spacial.

SAM Broadcaster

Product Guide

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SAM Broadcaster Product Overview

SAM Broadcaster is an all-in-one solution to start an online radio station – stream music, voice or live event to the entire world. SAM Broadcaster takes care of all the major aspects of running a successful internet radio station.

SAM Broadcaster is available in four versions:

SAM Broadcaster Lite is bundled with and can only stream to Cheapest Stream. This version does not have all the features of its bigger siblings but is a great way to start Internet radio broadcasting.

SAM Broadcaster Live-DJ is included with SAM VIBE and has all the features of the more expensive versions but it can only stream to the SAM VIBE station it is associated with.

SAM Broadcaster Pro is the most popular version and contains all the features as well as being able to stream to any supported streaming service.

SAM Broadcaster Studio has an identical feature set to SAM Broadcaster Pro but is licensed to stream an existing, terrestrial radio signal

SAM Broadcaster Pro is available for a free, 14-day trial and we recommend taking advantage of this trial to ensure the software has the features required, before making any purchase.

Trial download, software purchases as well as a full product comparison matrix are available at the product homepage http://spacial.com/sam-broadcaster.

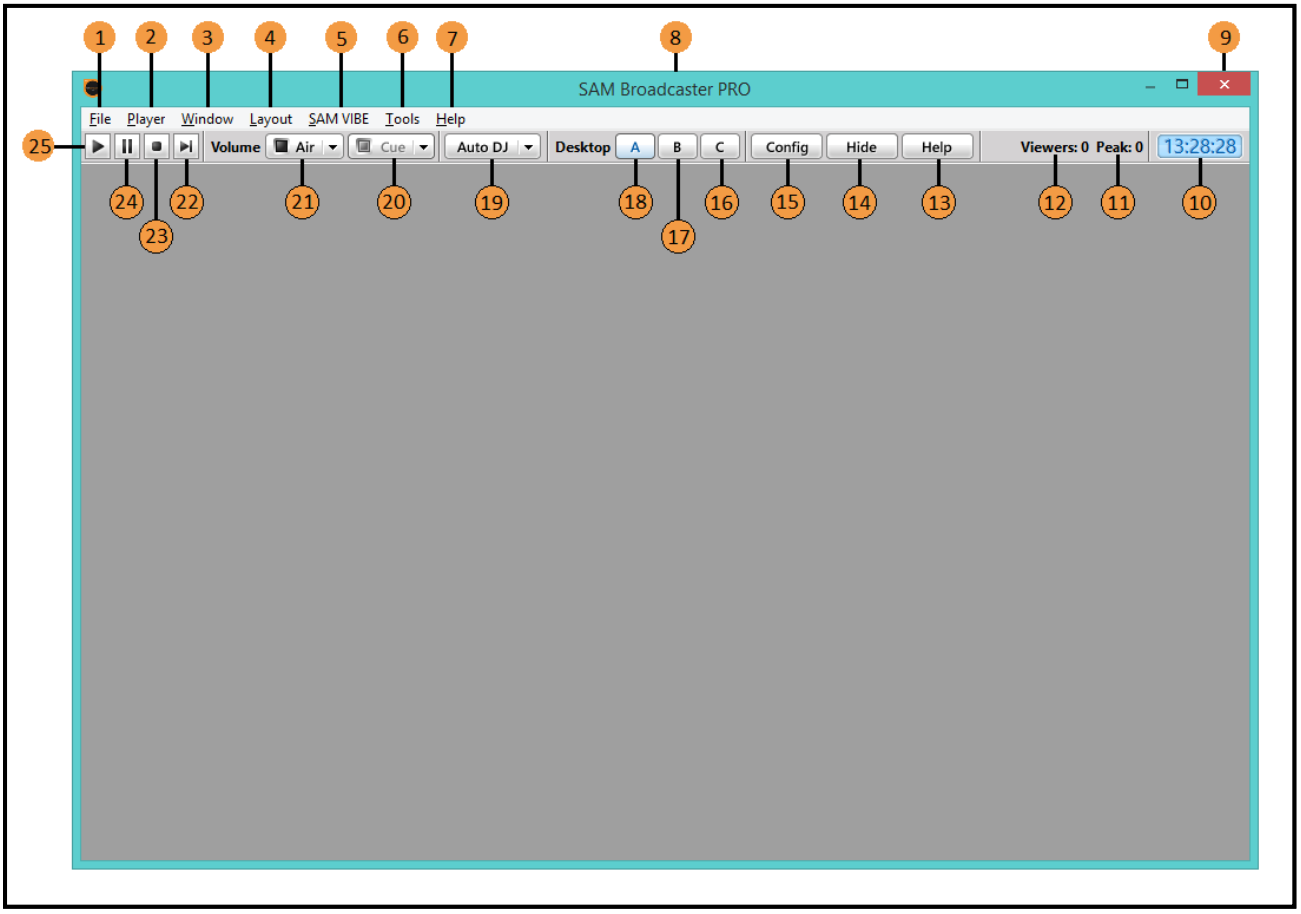
Please note that not every feature is included with each software version, for example, the Encoder window is not available in SAM Broadcaster Live-DJ and broadcasters can only add a Cheapest Stream (http://cheapeststream.com) encoder within SAM Broadcaster.

SAM Broadcaster Product Guide

This document is designed to give the reader an overview of the features within SAM Broadcaster. It is not designed to be a user guide but should be used as an explanation and reference for the controls and features contained within SAM Broadcaster.

SAM Broadcaster

The main SAM Broadcaster window can be configured by the broadcaster to best suit their needs by adding the required components to one of three available Desktops within SAM Broadcaster. Some standard controls are available from a main toolbar shown as item 4 on the diagram.



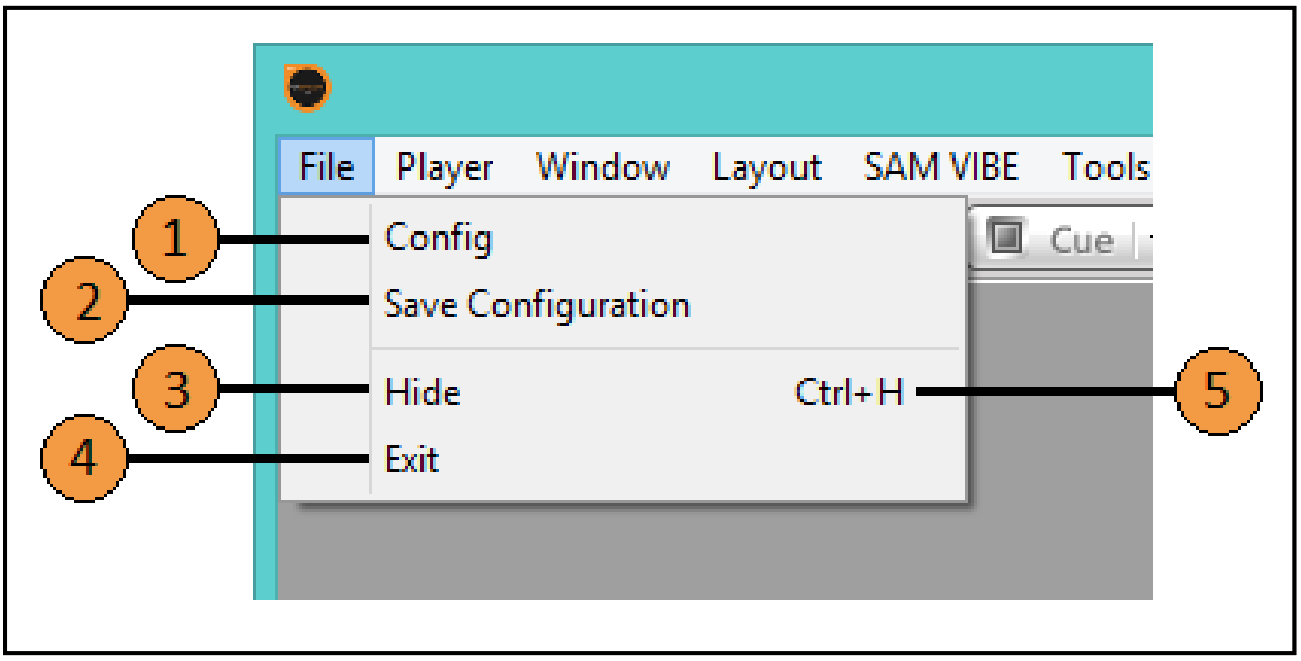
Serial	Description
1	File Menu
2	Player Menu
3	Window Menu
4	Layout Menu
5	SAM VIBE Menu
6	Tools Menu
7	Help Menu
8	Version of SAM Broadcaster displayed (Lite, Live-DJ, Pro or Studio)
9	Minimize SAM Broadcaster to the System Tray
10	Digital format clock
11	Shows the highest number of listeners (Listener Peak)
12	Shows the current number of listeners
13	Opens http://spacial.com/help-center?filter=sam-broadcaster
14	Minimize SAM Broadcaster to the System Tray
15	Open the Configuration window
16	Select Desktop C
17	Select Desktop B

18	Select Desktop A
19	Cycle through the Play Options, (Auto DJ Mode, Play Queue or Manual DJ)
20	Select to Cue the track (must be enabled in the Audio Mixer Pipeline – Air Out)
21	Open the aired volume slider which includes a default setting button
22	Stop the playing track and play the next queued track
23	Stop the playing track
24	Pause the playing track
25	Play the queued track

Standard Menu Options

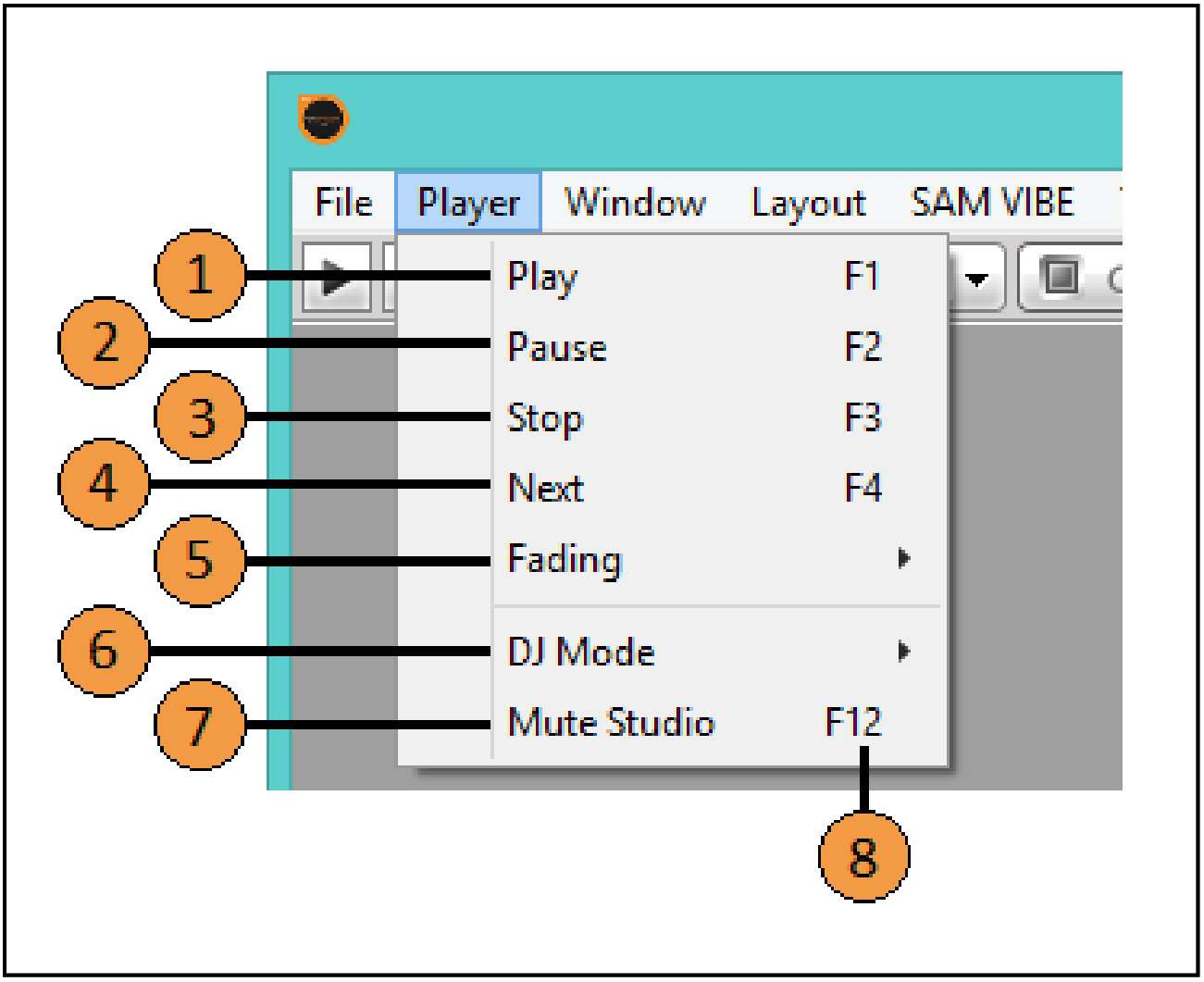
File Menu

SAM Broadcaster contains a number of standard Windows type menu options which includes sub-menus as well as a large number of shortcut codes which can reduce the mouse actions associated with many SAM Broadcaster tasks. Any available shortcut codes are displayed beside the action associated with it.



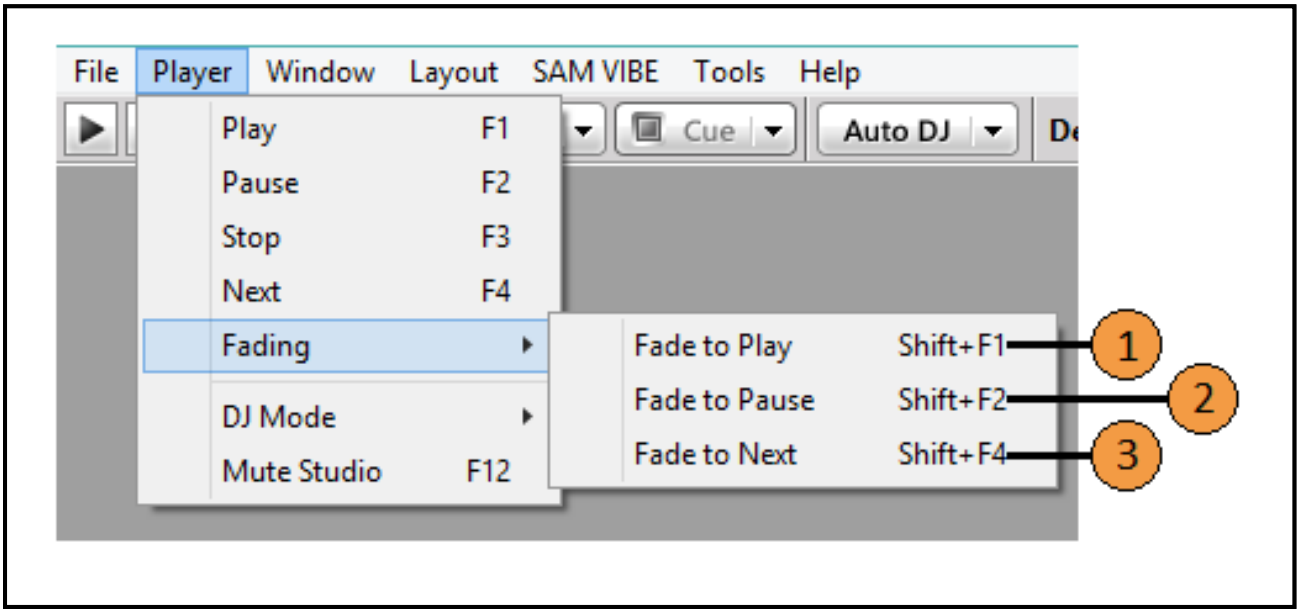
Serial	Description
1	Open the Configuration window
2	Save the current window configuration
3	Minimise SAM Broadcaster to the System Tray
4	Exit SAM Broadcaster
5	Shortcut key code associated with item 3

Player Menu



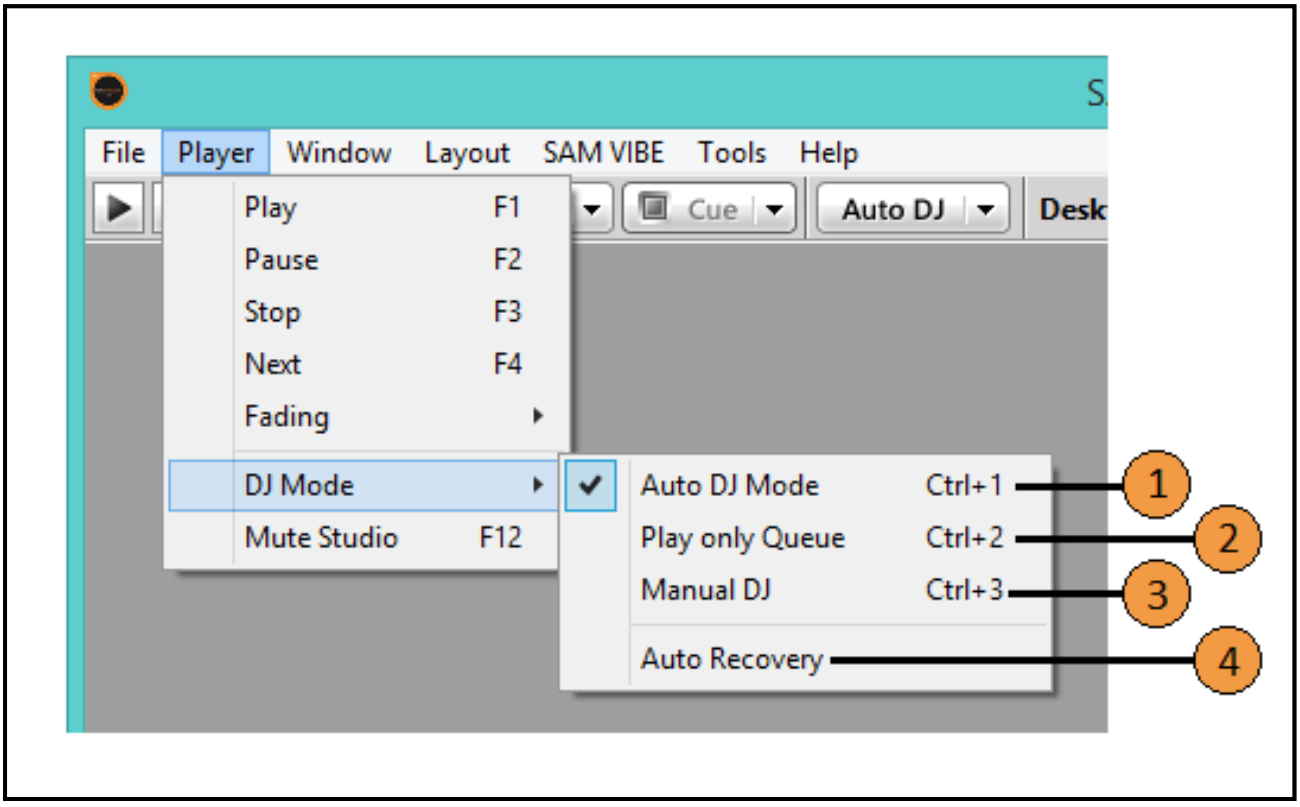
Serial	Description
1	Play the queued track
2	Pause the queued track
3	Stop the queued track
4	Stop the playing track and play the next queued track
5	Open the Fading sub-menu
6	Open the DJ Mode sub-menu
7	Mute the studio output
8	Sub-menu item shortcut key options

Fading Sub-Menu



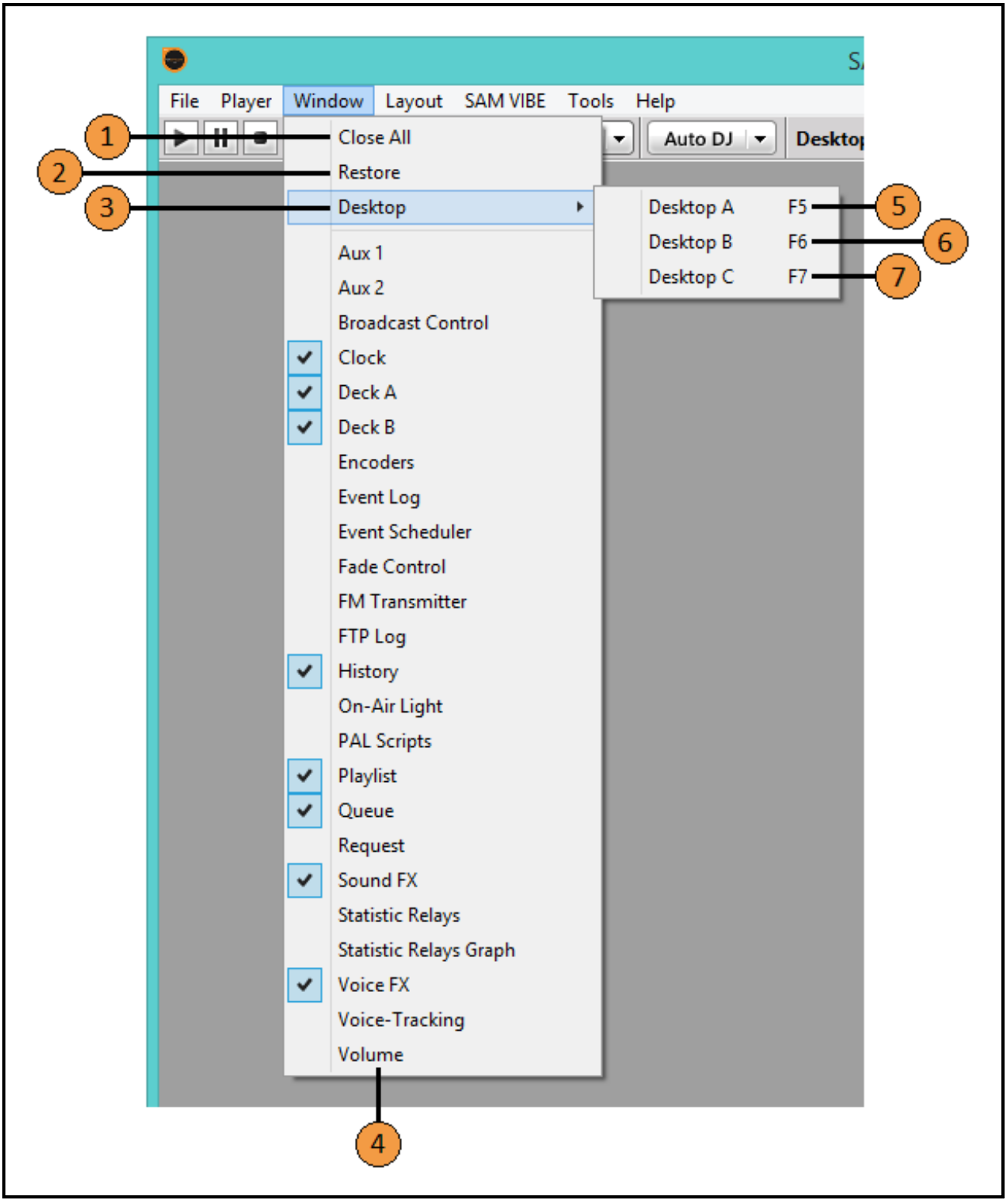
Serial	Description
1	Fade into the first track
2	Fade the current playing track to a pause
3	Fade the current playing track into the next cued track

DJ Mode Sub-Menu



Serial	Description
1	Auto DJ Mode and associated shortcut key
2	Play what is in the queue and stop and associated shortcut key
3	Manual DJ and associated shortcut key
4	When selected, Auto Recovery will play random tracks when the Queue is empty

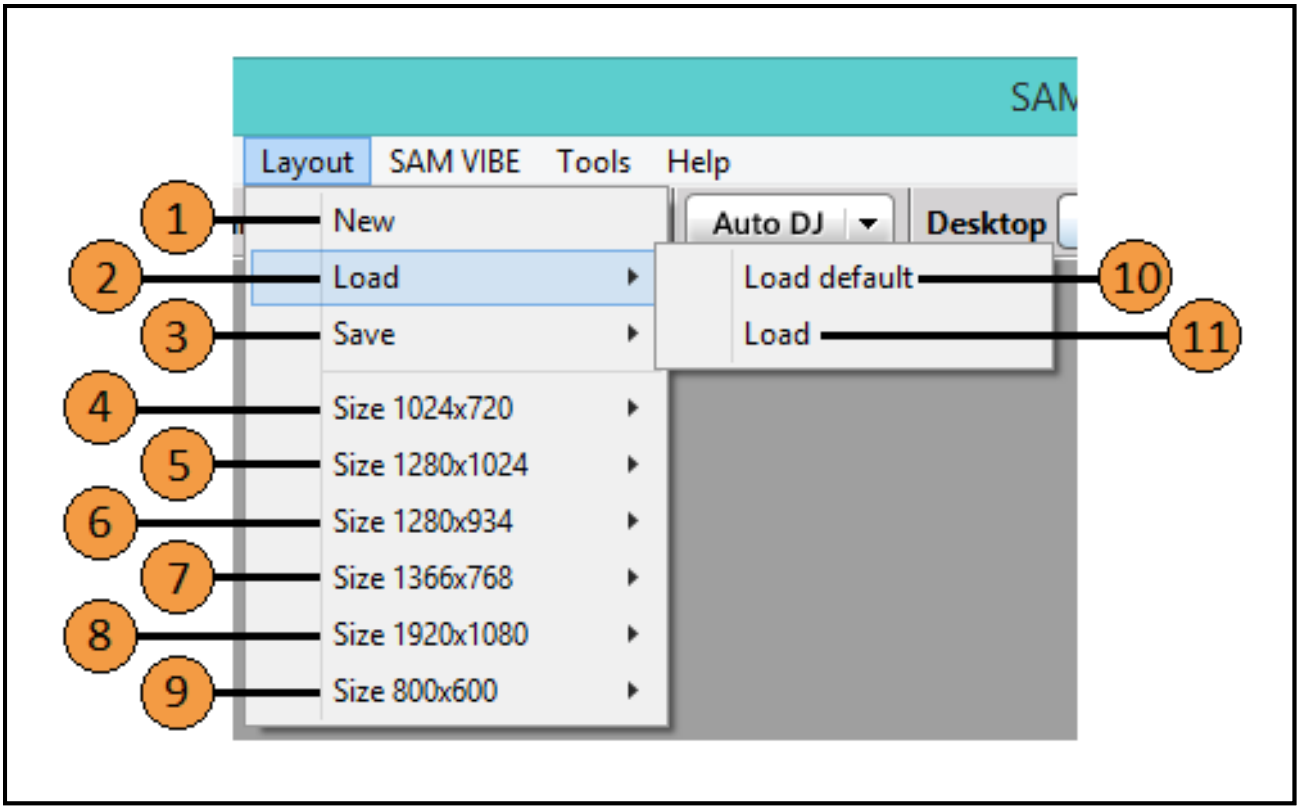
Window Menu



Serial	Description
1	Close all windows on the current desktop, (A, B or C)
2	Restore all windows to the previous configuration for the current desktop, (A, B or C)

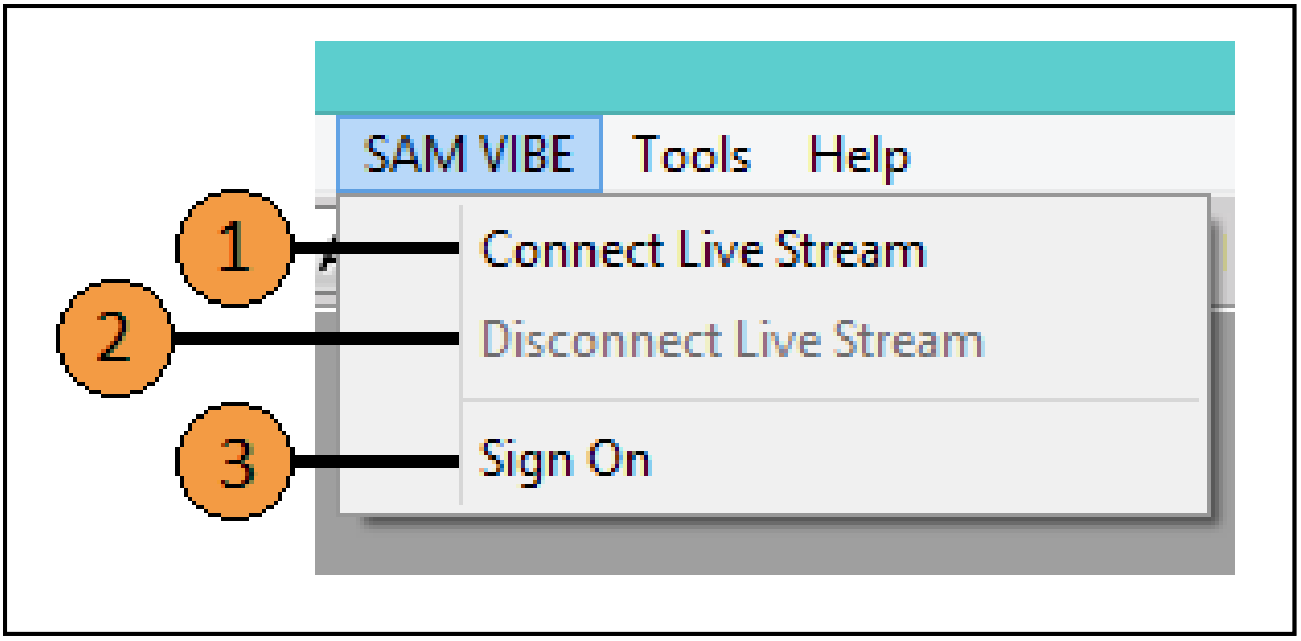
3	Open the Desktop sub-menu
4	List of available windows, the tick signifies it is displayed on the current Desktop
5	Select Desktop A (and associated shortcut key)
6	Select Desktop B (and associated shortcut key)
7	Select Desktop C (and associated shortcut key)

Layout Menu



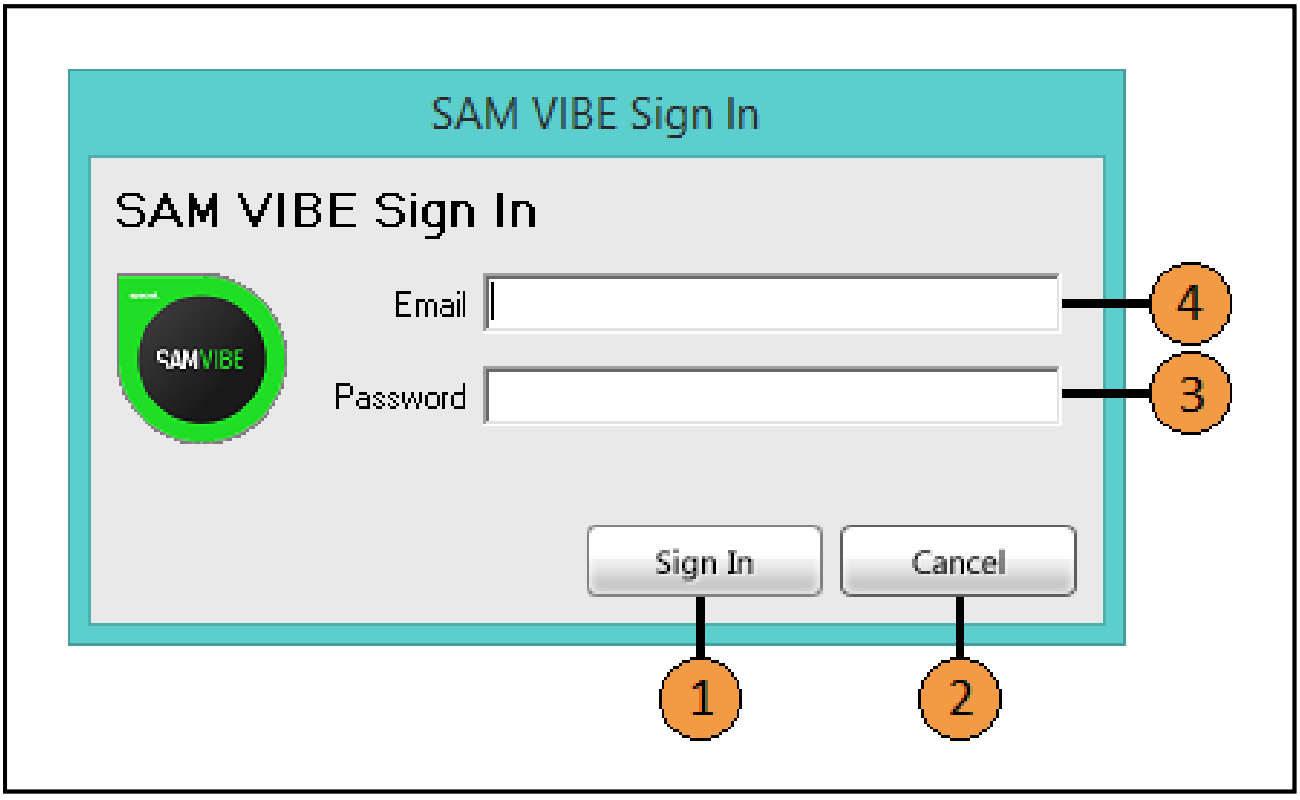
Serial	Description
1	Removes all windows, allowing you to create a new default layout
2	Opens the Load sub-menu (shown)
3	Opens the Save sub-menu, 'Save as Default' or 'Save as' (SAM Layout file .sul)
4	Opens the sub-menu which loads the default layout for the resolution 1024 x 720
5	Opens the sub-menu which loads the default layout for the resolution 1280 x 1024
6	Opens the sub-menu which loads the default layout for the resolution 1280 x 934
7	Opens the sub-menu which loads the default layout for the resolution 1366 x 768
8	Opens the sub-menu which loads the default layout for the resolution 1920 x 1080
9	Opens the sub-menu which loads the default layout for the resolution 800 x 600
10	Load the default layout
11	Load a pre-saved layout file (.sul)

SAM VIBE Menu



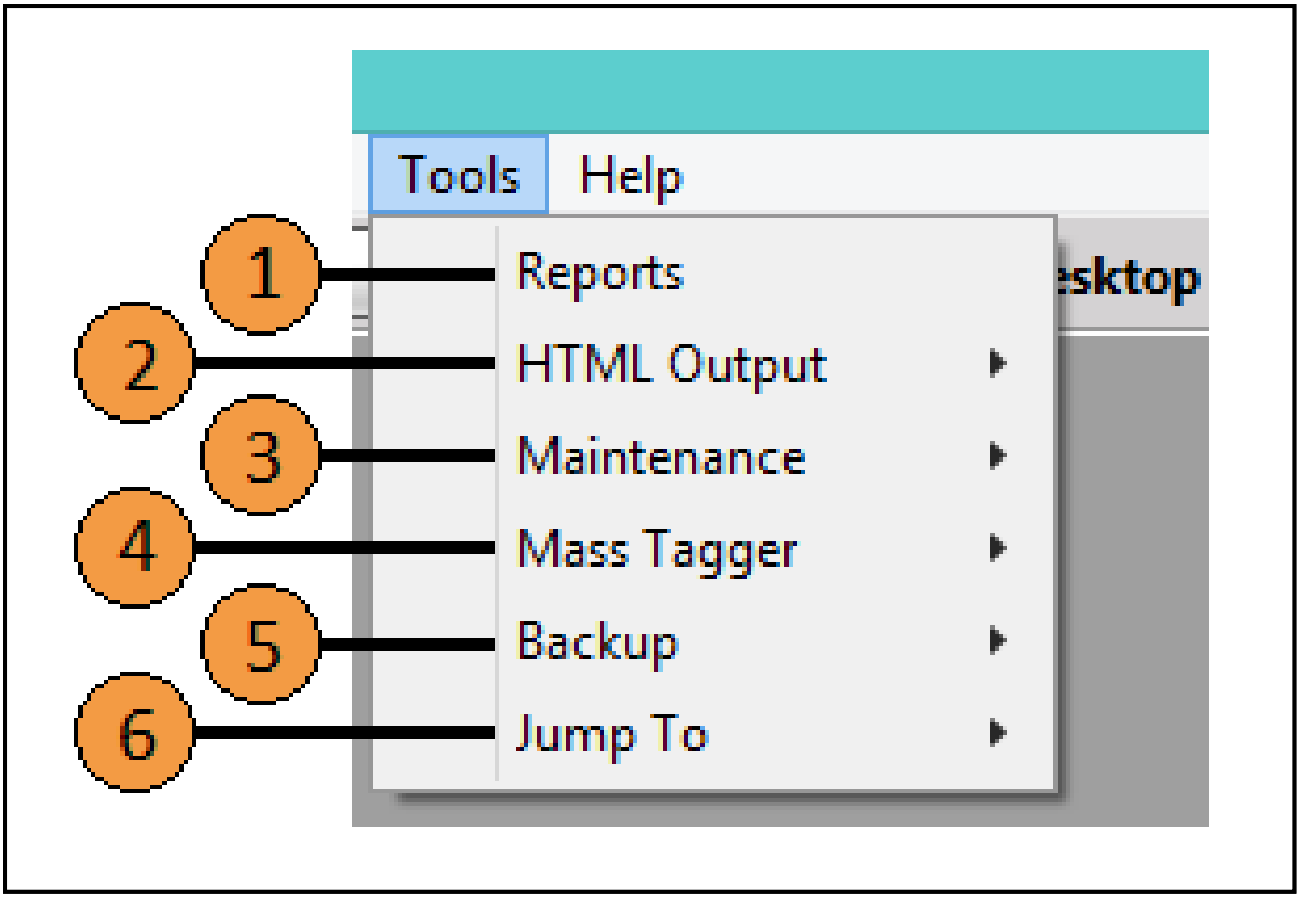
Serial	Description
1	Connect to Live SAM VIBE Stream to enable Live Broadcasting
2	Disconnect Live Stream (if connected)
3	Sign on to the SAM VIBE service

SAM VIBE Sign In



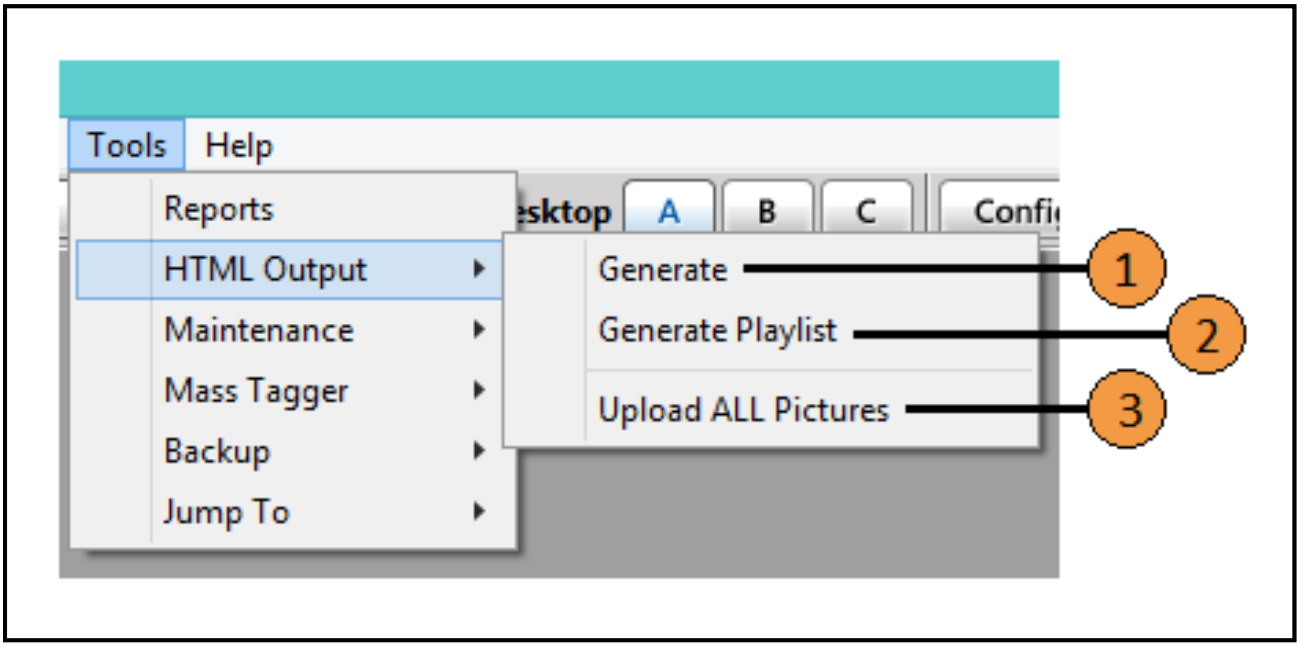
Serial	Description
1	Sign In to SAM VIBE
2	Cancel this operation
3	Enter the Password for this email address
4	Enter your email address associated with your SAM VIBE service

Tools Menu



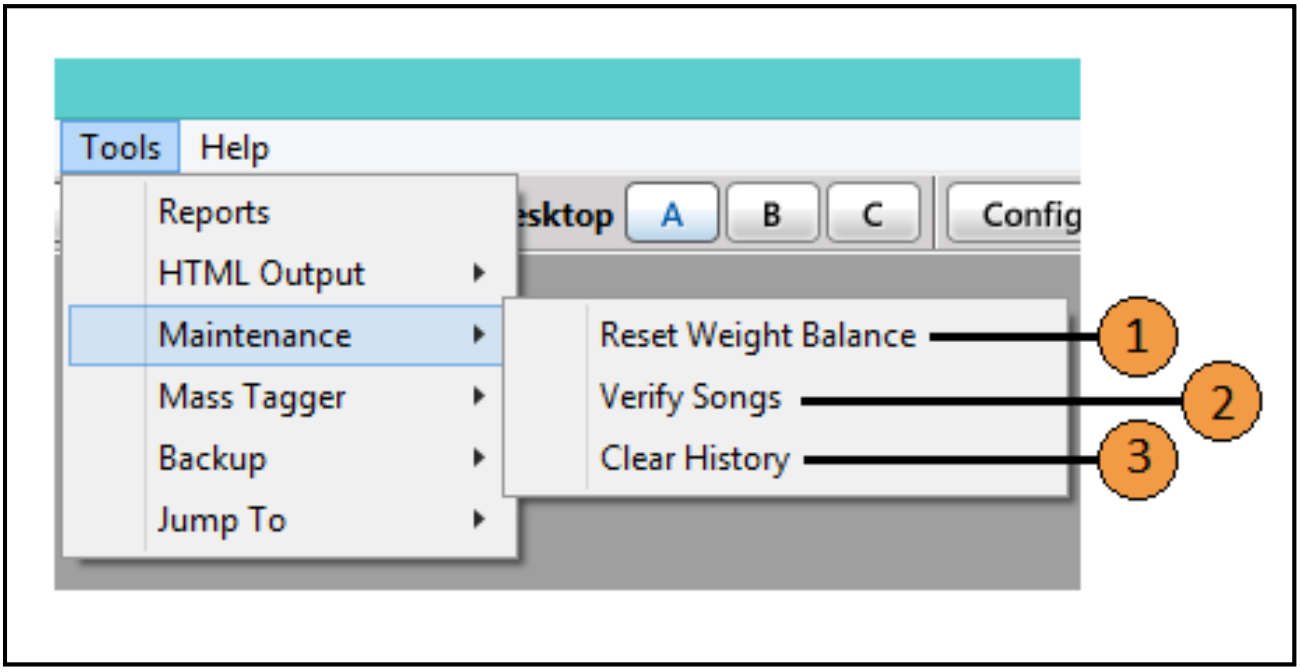
Serial	Description
1	Open the SAM Reporter, the SAM Report Generator
2	Open the HTML Output sub-menu
3	Open the Maintenance sub-menu
4	Open the Mass Tagger sub-menu
5	Open the Backup sub-menu
6	Open the Jump To sub-menu

HTML Output Sub-Menu



Serial	Description
1	Generate the HTML files based on the settings in the Config window
2	Generate a webpage showing what has played, what is playing and what will play
3	Upload ALL Pictures to the station website

Maintenance Sub-Menu



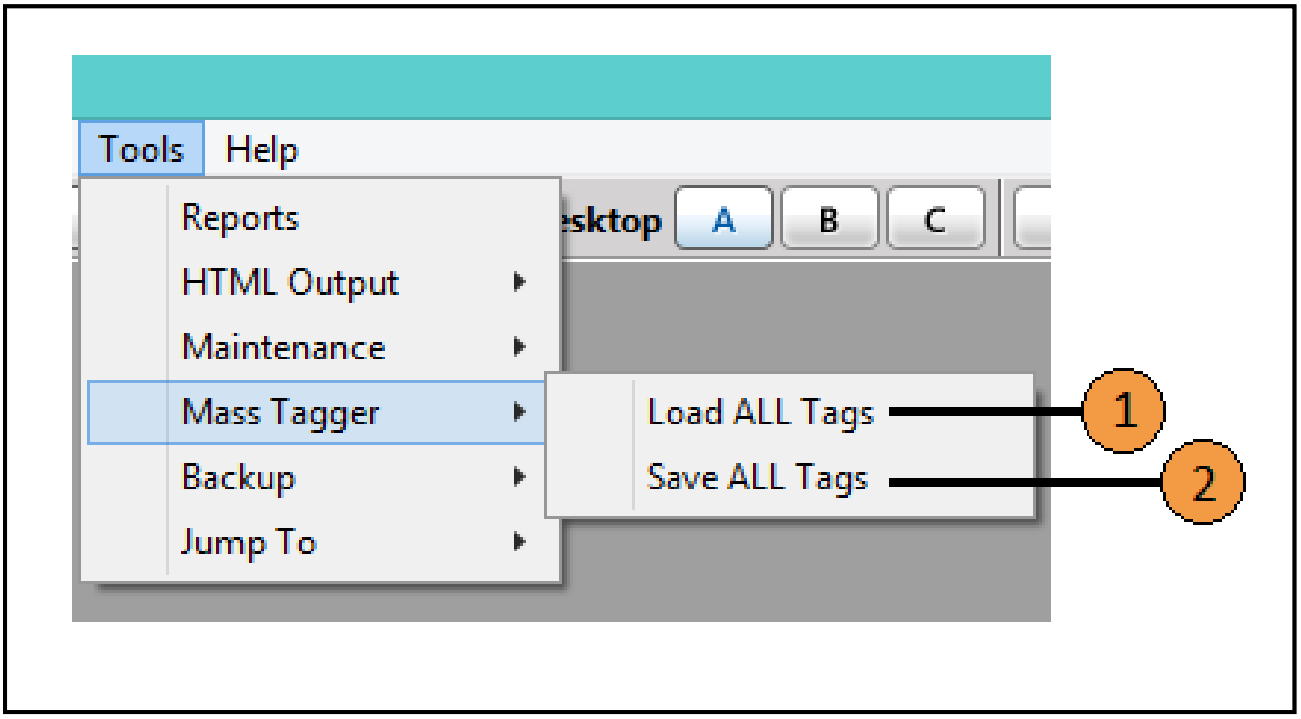
Serial	Description
1	Reset the track weighting balance
2	Verify songs in the database against physical tracks
3	Clear the track history (also removes all reporting information)

It is recommended that you click Reset Weight Balance after adding tracks to your library if you use weighted rotation otherwise, new tracks which would have a very low balance, might play very often.

When you click Verify Songs, SAM Broadcaster scans through all the songs in the media library database and then deletes all entries where the physical file no longer exists.

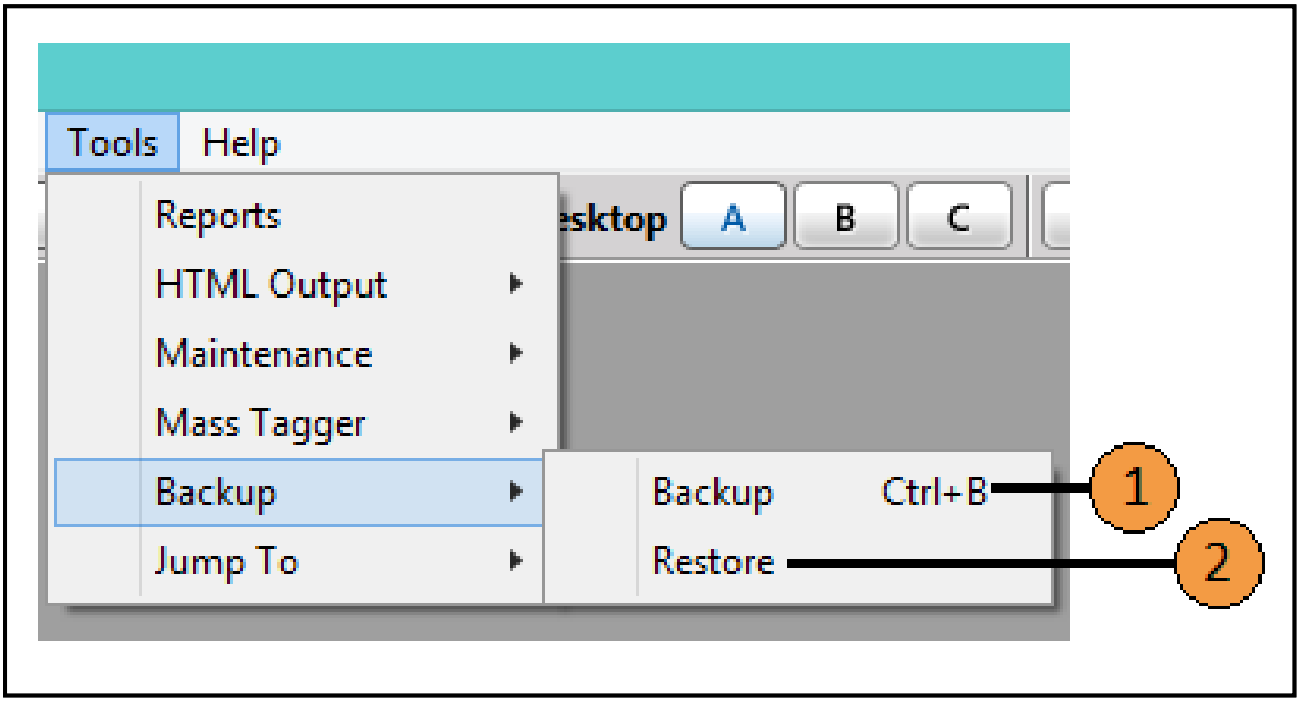
Clearing the History will completely empty the history table. Most broadcasters need this data for reporting purposes (Used for royalties or station statistics). So be very careful with this command. We recommend doing a backup of your data before you run this command.

Mass Tagger Sub-Menu



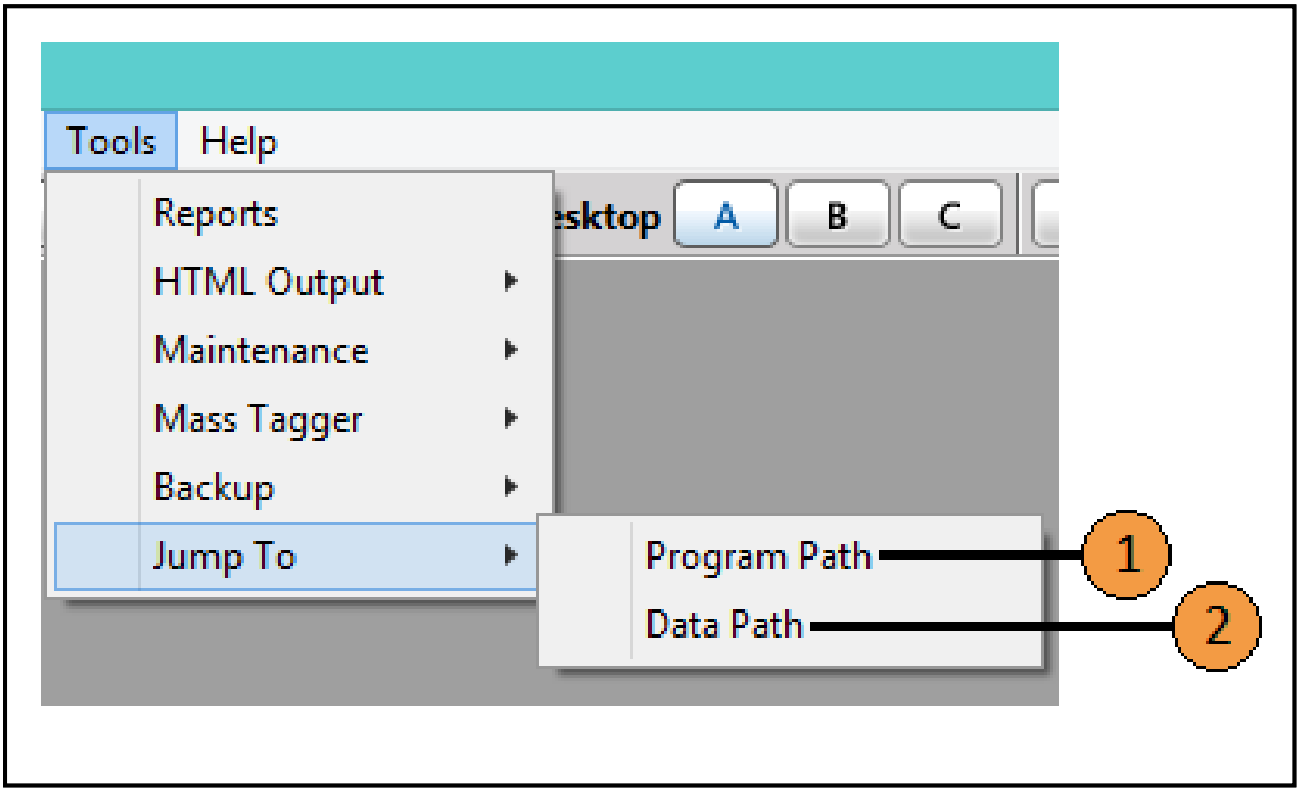
Serial	Description
1	Load all track tags for the songs in your library (Meta Data)
2	Saves all the track tags for the songs in your library

Backup Sub-Menu



Serial	Description
1	Backup the SAM Broadcaster Database
2	Restore the SAM Broadcaster Database

Jump To Sub-Menu

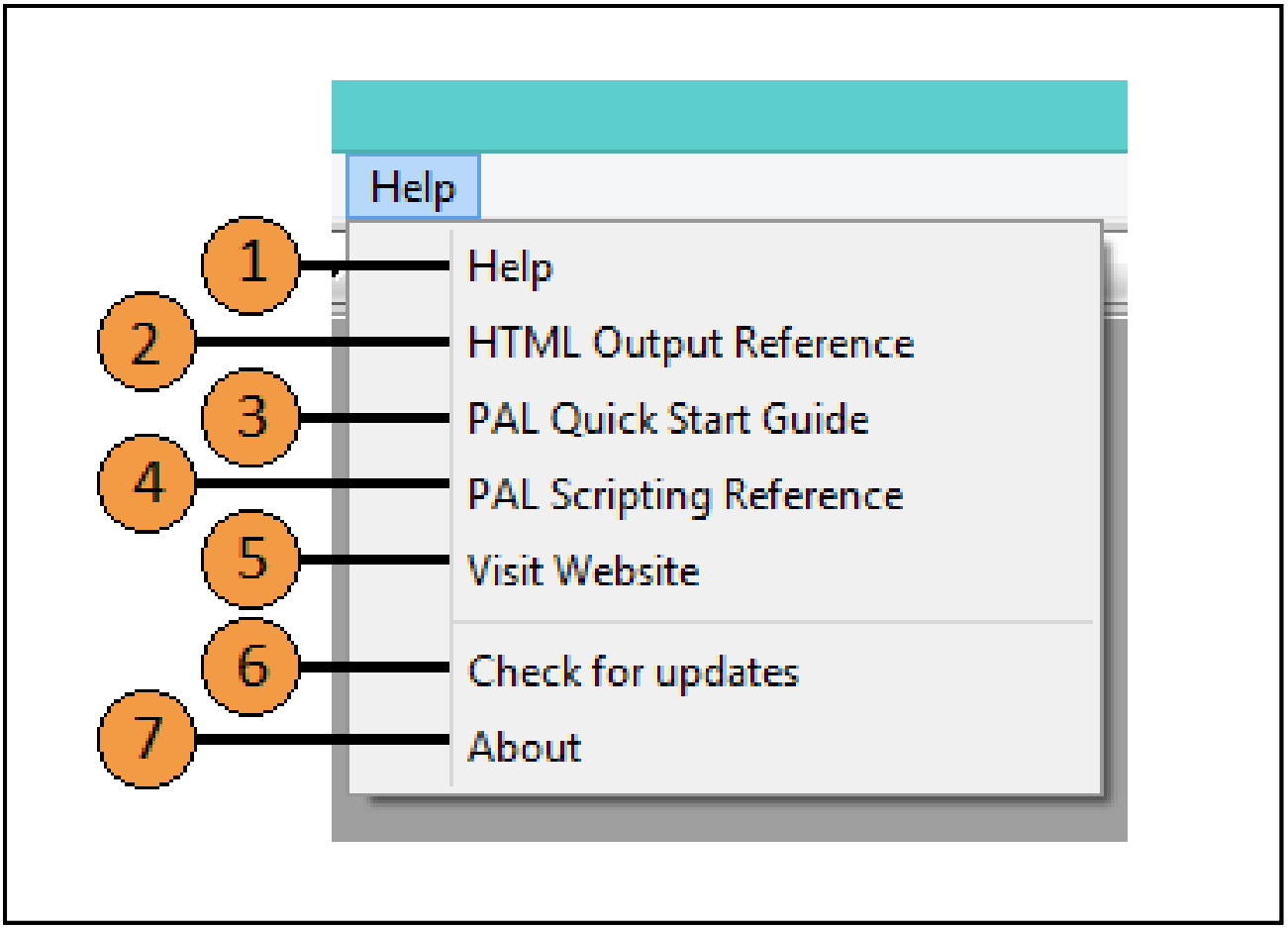


Serial	Description
1	Opens the folder SAM Broadcaster is installed into
2	Opens the folder SAM Broadcaster uses to store data

The default data path is C:\Users\%username%\AppData\Local\SpacialAudio\SAMBC

This folder also contains the configuration files and event log.

Help Menu



Serial	Description
1	Opens the Spacial Online Help Center in your default web browser
2	Open the SAM Broadcaster HTML Output Reference Guide
3	Opens the PAL Scripting Quick Start Guide (Microsoft Word document .doc)
4	Opens the PAL Scripting Reference
5	Opens http://spacial.com in your default web browser
6	Checks for Product Updates
7	Loads the About splash screen from where you can verify the software version

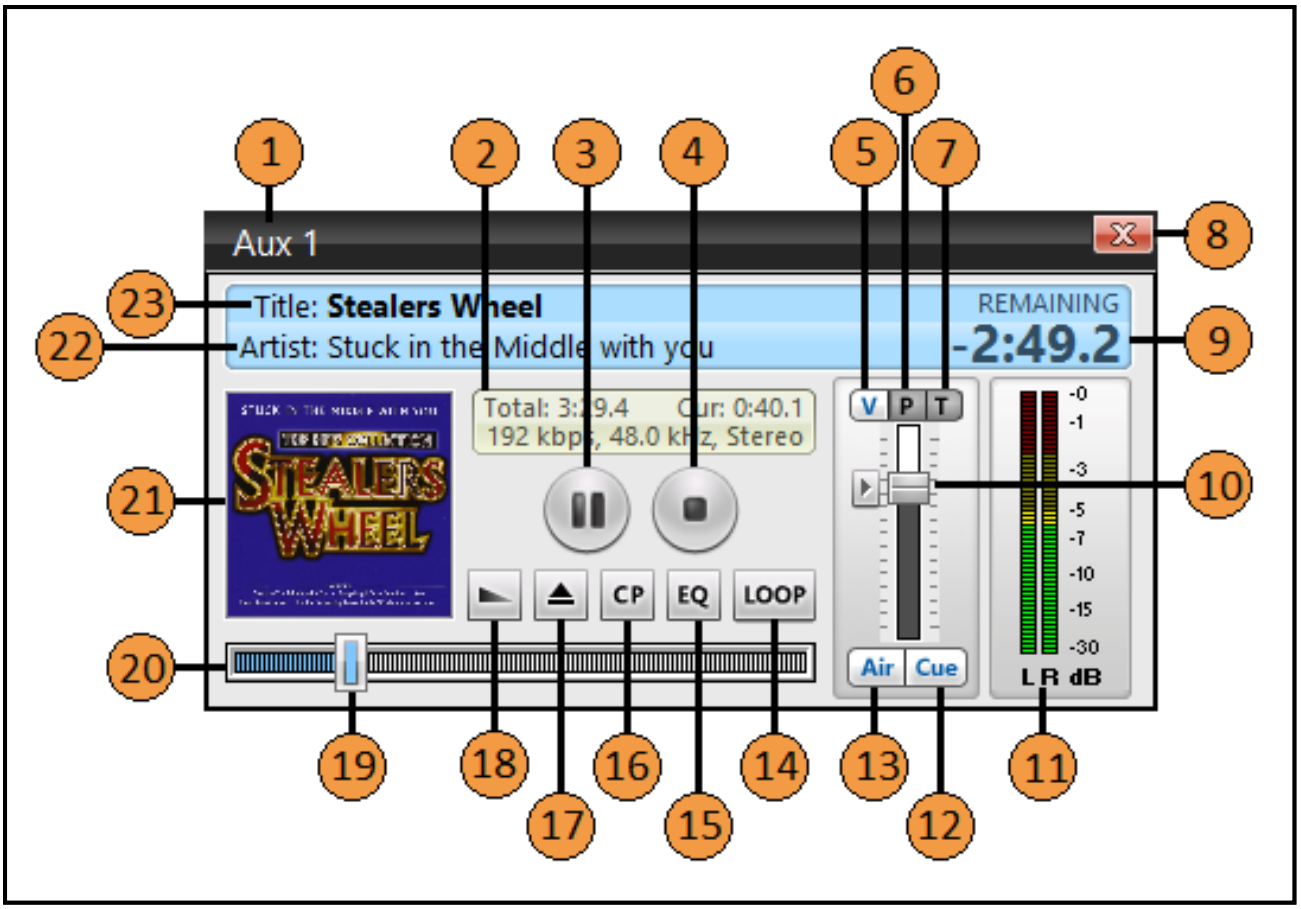
Auxiliary Decks

There are two auxiliary decks available and these are normally used to listen to tracks in the background before being brought to the decks. This would allow you to ensure the track you select is the track you want to play. You might have a number of different versions of the same track, perhaps you want to play a live or an acoustic version. You can listen to (Cue) the track on the auxiliary deck before bringing the track to the broadcast decks.

You can use the Air function to play a jingle or second track on top of a track playing through the primary decks and you can also use an auxiliary deck to play a music bed whilst speaking.

Tracks played in either of the auxiliary decks are not recorded in the history.

Auxiliary decks 1 and 2 operate with the same functionality.



Serial	Description
1	Identifies the deck as Auxiliary Deck 1
2	Detailed track information*
3	Pause Deck
4	Stop Deck
5	Click to select the Volume adjustment on the slide
6	Click to select the Pitch adjustment on the slide
7	Click to select the Tempo adjustment on the slide
8	Close the Deck window

9	Track Time remaining**
10	Volume/Pitch/Tempo Slide Adjuster (the arrow restores the default setting)
11	Audio Meter
12	Audio will be sent to cue when clicked
13	Audio will be sent to air when clicked
14	Loop the track (ideal for music beds)
15	Open the graphic equalizer
16	Cue Point
17	Eject the track from the deck
18	Fade the current track to start the next track
19	Progress Bar slider
20	Progress Bar
21	Displays track album art
22	Displays the current track artist
23	Displays the current track title

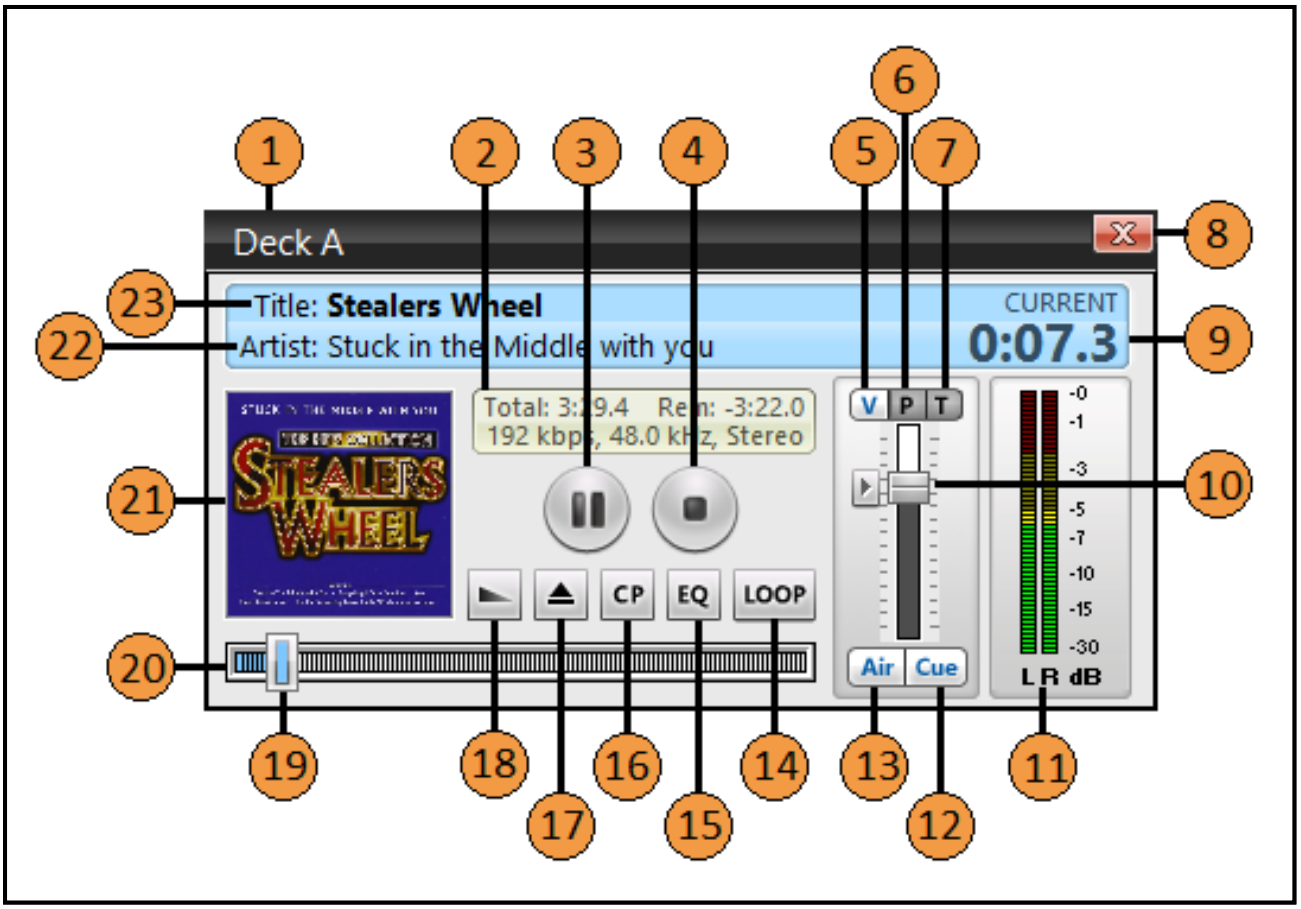
* If the time display at item 9 shows the time remaining then the time displayed here shows the elapsed time and vice versa.
** By clicking the track time, you can cycle through three option, to display the time remaining, the time elapsed or the overall track length.

Broadcast Decks

SAM Broadcaster contains two broadcast decks with Deck A being the main audio player in SAM Broadcaster.

As with the Auxiliary Decks, the time can display the elapsed track time, the time remaining or the track length.

Deck B has the same functionality as Deck A.



Serial	Description
1	Identifies the deck as Auxiliary Deck 1
2	Detailed track information*
3	Pause Deck
4	Stop Deck
5	Click to select the Volume adjustment on the slide
6	Click to select the Pitch adjustment on the slide
7	Click to select the Tempo adjustment on the slide
8	Close the Deck window
9	Track Time remaining**
10	Volume/Pitch/Tempo Slide Adjuster (the arrow restores the default setting)
11	Audio Meter
12	Audio will be sent to cue when clicked
13	Audio will be sent to air when clicked

14	Loop the track (ideal for music beds)
15	Open the graphic equalizer
16	Cue Point
17	Eject the track from the deck
18	Fade the current track to start the next track
19	Progress Bar slider
20	Progress Bar
21	Displays track album art
22	Displays the current track artist
23	Displays the current track title

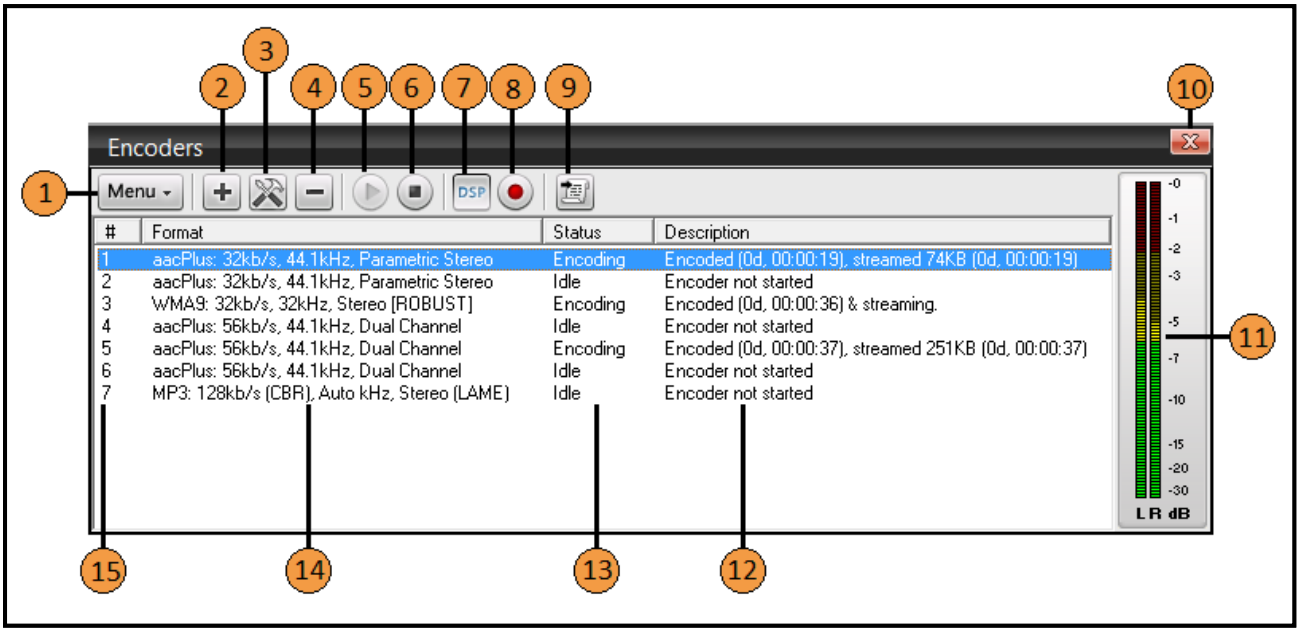
* If the time display at item 9 shows the time remaining then the time displayed here shows the elapsed time and vice versa.

** By clicking the track time, you can cycle through three option, to display the time remaining, the time elapsed or the overall track length.

Encoders

Encoders are the feature which takes your music and voice, 'encodes' this for upload to the streaming server, from where, your listeners can listen to your station.

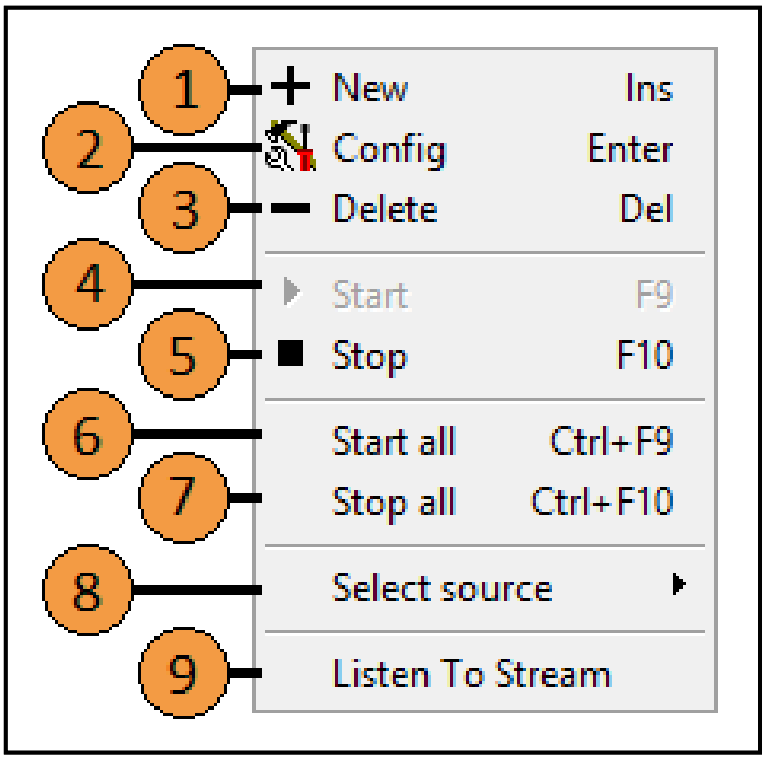
The encoders are the most important aspect of any radio software as it prepares the signal by compressing it into a streaming format.



Serial	Description
1	Displays the Encoder sub-menu
2	Click to add an encoder
3	Configure or modify existing encoders
4	Delete an encoder
5	Play or start the encoder (button remains greyed out until an encoder is selected)
6	Stop the encoder (button remains greyed out until an active encoder is selected)
7	Selects the DSP pipeline as the audio source
8	Selects the computer soundcard as the audio source
9	Show or hide the scripting interface
10	Close the window
11	Audio Meter
12	Encoder Description
13	Encoder Status
14	Encoder Format
15	Encoder Serial

Encoders Sub-Menu

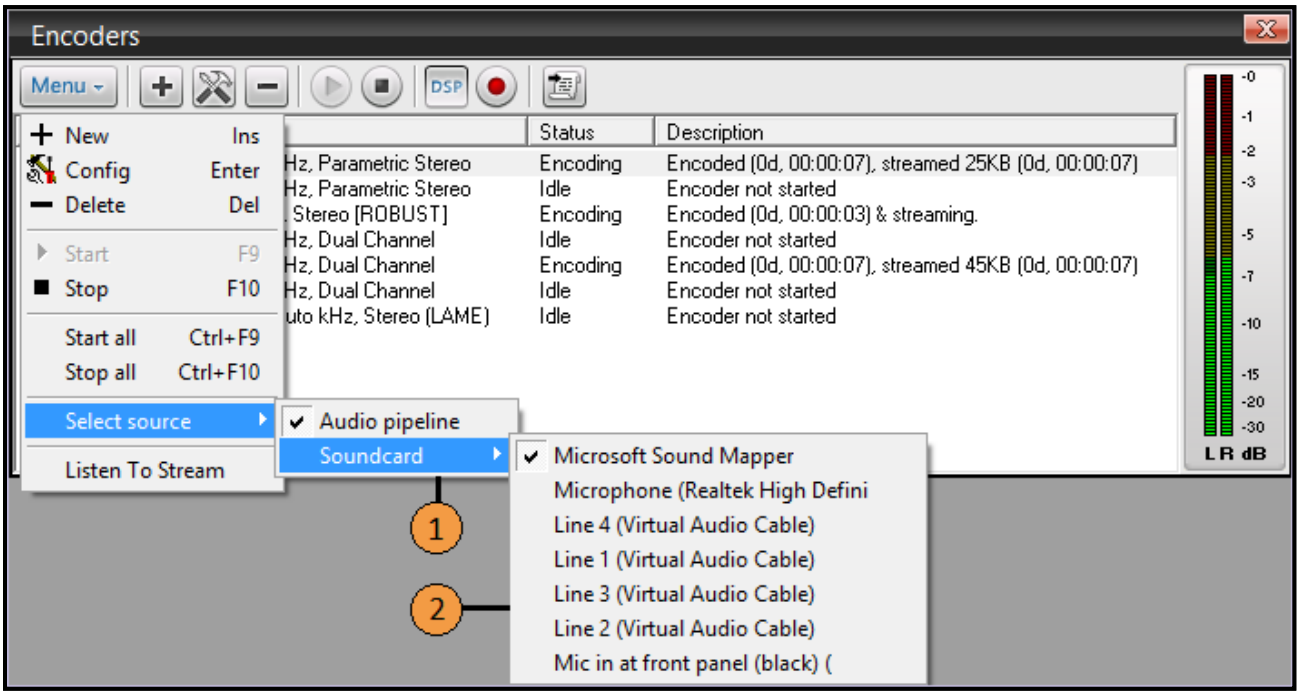
The Encoders sub-menu provides additional functionality including the ability to start and stop all encoders with a single mouse click.



Serial	Description
1	Click to add an encoder
2	Configure or modify existing encoders
3	Delete an encoder
4	Play or start the encoder (option remains greyed out until an encoder is selected)
5	Stop the encoder (option remains greyed out until an active encoder is selected)
6	Start all encoders
7	Stop all encoders
8	Select the stream source
9	Listen to Stream

Encoders Select Source Sub-Menu

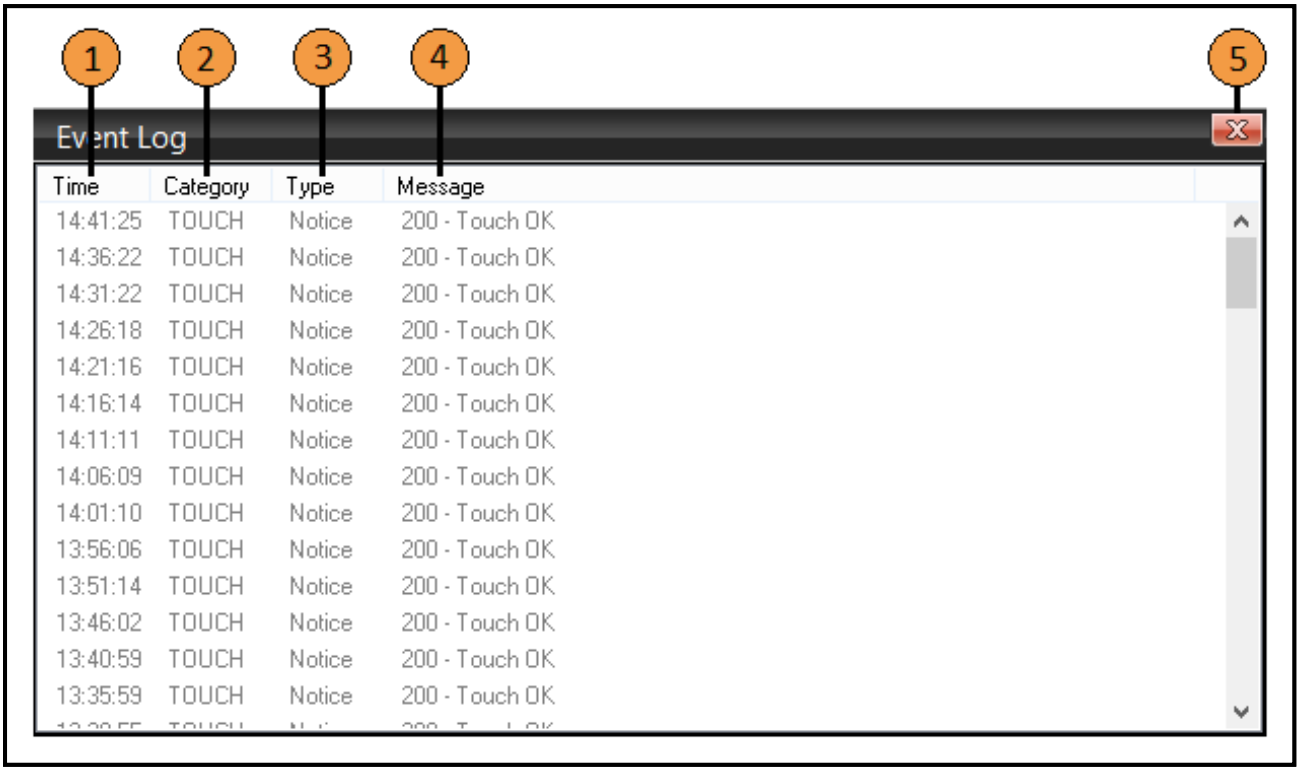
The Select Source sub-menu enables you to select the Audio Pipeline or a Soundcard as the source. You can see in this image that Virtual Audio Cables (VAC) is installed which is a requirement to integrate Skype into SAM Broadcaster.



Serial	Description
1	Select the source
2	Select the soundcard source

Event Log

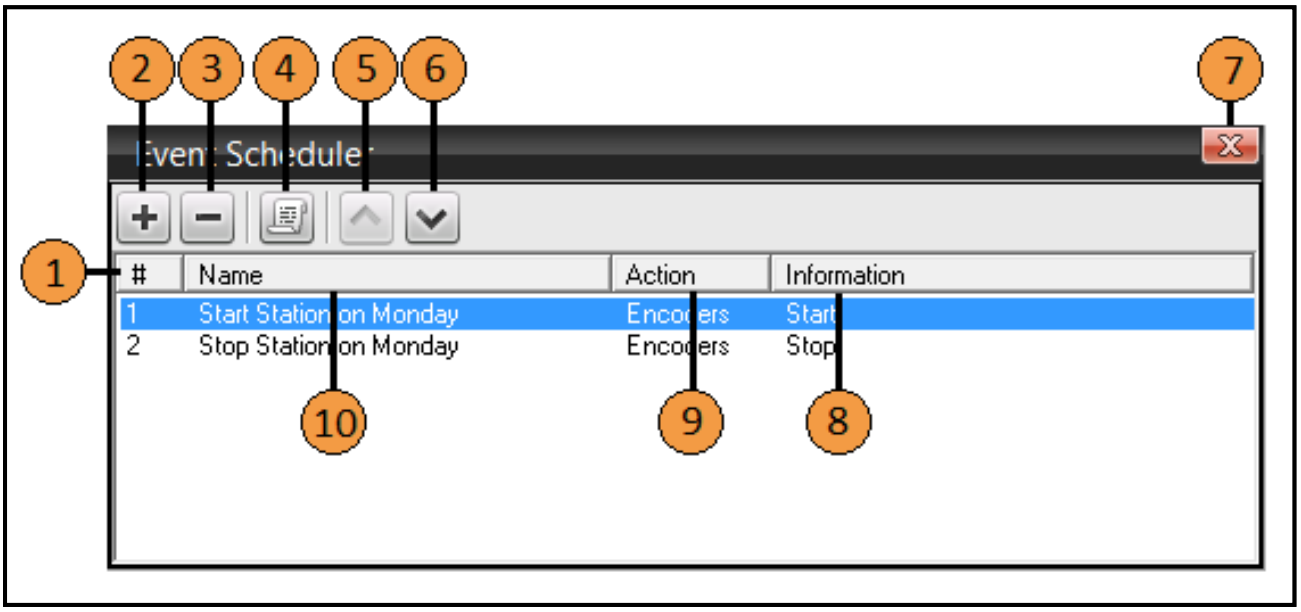
The event log displays all errors, warnings and the tracks played since the launch of the current session. This is cleared when SAM Broadcaster is closed. Messages in blue are informational warnings indicating something might be wrong but this is not severe enough to require immediate attention, grey messages record tracks played and red messages are errors which require immediate attention and could cause SAM Broadcaster to stop working as expected.



Serial	Description
1	Time the message was recorded
2	Message category
3	Message type
4	Message content
5	Close Window

Event Scheduler

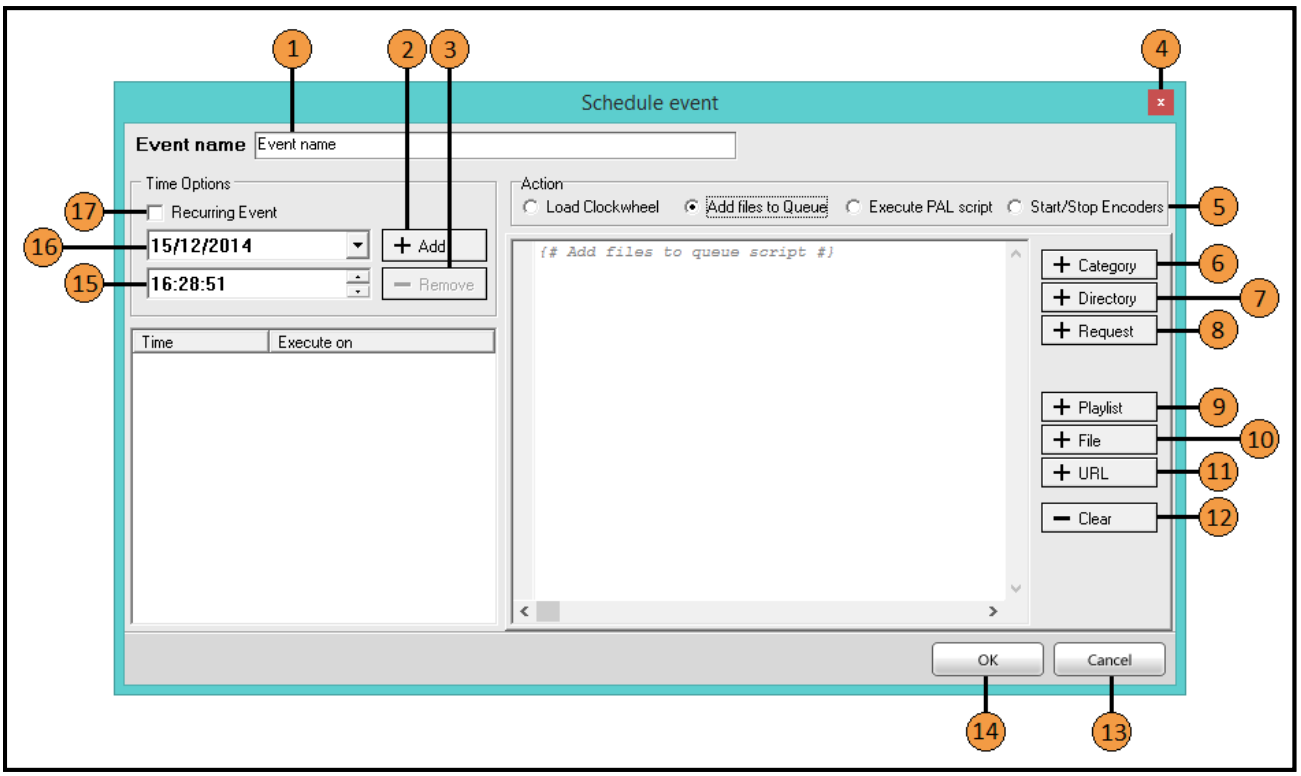
The Event Scheduler allows a user to manage their radio station without the need to be sat in front of the computer hosting SAM Broadcaster. The Event Scheduler allows a user to schedule a PAL script to run or to carry out many other actions without actually requiring 'hands-on' the computer.



Serial	Description
1	Event Serial Number
2	Add an Event
3	Delete an Event
4	Edit an Event
5	Move an Event up in the event order
6	Move an Event down in the event order
7	Close the window
8	Scheduled Event Information
9	Scheduled Event Action
10	Scheduled Event Name

Scheduled Event Editor

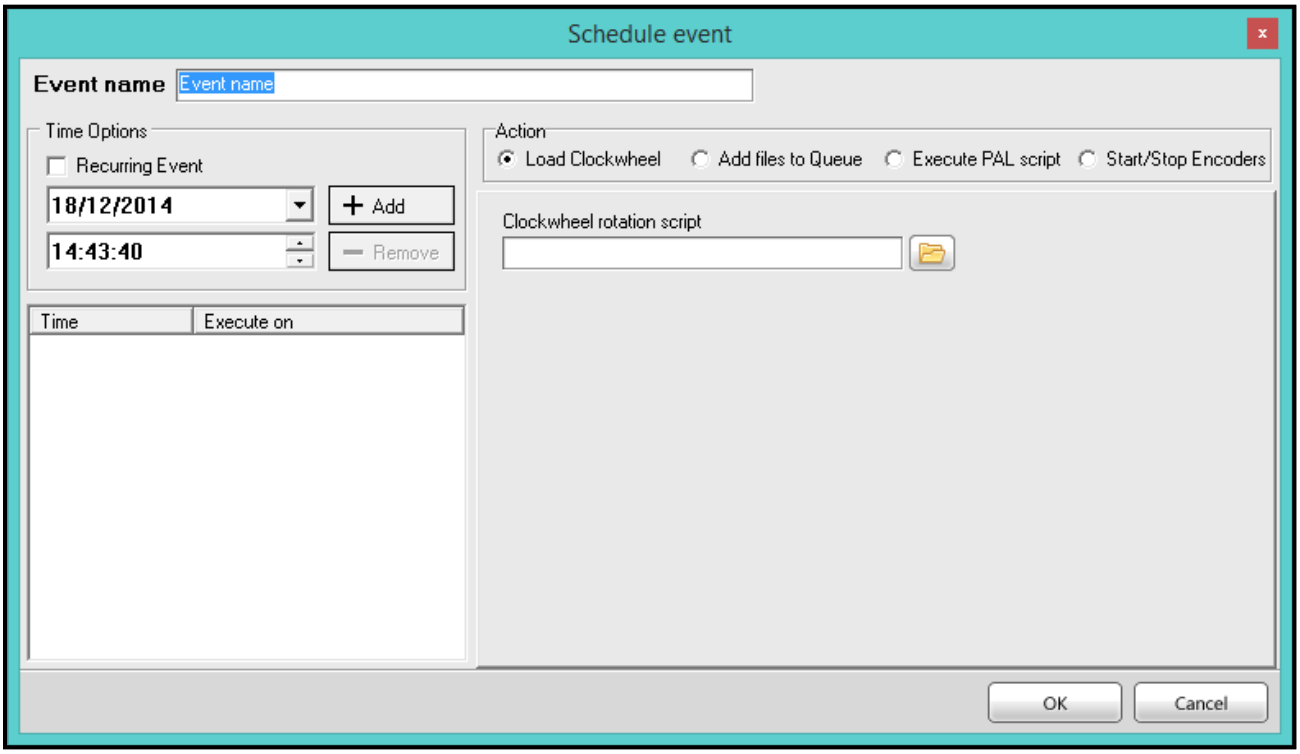
The four actions available within each Scheduled Event are explained below.



Serial	Description
1	Event Name
2	Add a Task
3	Remove a Task
4	Close the Window
5	Select the Task Action
6	Action specific to the Action Selected (add files to Queue) – Select a Category to add
7	Action specific to the Action Selected (add files to Queue) – Select a Directory to add
8	Action specific to the Action Selected (add files to Queue) – Select a Request to add
9	Action specific to the Action Selected (add files to Queue) – Select a Playlist to add
10	Action specific to the Action Selected (add files to Queue) – Select a File to add
11	Action specific to the Action Selected (add files to Queue) – Select a URL to add
12	Clears the options added
13	Click to Cancel changes
14	Click to confirm the Scheduled Event
15	Select the start time
16	Select the start date or day
17	Select to make this a recurring Event

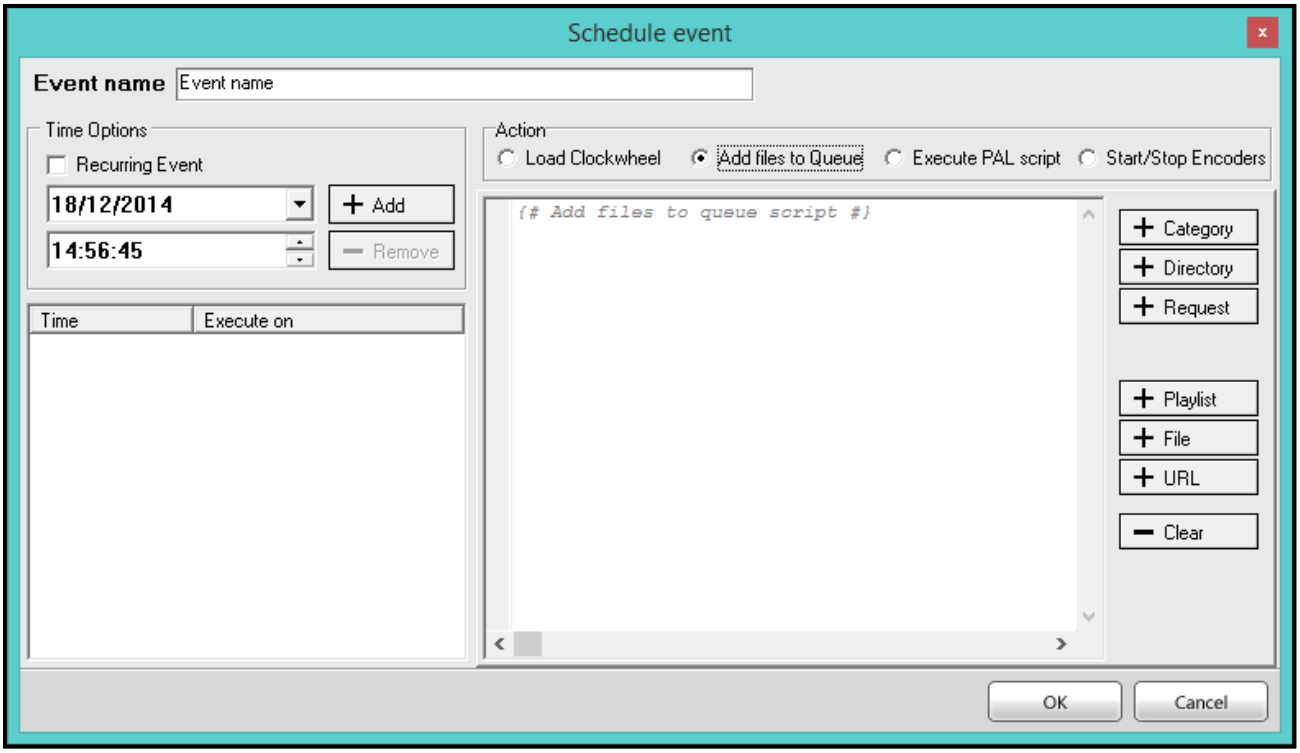
Scheduled Event – Load Clockwheel

If the Selected Action is Load Clockwheel then the path and Clockwheel name can be entered or navigated to with the file box and browse button.



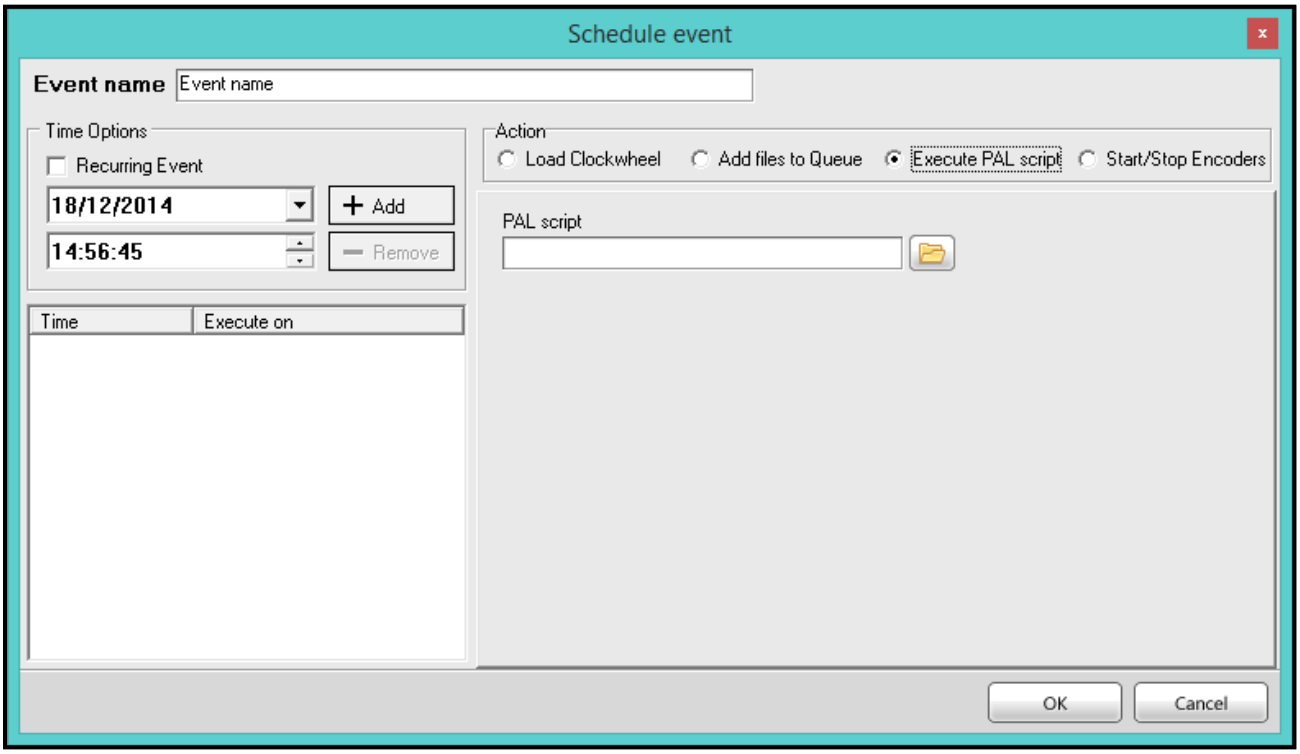
Scheduled Event – Add Files to Queue

If the Selected Action is Add files to Queue then the options described previously become available.



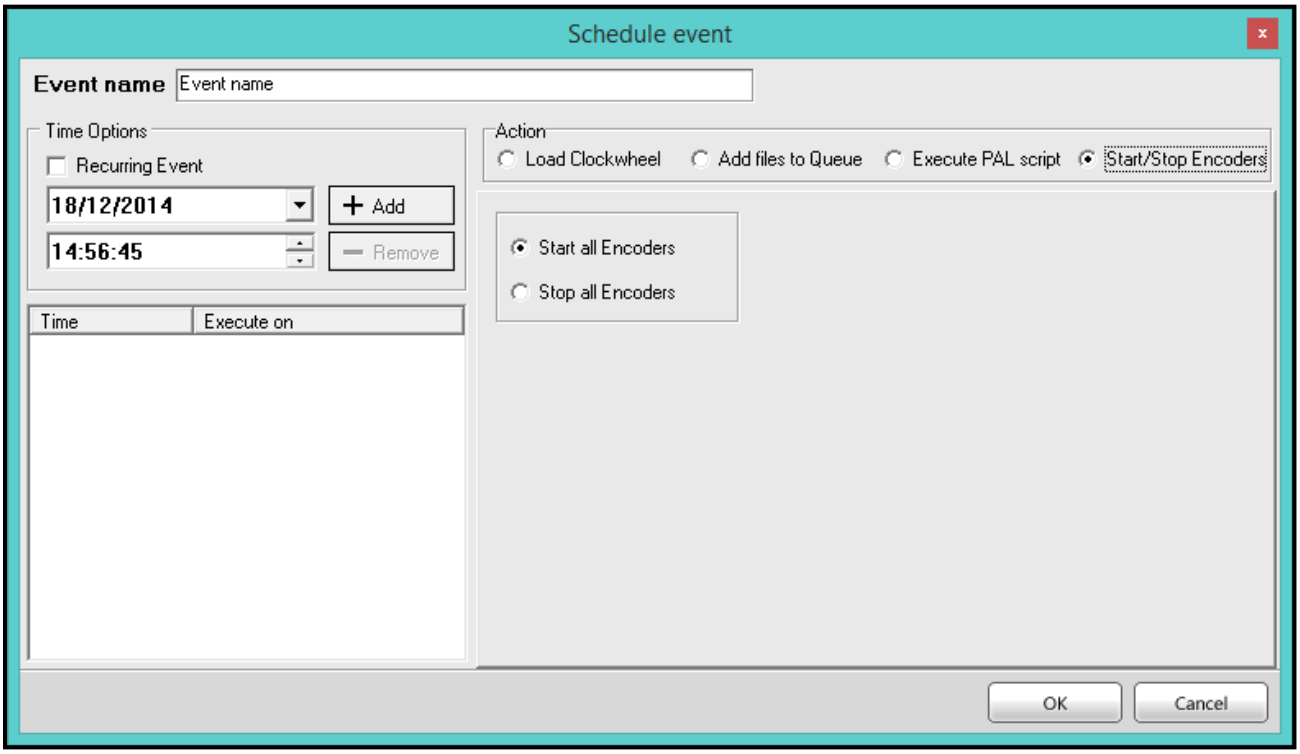
Scheduled Event – Execute PAL Script

If the Selected Action is Execute PAL script then the path and PAL Script name can be entered or navigated to with the file box and browse button.



Scheduled Event – Start/Stop Encoders

If the Selected Action is Start/Stop Encoders then all encoders can be started or stopped with a Scheduled Event.



Scheduled Event – Recurring Options

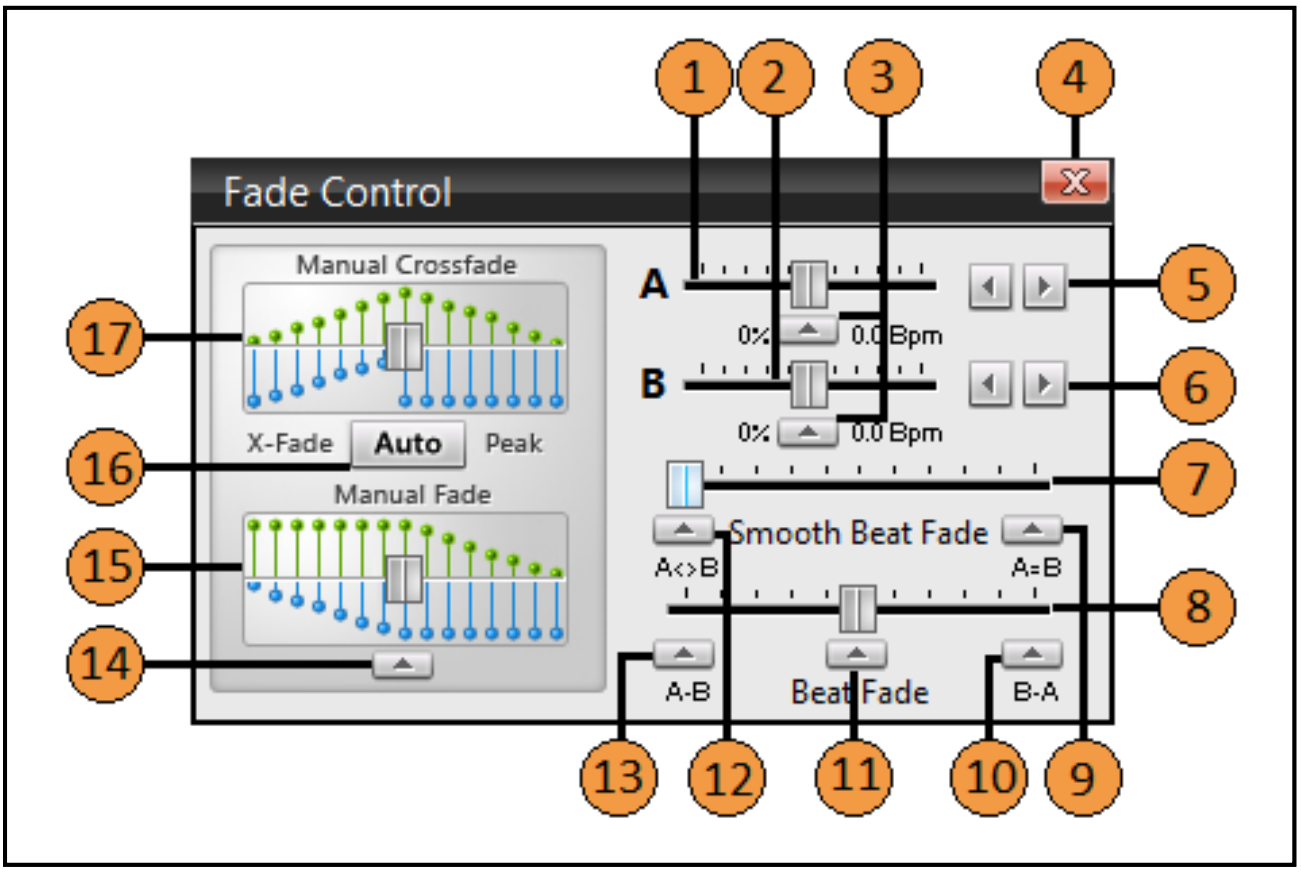
If the Recurring Event option is selected then the following day options can be selected:

Day
Monday
Tuesday
Wednesday
Thursday
Friday
Saturday
Sunday
Monday to Friday
Saturday and Sunday
Friday, Saturday and Sunday

By selecting a variety of options, the same event can be repeated on any day of the week or combination of days.

Fade Control

Fade Control is used to manually crossfade between songs and to also perform professional beat matching of the tracks.



Serial	Description
1	Deck A Tempo Adjustment, slide left to slow the track and right to speed up (by 25%)
2	Deck B Tempo Adjustment, slide left to slow the track and right to speed up (by 25%)
3	Tempo Reset Buttons
4	Close Window
5	Deck A Incremental Tempo Adjustment
6	Deck B Incremental Tempo Adjustment
7	Smooth Beat Fade slider
8	Beat Fade Slider
9	Adjusts the tempo of both decks so the BPM matches
10	Adjust the tempo of Deck B to match the tempo of Deck A
11	Smoothly fades the playing track into the upcoming track
12	Resets the tempo of both Deck A and Deck B
13	Adjust the tempo of Deck A to match the tempo of Deck B
14	This button resets the slider to the centre of the slider
15	Manual Fade
16	Automatic Crossfade
17	Manual Crossfade

Manual Crossfade

The slider bars allow you to manually crossfade between songs by dragging the slider-tab left or right.

Dragging it left will decrease the volume on the active (playing) deck and start the idle deck to play. It will also increase the volume (fade in) of the idle deck.

Dragging it right will decrease the volume on the active (playing)

Manual Fade

The slider bars allow you to manually crossfade between songs by dragging the slider-tab left or right.

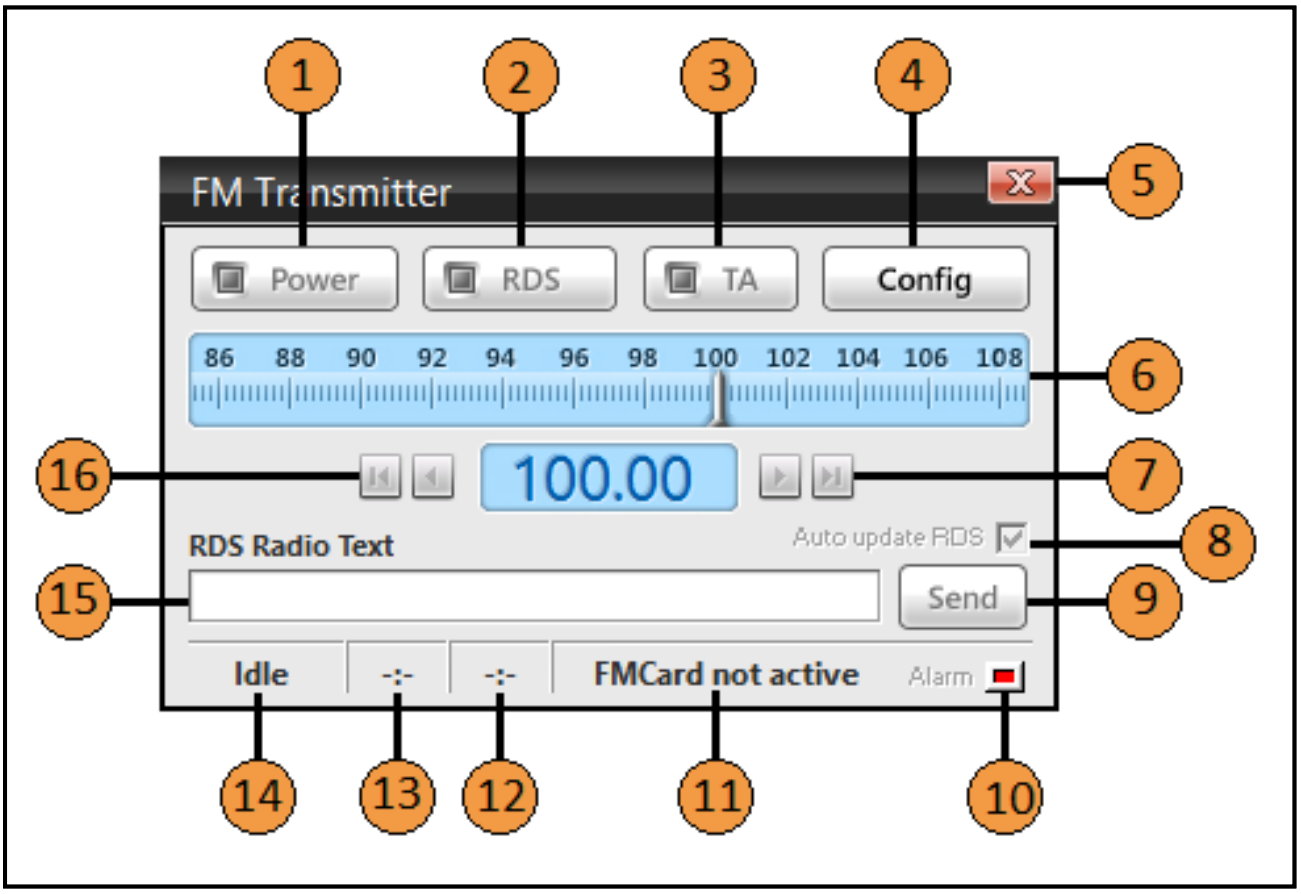
Dragging it left will decrease the volume on the active (playing) deck and start the idle deck to play. It will also increase the volume (fade in) of the idle deck.

Dragging it right will decrease the volume on the active (playing)

FM Transmitter

SAM Broadcaster can be used for FM transmissions as well as Internet streaming. The FM Transmitter enables the broadcasting of music over traditional FM frequencies with the addition of a supported FM Card.

The FM Transmitter allows Radio Data System (RDS), to be sent over the airwaves which can display the station identity and information about the tracks playing.



Serial	Description
1	Turns the power to the FM Transmitter card on or off
2	Toggles the RDS On or Off (no RDS features will work if RDS if switched off)
3	Toggles the Traffic Announcement On or Off*
4	Open the FM Card Advanced Configuration (shown below)
5	Close the window
6	Visual display of the selected frequency
7	Real-time frequency adjustment
8	Check to automatically apply the RDS template when tracks change in SAM Broadcaster
9	Send the RDS Radio Text from the RDS Text Window (auto-update must be disabled)
10	Alarm indicator (Green – OK, Blue – Notice, Red – Critical Warning)
11	FM Card Firmware Version (only shown when card is active)
12	FM Card Temperature (only shown when card is active)
13	FM Card Power Output (only shown when card is active)
14	FM Card Status

15	Enter text to send by RDS
16	Real-time frequency adjustment

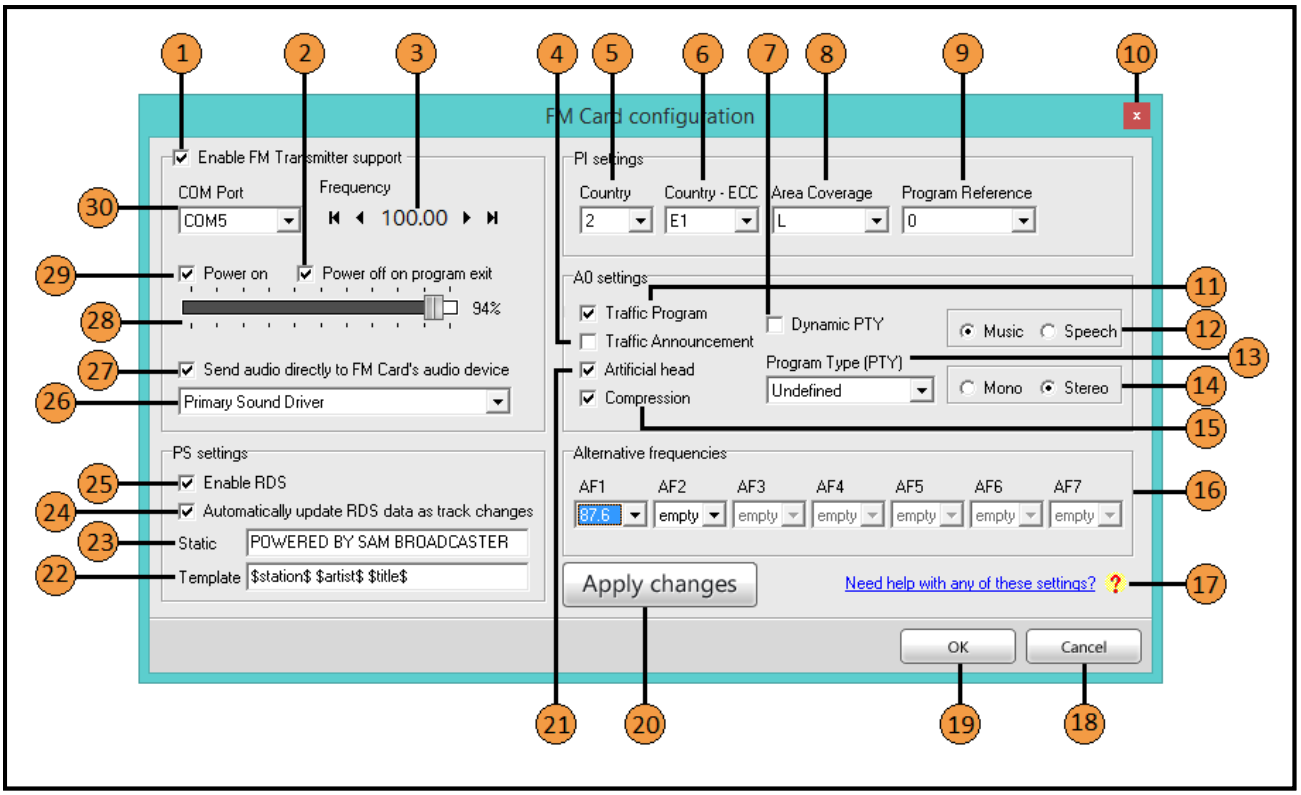
* The Traffic Announcement will be disabled by default if the Traffic Program option is not enabled within the configuration and should only be set to On during traffic announcement programs.

Legal authorisation should be obtained from the appropriate local or national, regulating authority as you would need to be assigned a specific frequency which must not interfere with other radio users.

FM Transmitter Advanced Config

This section includes a number of acronyms and abbreviations which are explained below:

Ref	Description
PI	Program Identification – This is the unique code which identifies the station
A0	
PTY	Program Type – There are 31 pre-defined program types
PS	Program Service – An 8-character static display which represents the Station ID
ECC	Country code standardization by the Electronic Communications Committee



Serial	Description
1	You must check this to enable the FM Card functionality in SAM Broadcaster
2	Check to power off the FM Card when you exit SAM Broadcaster
3	Set the frequency allocated by your authorizing body or organisation
4	Check this option if the broadcast is CURRENTLY carrying traffic information *
5	Identifies the country of the broadcast
6	Can help uniquely identify the location of the broadcast
7	Set this flag if the PTY code changes during the broadcast period
8	Area Coverage - Shown below
9	Program Reference – Shown below
10	Close the window
11	Select this is the program will contain traffic announcements
12	This is a signal to provide information on whether music or speech is being broadcast
13	Program Type
14	Specifies if the card broadcasts in mono or stereo

15	Compression flag
16	Up to 7 Alternative Frequencies allow a radio to search for your station
17	Links to http://support.spacialaudio.com/wiki/FMCard
18	Cancel any changes made
19	Accept any changes made
20	Apply changes without closing the configuration window
21	Artificial head flag
22	A Dynamic text template that is filled in with the data from the currently playing track
23	Default text displayed on the radio device
24	Enabling this enables the automatic update of your RDS data as the track changes
25	Check this to enable all the RDS features of the FM Card
26	Check this to enable the selection of the soundcard device
27	If checked you will be allowed to pick the soundcard device
28	This will set the maximum performance of your card**
29	Check this to turn on the FM Card transmitter to start broadcasting
30	The is the communications port that the FM Card is installed on in your computer

* You can also toggle this mode from the TA switch on the main interface. This will cause certain receivers to tune into the traffic announcement while the TA is active, and then back to the original source once it is done. For example if your receiver is set up to switch to a Traffic Announcement, then it could stop playing your CD and switch to the traffic announcement - then switch back to the CD once the traffic announcement is done.
** If your card is rated at 1W then setting it to 80% will mean the card then transmits at 0.8W .

Area Coverage

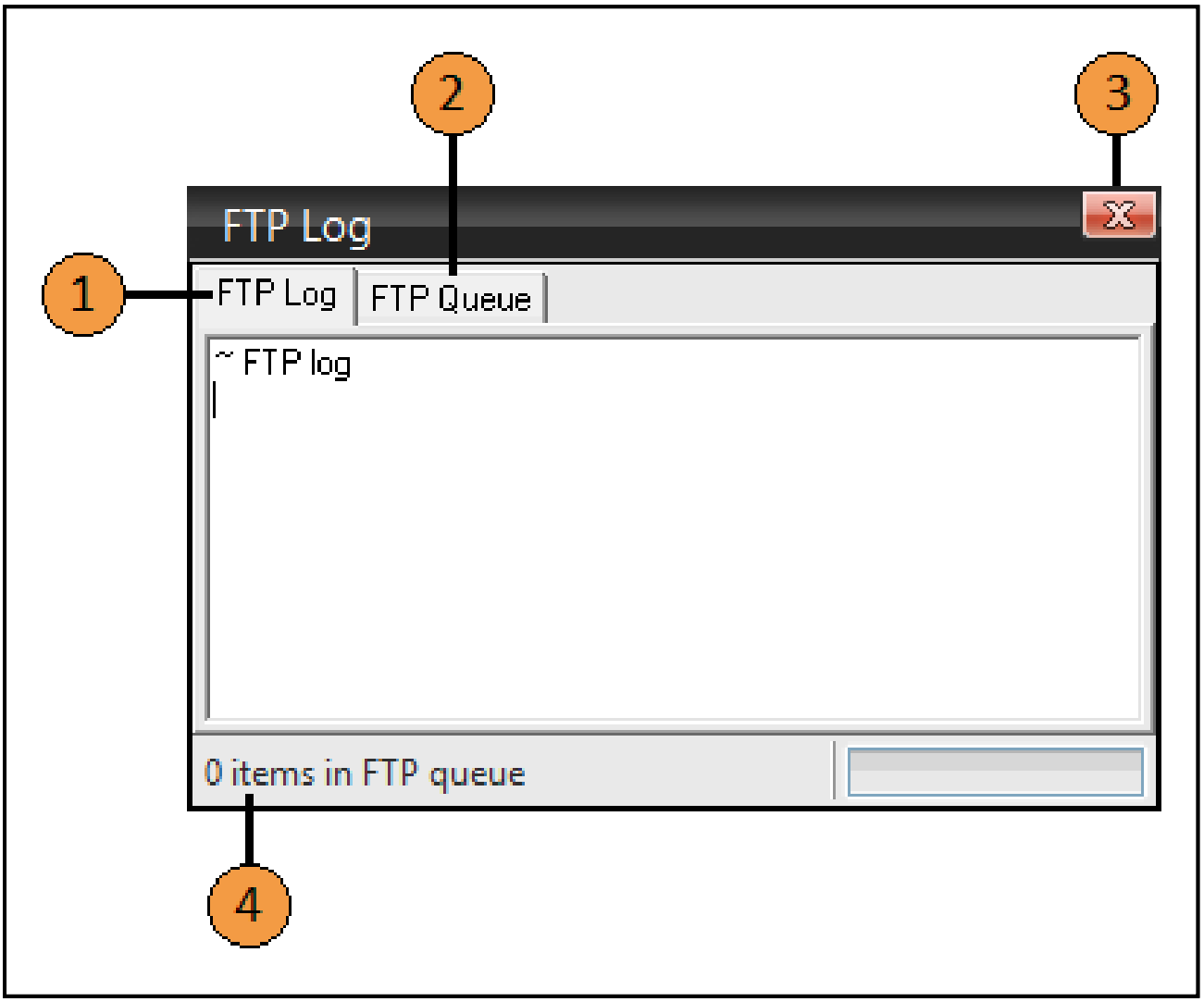
Serial	Description
L	Local - program transmitted via a single transmitter only
I	International - the program is also transmitted in other countries
N	National - the program is also transmitted throughout the country
S	Supra-Regional - the program is transmitted throughout a large part of the country
R1…R12	Regional - he program is available only in one location over one or more frequencies

Program Type

PTY Code	RDS Program Type (EU)	RDS Program Type (North America)
0	No program type or undefined	No program type or undefined
1	News	News
2	Current Affairs	Information
3	Information	Sports
4	Sport	Talk
5	Education	Rock
6	Drama	Classic Rock
7	Culture	Adult Hits
8	Science	Soft Rock
9	Varied	Top 40
10	Pop Music	Country
11	Rock Music	Oldies
12	Easy Listening	Soft
13	Light Classical	Nostalgia
14	Serious Classical	Jazz
15	Other Music	Classical
16	Weather	Rhythm and Blues
17	Finance	Soft Rhythm and Blues
18	Children's Programs	Language
19	Social Affairs	Religious Music
20	Religion	Religious Talk
21	Phone-In	Personality
22	Travel	Public
23	Leisure	College
24	Jazz Music	Spanish Talk
25	Country Music	Spanish Music
26	National Music	Hip Hop
27	Oldies Music	Unassigned
28	Folk Music	Unassigned
29	Documentary	Weather
30	Alarm Test	Emergency Test
31	Alarm	Emergency

FTP Log

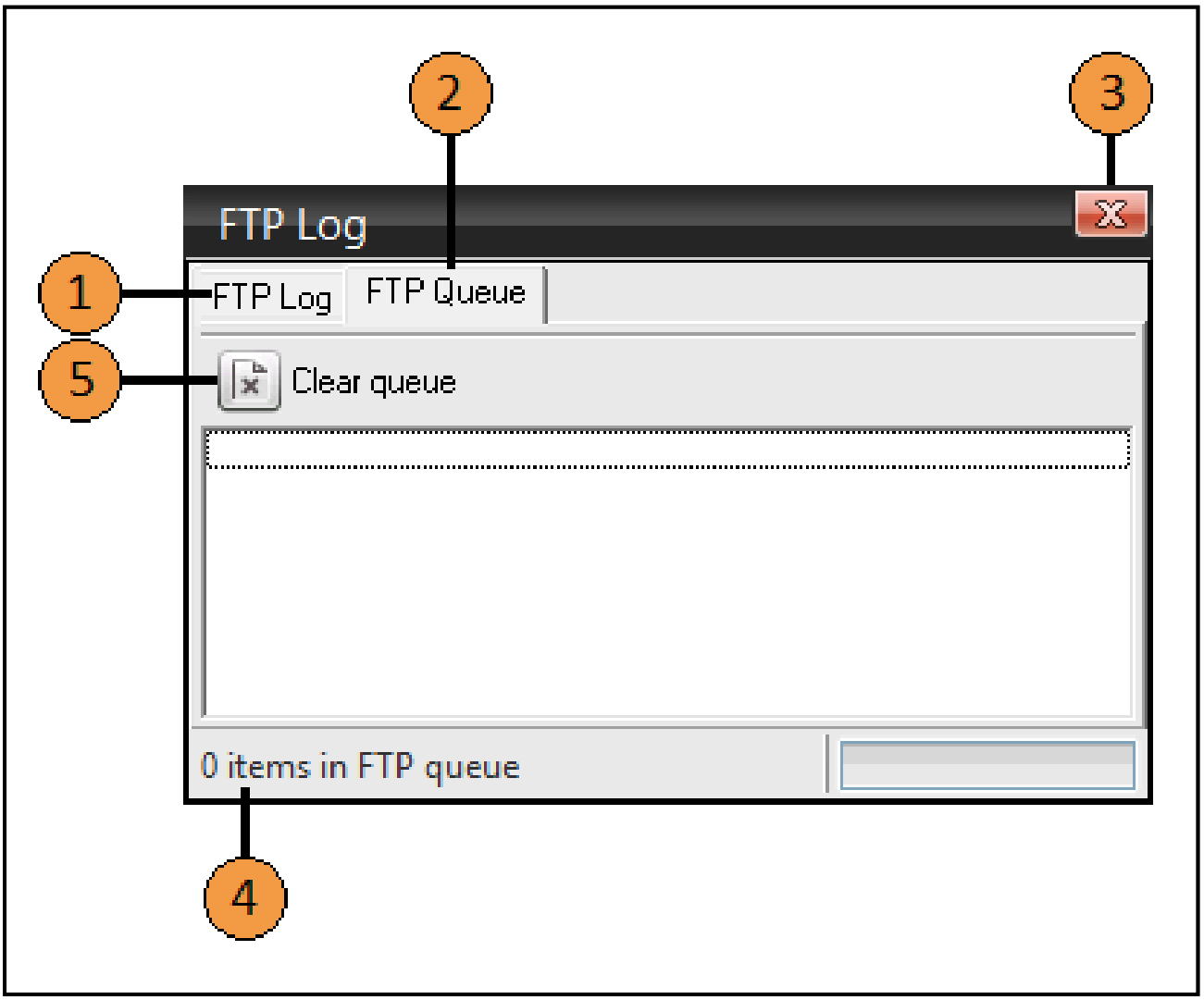
The FTP Log keeps a track of all uploads carried out via the FTP protocol to the remote webserver. FTP is mainly used to upload HTML outputs, PAL scripting and similar tasks.



Serial	Description
1	Select the FTP Log Tab
2	Select the FTP Queue Tab
3	Close the FTP Log window
4	Number of items in the FTP Queue

FTP Queue

The FTP Queue can be displayed and cleared from the FTP Queue Tab.



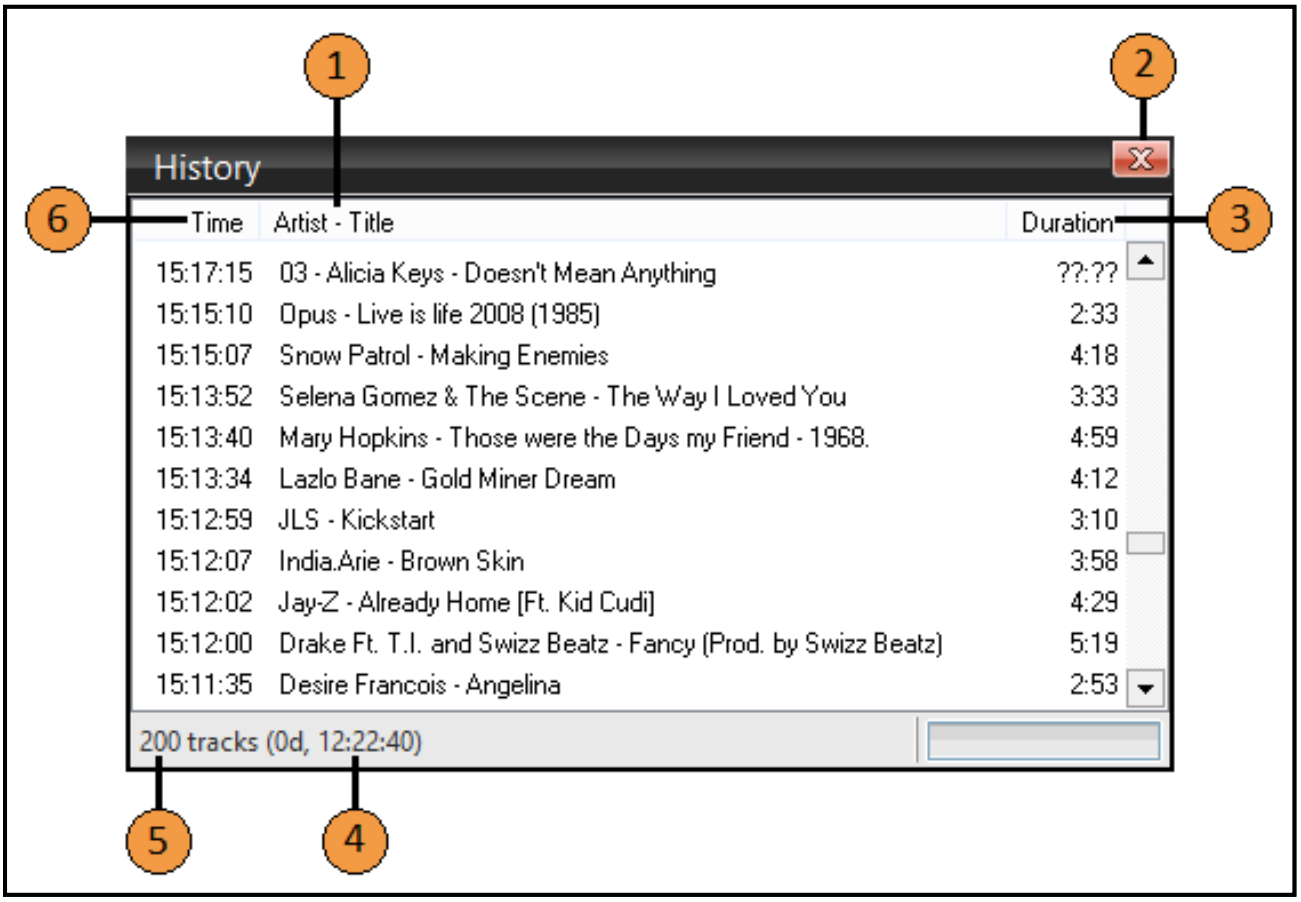
Serial	Description
1	Select the FTP Log Tab
2	Select the FTP Queue Tab
3	Close the FTP Log window
4	Number of items in the FTP Queue
5	Click to clear the FTP Queue

History

The History window displays the last 200 tracks played from both Deck A and Deck B. The history can be cleared from the Tools menu under Maintenance but this will also remove all reporting information and should be used with caution.

The History window is an ideal method of tracking all recent audio tracks which have been played.

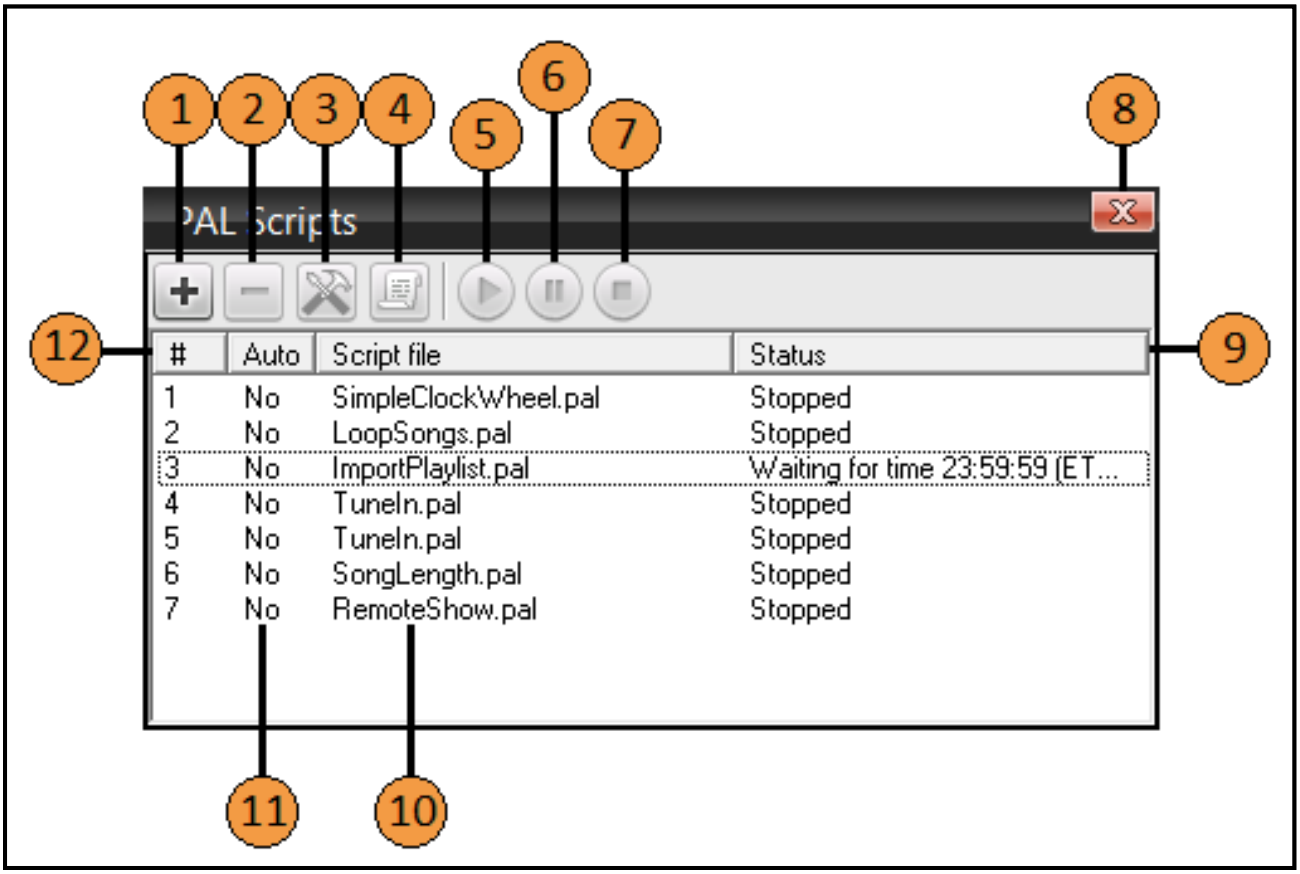
The time displayed is the same time displayed on the clock of SAM Broadcaster and the duration is the length of time the track played for.



Serial	Description
1	Artist – Title list
2	Close the History window
3	Track duration
4	Total duration of all tracks shown in the History (days, hours, minutes, seconds)
5	Number of tracks in the History (200 maximum)
6	Time the track was played

PAL Scripts

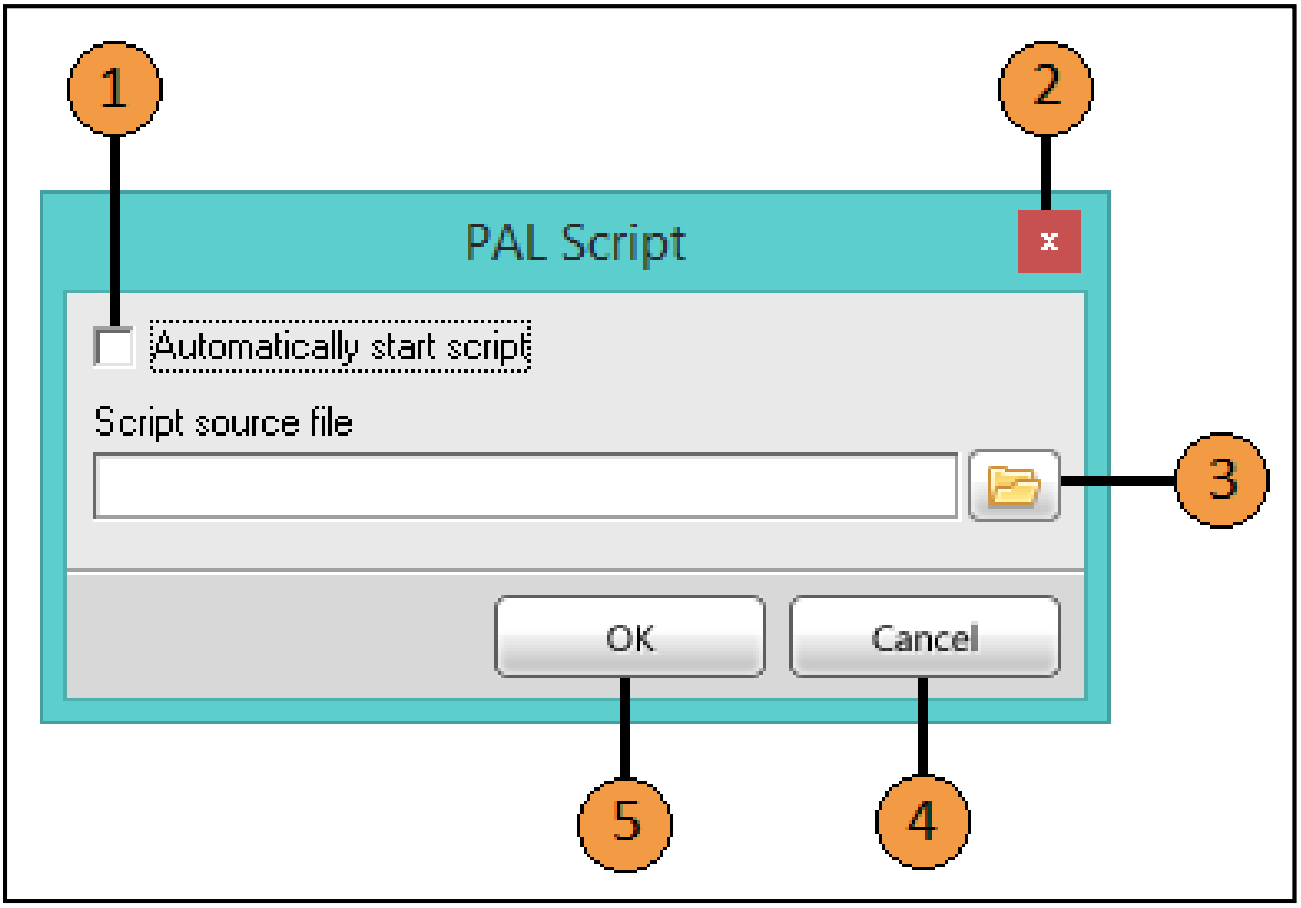
Playlist Automation Language (PAL) is a powerful language which allows you to control your radio without needing to be in front of your computer. Experienced broadcasters can use PAL scripts to play adverts, run clockwheels, change the music and insert jingles, all from a PAL script.



Serial	Description
1	Add a PAL script
2	Delete an existing PAL script
3	Load a PAL Script
4	View the selected PAL script
5	Run the selected PAL script
6	Pause the selected PAL script (Selected script must be running)
7	Stop the selected PAL script (Selected script must be running)
8	Close the PAL Scripts window
9	PAL script status
10	PAL Script name
11	Shows whether the script is scheduled to run automatically
12	PAL Script number

PAL Scripts

This window is displayed when you click item 1 in the previous image and will enable you to add further PAL Scripts and select whether they should start automatically when SAM Broadcaster starts. If you select a PAL Script in the previous window, this window shown below is also displayed when you click item 3 in the previous image and will enable you to select or deselect whether the script starts automatically.

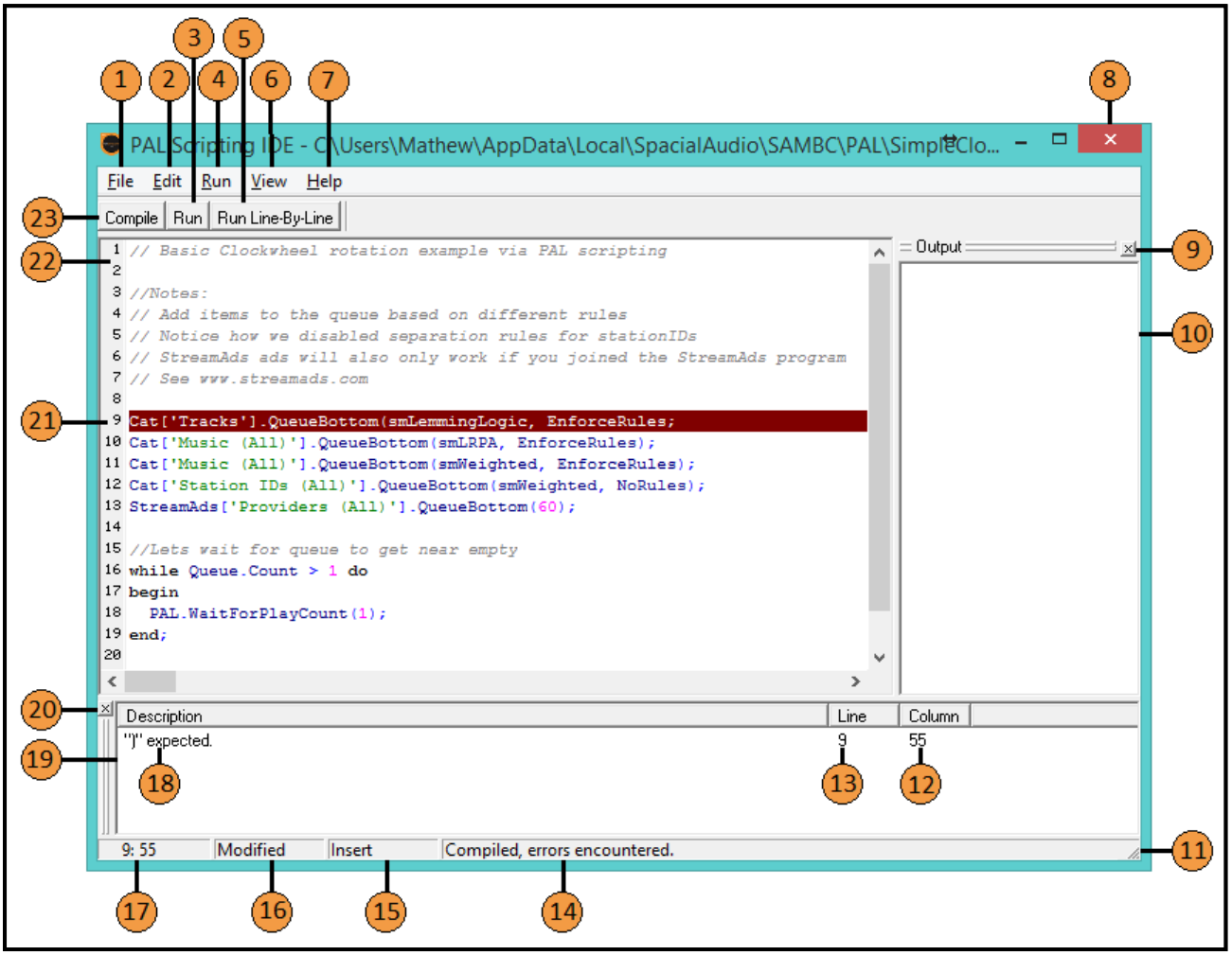


Serial	Description
1	Automatically start the PAL script
2	Close the window
3	Browse to the location of the required PAL script
4	Cancel any changes made
5	Accept any changes made

PAL Scripting IDE

This window is displayed when you click item 4 in the main PAL Script window which opens the PAL Script Integrated Development Environment (IDE). The PAL Scripting IDE enables you to create, test and run PAL Scripts, and includes a number of development features like Compiler, Error Checking and Output window.

To give a better indication of the functionality, a closing bracket has been removed from Line 9.



Serial	Description
1	File Menu
2	Edit Menu
3	Run Script Button
4	Run Menu
5	Run Line-by-Line Button
6	View Menu
7	Help Menu
8	Close the PAL Scripting IDE window
9	Close the Output sidebar
10	Output Sidebar where the results of the PAL Script would be displayed
11	Drag to resize the window
12	Column number of any error found in the script

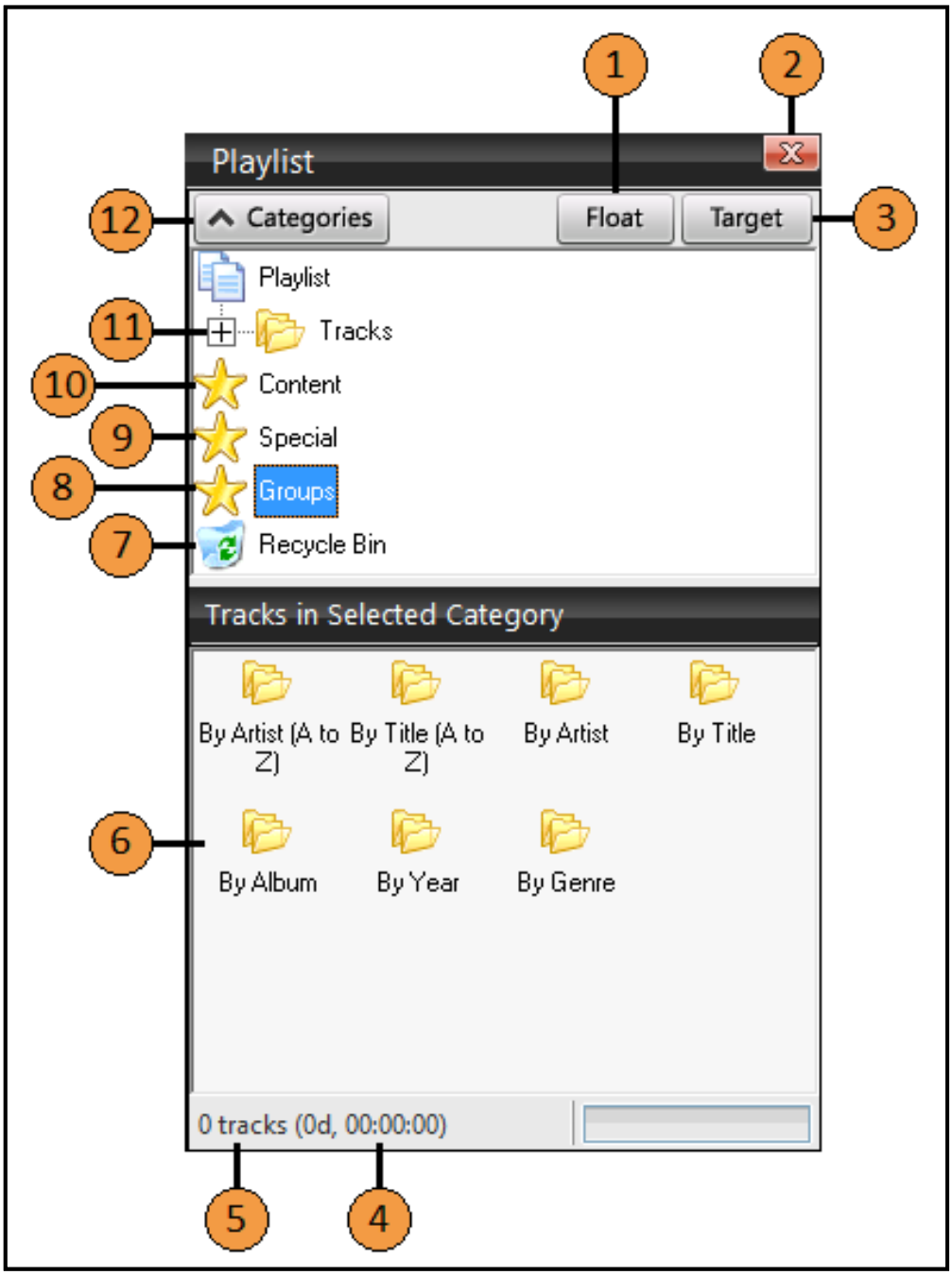
13	Line number of any error found in the script
14	Results from compiling the script (error message or Compiled)
15	State of the cursor either Overwrite or Insert
16	Shows Modified if the script has been changed
17	Cursor location (by Line and Column) within the IDE Window
18	Description of any error message encountered
19	Compiler Message Window
20	Close the Compiler Message Window
21	Highlighted error message
22	PAL Script line numbers
23	Compile button

Playlist Categories

The Playlist window contains all the necessary categories for organizing your music library so you can broadcast professionally. It allows you to organize all audio files in user-specified categories for effective clockwheel rotation.

Playlist Categories are displayed as folders in a tree representation where you can have folders within folders (or more correctly, playlists within playlists) until you have completely categorised your music library.

The same track can be added to any number of Playlist Categories, for example, you might put a track in a playlist for the artist or in an album playlist in the artist playlist. You might also add the track into a mood playlist or a playlist based on the year of release or the highest chart position. The options are endless.



Serial	Description
1	Click Float to separate the Playlist and Playlist Category windows as shown below
2	Close the Playlist window
3	Content which has been identified under these rules
4	Total duration of all tracks (days, hours, minutes, seconds)
5	Number of tracks
6	Content from the selected Playlist is displayed here
7	Recycle Bin
8	Content listed by specific groups explained below
9	Content listed by Special groups explained below
10	Content listed by specific content type explained below
11	All tracks listed below this Playlist Folder
12	Cycle through the hiding or displaying the Playlist or Playlist Categories windows

Playlist Category – Content

The built-in Content Playlists available shown as item 10 in the previous image.

Serial	Description
1	Music
2	Sound FX
3	Station IDs
4	Jingles
5	Promos
6	Advertisements
7	News
8	Interviews
9	Other

Playlist Category – Special

The built-in Special Playlists available shown as item 9 in the previous image. There are further sub-categories available below these Special Playlists as shown.

Serial	Description
1	Weighted Rotation: *Power hit* *Heavy rotation* *Medium rotation* *Light rotation* *Rare rotation* *No rotation*
2	Overlay: *Overlay (Yes)* *Overlay (No)*
3	Song Rights: *Broadcast (Yes)* *Broadcast (No)* *Download (Yes)* *Download (No)* *On-demand (Yes)* *On-demand (No)* *Royalty free (Yes)* *Royalty free (No)*
4	Play limit: *Play unlimited* *Play once* *Play once and remove* *Play once and erase* *Play limit (Other)*

Playlist Category – Groups

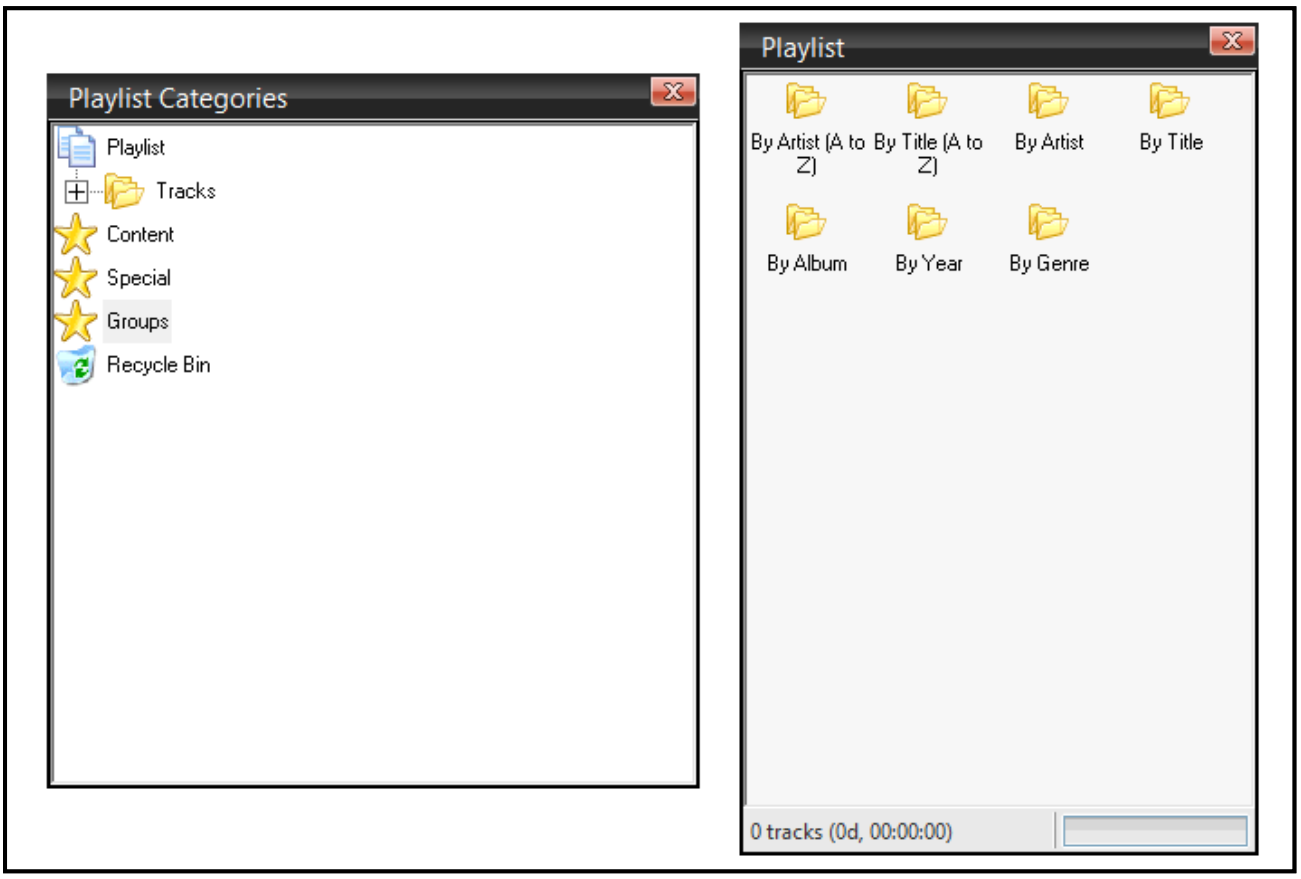
The built-in Groups available shown as item 8 in the previous image.

Serial	Description
1	By Artist (A to Z)
2	By Title (A to Z)
3	By Artist
4	By Title
5	By Album
6	By Year
7	By Genre

Separate Playlist & Playlist Categories Windows

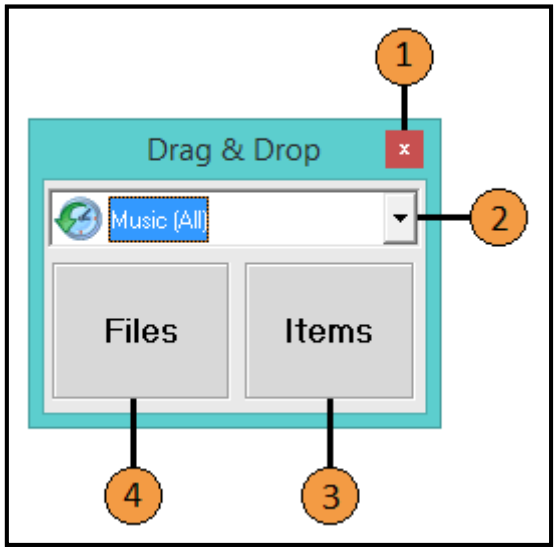
By clicking the Float button, you are able to separate the two windows into Playlists and Playlist Categories. To conjoin the two windows simply close the Playlist Categories window. The contents of the option selected in the Playlist Categories window is still displayed in the Playlist window.

Here we can see the contents of the built-in Groups Playlist category.



Playlist Categories Drag & Drop Window

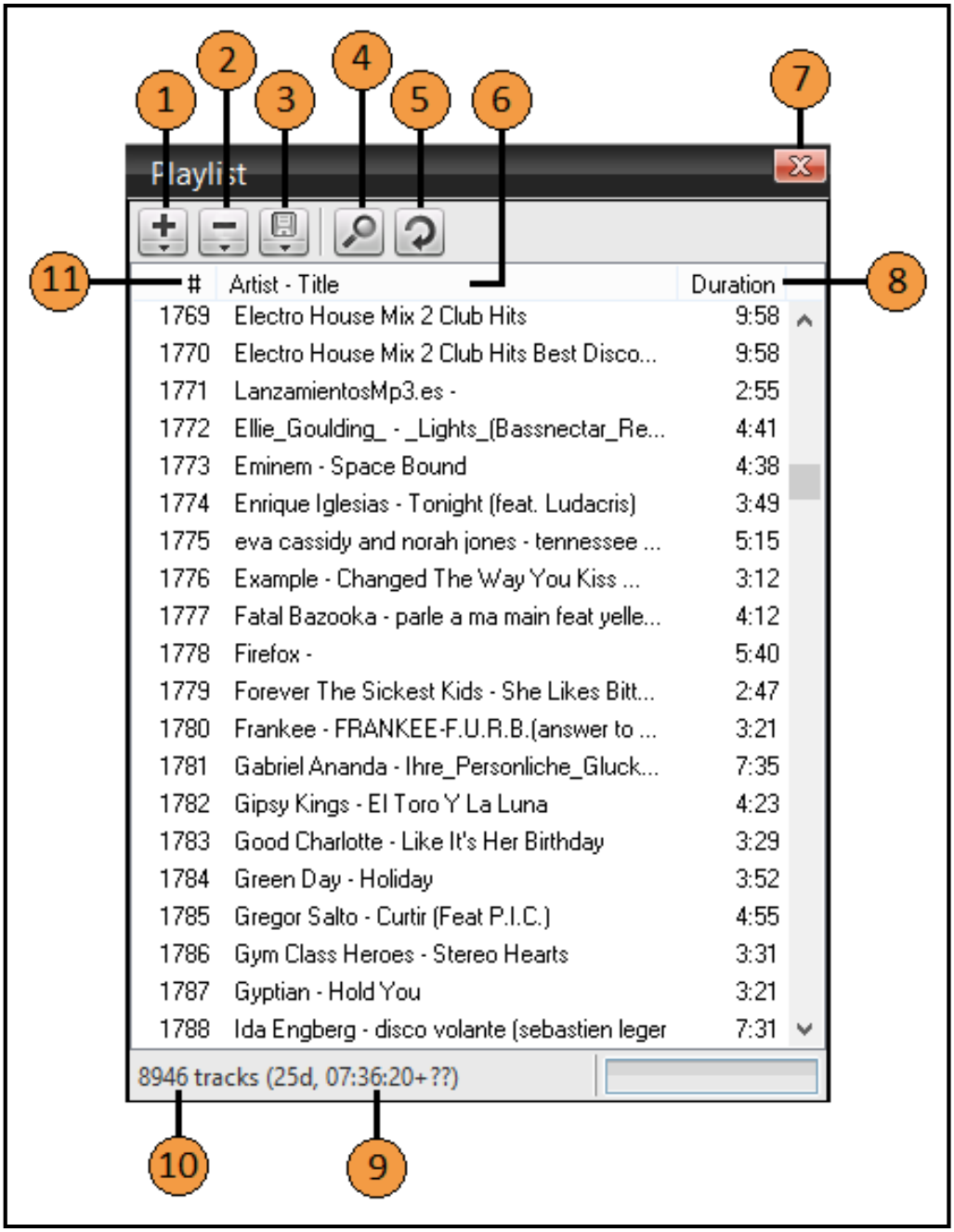
This feature enables broadcasters to quickly organize content. New content can be added to the relevant Playlist within SAM Broadcaster whilst you can also reorganize content into additional Playlists if necessary.



Serial	Description
1	Close the Drag & Drop window
2	Select the target Playlist
3	Drop items already within SAM Broadcaster here
4	Drop files not already within SAM Broadcaster here

Playlist

The Playlist window displays the contents of the selected folder in the Playlist Categories window and provides an efficient way to find and select the desired track.

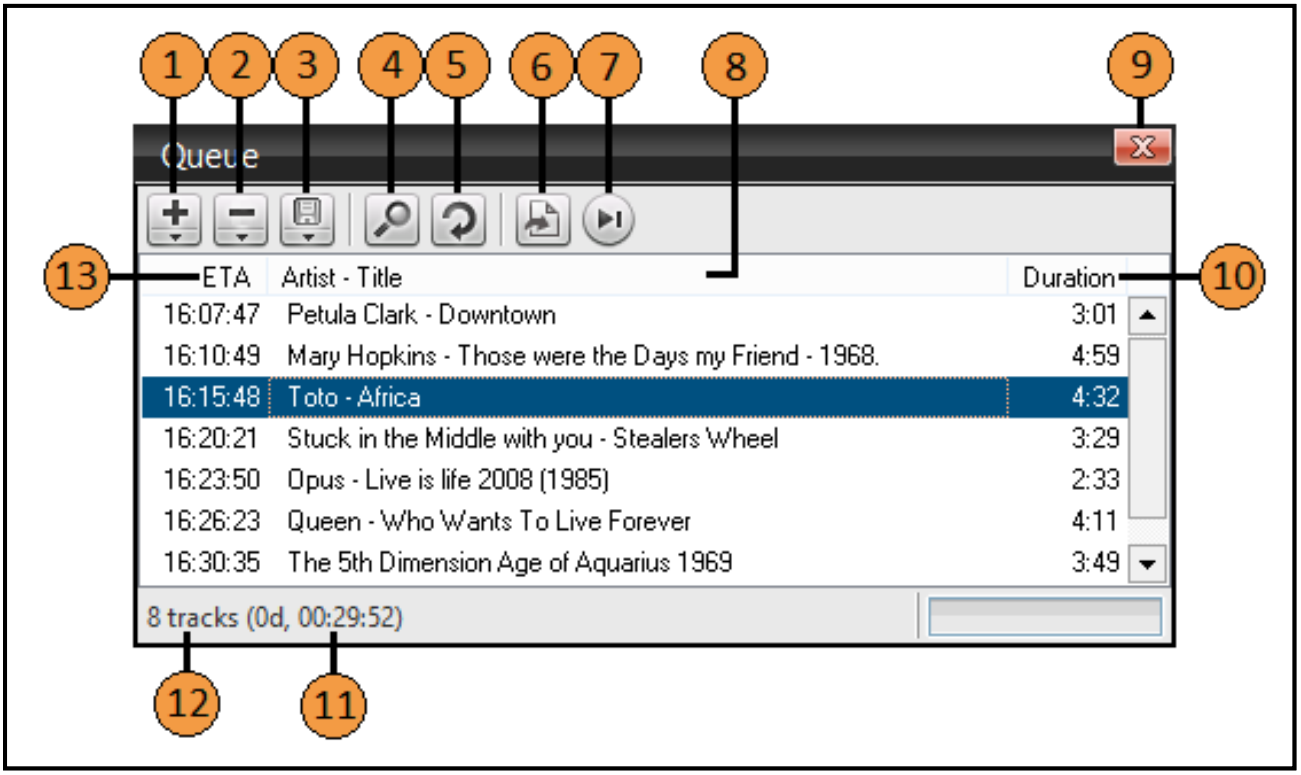


Serial	Description
1	Add Directory, Files, URL or Playlist
2	Remove, Crop, Clear, Remove Duplicates, Delete from All and Delete Physical File
3	Save as M3U playlist or export as a CSV list
4	Brings up a search box
5	Refresh the current view
6	Track Artist – Title Heading
7	Close the Playlist window

8	Track duration
9	Total duration of all tracks (days, hours, minutes, seconds)
10	Total number of tracks
11	Track number heading

Queue

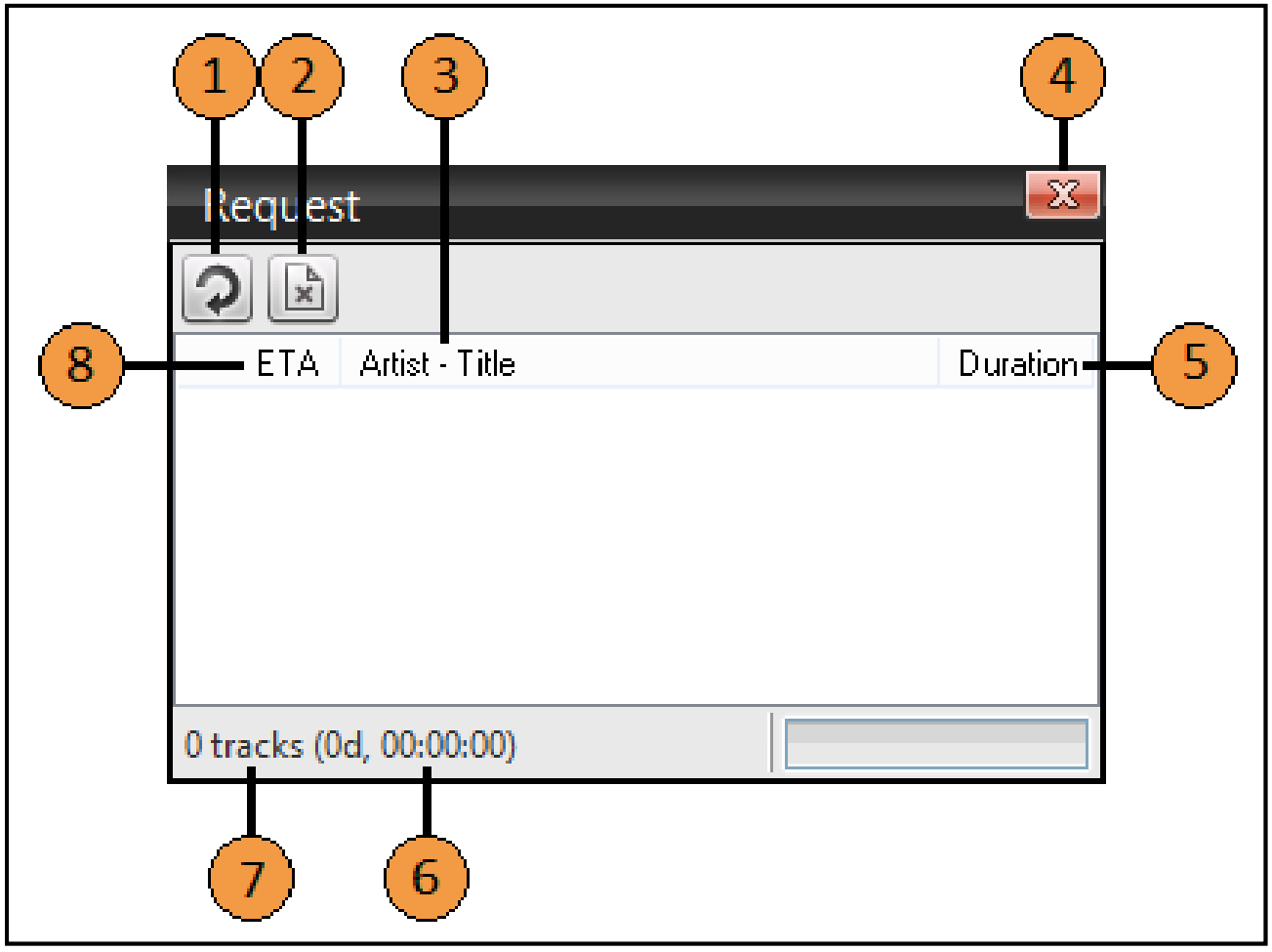
The Queue window shows all the tracks which SAM Broadcaster will play. Normally, SAM Broadcaster will play each track in the order they are listed in the queue but this can vary if the user is custom broadcasting. The Queue also displays when the next track will begin as displayed by the ETA.



Serial	Description
1	Add new Files, Directory, URL, Playlist or Mic/Line In to the Queue list
2	Delete tracks or track duplicates from the queue or physical disk
3	Save the Queue as an m3u playlist or export as a CSV
4	Search for a track
5	Refresh the Queue list
6	Queue another random track
7	Jump to the next audio track
8	Artist – Title list
9	Close the Queue window
10	Track Duration
11	Total duration of all tracks (days, hours, minutes, seconds)
12	Total number of tracks
13	Estimated track start time based on the current time and currently playing track

Request

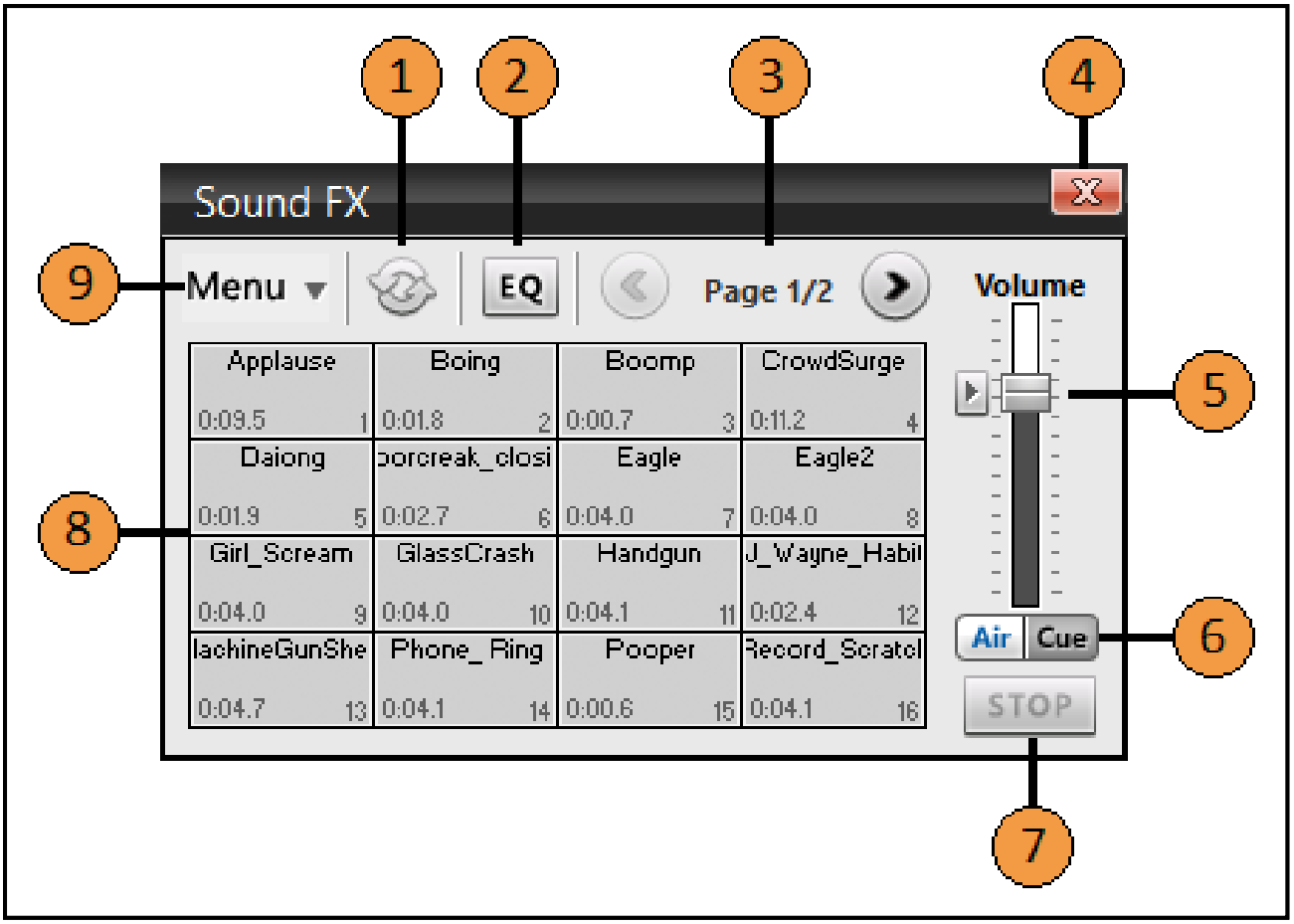
The Request window will show all the listener requests which have been received from the associated website. The broadcaster can chose to move tracks up or down or clear the Request list so no requests are enabled.



Serial	Description
1	Refresh the Request list
2	Clear the Request list
3	Artist – Title list
4	Close the Request window
5	Track Duration
6	Total duration of all tracks (days, hours, minutes, seconds)
7	Total number of tracks
8	Estimated track start time based on the current time and currently playing track

Sound Effects (FX)

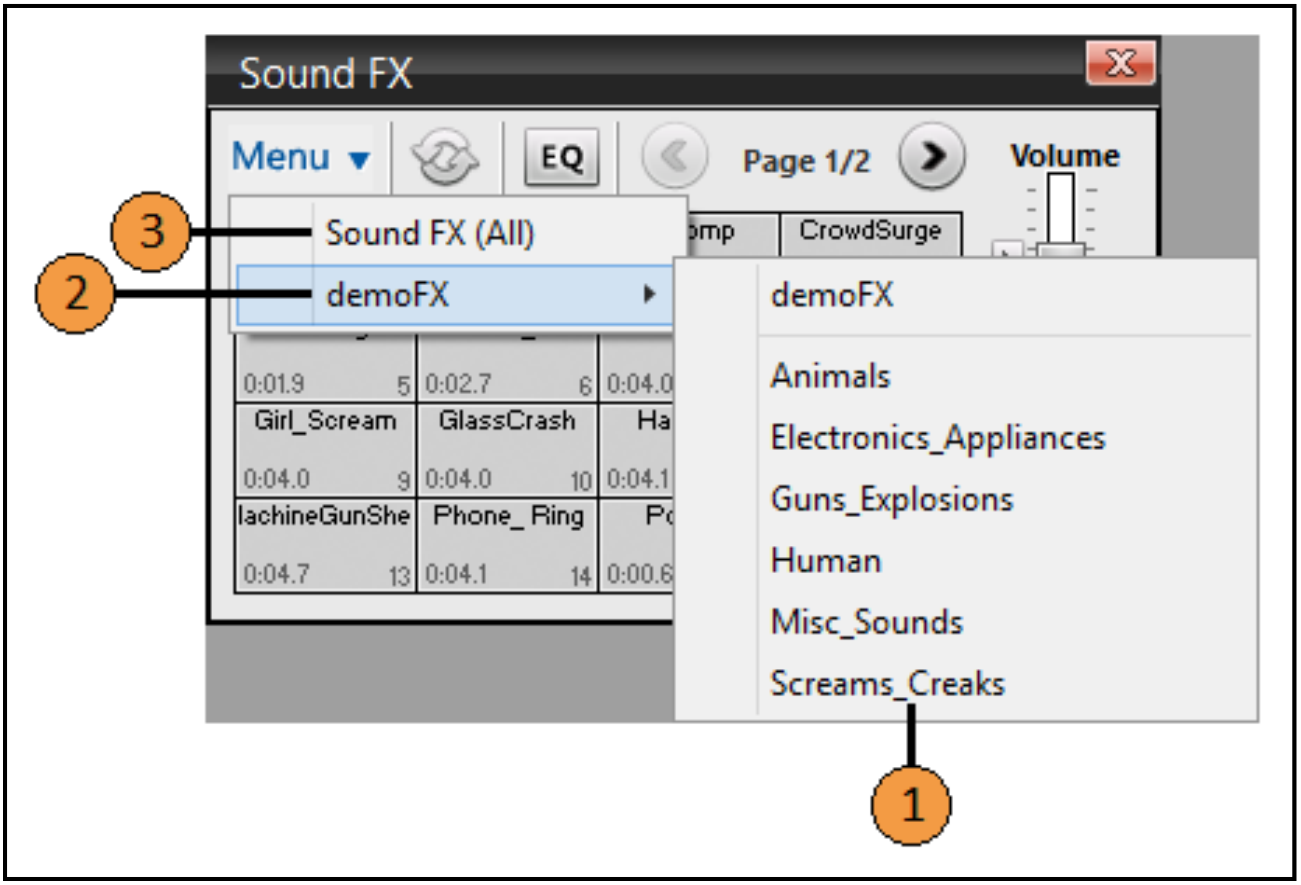
SAM Broadcaster comes with a number of standard sound effects which can be accessed and played from the SOUND FX window. Additional sound effects can be added and sound effects can be categorised.



Serial	Description
1	Refresh the window
2	Opens the Graphic Equaliser for the Sound Effects
3	Allows you to navigate through different pages of Sound Effects
4	Close the Sound FX window
5	Sound Effects volume slider with default volume selector
6	Selects whether the Sound Effect is broadcast or cued
7	Stops the playing Sound Effect
8	Sound FX Matrix
9	Sound FX Sub-Menu (explained below)

Sound Effects (FX) Sub-Menu

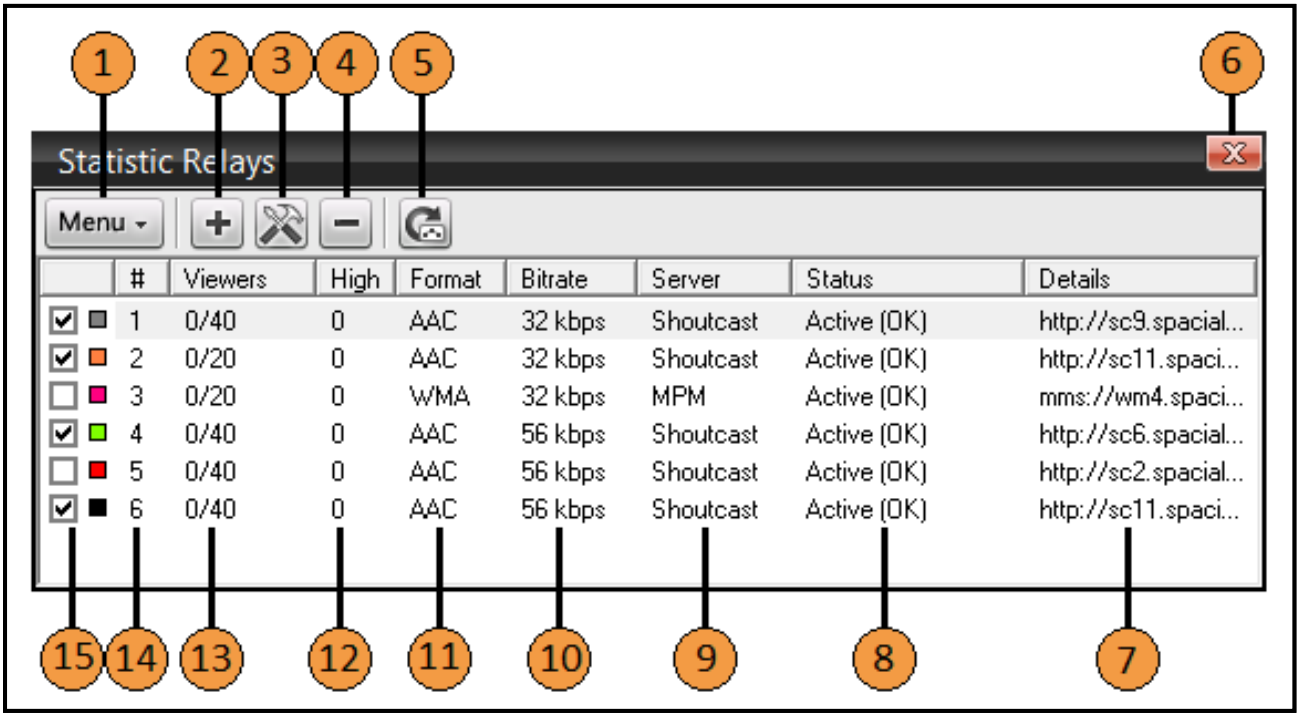
SAM Broadcaster comes with a number of standard sound effects which can be accessed and played from the SOUND FX window. Additional sound effects can be added and sound effects can be categorised.



Serial	Description
1	List of Sound FX Categories to display in the Sound FX matrix
2	Open the demoFX Categories list
3	Display all sound FX in the matrix

Statistic Relays

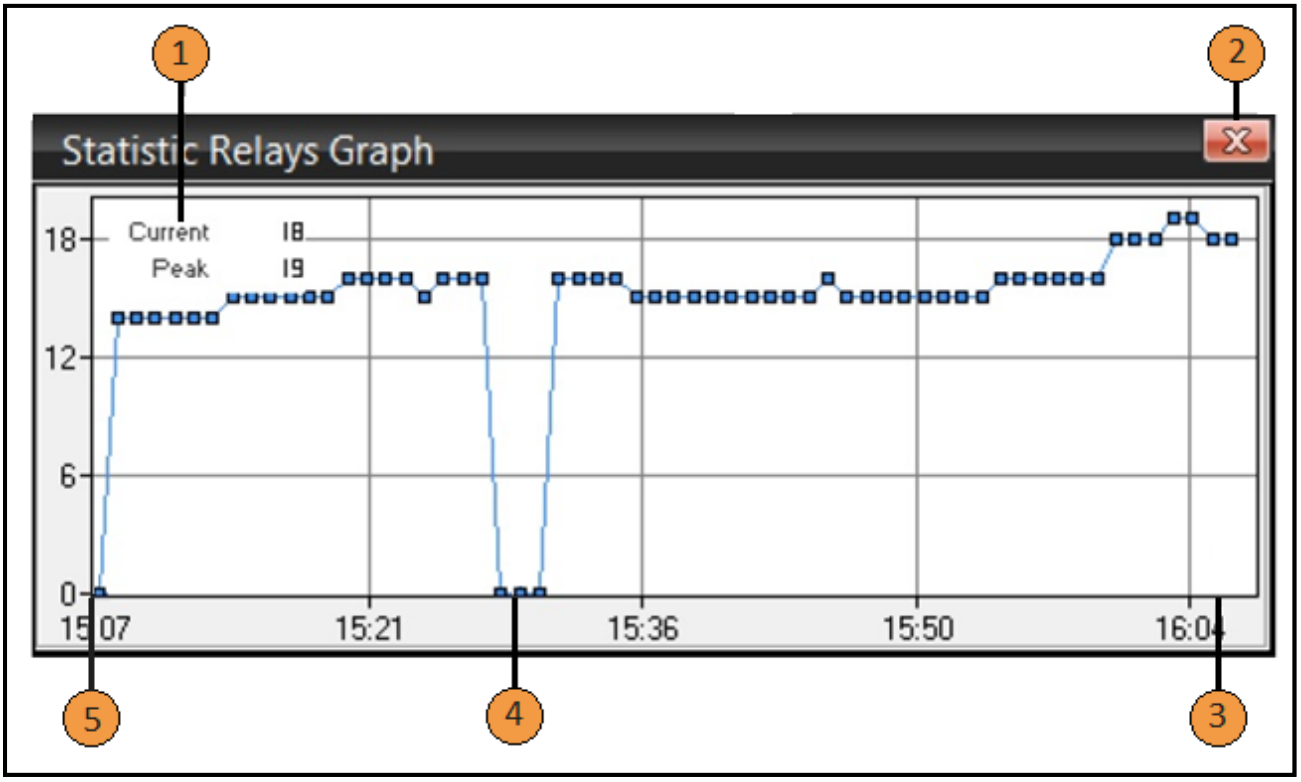
The Statistic Relays window allows a broadcaster to add their Statistics Relays, the output of which is displayed in the Statistic Relay Graph. The number of Relays which can be added is dependent upon the version of SAM Broadcaster being used. The Statistics from all Relays can be displayed in the Statistic Relay Graph.



Serial	Description
1	Add, Configure, Remove or force the update of a Statistic Relay
2	Add a Statistic Relay
3	Configure the Statistic Relay
4	Remove a Statistic Relay
5	Force an update of the Statistic Relay
6	Close the Statistic Relay window
7	Associated Encoder details
8	Relay status
9	Streaming Server Type
10	Streaming bitrate
11	Encoder format
12	Peak listener figure
13	Number of current listeners and the maximum number of listeners for the service
14	List number
15	Select to display the Statistic Relay in the Statistic Relays Graph and graph colour

Statistic Relays Graph

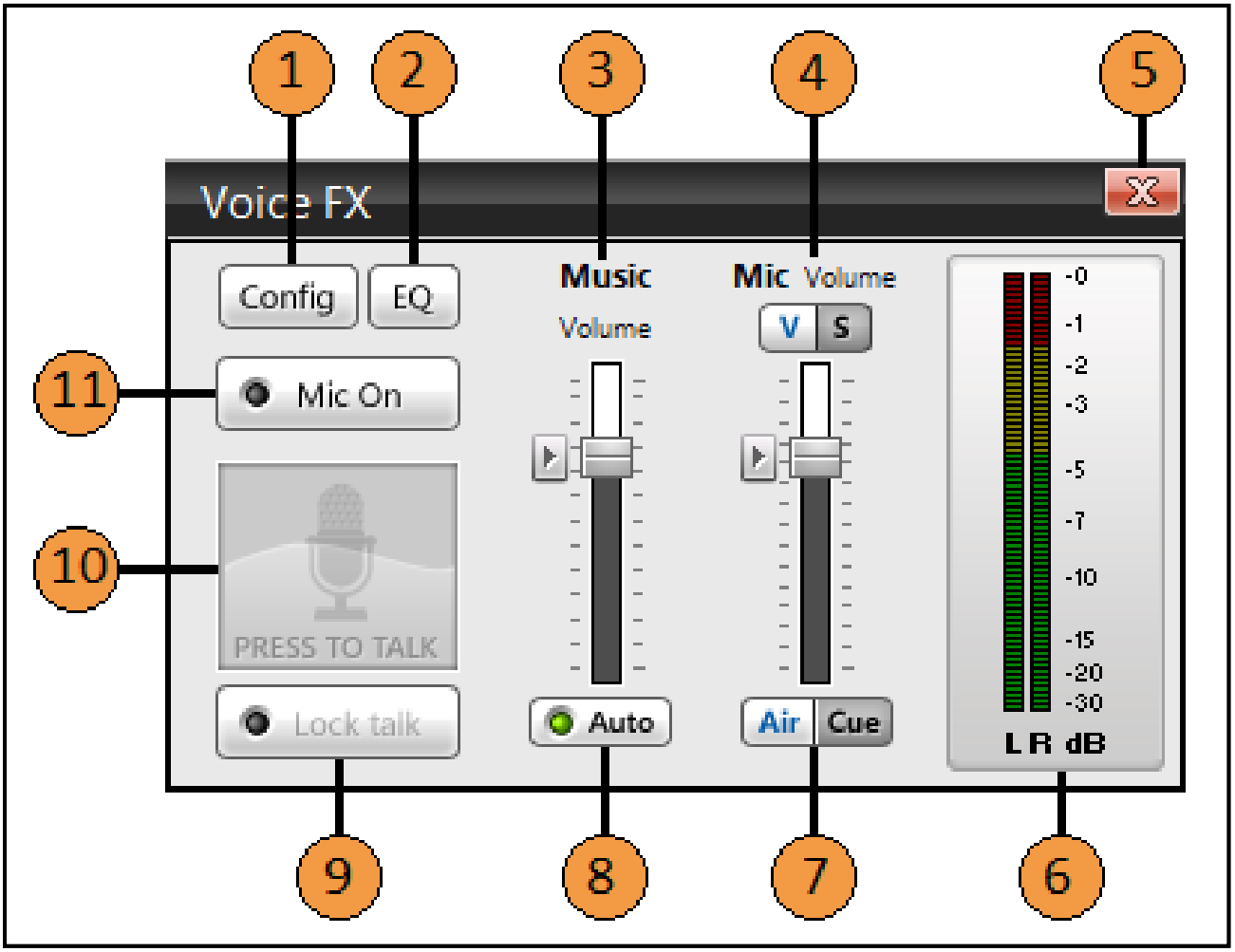
The Statistics Relay Graph shows the variation in the number of listeners for each relay. It is simply a graphical representation of the statistics relays in use. It also shows the peak listeners and the current number of listeners listening to your radio stream.



Serial	Description
1	Current and Peak listener numbers
2	Close the Statistic Relays Graph window
3	End of the Relay (1 hour from the start)
4	Sudden drop in the Relay
5	Start of the Relay

Voice Effects (FX)

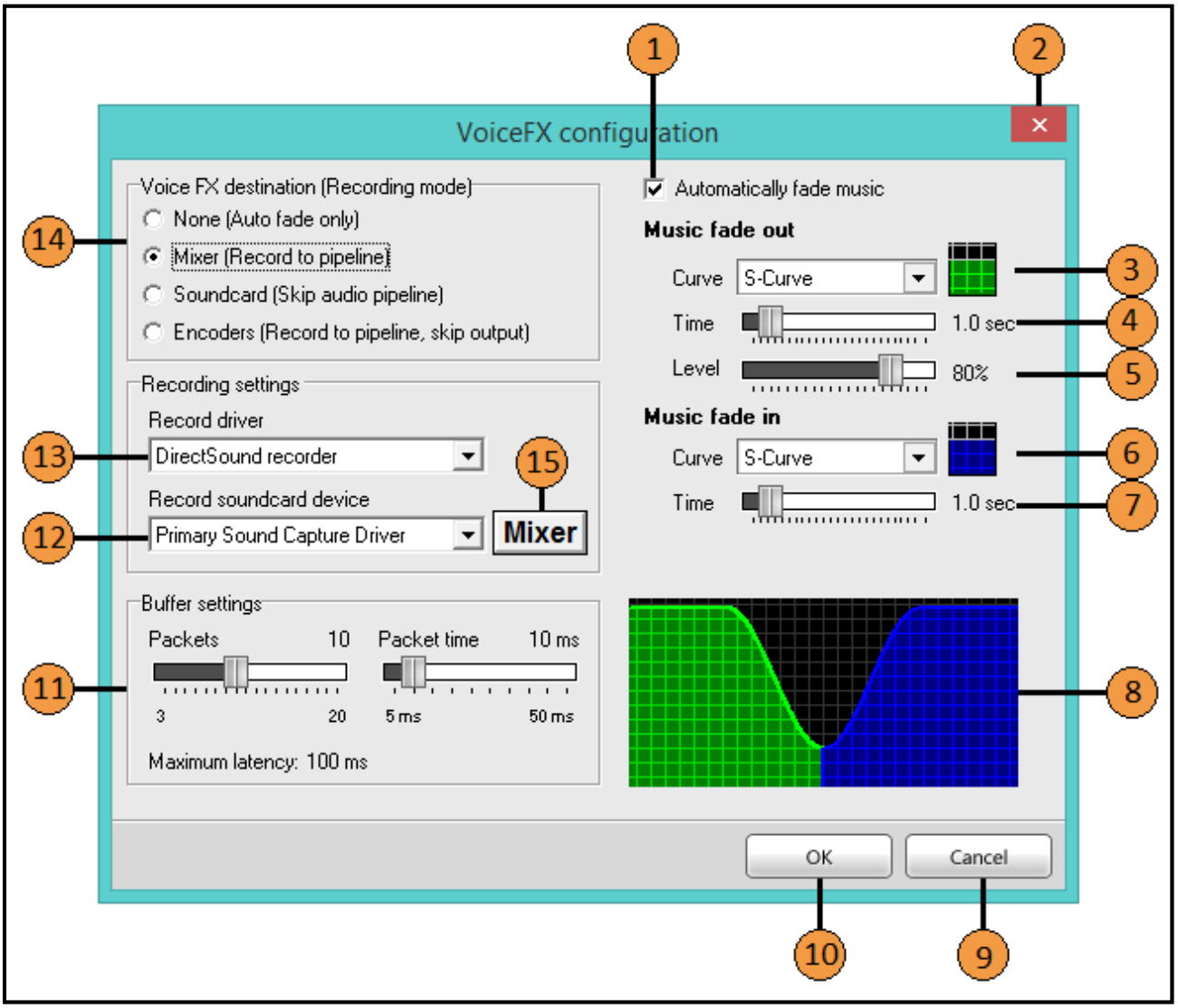
The Voice Effects or Voice FX is a very important component in the design of SAM Broadcaster. It allows broadcasters and DJs to broadcast their voice while broadcasting or DJing. It also allows you to fade the music automatically whenever you use the Voice FX feature.



Serial	Description
1	Brings up the Voice FX configuration window (greyed out when the Mic is on)
2	Display the Graphic Equaliser for the Voice FX
3	Set the music volume when the microphone is in use
4	Set the Microphone volume/speed
5	Close the Voice FX window
6	Audio Meter
7	Select either Air or Cue
8	Set the music volume to automatic
9	Click this to keep the mic open
10	Press to Talk
11	Click to make the mic live

Voice Effects (FX) Configuration

The Voice FX Configuration enables you to select how the music fades in and out when the microphone is live as well as adjust the microphone buffer settings. This is particularly useful if you are experiencing an echo with the microphone.



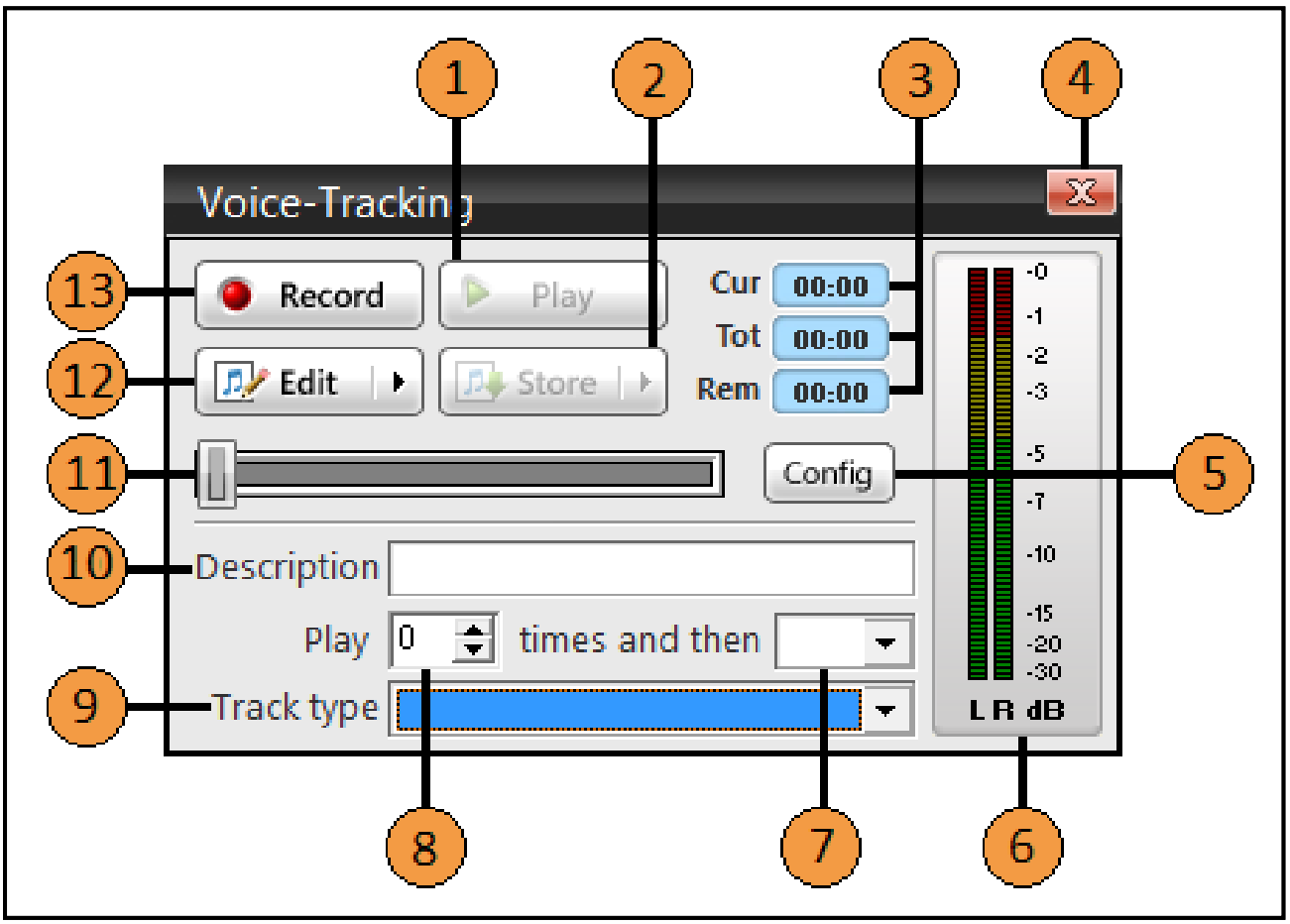
Serial	Description
1	Check to enable automatic music fading when the mic is open
2	Close the Voice FX Configuration window
3	Select the type of music fade out
4	Set the music fade out duration
5	Set the faded out volume level
6	Select the type of music fade in
7	Set the music fade in duration
8	Visual representation of the music fade settings
9	Cancel any changes made
10	Accept any changes made
11	Set the microphone buffer settings
12	Select the Record soundcard device

13	Select the Record driver
14	Set the Voice FX Destination from the choices available
15	Open the Windows Sound Applet from the Control Panel

Voice Tracking

Voice Tracking allows you to record audio from the microphone or line-in to be played at a later stage. This is mainly used for adverts, announcements or similar short soundbytes which you might like to create and make available whilst broadcasting.

This feature is limited to 5 minutes as adverts or soundbytes longer than 5 minutes can be quite disruptive to a radio broadcast.



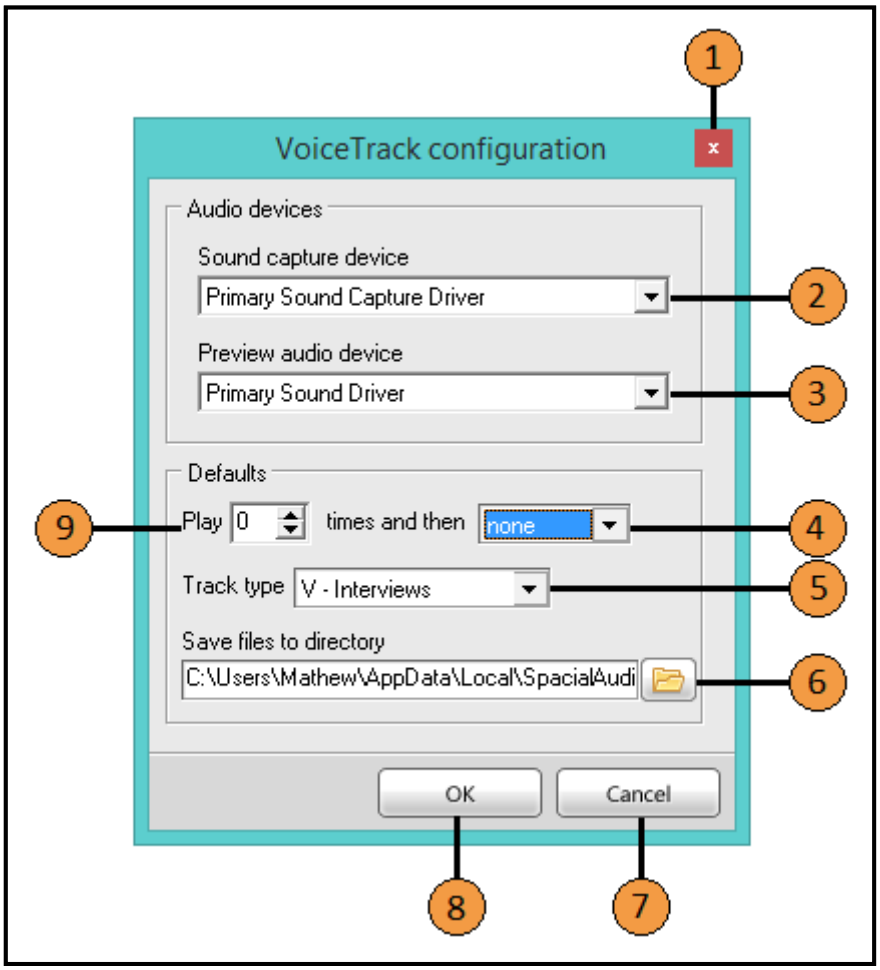
Serial	Description
1	Play the recorded audio
2	Store options for the recorded audio*
3	Track timings (Current, Total and Remaining Times)
4	Close the Voice-Tracking window
5	Config options (next image)
6	Decibel meter for left and right audio channels
7	Set the action to complete after the audio has played the designated number of times**
8	Select the number of times the recorded audio should play
9	Select the type of audio file being recorded***
10	Enter a description (Filename) for the recorded audio
11	Audio progress bar
12	Click to edit the recorded audio segment****
13	Click to start recording the audio

* Available options consist of Quick Queue, Store & Queue and Store Only

**Available options consist of None, Remove and Erase
*** Available options consist of S - Normal Song, I - Station ID, P - Promo, J - Jingle, A - Advertisement, N - Syndicated News, V - Interview, X - Sound FX, C - Unknown Content, ? – Unknown
**** Available options consist of New Voice Track, Delete before current position, Delete after current position, Clear and Delete

Voice Tracking Configuration

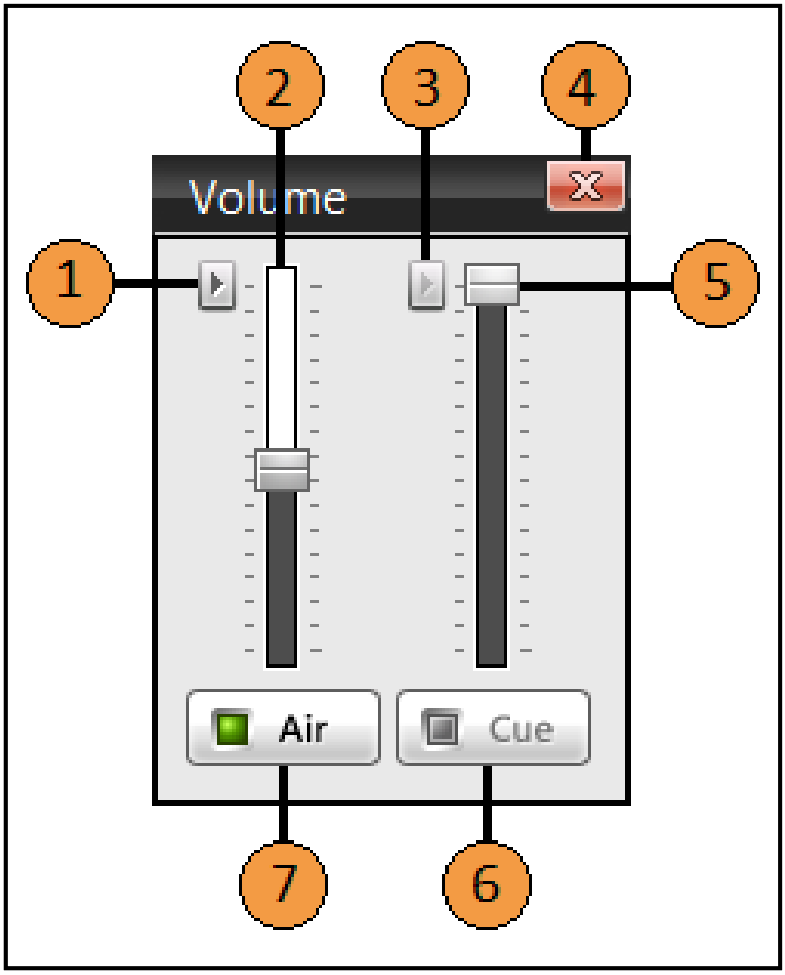
After clicking the Config button in the previous image, you will be presented with the following Configuration options.



Serial	Description
1	Close the Voice-Tracking configuration window
2	Select the Sound Capture Device
3	Select the Preview Audio Device
4	Set the default option for item 7 in the previous image
5	Set the default option for item 9 in the previous image
6	Set the default directory path to save created audio files
7	Cancel any changes made
8	Accept any changes made
9	Set the default option for item 8 in the previous image

Volume

The Volume window allows you to control the volume (decibel) of the audio file being played. It gives you the option to Cue your audio file which means you can listen to it before you broadcast it. Instead of controlling the volume on your computer or the decks, you can use this option centrally.

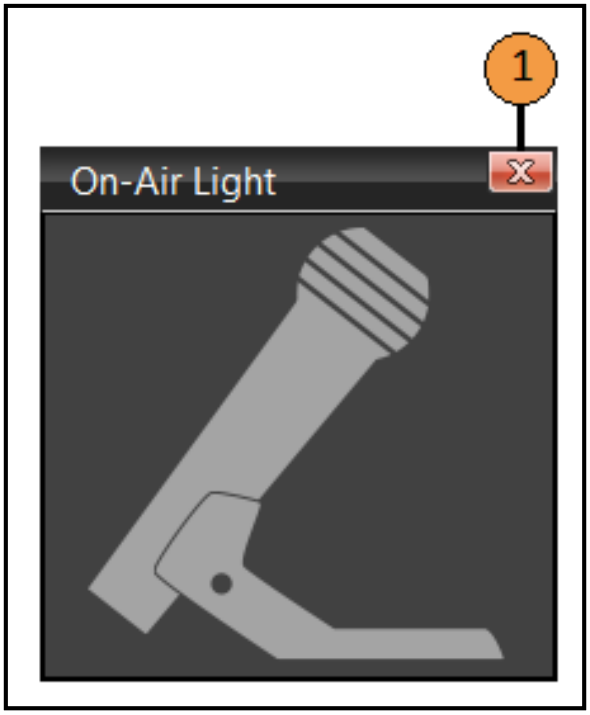


Serial	Description
1	Click to restore the default broadcast (Air) Volume
2	Air Volume slider
3	Click to restore the default Cue Volume
4	Close the Volume window
5	Cue Volume slider
6	Audio is Cued (song will play but will not be aired)
7	Audio is Aired when selected

On-Air Light

The On-Air light gives a clear and graphical indication of the status of the microphone.

This image shows the On-Air light when the microphone is not live

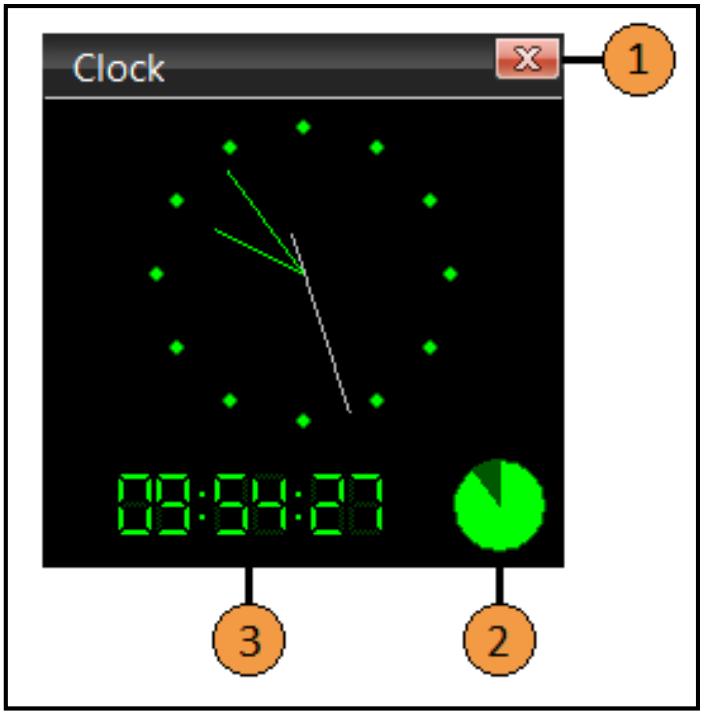


Serial	Description
1	Close the On-Air Light window

This image shows the On-Air light when the microphone is live.

Clock

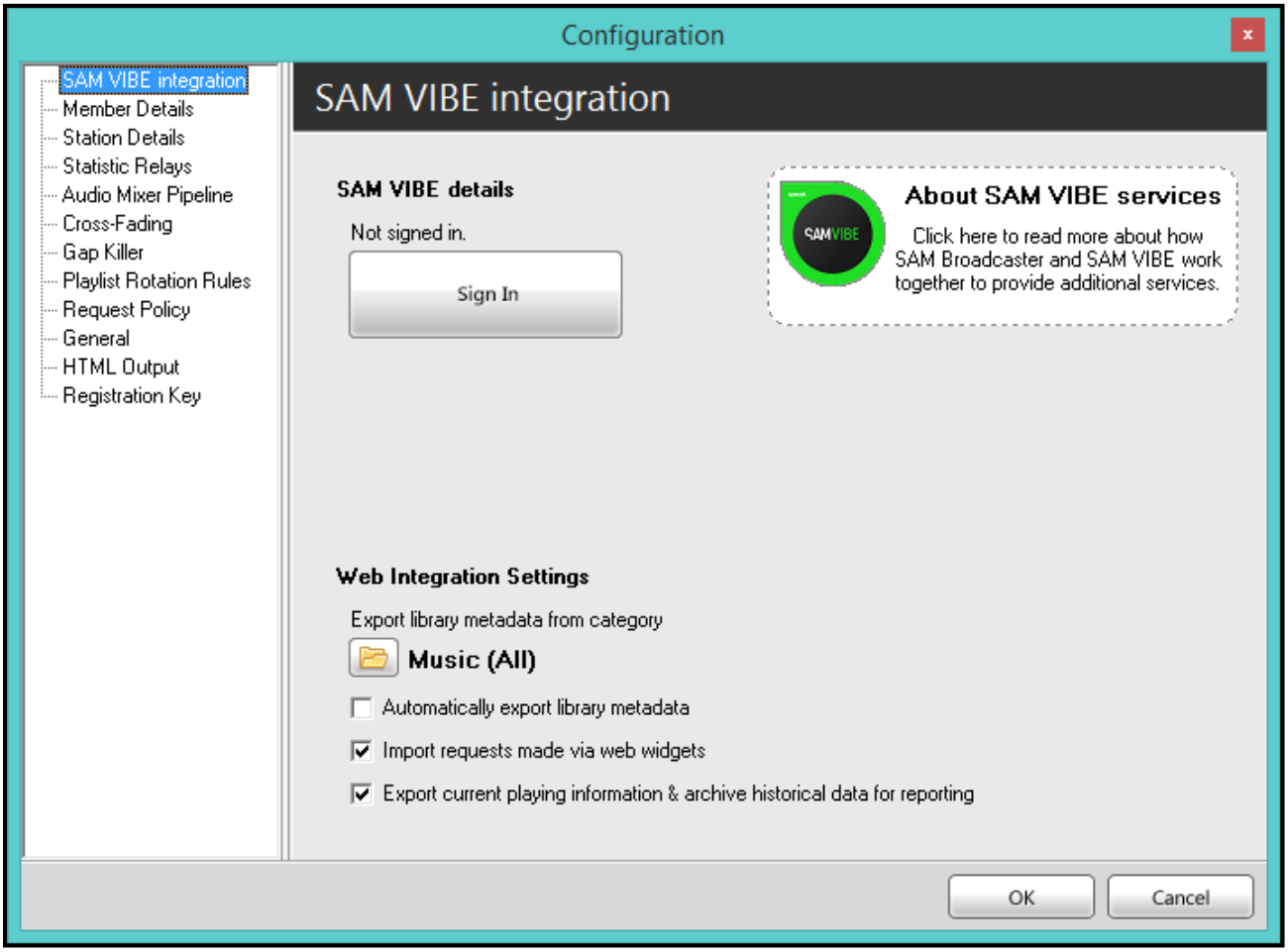
The clock provides a digital and analogue display of the current system time as well as a graphical representation designed to convey the percentage of the hour passed and remaining, from a glance.



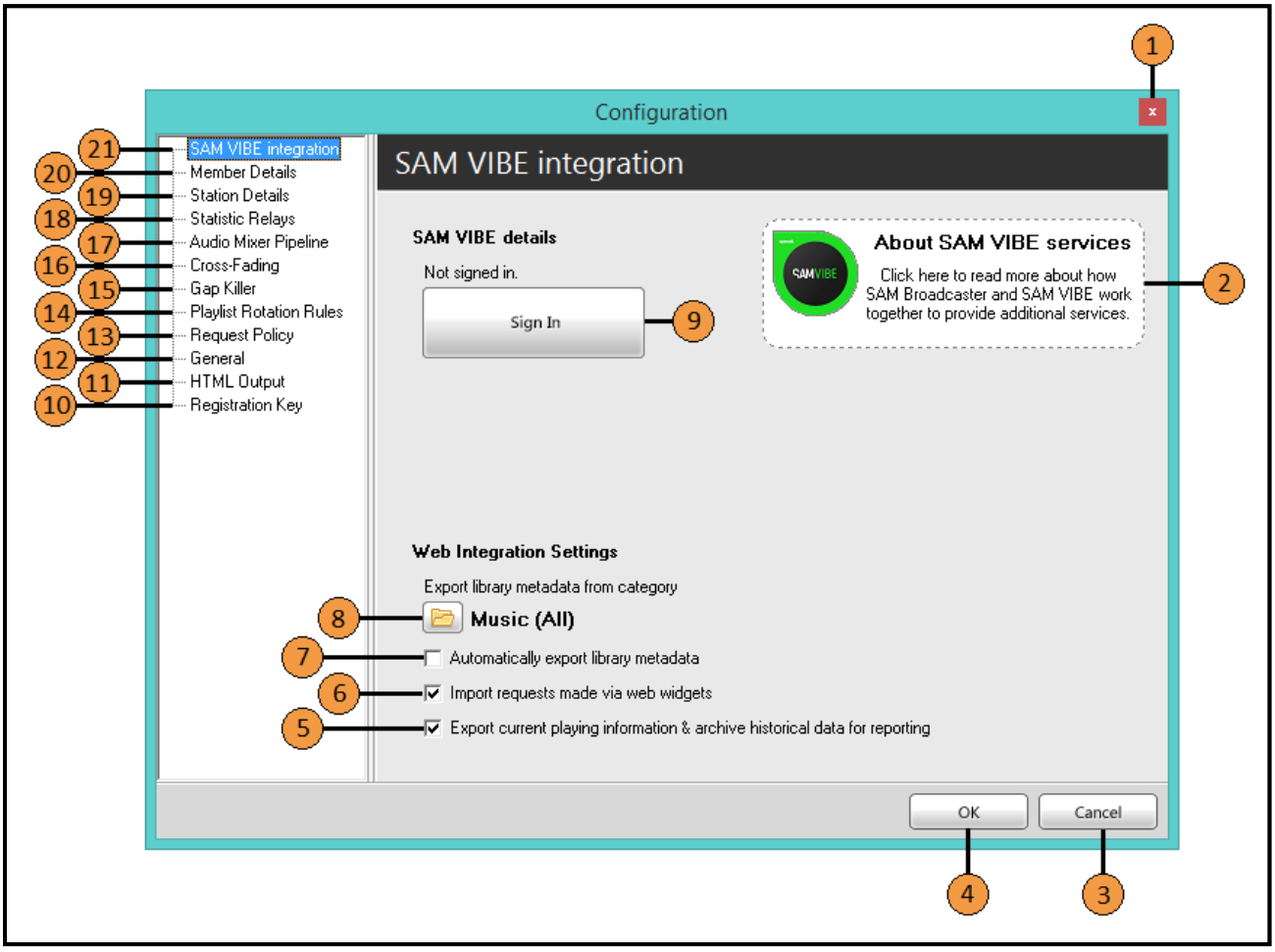
Serial	Description
1	Close the Clock window
2	Part of the hour passed/remaining
3	Digital time display (24 Hour clock system)

Configuration

The Configuration window is the main component in SAM Broadcaster which allows you to configure SAM Broadcaster as you want it to be. The Config window provides a central point from which to access all of the configurable options within SAM Broadcaster.



Configuration – SAM VIBE Integration

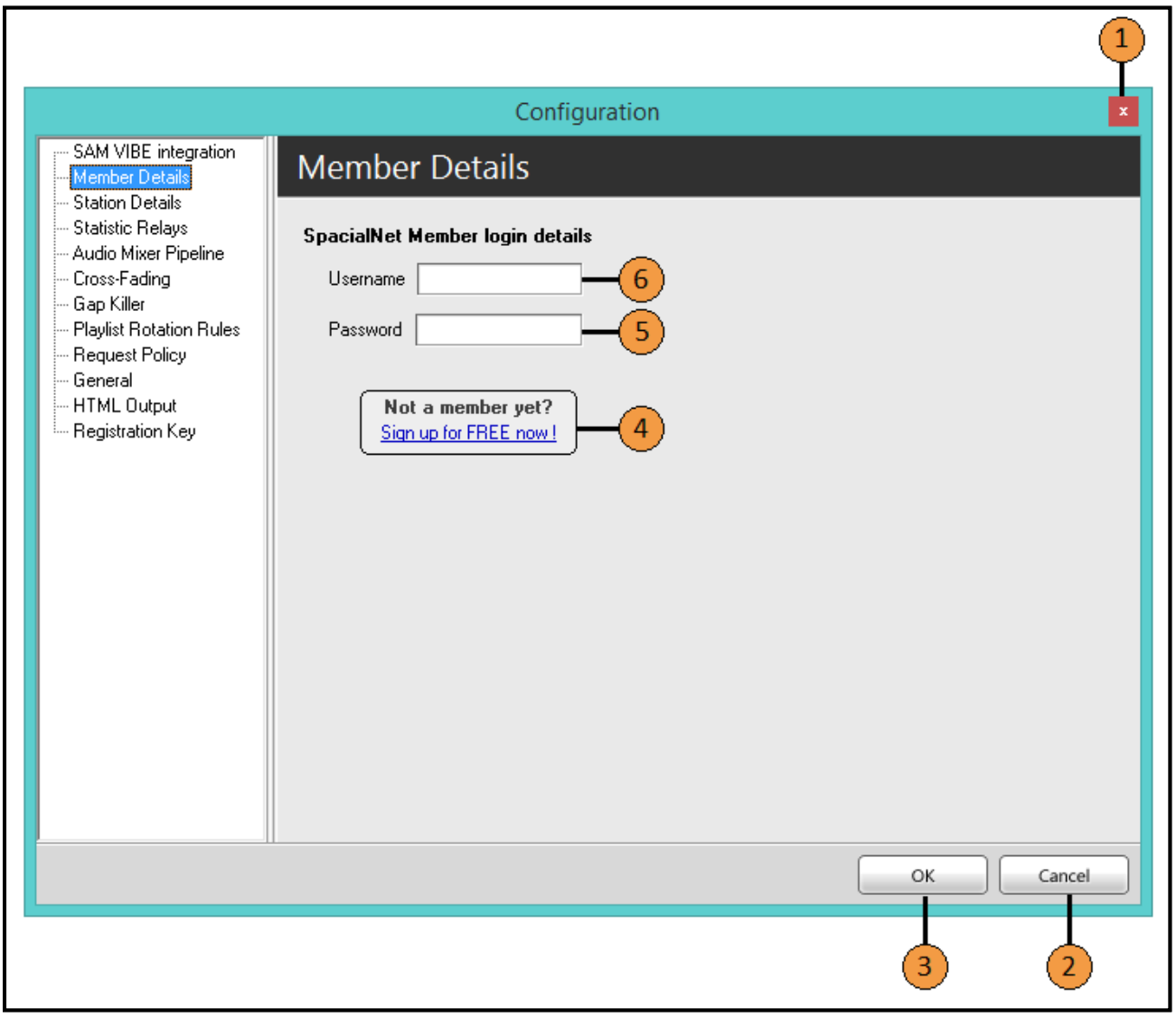


Serial	Description
1	Close the Configuration window
2	Link to find out additional information about SAM VIBE
3	Cancel any changes made
4	Accept any changes made
5	Export current playing information and archive historical data for reporting
6	Enable Web Widget requests
7	Automatically export the library metadata for the tracks played
8	Select the folder to export library metadata from
9	Sign in with your SAM VIBE login credentials
10	Access the Registration Key options including Manual Deactivation
11	Access the HTML Output options for inclusion in your website
12	Configure the General options not covered under specific topics
13	Enable/Configure/Disable the listener request policy
14	Configure audio files to rotate based on broadcaster preferences
15	Add/Modify/remove the Gap Killer which detects silences based on user settings
16	Configure the Cross Fade logic depending upon your requirements
17	Opens the Audio Mixer Pipeline window to configure all input/output devices
18	Configure or modify the statistics relays
19	Enter the station details for Spacial Net subscribers including AudioRealm listings

20	Insert or modify the Spacial Net member login details
21	Access the SAM VIBE Integration options

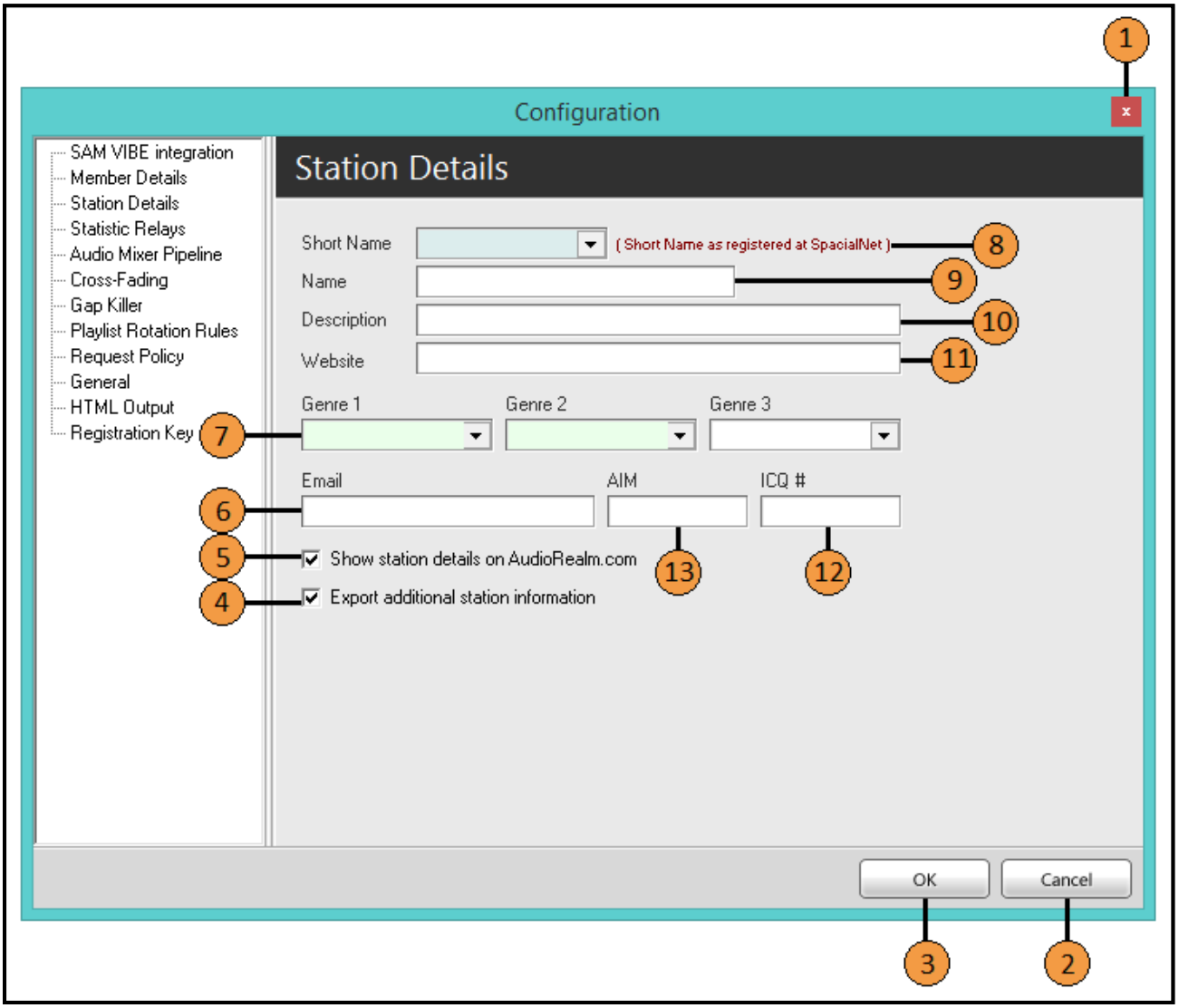
Configuration – Member Details

Spacial Net (http://spacialnet.com) is Spacial's premium streaming service and whilst it is not mandatory to have a Spacial Net account to use SAM Broadcaster it is a requirement for registering your station with AudioRealm (http://audiorealm.com), Spacial's radio listings site.



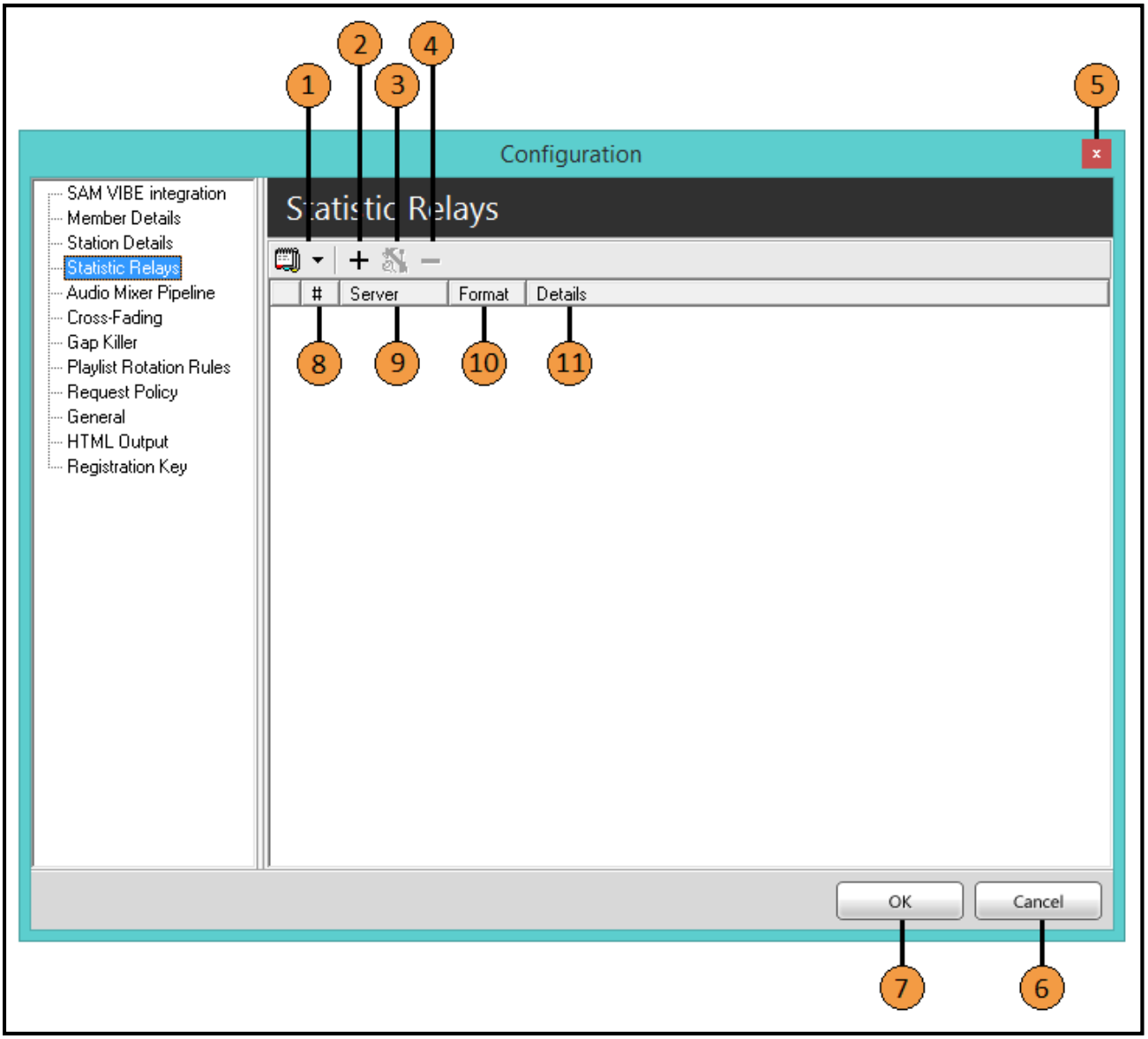
Serial	Description
1	Close the Configuration window
2	Cancel any changes made
3	Accept any changes made
4	Sign up for a free Spacial Net Member account (required to list on AudioRealm.com)
5	Enter your Spacial Net account password
6	Enter your Spacial Net account username

Configuration – Station Details



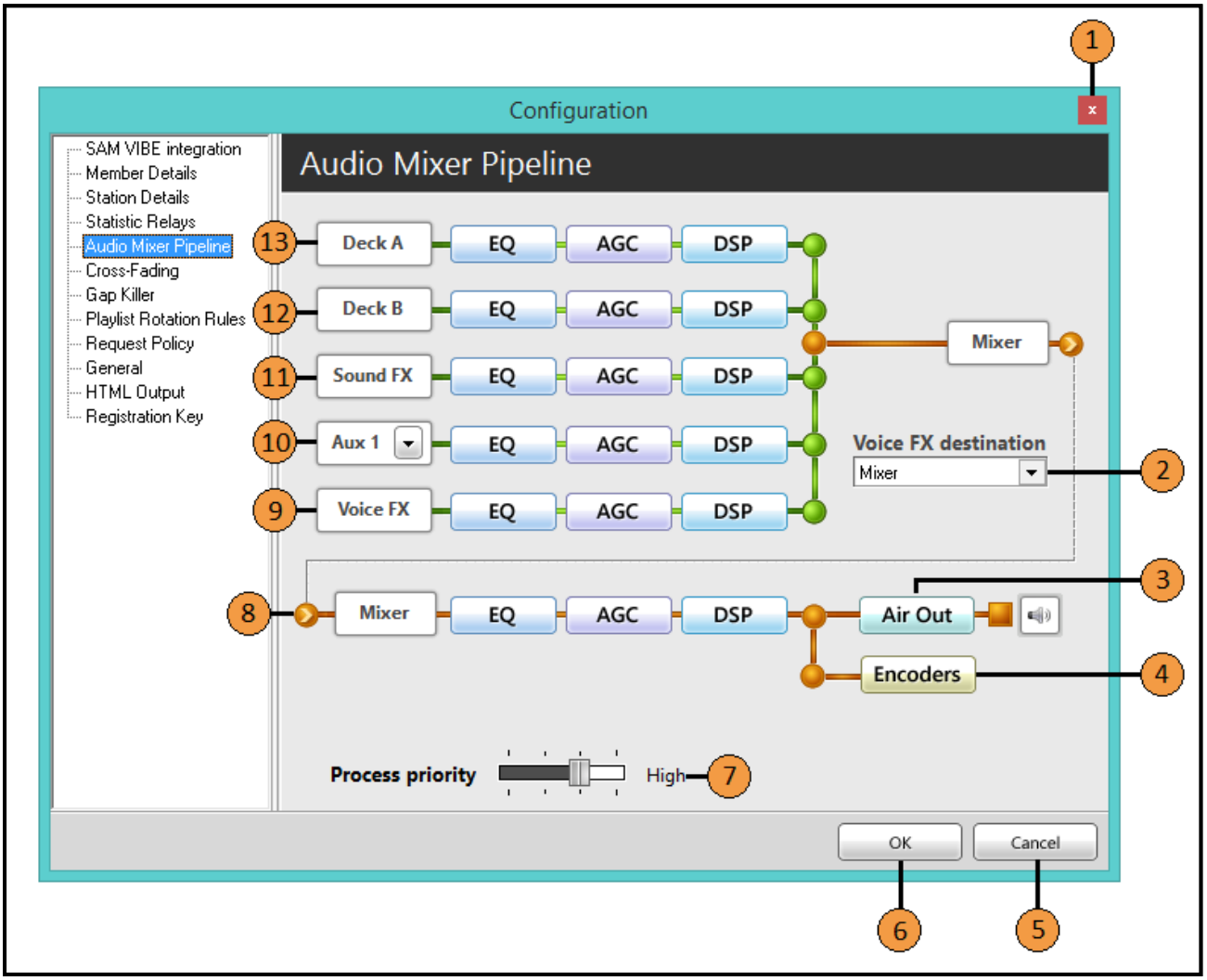
Serial	Description
1	Close the Configuration window
2	Cancel any changes made
3	Accept any changes made
4	Check to export additional station information
5	Check to show station details on AudioRealm.com
6	Enter an email address to list on AudioRealm.com
7	Enter up to three station genres from the drop-down lists provided
8	When signed in under Member Details, this will list the short-names of all your stations
9	Enter the full station name
10	Enter a brief description of the station
11	Enter any station web address
12	Enter any ICQ number to list on AudioRealm.com
13	Enter any AIM nickname to list on AudioRealm.com

Configuration – Statistic Relays



Serial	Description
1	Add, remove or edit a Statistic Relay
2	Add a new Statistic Relay
3	Edit an existing Statistic Relay
4	Remove an existing Statistic Relay
5	Close the Configuration window
6	Cancel any changes made
7	Accept any changes made
8	Statistic Relay number
9	Server type (SHOUTcast, Icecast, MPM)
10	Streaming format (AAC, WMA, MP3)
11	Server details

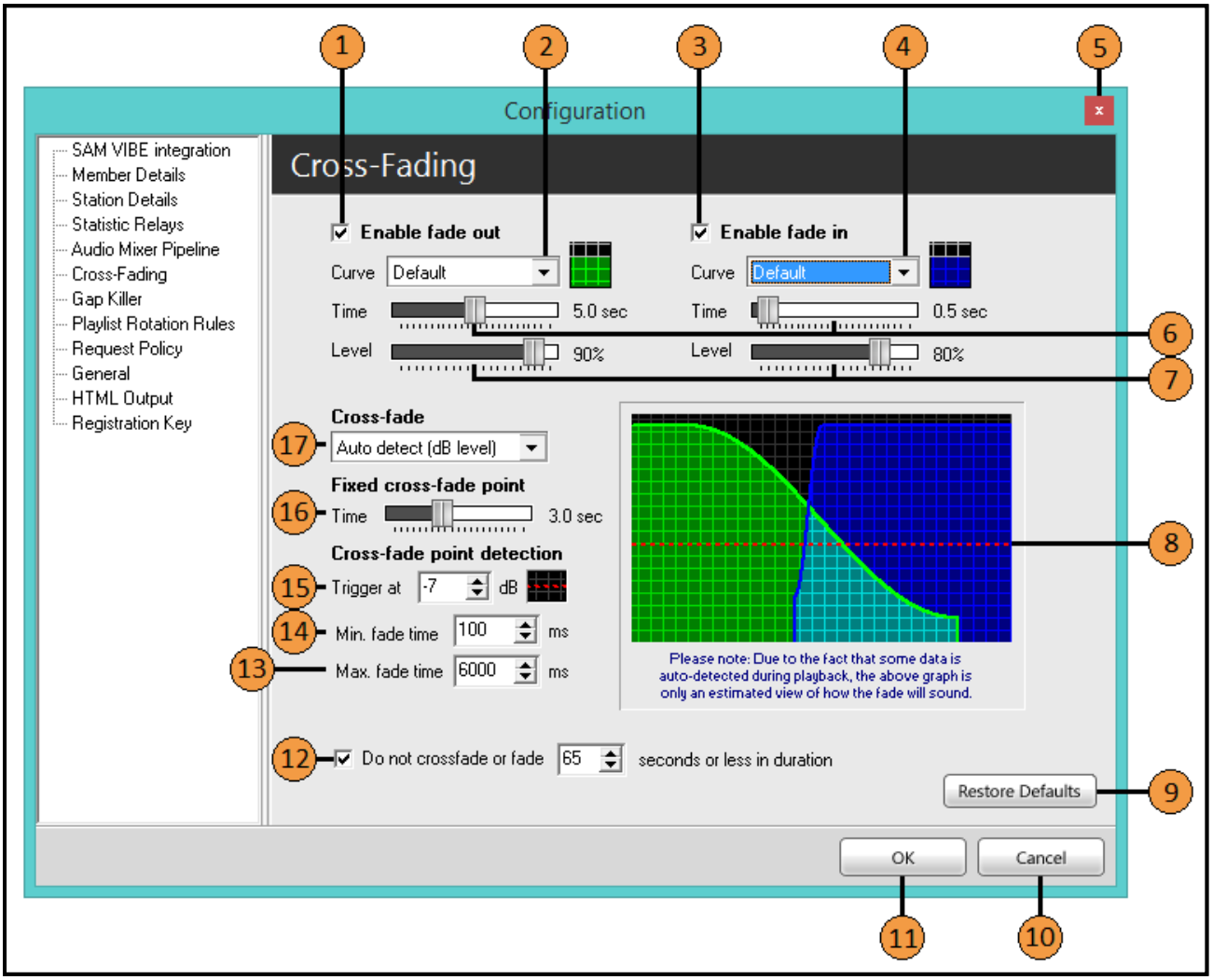
Configuration – Audio Mixer Pipeline



Serial	Description
1	Close the Configuration window
2	Select the Voice FX output destination*
3	Opens the Air Out configuration options
4	Graphical indication of the encoders in the pipeline
5	Cancel any changes made
6	Accept any changes made
7	Set the process priority (a higher priority assigns more CPU power to the processing)
8	Mixer Pipeline
9	Voice FX Pipeline
10	Auxiliary decks Pipeline
11	Sound FX Pipeline
12	Deck B Pipeline
13	Deck A Pipeline

*Available options consist of Default, None, Mixer, Sound device and Encoders

Configuration – Cross Fading

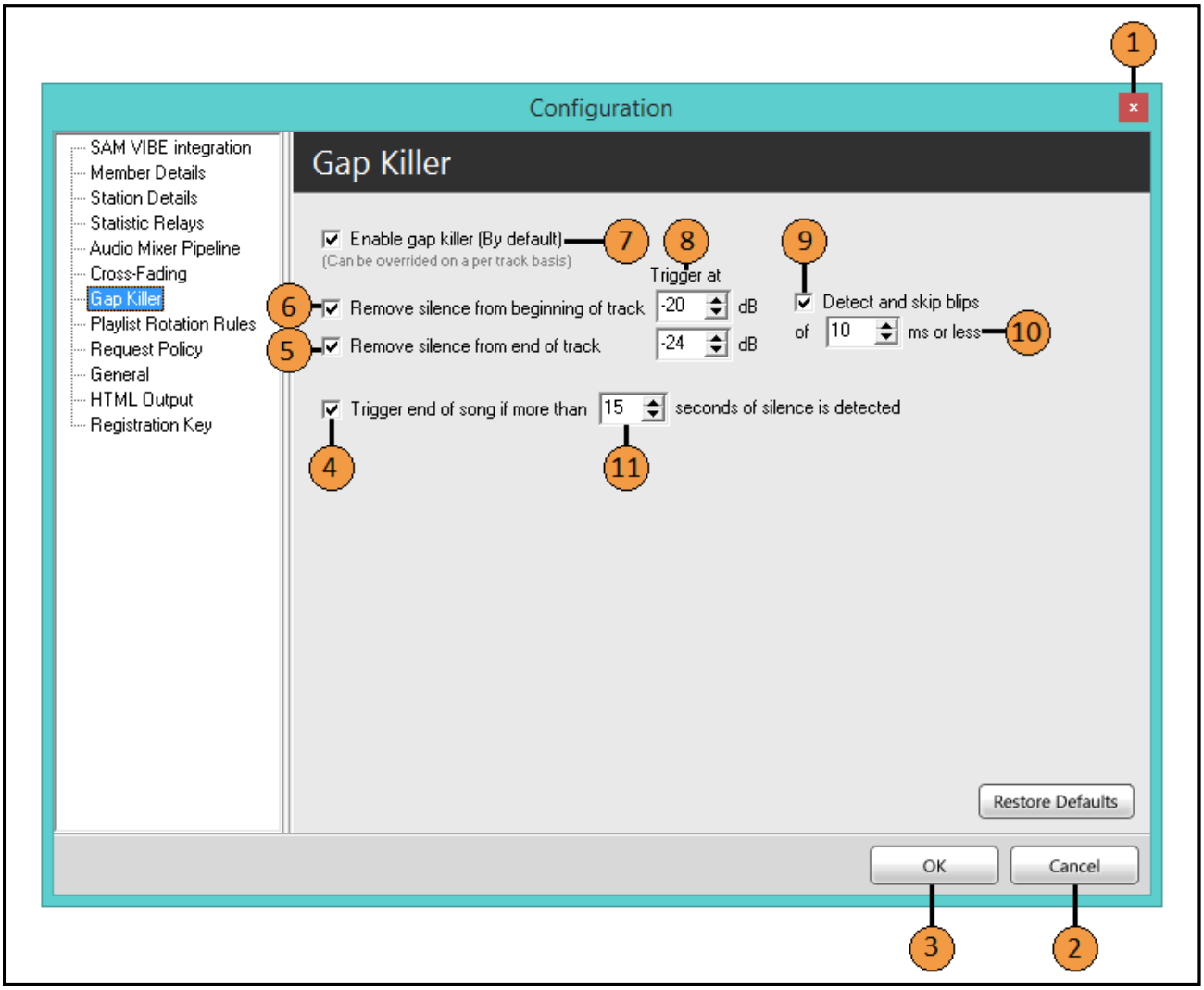


Serial	Description
1	Enable the fading out of the outgoing track
2	Select the fade out curve*
3	Enable the fading in of the next track
4	Select the fade in curve*
5	Close the Configuration window
6	Adjust the fade out and fade in durations
7	Adjust the fade out and fade in audio levels
8	Visual representation of the settings selected
9	Click to restore the default settings
10	Cancel any changes made
11	Accept any changes made
12	Check to not crossfade or fade tracks of the selected duration
13	Adjust and set the maximum fade time
14	Adjust and set the minimum fade time
15	Adjust and set the crossfade detection level
16	Adjust and set the fixed crossfade point
17	Select the crossfade type**

*Available options consist of Default, Linear, S-Curve and Exponential

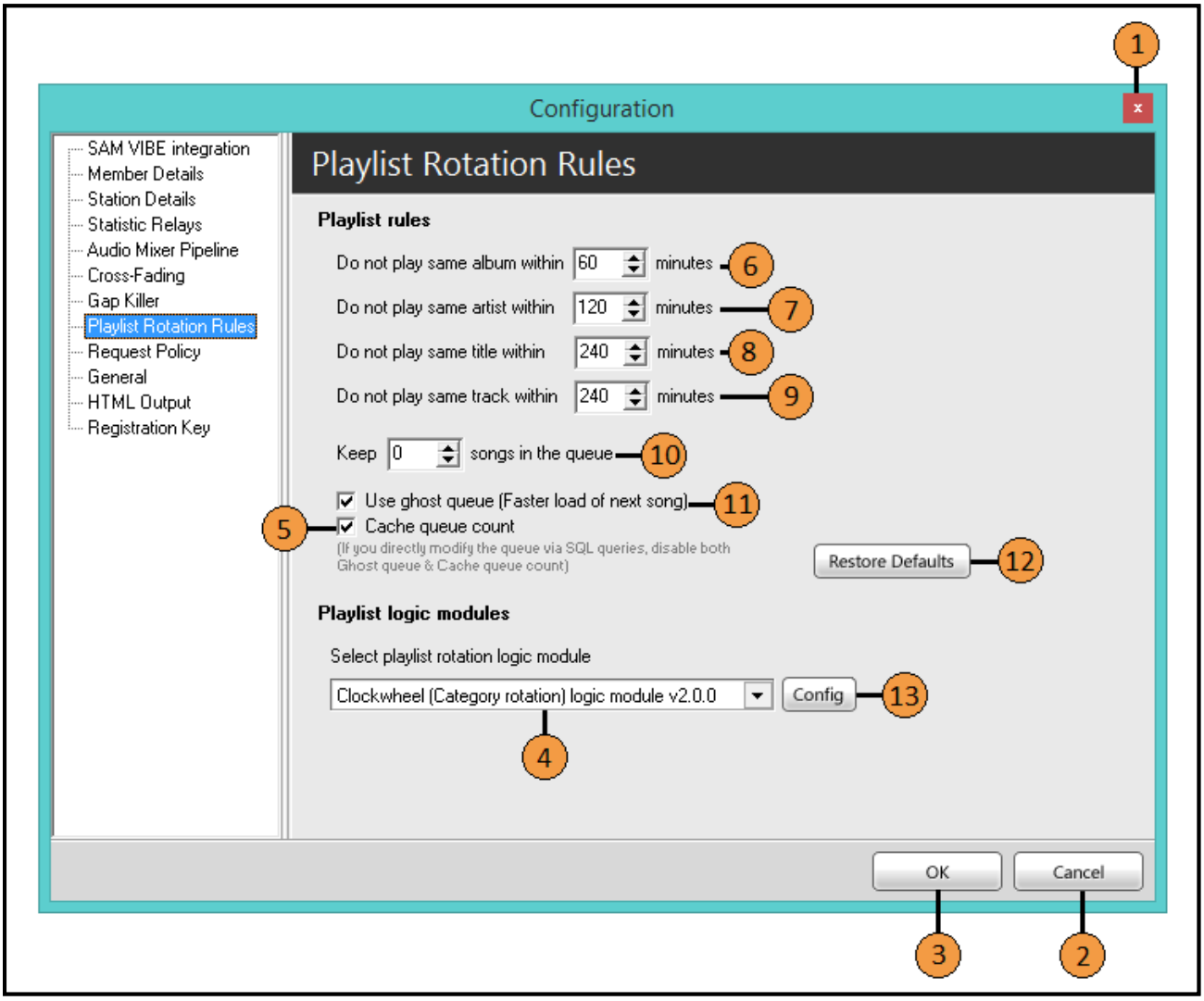
**Available options consist of Default, Disable crossfading, Fixed point and Auto detect (dB Level)

Configuration – Gap Killer



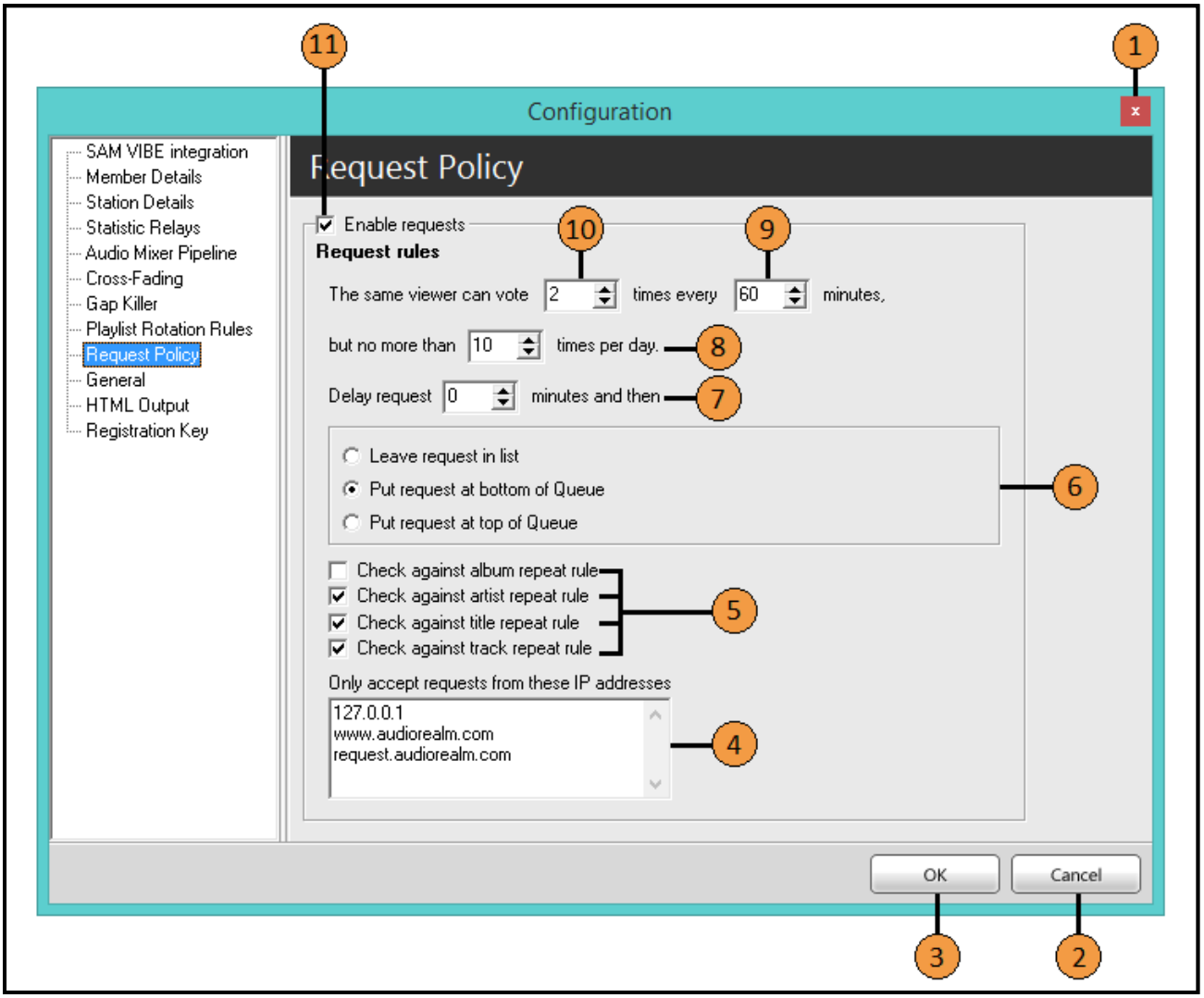
Serial	Description
1	Close the Configuration window
2	Cancel any changes made
3	Accept any changes made
4	Check to trigger the end of the track based on a pre-determined silence length
5	Check to remove the silence from the end of the track
6	Check to remove the silence from the start of the track
7	Check to enable the Gap Killer by default
8	Gain level (dB) to consider as silence at the start and end of a track
9	Check to ignore blips of a pre-determined length
10	Determine the blip length in milliseconds to ignore
11	Determine the length of silence to consider as the end of the song

Configuration – Playlist Rotation Rules



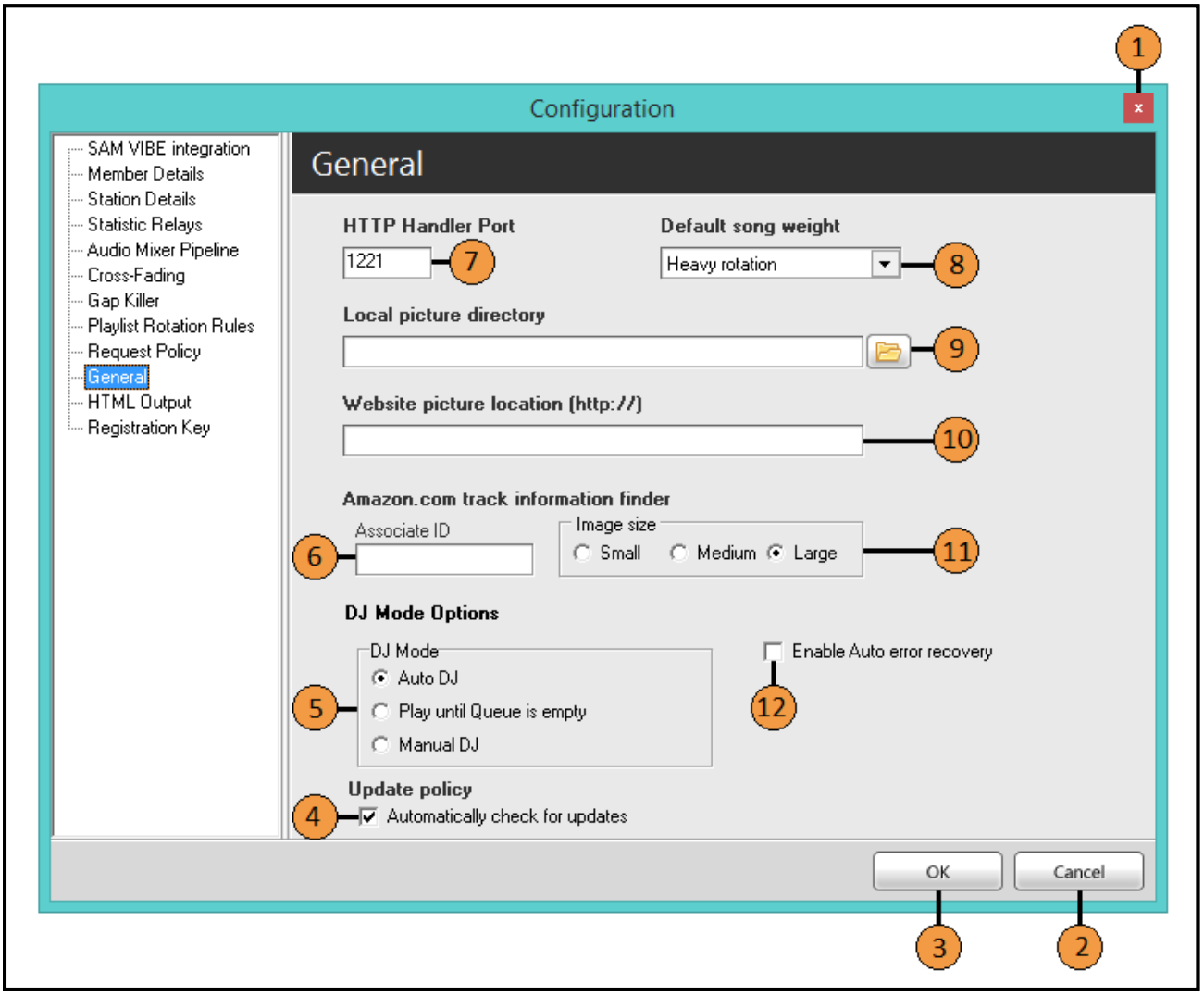
Serial	Description
1	Close the Configuration window
2	Cancel any changes made
3	Accept any changes made
4	Select the Playlist Rotation Logic Module
5	Check to cache the queue count
6	Time limit to prevent tracks from the same album playing
7	Time limit to prevent tracks from the same artist playing
8	Time limit to prevent tracks of the same title playing
9	Time limit to prevent the same track from playing
10	Number of tracks to keep in the queue by default
11	Check to use a ghost queue for faster track loading
12	Restore default options
13	Click to configure the selected playlist rotation logic module

Configuration – Request Policy



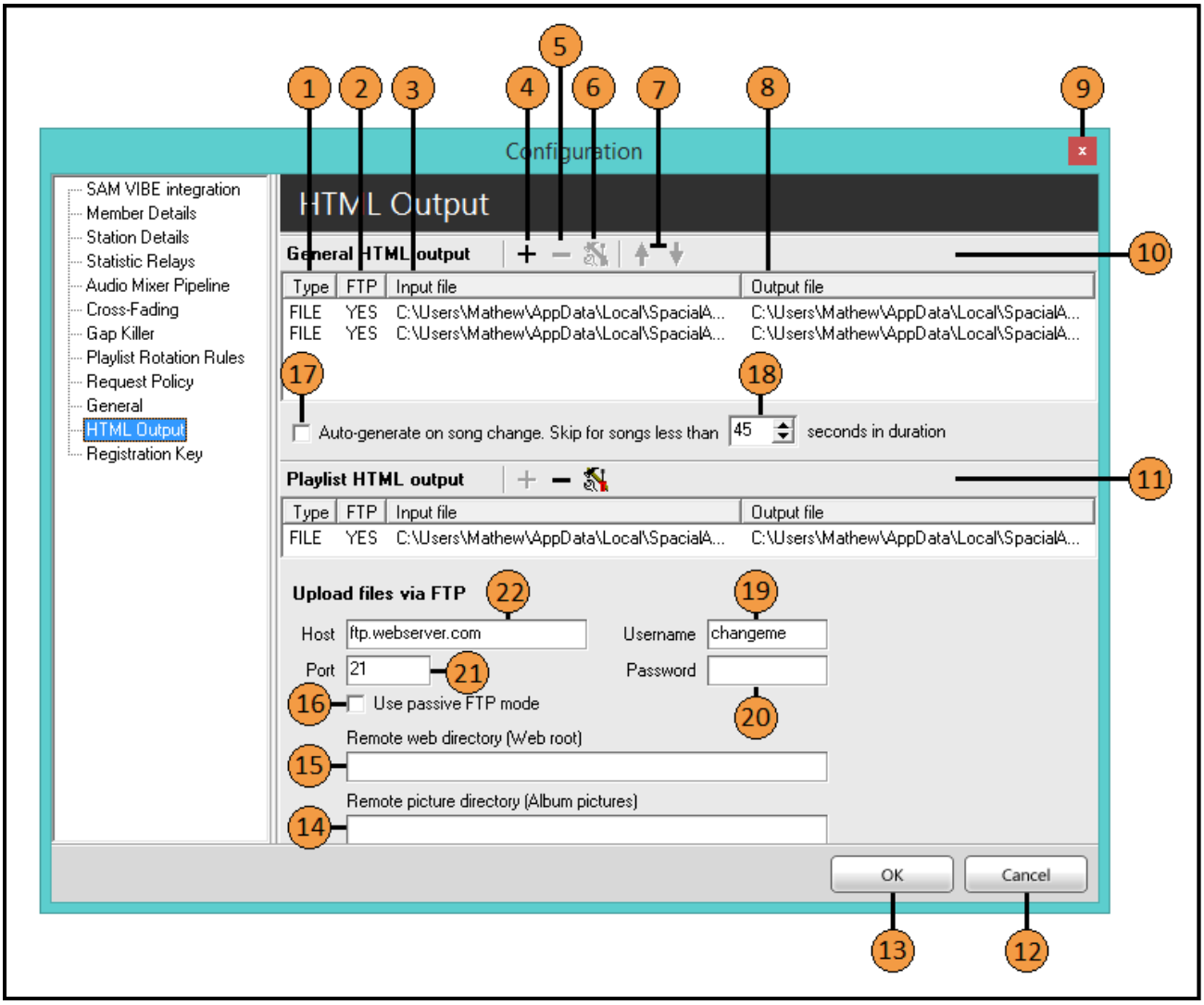
Serial	Description
1	Close the Configuration window
2	Cancel any changes made
3	Accept any changes made
4	Set the IP Addresses requests can be received from
5	Check to implement track separation rules against requests received
6	Default action for requests received
7	Option to delay the request
8	Maximum number of daily requests from the same requestor
9	Time limit for the maximum number of requests
10	Maximum number of requests from the same requestor
11	Check to enable the request policy

Configuration – General



Serial	Description
1	Close the Configuration window
2	Cancel any changes made
3	Accept any changes made
4	Check this for SAM Broadcaster to automatically check for software updates
5	Set the Default DJ Mode
6	Enter the Amazon.com associate ID
7	Default HTTP Handler Port
8	Default track rotation weighting
9	Set the local computer picture (album art) directory
10	Set the default website picture directory (if applicable)
11	Set the default image size
12	Check to enable automatic error recovery

Configuration – HTML Output

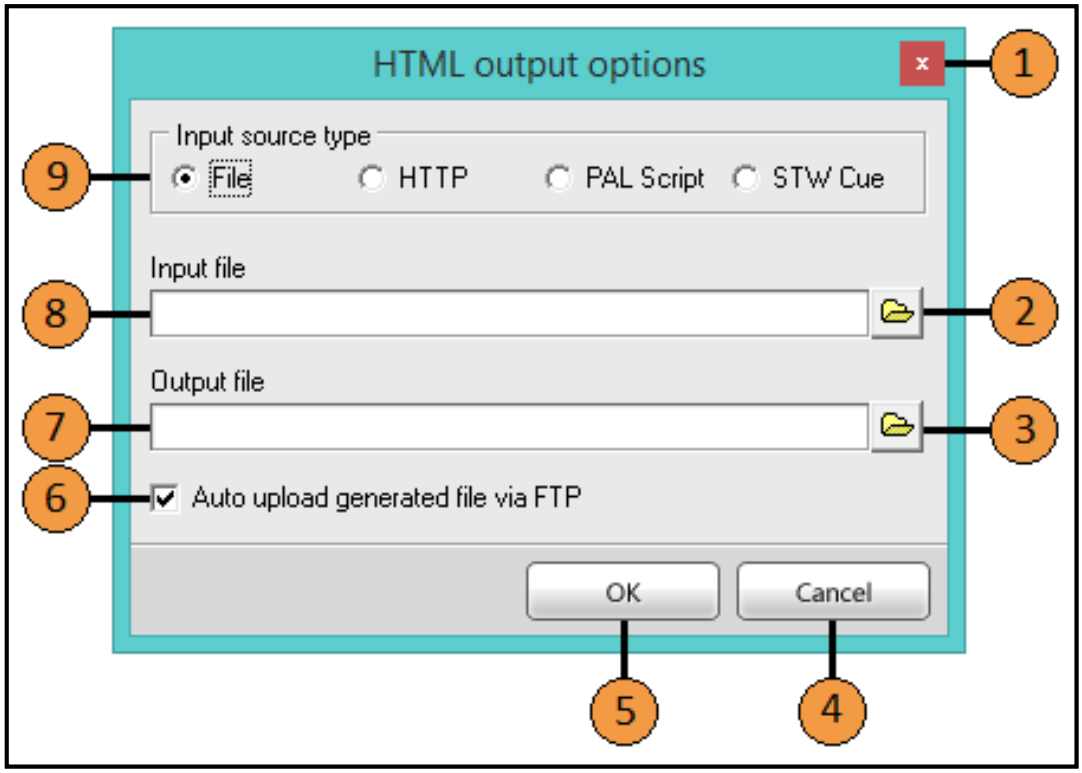


Serial	Description
1	Input Source Type (File, HTTP, PAL Script or STW Cue)
2	Automatic FTP upload status
3	Input File Path
4	Add another entry
5	Delete an existing entry when highlighted
6	Edit an existing entry when highlighted
7	Move an existing entry up or down in the list
8	Output file path
9	Close the Configuration window
10	General HTML Output settings
11	Playlist Specific Output settings
12	Cancel any changes made
13	Accept any changes made
14	Remote image directory location
15	Remote web directory location
16	Check to use Passive FTP

17	Select to automatically update the file when the song changes
18	Set the minimum track length for tracks to ignore*
19	Enter the FTP Username
20	Enter the FTP Password
21	Set the FTP Port number (Port 21 is the default FTP port number)

*Short tracks would usually be Station IDs, commercials and other tracks which you might not want to display the name of

Configuration – HTML Output Options

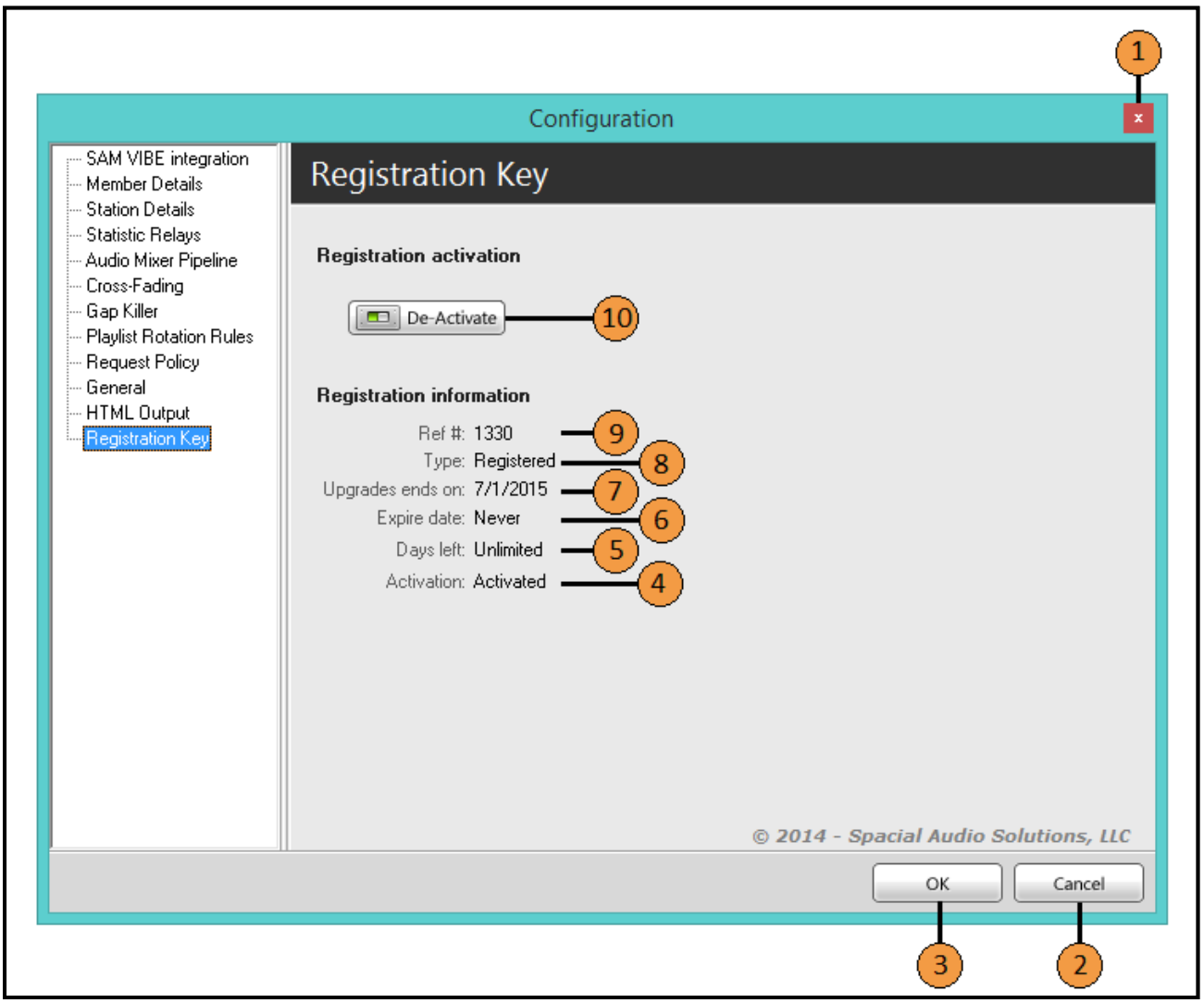


Serial	Description
1	Close the window
2	Navigate to the Input File folder location
3	Navigate to the Output File folder location
4	Cancel any changes made
5	Accept any changes made
6	Check to automatically upload via FTP, the file generated
7	Output file path
8	Input file path
9	Select the Input Source Type (File, HTTP, PAL Script or STW* Cue)

*STW (Stream the World)

Configuration – Registration Key

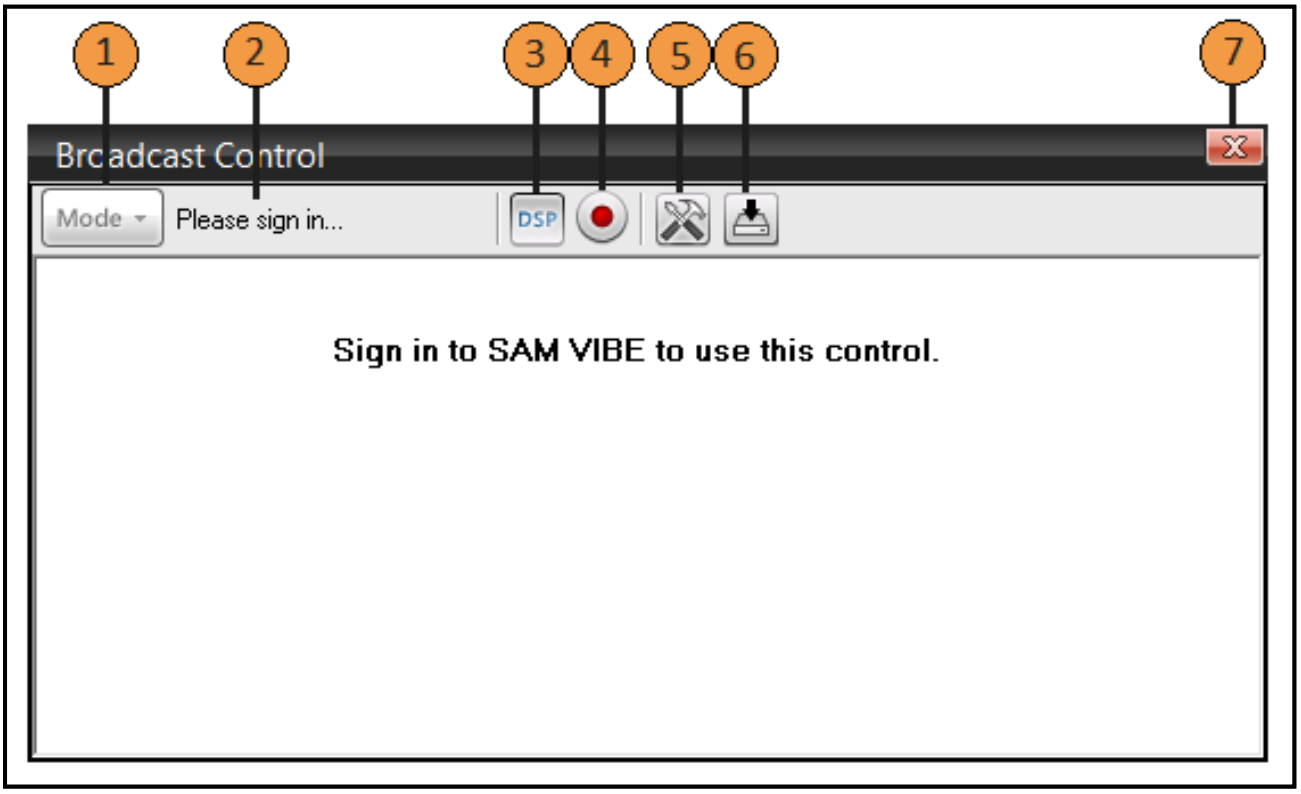
The Configuration window is the main component in SAM Broadcaster which allows you to configure SAM Broadcaster as you want it to be. The Config window provides a central point from which to access all of the configurable options within SAM Broadcaster.



Serial	Description
1	Close the Configuration window
2	Cancel any changes made
3	Accept any changes made
4	License activation status
5	Number of days remaining (for time-limited or trial licenses)
6	License expiry date (for time-limited or trial licenses)
7	Upgrade expiry date
8	License type
9	Activation reference number
10	Manually deactivate the license for reassignment of the activation

Broadcast Control

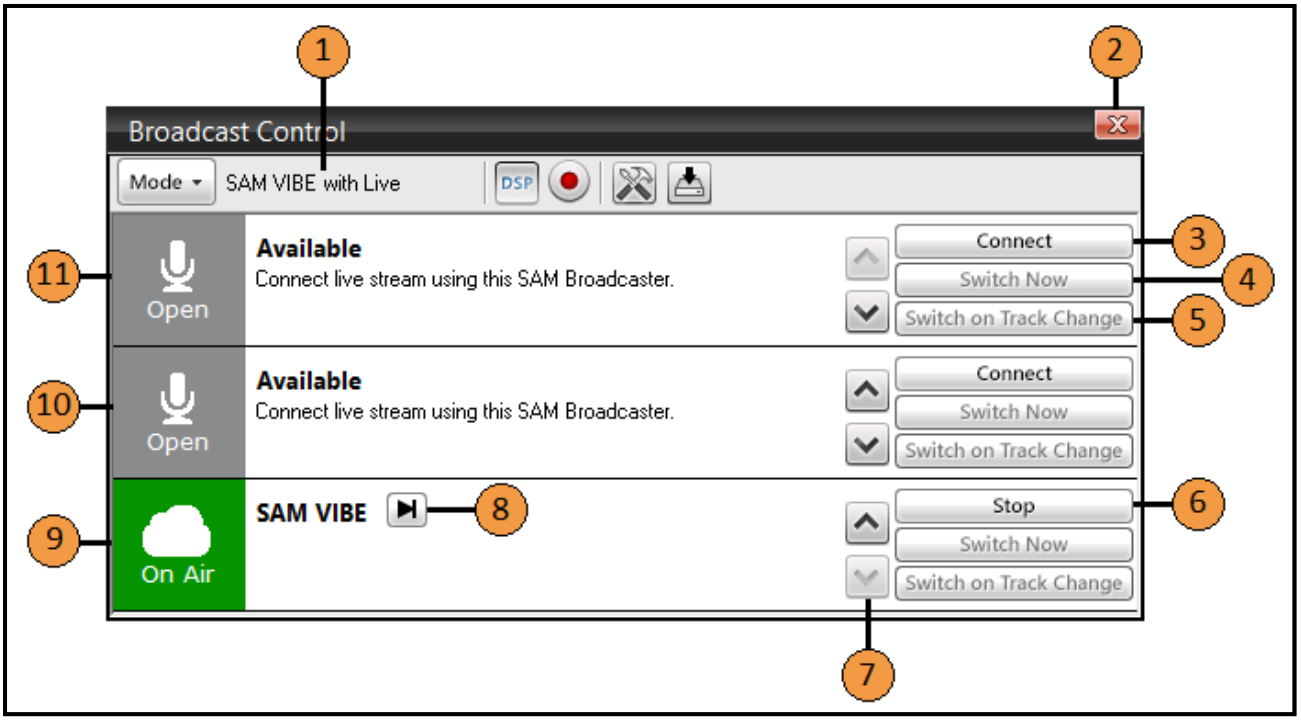
The Broadcast Control is where you can connect to and start streaming to SAM VIBE. If you are using SAM Broadcaster Live-DJ then you will have already signed in to SAM VIBE and you would not need to sign in again to use the Broadcast Control.



Serial	Description
1	Select the Broadcast Mode (greyed out until signed in to SAM VIBE)
2	Notification area
3	Set the DSP as the audio source
4	Select an alternative audio source
5	Open the encoder configuration options
6	Archive (record) the stream
7	Close the Broadcast Control window

Broadcast Control

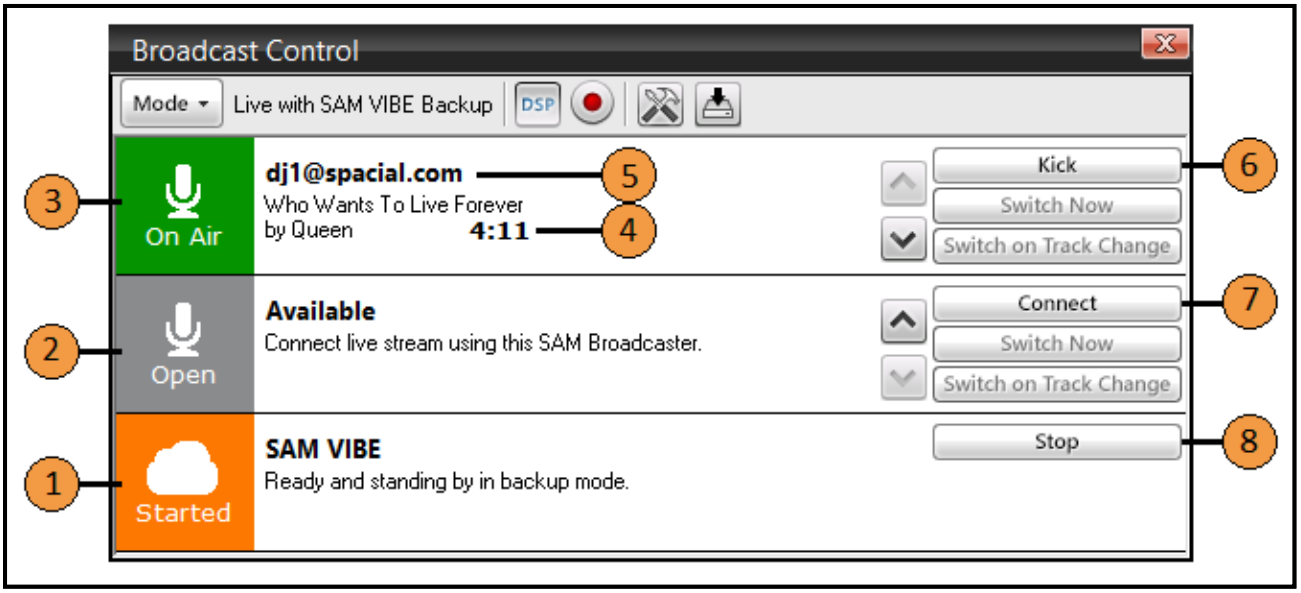
Once you have logged in to SAM VIBE through SAM Broadcaster, the Broadcast Control becomes functional



Serial	Description
1	Notification area (showing the current Broadcast Mode)
2	Close the Broadcast Control window
3	Connect to this source channel
4	When connected, Switch to this source
5	When connected, Switch to this source on the next track change
6	Stop SAM VIBE
7	Move the source up or down
8	Skip to next track
9	On Air status
10	Second available source channel
11	First available source channel

Broadcast Control

Further options become available when another DJ is connected to one of the available source channels.



Serial	Description
1	Source status showing SAM VIBE is ready and standing by
2	Source status showing this channel is available
3	Source status showing another DJ is connected to this channel
4	Current playing track information
5	Connected DJ
6	Kick the connected DJ
7	Connect to this available channel
8	Stop SAM VIBE

spacial.

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