Radio Automation Software Package

Broadcast version
User's Manual

(V 4.1.x)

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Before going to air

If you are really serious about Radio Broadcasting, you'll want to do things right first time. There are many different legal requirements set down by the authorities around the world that regulate and control the use of the *airwaves*. It is most important that you begin by thoroughly checking the rules and regulations for broadcasting in your Country.

Added to these regulations are bodies that represent the Music / Recording Industry, Musicians and Songwriters. Playing any music other than your own originals, is not permitted without the *right* to do so being extended to you or your organisation, by way of a licence and / or Royalty Payment, for the use of the material you use in the Public Domain. Moreover it is a legal requirement in most Countries, that you Log / Record the number of times and dates that any and every piece of music or song is played (On Air / On Line).

Introduction

First and foremost thank you for choosing DirEttore – radio automation software package! This program has been designed by people that understand broadcast radio; especially with you, the (small) *Radio Station Operator* in mind. Its reliability, ease of use and functional uncluttered user interface guarantee round the clock, rock-solid operation of your station. DirEttore will become the *driving force behind* your broadcast programmes; a silent partner - working in the background, when you're not. We are continuously developing and refining our products. Your feedback is an important part of this process. Please feel free to contact us with your comments and ideas.

Minimum Requirements

If you want to be sure to avoid unwanted instability over time, with smooth and accurate transitions, a dedicated computer with a fresh OS installation is strongly recommended. You must also observe the following absolute minimum requirements:

Operating System	Microsoft® Windows 10 / 8.1 / 8 / 7 / Vista™
Screen Resolution	1024 x 768 @ 64K colours
Processor	Intel Core 2 duo @ 1 GHz
RAM	2GB RAM
HDD Space	10 MBytes
Sound Card	A DirectX 8 (DirectSound) Compatible Sound card

Installation

Unpack DirEttore41BROADCASTSetup.zip downloaded from The Internet and execute *DirEttore41BROADCASTSetup.exe,* the installation process will begin with this warning:

Due to the major changes made to the TIME ANNOUNCEMENT structure, if you are upgrading from a version earlier than 4.0, you have to re-configure all the parameters for this function to work.

The next step is to insert the password, in order to continue the installation process. If you are missing this information, please contact **MixTime** using the following e-mail address:

info@mixtime.com

The program, initialization files, this manual, the POWERED BY DIRETTORE logo (in jpg format) and some demonstration files will be installed onto your hard drive together with (if selected) the start menu and desktop icons.

Note that any files you add to the installation folder will **not** be deleted during the de-installation process.

About the audio files

DirEttore plays aac, flac, mpeg 1 Layer III (mp3) files encoded at any bit rate in CBR (constant bit rate) / VBR (variable bit rate) mode, OGG Vorbis (ogg), wave (wav) files recorded at any bit rate and bit depth and Windows Media Audio (wma), provided that the appropriate codecs are installed.

Main Features and definitions

Before starting to explain all DirEttore's windows, let's focus on the key features that the application can provide. This brief glossary should help you to understand how the automation process has been implemented.

THREE PLAYERS
You can mix songs with up to three virtual players at the same time, and a fourth is also available to fire the next song (ready and on cue).

CUE START
Every NEXT song is set on cue at its start point, while the previous song is being played in order to avoid delayed starts. In this way songs will always start immediately.

CUE POINTS
You can set START, INTRO and MIX points for each song, as well as three kinds of fade-type (fast, normal and slow). DO NOT FADE can also be set together with the starting mode by means of the cue points editor.

ROTATION
A sequence of *Rotation Elements* (with Jingles*, Time Announcements and Sweepers*) that are randomly selected at the beginning of each new cycle.

ROTATION ELEMENT
A chosen directory containing song files classified according to previously selected genres, tempo, age or whatever is desired.

PLAYLIST
A playlist is basically a predefined and set sequence of songs, jingles, commercials, *Time Announcements* and *Sweepers* that can repeat itself.

SEQUENCE
A single *rotation element* inserted a specified number of times that can have an INTRO, an OUTRO and an *in between rotation elements* jingle definition. This is useful for building commercial / trailer, sequences and so on.

TIME ANNOUNCEMENT
A "real time" time announcer with the voice of your speaker. Following a few simple rules you can build your own time announcement to be mixed seamlessly with your music program.

SWEEPER
A vocal or musical jingle automatically timed to end at the exact INTRO point of the next song, usually set at the beginning of the lyrics.

VOICE-TRACK
As the sweeper is a vocal or musical jingle automatically timed to end at the exact INTRO point of the next song but starting from the currently playing song.

The MAIN SCREEN window

Double click (left mouse) on the DirEttore icon and, after all previously saved settings have been loaded, the main screen will be displayed. The main screen is the re-sizeable window from which all functionality and control of your radio automation and broadcast programming is created and edited. From the main screen, you are always, only *one* (mouse) *Click Away* from whatever function you require, allowing instant configuration changes without losing focus on what is being broadcast.

Starting at the top of the screen and moving downwards we will explain the meaning of all the buttons and indicators you can see.

The players panel

The top-left group of indicators displays the previously played, the currently on air, and the next-to-come song. A combined slider and progress control is also provided in order to allow changes or just look at the on-air song position. The progress indicator changes its color from green to yellow and then red, warning of the track's approaching end.

The program relies on five virtual players, four of them (**1 2 3 4**) are dedicated to the normal musical program and the fifth (special player) is used to fire special events such as the time announcement, sweepers and voice-tracks. Only three of the four normal players

can play simultaneously; the forth is always set on cue, ready to start the next song. Three states (identified by color) are shown:

STOP in which the player is not loaded, **ON CUE** indicating the loaded and ready status and **PLAY**, the player is running. Four volume level meters are provided, in order to give visual feedback of the player's current volume. The special player doesn't change its volume.

The counters/status panel

All the counters in this panel (and the remainder of the program) display the format **H:MM:SS.T**, therefore the maximum displayed time is: **9:59:59.9**. Audio files longer than that will normally be played, but not counted down (or up) unless the song position is within the upper limit. The only exception to this rule is the duration calculation counter (below the counter/status panel) which uses the format **HH:MM:SS.T**, in order to show a maximum duration of **23:59:59.9** Hours. Durations above this limit will be displayed as a "more than one day" message.

The first vertical bar shows the actual system **CPU usage**; In this way the user can continuously check the system's overall performance and understand if the PC power can cope with the program demands. Note that **the CPU usage monitor provided indicates the global system status not only the DirEttore's resource usage**. The program will work flawlessly up to 60-70% but peak usage must be monitored and can't exceed 90%. This high usage usually occurs during particularly rapid transitions between tracks.

The second and third vertical bars show the left and right level on a mono indicator of the pre-listen (PFL) and instant players (IP) windows respectively. Their range is from -30 to 0 dB, where the top limit is the maximum digital level before clipping.

The first large counter is a countdown timer to the previously set mix point. When the digits are shown in green, it displays the countdown to the end of the on-air portion of the song. As a warning, it starts flashing the background red ten seconds before the end of the track. When the background turns blue, it indicates that an intro point has been set and hence the numbers displayed are the countdown to the intro point. As a warning, it starts flashing the background five seconds before the intro point time. The other two counters are: **ELAPSED** (on the left), the elapsed time from the **real** start point (not the one set in the cue points editing window), **REMAIN** (on the right), the **real** song position count down.

Below these counters there are four indicators: the DSP **equalizer**, the **compressor,** the **VST** and the **remote** status. If the corresponding background colour is dark the function is off. If, however the background colour is light the corresponding function is on. You can double click on the desired indicator to change its status. The **remote** indicator will turn its background colour to red indicating an incoming remote connection activity.

To the left of the counters area (section of the main screen) there is the ***cue points* section** in which you can check all the cue points of the current track as well as the fade type, which can be: **NO**, **CUT**, **FAST**, **NORMAL**, and **SLOW**. The start and intro point displayed always refer to the track's start position (time from start), while the mix point refers to the track's end position (time to end). Mix point indication will change its background color when the current track has been limited in duration by means of the **maximum duration** set (see track defaults configuration window).

Alternatively, this area can contain ***the station logo*** assigned in the main configuration window.

Now let's focus on the **central status panel**, which displays critical information about the whole automation process. The first large row is used to indicate the current automation settings and to warn the operator that a major issue is occurring. Usually this means that something critical to normal behaviour is happening. The second row indicates that a scheduled event or a commercial break is on the way and ready to be inserted into the current playlist. The third row informs that the next action will be a special event, such as a *time announcement* or a *sweeper*.

SEARCH BUTTON - Search for supported audio files on a given path

Another function included in the *counters/status panel* is the **search tool**:

It allows the user to search for supported audio files in a given directory. Wildcards are allowed, but the track to be searched **must not contain the file name extension**; this will be added automatically by the program. Tracks found matching the search criterion may be prelistened before being inserted on the automation flow. The **autoplay** function make easy the track **prelisten** by means of a simple click on the desired track.

Once the required track is found, simply double click on a result to add the track immediately after the current selection in the main playlist/rotation view.

Below the search tool button there is the **track info** button that shows the extended track information, stored by the user for a given track:

This view is mutually exclusive with the **last played track** view and it is possible to choose from two different font sizes: **Small** and **Big**. See the track info configuration tab to set the associated parameters.

If extended track information contained in the **id3v1 tag** of an **mp3 file** is required, it can be

accessed simply by double clicking on the ON AIR track name.

The track name indication will turn orange and the id3v1 tag fields: artist name, track name, album and year will take the place of the central status panel. The first line displays the artist name, the second line the track name while the third line the album name and the year.

Double click the track name again to revert the display to normal.

The main VU Meters

The MAIN SCREEN window also features a logarithmic stereo VU meter with peak level indicator. The range is from -30 to 0 dB, where 0 is the digital clipping that triggers the peak indicators (the peak indication is kept on hold for 1 second).

This stereo VU Meter shows the **audio level generated by the ON AIR PLAYERS** (1 to 4) **together with the SWEEPER and the TIME ANNOUNCEMENT players**. INSTANT and PRELISTEN players have their own mono vu meters located near the CPU meter (see *The counters/status panel*).

The numbers within the bars are the output level expressed in decibels (dB). This indication is accurate in the digital domain but the real audio output level depends on the sound card window's mixer settings.

The buttons

There are three groups of buttons; one set placed vertically at the top right of the screen, the others below the counters / status panel, filled with two horizontal rows of buttons.

These two rows are logically grouped: the first assembles the **operational** modifiers, while the second the **visualization** modifiers.

Starting with the top row we see eight buttons used either to change the configuration of the current broadcast program on the fly, or modify the information displayed on the main screen. The meaning of each button is as follows:

THE FIRST ROW

BREAK AFTER
Stops the automation at the end of the currently playing track, applying the set fade type. This button is active only when the automation is in play. Moreover, ***BREAK AFTER*** is automatically activated when the maximum number of errors during the selection of the audio tracks is reached. It is also possible to set this function on a given track by means of the main playlist context menu.

LIVE ASSIST/AUTO
Toggles between the above two modes. ***LIVE ASSIST*** is the manual mode, where the following track doesn't start automatically but is fired either using the *return* / *space* keys or double clicking on the desired track. Scheduled events are disabled in this mode. ***AUTO*** completely automates the playing of the rotation / playlist tracks with insertion of scheduled events.

PLAYLIST/ROTATION
Toggles between the two operational modes provided by DirEttore. ***PLAYLIST*** allows you to broadcast a predefined and fixed sequence of songs, jingles, *sweepers* and *time announcements*.

ROTATION plays a predefined sequence of *Rotation Elements,* (together with *Time Announcements and Sweepers*) which are randomly selected at the beginning of each new cycle.

ROTATE NOW
Rebuilds the current playlist / rotation window with newly selected tracks according to the active rotation. If playlist mode is enabled instead, then the *rotate now* button will simply reinstate the current playlist.

THE SECOND ROW

EXPAND I.P./ COLLAPSE I.P.

Toggles between the expanded and collapsed view of the instant players group.

When the expanded view is enabled, the right side of the main screen playlist / rotation view will be filled by the expanded panel regardless of the rotate and events view settings. Starting from left, the number on black background identifies the associated instant player; it will flash red when the player is started.

In the center are the start and stop buttons, a replica of those described in the **second horizontal group** section. The only difference being that the caption will display the associated track name. If it is inactive, there is no file loaded for the button (empty slot or bad/wrong track).

Each player also has its own countdown counter and a progress indicator at its right. The duration is calculated taking account of the possible start point but, as seen that the instant player is a "*cart like*" one, end point will always be the end of the track and the fade will never be applied, regardless of the cue points set.

ROTATE VIEW/LIVE FADER

This button toggles between displaying the currently selected *rotation* and the *Live Fader Control* panel. The **rotation view** shows the elements belonging to the current *rotation.* It also displays the associated directory for every *rotation element.*

The **live fader control view** allows the user to fade music up and down in order to talk over the current program. By pressing the LIVE PLAYER button you apply the fade only to the currently played track. The next-track player will start at full volume. Pressing ALL PLAYERS, will apply the fade to all players; special players (*time announcement* and *sweeper*) included. Five fade levels are available: **MAX**, **3**, **2**, **1** and **MIN**. It is also possible to choose one of the three fade speeds available: **FAST**, **NORM** (normal) and **SLOW** whose respective durations are 1, 4 and 8 seconds.

When instant players are expanded, the fader control group is placed where the I.P. *collapsed version* is located.

EVENTS VIEW/FILES VIEW

Toggles between displaying the *Upcoming Scheduled Events* and the *Files and Directory Tree* windows.

The **upcoming scheduled events view** shows events coming up in the next 60 minutes, allowing the user to disable all these events by un-checking the UPCOMING SCHEDULED EVENTS checkbox.

The events displayed with a light blue / purple background are *immediate* events.

The **files and directory tree view** displays supported audio files only, allowing selection of the track you want to add to the current program in the playlist/rotation view. If you double click on a track it will be inserted immediately below the current playlist/rotation cursor position.

The below picture shows the context menu for the **files and directory tree view**:

It is possible to **prelisten** a track right clicking on the name and select *prelisten track* on the pop up menu. The selected track can also be **loaded** into one of the 12 available *Instant Players*. The loaded track will substitute the current, if any.

LAST PLAYED VIEW/ TRACKS ONLY

LAST PLAYED TRACKS - 124 Tracks logged (Max 2000 - 1876 Left)

Num	Time	Played Tracks	Full Path and Name
0120	14:59:42	DE Demo Track 1	C:\DirEttore\Demo\Music\DE Demo Track 1 [0-3-17-1].mp3
0121	14:59:58	DE Demo Track 2	C:\DirEttore\Demo\Music\DE Demo Track 2 [0-13-20-1].mp3
0122	15:00:00	JingleIntro	C:\DirEttore\Time\JingleIntro [0-0-44-1].mp3
0123	15:00:04	DE Demo Track 3	C:\DirEttore\Demo\Music\DE Demo Track 3 [0-0-26-1].mp3
0124	15:00:20	DE Demo Track 4	C:\DirEttore\Demo\Music\DE Demo Track 4 [0-8-46-1].mp3

If you need more information about recently played tracks, press the LAST PLAYED / TRACKS ONLY button. The above box will appear, showing the last 2000 tracks played by the automation. To reset and clear the entire window content simply double click over the heading. This view is mutually exclusive with the **track info** view.

Below you can see the main screen without last played track info (TRACKS ONLY).

The **second horizontal group** is made of 12 *instant player* buttons that can also be started using the corresponding function keys F1 – F12 and numeric keypad keys

from 1 to 0, - and +.

If you need to know the name of the files loaded, just hover the mouse cursor over the required button and a tooltip will appear with the name of the associated track. Another way to obtain a full/partial name of the loaded track is by expanding the main window. Instant players button will consequently expand revealing the full name (or a part of it if not enough space).

It is always possible to activate the **expanded view** described previously. Inactive buttons indicate that there is no file loaded for the corresponding button (empty slot or bad track).

The *Instant Players* context menu (available in both expanded and docked view) allows the user to **prelisten** the selected Instant Player, **Add** the track loaded into the instant player to the main playlist/rotation window, **load**/**remove** a track, **load**/**save** an *Instant Players* set and **edit** the track cue points.

If all the context menu buttons are turned off, *Instant Players* behaviour will be like having 12 independent cart players. This is the default behaviour.

The other behaviours are:

LOOP Tracks – Once started, each and every *Instant Player* will play the track in a continuous loop until the corresponding button is pressed again.

FADE Tracks On STOP – When the track is stopped, the default fade type is applied in order to avoid an immediate stop of the sound being played.

FADE PREVIOUS Track On START NEXT – *Instant players* are not independent anymore. Starting a new player will cause the previously playing track to fade. Also here the default fade type is applied.

The **PANIC** function completes the horizontal row of buttons. It allows the insertion into the playlist of a predefined number of tracks from a given directory, in order to resolve any *panic* situations in which the user is experiencing dead air not caused by a system or program crash.

Event	Title	Start	Intro	Mix	Fade Type	Skip Intro
PANIC FILE	DE Demo Track 1	0:00:00.0	0:00:00.3	0:00:01.7	NO	NO
PANIC FILE	DE Demo Track 3	0:00:00.0	0:00:00.0	0:00:02.6	NO	NO
PANIC FILE	DE Demo Track 4	0:00:00.0	0:00:00.8	0:00:04.6	NO	NO

Just press either the panic button **TWICE** or hit the associated [**ESCAPE**] shortcut key **TWICE** to immediately stop (without any fade) all the DirEttore's players; *Sweeper* and *Time Announcement* players included, and start the first panic track:

When the panic tracks cycle is completed, the automation will revert to the previous state (Rotation or Playlist mode).

The **third group of buttons** is the vertical group. It allows you to access all the main configuration windows of the program, combined with the PLAY / STOP function.

Between the instant players button group and the vertical one there is a date / time indicator that flashes red at every top of the minutes.

Date and time accuracy is dependent on the computer's system clock.

Date format can be switched between 12 and 24 Hour mode by simply double clicking on the date / time indicator.

The playlist/rotation view

This is the view from which you can control the automation process flow. The top row summarizes how the program has been configured. Starting from left you are informed about which track of the current list is being played, the PLAYLIST or ROTATION mode selected, whether the logging is activated, if you are in Voice-Track mode, if the AUTOCUE option is enabled and finally, the playing duration of the whole list, calculated subject to start and mix point offsets.

Event	Title	Start	Intro	Mix	Fade Type	Skip Intro
MUSIC	DE Demo Track 2	0:00:00.0	0:00:01.3	0:00:02.0	NO	NO
JINGLES	DirEttore Jingle 2	0:00:00.0	0:00:00.8	0:00:03.1	NO	NO
MUSIC	DE Demo Track 4	0:00:00.0	0:00:00.8	0:00:04.6	NO	NO
SWEEPER	DE Sweeper 1	0:00:00.0	0:00:00.0	0:00:03.9	NO	NO
MUSIC	DE Demo Track 3	0:00:00.0	0:00:00.0	0:00:02.6	NO	NO
MUSIC	DE Demo Track 2	0:00:00.0	0:00:01.3	0:00:02.0	NO	NO
JINGLES	DirEttore Jingle 4	0:00:00.0	0:00:01.6	0:00:06.6	NO	NO
MUSIC	DE Demo Track 1	0:00:00.0	0:00:00.3	0:00:01.7	NO	NO
SWEEPER	DE Sweeper 2	0:00:00.0	0:00:00.0	0:00:02.4	NO	NO
MUSIC	DE Demo Track 2	0:00:00.0	0:00:01.3	0:00:02.0	NO	NO
MUSIC	DE Demo Track 4	0:00:00.0	0:00:00.8	0:00:04.6	NO	NO
SWEEPER	DE Sweeper 3	0:00:00.0	0:00:00.0	0:00:01.7	NO	NO
MUSIC	DE Demo Track 1	0:00:00.0	0:00:00.3	0:00:01.7	NO	NO

The list below the information text, gives you information (from left to right) about the element type, track title, associated start intro and mix points, the fade type, the status of the *skip intro* option, the on air (trimmed with the cue points editor) duration of the track, **when the track will be aired** (this option is available only if the automation is on air, the average precision is **+/- 1 sec**.), the duration of the intro point, the complete path to the file (if applicable), the voice-track status that instructs the automation to treat the track as a voice-track and the VT-Overlap Status that indicates that a voice-track can overlap the specific track. SWEEPERs and VOICE-TRACKs are identified with a light blue background while TIME ANNOUNCEMENTs are identified with a light red background.

Duration	On Air Time	On Air Intro
0:00:15.4	- - -	0:00:00.3
0:00:07.9	- - -	0:00:00.8
0:00:14.9	- - -	0:00:00.0
0:00:03.4	- - -	0:00:00.0
0:00:15.4	- - -	0:00:00.3
0:00:14.4	- - -	0:00:00.8
0:00:05.2	15:23:12	0:00:00.0
0:00:15.7	15:23:17	0:00:01.3
0:00:02.5	15:23:33	0:00:00.0
0:00:14.9	15:23:35	0:00:00.0
0:00:15.4	15:23:50	0:00:00.3
0:00:03.7	15:24:06	0:00:00.0

Full Path and Name	Voice Track	VT Overlap
C:\DirEttore\Demo\Music\DE Demo Track 1 [0-3-17-1].mp3	NO	YES
C:\DirEttore\Demo\Jingles\DirEttore Jingle 2 [0-8-31-1].mp3	NO	YES
C:\DirEttore\Demo\Music\DE Demo Track 3 [0-0-26-1].mp3	NO	YES
C:\DirEttore\Demo\Voices\DE Sweeper 1 [0-0-39-1].mp3	NO	YES
C:\DirEttore\Demo\Music\DE Demo Track 1 [0-3-17-1].mp3	NO	YES
C:\DirEttore\Demo\Music\DE Demo Track 4 [0-8-46-1].mp3	NO	YES
C:\DirEttore\Demo\Jingles\DirEttore Jingle 1 [0-0-52-1].mp3	NO	YES
C:\DirEttore\Demo\Music\DE Demo Track 2 [0-13-20-1].mp3	NO	YES

All the columns in this list may be rearranged. Double clicking on the header will set all the columns to the default position, which is shown in the images of this page that represent the whole content split across 3 pictures.

In this *playlist / rotation view* there are three other colour codes: if the automation is stopped, the currently ON CUE track (the one that will start if the PLAY button is pressed) is identified with a dark grey background. If the automation is playing, the currently ON AIR track is identified with a dark grey background while the NEXT track (the one that will follow the

currently ON AIR track) is identified with a light grey background. The cursor is always identified with a black background.

If you right-click over an element, a **Context Menu** will appear. It is possible to choose to **prelisten** the selected track (the *prelisten window* is shown and explained in The PRELISTEN window section), set the **BREAK AFTER** (As in the below pictures, track icon will change accordingly, indicating where the break after will occur – Context menu will also change in order to allow the user to disable this function).

You can also **Edit** the **Cue Points** or the **info** of the selected track and set the currently selected track as the **NEXT** to come while the automation is running, it is indeed possible to **change** the **NEXT track** with one of the others present in the playlist / rotation view. SWEEPERs and TIME ANNOUNCEMENTs cannot be set as NEXT. If the automation is stopped, this option won't be available and will appear greyed out in the context menu.

The menu allows the user to **Insert** a new track **Before** or **After** the current cursor position (the black background and white text row explained before), **Change** / **Delete** / **Move** / **Copy** / **Paste** the selected track. Note that you cannot change, delete or edit the cue points of the currently active element.

To **Move** an element just **right click** on it, the **Title will start flashing** to highlight the element that is to be moved. To complete the process, **left click** on the playlist position in which you want the element to be moved to. Note that if the playlist position changes, events or commercials are inserted or you right click again, the move process is reset. SWEEPERs and TIME ANNOUNCEMENTs cannot be moved.

It is also possible to **Insert** a **STREAM SLOT** (a previously configured Internet Stream) in the automation flow, the stream is inserted next to the selected track.

Note that any *Internet Stream* will be played like a normal track. The duration is set during the configuration of the corresponding stream slot.

An *Internet Stream* is, by definition, a continuous playback. In order to create a flawless mix, DirEttore will apply **1 second fade up** at the beginning of the stream playback.

Any track in the Playlist / Rotation Window can be **assigned to an INSTANT PLAYER**. To do so, just select the INSTANT PLAYER you want the selected track inserted to, note that the insertion will substitute the currently loaded track, if any.

Inserting a track from an INSTANT PLAYER to the main Playlist / Rotation can also be done. Please see the instant players dedicated section.

Insert COMMERCIALS Cluster allows the user to select any of the available clusters, **matching the validity parameters**, to be inserted in the automation flow.

A window will appear listing the valid clusters for the day.

Finally, it is also possible to **insert a playlist** in the automation flow and **create** a brand new one from the tracks currently present in the playlist / rotation view.

The PRELISTEN window

The *Prelisten window* allows monitoring of the selected track in the rotation / playlist section of the main window. Right-click over the track you need to **prelisten** and choose **Prelisten Track**. The below window will appear.

It is possible to select a desired prelisten volume level, to start / stop the track and to move along the whole song using the horizontal position control provided.

The **spectrum analysis** shows the track's frequency distribution for both right and left channels, while the counter shows its current position and the panel at its right the upper frequency limit (sample rate divided by two) displayed by the spectrum analyzer.

Audio track details are also provided. The detail shows the type of audio track and the associated information taken from the ID3/v1 section of the file if present.

Note: There are three places where you can set the prelisten audio level: this window, the Playlist configuration window and the Cue Points editor window. In all cases the change will affect the global prelisten volume level.

The TRACK INFO EDITOR window

After having properly set up this function in the configuration window (see *Track Info* tab under CONFIGURE in the main screen), the Track INFO Editor allows the user to **add information** to a specific track like the artist's biography, the album cover and/or any other extended information, The built in editor is reachable by right-clicking over the track you require.

The Track INFO Editor window will appear allowing you to **edit**, **copy & paste** from another source and **load** the text / image from a previously saved DirEttore's Track Info file (.dti extension).

You can also associate a picture to the track info. Supported formats are JPG, PNG, GIF, BMP and TIFF.

(1) **Type** the desired text up to the maximum number of characters available.

(2) **Copy & paste** the text you need from any other text source. The text will be copied without any colour, format or font different from DirEttore's. If the text exceeds the maximum number of characters available it will be truncated.

(3) **Load an image** for the track.

(4) **Double click** on one of the items (previously stored) shown in the list box. The text and the associated image (if any) will be copied into the editor overwriting any other text / image entered, and will be available for further editing.

(5) **Press OK** to save changes.

The INSTANT PLAYERS context menu

Instant Players are the improved version of the old *cart machine* concept. Twelve tracks can simultaneously be played using either the associated button in the main screen or the equivalent keyboard shortcut (function keys from 1 to 12 and keypad keys 1-0 – +).

The below pictures illustrates the Instant Players window in expanded mode:

Pressing the required key will toggle the status of the associated instant player from start to stop and vice versa. Start will always begin from the point previously set with the cue points editor; if there isn't a cue point set, the track will start from its actual beginning.

For collapsed mode and a complete explanation of the context menu see THE SECOND ROW - EXPAND I.P./ COLLAPSE I.P. section.

The ROTATION window

In order to play some music you have to tell DirEttore where to find your audio Files. We suggest that you create a separate master folder in which to store your Files, Folders, Events ... (call it *Radio* for example). From this Folder, you can create sub-directories that contain all the elements that DirEttore requires to select, operate and maintain seamless radio programming for your station.

Now we need to assemble your selected music files / elements into some sort of order, so as to have control over what is played, where and when. *Custom Elements* is just terminology for once again exactly what it is. To explain further; you are about to customise your individually created content of which elements DirEttore is expecting to play for you.

Click on the ADD NEW button and you will see another window titled *Add NEW custom element*.

So let's add one. Give it a name (maximum of 50 characters). Click on *browse for FOLDERS*, find the folder where you previously stored the audio files of the category you are creating. Double-click on the folder you want to assign to your newly created *custom element*. The final thing to do is choose the desired scan method. By default a new *custom element* searches for supported audio files only in the associated directory, but if you check the SCAN METHOD selection the search will be extended to all the directories below the chosen one. This method is known as "recursive scan" and allows the user to better organize the way in which a rotation is built.

The only thing to remember is that this is a time consuming process that may **significantly slow down** the building of a rotation with these kinds of elements.

Once finished click OK. Check the top half of the ROTATION split screen (under the heading Custom Elements) for your newly created *custom element.* You have now created your first *customised element*.

Let's continue to create a simple programme for starters. Following the above directions, repeat the process as many times as you require *Custom Elements*.

Now let's focus on the *Rotation* part of the ROTATION Split Screen. Go up to the *Custom Elements* part of the split screen and click on the element you wish to load first into the Rotation part of the split screen. Double-click on the element or just click on it and press SELECTED CUSTOM ELEMENT button in the INSERT INTO ROTATION frame. Repeat this until you are happy with what will eventually be your first programme. You can add/delete as many *Customs Elements* as you wish.

Before saving don't forget to choose the *SWEEPER*s directory that the automation will change to, when the rotation is put on air.

Give your first rotation a file name and press SAVE. It is now saved for future reference, or until you want to change things. If you want to load a previously stored programme, then press the LOAD button.

Finally, press the big OK button. If you don't, all of the changes you made will be lost, newly added elements included. If you didn't have a rotation set, then this new rotation becomes the default one. If there's already another rotation set, the new one will appear at the end of the current cycle. The change is performed immediately if you press the ROTATE NOW button.

The PLAYLIST configuration window

This window represents DirEttore's second way to broadcast a programme. Conversely from the rotation mode (where the tracks are chosen randomly), here, you must build your own fixed sequence of tracks and elements.

The top left-hand quarter of this window shows the supported **files** and **directory tree**. If you double-click over a track, it will be added to the **playlist builder** panel on the right; at the current cursor (selected track) position. The playlist elements can be rearranged by using standard **drag–and-drop** actions.

These two side-to-side panels can be resized in order to accommodate the information needed.

All of the supported audio files, SWEEPERs, TIME ANNOUNCEMENTs and ROTATION ELEMENTs can be added to the playlist. For this reason, playlist duration can't be determined because SWEEPERs and ROTATION ELEMENTs are randomly selected at broadcast time.

An ASSOCIATED SWEEPER DIRECTORY must be specified in order to choose appropriate SWEEPERs for a specific playlist.

The event scheduler is the function that will insert the playlist into the programme flow at the specified time with associated event parameters. If instead you want to change from ROTATION to PLAYLIST mode, press the corresponding button in the main screen; in this way

the current list contained in the **playlist builder** will be broadcast after the end of the currently played track, discarding the rest of the rotation. This is very useful if there's ever the need to kick-in a previously selected sequence of songs, but be careful: when the playlist is over it will be restarted from the beginning (if return to rotation – RR, is not enabled).

It is possible to prelisten the selected track either in the **files and directory tree** or in the **playlist builder**. Just select a track and press the **PRELISTEN** button.

It is also possible to enable the autoplay function, by means of the **AUTOPLAY** button. In this way selected tracks will start to play automatically.

In both cases the name of the track currently loaded in the prelisten player is available in the playlist window title bar

Prelisten volume can be set using the vertical slider. This setting is global. This means that changes to the level made here will also be reflected everywhere in DirEttore.

The playlist can behave in the normal way, inserting in the rotation flow each and every item contained within, or act as a SEQUENCE PLAYLIST. In the latter case, **only one track of the playlist is inserted** and the sequence position counter is increased so that the next item in the playlist is the one that will be inserted when the same playlist is again scheduled. Once the end is reached, the sequence position will be reset to the first playlist item.

Element Name	Type	Full Path and Name
DE Demo Track 1	AUDIO	C:\DirEttore\Demo\Music\DE Demo Track 1
DE Demo Track 2	AUDIO	C:\DirEttore\Demo\Music\DE Demo Track 2
DE Demo Track 3	AUDIO	C:\DirEttore\Demo\Music\DE Demo Track 3
DE Demo Track 4	AUDIO	C:\DirEttore\Demo\Music\DE Demo Track 4

The SEQUENCE PLAYLIST feature is valid for saved playlists only, that will store the last sequence position.

You can DELETE the selected element or ALL of them and SAVE or LOAD a previously stored playlist. **M3U** playlist type (import only) is supported.

The creation of a complex playlist may be affected by difficult to trace errors. For this reason the window contains three important tools:

The most common mistake during the creation of a playlist is the insertion of the same track more than one time, the **CHECK DUPLICATES** button searches for any duplicated entry. If a duplicate is found, it will be listed in the results window and **highlighted** in the playlistlist.

A playlist is basically made of files. If you change the name of a file referenced in a playlist the automation won't be able to find the track. The **CHECK CONSISTENCY** button performs a search of all the files contained in the playlist and returns the missing ones (also **highlighted** in the playlist). Special elements (*time announcements, sweepers* and *rotation elements*) are excluded from the search.

If you want to know the duration of a given playlist just press the **CHECK DURATION** button. Also here special elements are excluded from the calculation – in this case because you can't predict the duration of an element that is chosen run-time. The level of accuracy returned is the one set in the general parameters tab of the *configuration window*.

Also here you will find the **search tool**. It allows the user to search for supported audio files in a given directory, adding the double-clicked one to the current playlist at cursor position.

In order to help the user to remember the last playlist loaded in the playlist editor, the title bar contains the name of the last playlist loaded. The program will ask if you intend to overwrite the current file once the playlist is modified and saved. The title bar will also contain the last previewed track.

The EVENTS SCHEDULER window

From this window you can control and modify the current program's behaviour, by inserting events that can fire *tracks*, *rotations*, *sequences*, *playlists*, *rotation elements, Internet streams*, *time announcements* and *sweepers*.

Adding an event is a straightforward operation; follow these few simple rules:

First it is necessary to decide the **start time** and the **start / expiration date** of the event that you want to add (if needed).

Then the desired **repetition rate** (which can be **none**) that inserts the event only at the exact time, or **every hour** where the same element is repeated every single hour at the minutes and seconds set. In this case hours will be substituted by underscores (__:mm:ss) in the visualization.

You can set the start of the event as **immediate**, in this way the music flow will be immediately interrupted and the programmed event started, otherwise it will wait for the end of the currently playing track. Note that having one immediate event in a list of events (all with the same start time) will make them all immediate.

Never forget to enable the event before inserting it otherwise it will never be scheduled. (To ensure backward compatibility events saved before version 1.8 are enabled by default).

The last thing to select is when the event is **active**, unchecked **days** of the week are the ones in which the event will not be inserted in the automation flow.

At this point you have to select which kind of element you want to add. Press the browse button if you need to insert *tracks*, *rotations*, *sequences* and *playlists*. *Sweepers*, *Time announcements, Rotation elements* and *Stream Slots* have their own separate buttons. If you select them, the current setup will be copied to the newly added element in the position where the cursor is. *Rotation element* and *Stream Slot* buttons have their own window from where you can choose the correct element.

Once inserted it is important to move the event to the desired place, because if there is more than one element with the same start time, DirEttore will follow the position in the list to add the elements into the automation's playlist. Elements can be moved by using standard **drag–and-drop** actions.

In some situations where events are many, it may be difficult to find the event that is scheduled to start at a specific day. The events scheduler allows you to see them **organised by day** by simply clicking on the tab needed.

Once selected the day, it is possible to view the events that are enabled, hiding the ones that have been disabled by checking the box at the bottom left side in the parameter section of the events scheduler: View ENABLED events ONLY ☐ The events in these partial views are read-only.

Indeed, only in the first tab: "*EDIT EVENTS*", you may change some of the parameters associated to an inserted event, by means of a simple double-click. You can change everything except the event itself.

By pressing **MODIFY** the event is updated with the new parameters.

Events can also be early inserted avoiding excessive delay, compared to the scheduled time of the event, due to a particularly long track. **EARLY INSERTION** sets the maximum number of minutes allowed after event time (range is 1 to 10):

Assuming 1 minute as the maximum allowed, if the next track end time exceeds 1 minute the event time, EARLY INSERTION is triggered and the event is inserted in the automation flow. The button "MORE INFO ON EARLY INSERTION" extends the explanation giving boundaries and an example.

EARLY INSERTION is global. This means that, when enabled

, <u>it will affect all the events behaviour</u>.

At the bottom-right side, the button "CHECK TIME INTERVAL" shows a window that allows the user to test if the scheduled events will be inserted as expected.

Once the TIME INTERVAL is chosen and the DAY is selected, it's enough to press "CHECK TIME INTERVAL" to see the events matching the programmed conditions (Enabled, active days …), in the given TIME INTERVAL and DAY. The output result is the same as in the automation flow.

As with all of the most important features of the program, you can SAVE the current scheduled events or LOAD the previously stored sessions using the associated buttons.

Be sure to enable the scheduled events otherwise none of the events inserted (regardless of their own status – enabled or not enabled) **will be scheduled.**

Events may also be globally switched ON and OFF by schedule. This feature can be useful in case of a particularly long event (live session, Internet stream event) that may cause the events to stack up (imagine many TIME ANNOUNCEMENT events back to back …) .

The EVENTS And COMMERCIALS Switch Scheduler helps mitigate the unwanted insertion of many events that won't have any reason to be played back once the previous, very long event, is over.

It is important to understand that **the Switch Scheduler has 1 minute granularity**, for this reason if you don't want any scheduled event from 15:00 to 18:00 you must insert a switch OFF at 14:59 and a switch ON at 18:01

EVENTS And COMMERCIALS Switch Scheduler

ON / OFF SWITCH

SWITCH TIME

15:00

SWITCH ON OFF

ENABLED FOR EVENTS

ENABLED FOR COMMERCIALS

ACTIVE DAYS

Monday Friday

Tuesday Saturday

Wednesday Sunday

Thursday

Select the SWITCH TIME (one minute step) and type (ON / OFF), the days in which the SWITCH must be ACTIVE and its ENABLED state, that can be extended to the COMMERCIALS scheduler. It is also possible to add a comment that explains the reason of the SWITCH.

COMMENT (60 chars MAX)

3H STREAM FROM LONDON

The SWITCH SCHEDULER is to be globally enabled or disabled using the below checkbox:

ENABLE EVENTS SWITCH SCHEDULER

INSERT

Time	Type	Events	Commercials	Active Days	Comment
15:00	OFF	TRUE	FALSE	--------FrSaSu	3H STREAM FROM LONDON
18:00	ON	TRUE	FALSE	--------FrSaSu	3H STREAM FROM LONDON

ENABLE ALL

DISABLE ALL

SWITCH elements may be ENABLED or DISABLED ALL together. Double click an existing element in order to edit the selected SWITCH element parameters.

DELETE SELECTED

DELETE ALL

OK

SWITCH TIME

15:00

SWITCH ON OFF

ENABLED FOR EVENTS

ENABLED FOR COMMERCIALS

Set the time (1 min step) and the status of the switch. Select to whom the switching is to be applied, EVENTS and / or COMMERCIALS and the days in which the switch is active.

ACTIVE DAYS

Monday Friday

Tuesday Saturday

Wednesday Sunday

Thursday

You can also add a comment that explains the reason of the switch:

COMMENT (60 chars MAX)

3H STREAM FROM LONDON

Never forget to enable the **EVENTS And COMMERCIALS Switch Scheduler**

Existing Switching events may be edited by double clicking on the event to be modified.

Once done click MODIFY to update the Switching event parameters.

You can press ENABLE ALL or DISABLE ALL in order to globally enable / disable where switching will take place, this action affects both EVENTs and COMMERCIALs.

Select a Switching event to be deleted and press DELETE SELECTED or DELETE ALL if you want to clear all the Switching events.

The last important thing about scheduled events is:

IF THE INSERTION OF A PARTICULAR ELEMENT OCCURS ONE SECOND BEFORE THE END OF THE CURRENTLY PLAYING TRACK, IT WILL BE RE-SCHEDULED FOR THE NEXT 10 SECONDS.

The COMMERCIALS PLANNER window

Broadcast version offers a powerful tool that allows the user to schedule commercials independently from scheduled events. It is possible to insert up to 20 commercials each and every 5 minutes as a **single indivisible block** (a *cluster*). Events that occur during the commercials broadcast, will be put at the end of the commercials cluster. The same action will be taken for immediate start events that, that in this case won't be immediate anymore.

Let's take a look at the above window: The first tab is the main commercials planner editor. It is a time grid that divides 24 hours into 5 minute rows. In every row it is possible to insert up to 20 commercials that will be played following the left to right insertion order. Cells that are left blank between two commercials are simply not considered.

Within this grid you can add, delete, move and swap your commercials along the time grid as well as edit properties and change the commercial colour.

Indeed the context menu allows the user to **duplicate** the commercial in order to define a set of broadcast times, **delete** an unwanted item, move and swap it. It is also possible to **find** the previous and next commercial that matches the selected one. **A colour can be added** to a specific commercial and every cell containing that commercial will be painted with the same colour.

If you double click on an empty cell (or right click and choose *add*) a dialog box will appear asking for the file to be inserted in the selected cell. **By default any item inserted is enabled** and active every day, will never expire and placed on schedule queue immediately after the OK button is pressed in the commercials planner window.

If, on the contrary, you double click on a cell that is not empty, the following edit window will appear:

Here you can **enable** the commercial, set **start** and **expiration** dates and the **active days**. This information is also available in a condensed form inside the selected cell.

The commercials cluster can also be identified on air by means of an **intro** jingle, a **separator** effect between two commercials and an **outro** jingle that tells the listener that the commercial break is over (in some countries this feature is mandatory). You can choose to use one of such identifiers, all or none.

Instead of using the side scroll bars, when you have to insert a number of commercials that are separated in time, you can easily access the top of the hour simply pressing the associated button. This will take the grid display to that time.

Here it is also possible to SAVE a commercial set, reset the whole grid content or recall a previously stored commercial set with the LOAD button.

Be sure to enable the commercials otherwise none of the commercials will be inserted (regardless of their own status – enabled or not enabled) they **will not be scheduled.**

Inserted commercials are identified by the icon and a green background. The picture shows the insertion of three commercials with their associated **intro** (*DE Sweeper 1*), **separator** (*FX 1*) and **outro** (*DE Sweeper 2*).

COMMERCIAL	DE Sweeper 1
COMMERCIAL	DirEttore Jingle 1
COMMERCIAL	FX 1
COMMERCIAL	DirEttore Jingle 2
COMMERCIAL	FX 1
COMMERCIAL	DirEttore Jingle 3
COMMERCIAL	DE Sweeper 2

By default, commercial clusters that have the same scheduling time of programmed events are placed first. If you want to reverse the priority there is an important setting in the configuration window (CONFIGURE button) under the *Automation Behaviour* tab (EVENTS BEHAVIOUR section) that tells the automation to play the scheduled events first:

If you then need to see the whole picture, knowing what times are involved in the commercials scheduling and what commercials will be played, it is possible to swap between days using the tab buttons at the top of the *commercials planner* window.

EDIT CLUSTERS | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | SATURDAY | SUNDAY

ON AIR Time	Sponsor 1	Sponsor 2	Sponsor 3
10:00	DirEttore Jingle 1	DirEttore Jingle 2	
10:20	DirEttore Jingle 3	DirEttore Jingle 4	DirEttore Jingle Long
10:35	DirEttore Jingle 1	DirEttore Jingle 3	DirEttore Jingle 2

By clicking on a cluster row in the top list view, all the involved commercials are highlighted on the bottom list.

ON AIR Time	Sponsor 1	Sponsor 2
10:00	DirEttore Jingle 1	DirEttore Jingle 2
10:20	DirEttore Jingle 3	DirEttore Jingle 4
10:35	DirEttore Jingle 1	DirEttore Jingle 3

Being just a view (editing is done only in the main grid – first tab), here you can determine if you want to see all the commercials or only those that are enabled (and so scheduled) on a particular day of the week.

View ENABLED events ONLY ☐

Sponsor	ON AIR Times	Times Today
DirEttore Jingle 1	10:00, 10:35	2
DirEttore Jingle 2	10:00, 10:35	2
DirEttore Jingle 3	10:20, 10:35	2
DirEttore Jingle 4	10:20, 10:35	2
DirEttore Jingle Long	10:20	1

View ENABLED events ONLY ☐ ENABLE COMMERCIALS ☑

Sponsor 4 | Sponsor 5 | Spons

Be sure to enable the commercials otherwise none of the clusters will be scheduled.

SWITCH ENABLE ON / OFF BY SCHEDULE

COMMERCIALs can also be enabled or disabled here by schedule. Please read **The EVENTS And COMMERCIALS Switch Scheduler** paragraph part that explains how to configure this.

The last important thing about commercials is:

IF A COMMERCIAL IS PRESENT IN THE PLANNER BUT DOESN'T EXIST AS A FILE ANYMORE, IT WON'T BE INSERTED AND SEPARATORS WILL CHANGE ACCORDINGLY. IF NONE OF THE COMMERCIALS ARE PRESENT IN A SPECIFIC COMMERCIALS CLUSTER NEITHER THE MISSING FILES NOR THE INTRO OUTRO AND SEPARATOR WILL BE INSERTED.

The SEQUENCE EDITOR window

The concept behind a *sequence* is quite simple: the need to play a certain number of tracks, separated by a jingle with an introduction and an ending song / jingle. The implementation is simple and straightforward but this simplicity hides a powerful tool: if, for instance, you need to organize a **movie trailers** presentation, just create a *rotation element* where the trailers will be stored, set the intro, separator and outro and that's all. DirEttore will randomly populate a list with the selected number of *rotation elements*. The same applies to spotsets, where the only attention you have to pay, is how to organize the *rotation elements* used to broadcast commercials and when to schedule them.

Starting at the top of the *sequence editor* window, we can see that it is possible to assign a file to the **intro**, **separator** and **outro** objects comprising the sequence. Press the corresponding browse button to choose the required jingle or none if you don't want to insert any within the sequence.

Now press VIEW to select the desired *rotation element* that will be repeated the set number of times (the selection range is from 1 to 20). If at the end you think you've created an incorrect sequence, just press RESET ALL and start over again, otherwise SAVE the finished sequence and go to the event scheduler to select broadcasting times. It is always possible to recall previously stored sequences with the LOAD button.

The SEQUENCE function will not insert intro/outro if the associated rotation element is empty (no supported audio files or not valid tracks) therefore if the ROTATION ELEMENT is not valid, the sequence won't be inserted.

The CUE POINTS EDITOR window

In this window you can set START, INTRO and MIX points for each song, as well as the associated fade types and the *start from intro point* option. These settings are stored within the file name. A small number of characters will be appended to the end of the file name. This feature avoids the need for a database to store this information - allowing you to move / share your entire music library effortlessly.

Once the file has been loaded (either via the load button or by selecting a track from the playlist), calculation of the waveform to display begins. During this process it is possible to operate the editor as usual, but save is disabled. Press play and set the point from which the track will start, identify and set the intro point (usually the beginning of the lyrics) and mark the mix point. **SET** defines the desired point and **GET** recalls it. Once set, all points can be trimmed to perfectly match the required position, using the two trim buttons. Trimming can only be done when the selected track is in play. You can test the mix point, with the associated fade type, by pressing the **TEST MIX POINT** button (not available when the **DO NOT FADE** option is selected).

You may adjust the **preroll** time (from 0 to 30 seconds, in one second increments) to start the mix point testing, the specified number of seconds prior to the mix point. Four fade types are available: **fast**, **normal**, **slow** and **cut** (**normal** is the default setting). There is also the option to not fade the track at the mix point, selecting **do not fade**.

It is also possible to force the track to **always start from intro point**; in this way the track will skip the beginning and start playing from the intro point set.

Silence detection may be used to automatically adjust start and end position accordingly to the start and end level set in the dedicated sliders. You can detect levels separately or together.

You may also enable the auto detection on load for the tracks without any already assigned cue points.

The **audio track details** window shows the type of the audio track giving extended information such as encoding type, sampling rate, bit rate and number of channels. If the audio type is mp3 then title, artist, album name and year are read from ID3/V1 tags if stored within the loaded file.

Level and **spectrum** visual feedback is also provided, together with the prelisten level slider, in order to give full control and analysis of the selected track.

Four counters are available. The first (starting at the top) displays the **current position** corresponding to the slider control. The second shows the **real on air time**; that is the time the track will effectively be played by the automation, depending on how the cue points are set. This is a very useful feature, because you can check the actual duration while you're trimming the track. The third counter is a static display of the **total length** of the loaded track.

As of version 1.9, voice tracking became an integral part of the settings associated with the single track.

It is now possible to make a track a *voice-track* simply enabling the VOICE TRACK checkbox. In this way when the track is placed in the automation flow, it will be marked as a SWEEPER and treated as a SWEEPER / VOICE-TRACK depending on the automation settings (see the configuration windows).

But the voice tracking feature raises a problem: if a particular track (like jingles, announcements ...) is not to be overlapped by a VOICE-TRACK, there must be something in the track settings that instructs the automation to avoid it.

The NO VOICE TRACK OVERLAP checkbox does exactly this. If enabled, the associated track will never be overlapped before the mix point.

The CONFIGURATION windows

Press the CONFIGURATION button on the top right-hand side of the MAIN SCREEN. We are about to give DirEttore some information so that you can bring this Radio Station of yours to life. All you have to do now is tell DirEttore what you want it to do.

General parameters tab

Type your intended Radio Station name (max 50 characters) in the dedicated edit box and insert your station logo. Supported formats are JPG, PNG, GIF, BMP and TIFF.

When ☑ SHOW STATION LOGO ON MAIN SCREEN is checked the chosen image will appear in the place where the current track ***cue points* section** is.

If no picture is selected or the *Clear Image* button was pressed, the MIXTIME logo is shown.

The available GLOBAL PARAMETERS are:

ENABLE AUTOSTART — If you want DirEttore to start playing at the end of the startup process.

ENABLE AUTOCUE — If you need to have the track under the PLAYLIST / ROTATION cursor always on cue (works only if the automation is stopped). *Time announcements* and *sweepers* are excluded.

ENABLE REAL-TIME ERROR CHECK — If you want the missing / unavailable tracks marked with a red background.

ENABLE SPLASH SCREEN — If you want program loading progress to be shown at start-up.

ENABLE DURATION CALCULATION — In order to let the program calculate the current total playlist / rotation time, together with the duration of every single track in the main playlist / rotation window. You can also choose the speed (and therefore accuracy) of the calculation process:

☑ ENABLE DURATION AND ON AIR TIME CALCULATION

◉ SLOW (Highly accurate) ○ FAST (Less accurate)

You can also save the configuration windows settings when the OK button is pressed instead of saving them only when DirEttore is closed. This feature is useful in case of program crash:

☐ SAVE THE PROGRAM CONFIGURATION ALSO ON CONFIGURATION WINDOW EXIT (Not only on program's exit)

Track defaults tab

This tab allows you to set the *default mix point*, the *fade type* and the *absolute maximum length* for all tracks not edited using the CUE POINTS EDITOR.

In the *default mix point box*, using the UP and DOWN arrow buttons, you can set how many seconds prior to the end the track must mix to the next (0 to 30 seconds, 100mS increments). From that point onward a *default fade type* will be applied. You can select any one of the four available fade types or the DO NOT FADE Option.

The *absolute maximum length* box enables you to set (or set to NONE) the length that a track without assigned cue points cannot exceed. The range is from 1 to 10 minutes with steps of one second while the DEFAULT associated button sets the maximum length to 5 minutes.

An alternative method available to automatically set START and MIX points, mutually exclusive with the *default mix point* strategy, is the silence detection. Here you can independently trim the threshold level that will be used to set the START and the MIX point.

Try low levels for start (i.e.: -20 / -25 dB) and higher levels for stop (i.e.: -5 / -10 dB).

Note that the **NEXT** button in the main screen will move to the next track applying the DEFAULT FADE TYPE, selected here, to the currently playing track.

Track Info tab

If you want to add some information about a specific track (biography of the artist or whatever may be useful) it is necessary to set three things:
1) The **display delay** time - the time before the info is shown in the track info display area.

2) The **browse delay** - the time before the info is shown while you are moving along the playlist / rotation window with the mouse or by means of the arrow keys.

3) The **track info path** – the path in which the program will search for the previously created DirEttore Track Info (.dti) files.

In this tab you can also set the size of the font that will be used to display the info (normal or big).

Logging tab

If you ENABLE LOGGING, DirEttore will silently Record / Log everything that is played on your Radio Station, together with the most important actions taken by the automation process (start, stop, abnormal termination ...). Don't forget to select a LOG FILE PATH where the files will be stored. The format is:

DDMMMYYYLog.txt

This means **one file per day**. In this way, all the information that will be required by your Music Industry royalty collecting agency, can be copied / printed out from these log files.

ENABLE ON-AIR TRACK FILE allows the user to send the currently ON AIR track to an external stream client, by means of a text file stored in the ON-AIR TRACK FILE path. File name is *DirEttore* and cannot be changed while its extension may be ether *.dtf* (the default value) or *.txt* : Change extension to: dtf ◉ txt ◯

It is also possible to ENABLE ERROR WARNINGs (☐ ENABLE ERROR WARNING) if you want to be informed (and disable the ON-AIR TRACK FILE generation) whenever a file-write error occurs. If this option is not checked, no messages are displayed and writing is resumed once the error condition is resolved .

By default the text generated during a commercial break is “Advertisement” but it is possible to replace it with a personalized sentence. Maximum length is 50 chars.

EXTENDED OPTIONS

If a more accurate stream text handling is needed, it’s enough to press the EXTENDED OPTIONS button and the associated window will show other ways to manage track titles:

Rotation tab

Here you can change the behaviour of DirEttore's rotation structure, choosing the minimum interval before any track is repeated (from 5 to 1000 tracks). This minimum distance is guaranteed only if there are at least the defined number tracks in all the single *rotation elements* chosen for the given *rotation*.

It is also possible to extend the control to the artist's name, checking ENABLE ARTIST SEPARATION CONTROL, in order to avoid the same artist to be played too often. This last feature works only if the track file name has the following structure:

[**Artist name**][**SPACE**][**–**][**SPACE**][**Song name** (**Featuring** …)]

Madonna and **Madonna Feat. Prince** are 2 different artists for the automation, so that *Madonna – Material girl* and *Madonna Feat. Prince – Material girl* Can be played back to back.

Finally, if RESTORE SESSION AT STARTUP is checked, the program will remember the last "MINIMUM DISTANCE" tracks played when the rotation building process is started in the following session.

Panic tab

In order for this function to work properly, you need to specify a path where the files you want to play (when the panic function is engaged) are stored. If no playable audio file is found in the given directory, the main screen's PANIC button is disabled and the function won't be available.

It is also important to set the number of files (from 1 to 20) to be inserted during the PANIC file runtime insertion action.

Sweepers and Voice-tracks Tab

In order to use the SWEEPER functionality, the path in which these files are stored must be specified.

When **IMMEDIATE START ON OVERTAKING** is enabled, the sweeper will be programmed to start at the beginning of its associated track, if the difference between the intro point and the sweeper length exceeds the number of seconds set.

This is done with the intent of avoiding long delays from the beginning of the song before a sweeper will start.

It is also possible to set the ducking level of the background track during the sweeper's play. Ducking level range is from 0 to -30 dB

Warnings on the correct use of the SWEEPER function are fully explained in this tab.

If **ENABLE VOICE-TRACKING** is checked all the tracks marked as voice tracks and the special element SWEEPER will act in a different way: the main difference between a *sweeper* and a *voice-track,* as shown in the diagram on the next page, is that if the length of the track to be mixed (in blue) is greater than the intro length (in orange) the *voice-track* will fade the previous track and start in order to end at the exact intro point of the following track, while the *sweeper* will wait for the previous track end and delay the next track start in order to end at the exact intro point.

Here follows a visualization of the way sweeper and voice track respectively work:

Time announcement tab

TIME ANNOUNCEMENT is quite a powerful function. It gives the possibility to play the current time with the package installed during the setup or with any other voices, even your own. You've just to follow the file naming convention and structure while creating a time announcement package.

Four different time announcements are possible during the day:

All of them can have an OPENING JINGLE, an INTRO SPEECH, a dedicated TIME ANNOUNCEMENT package, an OUTRO SPEECH and a CLOSING JINGLE. They can be any supported audio file in any ENABLE combination, the only limitation is your fantasy and the length of the track: 60 sec. for OPENING / CLOSING, 30 sec. for INTRO / OUTRO.

TIME ANNOUNCEMENT elements are mixed together but be careful, no fade is applied.

Mix point for OPENING / CLOSING and INTRO / OUTRO tracks can be set by pressing the corresponding **Edit** button.

The **Edit Mix Point** window allows you to SET / GET and TRIM the mix point in the same way as explained in **The CUE POINTS EDITOR window**.

If you don't want to take advantage of the possibility of using 4 different TIME ANNOUNCEMENTs during the day, you can define one of the four and make the other sections equal to that one.

It is possible to create an offset from the current time in order to play different time zone time announcements. The offset range is +/- 12 Hours.

The TIME ANNOUNCEMENT configuration can be tested by pressing the TEST button. In this way the time announcement will be played in the prelisten player. If something goes wrong a warning message will appear. If you change tab during the test, the announcement is stopped.

TIME ANNOUNCEMENT packages, that contain the announcement files, must be unpacked in a chosen directory that is to be selected by using the *Browse* button. You also have to select the file type (wav or mp3).

If you want to create your own package you must follow the below naming convention and structure, in order to allow DirEttore the search for the right file. Naming and structure is as follows:

HRSXX (.wav or .mp3)
(For XX hours with minutes)

MINXX (.wav or .mp3)
For XX minutes.

HRSXX_O (.wav or .mp3)
For XX hours without minutes (o'clock)

View tab

The main playlist / rotation view allows you to view all information contained within tracks, organised in columns.

If you don't want to show some of the information provided, this tab enables you to select those you really need.

Note that *Event* name and *Track* title cannot be hidden.

In this tab you can also set the size of the font (normal or big) that will be used to display the elements in the main playlist / rotation view .

Audio Cards Tab

There are many players working in this automation and they have been logically grouped in order to be assigned to a dedicated soundcard. The first is the **ON AIR** players group (the 4 on air players, the sweeper/v-track and the time announcement players) the second 12 **INSTANT** players group and the third is dedicated to the **PRELISTEN** player. The **ON AIR** players can be subsequently split (remaining grouped in their own logical group) and each and every player can have its own soundcard assignment.

The assignment of soundcards can be **changed at runtime** but **glitches may occur**. The affected players will output to the newly assigned soundcard immediately after the OK button is pressed.

If the soundcard driver, in DirectSound mode, maps the audio pairs as surround channels, **only the first audio pair** (stereo channel) of the selected soundcard will be available in DirEttore.

ASIO Support is also implemented, giving the user the ability to exploit the low latency typical of this interface, settings may be changed pressing the Display ASIO CONTROL PANEL button, that will show the control panel provided by the soundcard driver manufacturer:

Important information about soundcard drivers:

Switching between DirectSound and ASIO drivers will cause the automation to restart in order to use the correct audio drivers.

Compressor Tab

The DSP compressor is a DirectX Media Object embedded within the automation, which allows sound levelling of audio signals coming from the **ON AIR** players, **INSTANT** players, **SWEEPER** and **TIME ANNOUNCEMENT** players.

The usual compressor parameters (Gain, Attack, Release, Threshold and Ratio) can be set in this tab.

"Best practice" is to change the values slightly and then listen to how the new settings affect the audio output (which can be easily distorted using inaccurate combinations).

Equalizer Tab

The Equalizer is the second DirectX Media Object embedded in the automation, which allows the sound equalization of the audio signals coming from the **ON AIR**, **INSTANT**, **SWEEPER** and **TIME ANNOUNCEMENT** players.

There are 10 Bands available each with a range of 30 dB (+15 / -15).

It is also important here to make fine changes to the values and listen to how the new settings affect the audio output. To avoid unwanted distortion, try to use negative gain values.

The audio path from the players output to the sound card output is as follows:

Password Tab

If you need to protect access to the configuration window it is possible to enable a *password* from this tab. **This is not a high security password** but just a basic method to filter the access to a place that contains the most important settings of the program.

The password must be entered twice and the **change password** button must be pressed in order to confirm the password set or change. You can select the configuration buttons of the main screen (PLAYLIST, ROTATION ...) that you want to be enabled after the password check is active. The instant players context menu will always be available to any user because it take parts in the real time show building not in the DirEttore's configuration.

Once the password is set every time the configuration button (or the equivalent shortcut key) is pressed, the *enter password* window will appear.

There's no a maximum number of times you can enter a wrong password but a 50 character limit of an alphanumeric case sensitive text, gives quite a large number of combinations, making it almost impossible to easily guess the set password, assuming you don't use a short or obvious one.

Remote Control Tab

This is an extremely useful feature that is to be used in conjunction with the provided **DirEmote** application. Here you can enable or disable the remote control server embedded in DirEttore and allow the remote use of the following features: BREAK AFTER, NEXT, FADE (and related functions), PLAY/STOP and INSTANT PLAYERS.

It is possible to authorize a specific IP address to connect from remote or authorize any computer connected to the same network.

You can also enable the **Remote START** function by means of accepting incoming remote start commands and/or send the same command to a specific IP address. In this way when the automation stops (manually or by means of a BREAK AFTER), it will send the remote start command to the given IP Address. This is an easy method to change the playout system without interruption or the need of an assistant.

Important information about the Remote Control function:

The REMOTE CONTROL feature uses ports 19860 and 19865 to communicate, that are opened at start-up regardless of the remote control enable status. If you use a firewall the above ports must be opened otherwise the feature won't work and may cause false security alarms.

If you accept the remote START COMMAND and send the remote START COMMAND to the same IP address of your computer (also 127.X.Y.Z is your computer), you'll create a logical loop and whenever the automation stops it will immediately restart.

You can also **access DirEttore from the Internet**, to do so you have to know the public IP address of the computer in which the program is installed (use www.whatismyip.com or similar web sites to know your public IP address) and open 2 UDP ports in the router: **19860** and **19865**. Please read your router manual to understand how to open **UDP ports** (Port mapping).

Automation Behaviour Tab

Here you can change the automation behavior in terms of workflow and events behavior.

AUTOMATION WORKFLOW parameters:

The first checkbox determines the audio program flow when in PLAYLIST MODE. If the **Return to ROTATION MODE** option is enabled the automation will revert to ROTATION MODE at the end of the current playlist in PLAYLIST MODE.

The second checkbox instructs the automation to **Load the closest ROTATION** at startup, namely the closest matching rotation change event scheduled in the time interval between startup time and the end of the day.

EVENTS BEHAVIOUR can be modified as follows:

Events are ACTIVE when automation is stopped means that events can be fired by means of a pop-up window that will show the upcoming event(s):

With this window it is possible to insert all or some of the scheduled events and decide if the automation should start after the insertion. Events will be placed immediately after the currently selected track in the main playlist / rotation view. Note that if the first event t be inserted is a TIME ANNOUNCEMENT or a SWEEPER, it will be skipped.

If no action is taken, the window will close in one minute but it will restart the countown if another event occurs within this time span.

Play EVENTS FIRST, determines if the programmed events must be played before a commercial cluster that has the same ON AIR time. By default commercials are played first.

VST Effect Tab

the VST Effect Tab enables the sound processing of the audio signals coming from the **ON AIR**, **INSTANT**, **SWEEPER** and **TIME ANNOUNCEMENT** players, by means of a compatible VST Effect plug-in. A wide range of VST effects are available in the market allowing you to expand and combine external effects with the embedded equalizer and compressor.

A dedicated window allows the user to trim the chosen VST Effect associated parameters, using the built-in visual interface (or *effect editor*).

In order to test the results, before applying the wanted effect to the automation players, it is possible to prelisten a test track. An useful **Loop TEST TRACK** option is also available.

The audio path from the players output to the sound card output is as follows:

Stream SLOTs Tab

This tab shows the user all the parameters associated to the **10 available stram slots**. They can be configured using the **Edit STREAM SLOTs Parameters** button that invokes the STREAM SLOTs configuration window. This button is also present in the EVENTS configuration window.

DirEttore can playback **http://** or **https://** Internet radio Shoutcast (versions 1 and 2) Icecast and WMA streams. Accepted stream formats are: MP1, MP2, MP3, AIFF, AAC, AC3, FLAC, WAV and OGG Vorbis.

MP4, WMA, ASF and WMV formats are also available but only if Microsoft® Windows Media Format modules are installed.

The **Edit STREAM SLOTs** window allows the insertion of the stream url and test it. If succesful, the resulting audio will be routed to the prelisten player and associated parameters (stream *name* / *type* and *genre*) are shown in the dedicated box.

A comment that uniquely identifies the stream (the name that will be sent to a shoutcast server as the stream title) is to be inserted.

STREAM DURATION must be set. This value is the ON AIR duration time that can be overridden by placing an immediate event at a given time.

STREAM RETRIES is the number of times a stream can have buffering and/or connection problems before the automation declares the stream invalid and move to the NEXT track.

When inserted, a slot can be **modified** by double-clicking the wanted slot and then pressing the **MODIFY** button after the editing is completed. A slot can also be removed by selecting it and pressing the **REMOVE** button. <u>All changes will be made only after pressing **OK** button</u>.

Once connected to a stream your net agent name, read by the stream provider, will be the program name and version: **DirEttore 4.1.0**

Starting up the AUTOMATION

Excluding the AUTOSTART option in the configuration window, that will start the automation at program start-up only, **three modes** are available to begin playing the music:

1) By pressing the **PLAY** button (or the associated **SPACE BAR** keyboard shortcut), the currently ON CUE track will start.

2) By pressing the **RETURN** key the track under the cursor will start. You can move along the current list using the arrow keys to select the needed track. SWEEPERs and TIME ANNOUNCEMENTs can't be started in this way.

3) By arming **AUTO PLAY**

AUTO PLAY is a special function activated right clicking on the PLAY button while the automation is stopped.

It allows the user to start DirEttore within the next 24 hours (one day) starting from the moment the function is activated.

Once selected, the below configuration window will appear:

With this window it is possible to select the time (hours, minutes and seconds) when the automation will start.

Time left to AUTO PLAY is indicated above the ARM AUTO PLAY button, that is to be pressed when start time is chosen in order to arm the countdown.

When this function is engaged, the count down window appears showing the remaining time to AUTO PLAY.

Two more options are available during the countdown: PLAY NOW and ABORT.

Playback will always start from the currently selected track.

The above picture shows the countdown window when the AUTO PLAY is started.

PLAY button icons and meanings

Automation STOPPED

Automation STARTED

Automation LOCKED

While in play, if the user wants to start the next song immediately (without waiting the current track to complete) just press the NEXT button at the top of the PLAY / STOP button or the associated BACKSPACE keyboard shortcut.

Locking the AUTOMATION

This function is reachable by right clicking the **PLAY** button of the main screen. Its purpose is to avoid unwanted automation interruptions caused by erroneous user actions.

Once activated, it **disables** the **PLAY** button, the associated **SPACE BAR** keyboard shortcut and the **ENTER** key.

Automation must be in **PLAY** for this function to be activated. Note that **PANIC** button and **INSTANT PLAYER**s still work.

The KEYBOARD SHORTCUTS

In order to help the user to control all aspects of the automation control, some keyboard shortcuts have been added. The complete list is given below:

RETURN Plays the track selected in the playlist window of the main screen.
SPACE BAR Automation play and stop toggle, shortcut to the PLAY / STOP button.
ESC Panic function start. Shortcut to the PANIC button. Must be hit twice.
F1/F12 Instant players 1 ... 12 play and stop toggle.
PAD 1/0 - + Instant players 1 ... 12 play and stop toggle.
BACKSPACE Next song when the rotation is playing, shortcut to the NEXT button.

A AUTO / LIVE ASSIST toggle.
B BREAK AFTER - stops the automation at the end of the current track.
C Cue points editor window.
E Events scheduler window.
F Live fade control.
I Instant players configuration window.
J Instant players *load a stored set* window
L LIVE FADER / ROTATION view toggle.
M PLAYLIST / ROTATION mode toggle.
N ROTATE NOW – Rebuilds the rotation.
O Commercials Planner window.
P Playlist configuration window.
R Rotation editor window.
S Sequence editor window.
T TRACK INFO window (mutually exclusive with the LAST PLAYED TRACKS window)
V EVENTS VIEW / FILES VIEW toggle.
X EXPAND / COLLAPSE instant players view.

TAB Activates the SEARCH TOOL, shortcut to the SEARCH button (the magnifying glass icon).

0 Configuration window.
K Keyboard shortcuts window.

The ABOUT BOX

This window can be reached by clicking *Help* in the main menu. It gives some important information about the program and the engines. All the info contained in this window must be provided when submitting bug reports :

Start Date is the date and the time in which the program was started. It helps debugging any program / computer restart that can happen unnoticed.

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Ettore.