

# moviejaySX

v.7.0

User's manual

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# Overview

moviejaySX is a powerful and flexible software to manage all your TV playout requirements: from live assist to playlist scheduling up to full automation, CG (Character Generator) projects, integration of external feeds, streaming, and much more. All your video clips digitally stored on hard disk, without any custom hardware components, just a software solution as easy to use as your PC, with an excellent price/quality ratio!

moviejaySX runs on the widely known Windows 10 operating system and uses the familiar operating environment of a standard PC: a simple and user-friendly interface perfectly suitable also for non-trained staff.

Tested and constantly improved in cooperation with real-life broadcasters, moviejaySX is the key solution for your broadcasting environment, where computers become the heart of a TV station: clips, programmes, commercials, pre-recorded shows, all compressed up tenths of the original size thanks to state of the art video compression standards and digitally stored on Hard Disks.

moviejaySX Main features:

- Live assist or long-term unmanned full-automation.
- Powerful preview window allowing easy setting of fade markers into any video clip with 1/10sec precision.
- Works on a standalone PC. No need to install video servers and separate storage servers: save money on the hardware without missing the possibility of future upgrades.
- Works with broadcast grade playout cards allowing seamless back-to-back, multiformat playout on Blackmagic, Deltacast, Stream Labs and realtime streaming.
- Broadcast-grade integrated video codecs for mp4, MOV, MXF (including AVC-Intra 50 and 100), MKV, AVI, WebM, MPEG1, MPEG-2 (PS e TS), VOB, MPEG4, DivX, Xvid, AVC/H264, WMV (Windows Media Video), M-JPEG, DV, DVCPRO HD, ProRes 422, VC-3 (aka DNxHD), JPEG2000, VP8, etc..
- Carefully engineered on building blocks, so you may purchase just the needed channels and features and save money on your initial purchase.
- Integrated CG window for realtime graphics saves money on purchase of dedicated logo generators.
- Unlimited playlists scheduling, featuring auto firing by day and time.

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MoviejaySX on-air module and related scheduling/setup features are included in the same application for maximum ease of use. Of course, thanks to Windows built-in networking features, sharing computers resources in the network, access and modify information stored in the on air PC working from the production studio PC or from the Internet. Scheduling commercial breaks or transfer video clips from the production workstation to the on air studio is simple and fast as a few mouse clicks!

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# Quickstart

Here is a short summary of basic operations for speeding up moviejaySX initial setup. For further details we strongly suggest you to carefully read the user's manual!

**Installing your customized USB dongle:** If you purchased a retail package, insert the USB dongle in one of the available USB ports. While Windows is running, the dongle is recognized and installed automatically following a search on Windows Update.

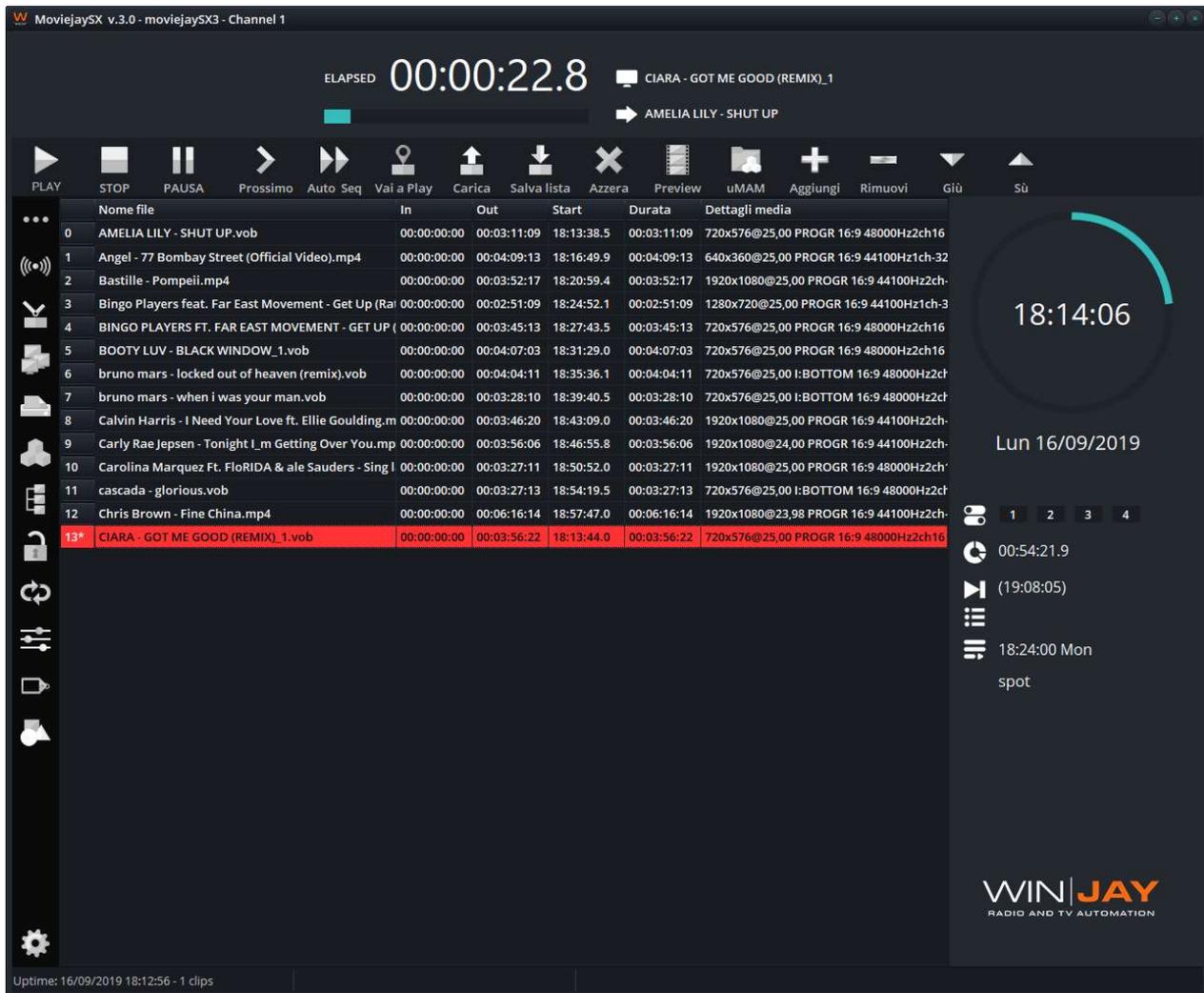
## Installing MoviejaySX

1. Insert the installation CD in your CD-ROM drive.
2. Double click on the setup.exe file in the "moviejaySX" folder to start setup.
3. Follow the on-screen guided instructions which will guide you for the rest of the setup procedure.
4. Copy the wjlogo.png file from the main folder of your installation CD to MoviejaySX installation folder (usually c:\program files (x86)\moviejaySX if you choose the default one). This file is your station logo which is needed for software customization.
5. Click "Start", "MoviejaySX", "MoviejaySX" to start the on-air module, which should start without any problems, then click on "Setup" button and proceed to perform initial system setup and configuring your video playout card, etc.

Once you're done with setup and initial testing, we strongly suggest you to fine tune your system setup for best performance:

- Disable screen savers and power saving modes: from the Windows desktop, click the mouse right button, select "properties", click on "screen saver" tab, and from the drop-down menu select "none". In the "Screen power saving setup" section, click on "setting" and from the drop down menus "turn down monitor" and "disable hard disks" select "Never".
- Add MoviejaySX to Windows autostart group, so the software will automatically restart after a power failure.
- In your PC BIOS setup screen, set the "AC Power Loss Restart" (o similar) feature such as your PC turns on again automatically after a power failure.

# The on-air window

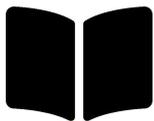


This is moviejaysX main window, allowing to control most of the features, open other windows and get details about the current system status. It is the screen shown on application startup and for the most part of program execution. From top to bottom we find:

- An upper display, which shows elapsed and remain time for the clip currently playing, name of current and next clip.
- At the top just under the display, an horizontal button bar to control main playlist flow.
- In the center, the list of events in the play queue.
- A sliding side menu on the left, allows opening additional windows and access other features.

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- A right panel, that contains the clock and shows trigger status, current and next scheduled playlist, queue length, and your station logo.
  - A status bar on the bottom, which shows uptime and clips counter.

You can freely resize the on-air window to fit more playlist items, all controls inside the selection windows will be dynamically allocated accordingly.



## DETAILED DESCRIPTION

### UPPER DISPLAY



#### PLAYBACK COUNTER

Shows elapsed time from beginning of the current clip, or remaining time to the end of the clip. In both cases, the net time will be indicated between the user-set Start and End markers (if any), otherwise, the values are calculated on the total clip length. The progress bar below graphically displays the elapsed time from start of clip, or remaining time to the end



Click on the counter to toggle between ELAPSED and REMAIN time.

On the right of the counter:



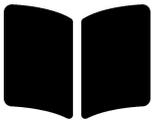
#### CURRENT CLIP

Displays the current playing file



#### NEXT CLIP

Displays the next file in the playlist.



## DETAILED DESCRIPTION EVENTS GRID

	File name	In	Out	Start	Duration	Media details
9	Afrojack_ Steve Aoki - No Beef feat Miss Palmer (of	00:00:00:00	00:05:26:05	17:28:16.7	00:05:26:05	1920x1080@23,98 PROGR 16:9 48000Hz2
10	samuelesartinicrazibiza_mylovin_video_it63v11000	00:00:00:00	00:03:39:23	17:33:42.9	00:03:39:23	1280x720@25,00 PROGR 16:9 48000Hz2cl
11	seboreedmeetsweathergirls_itsrainingmen2k12_vic	00:00:00:00	00:02:43:04	17:37:22.8	00:02:43:04	1280x720@25,00 PROGR 16:9 48000Hz2cl
12	liljonfeatlmfao_drink_videouncensored_usus11220	00:00:00:00	00:05:08:24	17:40:06.0	00:05:08:24	1920x1080@23,98 PROGR 16:9 48000Hz2
13	courtneyarguevsjeremygreenefeatpitbull_makeitra	00:00:00:00	00:03:15:04	17:45:14.9	00:03:15:04	1920x1080@23,98 PROGR 16:9 44100Hz2

The event grid lists the events in the play queue. Informations in the columns indicate:

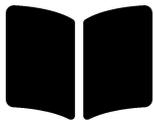
- **Filename:** clip's filename or complete path info, or command related information. All clips set as "insert" are marked with the » symbol.
- **In:** Start marker, if set.
- **Out:** End marker if set.
- **Start:** clip's start time, calculated from playlist's start time and updated each time a new clip starts playing.
- **Duration:** clip's length.
- **Media details:** video size, frames per second, aspect ratio, audio sampling rate etc.

The leftmost column indicates the clip's sequence number inside the playlist; when moviejaysX is playing, an asterisk highlights the clip currently playing; as well, the same clip is highlighted in red inside the grid. All the events belonging to a list loaded as "insert mode" are marked with the » symbol.

## KEYBOARD SHORTCUTS SPEED UP YOUR ACTIONS

**DOUBLE CLICK** on any event in the grid to switch playing from that event

**SWAP EVENTS** with a simple drag and drop: click and drag any clip from the original position to the new desired position into the play queue.



## DETAILED DESCRIPTION

### TOP BUTTON BAR



#### **PLAY**

Starts playing the events in the play queue.



#### **STOP**

Stops playing, this also turns useful if you want to temporary stop a clip, and restart it later on.



#### **PAUSE**

Pause playing on still frame. To restart playing, click on Play button.



#### **NEXT**

Skips playing to the next clip in the play queue.



#### **AUTO SEQUENCE**

Switches clips' sequencing mode between Auto Sequence and Auto Stop. In Auto Sequence mode clips in the play queue will started automatically one after another, while in Stop mode moviejaySX plays the current clip, then stops and keeps waiting until you press the Play button.



#### **GOTO PLAY**

Moves the cursor to the clip currently playing. This feature turns useful to quickly locate the clip playing when the playlist is very long.



#### **LOAD PLAYLIST**

Opens a dialog window to reload a previously saved playlist.



#### **SAVE PLAYLIST**

Opens a dialog window to save the current playlist on file, for later reloading or scheduling.



### **CLEAR LIST**

Deletes all the events in the play queue. If the playlist is running, deletes all the elements except the current playing one.



In order to avoid accidental deletion, to activate this feature you must keep the button pressed for at least 1 second.



### **PREVIEW**

Opens the preview window for the clip highlighted in the grid, allowing to preview the clip and eventually edit its Start and End markers.



### **uMAM LOAD**

Opens the uMAM database window to select a clip to load into the play queue.



### **ADD EVENT**

Opens the event selection window (clip or other events such as external feeds, special commands). For more details please consult the related section "The event loading window" on this same users' manual.



You can also add events to the play queue with an usual drag-and-drop: drag one or more video clips from Window's Explorer (or similar applications) and drop them inside the playlist queue grid.



### **DELETE**

Deletes the highlighted event in the play queue. If the playlist is running, attempting to delete the current playing element will have no effect.



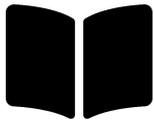
### **DOWN**

Moves the highlighted event one step down in the play queue.



### **UP**

Moves the highlighted event one step up in the play queue.



## DETAILED DESCRIPTION

### LEFT BUTTON BAR



#### OPEN / CLOSE

Opens or closes the left button bar.



#### ENCODER 1/2

Start / stop the 1<sup>st</sup> and 2<sup>nd</sup> encoder, to export the running playlist to file or streaming, according to codec set in the setup window. When any of the encoders are running, the corresponding caption on the right panel will be highlighted.



#### SCHEDULER

Opens the playlist scheduling window, that allows to schedule auto loading of playlists by day and hour.



#### PREVIEWS

Opens the on-air, preview and line input monitoring windows.

moviejaySX offers 3 dedicated windows to allow previewing on-air, preview, and video input. You can freely move and resize windows on your desktop, their position is automatically stored so that the next time the software is started, they will appear in the same size and position.



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## AUDIO MONITORING

Click on the speaker icon to toggle audio monitoring:



Audio monitoring is disabled



Audio monitoring is enabled

The VU-meter shows in real-time the overall output audio level. Signal is represented as peak level in dBs, where the 0 dB is the absolute maximum before a clipping occurs. The VU-meter also includes a peak-hold feature: the peak level segments are temporarily left visible before resetting themselves.

For the video input window only, when the input is set to “WebCapture”, an edit box right to the speaker icons allows to type the URL to load into the browser. You can interact with mouse and keyboard (for example, type a search on Google or click to play a YouTube video) just like a regular web browser.

## VIDEO SOURCE

If picture squeeze feature is enabled, the playlist output is routed to a mixing engine where picture squeeze and video overlays are applied. This button toggles the video preview source between the playlist output and the mixing engine output:



Output from mixing engine is displayed with picture squeeze and video overlays



Clean output from playlist is displayed



### PRINT

Opens the playlist print preview window.



### uMAM EDIT

Opens the uMAM database window for records editing mode.



### LIST MODE

Switches the playlist grid layout to text mode (short path “Media details” + or long path) and graphic mode with video snapshots.

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## LOCK

Click on the padlock to enable/disable the security lock feature.



Lock is off, you can operate the application normally



Lock is on, buttons and keyboard shortcuts have no effect. Also, the application can't be closed by accident. Attempting to use any controls will flash the lock icon in red.

## LOOP

Turns playlist Loop mode on and off.



Loop mode is on, as soon as the last clip is over, playlist restarts from beginning.



Loop mode is off, the playlist stops on the last clip unless it contains any special commands.

## STATION LOGO

Switches the overlay of the selected station logo.



Station logo is switched off.



Station logo is switched on.



Opens the event loading window to select a picture logo or CG project to use as station logo overlay.



### **AUDIO PROCESSOR**

Opens the audio processor window.



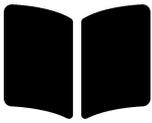
### **CG**

Opens the Character Generator window to perform realtime graphic overlays.



### **SETTINGS**

Opens the software settings window.



## DETAILED DESCRIPTION

### RIGHT PANEL



#### ON-AIR CLOCK

The outer ring highlights the elapsed minutes from start of the hour. The clock displays the current time inside the ring, and current day of week and date below.



#### TRIGGER STATUS

The eight LEDs will turn on when the corresponding contact closure is active, to allow real time monitoring of incoming triggers.



#### QUEUE LENGHT

Shows play queue total length (sum of loaded items' lengths)



#### QUEUE ENDING

Shows expected queue ending time for playback.



#### CURRENT PLAYLIST

Shows denomination of current playlist running



#### NEXT SCHEDULED LIST

Shows start time and denomination of next scheduled playlist.



#### IP OUTPUTS

The indications on the right will be highlighted when the corresponding features (IP encoder, NDI, WebRTC) are active. The encoder label will turn off if for whatever reason the process is stopped, such as in case of a bad network connection.



For both multiformat and WebRTC streaming, an encoder statistics window is available. To show the window, click on the camera icon.

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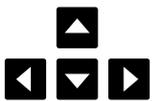
## HOURLY ADVERTISING LIMITS



These labels show the total advertising time according to Italian authority requirements for the 6AM to 6PM and from 6PM to 24PM time slots, for the playlist items set as advertising in the uMAM. This feature is disabled by default from the setup window, so you can safely ignore it.

## YOUR CORPORATE LOGO

The logo hides a secret panel: click on the logo to display some scrolling information about the application, current version, enabled features, and USB dongle serial number if available. At the end, your logo appears again automatically. To avoid that moviejaySX stops execution in presence of minor errors, instead of opening a message box such messages are shown in the same area reserved to the logo and at the same time logged for future reference in a text file named wjerror.log, found in the installation folder. Once you've noted the error message, just double click on the shown messages to return to the visualization of the logo.



## KEYBOARD SHORTCUTS

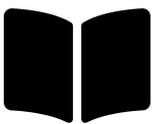
SPEED UP YOUR ACTIONS

### SPACE BAR

Same as pressing "Play" button: starts the current clip in the play queue.

### ESC KEY

Same as pressing "Stop" button: stops the clip currently playing on-air.



## DETAILED DESCRIPTION

CONTEXT MENU

A mouse right-click on the playlist grid opens a dedicated menu for additional features:

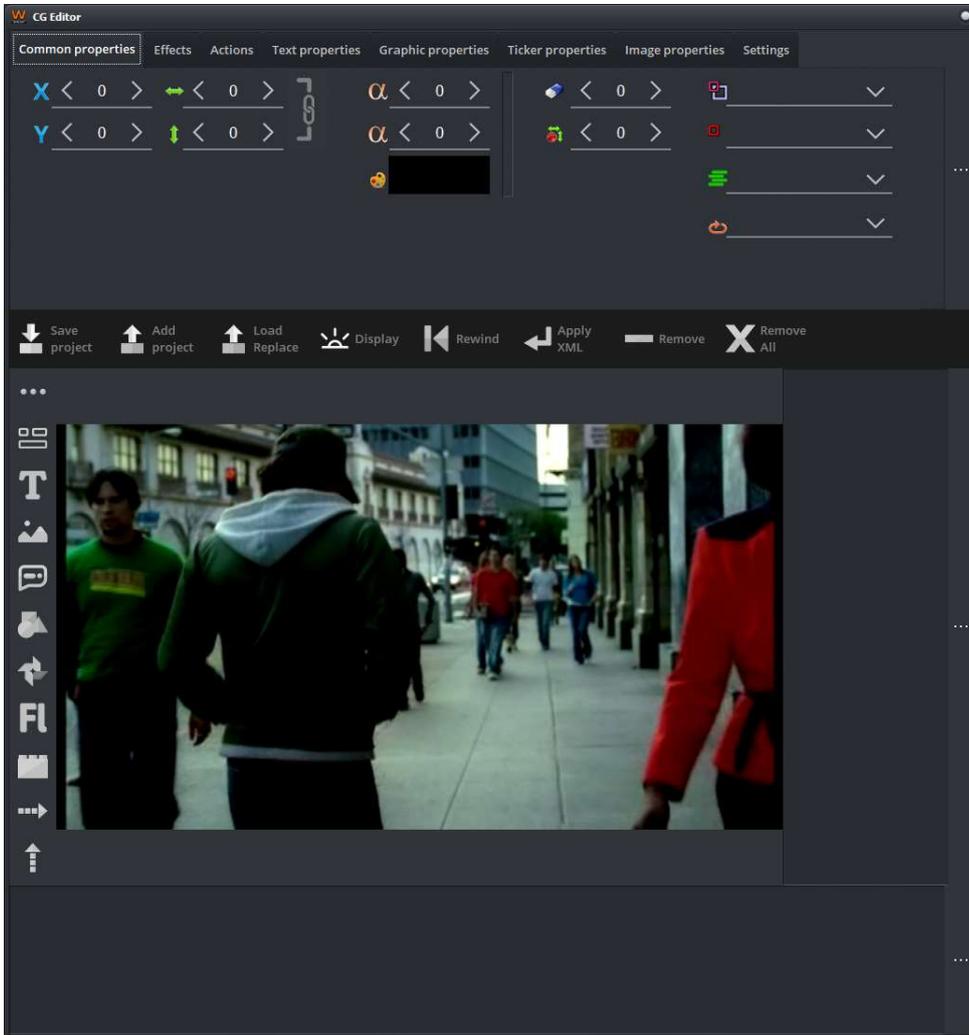
- **Add clip:** Shortcut to open the clip selection window.
- **Add command:** Shortcut to open the command selection window.

- 
- **Delete:** Deletes selected clips.
  - **Loop:** Inserts a <LOOP 1> command to loop the item immediately above.
  - **Preview / trim:** Opens the preview window for the clip highlighted in the grid.
  - **Set Time / XMLTV:** allows to set a reference starting time for the 1<sup>st</sup> playlist item, and to generate a XMLTV compatible file based on the current playlist. For example, should you wish to create a playlist due to start at 10.00, after setting the same time as reference you will be able to verify that the starting time related to all subsequent clips effectively correspond to your desired scheduling. The "Now" button right to the edit box resets the feature to the normal behavior, i.e. the items' indicated start times will be calculated according to the present time.  
moviejaysX generates XMLTV compatible files based on the specific playlist in the queue. XMLTV is a very popular XML based file format for describing TV listings that can be used to populate EGP data on many popular DVB software platforms.
  - **Edit mode:** Enables editing mode, to use cut/copy/paste and selection features. When edit mode is enabled, click on the items inside the play queue to select or unselect the corresponding item. You can also use Ctrl key to select multiple items.
  - **Cut:** Cuts selected clips. You can also use the keyboard shortcut Ctrl-X
  - **Copy:** Copies selected clips to the clipboard. You can also use the keyboard shortcut Ctrl-C
  - **Paste:** Pastes copied clips to the cursor position. You can also use the keyboard shortcut Ctrl-V
  - **Select all:** selects all clips inside the playlist.
  - **Select none:** deselects all clips inside the playlist.
  - **Refresh:** Retrieves actual duration for those playlist items that have been overwritten with a new version (such as newscasts) after the playlist has been already loaded in the queue, and consequently recalculates items' start times for the whole playlist.

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# The CG (Character Generator) editor

The CG Editor allows to perform realtime graphics overlays.



The window is split in three main sections:

- In the top area, several controls organized in tabs allow to set the objects' parameters.
- On the left, a group of buttons to add a new object or edit existing ones, load and save projects, etc.
- In the center area, a video preview window shows the graphic objects overlaying the on-air output while allowing real time editing.
- In the right area, a box lists the graphic objects playing in the CG (text, pictures, etc.)
- In the bottom-right area, a box shows the XML description for the highlighted object.



## STEP BY STEP

### BASIC OBJECT MANAGEMENT

#### **ADDING A NEW OBJECT**

Click and drag an object (such as "Text") from the list on the left to the preview window, and drop it in the desired position

#### **MOVING AN OBJECT**

Click the desired object inside the preview window, drag it freely along the screen, and release the mouse button to confirm the new position.

Alternatively, select the same object from the list on the right of the window, then use the controls on the top to change all required settings.

#### **RESIZING AN OBJECT**

Click the desired object inside the preview window and release the mouse button, or highlight the same object from the list on the right. Move the mouse cursor along the borders, the arrow cursor will change into a bidirectional arrow (left/ right or top/bottom) to highlight the allowed resizing area and direction. Click and drag the object to left/right or top/bottom to change its size, and release the mouse button to the required new size.

Alternatively, select the same object from the list on the right of the window, then use the controls on the top to change all required settings.

#### **DELETING AN OBJECT**

Click the desired object inside the preview window (or highlight the object from the list on the right) and tap the "Del" button on the keyboard. Or alternatively, click the Remove button.



## STEP BY STEP WORKING WITH PROJECTS

### LOADING AND SAVING A PROJECT

After you have completed your project, click the "Save project" button to save your work for later use.

To recall your previously saved projects:

- Click the "Add project" button to reload a previously saved project into the CG, without deleting any other object already in the CG.
- Click the "Replace" button to clear the CG contents and reload a previously saved project. Any object in the CG, if any, will be cleared.

### LINKING A CG PROJECT OR SRT SUBTITLES TO AN INDIVIDUAL CLIP

Other than loading a CG project manually or via the <CG LOAD> commands, when each new file is started, moviejaySX also automatically scans the folder for CG projects or SRT files that, if found, will be automatically loaded into a temporary CG (so, the objects will not be listed into the CG editor):

- If a CG project with the same filename as the clip is found, it will be loaded and used.
- If not found, moviejaySX scans for a .SRT subtitles file and if found, moviejaySX scans for a CG project named "defaultSRT.ml-cgc".
  - > If such CG project is found, it will be used as template for the subtitles file (i.e. the SRT will use font and position settings etc. from the text object named as default "text-000").
  - > If the "defaultSRT.ml-cgc" is not found, the .SRT subtitles will be loaded with default settings.

This feature automates subtitles management and also allows to automatically load a CG project associated to each specific clip.



## STEP BY STEP

### ADDING A TEXT OVERLAY

Click and drag the Text button to the preview window in the desired position, the new object created will be automatically selected while on the top of the window, the Text properties tab will be shown automatically.

- To add text manually: just type the text into the text box
- To copy/paste text from file: click on the "Add text" button and select the text file
- To add a date/time, from the "Text type" select the "date-time" option; inside the text box the default "yyyy/MM/dd HH:mm:ss" macro will appear automatically; you can then edit this macro as desired.

To define the date/time, you can use any of the standard Windows macros such as:

- yyyy - sets the year
- MM - sets the month
- dd - sets the day
- HH- sets the hour
- mm - sets the minutes
- ss - sets the seconds
- tt - sets the AM/PM

Examples:

- the string HH:mm:ss will display the time as 10:15:28
- the string h:mm:ss tt dddd will display the time as 5:15:28 Monday



## STEP BY STEP

### ADDING A TICKER

1. Click and drag the Crawl Ticker button to the preview window in the desired position, the new object created will be automatically selected while on the top of the window, the Ticker properties tab will be shown automatically.
2. You can now type any new text into the box, load text from external file, or assign an external file to track, and change any properties such as font, crawl speed, etc.
  - > To add text manually: just type the text into the text box
  - > To copy/paste text from file: click on the "Add text" button and select the text file
  - > To track the contents from a text file: click on the "Track file" button and select the text file. The ticker includes an automatic file tracking feature so when the text file is modified, the ticker will be updated automatically.
  - > To add a RSS feed: use the text box to type one or more URLs pointing to the desired RSS feeds (one per row).

Please note:

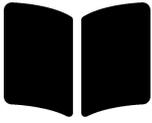
After changing the ticker text or using the "Rewind" button, with the default ticker speed set at -2, it might need up to 10 seconds before the ticker appears again on the screen.



## STEP BY STEP

### ENABLING THE SQUEEZE FEATURE

- To use the video squeeze feature you need to create a standard CG project, complete with video squeezing settings. As always, it is suggested to run moviejaySX in "Editing mode" to avoid messing with any playlist running in the meantime.
- Optionally, from the settings tab select a suitable background mode, such as color bars, so the video window will be clearly shown while adding other graphic objects.
- From the actions tab, inside the squeeze section set zoom and target as desired using the available controls.
- Finally, add graphic objects, like RSS, crawls, etc, in the free space left from the video window, and save the final project.



## LEARN MORE

### COMMON PROPERTIES section

Controls in this section set common properties for the selected object.

#### **HORIZONTAL POSITION**

Sets the item's horizontal position.

#### **VERTICAL POSITION**

Sets the item's vertical position.

#### **WIDTH**

Sets the item's width.

#### **HEIGHT**

Sets the item's height.

#### **PROPORTIONAL**

If the button is down, any changes in the width will be proportionally applied to height.

#### **TRANSPARENCY**

The Alpha value sets the item's transparency from 0=not visible to 255=solid color.

#### **BACKGROUND COLOR**

The box shows the current item's background color. To change the color, just click the box and select the desired color from the dialog box.

#### **BACKGROUND TRANSPARENCY**

The Alpha value sets the item's background color transparency from 0=not visible to 255=solid color.

#### **EDGE SMOOTH**

Sets the item's edge smoothing value.

#### **PIXEL ASPECT RATIO**

Sets the item's pixel aspect ratio.

#### **SCALE TYPE**

Sets the item's scaling mode.

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**ALIGNMENT**

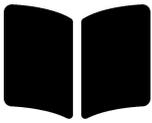
Sets the item's alignment.

**INTERLACE**

Sets the item's interlace, to achieve smooth animation over interlaced video.

**PLAY MODE**

Sets the item's playing mode.



## LEARN MORE

### EFFECTS section

Controls in this section allow to set various effects for the selected object.

#### **HORIZONTAL SPEED**

Sets the item's horizontal speed.

#### **VERTICAL SPEED**

Sets the item's vertical speed.

#### **SHADOW BUTTON**

Enables or disables the Shadow effect.

#### **SHADOW COLOR**

The box shows the current shadow color. To change the color, just click the box and select the desired color from the dialog box.

#### **SHADOW TRANSPARENCY**

Sets the shadow's transparency from 0=not visible to 255=solid color.

#### **SHADOW BLUR**

Sets the shadow's blur value.

#### **SHADOW HORIZONTAL OFFSET**

Sets the shadow's horizontal offset comparing to the associated object.

#### **SHADOW VERTICAL OFFSET**

Sets the shadow's vertical offset comparing to the associated object.

#### **BLUR BUTTON**

Enables or disables the Blur effect.

#### **BLUR ALIGN**

Sets the Blur effect alignment.

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**BLUR WIDTH**

Sets the Blur effect width.

**BLUR HEIGHT**

Sets the Blur effect height.

**GLOW switch**

Enables or disables the Glow effect.

**GLOW VALUE**

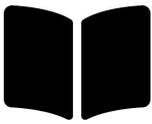
Sets the Glow effect value.

**GLOW WIDTH**

Sets the Glow effect width.

**GLOW HEIGHT**

Sets the Glow effect height.



## LEARN MORE

### ACTIONS section

Controls in this section run special actions on the selected object.



#### **LAYER UP**

Moves the selected item one layer up.



#### **LAYER DOWN**

Moves the selected item one layer down.



#### **BRING TO FRONT**

Moves the selected item to the front (upper) layer.



#### **SEND TO BACK**

Moves the selected item to the background (lower) layer.



#### **ALIGN LEFTS**

Aligns the selected objects on the left margin.



#### **ALIGN CENTERS**

Aligns the selected objects on the common middle (horizontally).



#### **ALIGN RIGHTS**

Aligns the selected objects on the right margin.



#### **ALIGN TOPS**

Aligns the selected objects on the top margin.



#### **ALIGN MIDDLES**

Aligns the selected objects on the common middle (vertically).



#### **ALIGN BOTTOMS**

Aligns the selected objects on the bottom margin.

---

**SQUEEZE**

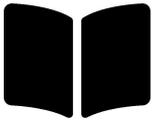
Enables the video squeeze feature and allows to set the video rectangle size and position.

**ZOOM**

Sets the video rectangle size from minimum (not visible) to maximum (full screen).

**TARGET**

Sets the corner to which the video rectangle will be hooked when resized (Top-Left, Top-Right, Bottom-Left, Bottom-Right).



## LEARN MORE

### TEXT PROPERTIES section

Controls in this section set properties for the selected text object.

#### **TEXT BOX**

For texts objects, allows to type the text or macro to overlay.

#### **TEXT COLOR**

The box shows the current text color. To change the color, just click the box and select the desired color from the dialog box.

#### **OUTLINE COLOR**

The box shows the current outline color. To change the color, just click the box and select the desired color from the dialog box.

#### **OUTLINE WIDTH**

Sets the outline width (0=not visible, 10=widest).

#### **TEXT TYPE**

Sets the type of text objects:

- text: displays the text as it appears in the text box
- date-time: displays a date/time according the macro in the text box. Refer to the example at the beginning of the CG Editor section for more details about the available macros.
- subtitles: displays subtitles from a SRT file
- timer: displays a countdown timer
- counter: displays a counter
- stopwatch: displays a common timer
- timecode: displays the drop frame timecode of received frame
- timecode-ndf: displays the non-drop frame timecode of received frame
- frame-time: time of received frame

#### **FONT**

Selects the font face among the installed fonts.

#### **FONT TYPE**

Selects the fonts' attributes like Bold, Italic, etc.

---

## **FLIP TYPE**

Allows to flip the text horizontally and/or vertically.

## **FONT SIZE**

Sets the font size.

The following buttons can be switched on to enable the corresponding feature:



### **UPPERCASE**

Sets the font to uppercase.



### **UNDERLINE**

Sets the font to underline.



### **STRIKEOUT**

Sets the font to strikeout.



### **WORD WRAP**

Sets the word wrap mode.



### **AUTO WORD WRAP**

Sets the auto word wrap mode (rows will be wrapped as the text object is scaled)



### **VERTICAL**

Sets the vertical mode.



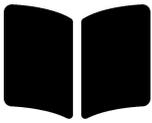
### **RIGHT TO LEFT**

Sets the right to left mode.



### **NO TABS**

Sets the no tabs mode.



## LEARN MORE

### GRAPHIC PROPERTIES section

Controls in this section set properties for the selected graphics shape object.

#### **SHAPE TYPE**

Sets the shape type such as rectangle, polygon etc.

#### **NUMBER OF SIDES**

Sets the number of sides for polygon shapes.

#### **ROUND CORNERS**

Sets the rounding value for rectangle corners.

#### **ROTATE ANGLE**

Sets the angle so the object can be rotated.

#### **GRADIENT TYPE**

Sets the gradient fill type.

#### **BACKGROUND ROTATE ANGLE**

Sets the background gradient rotation angle.

#### **GRAPHICS COLOR**

These boxes show the current colors to use in the graphics gradient. To change the color, just click the box and select the desired color from the dialog box.

#### **OUTLINE COLOR**

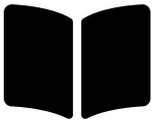
The box shows the current colors to use in the graphics outline. To change the color, just click the box and select the desired color from the dialog box.

#### **FOREGROUND ALPHA**

Sets the foreground color transparency from 0=not visible to 255=solid color.

#### **OUTLINE WIDTH**

Sets the graphics' outline width from 0=not visible to 10=largest.



## LEARN MORE

### TICKER PROPERTIES section

Controls in this section set properties for the selected ticker object.

#### **TEXT BOX**

Allows to type the text to overlay, or a filename or RSS feed to track.

#### **LOAD TEXT**

Allows to load and paste text from an external file into the text box.

#### **TRACK FILE**

Allows to set a filename or URL and track the contents from the text file so when the text file is modified, the ticker will be updated automatically. You can also use the box below to type one or more URLs pointing to as many RSS feeds (one per row).

#### **TICKER SPEED**

Sets the ticker's scrolling speed. A positive value scrolls from left to right, a negative value scrolls from right to left.

#### **LINE'S HEIGHT**

Sets the ticker's line's height.

#### **ROWS DISTANCE**

Sets the ticker's distance between rows.

#### **GRADIENT TYPE**

Sets the background gradient fill type.

#### **BACKGROUND COLOR**

These boxes show the current colors to use in the ticker background gradient. To change the color, just click the box and select the desired color from the dialog box.

#### **BACKGROUND ROTATE ANGLE**

Sets the background gradient rotation angle.

---

**ROUND CORNERS**

Sets the rounding value for rectangle corners.

**BACKGROUND ALPHA**

Sets the background color transparency from 0=not visible to 255=solid color.

**SHAPE TYPE**

Sets the shape type such as rectangle, polygon etc.

**NUMBER OF SIDES**

Sets the number of sides for polygon shapes.

**INTRO TIME**

Sets duration of the slide-in for the ticker object.

**SHOW TIME**

Sets duration of the show time for the ticker object.

**EXIT TIME**

Sets duration of the slide-out for the ticker object.

**FONT**

Selects the font face among the installed fonts.

**FONT TYPE**

Selects the fonts' attributes like Bold, Italic, etc.

**FLIP TYPE**

Allows to flip the text horizontally and/or vertically.

**FONT COLOR**

Allows to select the font color.

---

The following buttons can be switched on to enable the corresponding feature:



**UPPERCASE**

Sets the font to uppercase.



**UNDERLINE**

Sets the font to underline.



**STRIKEOUT**

Sets the font to strikeout.



**WORD WRAP**

Sets the word wrap mode.



**VERTICAL**

Sets the vertical mode.



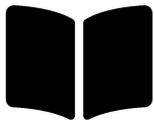
**RIGHT TO LEFT**

Sets the right to left mode.



**NO TABS**

Sets the no tabs mode.



## LEARN MORE

### IMAGE PROPERTIES section

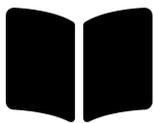
Controls in this section set properties for the selected image, image sequence or Flash object.

#### **IMAGE PATH**

Sets the image or Flash filename, or image sequence folder. Since subtitles files are also treated like images, also sets the subtitles file. Click on the "open" icon on the right of the edit box and select the desired file or folder from the standard dialog window.

#### **FRAME SPEED**

Sets the frame speed for image sequence objects.



## LEARN MORE

### CG PALETTE section

The clip palette allows to manually overlay CG projects on the running playlist with just a click.

#### **PLAY / EDIT BUTTONS**

- In PLAY mode, a click enables overlay instant overlay of the previously set CG project, and the numeric indication will turn red to show that the button is active.  
CG projects are handled as compositions and so are independent from other objects, if any. Consequently, it is possible to overlay more than one project simultaneously.  
When you click a button that is already active, the corresponding CG project will be removed from overlay leaving other objects active (if any).
- In EDIT mode, click on the button to select a file containing the CG project to assign to that button.

---

## PLAY / EDIT SWITCH

Switches the palette operating mode between PLAY and EDIT.

 EDIT mode

 PLAY mode



## LEARN MORE

RSS FEEDS section

This section allows to receive and export RSS feeds to text file, while adding separators or icons between each news.

### RSS FEEDS

Sets one or more URL linking to as many RSS feeds to process. Use a semicolon to separate the various URLs, such as <http://www.url1.com>;<http://www.url2.com>

### EXPORT FILE

Sets one or more destination files to which the corresponding RSS feeds set above will be exported (1<sup>st</sup> RSS feed will be exported to 1<sup>st</sup> file, 2<sup>nd</sup> RSS feed to 2<sup>nd</sup> file etc). Use a semicolon to separate the file paths, such as c:\rss\_file1.txt;c:\rss\_file2.txt



### HINTS

- you can set a list of export files with less items than the RSS feeds. When parsing your settings, moviejaySX will normally match feed 1 to file 1, feed 2 to file 2 and so on. If a feed 3 (or more) is set but without any corresponding file 3 (or more), all these feeds will revert to the latest file available. So in fact, feeds 2 and 3 (and eventually, more ones) will all be saved to file 2.

RSS feeds:

<http://www.url1.com>;<http://www.url2.com>;<http://www.url3.com>

Export files:

c:\file1.txt;c:\file2+3.txt

As RSS 3 has no matching file 3, RSS 3 will be appended to file 2

---

- you can use a special "filename" set to NO to effectively skip that item from parsing. In that case, the corresponding RSS will be matched to the previous file in the list.

RSS feeds:

<http://www.url1.com>;<http://www.url2.com>;<http://www.url3.com>;<http://www.url4.com>

Export files:

c:\file1+2.txt;NO;c:\file3+4.txt

As RSS 2 matches to the "NO" filename, RSS 2 will be appended to file 1

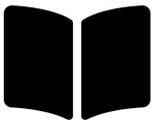
As RSS 4 has no matching file 4, RSS 4 will be appended to file 3

### **RSS MODE**

Sets the color to highlight selected objects.

### **SEPARATOR**

Sets a separator that will be added in between the various news contained in the RSS feed. You can type it a character like \* or click the icon on the right to browse for a picture image.



## LEARN MORE

SETTINGS section

### **SELECTION COLOR**

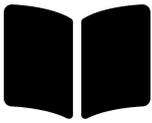
Sets the color to highlight selected objects.

### **SHOW SELECTION**

If checked, selection frame will be shown around selected objects. You might wish to uncheck this option in case you are moving objects while on the air.

### **BACKGROUND MODE**

Sets the background to show when the playout is in stop status.



## DETAILED DESCRIPTION

### TOP BUTTON BAR



#### **SAVE PROJECT**

Saves the project to a file.



#### **ADD PROJECT**

Merges a previously saved project with any other item on the CG (if any).



#### **REPLACE PROJECT**

Loads a previously saved project and clears any other item on the CG (if any).

#### **DISPLAY**

Sets the show / hide property to the selected object in the list.



Object is visible



Object is hidden



#### **REWIND**

Rewinds selected ticker or Flash object to the beginning.



#### **APPLY XML**

Applies the changes made to the XML text to the selected object.

---

### **REMOVE**



Removes the selected object from the CG.



Alternatively, you can just hit the Del button on your keyboard.



### **CLEAR ALL**

Removes all the items from the CG.



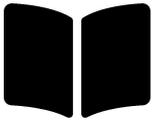
### **SAVE POSITION**

Saves the current window position for the selected image file or Flash object, using same filename but with XML extension, so this object will be automatically positioned when loaded as logo, station logo or Flash banner in the Music Pack.



### **LOAD POSITION**

Recalls the default position set for the selected logo or Flash object from the XML file, if set.



## DETAILED DESCRIPTION

### LEFT BUTTON BAR



#### **TABLE**

Adds a table object from XML file. Samples of suitable XML structure to be used with this feature can be found under the CG-samples\xml and CG-samples\xml-worldcup folders.



#### **TEXT**

Adds a text object.



#### **IMAGE OR CLIP**

Adds an image or video clip object.



#### **SUBTITLES**

Adds a subtitles object.



#### **SHAPE**

Adds a shape object.



#### **IMAGE SEQUENCE**

Adds an image sequence object.



#### **HTML5**

Adds a HTML5 object.



#### **TICKER**

Adds a ticker object.



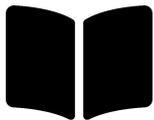
### **CRAWL TICKER**

Adds a crawl ticker object.



### **ROLL TICKER**

Adds a roll ticker object.



## **DETAILED DESCRIPTION**

### **ADDITIONAL PANELS**

### **OBJECT LIST**

This box on the right lists all the objects in the CG.

- To change an object name: double click on the desired object on the list, the item will change into an edit box allowing you to type the new name. When you are done, click anywhere on the object list to confirm.
- To delete an object: click on the desired object and hit the Del button on the keyboard.

### **XML EDITOR**

This box shows the XML description for the selected object. You can manually edit the code and click on the Apply XML button when done.



## STEP BY STEP

### HOW TO COMPOSE A TEXT FILE FOR A TICKER

As indicated, the Track File feature allows to set a filename so that when this file is modified, the ticker tracks the changed and updates automatically. Inside this file you can type just plain text as well as inserting icons or small pictures, according to the following syntax: `[[picturename:path\filename.png]]`

Where "picturename" is a mnemonic associated to a file, allowing to recall the same picture in the same ticker file without having to specify the path again.

Example: `[[sun:weather\01d.png]]` links the denomination "sun" to the picture filed in: `weather\01d.png` so that if you wish to reuse the same picture in the same ticker file, you can just recall: `[[sun]]`

Example of a Ticker file, with comments on the right:

```
[[sun:weather\01d.png]] Alicante 18°C // links the sun picture to the filename
// 01d.png
[[cloud:weather\04.png]] Amsterdam 13°C // links the cloud picture to the filename
// 04.png
[[sun]] Dublin 7°C // recalls the sun picture with the filename
// set before
```



## STEP BY STEP

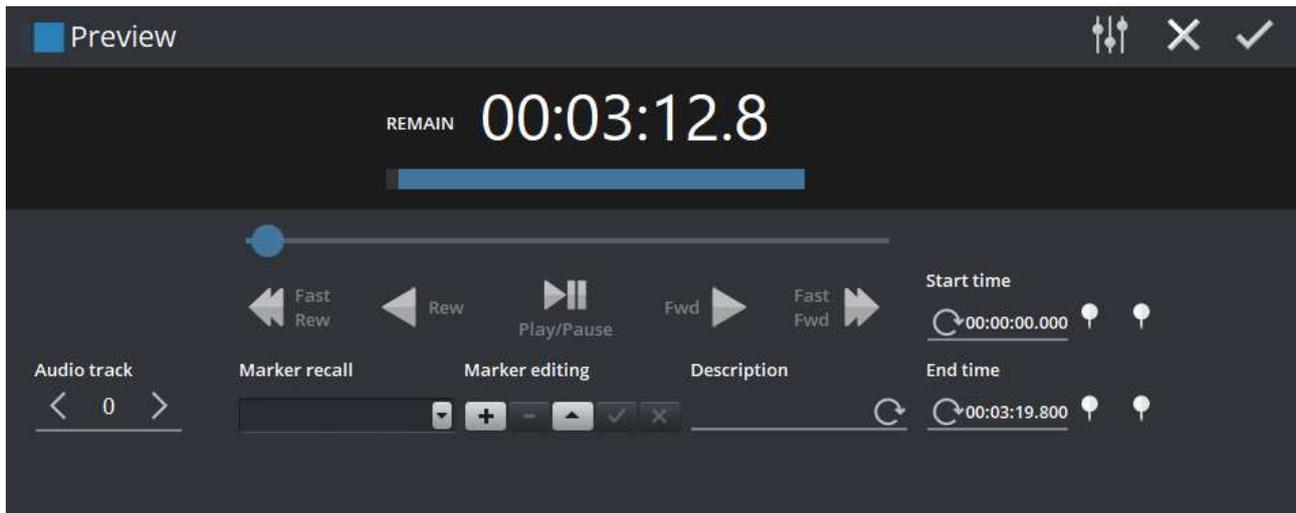
### HOW TO CHANGE FONTS INSIDE A TICKER

You can freely change fonts and text colors inside ticker files by using standard HTML tags such as in the following sample:

```
<text type='text' fontSize='40' color='#00B050' font='Arial Black'>moviejaySX</text>
<text type='text' fontSize='40' color='#548DD4' font='Agency FB'> moviejaySX</text>
```

Colors are expressed as standard HTML color codes that you can get from this link:  
<http://html-color-codes.info/>

## The preview window

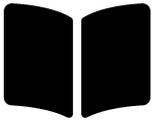


Click on the preview button to open the related window, which allows you to preview the corresponding clip in the dedicated on-screen window, without affecting the on-air channel, and edit the Start and End markers.

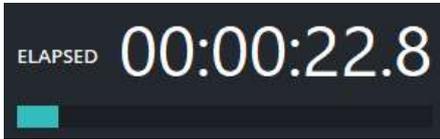


### STEP BY STEP SETTING START / END MARKERS

1. Press "Play/Pause" button to start playing.
2. Move to the desired marker with the slider, Rew - Fwd - Fast Rew - Fast Fwd buttons.
3. Press the "Set Start" button to set the Start marker
4. Press the "Play/Pause" button to restart playing, if you wish you may check your setting pressing the corresponding "Go Start" button to restart playing from the marker you've just set.
5. If you wish, repeat steps 2 - 3 - 4 to set End marker.
6. Press the OK button to confirm changes when you're done.



## LEARN MORE BUTTONS AND CONTROLS



### PLAYBACK COUNTER

Shows elapsed time from beginning of the clip playing in preview, or remaining time to the end. Click on the counter to toggle between the two modes. In preview mode, values are always calculated on the total clip length without taking into account any markers, if set. The progress bar below graphically displays the elapsed time from start of clip, or remaining time to the end.

### POSITION SLIDER

While the track is playing, just click and drag this slider to the left or right to change the clip playing position. While dragging the slider, the time displays and the video preview are updated in real time.



### PLAY / PAUSE

Starts/stops playing the current clip in the preview window. While in frame still mode, pressing the button resumes normal play mode.

These buttons switch playback to still frame mode and change track's playing position, allowing extremely precise cueing of any video track before setting markers:



### FAST REW

Rewinds 0,5 seconds



### REW

Rewinds 1 frame



### FWD

Forwards 1 frame



### FAST FWD

Forwards 0,5 seconds

---

## START TIME

The edit box displays and allows to manually type the start marker for the clip on preview. While the clip is playing:



Click and release the red pin when the clip is exactly positioned on the desired Start position. The set marker will be updated on the corresponding display on the left of the button.



Click and release the green pin to change the clip's playing position to the user-set Start marker: this way, you may easily check your settings.



Resets the start marker to the value set before opening the preview window.

## END TIME

As above, allows editing the end marker.

## AUDIO TRACK

In case of clips with multiple audio or languages, allows to set a specific audio track.



## STEP BY STEP

### STORING AND RECALLING MARKERS

Apart from main Start and End markers, you can set more pairs of markers for the same clip. The informations will be stored inside an XML file with the same filename as the clip. When previewing the same clip later, stored markers will be automatically recalled and made available.

1. Set Start and End markers as described above.
2. Click on the Insert button (marked with "+") to add a new record, type the description that you wish to assign to the marker, then click the Post button (marked with a check) to confirm.
3. Stored markers are listed in the dedicated box; just select from the drop-down list to recall the desired marker: Start and End values will be automatically updated according to the previously stored informations. Should you wish to reset the settings, press the Del button on your keyboard.
4. Press the OK button to finally confirm all the updates done.



## STEP BY STEP

### SETTING A DEFAULT MARKER

Apart from custom markers, you can also set a default pair of markers. Such markers will be automatically assigned and used each time the clip will be loaded manually (i.e. not inside a previously made playlist), or selected from a <RANDOM> command.



As above, but on step (2) instead of typing the description, click on the "default" icon, this way the description box will mark "default", this is a reserved word, so the current pair of markers will be treated as default.



#### **PARAMS**

Opens a dedicated window to edit various clip related settings such as external audio, interlacing, etc.



#### **CANCEL**

Cancels changes and closes the event preview window.



#### **OK**

Confirms changes, updates the selected clip with the set markers and closes the preview window.

## The event loading window



This window allows to load one or more clips or graphics from disk, or events like external feeds, commands, etc.



### STEP BY STEP

#### LOADING A CLIP FROM DISK TO THE PLAY QUEUE

1. Click the Add event button from the main window.
2. Select the folder to browse for the desired clip.
3. Highlight your favourite clip from the list on the right. You can also select more clips in batch with the Shift and Ctrl buttons. Shortcuts to the media file (LNK files) are also supported.
4. Press the OK button to confirm. If you wish to select a single clip, you can also confirm selection with a double-click on the selected item.

### LOADING MODE

Selects the item's loading mode:



Replace (only valid for loading playlists): the selected playlist will replace other items in the on-air queue.



Insert: the selected item or playlist will be inserted at the cursor position, while following items will be shifted down. When a playlist or item are loaded in insert mode, items will be automatically removed from the play queue after playing back.



Paste: as above, but items or playlist's items they will not be removed after playback.



Append: the selected items or playlist will load at the end of the existing list.



### **PREVIEW**

Opens the preview window for the select clip in the list view.

### **SINGLE / MULTIPLE**

Switches the event loading mode between single and multiple events.



Single: when you select one or more clips in the file list grid and click OK, or double-click on a clip, the events will be added to the playlist and the selection window will close.



Multiple: when you double-click clip on the file list grid, the event will be added to the playlist but the selection window will stay open until you click the OK button. This helps to add multiple files in case they are located in different folders without having to open add file window each time.



### **SHOW PICTURES**

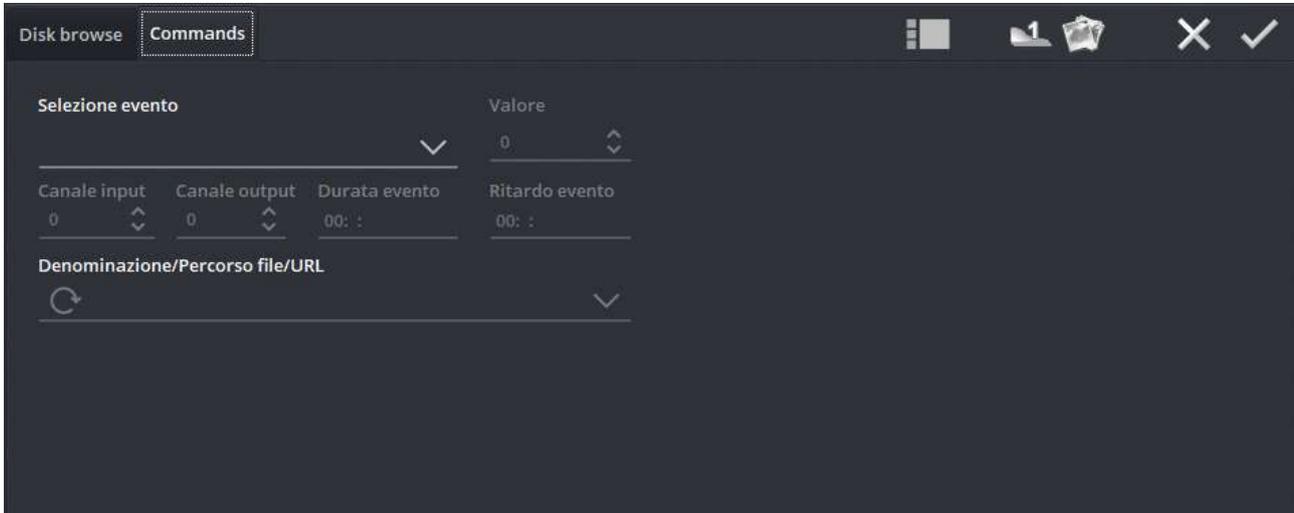
Normally the file listing doesn't include pictures (PNG, JPG etc.) in order to keep out the previews automatically created on each video clip. In case you specifically need to load a picture into the playlist, click on the button to include the graphic formats into the listing.

---

## CLIPS / COMMANDS

Clips: Displays the main tab dedicated to file selection.

Commands: Displays the second tab dedicated to loading of other items such as external feeds, commands etc. The window will look like the example below:



## EVENT TYPE

Selects the event type to add. After selecting some of the events, you can also edit the related parameters according to your requirements.

### - <LINEIN>

Adds an external feed event. MoviejaySX will drive the switcher according to the specified input and output channels, so the external feed will be routed on-air for the time set in the dedicated box.

You need to set:

- > Switcher's input and output channels (if set to -1, no command will be sent)
- > Event duration (if not set, the application will execute the switching and immediately skip to the next event in the play queue).
- > Optionally, you can set an event name in the bottom "Event name/File Path/URL" box.

---

- **<NETPLAY>**

Adds an external feed to be received via streaming, or a Virtual Object (such as the output from another moviejaySX or CapturejayHX) so it will be played back just like a local clip. Set event length and URL into the related boxes, for example: udp://127.0.0.1:8080

or the Virtual Object denomination, for example: mp://moviejaySX Channel1



**NOTE**

Other than direct links to streaming feeds, for YouTube clips (included live events) you can directly paste the link to the whole web page. Despite such feature is working perfectly at the time this manual is being written, we can't guarantee that any updates YouTube will perform to its platform will be likely cause unpredictable issues.

- **<LOGO OFF>**

Adds a command to switch off the logo overlay at the desired position in the playlist.

- **<LOGO>**

Adds a logo switching command. Use the "File path" box below and the button on its left to open a standard dialog box and select the logo. The logo will be overlaid with the settings previously saved using the "save position" button from the CG window.

- **<SQUEEZE LOAD>**

Adds a picture squeeze command. Use the "File path" box below and the button on its left to open a standard dialog box and select an existing CG project having valid squeeze settings. The CG project will load with the contained graphics while the played back playlist will be squeezed according to the setting made.

- **<SQUEEZE OFF>**

Turns the squeeze feature off, so the running video will be reset to full screen.

---

- **<JUMP>**

When the specified time is reached (for example JUMP 20.00.00), the playback cursor jumps to the next event in the playlist, in the above example, at 20 o'clock all the previous playlist items will be skipped and the playback jumps directly to the next event after the command. Use the "Event time" box below to specify the required time of the day.

- **<STOP>**

Stops the playlist when the event is reached. To restart playing, you need to click the Play button. Setting an optional event duration, playback will be resumed automatically from the next event after the delay expires.

- **<PAUSE>**

Pauses playing. To restart playing, you need to click the Play button. Setting an optional event duration, playback will be resumed automatically after the delay expires.

- **<PAUSE-LAST>**

Pauses playing on the last frame of the last clip. Setting an optional event duration, playback will be resumed automatically after the delay expires.

- **<PAUSE-NEXT>**

Pauses playing on the first frame of the next clip. Setting an optional event duration, playback will be resumed automatically after the delay expires.

- **<LOOP>**

Sets loop playing mode on the previous event in the play queue. Use the "value" box to specify the number events to be looped, for example <LOOP 2> will loop play on the 2 previous events in the play queue. Setting a very high number, greater than the number of events on the playlist, such as <LOOP 1000>, this same command can be used to restart from start of list.

---

- **<BANNER ON>**

Activates display of the default Music Pack banners on all the following clips in the play queue, until a <BANNER OFF> command is found, according to user-defined settings .

- **<BANNER OFF>**

Sets the default Music Pack banner off (not active) on all the following clips in the play queue.

- **<BANNER PRESET>**

Sets the Music Pack banners on (active) on all the following clips in the play queue, using a specified preset selected from the bottom box "Event name/file Path/URL". The list of presets can be edited from the Setup->Music Pack window.

- **<RANDOM "path to folder">**

Loads a clip randomly from the specified folder, for example:

<RANDOM d:\videoclips>

This feature is available with the Music Pack plug-in, and it is mainly used to allow automatic music rotation from videoclips contained inside one or more folders. Many <RANDOM> events can be queued into the same playlist, each one pointing to a different folder, in order to rotate various music styles.

You may optionally use the event length box to specify an expected length for <RANDOM> events in order to ease calculation of playlist's items start times, in the special case all your items to be randomly selected have a similar average length (for example, 30" commercials).



## HINTS

- when creating a playlist with <RANDOM> events inside, moviejaySX shall be run in "editing mode", so that <RANDOM> commands will not be processed (i.e. not replaced with the actual clips) so that the playlist can be saved with such commands to be replaced when the playlist is going to be played back (moviejaySX running in the normal on-air mode).

- The <RANDOM> command also scans for LNK (shortcut) files. Supposing clips are organized into folders, each one related to a specific category, this feature allows, for example, to link a clip from more folders, so to virtually assign the same clip to more categories.

### - <RANDOM μMAM>

Similarly to the <RANDOM PATH> above, loads a random clip filed in the μMAM database. As above, the event length box allows to specify an expected length for random events in order to ease calculation of playlist's items start times. The "Event name/file Path/URL" allows to set a specific category so that only requested records will be rotated.

### - <CG load="path to file">

Loads a previously saved CG project. Use the "event delay" box to optionally specify a delay in hh:mm:ss to wait before loading the project on the overlay. The "event length" allows to optionally set a show time so the CG project will be displayed for this specified time and then hidden automatically. Use the "File path" box and the button on its right to select the path to the CG project.

### - <CG CLEAR>

Adds a command to clear all the CG items at the desired position in the playlist.

### - <CG display="item-id">

Displays or hides a single item in the CG project with the specified settings. Set the object name inside the event name/path box and check/uncheck the "Visible" box underneath as required.

---

- **<URL>**

Opens a URL, for example to call the vMix API that provides access to common functions through the HTTP protocol.

- **<REC START>**

Adds a command to start recording to file (or streaming) according to encoder settings.

You need to set:

- › Encoder number to start (1 or 2).

- **<REC STOP>**

Adds a command to stop recording to file (or streaming).

You need to set:

- › Encoder number to start (1 or 2).

## **INPUT AND OUTPUT CHANNELS**

In case a <LINEIN> event is specified, sets the input and output channels to switch on the video router. To rebroadcast a passthrough audio/video input, just set both input and output to: -1

## **EVENT LENGTH BOX**

Sets the event length for the selected event (<LINEIN>, <STOP>, etc.)

## **EVENT DELAY**

Sets a delay to wait before an event running an event (for example, CG overlay).

## **PATH BOX**

For related events, sets the file to be loaded or the URL for receiving the streaming event from. The buttons on the right allow respectively to browse for the desired media, and to update the list of available Virtual Objects to queue as <NETPLAY> events.

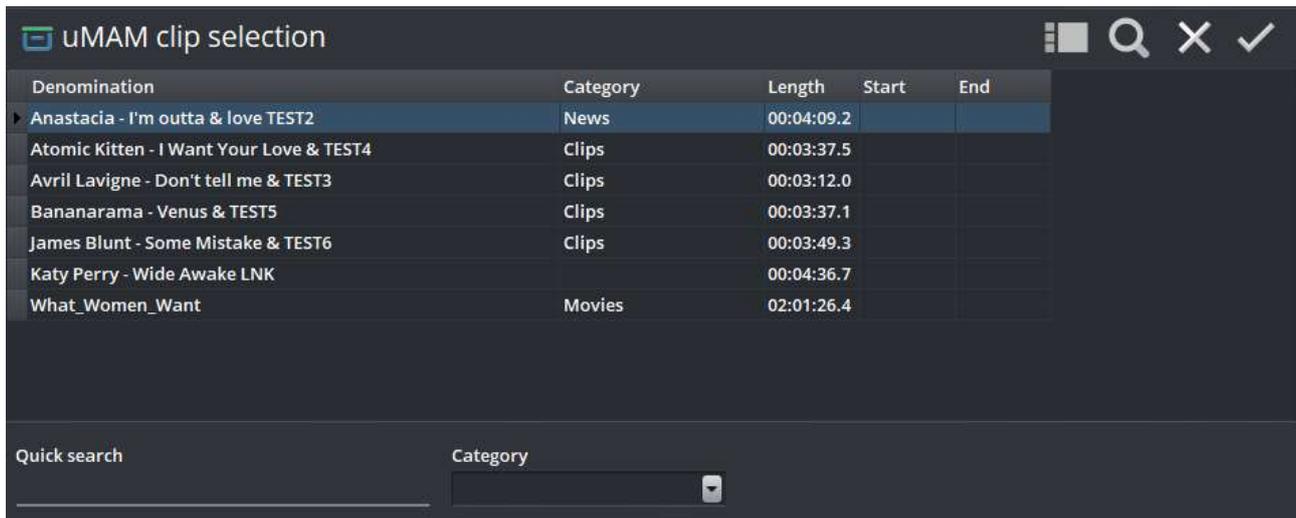
**CANCEL**

Cancels operations and closes the event selection window.

**OK**

Confirms operations, loads the selected events in the play queue and closes the selection window.

## The uMAM database selection window



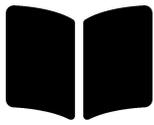
This is the uMAM database selection window, which is recalled from the on-air window to browse the uMAM database, select a clip and load it to the play queue.



### STEP BY STEP

#### LOADING A CLIP FROM THE DATABASE TO THE PLAY QUEUE

1. Click the uMAM Load button from the main window.
2. Highlight your desired clip from the list, or use the search box to locate the clip.
  1. If you wish, click the preview button to watch the clip off the air.
3. Press the OK button to confirm loading. If you wish to select a single clip, you can also confirm selection with a double-click on the selected item.



## DETAILED DESCRIPTION

### BUTTON AND CONTROLS

#### CLIP LIST

The grid shows the list of clips filed in the database ordered by title. From left to right: clip title, category, length, start/end of enabled date range.

#### QUICK SEARCH

When filtering is off, type initial letters from the requested clip denomination to locate the first record that matches your criteria. When filtering is on, filters the database on only those items containing the specified string.

#### CATEGORY

Sets a category to filter the data on.



#### PREVIEW

Opens the preview window for the highlighted clip in the database grid.

#### FILTER

Click to apply or remove filtering based on the selected category in the drop-down box:



Filtering is off, all the items filed in the database will be shown.



Filtering is on, only those items matching the selected category and filtering string will be shown.



#### CANCEL

Cancels operations and closes the uMAM selection window.



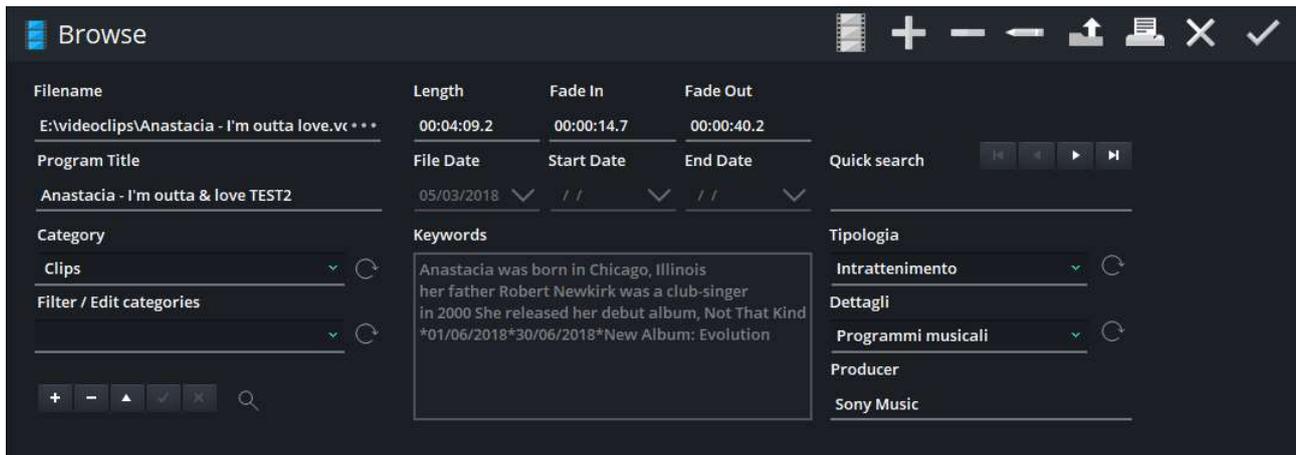
#### OK

Confirms operations, loads the selected clip in the play queue and closes the uMAM selection window.

**HINT**

Before loading the selected clip in the play queue, moviejaySX checks if the video file can be accessed. If the check fails, a dialog box is shown to warn the user about the problem. In this case, click on the box to close it, select another clip or click the cancel button to close the selection window.

## The uMAM database editing window

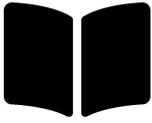


This is the uMAM editing window for database managing. Other than browsing clips directly from Hard Disk, the uMAM allows to file your clips into a database for better search and retrieval.



### STEP BY STEP ADDING A CLIP TO THE DATABASE

1. Click the uMAM Edit button from the main window.
2. Press the New button to enter insert mode.
3. Browse your hard disk for the desired clip using the "open" icon to the right of the filename box.
4. If needed, edit clip name and type
5. If you wish to set Fade-In and Fade-Out markers, or watch the clip off the air, click the preview button.
6. Press the OK button to confirm when done.



## LEARN MORE BUTTON AND CONTROLS

### **FILENAME**

Sets the filename for the current clip, with full path info. Click on the "open" icon on the right of the edit box: a standard "file open" dialog window will appear to let you browse your disk for the desired clip. Shortcuts to the media file (LNK files) are also supported.

### **CLIP TITLE**

Automatically sets a title based on the clip filename, of course you can edit field contents as required.

### **CATEGORY**

Sets the category to assign to the current clip.

### **CATEGORY FILTER / EDIT**

This box allows to filter the database by category or to edit the list of user set categories. The color box on the right sets a color to assign to this category, so the events in the playlist will be highlighted with the set color.

### **- HOW TO filter by denomination and categories -**

Open the drop-down box and select one of the available categories, optionally type any string to match the clips' denomination, then click the magnifier icon below to apply or reset the filter.

### **FILTER**

Click to apply or remove filtering based on the selected category in the drop-down box:



Filtering is off, all the items filed in the database will be shown.



Filtering is on, only those items matching the selected category and filtering string will be shown.

---

## - HOW TO edit categories -



### **ADDING a new category**

Click the button with the + symbol, type the new denomination into the box and select the desired color from the drop down box, then click the button with the check symbol to confirm or the button with the X symbol to cancel.

### **EDITING an existing category**

Select the category that you wish to edit, click the button with the up arrow sign, type the new denomination into the box and select the desired color from the drop down box, then click the button with the check symbol to confirm or the button with the X symbol to cancel.

### **DELETING an existing category**

Select the category that you wish to delete, then click the button with the minus symbol to confirm.

### **LENGTH**

Displays clip length in hh:mm:ss:1/10 sec. This value is automatically filled in as soon as you select the clip from the Hard Disk.

### **START**

Displays the Start marker set for the current clip in hh:mm:ss:1/10 sec. This value is set to 00:00:00.0 when you select a clip from disk but it is automatically updated once you set the start marker in the preview window and confirm changes. If you don't set the Start marker, the clip will be played from the very beginning of the file (this is the default setting unless you want to cut unwanted segments).

### **END**

Displays the End marker set for the current clip in hh:mm:ss:1/10 sec. This value is set to the programme length when you select the clip from disk, but it is automatically updated once you set the End marker in the preview window and confirm changes. If you don't set the End marker, the clip will be played until the very end of the file.

---

## **FILE DATE**

Sets the file or production date for the current clip.

## **START DATE / END DATE**

Set the start / end dates for the current clip, so this clip will be loaded in the play queue only if the current date is between start / end dates set.

If start date is not specified, the clip will be loaded until the specified end date (if any). If end date is not specified, the clip will be loaded from the specified start date (if any).

This feature is only enabled when playlists are loaded in Insert Mode, and turns especially useful for commercials management, events outside the range of specified dates will be automatically discarded.

## **KEYWORDS / METADATA**

Allows to type keywords for the current clip, or just free text. In the special case of clips selected with the <RANDOM μMAM> command in the playlist, the informations contained herein will be exported to a text file to be displayed on a Flash banner such as clip or artist informations, etc.

## **QUICK SEARCH**

When filtering is off, type initial letters from the requested clip denomination to locate the first record that matches your criteria. When filtering is on, filters the database on only those items containing the specified string.

## **PROGRAM TYPE, DETAILS, PRODUCER**

These informations are normally useful only to generate a asrun log that complies with Italian broadcasting authority. You can safely leave them blank.



## **PREVIEW**

Opens the preview window for the current clip, from which you can preview the clip and edit its start/end markers.

**NEW**

Switches the database to insert mode to add a new clip.

**DELETE**

Deletes the currently selected clip. You'll see two dialog boxes: the first one will ask you to confirm database record deletion, the second one will ask you to confirm the clip deletion from the hard disk.

**EDIT**

Switches the database to edit mode, to edit fields for the current clip.

**ADD TO PLAYLIST**

Loads the currently selected clip to the on-air playlist and closes the database window.

**PRINT**

Opens the uMAM print preview window.

**CANCEL**

Cancels updates to the current record and switches back to browse mode.

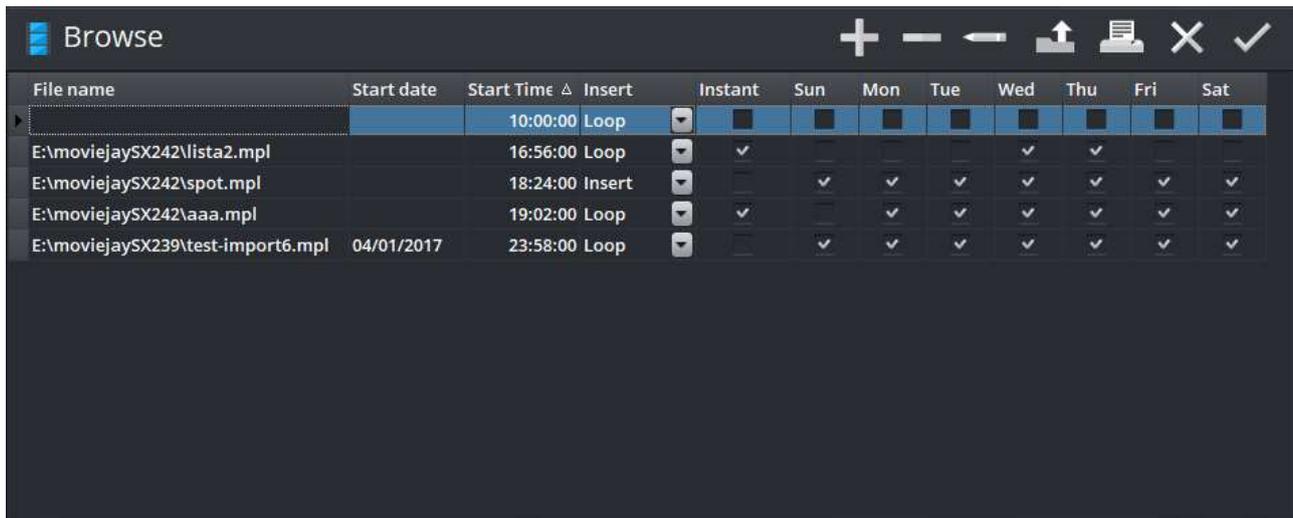
**OK**

Confirms updates and returns to browse mode. If you are already in browse mode, closes the uMAM database window.

**HINT**

Clips categories are internally handled as numeric autoincrement codes so, if you make a mistake when editing an existing type, don't delete it but just make your changes in the box. If you delete the type and add a new instance of the same type, the record will be assigned a new numeric code, so it will be treated as it was a completely different type: any clips with the old category will just have a blank type field and would need to be reassigned.

## The scheduling window



File name	Start date	Start Time	Insert	Instant	Sun	Mon	Tue	Wed	Thu	Fri	Sat
		10:00:00	Loop	<input type="checkbox"/>							
E:\moviejaySX242\lista2.mpl		16:56:00	Loop	<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
E:\moviejaySX242\spot.mpl		18:24:00	Insert	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
E:\moviejaySX242\aaa.mpl		19:02:00	Loop	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>					
E:\moviejaySX239\test-import6.mpl	04/01/2017	23:58:00	Loop	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

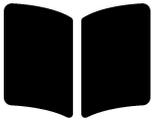
This is the playlists scheduling window, which allows to schedule auto loading of playlists according to time and day of week. You can schedule an unlimited number of playlists, and each playlist can hold a virtually unlimited number of clips, external feeds, commands etc. This way the on-air can be completely automated.



### STEP BY STEP SCHEDULING A PLAYLIST

In the following example we are scheduling the automatic loading of a playlist for Sunday and Tuesday at 10 o'clock.

- Click on the "New" button to switch into Insert mode.
- Click on the "Load playlist" button and select a previously saved playlist.
- Type the start time (10.00.00), and check the desired days, for example Sunday and Tuesday.
- At the end, click the OK button to confirm edits made.



## LEARN MORE

### BUTTONS AND CONTROLS

The grid lists all the scheduled playlist and related details. The informations in the eight columns indicate:

- **Filename:** playlist's filename
- **Start date:** scheduled date for playlist loading, if the scheduling type is set to "by date" from the Setup window.
- **Start time:** scheduled time for playlist loading.
- **Insert mode:**
  - > Loop: the playlist will replace other items in the play queue except the currently playing item that will not be interrupted.
  - > Insert: the playlist will load in insert mode after the current event, and existing items will be shifted down. After the playlist items will be played, they will be automatically removed from the queue.
  - > Paste: as above, but the playlist items they will not be removed after playback.
  - > Append: the playlist will load at the end of the existing list.
  - > Insert on top: the playlist will load in insert mode to the top of the existing list. After the playlist items will be played, they will be automatically removed from the queue while the playlist will resume from the 1<sup>st</sup> event previously in the queue.

When a playlist is loaded in insert or append mode, its items will be automatically removed from the play queue after playing back.

- **Instant:** if checked, the playlist will be run as soon as it is been loaded in the play queue. Otherwise, it will wait for the end of the item currently in air.
- **Sun...Sat:** if checked, enable loading of the playlist in the corresponding day, if the scheduling type is set to "weekly" from the Setup window.

### FREE SEARCH

Type any keyword to display the only playlist events where the filename matches the specified string.



### **LOAD ON PLAY QUEUE**

Loads the currently selected playlist in the play queue according to user settings (loop, insert, etc). For security reasons and to prevent accidental clicks from making unintended changes to the running schedule, it is necessary to double-click the button to activate this function.



### **NEW**

Switches to insert mode, to add a new schedule.



### **DELETE**

Deletes the currently selected schedule. A dialog box will appear asking you to confirm.



### **ASSIGN PLAYLIST**

Opens a dialog box to browse for a previously saved playlist to assign to the current schedule.



### **EDIT**

Switches to edit mode, to edit the highlighted schedule.



### **PRINT**

Opens the scheduler print preview window.



### **CANCEL**

Cancels changes and switches back to browse mode.



### **OK**

Confirms changes and switches back to browse mode. If you are already in browse mode, closes the scheduling window.



### **HINT**

moviejaySX scans for the next scheduled playlist in 1 minute interval: for such a reason, start time of playlists programmed for the same day of the week must be distanced at least 1 minute, otherwise the next playlist might not be loaded in the queue.

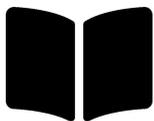
---

## The audio processor window



The audio processor window allows to edit settings for the integrated audio processor, and save/recall profiles. Depending on the settings made on the setup window, you can use the legacy processor based on DC-DSP that offers a dynamic amplify and compressor, or the new one based on FFMpeg audio filter, that offers a compressor, limiter, bass/treble control and much more when using the expert mode.

For more informations please consult the FFMpeg documentation at: <https://ffmpeg.org/ffmpeg-filters.html#Audio-Filters>



### LEARN MORE

BUTTONS AND CONTROLS (DC-DSP processor)

#### **ENABLE DYNAMIC AMPLIFY**

Enables the dynamic amplification filter.

#### **MAX AMPLIFICATION**

Sets the maximum amplification to apply on the input signal. Available range is from x1 to x10.

#### **ATTACK TIME**

Sets the amount of time the signal has to rise above the threshold before gain reduction starts. Available range is between 0,1s and 10 seconds.

---

### **RELEASE TIME**

Sets the amount of time the signal has to fall below the threshold before gain reduction is decreased again. Available range is between 0,1s and 10 seconds.

### **ENABLE AUDIO COMPRESSOR**

Enables the audio compression filter.

### **GAIN**

Sets the gain to apply on the input signal.

### **ATTACK TIME**

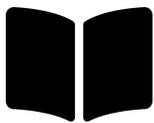
Sets the amount of time the signal has to rise above the threshold before gain reduction starts. Available range is between 0,1s and 10 seconds.

### **RELEASE TIME**

Sets the amount of time the signal has to fall below the threshold before gain reduction is decreased again. Available range is between 0,1s and 10 seconds.

### **RATIO**

Sets a ratio by which the signal is reduced. 1:2 means that if the level raises 4dB above the threshold, it will be only 2dB above after the reduction. Available range is between 2 and 20.



## **LEARN MORE**

**BUTTONS AND CONTROLS (FFMpeg processor)**

### **ENABLE COMPRESSOR**

Enables the compressor filter. For more informations please consult the FFMpeg documentation at <https://ffmpeg.org/ffmpeg-filters.html#acompressor>

### **INPUT GAIN**

Sets the gain to apply on the input signal.

### **ATTACK TIME**

Sets the amount of time the signal has to rise above the threshold before gain reduction starts. Available range is between 1ms and 1 second.

---

## RELEASE TIME

Sets the amount of time the signal has to fall below the threshold before gain reduction is decreased again. Available range is between 1ms and 5 seconds.

## RATIO

Sets a ratio by which the signal is reduced. 1:2 means that if the level raises 4dB above the threshold, it will be only 2dB above after the reduction. Available range is between 1 and 20.

## ENABLE LIMITER

Enables the limiter filter. For more informations please consult the FFMpeg documentation at <https://ffmpeg.org/ffmpeg-filters.html#alimiter>

## THRESHOLD

Sets the threshold value so that signals above this level will not pass the limiter.

## VOLUME

Sets the output level from the filter chain. Available range is between -12 and +12.

## BASS

Sets the bass level. Default frequency is 100Hz and available range is between -20 and +20.

## TREBLE

Sets the treble level. Default frequency is 3000Hz and available range is between -20 and +20.

## EXPERT MODE

FFMpeg makes available much more audio filters and settings comparing to the most used featured in this window. Anytime you edit settings using any of the controls, a "settings string" is automatically compiled to update operating parameters. Click on the left arrow to expand the edit box so the current settings are made visible, edit settings as required, then click on the right icon to apply changes.



> alimiter=limit=0.17,volume=volume=-6.08dB:precision=fixed,bass=gain=-4.06,treble=gain=6.54 

**LOAD PRESET**

Loads a previously saved preset

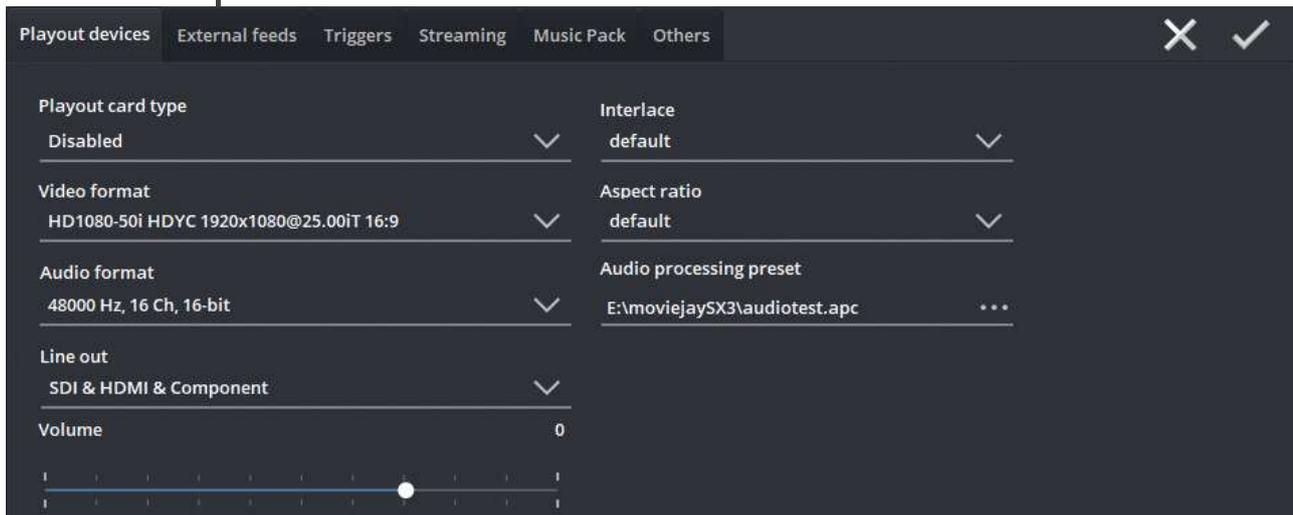
**SAVE PRESET**

Saves settings to a file with "apc" extension. You can use a saved preset as default to be loaded at application startup, if set from the moviejaySX Setup window, playout devices section.

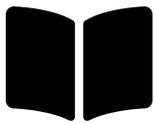
**OK**

Closes the audio processor window

## The setup window



The setup window allows to set various hardware and software settings such as the playout card, streaming settings, etc.). After some of the changes are confirmed, it is required to restart moviejaySX to apply changes.



**LEARN MORE**  
PLAYOUT DEVICES section

### **PLAYOUT CARD**

Lists the installed playout cards and allows to set the desired one (for example Decklink HD Extreme).

### **VIDEO FORMAT**

Sets the video output format, for example PAL UYVY 720x576@25.00iT 4:3.

### **AUDIO FORMAT**

Sets the audio output format, for example 48000Hz, 2ch, 16bit. In case of playing back clips with multiple audio tracks or languages, you should use a setting with a number of channels at least equal to the number of available tracks in such clips, otherwise all the audio tracks above the audio format set will be ignored.

---

## LINE OUT

Sets the video output configuration, for example "SDI & HDMI & Composite (Y Out)".

## VOLUME SLIDER

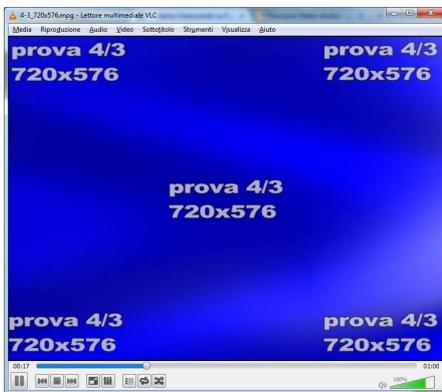
Sets the master audio output level.

## INTERLACE

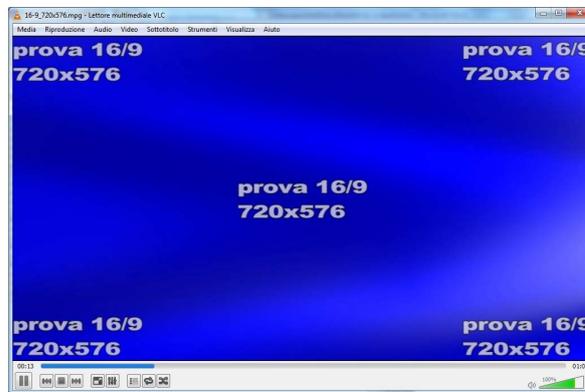
Sets the video output interlace mode.

## ASPECT RATIO

Sets the video output aspect ratio. Below you can see screenshots from a couple of test clips played on VLC:



720x576 4:3



720x576 wide (16:9)

In the examples below, we assume the moviejaysX output is set to 720x576 4:3 and you require to play back a mix of 4:3 and 16:9 clips. The 4:3 clips will be played correctly independently of the aspect ratio setting, while 16:9 clips will behave according to the settings below:

- **Default:** the aspect ratio information is read according to the information stored in the clip, if the aspect ratio doesn't match the video output resolution, the video will be cropped.



16:9 clip played back with output



4:3 clip played back with output set to 16:9

---

set to 4:3

- **None:** the aspect ratio information stored in the clip is ignored, if the clip doesn't match the video output resolution, it will be stretched to fill the screen.



16:9 clip played back with output set to 4:3

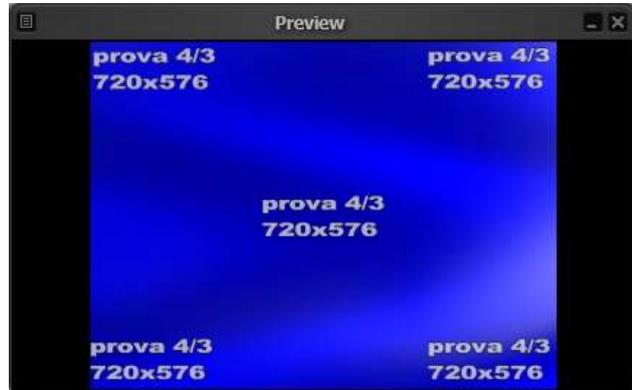


4:3 clip played back with output set to 16:9

- **Letter Box:** if the clip doesn't match the video output resolution, black bars are added accordingly so image proportions will not be altered.



16:9 clip played back with output set to 4:3



4:3 clip played back with output set to 16:9

- **Crop:** if the clip doesn't match the video output resolution, for example a 16:9 clip played back on moviejaysX set to 4:3 output, will be cropped as in the example below.



16:9 clip played back with output set to 4:3



4:3 clip played back with output set to 16:9

**HINT**

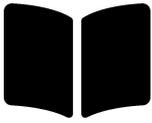
The aspect ratio information is also set inside a playlist, at the time the playlist will be saved to disk. So if you change aspect ratio settings and try to reload a previously made playlist, the new setting will probably not be taken into account. So, it is advisable to set your desired aspect ratio settings before actually creating your playlists.

**AUDIO PROCESSOR PRESET**

Sets the preset file to use for the audio processor to be loaded automatically at application startup. Click on the button to the right of the edit box and use the standard dialog box to locate the desired file. You can save presets from the "Audio processor" window in the moviejaySX on-air module.

**AUDIO PROCESSOR**

Sets the audio processor to use between DC-DSP (legacy) and the new one based on FFMpeg.



## LEARN MORE

EXTERNAL DEVICES section

### SWITCHER TYPE

Sets the kind of video switcher in use:

- Disabled: No video switcher in use
- ELCA: drives the Elca SR8P - SR16 - MC2424 - MC 3225 video switchers via RS232
- Elca MX3232 - MX3224 - MX2424 - MX1616 - MX88, for the Elca MX series
- CEM Ibrida: drives the CEM Elettronica Ibrida controller via RS232
- BTS MS16: drives the BTS MS16 via RS232
- Elpro SAVIS204: drives the Elpro SAVIS204 via RS232
- Elpro TZ09: drives the Elpro TZ09 via RS232
- Kramer Protocol2000: as above, for any Protocol2000 compatible Kramer switcher.
- Kramer VS-401N, VS-601N VS-801N: drives these indicated Kramer switchers.
- Knox Video RS16x16HB, for the indicated Knox switcher
- Pesa Bobcat, for the indicated Pesa series
- Inday RGB4X-RS - DA4X-RS - AV4X-RS, for the indicated Inday switchers
- Atem VS481A, for the Atem switcher via RS232 port
- Blackmagic VideoHub (RS232) – drives all the Blackmagic VideoHub series via RS232
- Blackmagic VideoHub (IP) – drives all the Blackmagic VideoHub series via LAN
- Neveion NCB – drives all the Neveion switchers via the NCB protocol.

### SWITCHER COM PORT

Sets the COM Port to use for remote control of your video switcher.

### SWITCHER COM SPEED

Sets the COM port speed depending on your video switcher requirements (usually 9600 bps).

### IP ADDRESS

Sets the switcher IP address (to be used for remote control of Blackmagic VideoHub).

### INPUT & OUTPUT CHANNEL

If a video switcher is used, these boxes set the corresponding switcher's input/output channels to switch the output from the playout card on the air. The switching is performed automatically anytime moviejaysX plays a clip from the Hard Disk. To disable this feature, set both values to: -1.

---

Apart from routing inputs via a video switcher, moviejaySX also allows to schedule and play back a passthrough audio/video signal, coming from any video capture device, such as the same Blackmagic card used for playout.

### **VIDEO CAPTURE DEVICE**

Sets the video capture card used for video passthrough line or:

- **NDI receiver:** sets the video input to Newtek NDI (Network Device Interface) streams. The list of available streams will be shown into the Video Input Line box.
- **WebRTC:** sets the video input to WebRTC streams. The list of available streams will be shown into the Video Input Line box.
- **Medialooks DXGI/DX11 Screen Capture:** this is a special screen capture virtual card, that can be set to capture the screen activity into a file or streaming.
- **Medialooks WebCapture:** this is a special web page capture feature. Use the Video Input Line box to type the URL you wish to display.

All the related boxes below (video format, input line etc.) will be automatically updated accordingly.

### **VIDEO CAPTURE FORMAT**

Lists all the combined video settings available for the selected card, allowing to select the desired one.

### **VIDEO INPUT LINE**

Lists all the input lines available for the selected card, allowing to select the desired one from the drop-down list. This same box lists all the available streams in case NDI or WebRtc have been selected as capture device.



Click on the button on the left to refresh the list of available virtual objects.

### **AUDIO CAPTURE DEVICE**

Lists all the audio devices installed in the system. You may usually select the <From Video> option since the video capture device also offers audio capture features.

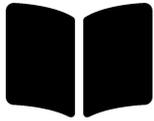
### **AUDIO FORMAT**

Sets the audio sampling rate and bit depth for audio capture, for example 48000 Hz 16 Bit Stereo.

---

## AUDIO INPUT LINE

Lists all the audio input lines available for the selected card, allowing to select the desired one from the drop-down list.



## LEARN MORE

### TRIGGERS section

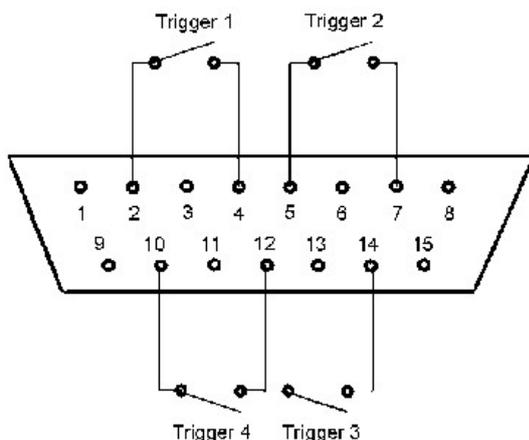
Triggers are relay closures connected on PC's joystick port. The same triggers can be assigned in parallel to keyboard hotkeys so you'll be able to run commands such as loading playlists, skip to next items in the play queue, start or stop the encoders, etc.

Since playlists can contain virtually any kind of event (including external feeds), you'll be able to open or close external feeds by relay closure and so you may broadcast incoming video from external feeds (satellite, etc.) feeds in a totally automatic way.

The eight green LEDs on the main screen will be lit when the corresponding trigger is closed; this will allow you to test your triggers setup on the joystick port.

To assign a playlist or a Play event to a trigger:

- Use the drop down menus to select the desired action (Disabled, Playlist, Play, etc.)
- Select the desired playlist that should link to the trigger.
- Press the "OK" button to confirm.



For the trigger feature to work correctly, first of all you should connect to the joystick port using the diagram on the left (for the preliminary checks you may also wish to use an ordinary joystick). You also have to add some 100 K-Ohm resistors between pins 1-3, 1-6, 9-11, 9-13: otherwise Window will report the joystick as "not connected" and triggers won't work. You should also jump together pin 12 with pin 4 (or 5).

---

The most recent motherboards don't offer any joystick port anymore, so you should use an USB-joystick converter, or alternatively buy any USB joystick and then wire your triggers in place of the original buttons. When you plug the device, Windows automatically installs the driver and the joystick is listed in the "devices and printers" section. Right-click to select the "game device setting" menu item: you will see the installed device inside the window. Click on "properties" to test the buttons which will be used as triggers.

A total of 8 triggers are available, the display window can be scrolled up and down using the arrow buttons.

### **ACTION**

Links the incoming trigger to a specific action to be performed:

- > Disabled: incoming trigger is disabled.
- > Playlist: the playlist specified in the associated box is loaded.
- > Play: starts playing the events in the play queue.
- > Stop: stops the playback.
- > Pause: pause playback on still frame.
- > Next: skips to the next event in the play queue.
- > Encoder 1 Start: starts 1<sup>st</sup> encoder.
- > Encoder 1 Stop: stops 1<sup>st</sup> encoder.
- > Encoder 2 Start: starts 2<sup>nd</sup> encoder.
- > Encoder 2 Stop: stops 2<sup>nd</sup> encoder.

### **PLAYLIST**

If action is set to "playlist", opens the dialog box to browse for a previously saved playlist to associate with the incoming trigger.

---

## **PLAYLIST LOADING MODE**

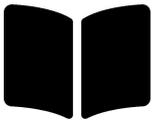
If action is set to "playlist", sets the playlist's loading mode:

- › Loop: the playlist will replace other items in the play queue except the currently playing item that will not be interrupted.
- › Insert: the playlist will load in insert mode on top of the existing list, and existing items will be shifted down. After the playlist items will be played, they will be automatically removed from the queue.
- › Paste: as above, but the playlist items they will not be removed after playback.
- › Append: the playlist will load at the end of the existing list.
- › Loop+instant: the playlist will replace all other items and start instantly.
- › Insert+instant: like the insert mode described above, but the playlist will start instantly.
- › Paste+instant: like the paste mode described above, but the playlist will start instantly.

## **HOTKEY**

Optionally, you can assign a trigger to a keyboard hotkey:

- › Click on the desired hotkey box, the text will change to "observing keystrokes"
- › Use your keyboard to hit the desired hotkey, for example spacebar, SHIFT-F, ALT-F6 etc. Such hotkey will be displayed in the corresponding box.



## LEARN MORE

### STREAMING section

moviejaysX engine includes a double encoder to export the playback output to a streaming server or local video file. This section allows to specify all the related settings.

#### ENCODER 1/2 SWITCH

Displays settings for the 1<sup>st</sup> or 2<sup>nd</sup> encoder, so they can be set independently.

#### FILE OR STREAMING FORMAT

Sets the output file format (MPEG, MOV, etc.) or streaming format (RTMP, UDP, etc.).

#### VIDEO CODEC

Sets the desired video codec for the video file or streaming output.

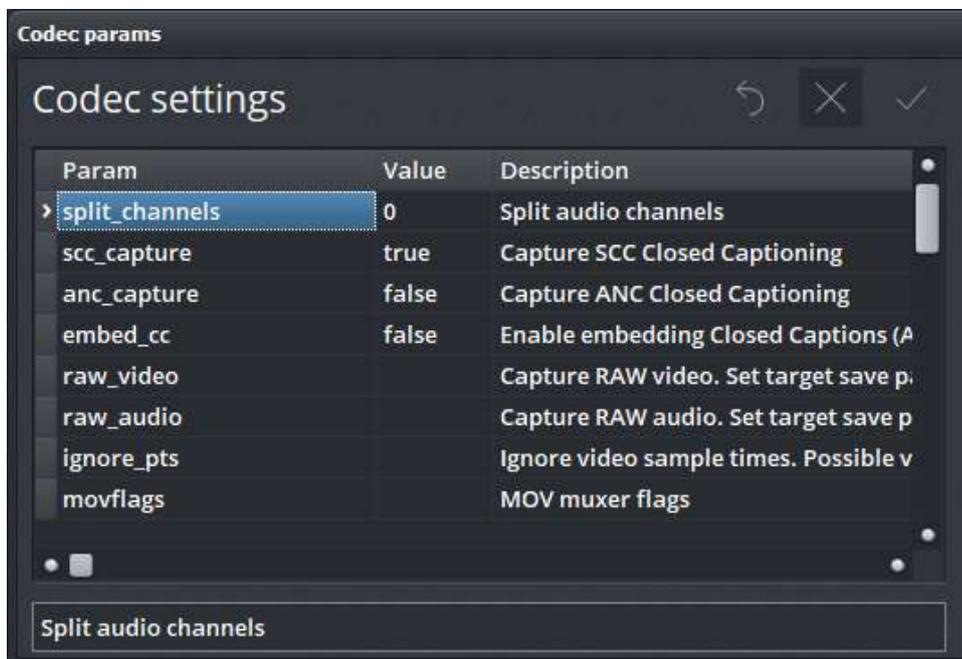
#### AUDIO CODEC

Sets the desired audio codec for the video file or streaming output.



#### PARAMS

The buttons on the right of the above boxes open a dedicated window to fine tune muxer, video and audio codecs:



---

You can change any of the settings shown by typing a new value in the related column, or reset a single setting to its default value by deleting the corresponding value in the grid.

To add a custom parameter:

- Click the INS button on your keyboard to add a new line
- Type the parameter denomination into the related column and press Enter, and repeat the same for the parameter value.
- Move to the next or previous row using the arrow keys to post the new value to the list

For example, to set a specific audio and/or video PID to a UDP or DVB stream, insert a new row specifying "streamid" as param and your audio or video PID as value.

### **CANCEL**

Cancels changes and closes the codec params window.

### **RESET**

Resets to defaults all settings related to the selected codec, and closes the window.

### **OK**

Confirms changes and closes the codec params window.

### **FILENAME OR URL**

Sets the output filename for local file or URL for streaming output. Example for UDP streaming: `udp://192.168.0.8:5000` to a specific target, or `udp://192.168.0.255:5000` to all destination IP addressed on that class.

In the example, 192.168.0.8 is the target IP, 5000 is the target port.

To check the stream, you can run VLC on the target workstation 192.168.0.8 and open the network stream as: `udp://@192.168.0.8:5000`

Other than the settings listed in the popup box, it is also possible to specify many of the additional settings in the form of

`udp://hostname:port?your_param=your_param_value`

as listed in the FFmpeg documentation at:

<https://www.ffmpeg.org/ffmpeg-protocols.html>

Examples:

- to specify a TTL value of 1 for UDP streaming, the above sample can be modified as:  
`udp://192.168.0.8:5000?ttl=1`
- in case more network interfaces are installed in the same the workstation, to set the specific network interface where to output the streaming and the TTL value as above:  
`udp://192.168.0.8:5000?ttl=1&localaddr=111.112.122.222`  
where 111.112.122.222 is the address of the network interface

For streaming in RTMP format, a sample URL is like the following:

`rtmp://User:Password@server.com/live/myStreamName`

---

In case any of the fields like username or password contain any special characters (like the @), you can alternatively use an extended authentication string, like the following:  
rtmp://[SERVER]/[APPLICATION] flashver=FMLE/3.0\20(compatible;\20FMSc/1.0)  
live=true pubUser=[LOGIN] pubPasswd=[PASSWORD] playpath=[STREAM\_ID]

More examples:

FlashWebTown:

rtmp://User:Stream@flashwebtown.com/live/test

DaCast:

rtmp://p.ep348639.i.akamaientrypoint.net/EntryPoint  
flashver=FMLE/3.0\20(compatible;\20FMSc/1.0) live=true pubUser=User  
pubPasswd=Password playpath= myStreamName

YouTube:

rtmp://a.rtmp.youtube.com/live2/myStreamName

Facebook:

To start a stream you have to first visit your Facebook Page, then at the top click on "Publishing Tools" (if you do not see the Publishing Tools your page is probably not unlocked for Live Streaming yet, contact Facebook to find out what is needed), on the left side click on "Videos" and then on the top right click on "Live". Finally, copy and paste the "Server or stream URL" from the Single Field section to moviejaysX File or URL box.

## **EXTERNAL ENCODER**

Sets the path to a BAT or CMD file that will launch an external application to encode the stream, for example c:\progam files (x86)\moviejaysX\vlc.cmd to use a provided sample. To use the internal encoding features, this field should be left blank.

Should you wish to use VLC as external encoder, you can find a list of the available command line options at: [https://wiki.videolan.org/VLC\\_command-line\\_help](https://wiki.videolan.org/VLC_command-line_help)

## **ENABLE NDI OUTPUT**

Enables/disables simultaneous playout output to Newtek NDI (Network Device Interface) protocol that allows transmitting video streams via LAN instead of SDI. The NDI protocol allows to send video to Newtek compatible devices and other Winjay applications, for example a CapturejayHX can capture the NDI stream generated from a moviejaysX on any other workstation in the LAN.

## **ENABLE WEBRTC RENDERER**

Enables/disables simultaneous playout output to WebRTC.

WebRTC is a new technology that provides browsers and mobile applications with Real-Time Communications (RTC) and allows audio/video data to be transferred between desktop applications and browsers like Google Chrome and Mozilla Firefox without any plugins. WebRTC has a number of awesome features like adaptive bit rate, direct peer-to-

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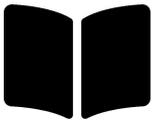
peer data transfer and low latency. Clearly, the WebRTC protocol allows as well to send video to and from any Winjay application, for example a CapturejayHX can capture the WebRTC stream generated from a moviejaySX in any other location in the world via the internet.

**START CAPTURE /STREAMING AT STARTUP**

Allows to enable/disable automatic start of capture to disk or streaming when application is restarted.

**WEBRTC SIGNALING SERVER**

Sets the WebRTC signaling server in the form address:port



## LEARN MORE

### MUSIC PACK section

This section allows to set up to a couple of different banners and related timeline, that will be automatically overlayed on music clips, usually to show title and artist, and additional clip/artist informations.

#### **BANNER 1**

Sets path to the main html5 banner, usually to display title and artist.

#### **BANNER 1 SCHEDULE**

Sets a list of time markers, on which the banner set as Banner 1 will be displayed. You can set multiple markers, expressed in seconds, or as a fraction (such as 1/3), all separated with commas. A minus sign before the value means to calculate the marker from the end of clip, the special value "middle" will overlay the banner in the middle of the clip.

For example, the value: 10,1/3,middle,-20

will overlay the banner at 10 seconds from beginning, at 1/3 of the clip, in the middle of the clip, and 20 seconds from the end of clip.

#### **BANNER 2**

As above for the "Banner 1", but optionally sets a different banner with a different scheduling, for example to display additional informations.

#### **BANNER 2 SCHEDULE**

As above for the Banner 1 Schedule, sets a list of time markers for banner 2.

You can save all the settings described above as presets. Such presets can be recalled into the playlist with the <BANNER PRESET> command, for example to use different banners and overlay timelines according to each specific playlist.



#### **HINT**

To set on-screen position for the banners, use the "save position" button from the CG window.



- **Adding a new preset**

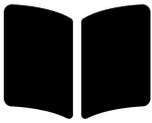
Set the boxes as required, click the button with the + symbol, type a denomination into the box, then click the button with the check symbol to confirm or the button with the X symbol to cancel.

- **Editing an existing preset**

Select the preset that you wish to edit, click the button with the up arrow sign, set the boxes as required, type the new denomination into the box, then click the button with the check symbol to confirm or the button with the X symbol to cancel.

- **Deleting an existing preset**

Select the preset that you wish to delete, then click the button with the minus symbol to confirm.



## LEARN MORE

OTHER SETTINGS section

### LANGUAGE

MoviejaySX is multilingual and any caption used in the software is read from a text file you can easily tailor to your needs, or copy-and-paste to create new languages. The software comes with English and Italian LNG language files. To set your preferred language, just select a language from the available ones in the drop-down box.

### SCHEDULING MODE

Selects the operating mode for the scheduler between weekly (playlists start based on day of week) and date (playlists start based on exact date).

### STARTUP PLAYLIST

Enable/disables automatic reload of the latest playlist when application is restarted:

- > **Disabled:** moviejaySX starts with empty playlist
- > **Latest playlist:** the latest active playlist is reloaded and started
- > **Latest playlist + Resync:** the latest active playlist is reloaded and started from the same position at shutdown time.

### CHANNEL NAME

Sets the playout channel name, which is shown on the on-air window's caption and on the virtual output device to identify the channel.

### INTERFACE STYLE

Sets an interface style among the available ones. moviejaySX user interface is based on Windows themes, so you can fully customize the application's appearance.

### PLAYLIST DEFAULT LOADING MODE

Sets the default loading mode for playlists between replace, insert, paste, append.

### EVENT DEFAULT LOADING MODE

Sets the default loading mode for single events between insert, paste, append.

---

### **THUMBNAIL PATH**

Sets the path to a specific folder where the application's generated thumbnails for playlist items will be saved. If not set, thumbnails will be saved in the same items' folder.

### **LOG PATH**

Sets a path where moviejaySX will write its operation log (for example event start / end times, software startup and shutdown, etc.). Logs will be generated as monthly plain text files, which you can open with Windows Notepad, and as database tables if the uMAM option is enabled.

### **PLAYLIST ROW HEIGHT**

Sets the playlist's grid row height in pixels, default value is 24.

### **REMAIN DISPLAY BLINK TIME**

Sets a time in seconds so if remaining time from the end of event is less than the set value, the remain display will start blinking in red. If set to 0 the feature is disabled.

### **PAUSE ON LAST FRAME**

Sets playback to pause the video at the last frame after the latest clip in the playlist or if the playback mode is set to Auto Stop.

### **CHECK PLAYLIST AT LOADING**

If checked, when a new playlist is loaded in the on-air queue, this feature automatically checks and updates clips' length and removes from the playlist any file not found on Hard Disk. As rendering each clip to update their actual duration takes some time, we suggest to enable this feature only in case if you reuse the same playlist while the actual clips have been overwritten with new ones, and only in case of short playlists.

### **ENABLE PICTURE SQUEEZE**

Allows to enable or disable the picture squeeze feature if you are not going to use it, in order to save system resources and CPU load.

### **ENABLE HTML5 OVERLAY**

Allows to enable or disable the HTML5 overlay feature if you are not going to use it, in order to save system resources and CPU load.

---

## ENABLE ADS COUNT

Enables or disables the counting of the total advertising time according to Italian authority requirements. If it doesn't match your country requirements, you can safely disable it.

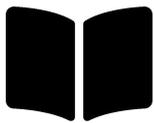
## ENABLE PANEL ANIMATION

Enables or disables the animation effect on opening and closing menus and panels.

## PLAYLIST REPLACEMENT MODE

Sets the replacement behaviour for the events in the play queue when a new playlist is loaded:

- > **Replace all:** replaces all items and start immediately with the new playlist.
- > **Keep on-air event:** keeps only the currently playing item in the queue, that will be automatically removed within 1 minute after playback is over.
- > **Keep on-air + insert events:** keeps the currently playing item in the queue and any events loaded in "insert mode", all will be automatically removed within 1 minute after playback is over.



## LEARN MORE

REPORTS section

## PLAYLIST REPORT SCHEMA

Sets a report schema for printing playlists. Click on the left button to edit the current report schema, or the right button to browse for another schema.

## LOG REPORT SCHEMA

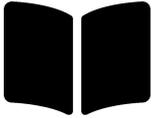
As above, sets or edits a report schema for printing logs.

## uMAM REPORT SCHEMA

As above, sets or edits a report schema for printing uMAM database.

## SCHEDULER REPORT SCHEMA

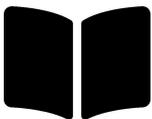
As above, sets or edits a report schema for printing scheduler items.



## LEARN MORE

### COLORS SECTION

The color selection boxes allow to set the desired color to the playlist events depending on the specific event type, for example you might want to highlight uMAM events in green. Also, if the uMAM feature is enabled, from its database window you can optionally, assign a color to each user-set category. This way, if a uMAM event in playlist belongs to a category for which a color is set, it will be highlighted with the corresponding color, or otherwise with the default color set for the uMAM event.



## LEARN MORE

### LOGS section

If the uMAM option is enabled, all events run by moviejaySX (clip playback, external feeds, playlist loading, ecc.) are automatically stored on database tables other than plain text files. This windows allows browsing, filtering and printing of generated logs.

### **START / END DATE**

Setting dates (or just the start date), you can restrict the list to a well defined date interval.

### **FREE SEARCH**

Type any keyword to filter the logged events on the only ones containing the specified string.



### **REPORTS**

When the reports window is selected, recalls the playlist print preview window. The reports fully reflect any filter is applied (dates, keyword).



### **CANCEL**

Cancel changes and closes the setup window



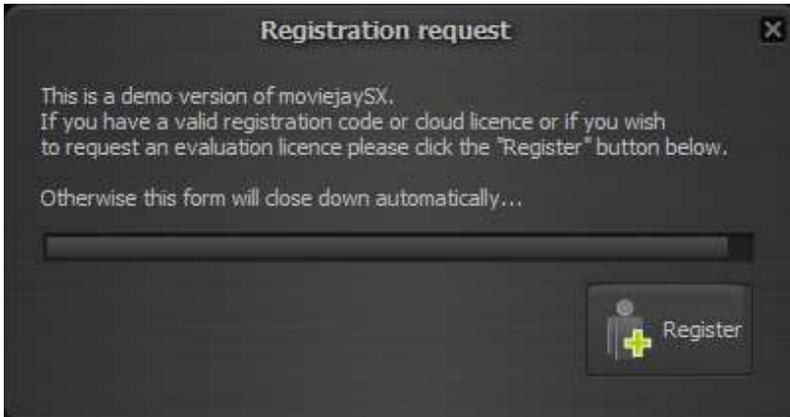
### **OK**

Confirms changes and closes the setup window

---

## The registration window

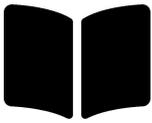
When the application is started without any valid license installed, the window shown below pops up to offer the chance to insert your license code or request an evaluation. In absence of any user action, the form will close down automatically and the application will run in demo mode.



While the window is visible, click the Register button to open the registration window below:



Alternatively, to open this same window anytime later, just click on the system menu icon located at top-left of the main window, then select the "Register" option.

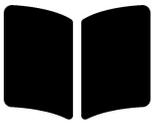


## DETAILED DESCRIPTION

"I WISH TO REQUEST AN EVALUATION LICENSE"

The screenshot shows a 'Register' dialog box with a close button (X) in the top right corner. The text inside reads: "Please fill in the following few fields and provide a valid email address. All fields are mandatory. Please don't submit bogus information since we might be unable to e-mail you the evaluation licence code. We will also provide contact informations to access our premium support service during your evaluation period." Below the text are three input fields: "Your company or name/surname:", "Your email:", and "Your country:". At the bottom left is a "Back" button with a blue arrow icon, and at the bottom right is a "Request code" button with a globe icon.

This option allows to request an evaluation license. Please fill the form with your informations and you will receive a reply to the indicated email address.



"I HAVE A VALID LICENSE CODE AND WANT TO USE IT"

"I WANT TO VIEW MY LICENSE INFORMATIONS"

The screenshot shows a 'Register' dialog box with a close button (X) in the top right corner. It features a "Registration code" input field with a "Paste" button to its right. Below this is a table with four columns: "Hardware ID", "User name", "Minutes left", and "End date". The "Hardware ID" field contains the value "03F7-1EE4-DFE4-726B". At the bottom left is a "Back" button with a blue arrow icon, and at the bottom right is an "OK" button with a green checkmark icon.

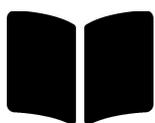
This option allows to get the unique Hardware ID related to your specific installation, needed to generate your license, or to activate a new license or renew an existing one.

---

Once you receive your registration code, paste provided code into the related box (or use the paste button) and click OK to confirm.

If the code is correct, the user name, minutes left and expiration date will be automatically updated accordingly.

If the application was in demo mode, or the new code will enable a different features or plug-ins, you will need to restart the application for changes to be effective. Otherwise, if the new code just extends the expiration date, no restart will be needed and the expiration date shown in the main window will update automatically within one minute.



"A CLOUD LICENSE HAS BEEN ACTIVATED FOR ME  
AND I WISH TO REGISTER ONLINE"

Normally, if your workstation is connected to internet, the application will automatically check the expire date and request a new code from the cloud 15 days before expire, if available.

This option allows to run the same request manually, if required for any reason (for example, lack of internet access at the time of automatic check)



"I WISH TO DELETE MY EXISTING LICENSE"

Select this option and click the Next button should you wish to delete your installed license for any reason. When the application is restarted, it will run in demo mode.



### USEFUL INFOS

For subscription options only (except for the case of one-time-buy licenses, which have no expiration), the expiration date is clearly shown on the application main screen, and normally displayed in green.

If your workstation is connected to internet, moviejaySX will automatically check the expiration date and request a new code from the cloud 15 days before expire, if available.

Should moviejaySX is unable to get a renewal code from the online activation server, a few days before expiration the date displayed will turn red and flashing. In such a case, please get in touch with us in time for renewal, in order to avoid any off-air.

---

# The event logs

During program execution, all events (clips played back, playlist loading and unloading, system messages, etc.) are logged and timestamped to monthly log files. Basic text based logs are created and updated in the c:\ProgramData\moviejaySX folder or using the folder set in the options window, as logyyyy\_mm.txt, so for example log2022\_11.txt for November 2022. Also, if the uMAM plug-in is active, moviejaySX creates comprehensive asrun logs as SQLite monthly tables. Any time you need to have a look at moviejaySX activity, you just have to get a look to the logs.

## Field structure:

Plain text logs are generated as comma-separated fields:

- 1: event start time/date
- 2: event end time/date
- 3: event type
- 4: event description

## Event description field (3<sup>rd</sup> field):

The 3<sup>rd</sup> field (column) indicates the event type among the following:

- 0: playlist loading
- 4: commands
- 5: external feed playback
- 8: hard disk clip
- 12: system message

## System messages (4<sup>th</sup> field):

The 4<sup>th</sup> field (column) in the station log normally indicates the clip's filename played out, and will also report some system-generated messages. Here is a short list and explanation:

- "Moviejay start" – shows date and time of software startup.
- "Moviejay shutdown" – shows date and time of software shutdown.
- "Warning! Invalid playlist " – You've tried to load (manually or from scheduling) an invalid playlist (empty playlist or without any valid item).
- "Live Assist operation" – From the on-air module, somebody has switched from automation mode to live assist mode (i.e. removed the playlist in the queue).

- 
- "Trigger (n)" – the incoming trigger number (n) has been received.
  - Messages about playlist loading also indicate the loading mode: Replace = playlist loads in replace mode, Insert = playlist loads in insert mode, Manual = playlist has been loaded manually, Scheduled = playlist has been loaded from schedule, Triggered = playlist has been loaded by external trigger, Startup = playlist has been loaded at program startup.

---

## Special settings

All moviejaySX options are set inside the Windows registry folder  
Computer\HKEY\_CURRENT\_USER\SOFTWARE\Winjay\moviejaySX6\ch1  
or ch2, up to ch8 for additional channels installed on the same workstation.

It is possible to set some special additional features inside the registry. For this, run the regedit tool and locate or add the following entries:

DynamicPlaylist=1

This feature allows to automatically delete from the play queue the items as they are played back. Clearly if this feature is enabled, it is not possible to use playlist loop mode.

EnableResume=1

When a playlist is scheduled for insert in instant fire, this feature allows to automatically add the same clip that was playing at the end of the inserted playlist, so the clip is resumed from the same marker where it was interrupted.

---

## Creating HTML5 banners for the Music Pack



The above picture shows a sample HTML5 banner used in the moviejaySX Music Pack feature, to display the song title and artist corresponding to the current clip.

Adobe is ending support of Flash Player on Dec 31<sup>st</sup> 2020. Microsoft is consequently removing Flash Player from their browsers, via Windows Update, by the same schedule.

All overlays reliant on Flash for playback of graphics animations, including the Music Pack, will simply stop working. We are therefore encouraging to work out a transition to HTML5 to remove the dependency on Adobe Flash as soon as possible to avoid lacking of this feature.

Playback of HTML5 graphics is already included in the moviejaySX 4 CG, you'll just need to convert your existing animation into the new format, or use the sample animation provided in our installation package.

There are various open source and commercial solutions to convert or create HTML5 content, for example Adobe Animate will allow loading a previously made FLA animation and exporting to a HTML5 animation, although some changes will be required to make it working correctly.

To get started, in the logos\_demo folder we provide:

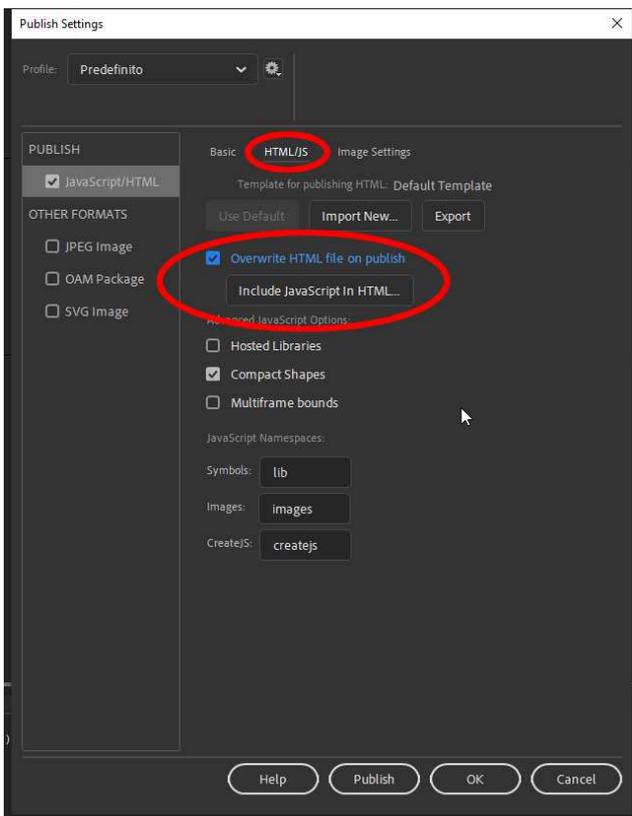
- > "maintitleNext\_html5" FLA source
- > "maintitleNext\_html5" HTML that you can set as Music Pack banner without having to make any modifications
- > "maintitleNext\_html5\_export" HTML - this is the file as it is exported from Animate. Since it requires some changes (see below) it is provided for comparison with the ready-to-use html file above.

---

The following steps are referred to Animate 2020. Using any other version, screens and especially the exported file might vary and be incompatible with the description below.

Once you load our FLA sample source into Animate, the environment looks almost identical to a Flash animation, however you will notice that all the previous ActionScript inside the "actions" layer has been changed to some Javascript code.

Make your changes to the animation if you wish (not suggested for the initial test-run), then click on File -> Publish settings, or use the Ctrl-Shift-F12 shortcut to open the publishing window:



In the left column, check the Javascript/HTML option, then select the HTML/JS tab and check the "overwrite HTML file on publish" and click on "include Javascript in HTML" so you will export a all-in-one file instead of a html + JS bundle. Finally, click on "Publish".

Check your working directory, you will notice a "libs" folder that you will need to include together with the html5 animation, as it contains support libs required for the animation to run.

---

Open the exported file with a text editor and follow these steps:

- > The html5 exported from Animate includes two `<script>` sections, you'll need to join them together so to allow using global variables for the required text objects. For this, perform a text search for the following line:  
`var createjs, AdobeAn;`

Delete these 2 lines immediately below

```
</script>  
<script>
```

- > Replace the above lines with the following code:

```
var ArtistNow = "";  
var TitleNow = "";  
var ArtistNext = "";  
var TitleNext = "";  
  
var timeOut = 0;  
  
function checkVariable() {  
    if ((ArtistNow != "") && (TitleNow != "") && (ArtistNext != "") && (TitleNext != "")) {  
        init();  
    } else {  
        timeOut += 100;  
        if (timeOut > 2000) {  
            return;  
        } else {  
            window.setTimeout(checkVariable,100);  
        }  
    }  
}
```

This code initializes the text variables and keeps waiting until a maximum timeout of 2 seconds for such variables to be set from moviejaysX, then calls the `init()` procedure entry point to start the animation, and returns.

- > Finally, locate the following line:  
`<body onload="init();" style="margin:0px;">`

and replace with

```
<body onload="checkVariable();" style="margin:0px;">
```

- 
- > Save the patched file, then refer to this same manual for using your animation in the Music Pack features.

As with Flash:

In case of clips added with <RANDOM PATH> command:

- The clip title and artist are generated based on the clip's filename, that should be in the form artist-title i.e. with artist and title separated by a dash.
- Should you wish to display as well artist metadata, for each clip you need to create a file with the same filename as the clip, but with TXT extension, and write short rows of text inside. You can then develop a custom animated banner to display such text rows one by one or according to your preferences.

In case of clips added with <RANDOM μMAM> command:

- The clip title and artist are generated based on corresponding fields as set in the database, so can be different from the actual clip's filename.
- Same as above, artist metadata is generated based on text set inside the keywords/metadata field.

---

## Notes on safety

We surely know how much important is the reliability of an automation system. Therefore, it's both your and our interest that the minor problems that may arise in the normal use will be solved in the better way and in the shortest possible time. To such purpose, it is of fundamental importance that users pay attention to some small details:

### **Periodically backup all your data (database and video clips):**

MoviejaySX generates just some plain table based on XML files, for example the scheduler.xml contains informations related to playlist scheduling, while other XML files are generated with the same filename of clips and logos in order to save markers and x/y logo positioning. A Hard Disk failure is always possible, and the time needed to perform a backup is ridiculous if compared to the time you would need to find again all your clips and settings.

- Backup the whole c:\program files\moviejaySX folder (on a removable Hard Disk or NAS)
- Backup all your playlist files, video clips, logos, and related XML files.

In such way, also in case of total breakdown of the on-air workstation (i.e. Hard Disk failure), restoring back your system into business is as simple as:

- Reinstall Windows
- Reinstall moviejaySX
- Restore files and moviejaySX installation folder from your backup copies.

### **Install TeamViewer on your workstation:**

This application allows us to take control of your PC as if we were sitting in front of it, using any standard Internet connection, and to find a solution remotely to a lot of issues without requiring any help from your side. This is the perfect solution to overcome technical and language barriers, with our qualified support we're almost always able to get you on the air again in a matter of few minutes.

### **Have a secondary workstation ready to replace the main one:**

The purpose is to have a secondary identical workstation ready to replace the main one in case of failure until the problem on the latter is fixed. In such way, it is enough to periodically effect the copies of the data from the main workstation to the backup one. In case of need, you'll just have to move the dongle (USB key) and perform some basic changes to the setup to return on the air within a few minutes. Of course, it is also possible to use the production workstation for this purpose.

---

**When a problem arises:**

- Always take note of the error messages that appear in the dialog box at the center of the screen and/or in the place of your station logo.
- Try to remember the last performed tasks that might have triggered the error. Is the error repeatable?
- Don't panic: once you've taken the above precautions and you can rely on a backup system, you have really nothing to fear.
- Remember, also the most meaningless details could be decisive to point out the problem.

---

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