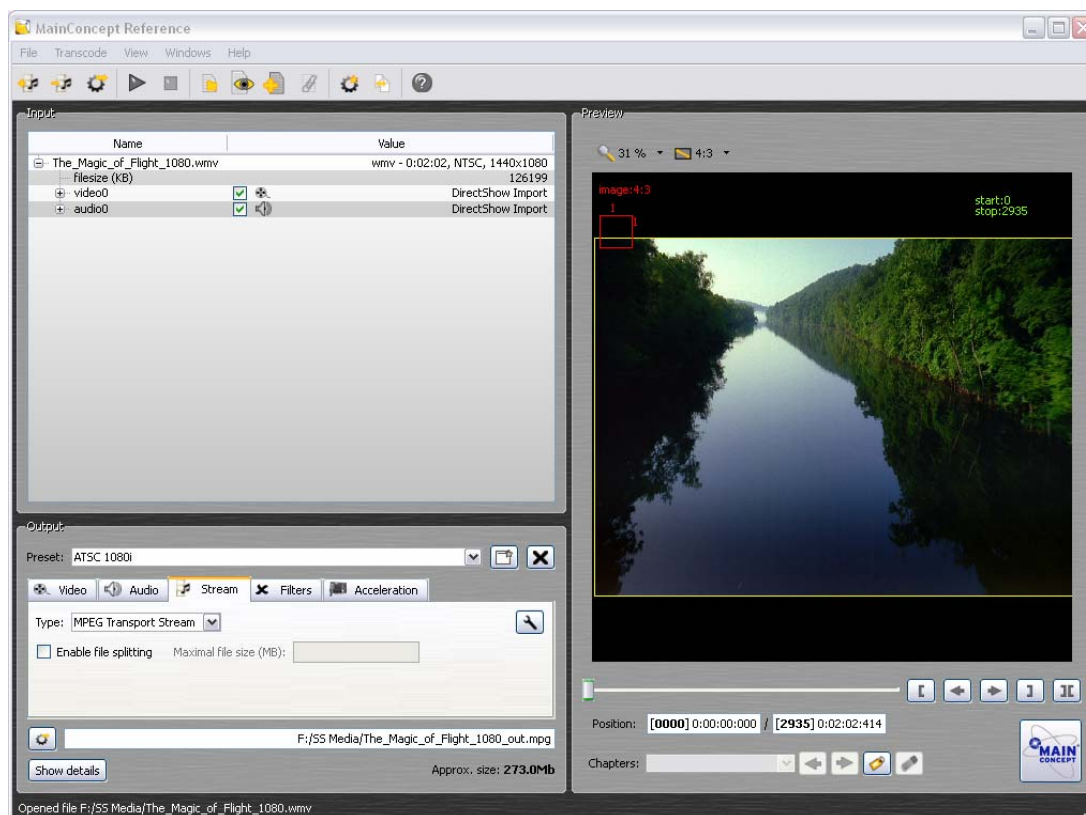


SignStream Tips

Purchasing and Using MainConcept Reference with MPEG Codec



Reference from Main Concept is a more advanced version of their original MPEG Encoder 1.5, used to transcode MPEG2, AVI, and WMV video files to an ATSC MPEG-2 Transport Stream. Because SignStream systems have a variety of needs and uses, this program is not included with the SignStream server.

The key advantage of this application over the previous MPEG Encoder is the inclusion of Dolby Digital, which is needed for audio playback on HDTV tuners. Overall performance in converting files is better than the old application as well.

This application is available from www.mainconcept.com. Go to Consumer Products and download the free demo version of MainConcept Reference. You can use this application to create the ATSC Preset for coding, and practice creating Transport Streams from a variety of sources – videos from this version will carry a MainConcept logo. To purchase the application, go to MainConcept/Reference and choose the MPEG-2 Codec – this will cost \$450, as of this printing. Presently, Reference is only available for Windows OS.

There are more sophisticated programs, such as [FlipFactory](#) and [AnyStream](#), that are designed for studio and broadcasting level applications and offer many more features, but at a far higher price.

Many types of video files can be converted to ATSC Transport Streams (TS), including MPEG2, AVI, WMV, and some QuickTime files (not all are actual video files). Preferably, the files should be 1920 x 1080 or 1280 x 720, though 856 x 480 16:9 DVD-quality graphics-based videos are usable as well. Avoid 4:3 (640 x 480) SD video files, the converted TS won't play in SignStream. A more sophisticated encoder that can add black bars to the sides of the video is required.

Setting up Reference Presets for ATSC Encoding

In version 1.1, the current ATSC preset does not have the correct settings. Here's how to import a correct presets.

1. Go to <http://www.crwww.com/CRWeb/SignStream-Content.asp> and download the ATSC Preset file, copying to your desktop.
2. Launch Reference and select the **Windows/Preset Manager** menu (or press F6).
3. Click on **Import**, browse, and select the CR_ATSC_Ref_Settings.mps file.
4. Click on **Open** to import the settings.

1080i or 720p?

We've created presets for both 1080i and 720p Transport Streams. Choose one or the other, but be consistent. – the playlists will run seamlessly if all files are 1080i or 720p. There will be a significant break-up between videos of different formats.

Also note that 720p files aren't significantly smaller than 1080i files. 1080i streams video using alternate 540-line fields per frame, 720p employs two 720-line progressive fields in each frame. As a result, both contain about the same amount of data. You will notice that the ATSC 720P preset encodes much faster than 1080i.

Encoding Video Files to ATSC



- Launch **Reference**. Tip – some users install MPEG Encoder into the SignStream server. That way the larger Transport Stream is created right in SignStream Media E: drive.
- **Video Source:** Click the Media icon on the far left to browse to a media file. You will have to select All Files to find Windows Media Video files (.wmv). Other file types include .AVI,.MPEG, or .MOV files.
- **Output file:** Click the “gear” icon to the right of the two Media icons. Reference will choose a default file name for you.
- **Preset:** Select the custom ATSC 1080i or 720p preset
- **Transcode:** Click the Play icon.
- **Rename:** Change the default .MPG extension to .TRP, the only extension recognized by SignStream
- **Copy:** Copy file to the SignStream Media directory
- **Reset:** Go the SignStream Media Express Web page, and click to **Media** page and click the **Reset** button in the **All Cards** section. This will force Media Express to re-scan the media titles.

Also note that installing **Reference** in the SignStream Server allows its Windows Media Player to play .trp Transport Files – and you can preview .TRP files in your PC if **Reference** is installed. Actually, if you install Reference, then uninstall, the TRP codec will stay in your PC for Windows Media playback.