Making DVDs using MPEG Streamclip and DVD Styler

Version 1.2   Author: Chris Playll

This guide provides step by step instructions for making a DVD copy of a Topfield recording using a Windows PC.
There are several methods of doing this, so this guide begins by describing some of the basic principles and then some of the options available. This is then followed by the detailed step by step guide for one method.

A. INTRODUCTION

Why Use a Computer?
The first question that you may ask is why not just copy the programme directly from the Topfield to a DVD recorder.
You may feel that this is a simpler solution and may be more convenient if your DVD recorder is permanently connected to your Topfield PVR. This method gives predictable results, if you are not bothered about removing commercial breaks from your DVD copy, and don't mind any unwanted extra material after the programme.

There are some disadvantages.
The programme has to be copied at normal speed, during which time the Topfield cannot be used for anything else.
You need to manually start and stop the DVD recorder at the correct time which means being available when the programme finishes, possibly by setting an alarm on your watch or phone to remind you. If you are recording several programmes on one disc this means starting and stopping the recording after each programme.

There will be some loss of quality since you will be decoding the Topfield files to analogue vision and sound and then re-encoding them in the DVD recorder.

Although it is possible to edit a programme in the Topfield before copying it, this editing function is not very accurate and involves cutting the original file which cannot be undone.

If you use a computer to make a DVD, you can edit a copy of the files more accurately and, once you have set up the details of the process required, you can leave the computer to get on with it.

A DVD recorder may be useful if you have problems with a faulty Topfield recording. If you can copy the programme on to a DVD recorder, you can then import the DVD into MPEG Streamclip and then follow the method described in the guide.

MPEG File Types
DVDs and Topfield recordings both use MPEG files. DVDs use MPEG Program Stream files, whereas Digital TV broadcasts use MPEG Transport Stream files, which are designed to be more robust over error prone transmission paths. Digital TV broadcasts use a range of quality settings. In the UK, BBC1 has the highest quality, while the shopping channels have the lowest quality. It is likely that quality standards will be reduced further as broadcasters try to make more space for HD transmissions.

The MPEG transport stream broadcast contains, not only the vision and stereo sound, but also additional sound tracks, such as audio description for the partially sighted, subtitles and other programme information.

The Topfield PVR records the complete transport stream, adding its own extra information to make a .rec file.

Files with an extension on their name of .mpg or .m2p are "multiplexed" MPEG files which contain both vision and sound streams. These files can be "demultiplexed",, a process which separates the individual vision and sound tracks into separate files.
Files with an extension .mpv or .m2v are vision files.
Files with an extension .mpa or .mp2 are sound files.

The programs described in this guide can handle both multiplexed MPEG files and separate vision and sound MPEG files. The advantage of a multiplexed file is that you can play it to check that the vision and sound are not out of sync, which can be a problem with converted Topfield files. Separate vision and sound files may reduce processing time when creating a DVD, but vision and sound synchronising errors will not be apparent until the DVD is played.

How do MPEG files compress the picture?
The MPEG system uses a number of methods to reduce the data rate.
An uncompressed standard definition TV picture consists of 740 pixels horizontally and 576 pixels vertically. A complete set of pixels (a frame) is produced 25 times a second.

The MPEG system also makes use of the fact that, in a typical TV signal, one frame is usually very similar to the next. The system divides the vision signal into Groups of Pictures (GOPs) each consisting of typically 12 frames. The first frame, known as an I frame or a key frame, transmits the full 740x576 pixel detail. For the remaining frames in the GOP, known as P frames, only the differences between that frame and the previous frame are transmitted. Unless there is a picture cut, or a lot of fast movement, the data in a P frame will be considerable lower.

Some TV stations, broadcasting at a lower quality, may choose to reduce the data rate further by using longer GOPs of up to 50 frames. Since TV broadcasts are designed to be viewed continuously at normal speed, the only problem with a long GOP is the delay when changing channels before a picture appears.

The data rate can also be lowered by reducing the horizontal detail. Some transmissions have only 544 horizontal pixels, giving a picture size of 544x576.

Some transmissions use a picture size of 704x576. This has no practical effect on the quality as the missing 8 pixels on each side of the picture are off the edge of most TV screens.

For more details on individual tv channels in the UK, there is a table available on the internet at dtt.me.uk.

The official DVD Specification does not accept 544x576 pictures or a GOP of more than 15 frames. However, most recent DVD players seem to play these pictures OK. When making a DVD, you have a choice of either re-encoding the vision to meet the official specification, which can take a long time on a computer, or save time by using the existing file, and hope the DVD plays OK.

One useful test that you can try is to make a Topfield recording of one of the shopping channels, which use the lowest quality. Make a DVD copy of this recording without re-encoding the file. You can then check that this DVD will play OK on any DVD player that you may wish to use.

Editing MPEG Files

You will probably want to edit the files to remove any extra material before and after the programme. If the programme has commercial breaks, you will probably want to remove these also.

It is only possible to edit an MPEG file at the start for a key frame, in order to preserve the GOP sequence. If you want to be able to edit any frame to any other frame, it is necessary to decode and recode the MPEG file.

To do this you will need to buy a some editing software, as the free software available will not do this. If you received some DVD making software with your computer when you bought it, or have obtained on some software on a magazine cover disc, you will probably find that the editing function is disabled unless you pay for the full product. However, if you just want to remove commercial breaks, editing the MPEG file to the nearest key frame using the free software described in this guide will probably be good enough for home viewing purposes. You will probably just get a small hole or jump on the sound.

B. OPTIONS

There are a number of stages involved in making a DVD and a range of software that can be used. Listed below are the various stages and some of the options. The guide that follows is in sections so you can mix and match the options according to your preferences and what software you may already have.

Making a DVD from a Topfield recording involves the following stages.

1. Copy the Topfield .rec file to your computer.

The Topfield has a USB connection which can be connected to a computer via a standard USB cable. Unfortunately it is not possible to access the files directly via normal Windows programs, as you would with an external hard disc. The file needs to be first transferred to your computer.

The only Windows based program for this is Altair, supplied by Topfield.(www.topfield.co.uk)
This will be described in detail later in this guide.

2. Convert the Topfield .rec file to an MPEG file.

Topfield's own .rec files are not readable by most MPEG software. It is necessary to convert them to standard MPEG program stream files containing the vision and sound tracks required. If the DVD authoring program that you are using in the next stage does not have an editing function, you will need to do any editing required to the MPEG file in this stage.

MPEG Streamclip   (www.squared5.com)
This program will play, edit and convert a wide range of files. This is the program described in detail later in this guide.

Project X   (www.oozoon.de)
This is an alternative file conversion program, although with a less user-friendly layout. Editing can be achieved by marking a series of cut points which are actioned when the file is converted. This program does not play the vision and sound so, if you wish to view your edited file, it is necessary to convert the file first and then view the result in another program.

PVAStrumento   (www.offeryn.de)
This file conversion program does not accept Topfield .rec files, but will convert MPEG Transport stream (.ts) files. Users report that it is a good program for fixing audio problems with MPEG files. As a result several users recommend using either MPEG Streamclip followed by PVAStrumento or Project X followed by PVAStrumento.

Video Redo (www.videoredo.com)
This is a program specially designed for the purpose, but has to be purchased after a 1 month free trial. It enables frame accurate editing without the need to re-encode the entire file when converting to an MPEG file. If you buy the VideoRedo TV Suite version, this includes the DVD authoring and burning software.

Rec2mpg and Rec2dvd Conversion Scripts   (www.landk.ukfsn.org)
These scripts, written by a Topfield user, SonicLife, can be set up to control the Project X program. They enable you to convert a file in a single operation, avoiding the need to learn how to use the Project X program itself.

"rec2mpg" will convert a .rec file to an .mpg file (no editing option)

"rec2 dvd" will convert a .rec file to a set of DVD files in a VIDEO_TS folder. A DVD burning program that can burn these files as a DVD-Video format disc will then be required. The programme can be edited by adding bookmarks to the file in the Topfield recorder before copying the file to your PC. This script also offers the easiest way to copy the transmitted subtitles for the deaf to an optional subtitle file for the DVD. The basic DVD created with this script will have no menu with the titles played in alphabetical order.

3. DVD Authoring

This is the name for the process of converting the MPEG files to the .vob files which are the files recorded on a DVD. Authoring also includes creating a menu for the DVD.

There is a wide choice of commercial software that you can buy for this. Most are multimedia packages designed for music and photos as well as video, so your purchasing decision may depend on what else you may want to use your computer for. Nero (www.nero.com) is probably the most popular commercial package with Topfield users

Most commercial DVD software is designed mainly for editing and creating menus for home video. It will enable you to edit the pictures more accurately than editing the MPEG file.

There are, however, some free DVD authoring programs which can be downloaded and are adequate for many purposes, although they do not have editing functions. Some of this free software has been designed by groups of technical enthusiasts, and can be difficult to understand. Luckily other individuals have incorporated this software into easy to use Windows packages, listed below.

DVD Flick
(www.dvdflick.net)
This is the simplest program to use. The current version, however, has only a limited range of menus. There is an option not to re-encode the vision, but the program will always re-encode vision that does not have a pixel size of 740x576. Audio is always re-encoded to AC3.

DVD Styler
(www.dvdstyler.de)
This program gives the option to either copy or re-encode the vision and audio files. It enables you to design a wide variety of menus. This is the program described in the guide below.

GUI for DVD Author
(download.videohelp.com/gfd)
This program controls the same software as DVD Flick and DVD Styler. It has more options, but this, in turn, makes it less easy to use.

4. Burn the DVD files on to a DVD disc.

Most DVD authoring programs include software to burn the files it has created on to a DVD.
DVD-R discs can only be burnt once. If your intention is to make a permanent copy, these are the best ones to use.
DVD-RW discs can be erased and reused, but are more expensive and take longer to burn.
DVD+R and DVD+RW discs are the alternative DVD format and, although most DVD drives can use them, offer no advantage.
In order to avoid wasting discs while experimenting, one option is to burn a DVD-RW disc and test it on your DVD player. If you are happy with the result, you can then copy it on your computer to DVD-R disc to make a permanent copy. The DVD-RW disc can then be reused.
Alternatively, it is possible to get your DVD authoring program to create a disc image, an .iso file, which is an exact copy of what would be burnt on to a disc. You can then make a test DVD-RW copy or a permanent DVD-R copy from the same .iso file.
If you choose to make an .iso file in your DVD authoring program, you will need to use a separate program to burn the disc later. If a disc burning program was not provided with your computer, there are a number of disc burning programs available to download such as ImgBurn.

File Playing Programs

Although not essential, it is worth installing a player on your computer for checking the files created. These programs seem to be less demanding of computer resources than MPEG Streamclip, and will give a smoother replay if you have lower specification computer.

Media Player Classic
(sourceforge.net/projects/guliverkli)
This program will replay a wide variety of files, including .mpg and .ts files, but not .rec or .iso files. It is described later in the guide, since it is bundled with the Quicktime Alternative program used in the guide.

VLC Media Player
(www.videolan.org)
This program will replay a wider range of files, including .rec and .iso files. It is useful if you need to check the files transferred from your Topfield. It can also be used to check an .iso DVD image files, created by a DVD authoring program, before burning to disc.

C. GUIDE

This guide provides step by step instructions for one method, using MPEG Streamclip and DVD Styler. It is written in sections so that, if you prefer a different method, you can just use those sections that you require.

Before starting it is a good idea to create a new folder in your computer for the files produced, with sub-folders for each of the stages.

1. Copy the Topfield .rec file to your computer.

Download Topfield Tools.
Go to www.topfield.co.uk > Software Downloads > Topfield Tools for Windows
This will download a set of programs and a USB driver. The package is downloaded as a zip file.
When downloaded, find zip folder. Right click on the folder and select "Extract all" (or "WinZip" on some computers).
Find the unzipped folder and then the file topfield tools.exe. Double click on this file to run the installation program. Follow the installation instructions. The installed programs will be found in the start menu under Topfield. The program required to transfer files is Altair.

If you need physically move the Topfield in order to reach your computer, only mains power and the USB lead need to be connected.

With the USB lead connected, run Altair and then press standby on the Topfield to switch it on.

The Topfield files should appear in the left window. Your computer's files will appear in the right window.

If the left window is blank, there is a problem with the connection.

Unless you are using the Topfield to make recording at the same time, select Turbo, which will speed up the transfer.

On the left window select the Data files folder which contains the programme (.rec) files.

On the right window select the folder where you wish to put the copied files.
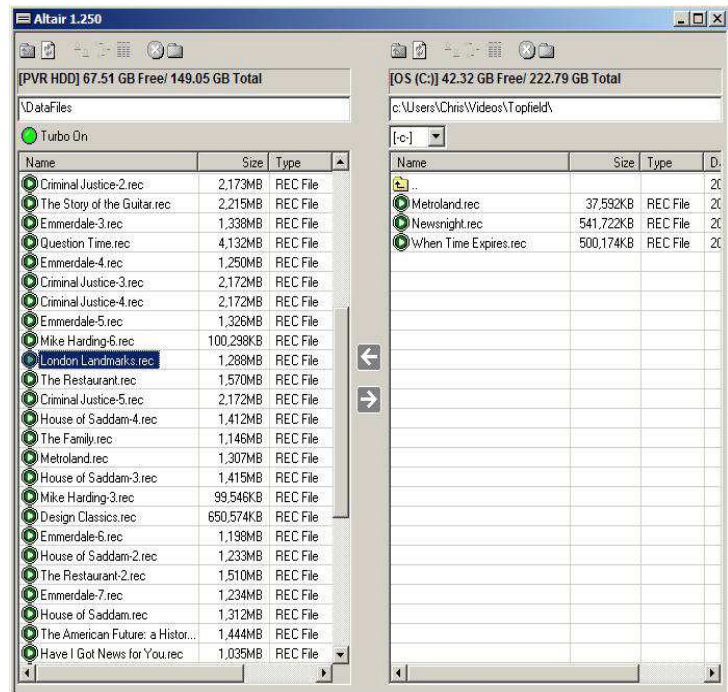
Check that the name of the file you wish to copy does not contain colons or any of the following characters : \ / * ? " < > | which are not allowed in Windows file names and will cause the transfer to fail. Delete these characters, before transfer, by right-clicking on the file name and selecting Rename. Remove the unwanted characters using the mouse and delete key.

Copy the required file from the left window to the right window, by clicking the right pointing arrow.
To copy several files at the same time, hold the control key while selecting the file names.

A progress bar will appear while the file is copied.

A 1Gb file takes about 6 minutes to copy
in Turbo mode.

When complete, check that the file now appears in the
right window with the same size indicated as the
original. If the file size is different, or sometimes 0kB,
try copying it again.
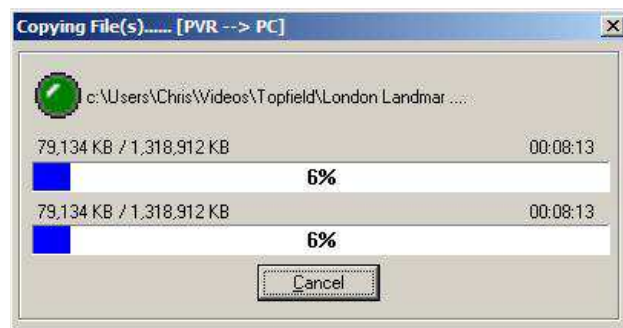
2. Convert the Topfield .rec file to an MPEG file.

In addition to the program "MPEG Streamclip", it is useful to download "PVAStrumento" to fix some audio problems and "Media Player Classic" to view and check the files.

Download MPEG Streamclip.
Go to www.squared5.com > MPEG Streamclip for Windows
MPEG Streamclip is downloaded as a .zip file. You will also need to download Quicktime as well in order for Streamclip to work. You can either buy a version from Apple or download Quicktime Alternative 1.81 which is free. The latest versions of Quicktime Alternative will not work with Streamclip. Use version 1.81 which can be downloaded from www.filehippo.com/download_quicktime_alternative/?2615

When you have downloaded it, find the file Quicktime Alternative 1.81.exe in your computer. Double click on it. This will run the installation programme. When you install Quicktime Alternative, you will also be offered Media Player Classic which is a useful player for checking files. Leave the Media Player box ticked and it will be installed as well.

Find the downloaded MPEG Streamclip Zip folder.
Right click on the folder and select "Extract all". An unzipped folder will be created. Open this folder, in which will be found the program, together with the instruction manual and notes.
MPEG Streamclip does not come with an installation program. The MPEG_Steamclip.exe file runs the program directly.
It is useful to create a shortcut for the program on your computer's desktop area. Right click the file MPEG_Steamclip.exe and select Create Shortcut. A shortcut will appear in the folder. Select it and, holding down the left button on your mouse, drag it on to the desktop area of your computer.

It may be helpful to copy the instruction manual to wherever you keep similar documents in your computer.

Media Player Classic can be run from the start menu under Quicktime Alternative. To create a desktop shortcut for it, go to C:\Program Files\Media Player Classic. Right click the file mplayerc.exe, select Create Shortcut, and drag the created shortcut on to the desktop area

Download PVAStumento.
Go to www.offeryn.de/pvas_2_1.htm
Download the zip file.
Find the downloaded PVAStumento Zip folder. Right click on the folder and select extract all.
An unzipped folder will be created.
Find the folder pvas21017/gui and then the file PVAStrumento.exe.

PVAStrumento does not come with an installation program, so it is useful to create a shortcut.
Right click on the file PVAStrumento.exe,
Select Create Shortcut, and drag the created shortcut on to the desktop area

Open MPEG Streamclip.

First set the preferences by selecting Window > Preferences.
Tick "Fix Streams with Data Breaks" and "Convert only one audio track". Leave the other options unticked.

Select File > Open files.
Select the required .rec file and click "Open".
The first picture of the file should appear.
Play the file by clicking the |> button.
Check that the vision and correct sound track plays.
If you cannot hear the programme sound, select the correct audio track using the Audio PID dropdown box.
How smoothly the vision and sound play depends on the specification of your computer.
Do not be unduly concerned if the replay is jerky. When the file is converted, the computer will take as long as is necessary to do the job correctly.

(If you are going to use a DVD Authoring program which has editing functions in the next stage, you can go straight to the file conversion step, without editing the file at this point.)

Editing the file is achieved by marking a section of the file with In and Out times.
Although it is possible to mark the In and Out times on any frame, if they are not key frames, when the file is cut, MPEG Streamclip will move the In time back to the previous key frame and the Out time forwards to the next key frame.
It is, therefore, best to mark your In and Out times on key frames, so you can see what you will get.

Below is the bottom part of the MPEG Streamclip screen.
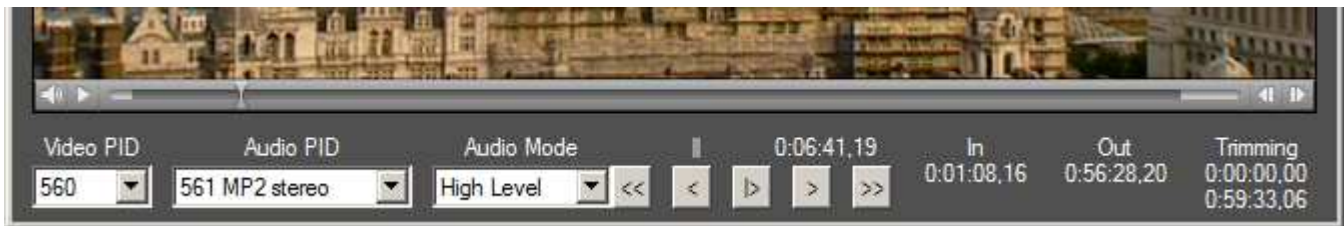
First, find the start of the programme. The slider can be used to move through the file.
Clicking on the arrow buttons will increase or decrease the replay speed.
The time displayed above the arrows is the frame currently being shown.

Using the mouse to click on these buttons to find an exact point is not easy. It can get confusing if the computer responds slowly.

The following keyboard shortcuts are a useful alternative.

Space Bar = Play/Stop
Alt key + Page Up = Back 1 minute
Alt key + Page Down = Forward 1 Minute
Page Up = Back 10 secs
Page Down = Forward 10 secs
Up Arrow = Back 1 key Frame
Down Arrow = Forward 1 key Frame
Right Arrow = Back 1 Frame
Left Arrow = Forward 1 Frame

The aim is to find the first key frame of the programme. If the programme starts with a fade up, select the first black key frame after any unwanted material has finished.
Use the up and down keys to step through the key frames.
With the correct first frame displayed, press the I key to mark the In time.

Next find the end of the programme. The aim is to find the last key frame of the programme before any unwanted material appears.

Press the O key to mark the Out time.

If the programme does not have any commercial breaks that you wish to remove, you can now convert the file, as described on the next page. Only the material between the marked In and Out times will be copied.

If you are removing commercial breaks, Select Edit > Trim.

This will delete the material before the In point and after the Out Point.
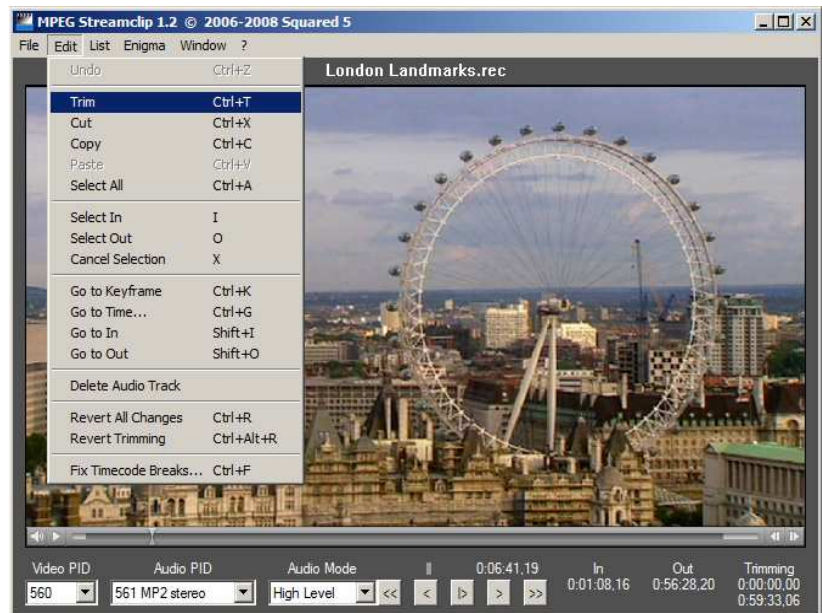
Next find the first commercial break.

If you are not sure where it is, go to the start of the programme. Fast forward or move the slider bar. Alternatively, if you hold down the Alt key, and repeatedly press Page Down, this will jump forward in one minute steps until you see a commercial.
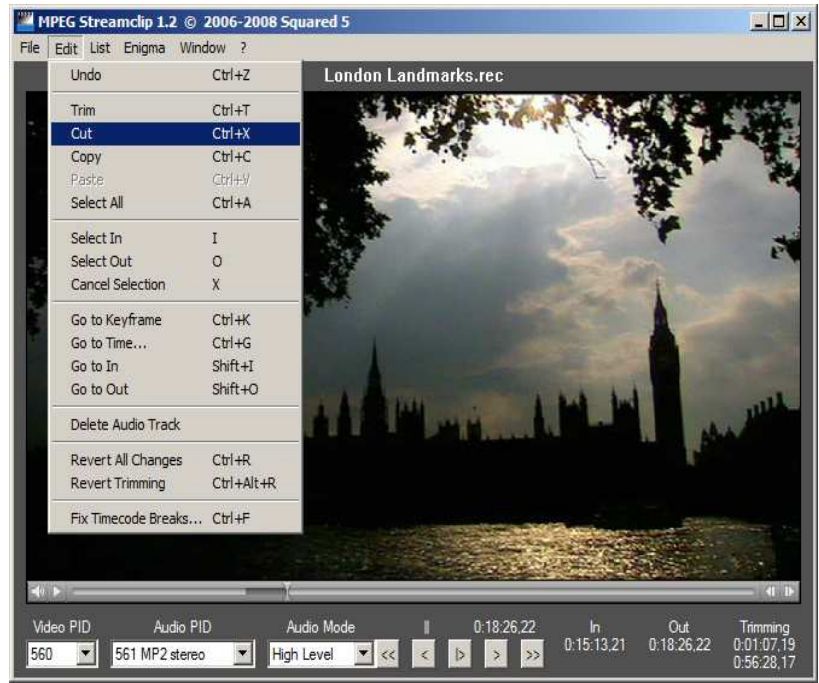
Use the Up and Down keys to find the last key frame of the programme before any End of Part caption or sponsor's logo appears.

Press I to mark the In time.

Next find the first key frame of the next part of the programme after any Beginning of Part caption disappears.

Press O to mark the Out time.

Select Edit > Cut to remove this marked section.

When removing a commercial break delete any black frames after or before the programme material. However, if there is a fade down and up at the break, mark the last black key frame after the fade down and the first black key frame before the fade up. This will retain the fade down and up in the edited file.

After you have made the cut, you can view it. Press the Page Up key to go back 10 seconds and then the Space Bar to play.
If you are unhappy with the edit you can select Edit > Undo to undo it. You can then adjust the in or out times and try again. You can only undo the last cut you made. You can undo the trimming of the start and end at any time by selecting Edit > Revert Trimming. The Revert All Changes option will delete all your trimming and cuts.

Repeat the process for the other commercial breaks, taking care not to miss any.
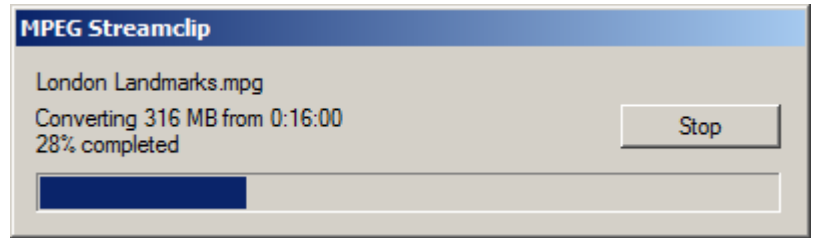
File Conversion

Select File > Convert to MPEG.

Choose the correct folder for the file and press OK.
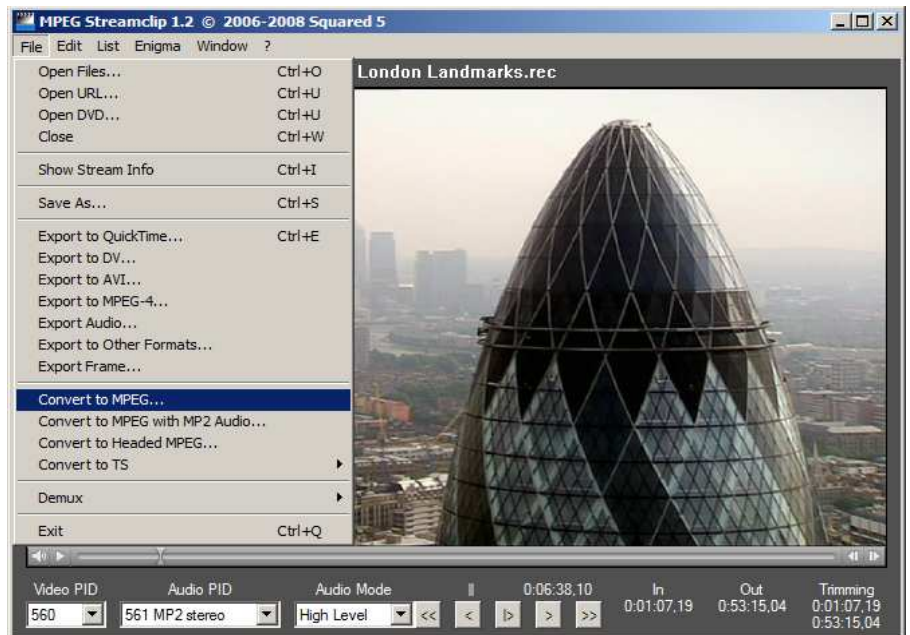
A progress bar will be displayed as the file is converted. If any data break warnings appear, MPEG Streamclip should correct them, although a large number of breaks indicate that the converted file should be checked for errors.

At this point it is worth checking the .mpg file. Minimise MPEG Streamclip, don't close it yet.

Open Media Player Classic and select File > Quick Open File.
Open the .mpg file and check that it plays OK. Check that the vision and sound are in sync at several points in the programme, particularly at the end, since errors accumulate during the programme. If the .mpg file is OK, it can be used for DVD Authoring.

If are problems with a file, try fixing it with PVAStrumento as described below. In order to do this, restore MPEG Streamclip and select File > Convert to TS.

In the DVD Authoring stage you have the option of using a still frame from the programme as a background for the DVD menu. If you wish to do this, use MPEG Streamclip to find a suitable frame, select File > Export Frame. Select OK to save the frame as a .jpg file.

PVAStrumento

To use PVAStrumento you need to make convert your edited file to a .ts file in MPEG Streamclip. (PVAStrumento seems to crash when a .mpg file is processed.)
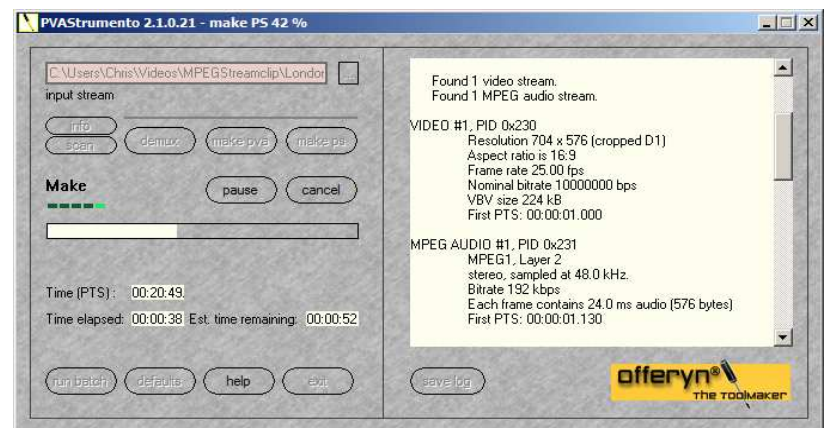
Open PVAStumento

Open the .ts file by selecting the box marked ... next to the input stream box.
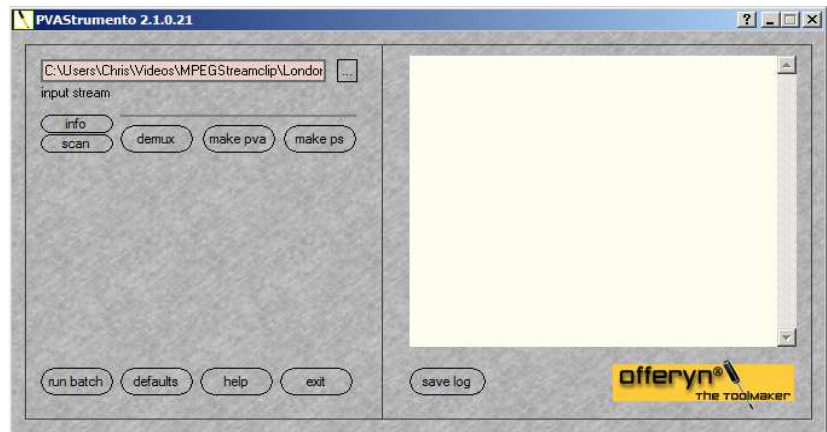
Select Make PS.

Choose a suitable folder and name for the file in the MPEG 2 File box.

Click Start. Wait while the file is processed.

At this point it is worth checking the mpeg file that you have made, particularly if the PVAStumento log screen above has shown errors while processing the file.

If a Topfield file has errors in it, these were probably caused by reception problems when it was recorded and, unfortunately, there is no one method that fixes all types of faults. All you can do is to try different options and see which one works best. Another option is to try using demultipxed mpeg files (.mpv and .mpa) which can be created in both MPEG Streamclip and PVAStumento by selecting Demux instead.

3. DVD Authoring

The process of creating the files for burning on to a DVD, together with an appropriate menu is known as DVD Authoring.

In DVD terminology, each individual programme, episode or other item of programme material is known as a "Title". The DVD can be authored to play the titles in a particular order or as selected by the viewer through a menu.

Each Title can be divided into a number of "Chapters". A chapter menu can be created to enable the viewer to choose to start viewing at the start of a particular chapter. Chapters are always replayed in sequence. Even if you do not wish to select individual chapter points yourself, it is useful to let the DVD authoring program automatically select chapter points at 10 or 15 minute intervals. This lets the viewer jump forward using the skip control on their remote.

To download DVD Styler go to www.dvdstyler.de
Select Downloads and choose the latest version (1.7.2 at the time of writing this guide)
Select DVDStyler-1.7.2-win32u.exe which is the version for Windows.

(Avoid versions 1.7.0 and 1.7.1 which do not work correctly. The earlier version 1.6.2 is OK)

For a copy of the manual, return to the DVD Styler home page, select Docs and then the latest .pdf file labelled "Operation Manual English".

After downloading, install the program by double clicking on DVDStyler-1.7.2-win32u.exe which will run the installation program.
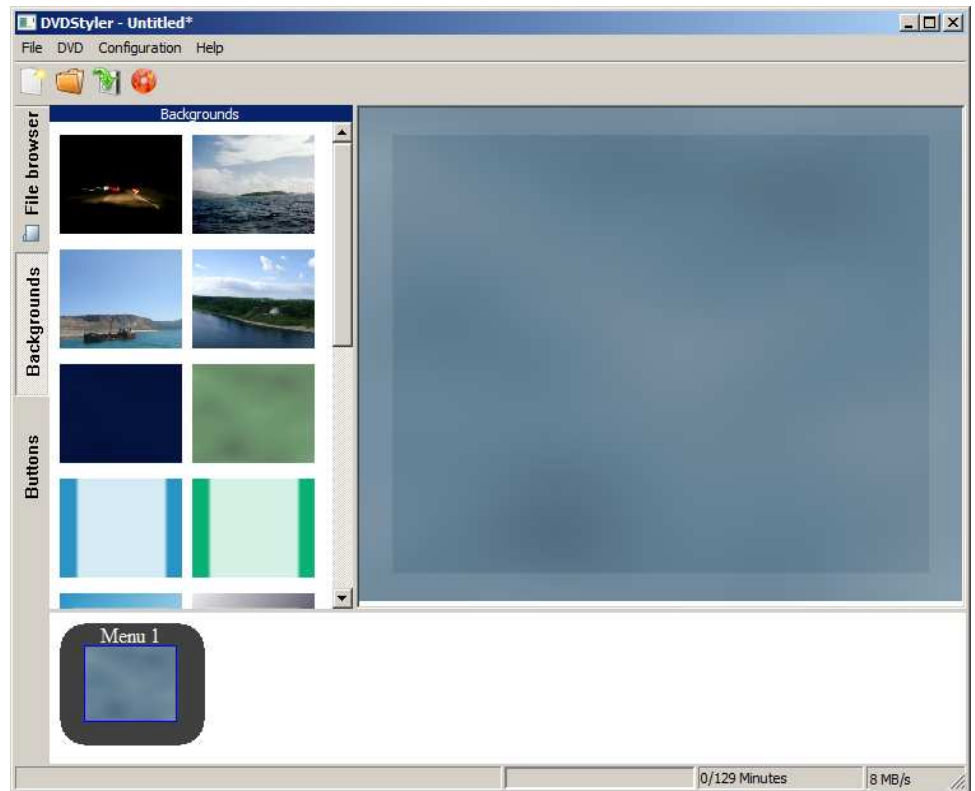
Open DVD Styler

As an example, this guide demonstrates how to make a DVD containing two episodes of a series with a simple menu.

The Menu Editing Window will appear in the main part of the screen.
On the left is the Program Window for selecting files and menu features.
At the bottom is the Project Timeline with a blank menu at the start.

The default Options and Configuration Settings should be OK.

With the "Backgrounds" tab on the left of the screen selected, select a suitable menu background from those offered, by double clicking on it.

In this example, a light blue plain background has been selected.

Select the "File Browser" tab.

Find the folder containing your MPEG files.

(To use an MPEG file that has the extension .m2p, the extension must be changed to .mpg in Windows Explorer or DVD Styler will not recognise it.)

Find the .mpg or .mpv file for the title that you want to be played first on your DVD.

Select the file with your mouse and, holding down the left button, drag the icon down into the timeline, to the right of the menu icon. Release the mouse button.
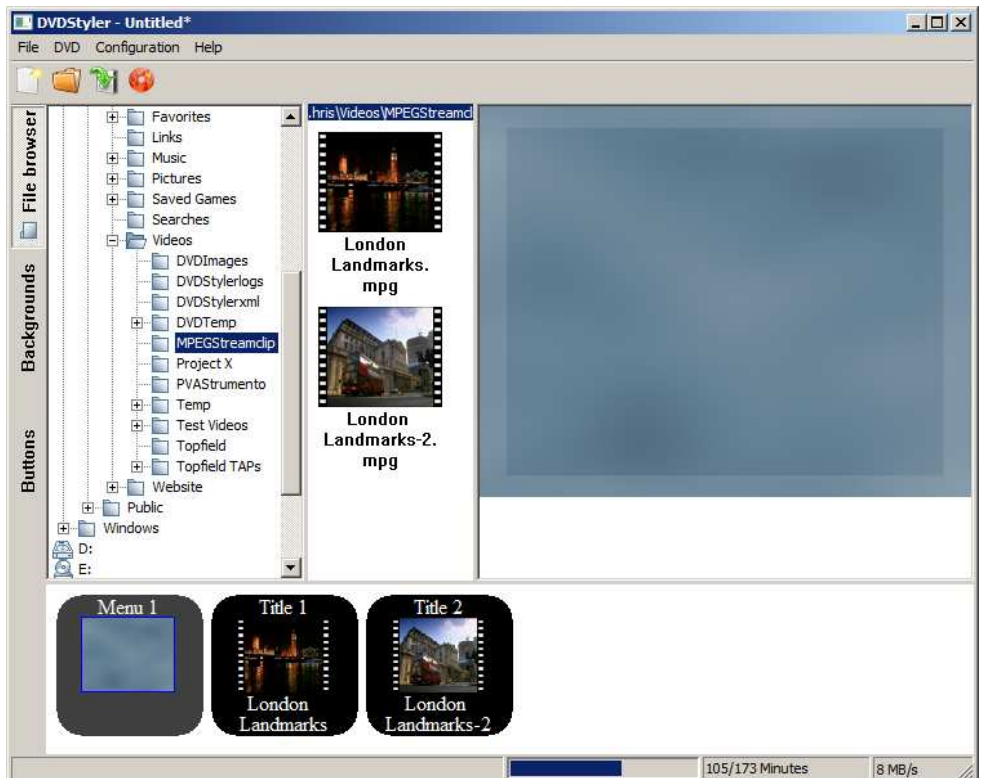
If the file is an .mpv file (vision only), find the corresponding .mpa (sound) file in the directory window and drag it over the .mpv file in the timeline.
If you are putting more than one title on your DVD, Find the next title and drag it into the timeline. Add the sound file if required.

If you are going to copy the files and not re-encode them, the total size of the title files should not exceed 4380 Mb or the titles will not fit on a 4.7Gb disc. If you place your mouse over an icon in the File Browser, the file name and size will be shown at the bottom of the screen. If you place your mouse over an icon in the timeline the duration will be shown.

The total duration of the titles and disc capacity in minutes is shown at the bottom of the screen. The video bitrate shown in the bottom right corner only applies if you are re-encoding the files. It should always read 8MB/s if all the files are being copied.

Re-encoding may be a useful option if you wish to squeeze more titles on a single DVD, although this will reduce the picture quality and increase the time taken to author the DVD. As you add more titles the video bitrate shown will be reduced in order to increase the disc capacity.

You should now set the properties of each title. Go to the timeline, right click on the icon for the title and select Properties.
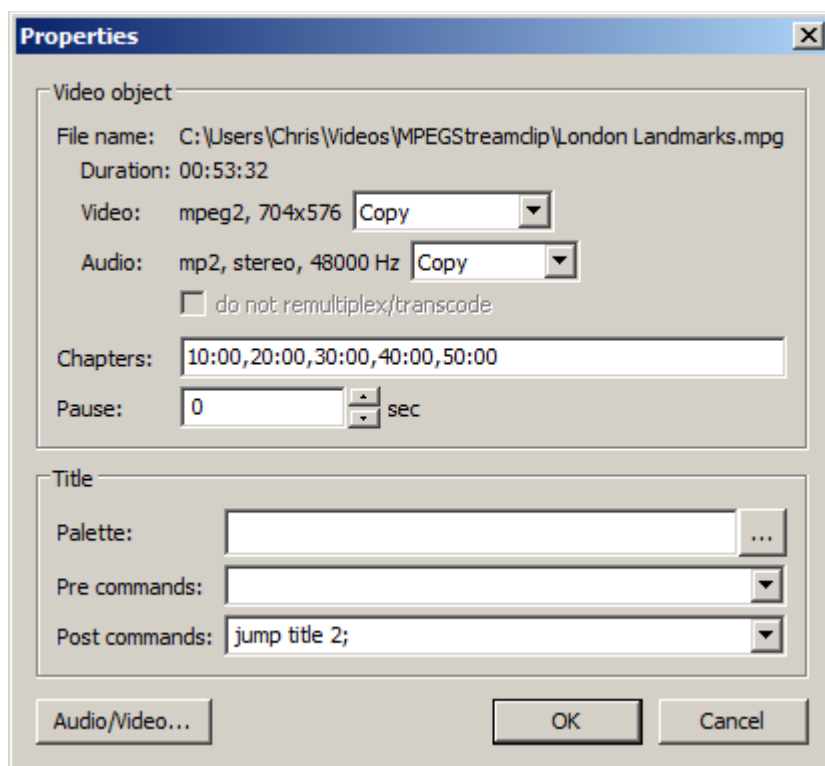
If the .mpg file does not have 740x576 video with mp2 audio the properties will have been set to re-encode the files to these formats.

Change these to Copy for both vision and sound if you wish to re-encode the files.

The chapter times will be set at 10 minute intervals for the duration of the title.

Leave these unchanged unless you have more accurate times to use.

The post command box sets what will happen when the title finishes playing. The default setting is to return to the menu.

Properties	☒
Video object	

File name: C:\Users\Chris\Videos\MPEGStreamclip\London Landmarks.mpg
Duration: 00:53:32

Video: mpeg2, 704x576 | Copy | ▼

Audio: mp2, stereo, 48000 Hz | Copy | ▼

☐ do not remultiplex/transcode

Chapters: 10:00,20:00,30:00,40:00,50:00

Pause: 0   ⬍ sec

Title

Palette: _____ ...

Pre commands: _____ ▼

Post commands: jump title 2;   ▼

Audio/Video...   OK   Cancel

If you would like the DVD to go straight to playing Title 2 after Title 1 finishes, change the post command of the Title 1 properties to "Jump title 2".

Menu Design

To design a menu, you first need to select some text and buttons. A button is some text or a symbol that is selected by the viewer to perform a particular action.

Select the "Buttons" tab on the left of the screen. Select a button with your mouse. The one labelled "Button" will do for this example.

Drag the button into the menu window and place it in a suitable position. Release the mouse button. The button text will change to "Button 1"

If there is only one title, one button is enough.

In the example shown, there are two titles, so select the same button again in the button menu and drag it to another position in the menu window.

The button text will change to "Button 2"
Select more buttons for any other titles.

To change the button text, right click on the button and select Properties.

Type the required text in the label box. In this example, "Play Episode 1". Since the type is rather small, select the font button and choose a larger size.

The action performed by the button is selected in the "Action"- "Jump to" box.
For the first title leave as the default, "Play Title 1".

You can also change the colour of the text.

"Normal" is the colour of all the unselected buttons, if there is more than one.
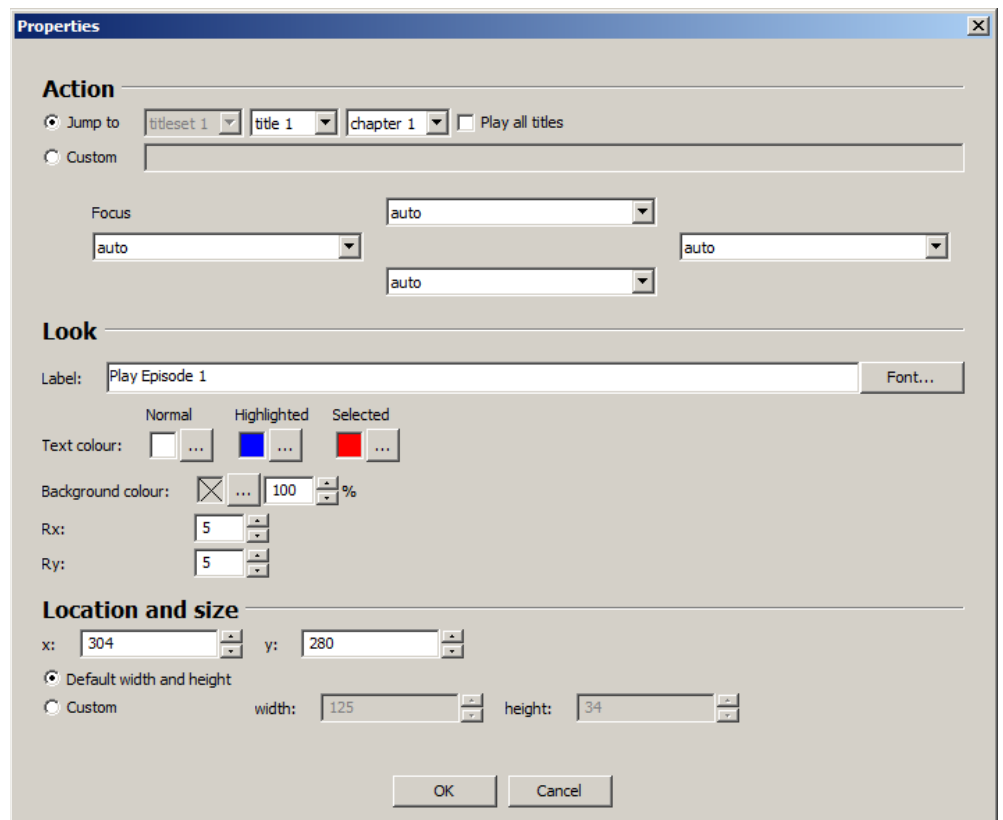
"Highlighted" is the colour of the button selected using the arrow buttons on the DVD remote control.

"Selected" is the colour that the highlighted button will change to when "Enter" is selected on the remote. If you change the colours, ensure that all 3 colours will be visible on the background.
Press OK.

For the second button in this example, change the label text to "Play Episode 2". The Jump to box must be changed to "Title 2" so that the DVD plays the correct episode when the button is selected by the viewer.

Additional text can be added to the screen by right-clicking anywhere on the screen.

Select Add > Text

Type the required text in the text box. In this example type the Name of the Series. To change the font, right click on the button and select Properties.

Select the font and choose OK

If there are only 2 buttons on the screen, it is helpful to the viewer if there is some additional text of the same colour as the normal button colour, otherwise it is not obvious which button is highlighted.

Having set the text of the buttons, their positions on the screen can be moved by holding down the left mouse key. Change the text size, if needed.

Other Menu Options

DVD Styler offers a wide variety of menu design options, see the DVD Styler instruction manual for more details.

One option, shown here, is to use a still frame from the programme as the menu background. This needs to be chosen and saved as a .jpg file in the previous stage using MPEG Streamclip.

Double click on the .jpg file in DVD Styler to select it. The position and colour of the buttons will need to be changed to suit the picture.

Saving Your Design

You can save the file and menu settings by selecting the icon with the green arrow at the top of the screen.

4. DVD Burning

Select the red Burn icon.

DVD Styler will create the required files and then burn the DVD.

It is also possible to just create an .iso image file which is an exact copy of the data that would be recorded on the DVD, and then burn the disc later.

Select either "Create iso image" or "Burn DVD"

Create a folder in the temporary directory box for the temporary files.

If you are creating an iso file, choose a suitable folder and name for it in the "Save to" box.

If you are burning the DVD, insert a blank disc and check the correct drive is selected.

If you are using a new DVD-RW disc or are re-using one that has not been erased, tick the format DVD-RW box.

Select Start.

Details are displayed as the process continues. If you are re-encoding the files this will take a long time, possibly up to twice the duration of the programme material. The "fps=" figure in the log file indicates the speed of encoding. If you are just copying the files, this should only take a few minutes. Some stages of the process give more regular updates than others, so there may be several minutes while nothing appears to be happening. Eventually, an estimated finish time will be displayed.

Note any warning messages. Serious ones are coloured red.

Watch out for messages like:
WARN: Discontinuity of in audio channel
WARN: audio sector out of range
This means that you have some out of sync or missing audio at some point on your DVD.

One problem with DVD Styler is that some computers will occasionally not delete some temporary files, because they are being accessed by another the program. This can occur if a file indexing program, such as Google Desktop, is operating in the background. The best solution is to uninstall Google Desktop. This problem will also arise if you cancel the burning operation before it has finished. If you get a "can't delete file" error message, choose a different folder name in the temporary directory box and Start again.
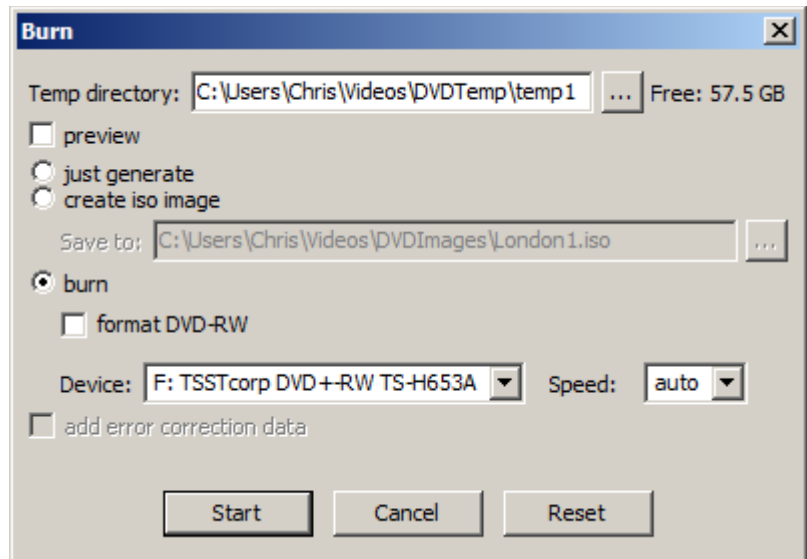
These temporary files can be deleted later when the computer is next restarted.

Hopefully you will get a green message saying the DVD has been burnt OK.

If you have chosen to make an .iso file, you can open this file using VLC Media Player. Select "All Files" in the Open File window to see the .iso file. VLC Media Player will enable you to check the vision, sound and menu buttons before burning the disc. To burn the disc you will need to use a separate program. If a disc burning program was not provided with your computer, there are a number of disc burning programs available to download, such as ImgBurn. (www.imgburn.com)

Check the disc in a DVD player. Check that the all menu buttons perform to intended function. Check that the vision and sound play correctly and are in sync with each other at several points in the programme. Go to the end of the programme and check that the player plays either the next title or returns to the menu as intended. If there are any problems with the vision or sound, re-check the same points by playing the MPEG files that were used to create the DVD, to find out where the problem may have occurred. You may need to try different options for creating the MPEG files as described in the previous section.

When you have successfully created a few DVDs, don't forget to delete all the intermediate files. Otherwise your computer's hard disc will soon get full up.

Good Luck

Making DVDs using MPEG Streamclip and DVD Styler   Version 1.2

Author: Chris Playll (span15@hotmail.com)   April 2009

Software versions described:
Altair Version 1.250
MPEG Streamclip Version 1.2
PVAStrumento Version 2.1.0.17
Media Player Classic Version 6.4.9.0
VLC Player 0.9.4
DVD Styler 1.7.2