Recommended Procedure for Success with VideoStudio

NEW USERS: The following procedure/work flow is recommended when using VIDEOSTUDIO because it has had the most success at producing good quality DVDs. In particular, it avoids triggering serious bugs, so please follow the process carefully.

The most important messages in this procedure are:
*(1) Always **Save** your project and **Create a Video File** before attempting to burn a DVD.*
*(2) Never try to burn a DVD with anything in the **EDIT Timeline** display.*
*(3) Never try to burn a DVD using **SHARE/Add Project** button.*
*(4) Make certain that your **BURN properties** exactly match your **DVD Compliant VIDEO FILE properties**.*

Capture Phase

Your first challenge is to get the video from the camcorder into the computer. As a vastly oversimplified introduction, there are basically two types of video sources: Analog (older camcorders and VCRs) and Digital (newer camcorders). There are also two possible target video file formats in the computer: MPEG-2 and DV. MPEG-2 is the file format required for burning DVDs and DV (Digital Video) is the native file format of most digital camcorders.

Analog Video
Most computers require a capture device to which one can connect an analog signal source (S-Video or composite). These often contain a fast, dedicated processor that converts the video to MPEG-2 format and stores it directly in the computer's hard disk, using either a PCI slot or a USB2 port.

Many analog capture products are not supported by VideoStudio. If you have difficulty, use the capture software (e.g., AmCap) that came with the device to capture the video file then edit with VideoStudio.

Digital Video (DV)
Most digital camcorders have a Firewire connector and can attach directly to a Firewire port on the computer. If your computer doesn't have a Firewire port then you can buy an inexpensive PCI card. DV AVI files are huge(13GB per hour) and require a lot of time to render.
Don't try to capture video with the USB cable that came with the camcorder - it is usually for transferring still images to the computer.

Analog Capture Guidelines
Capture 720x480 ONLY if you have a fast computer (>2 GHz, 1GB+ RAM, 7200rpm HDD). If you capture in DVD compliant MPEG-2 format the whole video editing process to DVD burn will be faster and simpler.

If you want the best quality and plan to burn a DVD, set high video bit rate properties (8-9 Mbps) and the best resolution (720 x 480 NTSC, 720 x 576 PAL). If you have a low resolution video source such as VHS tape and want to store a lot of video on a single DVD, use a lower bit rate (2-3 Mbps) and set resolution to 352x240(288 PAL).

These settings will produce the best results for DVD's:

Analog Capture Properties:
MPEG-2
NTSC_M drop frame(NTSC_J for Japan, PAL for most, SECAM for France or Russia)
24 Bits, 720 x 480, 29.97 fps
Upper Field First
(DVD-NTSC), 4:3 (or 16:9 for widescreen)
Video data rate: Constant (8000 kbps)
MPEG audio layer 2, 48 KHz, Stereo
Audio data rate: 384 kbps
or if available
AC3 48KHz, Stereo
Audio data rate: 192kbps

DV Capture Properties:
NTSC DV(PAL DV)
Microsoft AVI files
24 Bits, 720 x 480, 4:3 (or 16:9 for widescreen), 29.97 fps(25fps for PAL)
Lower Field First
DV Video Encoder -- type 2
Interleave audio for every 15 frames
PCM, 48.000 kHz, 16 Bit, Stereo

Tip:
In VS7&8, enable the Drop Frame Counter to monitor your capture quality as follows: Documents & Settings\All Users\Application Data\Ulead Systems\Video Studio 8. Open UVS.INI and scroll down to Information? And change the Show Drop Frame Counter from =0 to =1 Save the changes.
In VS9 and VS10, select menu File/Preferences/Capture tab: check "Show Drop Frame Information"

A video data rate of 8000 kbps will fit one hour of video on a SL DVD and two hours on a DL.
AC3 and LPCM are DVD compliant but some players have problems with MPEG audio layer 2.

Edit Phase

Note: If you captured in DVD-Compliant MPEG-2 format and do NOT want to edit your video, you can skip this Edit phase and the next (Create Video File) and continue with "**Burn DVD Phase**" to immediately burn a DVD.

1. Select Menu FILE/Preferences. Place a checkmark next to "Show Message When Inserting First Clip..."
2. Drag one of your captured video files into the empty timeline display.
3. When it asks "Do you want to Set Project Properties to Match..." press Yes.
4. Select Menu FILE/Project Properties. Click [Edit.] Open the Compression tab and select Media Type = [NTSC DVD] (or PAL DVD if you live in PAL country).
5. Move the Quality Slider to 100. The Bit rate and Audio settings will already be set properly to match your captured video. Press OK. Check [Perform Non-Square Pixel Rendering.]
6. Now complete your video editing - add audio, titles, transitions, cut out shaky video sections, too-fast pans and zooms, pictures of the inside of your camera bag, etc. How to use the Edit controls is outside the scope of this brief intro, use the ? in the upper right corner for help.
7. You can insert digital still images (e.g., jpeg files) freely, at full resolution into the timeline. Set menu File/Preferences/Edit tab "Image Resampling Option" to "Keep Aspect Ratio" and "Resampling Quality" to "Best" *before* insertion.
8. *Review and save your project(File/Save) just in case your computer crashes*.

Create Video File Phase

Note: This phase is crucial because it avoids a serious bug in VideoStudio. Always create a video file of your project before attempting to burn a DVD.

If you captured your video in MPEG-2 format, you will be able to "Smart Render" your video file relatively quickly:
1. Select SHARE/Create Video File
2. Select "Same as Project Settings" (Only if your project properties match your captured video files exactly).
3. Name your video file and hit the SAVE button.
If you captured DV format, you will have to transcode your project to MPEG-2 before burning a DVD, which can take a LONG time:
1. Select SHARE/Create Video File
2.Select Custom then set Save as Type = "MPEG" .
3. Select Options, Select "Compression" tab. Set Media Type = NTSC DVD (or PAL DVD). Select Video Data Rate = Constant (e.g. 8000 kbps). Make sure to select Lower Field First.
4. Name your video file and hit the SAVE button.

Tip:
Always create in the same frame rate and field order as the source, this will reduce judder and jaggies.

Burn DVD Phase

Caution: Never try to create a DVD with anything in the timeline. Do not use the SHARE/Create Disk/Add Project control option.

1. Select NEW project.
2. Select SHARE/Create Disc
3. Press ADD VIDEO button. Navigate to select your MPEG-2 video file. It will appear in the lower display.
4. *Click the little Gear-Shaped icon on the lower left, second to the right to set the properties for the DVD burn.*
5. Press "**Change Mpeg Settings**", then press **"Customize,"** then the **"Compression"** tab.
6. Push the quality slider to 100%.
7. Set all burn properties to exactly match the properties of your video file and make sure "Do not convert compliant MPEG files" is checked.
8.Keep clicking NEXT until you get to the burn page, here you can select your writer or output to an ISO or DVD folder.