

U-LIFE SYSTEM - A Custom MTX Channel for U-Life

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U-Life Logo

1. INTRODUCTION

U-LIFE is a Taiwan's leading home shopping television network based in Taipei, has implemented a cutting edge Etere system to manage the send on air of its five cable channels. U-LIFE has chosen Etere as the optimum solution based on its expertise and experience in the Asiatic market, a crucial characteristic that ensures the implementation of a broadcasting system able to work along with the most modern equipment.

In past, a distributed Etere system has been deployed to provide U-LIFE with a complete digital environment, enabling them to deliver five different channels via Cable Television; as well as with a series of integrated modules focused to perform the most delicate operations that forms the broadcast chain, from ingest to playout, from programming to video logging, from data transfer to remote access.

U-LIFE has required Etere to implement a simple but powerful application able to transmits media content independently from the main system and directly across one or more channels, Etere, as usual, has developed a standalone player able to send on-air a list of user-defined video files, allowing operators to define the individual timecodes and the sequential playout order.

2. OVERVIEW

Etere Standalone Player is the application developed by Etere to permit operators to easily made up a playlist and put it in playback across a Matrox video card, this key application permits stations to go directly on-air without passing for the traditional broadcast steps, all using a simple and user-friendly interface:

Etere Standalone Player is the ideal solution for a playback during system delays or automation failures, allowing a single operator to perform a direct playout through a certain output; the figure below clearly illustrates how Etere Standalone Player simplifies the broadcasting process:

Etere Standalone Player, which is based on Etere MTX technology, simplifies the broadcasting process by allowing a quick-playing of a playlist of video files selected by the operator. This application provides a several key features including:

- Support for SD/HD digital (SDI) video formats,
- Support of the industry-standard MXF file format,
- Genlock reference signal for a synchronized playout,
- SOM and EOM timecodes to define the playable video segment,
- Playlist management for a sequential playout of media files,
- Drag and drop features with load, save and edit functions,
- Most common media playing functions (play, pause, stop, previous, next, etc),
- Preview capabilities for a real-time monitoring of the output channel,
- Direct transmission to the output(s) for a broadcast without delays.

3. USING ETERE STANDALONE PLAYER

The Etere Standalone Player consist of a single window on which all operations can be performed, it is mainly divided in three key parts as shown in the picture below:

Transmitting video files with Etere Standalone Player it is as easy as following the next procedure:

1. Under the Files Selection area, select the directory which contains the files and add them to the playlist,
2. Organize under the Playlist the video files to be played (list position and timecodes), or just open an already existing playlist,
3. Use the Playback Controls to start transmitting the playlist.

3.1 Files Selection

Under this section it is possible to select the folder on which video files intended to be included in the playlist are stored, once the folder is selected, all video files contained on it will be listed (indicating filename, SOM, EOM, duration and resolution):

Configuring parameters

The configuration area permits to indicate the characteristics that video files must have in order to be allowed within the playlist, these parameters include:

- Genlock: Indicate the Genlock source (and channel) to be used for locking from reference, available options include input internal, black burst or SDI video.
- Channel: Select the channel of the video card to be used for the playout,
- Resolution: Set the resolution that video files must have in order to be inserted within the playlist. Available resolutions includes:

Timecode editing

To access the edit window for a certain video file, just make double-click on it, a small and intuitive window with preview capabilities will be opened, allowing setting the SOM and EOM timecodes for the selected video:

Please note that only one editing window can be opened at time, and it will use the first free channel founded.

Add to playlist

In order to insert video files into the playlist, just select one or more video files (multi-selection is supported) and perform one of the following actions:

- Append to playlist: Click this button and all selected videos will be inserted in the Playlist,
- Drag and drop: Move them manually into the Playlist by using the drag and drop feature, video files will be allowed to be placed only after the current on-air event (and also after those broadcasted in case the playlist is currently being transmitted).

Please note that, in order to be inserted in the playlist, video clips must meet the resolution set in the configuration area.

3.2 Playlist Management

The playlist is where all video files intended to go on-air are placed, video files listed here will be sequentially transmitted according to the position within the list. Functions available in the playlist include:

- Delete from playlist: It simply removes the selected video file from the playlist,
- Edit in playlist: Use it to edit the selected video clip, that is, modify its SOM and EOM timecodes,
- Load playlist: It will open an existing playlist saved in .MPL format.
- Save playlist: It will save the current playlist as an .MPL file.

Once finished to prepare the playlist, make double-click on the video file intended to be transmitted as first, the file will be cued and will be ready to be started from the Playback Controls area.

3.3 Playback Controls

This area is simply intended to display a preview of the current on-air video clip, while allowing viewing some video information including the audio decibels (dBFS), and the total, current and remaining playlist time.

The proper playback area allows performing the most common media playing

functions including:

- Play previous: It simply plays the video clip placed immediately before the current cued/playing video clip,
- Play current: This button will start the transmission of either the first video clip of the playlist or the cued video clip,
- Pause current: Use this button to temporally pause the transmission, to for example, perform the jog&shuttle,
- Stop: This function interrupts the playback, all the playback information (total, current and remaining playlist time) will be restarted,
- Play next: It simply plays the video clip placed immediately after the current cued/playing video clip,
- Jog & Shuttle: This feature, available only when the playback is paused, permits to position the playback to an exact part of the video timeline,
- Slower/Faster playback: Set the playback speed value by moving the cursor across the bar.

4. BENEFITS

This paper has described how the implementation of a standalone player will provide the station with a large number of operational benefits derived from the use of an independent player; these benefits have been condensed in the following points:

- Reliability, the standalone player is based on the Matrox SDK which permits to get the most of a Matrox video card to create fully customized playout channels,
- Independency, since the standalone player doesn't require an Etere installation to function, it can be launched from any workstation with a Matrox SDK installed,
- Simplicity, its simple and user-friendly interface makes of the standalone player the ideal solution for a fast and safe playback of media files,
- Efficiency, the use of a playlist and the preview capability makes of the standalone player the right solution for an efficient playout.
- Flexibility, the standalone player support the use of Genlock inputs and custom selection of channels,
- Scalability, a standalone player allows implementing more playout channels without altering the main workflow