & Timeshift & Player part.

3.2.1. Record

You can start to record or stop recording.

a.Click the **I** button

b. enabled.

c.[FilePool] window will be automatically shown when stop is pressed after the recording is started.

Follow the Recording steps using REC function

Run your Honestech TVR.

Press OPTION and choose driver, video resolution, national standard, etc...

Select input source(TV, Composite, S-Video, CATV) with SRC function.

When you want to record a TV program, select a channel button.

Press **Press** to start recording and press **to** end.

You can review your recorded file using the File pool function.

Exit program.

3.2.2. Time-shift

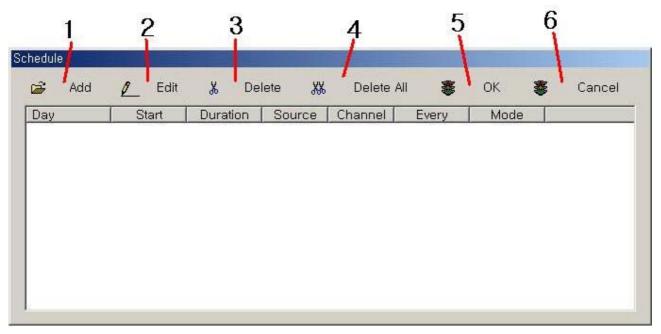
Time-shift is similar to Instant TV Replay in regards to the instant replay capability, but may only be used to video content.

- a. Be sure you are in the main display mode.
- b. Click the **button**
- c. **I** is enabled.
- d. Buffering window will be automatically shown.
- e. The mode will switch to **EPP**.
- f. To Fast Forward, Rewind, or Pause.
- g. To return to the recording or play mode, click **example** again

3.2.3. Player

- a. **Examples** is play button. this button plays the file selected from the recorded files.
- b. **E** is pause button.
- c. **E** is stop button.
- d. **Example** is moved at start frame.
- f. MPEG player program will be automatically executed so that you can check the recorded contents.

3.3. Record Scheduling function



- 1. Add Schedule entry.
- 2. Edit selected item.
- 3. Delete selected item.
- 4. Delete Added all items.
- 5, End the schedule function.
- 6. Cancel the schedule function.

if Add button is selected, users can show follow dialog.

OTV	O Cable	O Composite	O S-Video
Channel —		Every	- Mode
TV : 1	-	O Week	O View
Cable : 13		O Day O Once	⊙ Rec
Start Time –	0		6 a <mark>t</mark>
2001 💌	Year 12	2 💌 Month	20 💌 Day
THU 💌	Week 2	- Hour	41 Vinute
How long —			
0 -	Hour C	Minute	3 💌 Sec

You can add the schedule items.

3.4. TV Option Setting

3.4.1.TV Setting

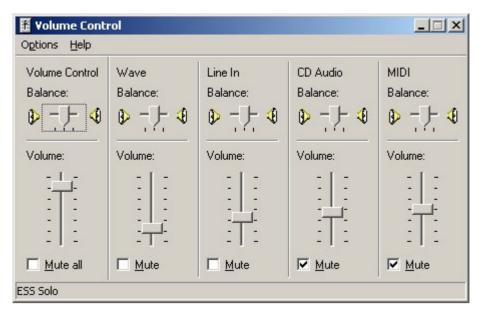
Pr	operty Settings	X
1	TV Setting Video Setting Record Settin Category C TV @ [Area	g Etc Dialog 9 Scan Mode ATV Channel Scan
	 Auto Detect Select your area : 	Area Code : 1 United States of America
3 4	Add/Delete Channels Minimum : 1 Maximum : 125 5 Add -> 6 <-Del 4 5 6 7 8 9 7 Auto Scan	Fine Tune Reset Channel Channel Names 8
L	0 Enter Change Name	Sort by : Channel Number - Ascending
		ак

- 1. TV Category Setting.
- Specify minimum or maximum channel range at section 3.
- Available channels will be displayed at section 8.
- 2. Country code specification.
- "Auto Detect" will automatically detect country code and specify the code in "Country Code".
- if "Select your country" is selected, user needs to select correct country manually.
- 3. Specify minimum and maximum channel range available.
- 4. Channel selection.
- Use number pad or button to enter channel numbers.
- Only numbers between minimum and maximum channel range will be accepted.
- Clicking "Enter" button will show TV program on the channel and enable "Add" button.
- 5. Add channel number entered.
- 6. Delete a channel number selected in section 8.
- 7. Perform auto scanning of available channels.
- 8. Display available channels
- **9**. Select the scan mode between "Frequency Scan" or "Channel Scan", "Frequency Scan" will take more time which can get more detail scanning result.

3.4.2. Video Setting

Property Settings	×
TV Setting Video Setting Record Setting	ing Etc Dialog
Fine Adjustment Default	Video capture device
Bightress	Video source
Contrast	Mixer device USB EMP Audio Device
Hue	Playback :
Saturation	Recording:
▲ <u>▶</u> 50	Audio input
	OK. Cancel

- **1**. Reset the value of brightness, contrast, hue, and saturation to default value.
- 2. Adjust brightness.
- 3. Adjust contrast.
- 4. Adjust hue.
- 5. Adjust saturation.
- 6. Select wanted video capture device.
- 7. Select video Source.
- 8. Select wanted Audio capture device.
- 9. Select wanted Audio mixer line for playback and recording.
- **10**. Set volume for audio input.
- Clicking the button brings up the following volume control dialog box.



3.4.3. Record Setting.

and the second	Beand Setting	na pista a	
V Setting VideoSe Piofile	ting Record Setting	Etc Dialog	
MPEG-1 MPEG-2	C VCD-NTSC C SVCD-NTSC C DVD-NTSC		C AVI
Size	320 × 240 -	FrameRate : 29.97	•
	Normal	Bitrate : 1250	
	Fastest V Mini	mum CPU : 350 Mhz	_
Information	MPEG-1 Size : (320 x 240) Frame Rate : 29.97 FF CBR : 1250000 bps	PS	
Working Directory	,		
C:\Program Files\hon	estech/TV Plus 3.0/TVP	R 2.0%cap\	Browse

- 1. Select profile.
 - If MPEG-1 or MPEG-2 is selected, users need to set values at section 2 through 7.
 - If VCD-PAL, VCD-NTSC or AVI is selected, predefined values will be displayed automatically at section **2** through **7**.
- 2. Select screen size (176*144, 320*240, 352*240, 352*288, 640*240, 640*480 can be selected).
- **3**. Select frame rate (15.00, 23.97, 24.00, 25.00, 29.97, 30.00 can be selected)
- 4. Select video quality level (Fast, Normal, Laziness can be selected).
- 5. Set bitrate.
 - Adjustment can be made by 50 Kbps interval.
 - Default values : 2000 Kbps.
- 6. Select Encording speed.
- 7. Display information on the selected profile.
- 8. Specify working directory.
- Clicking "Browse" button brings up the following dialog box.

Change folder	×
Common Files ComPlus Applications	-
Honest Technology	11
honestech MPEG Editor 2.0 honestech MPEG Encoder 2.5 honestech MPEG Encoder 2.5 honestech MPEG Encoder 3.0 honestech MPEG Encoder 3.0 honestech MPEG Encoder 3.0 honestech TVB 2.0 honestech TV	
_ Cep	-
OK Cencel	

- Click "OK" button after selecting the directory.

3.4.4. Etc Dialog Setting

Property Setting	2			X
TV Setting Video	Setting Record Se	tting Etc Dialog		
Channel Surfing Su	nfing Time : 💽 💌 Si	ec Number of S	uting Windows : 3 x 3	3
− TimeShilt Record I After Time	ing eShift recording, Don'	t save the temp file		
Delnterlace filter	dering, Don't use a d	einterlace filter		
Driver	Total Size	Avaliable Size	File System	-
C1	15249 MB	13331 MB	FAT	-
D:\	30514 MB	26453 MB	FAT	
EA	30506 MB	3908 MB	FAT	
		[OK Cancel	

1. Setting the channel surfing property.

- Surfing Time : It is time to change from one channel to other channel.
- Number of Surfing windows : window size(2x2, 3x3, 4x4, 5x5)
- **2**. Setting the TimeShift property.
 - If the checkBox is checked, After timeshift recording temp file will be removed.
- **3**. Setting the Deinterlace filter.
 - If the checkBox is checked, while on previewing does not apply to deinterlace function.
- 4. View the Disk driver information on user's system.

3.5.Channel Auto Scan

if selected, you can show below dialog.

Do you v	vant to add	channel '4'	?
1.12		-	1.0
Yes to All	Yes	No	Cancel

Users can auto scan avaliable channel in his[shes] areas.

3.6.Change Skin

if **B** is selected, skin on the main panel is changed another colors.



3.7. Still Capture function

if **o** is selected, you can dump current frame in previewing window. captured image file is show in the file pool.

3.8.Channel Surfing function

if **main** is selected, you can channel surfing.



while channel surfing, you can select channel number that you want to see it also you can continue channel surfing as right mouse button press.

3.9. Input Source part

You can change your input source.

Input signal part in the Window will be changed whenever you click button.



I: Input source TV



Video : Input source CABLE

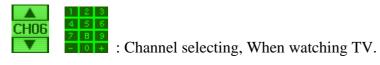


-Video : Input source COMPOSITE

TV Cable Composite S-Video

: Input source S-VIDEO

3.10. Channel adjust part



CH07

: Up channel list.



: Down channel list.

• Add current channel to channel list.

E: Delete current channel from channel list.

3.11. Volume adjust part

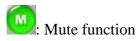
You can increase or decrease sound volume.



: Increase sound volume



: Decrease sound volume



16

3.12. Tray icon function

you can show ៉ t	outton on the taskbar.	
	Schedule View Launch - Honestech TVR	
if is selected,	Exit	window will be show.

then, you can reservation recording and launch TVR program.

4. MPEG Encoder

Interface Explanation

The default page as it appears when Encoder 5.0 is started:

honeslech MPEG End	coder 5.0 (+	$\Theta \Theta$					ox
Name SAMPLE.AVI	Status Vaiting	Video 352x240, 16bpp	Audio stereo.44.100K	Fps 29.97	Size 16.67MB	Duration 19 sec	Target full C:\capture
d							2
Width = 352 Height = 240 FPS = 29.97 Total Video Frame Length = 19 sec Audio : Channels = 2 Sample rate = 44. Bits per sample =	100 KHz	4	OUTFUT				

The default page is composed of four parts.

Header Buttons (Left to right)	Add input files; Delete files; Edit options; Start and Stop transcoding.
	Displays file name, encoding status, screen size and play time of files to be transcoded.
Progress Display Window	Displays formatting information about the file being transcoded.
Preview Display Window	Displays the video of the file being transcoded.

4.1. Header Buttons

honeslech MPEG	
Add	Add file(s) to be transcoded. Button initiates browse/selection dialog.
Delete	Highlight and delete selected file in Batch Process Display window.
Edit	Customize encoding options for selected file in Process Display window.
Encoding	Initiates transcoding of all files displayed as "Waiting" in status column in Process Display window. (Note: This button changes to "Stop" during the transcoding process.)
Stop	Terminates batch transcoding process.
Help	Launches Help file.
Minimize	Minimizes Encoder 5.0 interface.
Maximize	Maximizes Encoder 5.0 interface.
Color	Change color of program interface.
Exit	Ends Encoder 5.0 program.

4.2. Batch Process Display Window

Name	Status 🗸	Video	Audio	Fps	Size	Duration	Target full p
SAMPLE.AVI	Waiting	352x240, 16bpp	stereo,44.100K	29.97	16.67MB	19 sec	C:\capture\
4 [1				

Name Video file title(s) added to the program for transcoding. Status Displays one of three processing states. These are:

Waiting	Ready for transcoding.
	Excluded from transcoding process. Encoder 5.0 doesn't transcode files in this status.
Complete	Transcoding finished.
Video	Formatted screen size of original video file.
	Audio information for file. (If this field is blank, the file has no audio information.)
Fps (Frames Per econd)	Number of frames per second of the original file.
Size	Size of original file (Unit: Mega bytes)
Duration	Play time of original file (Unit: Seconds)
Target full path	Shows the intended location where the transcoded file will be saved.

4.3. Progress Display Window

Width = 352	
Height = 240	
FPS = 29.97	
Total Video Frames = 570	
Length = 19 sec	
Audio :	
Channels = 2	
Sample rate = 44.100 KHz	
Bits per sample = 16	-
	<u>+</u>

The Progress Display Window provides three reports:

- 1. While Encoder 5.0 is loading, activity related to that process is displayed.
- 2. Once a video file is added to the Batch Process Display Window, technical specifications

about the file are listed.

3. During the transcoding process, technical specifications about the output file are displayed.

4.4. Preview Display Part



The actual video is being displayed while it is being transcoded.

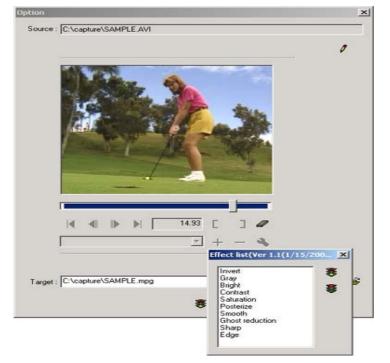
4.5. Option Dialog Box

When a video file is added to the Batch Process Display Window, the Option Dialog Box automatically opens. Four categories of output formats appear (MPEG 1, MPEG 2, WMV and AVI) with specific format selections within each. Choose one of the formats and click on "OK" to continue.



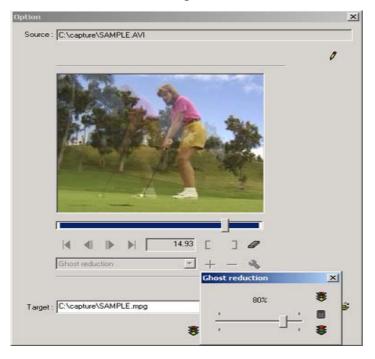
In the upper right hand corner of the Option Dialog Window is a "Change to Edit" icon. When selected, this feature makes it possible to select video segments in the file to be transcoded. It also allows video filters to be applied.

The "Change to Edit" dialog box.



The "Change to Edit" dialog box provides filter options that can be applied to video segments during the transcoding process. These filters can be selected from the "Effect List" drop down box. (Note: As of this writing, ten filters come bundled with Encoder 5.0.) Time segments of the video can be isolated using the "Mark-in" and "Mark-out" icons with the slider bar and arrow buttons used to move the video along the time axis.

The next screen is an example of the Ghost reduction filter being applied to the original file.



The slider bar controls the level of the filter being applied to the video segment. Twenty filters (maximum) can be applied to any video segment. Features of the "Change to Edit" dialog box are (from left to right):

					0.00	Ε]	Ø
--	--	--	--	--	------	---	---	---

Slide Bar	This bar represents the time line of the video file to be transcoded.
	Movement of the Slider Bar can be controlled by the mouse or key board.
First	Moves to the starting point of the video segment.
Previous	Moves forward along the video time axis 0.5 seconds.
Next	Moves backward along the video time axis 0.5 seconds.
Last	Move to the ending point of the video segment.
Time Display Part	Indicator of the point in the video where slide bar is indicating.
Left trim	Button "Marks in" the starting point of the video segment being edited.
Right trim	Button "Marks out" the end point of the video segment being edited.
Erase	Removes any video trimming and assigns the whole video segment for
	editing.
Filter display box	Drop-down list box showing all filters currently available for application to
	the video segment.
Add filter	Button used to add new filter to the Filter Display Box.
Delete filter	Button used to delete filter(s) from those displayed in the Filter Display Box.
Adjust filter	Button used to execute the Filter Adjustment Dialog window, to adjust the
	level of the filtering being applied to the video segment

There are four output file format categories represented by the four tabs in the Options Dialog Box (MPEG-1, MPEG-2, WMV and AVI). Each category can be viewed by clicking on the category tab.

a. The following figure shows the MPEG 1 menu.

Profile	erecis www. wve	Video
-	Auto (match source)	CBA [1700 KBADee
-	Internet Lone Barrel	Bagilly Good -
1	Hall Screen Intranel	Recolution Fill H Fill #
21	Full Screen Intranat	Frame Rate 28.97 los (2000/15)*
12	NTSC	F Constant
-	Pwi.	Audo
۲	Video CD	Lager II (201 - Kild/See

The MPEG-1 menu includes 7 profiles from which to choose. Each profile displays the video bit rate of that format.

Following lists are explanations for profiles.

Auto	Calculate most appropriate data rate in consideration of screen size of the
	translating file
Internet low band	256Kbps, QCIF(160*120), 23.976frame/sec, QCIF(Quarter CIF)
Half Screen Intranet	384Kbps, QCIF(160*120), 23.976frame/sec, QCIF
Full Screen Intranet	768Kbps, CIF(320*240), 23.976frame/sec, CIF(Common Intermediate
	Format)
PAL	Create MPEG file suitable for NTSC of American color TV broadcastings
NTSC	Create MPEG file suitable for PAL of European color TV broadcastings
Video CD	Create MPEG file suitable for manufacturing video CD

Video
🗖 Enable VBR
CBR : 1150 KBit/Sec
Quality : Good 📃
Resolution : 352 X 240
Frame Rate : 29.97 fps - (30000/11 💌
Sequence on every GOP
🗖 Deinterlace

An inverse relationship exists between bit rate (information saved) and compression: as the bit rate increases, the screen quality gets clearer, but the compression rate drops. If "automatic adjustment" is selected, the application will pick the optimize the bit rate with respect to screen size. (Note: MPEG 1 & 2 formats have "variable bit rates", that is, bit rates that can be adjusted.) Selecting "Enable Variable Bit Rate" results in the application automatically compressing the video while maintaining satisfactory screen quality within the maximum bit rate. Adjustments for screen quality, screen size and frame rate can be manually set.

Enable VBR	When selected, it transcode file to VBR (Variable Bit Rate) type.
Bit rate	Display video bit rate per second and bit rate of selected profile. Higher bit rates result in better screen quality, but less compression.
Quality	Select translation method. Screen quality preferred, standard, translation speed preferred and fastest translation are provided.
Resolution	You can set screen size of MPEG file you are creating.
Frame rate	Set number of frames per second.
Sequence on every GOP	This option allows you to output Sequence header for each GOP of MPEG file.
Deinterlace	This option is used to delete horizontal line pattern of input file.

b. Following figure shows MPEG 2 Menu.

G 1 MPEC	3 2 WMV AVI	**
rofile		Video
######################################	HP@H-14	CBR : 6000 KBR/Sec
720-110	HP @ ML	Quality : Quick.
	MP @ HL	Resolution: 720 × 450 ■ Frame Rate: 29.97 fps - (30000/11 ▼
HOLES	MP @ H-14	Sequence on every GOP
0	MP @ ML (DVD)	Denterlace
252+248	MP@LL	Audio
۲	MP @ ML (SVCD)	Video only Layer II : 224 KBit/Sec
-	ure\SAMPLE.mpg	

Seven MPEG 2 profiles with corresponding levels of picture quality are available. Industry standard MPEG 2 SVCD and DVD profiles are included. Variable bit rate overrides can be manually selected.

HP@H14	80Mbps, 1440*1152 (High Profile at High-1440)
HP@ML	20Mbps, 720*576
MP@HL	80Mbps, 1920*1152 (Main Profile at Main Level)
MP@H14	60Mbps, 1440*1152
DVD	Crete MPEG file suitable for creating DVD. Default 6Mbps
MP@LL	4Mbps (Main Profile at Low Level)
SVCD	Create MPEG file suitable for creating SVCD. 2.5Mbps

MPEG 2 Profiles and Explanations:

MPEG 1 & 2 profiles create audio files that are MPEG 1, Layer 2 in specification with bit rate choices of 128 Kbit/sec and 224Kbit/sec.

- Audio -	
	🗖 Video only
	Layer II : 224 KBit/Sec
	128

Video only : When selected, Encoder 5.0 transcodes only video and doesn't transcode audio.

c. Following figure shows WMV Menu.

		mi
MPEG 1 MPEG 2 W	MV AVI	
Profile list :	Windows Media Video 8 for Local Area Network (7 💌	
	Use this profile for high quality audio/video content intended for local playback or for download and playback.	
Title :		
Author :		
Description :	A	
	~1	
Rating :		
Copyright :		
Target : C:\capture\SA		

This option window is used when creating Windows Media Version 9 files. The WMV window offers several video formats from which to choose. It also makes it possible to change the name the output file, list the author, provide a description/explanation, provide a video rating and other copyright information.

Profile list	Offers a list of video output formats from which to choose. The edit box located
	below the Profile List display details information about the selected profile (if
	Windows Media Format 9 Series Runtime is installed).
Title	Select media title.
Author	Input name of author.
Description	You can input explanation for media file. Maximum of 255 characters are allowed
	to input.
Rating	Display class.
Copyright	Display copyright holder.

d. Following figure shows AVI Menu

			ш
MPEG 1 MPEG 2 WMV AVI			
Video compressor : DivX 5.0.2 Codec		-	
Key frame rate :			
P frames/key frame :	0%		
Quality:			
Resolution : 352 🗙 240 📑			
۹, ?			
Audio compressor : MPEG Layer-3		-	
Format : Stereo - 24 kHz - 56 kbp	5	-	
arget : C:\capture\SAMPLE-DivX.avi			

	format. (Codecs	t codec to compress/change the video file to the desired output are software modules used to transcode video files from one format				
	to another.) Some codecs permit manual selection of video variables					
	Key frame rate					
	AVI video is the standard frame. If the value gets higher,					
	quality of created file gets lower and it requires longer searching					
Video	time when you play the file after creation.					
Compressor	P frame rate /	Set number of reference frame displayed between standard frames.				
	key frame	No value greater than standard frame may be used.				
	Quality	Set video quality. You can select within 0~100%. 100% means the				
		best quality provided by the compressor. (Note: as video quality				
		increases, the ability of the compressor to shrink the file size				
		decreases.)				
	Resolution	Allows for manual selection of screen size.				

When manual variable changes cannot be made, the automatic compressor option is activated.

4.6. Practice Streaming Video Translation

honestech MPEG Encoder 5.0 transcodes multimedia files between video formats. For multimedia files to be transcoded using Encoder 5.0, they must be able to be played with Windows Media Player. File formats that can be transcoded are: AVI, DV-AVI, MPEG 1, MPEG 2, ASF, WMV, DivX, DAT, and AVS.

Name	Open			<u>?</u> ×	ion Target fu
Empty	Look in:	capture	- + E (* 🖬 • 🔤 🎽	
	SAMPLE				
d					
D					
Registering filters Loading Effect list(Ver 1.1(1					
WMV profile list Video compressor I	File name:	[Open	
Audio compressor I		and an and a state of the state			
Audio compressor i	Files of type:	avi,mpeg,asf,wmv,divx		Cancel	

To add a multimedia file to be transcoded, click on the "+" or "Add" button. This will open the "Browse" dialog box. Browse to the directory/file wanted and click on "Open". (Another method of adding files to the Batch Process Display Window is to simply highlight a file, then drag and drop it into the Batch Process Display Window.)

Once the multimedia file is added to the Batch Process Display Window, the Option Selection Dialog Box appears. This begins the process of selecting the output format for the transcoder to create. Chose among four categories of formats: MPEG 1, MPEG 2, WMV and AVI; Category tabs appear at the top of the window. After selecting a format category, chose a specific video format (and detailed options if necessary). For more information, refer to the Translation Option Dialog Session.

Protie	PTED 2 WANY ANA	Video
-	Auto (match source)	CBR 1110 KBM/Sec
-	Internet Low Band	Qually (bred
*	Hall ScreenIntranet	Resolution 1947 × 2007
2-2	Pull Screen Intranel	Frame Rate: [29.97 (per (20000/11))]
-	NTSC	E Dematura
-	PML.	Aude
•	Video CD	Lawell 100 - KBMSee

The output file will be created in the same directory as the original file unless a different path is manually chosen. It will also maintain the original video file name and add a file extension matching the video format of the output type selected. The file name can also be manually changed.

Target : C:\capture\SAMPLE.mpg

Once the output video format and options are selected and the "OK" button is clicked, the file will appear in the Batch Process Display Window.

Name	Status 5	$\overline{\nabla}$	Video	Audio	Fps	Size	Duration	Target full p
SAMPLE.AVI	Skip		352x240, 16bpp	stereo,44.100K	23.37	16.67MB	13 Sec	C:\capture\
4								

The Batch Process Display Window shows three states of process in the Status column.

1. Waiting means that the media file displayed is queued for transcoding (compression and/or

translation). The transcoding of video files in the "Waiting" state begins when the Encoding button is clicked.

2. Exclusion means that transcoding of that file will not occur.

3. Done means that the transcoding (compression and/or translation) is successfully completed.

To change a file's status between Waiting and Exclusion (and vice versa), double click on the file line. The Waiting state will change to an Exclusion state and be reported as "Skip". Similarly, a file with a "Skip" status when double-clicked, will change to "Waiting."

Following figure shows the status Exclusion that changed status of previously added at above by double clicking with mouse.

Name	Status	∇	Video	Audio	Fps	Size	Duration	Target full p
SAMPLE.AVI	Skip		352x240, 16bpp	stereo,44.100K	29.97	16.67MB	19 sec	C:\capture\
•								•

Although you push Encoding button in this status, it will not execute compression and

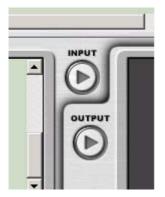
translation process. Change the status to [Waiting] by double clicking with mouse and push Encoding button() to execute compression and translation process.



During Transcoding, the Status column changes to display the percent of progress accomplished. Also, once the transcoding process has begun the (right arrow) Encoding button changes to a Stop button. If the Stop button is clicked-on during transcoding, the process will stop.

Once the transcoding process completes successfully, the status will change to Done. To transcode the same file again - for example, with an option change - double click on the file in the Batch Process Display Window and the Status will change to Waiting. To change the options again, highlight the file with a single mouse click and then click on the Option or Edit button to execute the Option Selection Dialog box.

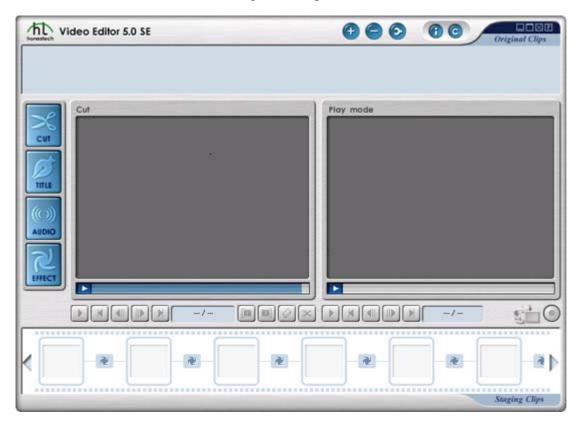
To view the transcoded output video file, highlight the video file and click-on the Output Play button



5.Video Editor

Screen Layout and Explanation

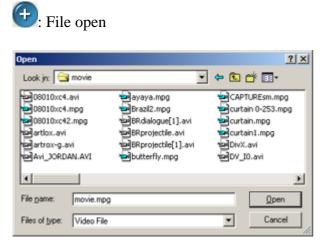
Click on an area or items below to get full explanation.



honestech Video Editor's screen has following areas.

- Menu Area: file open, file/video clip delete, video property, change skin color, minimize, maximize, close and help.
- Display Area: play original video clips, play edited video clips (preview), display saving progress information.
- Video Clip Staging Area: Original Clips, Staging Clips.
- Frame Edit Area: mark frame range, sequence arrangement, merge multiple frames into one video.
- Title Edit Area: add title, font style, size, color, movement (straight line, curve line)
- Audio Edit Area: add audio and create sound effect
- Special Effect Edit Area: use Color Effect, Filter Effect, Transition Effect, Transition In Effect, Transition Out Effect, Noise Reduction Filter

5.1. Menu Area



- Support MPEG-1, 2 system file(Video and Audio), AVI(DV-AVI).
- Select a file and click Ok button.

Clip/File delete

Delete Icon			×
Are you sure ?	Yes	No	
🔲 Delete	e File		

- Delete clips registered in Original/Staging Clips.
- Actual file on a hard disk is deleted when "Delete File" is checked.

: Property of Clip/File

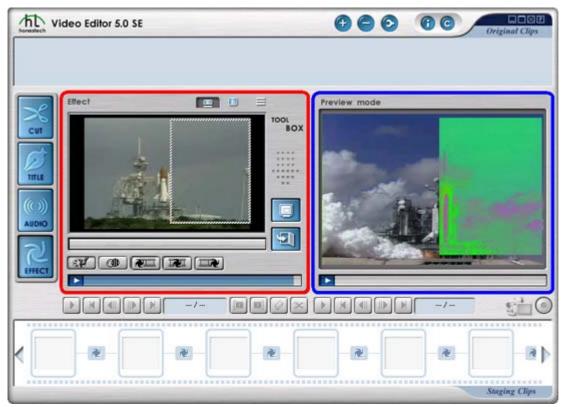
MPEG Properti	es			×	
Path	E:WetcWmovieWmovie.mpg				
Size	3.36 MB	_			
Time	00:00:20				
System					
Туре	MPEG-I				
				-	
Video				-	
Width	352	Height	240	1	
Frame rate	29.97	Bit rate	1182800 bit/s	1	
Audio					
Layer	Layer-II	Mode	Stereo		
Bit rate	192 Kbit/s	Sampling	44100		
Close					

- File path, size and play time.
- File System type
- Video information (screen size, frame rate, bit rate)
- Audio information (layer, mode, bit rate, sampling frequency)

©: screen color change

- E:Minimize
- **•**: Maximize
- E: Previous screen size
- ⊠:Close program

5.2. Video Display Area



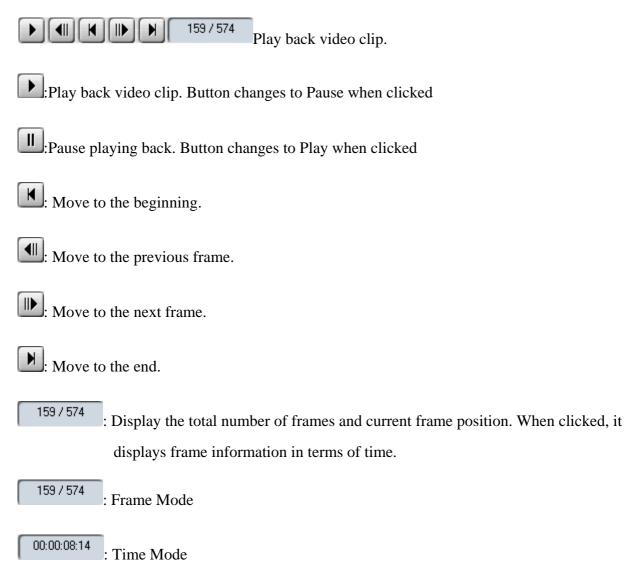
Original Video Display Window

- Displays videos in Original Clips(Double Click or Drag and Drop)
- Videos in Staging Clips cannot be displayed in this window.
- In Title editing mode, Title can be edited in this window.
- In Audio editing mode, it displays registered audio files.
- In Special Effect mode, it displays all available filters.
- Displays the progress information when final video is created.

Edited Video Display Window

- Displays videos in Staging Clips(Double Click or Drag and Drop)
- Videos in Original Clips can be displayed in this window.
- Preview function displays edited video in this window.

5.2.1 Edit Buttons



5.2.2. Preview and Save Button

- 1. (Preview Button) : Merges and plays back video clips in the Staging Clips. Video is played back in the Play mode window.
- 2. (Save Button) : Merges and saves video clips in Staging Clips area into a single permanent video file. Clicking this button displays the following dialog box so that users can select

output video format.

Select output file type		×
• MPEG		
O DV-AVI	ОК	
C AVI	Cancel	Ī
C ASF		

3.Select output video format, specify file name and click "Save" button.

Save As	<u>? ×</u>
Save jn: 🔁 Output	• 🗧 🖆 💷 •
DV_100-373.mpg	
File pame: movie0-126	Save
Save as type: MPEG File	Cancel

4. Another window will show up to specify video setting information according to the selected

video format.

- AVI Format
- DV-AVI Format
- MPEG Format
- Window Media(WMV) Format

5.3. Frame Edit Mode



Frame Range Selection for Editing

- Specify frame range
- To add an entire video clip, drag the clip from the Original Clips area and drop it in the Staging Clips area.
- To add portions of a video clip, drag the clip from the Original Clips area and drop it in the left preview window. Then using the Mark-in/Mark-out buttons, cut the portion of the video

clip to be edited and then click the \checkmark button to transfer the clip to the Staging Clips area.

• Users can repeat the above steps to add multiple video frames.



Video Frames Editing and Saving

Adding Video Clip

- Use the 🕑 button in the menu area to browse and select video clips to add to the Original Clips area.
- Drag and Drop video files to the Original Clips area.
- Double click on added video clips in Original Clips area or Drag and Drop them to Original Video Display Window to view and select frames for further editing.

Selecting frame ranges for video editing Click Mark-in to specify the beginning of a clip and

Mark-out to set the end of the clip. Next, click on the *button* to move the clips from the

Auto Edit window to the Staging Clips area.

Editing video frames

- Select video frames in Staging Clips area.
- Users can rearrange the sequence of videos.
- Users can repeat the same scene by putting the same video frames multiple times.
- Users can delete sections of video they do not want.
- Users can confirm the video before final saving using preview function.
- User can repeat the above steps.
- Save

5.4. Transition Edit Mode



Transition Registration and Range Setting

1. Transition Registration

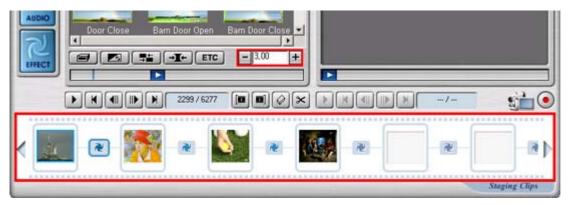
- Add video clips to the Staging Clips window ("registering") using the button.
 Specific frame ranges can be selected (see Frame Edit Mode) or
- The entire video clip can be added by clicking on the *Subutton* without specifying a frame range setting.
- Additional video clips can be registered by repeating the above processes.
- Click the *button between clips to add/edit transitions; (see Transition Edit Mode).*
- honestech's Editor comes complete with a variety of transition effects (3D, Wipe, Slide, Stretch, etc.).
- The transition button, *(Note: Construction of the selection of the sele*
- To change/adjust a transition setting, click the button and the Transition Edit Mode will open.

2. Transition Range Setting

• The length of time a transition plays can be set using the Transition Range Setting

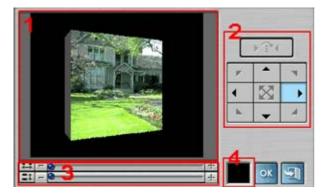
buttons:	-	3,00	+

- The transition default value is set to 3 seconds. If a video clip; s play time is shorter than the default value, the play time of the transition will be shortened to match the time frame of the video clip.
- The transition time frame can be adjusted using the +/- buttons.



Transition Setting

Set and preview the direction and background color of transitions.



1. Preview Window: Provides immediate playback of video edits.

2.Direction: Set the direction of the transition.

3.Number of horizontal and vertical lines: Adjust the number of horizontal and vertical lines.

4.Background Color: Set the background color.

Transition Effect Group

• All available Transition effect filters are displayed on a Transition effect edit window.

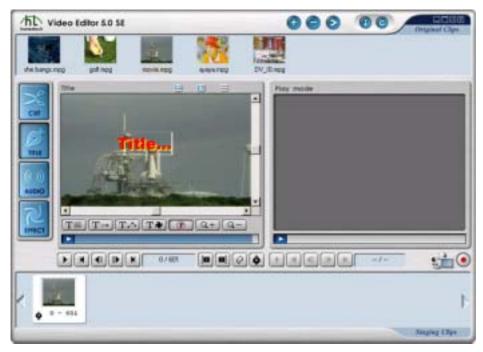
:3D Transition Effect Filters.

Slide Transition Effect Filters.

:Stretch Transition Effect Filters.

ETC:etc. Transition Effect Filters.

5.5. Title Edit Mode



Title Edit Button



 $T \equiv$: Specify title attributes and edit title text. Double clicking title has same effect.

 $\mathbf{T} \rightarrow \mathbf{T}$: Click this button to specify the linear path of the title movement.

- Initial setting: The position of title is starting point. Blue dot is ending point. There is a straight line from starting point to ending point.
- Use mouse drag and drop to modify the position of starting or ending point.
- Title will move straight from starting point to ending point.

T: Click this button to specify the curve path of the title movement.

- Initial setting: 3 blue dots show up. The dot farthest from title is ending point. The position of title is starting point. There is a The other two dots are for formulating curve line.
- Use mouse drag and drop to modify the position of starting or ending point.
- Use mouse drag and drop to modify the position of two dots. It will change the shape of curve line.
- Title moves along the curve line formed.

T*≹*: Display list of title effects users can select.

(Cancel the title animation or effect.

Q+: Zoom in the screen.

Q -: Zoom out the screen

Title Edit Setting

e
-
-
۶I I
•
3

- 1.Set the title's font's type and size, the text itself and whether bold, Italic and/or underline features are wanted.
- 2.Set the title's color.

3.Set the title's shadow effect and color.

4.Set the title box's Outline color and thickness.

5. When title box's Outline is selected, set the level of Outline fade in or fade out.

Frame Range Selection for Title

- Specify frame range.
- Add the frame range to Staging Clips area using button.
- Adding a video clip without specifying frame range adds entire video clip.
- Users can repeat the above steps to add multiple video frames.
- Clips in the Staging Area read XXX-YYY to indicate either an entire clip or a range of frames from within a clip.



Title Editing and Saving

1.Adding Video Clip

- Use Ebutton in menu area to register a video clip.
- Use drag and drop to register a video clip.
- Frame range can be specified after double clicking a registered video clip or drag and dropping it to video display window
- 2.Frame Range Selection for Title

Title Editing and Saving

- Use title edit button to add and edit title.
- Title edit buttons show up on Original Video Display Window.
- Setting the starting point of title movement: Select a title, drag it using mouse and drop it at a position you want it to start moving.
- Select T= button to specify title attributes such as font style, size, color, title text and etc.
- T → Straight line: Select a blue dot and drag it using mouse. Straight line shows up from the title to the blue dot that indicates starting point and ending point of straight title movement.
- **T** Curve line: Two dots show up next to the straight line. Create a curve line by moving around these dots.
- **T***N*Animation: It provides variety of pre-designed title animations.
- Zoom in and zoom out allows users to see the entire picture.
- Preview allows users to confirm how title will work without rendering final output.
- The above steps can be repeated until desired title effect is accomplished.
- Video frames that have title effect can also have audio effect and special effect.

5.6. Audio Edit Mode

honestech Video I	Editor 5.0 SE			000	1 C Original Clips
she bangs.mpg	gan.log	movie.mpg	ayaya.mpg	DV_10.mpg	
	o ringout ding	notify Utopia Asterisk	start chimes	Play mode	
		H 1 / 601			-/
60 - 211	a (1 ³¹⁵	- 477 ## ⁴⁷⁷	())) 7 - 601 ()	0 - 123 0 - 123	ţ
-					Staging Clips

Audio Edit Button

Register audio files (WAVE, MP2, MP3)

• Click this button to browse for audio files. Select desired audio file and click OK to add audio file for use in editing.

Look ja: 🔄 Media		- + 🗈 🗗 🖽 ·
Edhines.wav Edhord.wav Edhord.wav Edhord.wav Edir_end.wav Edir_end.wav	Chify.wav Trecycle.wav Tringin.wav Tringout.wav Start.wav Ttada.wav	The Microsoft Sound.wav Ditopia Asterisk.WAV Ditopia Cisse.WAV Ditopia Critical Stop.WAV Ditopia Default.WAV Ditopia Error.WAV
4		2
File name.		<u>Q</u> pen
Files of type: Wave M	P3.MP2 files	• Cancel

• Registered audio files show up on audio edit mode window.

Audio fades in.

Audio fades out.

Frame Range Selection for Audio Editing

- Specify frame range
- To add audio edits to an entire video clip, drag the clip from Original Clips area and drop it in the Staging Clips area.
- To add audio edits to portions of a video clip, drag the clip from the Original Clips area into the left preview window. Then using the Mark-in/Mark-out buttons, cut out the portion of

the video clip to be edited and then click the button to transfer the clip to the Staging Clips area.

- Users can repeat the above steps to add multiple video clips for audio editing.
- Clips in the Staging Clips area read XXX-YYY to indicate either an entire clip or a range of frames from within a clip.



Audio Editing and Saving

1. There are two ways to add video clips:

• Use the 🕑 button in the menu area to browse and select video clips to add to the Original

Clips area.

• Drag and Drop video files to the Original Clips area.

To view the video clips in the Original Clips area, either double click on a video clip or drag and drop a clip into the Original Video Display window. Clips in the Original Video Display window are not in a position to be edited.

2. Selecting frame ranges for audio editing Click Mark-in to specify the beginning of a clip and

Mark-out to set the end of the clip. Next, click on the button to move the clips from the Auto Edit window to the Staging Clips area.

3.Edit Audio

- Video clips must be taken from the Audio Edit window to the Staging Clips area.
- Audio files that can be used during the editing process are displayed in the Audio Edit window.
- If there are no audio files in the Audio Edit window, click on the audio editing button to

locate and add audio files for editing purposes.

- Highlight the video clip for audio editing. Next click on an audio file in the Audio Edit window. This process of highlighting a video clip and clicking on an audio file is how audio is applied to the video clip.
- Overwriting or mixing the audio on the clip is controlled by properties embedded within the audio file. Double-click on the audio file and adjust the volume ratio between the original audio and the new audio.
- Each video clip can have its own audio file applied to it.
- Use preview to test the audio effect.
- Repeat the above steps as many times as needed.
- Video frames that have audio effects can also have "Title" and "Special" effects.
- Use the Save button to merge

5.7. Special Effect Edit Mode



Frame Range Specification and Registration for Special Effects

- Specify frame range
- To add special effects to an entire video clip, drag the clip from the Original Clips area and drop it in the Staging Clips area.
- To add special effects to portions of a video clip, drag the clip from the Original Clips area and drop it in the left preview window. Then using the Mark-in/Mark-out buttons, cut the

portion of the video clip to be edited and then click the button. to transfer the clip to the Staging Clips area.

- Users can repeat the above steps to add multiple video frames.
- Clips in the Staging Area read XXX-YYY to indicate either an entire clip or a range of frames from within a clip.



Effect Setting

- When effect is applied to video clips, area and effect level can be set.
- Effect setting has 2 modes : Basic setting where level cannot be set and Advanced setting where level can be set.

1.Basic effect setting

• Area can be designated so that effect occurs only within that area. But level cannot be set and default level is applied.



• Area setting and resetting

2.Advanced effect setting

• Area and level can be set so that effect occurs only within that area with specified level.



- Area setting and resetting
- Level setting and resetting

Effect Editing and Saving

1. There are two ways to add video clips for editing:

- Use the 🕑 button in Menu area to browse and add video clips to the Original Clips area.
- Use Drag and Drop to add video clips to the Original Clips area.

(Note: To view video clips in the Original Clips area, either double-click on a video clip or drag-and-drop a clip into the Original Video Display window.)

2.Selecting frame ranges for special effect editing: Click the Mark-in button to specify the

beginning of a clip and the Mark-out button to set the end of clip. Next, click on the button

to move clips from the Audio Edit window to the Staging Clips area.

3.Special Effect Filters:

- Apply any or all of the filters in the following six filter groups to a video clip:
- a. Color Filter: Change colors of videos.
- b. Effect Filter: Add special effects such as a mosaic effect on videos.
- c. Transition Effect 1: Special effect filters to add introductory "opening" effects to the beginning of streaming video.
- d. Transition Effect 2: Special effect filters that can be applied to all parts of streaming video; effect weight settings are included.
- e. Transition Effect 3: Special effect filters to add ending ("disappearing") effects to the end of streaming video.
- f. Ghost & Noise Reduction Effects: Set screen quality of streaming video by removing ghost & noise effects.

4.Notes on applying special effects:

- Set the range: Cut frames for editing and applying special effects.
- Adjust weight value of the effects.
- Apply effects on frames by using registered filters.
- A special effect can be applied to more than one frame range of a video clip.
- Multiple special effects can be applied to the same frame range or several frame ranges.
- Video frames with special effect edits can also add audio and title effects.
- Preview makes it possible to immediately view changes made to a video clip.
- Use the Save button to merge and save the final video.

5.8. Special Effect Edit Button

• All available effect filters are displayed on a special effect edit window.

1. Click this button to select color filter.

- changes the color of videos.
- 2. Click this button to select effect filter.
 - Adds special effects on videos.

3.Select Screen Transition Filter 1 using button.

• "Opening" transition effect filters to apply to beginning point of a streaming video.

4.Select Screen Transition Filter 2 using button.

• "Between clips" transition filters may be applied to all parts of a streaming video.

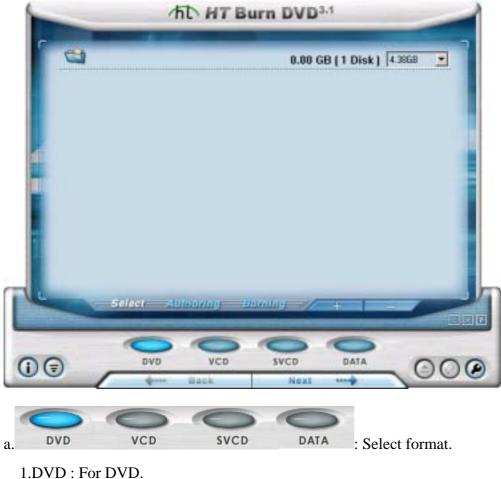
5.Select Screen Transition Filter 3 using button.

• "Disappearing or closing" transition filters to apply at end of a streaming video.

6.Select Ghost & Noise Reduction Filter with using button.

• Filters for reducing noise in the streaming video.

6.Burn DVD 6.1.Adding Files



2.VCD : For Video CD.

3.SVCD : For Super VCD.

4.DATA : For multi-media data CD.

This dialog box shows up when the button is clicked. b. +

Open			? ×
Look jn: 🔁	MPEG	- 🔁 🖆 🖬	
Birthday, Movie, M Movie2, N MySun, N Soccer, N Soccer2,	IPG MPG MPG MPG		
•			▶
File <u>n</u> ame:	<u> </u>	<u>O</u> pen	
Files of <u>type</u> :	Video Files (*.mpg,*.mpeg,*.mpe)) Cance	

Video or photo files are displayed as thumb nails on the screen (like below) after being added.

The HT Burn DVD3.1			
Birthday, MPG	Movie, MPG Wedding, MPG	0.00 GB (1	Disk) 43868
0	De Deck	0	

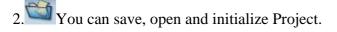
c.Added files can be deleted. Click on the file to be deleted and then click on the _____button.

Next d.When all necessary files are added, click on the button to move to next step.

6.2. BUTTON

1.Select video format for DVD/CD

HT Burn DVD supports four formats: DVD, Video CD, Super VCD and multi-media Data



Next Back **4**.... 3/

These two buttons allow users to go back or move forward in the DVD/CD creation process.

4.Extra convenient functions



: Hide or show HT Burn DVD's main window



Eject DVD/CD drive.



: Erase all content on DVD/CD media.

Open option dialog box.

Option	×
_ Video type	
O NTSC O PAL	 Both
Audio type	
C Default C LPCM	1
Settings	
🗖 Make compatible mpeg (if source is n	ot compatible)
🔽 Create menu	
🗖 Make UDI	
Support XVCD and XSVCD	
Burning option	
Perform writing test before recording	
Record to media	
Output folder	
Use Windows temporary directory	
Path : I:\temp\Test\	
O	K Cancel

- Video type : Select video type. (NTSC, PAL, Both).
- Audio type : Select audio format. (Default : Maintain audio file contained in video file. LPCM : Convert audio into LPCM.)
- Make compatible mpeg (if source is not compatible) : (If original video does not match with video format of user's selection) convert it into the video form of user's selection and save it in "output folder".
- Create menu : Create menu. If you do not select this menu, menu is not created and video is continuously played.
- Create a UDF file : If the DVD recorder is not recognized by HT Burn DVD or if you cannot record using the recorder, create a UDF image, and then use other company's application software to write the file to a disc.
- Support XVCD and XSVCD : Data rate is not checked in order to support XVCD and XSVCD.
- Perform Writing Test before recording : Checks to insure that the DVD/CD writer is functioning correctly before actual burning.
- Record to media : If you select this menu, video is saved on CD or DVD.
- Use Windows temprary directory : [Default] Use Windows temporary directory as HT Burn DVD's temporary directory.

5.Minimize, Close, Help

- E: Minimize HT Burn DVD window.
- Elose HT Burn DVD.
- I Open HT Burn DVD help.

6.3. Digital Versatile Disk / Video CD / Super VCD Spec

- Digital Versatile Disk(DVD) Spec NTSC :
 - Size : MPEG2 720 X 480 pixels
 - Video bit rate : Up to 9.8 Mbit/sec
 - Frame rate : 29.97 frames/sec
 - Audio : LPCM, MPEG-1 Layer2
 - PAL
 - Size : MPEG2 720 X 576 pixels
 - Video bit rate : Up to 9.8 Mbit/sec
 - Frame rate : 25.00 frames/sec
 - Audio : LPCM, MPEG-1 Layer2
- Video CD(VCD) Spec MPEG1 352 X 240 NTSC
 - Size : MPEG1 352 X 240 pixels
 - Video bit rate : 1150 kbit/sec
 - Frame rate : 29.97 frames/sec
 - Audio : 224 kbit/sec MPEG-1 Layer2
 - MPEG1 352 X 288 PAL
 - Size : MPEG1 352 X 288 pixels
 - Video bit rate : 1150 kbit/sec
 - Frame rate : 25.00 frames/sec
 - Audio : 224 kbit/sec MPEG-1 Layer2

• Super VCD(SVCD) Spec - NTSC

Size : MPEG2 480 X 480 pixels

Video bit rate : max 2524 kbit/sec MPEG-2 (if the audio is in 224 kbit/s), audio + video bitrate max bitrate is 2748 kbit/s.

Frame rate : 25.00 frames/sec

Audio : from 32 - 384 kbit/sec MPEG-1 Layer2

- PAL

Size : MPEG2 480 x 576 pixels

Video bit rate : max 2524 kbit/sec MPEG-2 (if the audio is in 224 kbit/s), audio + video bitrate max bitrate is 2748 kbit/s.

Frame rate : 25.00 frames/sec

Audio : from 32 - 384 kbit/sec MPEG-1 Layer2

Q&A:

Question 1--- After recorded files, sometime the audio & video were not sync when playback. Why?

Answer 1--- Firstly we suggested users to check if your system performance cannot run this application well (please check the **system requirement** again in this manual), because this product is based on software compression of A/V. Or please change the record setting to lower level in application software settings; it will help to solve the sync problem. Besides, if you use Windows[™] 2000 for your operating system, please update to Service Pack 4 to increase the supporting of multimedia performance.

Question 2--- Did this product support Windows[™] NT?

Answer 2--- Sorry, this product only supports Windows[™] 2000 & Windows[™] XP. And please be sure about your operating system can update to latest service packages.