



ONAIR TRACKMIXER

V1.3

ADMIN MANUAL

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1. About this Manual

1.1. Manual colors

DAVID System manuals have different color codes according to the manual type:



Admin Manual (blue): Admin manuals either describe DigaSystem modules with no significance for application users (such as DigAlign) or represent the configuration document to a user manual. This manual type is mainly relevant to system or DigaSystem administrators and assumes the reader to have full access to the DigaSystem administrating tools (mainly DigaSystem Administrator and/or DPE Admin).







User Manual (red): User Manuals describe all functions of DigaSystem modules used for media production, such as DBM or the Audio Editors. It might however be necessary to consult an according Admin manual to configure and/or activate some of the features.



Technical Manual (green): Technical manuals provide technical details of DigaSystem products and interface information that can be used to develop own solutions for individual workflows. This manual type is usually only handed out under specific circumstances.



1.2. Manual icons

There are some icons in this document to point out important information

	License required	Sections with this icon need a license to work.
	New	This icon appears in headlines and the content index. It marks new features or a changed behavior/workflow that has been implemented lately.
	Admin info	When this logo appears, then there is a chapter in the according admin manual about this topic (the chapter or section usually has the same title in both manuals); e.g. how to activate a described feature. This also means the described function will not be available if not activated and configured.
	Hint	This icon marks hints, tips and help.

1.3. Parameter and subkey diction

Subkeys: A subkey means a folder in the parameter files’ tree structure, shown in the DigaSystem Administrator.

<p>Parameter level:</p>	<p>Subkeys (sometimes also called folders) and parameters can be located in three different parameter files (levels): The Global Settings, the Local Settings and the User Settings.</p> <p>If the parameter level can be chosen at will, the parameter path is shown as e.g. ... Settings (the three dots in the beginning), that indicate the Settings subkey of any parameter level.</p>
<p>Vertical bar () and parameter syntax</p>	<p>If the vertical bar (that separates the subkeys) appears at the end, then a subkey is meant, e.g. ... DigAIRange Crossfade Extra (the Extra subkey in the Crossfade folder). Without the bar the manual refers to a parameter, e.g. (... DigAIRange Crossfade Extra FadeInCurveType).</p> <p>If a parameter value is pointed out or recommended it will be shown as Parameter=Value. As an example: UseOnAirTrackMixer=TRUE means, the parameter “UseOnAirTrackMixer” is (or should be) set to “TRUE”.</p>
<p>Variable <n></p>	<p>The subkey variable <folder name> or just <n> means the parameter folder can have multiple names or there can be several folders of this type.</p>
<p>Default path in the manuals</p>	<p>Parameters being listed without a reference path are always stored under:</p> <div style="display: flex; align-items: center;">  DigAIRange Crossfade Extra </div> <div style="display: flex; align-items: center; margin-top: 5px;">  TurboPlayer GUI Windows CFM [n] Extra </div>

2. Installation of OnAIR TrackMixer

2.1. Prerequisites

The following system components must be installed on the computer, on which the **OnAIR TrackMixer (OTM)** is going to be installed:

- **Visual C++ 2012** Runtime Libraries (vcredist_x86.exe)
- **Microsoft .NET 4.5** (dotNetFx45_Full_setup.exe)

2.2. Installation Files

It is recommended to use OTM in a local DigaSystem with at least the release 2015.1.0 versions of:

- **DBM** (version 4.8.7381.0 or higher) and/or
- **DigAIRange** (version 4.8.579.0 or higher)
- **TurboPlayer** (version 4.8.1741.0 or higher)

This includes a working

- **MultiRec2.ocx** or **MultiRec4.ocx**, which is a required component for OTM (see also the file `OtmControlLibrary.dll` below to switch between the MultiRec versions). It will replace the existing `CrossfadeMixer (CFM)`.

The OTM core package consists of the following files:

- **Audio32.dll**
- **ClipboardFormatConversions.dll**
- **OtmControl.ocx** (CFM-compatible OCX wrapper for `OtmControlLibrary.dll`)
- **OtmControlLibrary.dll** (needed to switch between MultiRec2 or MultiRec4)
- **OtmControlLibrary.dll.config** (required to switch between the usage of MultiRec2 and MultiRec4; default is MultiRec4)
- **System.Windows.Interactivity.dll**

2.2.1. DIGAIRANGE AND TURBOPLAYER VERSIONS

Generally, this manual focusses on the usage of DigAIRange V4.8 and TurboPlayer V4.8. V4.7 versions of these modules can be used in combination with OTM V1.1, but then most of the new features and parameters described in this manual will not work!

2.2.2. SWITCH BETWEEN MULTIREC2 AND MULTIREC4 USAGE

OTM works with MultiRec4 as default, which is recommended. However, to switch to the usage of MultiRec2, the file **OtmControlLibrary.dll.config** needs to be opened with a text editor. In the line `<MultiRecVersion>4</MultiRecVersion>` change the number "4" to "2". Save and quit the editor. OTM now runs with MultiRec2.



2.3. Installation steps

1. Copy the files into **the same directory as the executable program** which will host OTM; this is usually the DigaSystem Root directory containing DBM.exe and/or DigAIRange.exe.
2. Register **OtmControl.ocx** using **regsvr32.exe**; drag the ocx file onto the regsvr.exe. A message will confirm the successful registration.

If UAC (WIN7 and 8) is activated:

In order to always run as Administrator an executable file, please click with the right mouse button on the *.exe (in this case "regsvr32.exe") go to "Properties" select the "Compatibility" tab and select Privilege Level "Run this program as an administrator". Confirm dialog with OK.

2.4. Configuration for DigaSystem modules

2.4.1. DATABASE MANAGER

Open the DigaSystem Administrator (admin.exe in the DigaSystem root directory) and enter the following parameter to activate OTM:



Local Settings|DBM|Crossfade|UseOnAirTrackMixer=TRUE If not enabled or set to FALSE the CrossfadeMixer will be launched instead of OTM.

The OnAirTrackmixer can also be opened by clicking on the **Edit** button in the **Music2** and the **Marker/SubClips** tab of a DBM entry.

Additional Parameters:

Parameter	Possible Values	Description
OTMSettings	XML string (empty as default)	Xml file providing OTM specific settings to DBM, e.g. <pre><?xml version="1.0" encoding="UTF-8"?> <CrossFadeParameters> <MultiRecSkinfile>...</MultiRecSkinfile> <!-- formerly crossfade parameter OtmXamlFile --> <SkipbackAfterLinkoutSet>...</SkipbackAfterLinkoutSet> <!-- formerly crossfade parameter SkipbackAfterLinkoutSet --> </CrossFadeParameters></pre>
SkipbackAfterLinkoutSet	0... (in seconds; Integer Parameter, Default=0)	Path: User Settings DBM Crossfade User settings only! The value sets defines the time (in seconds) the sound head will jump back in the timeline if the user sets the LinkOut marker during playback. NOTE: Invalide since DBM version 4.8.7372.0, use xml parameter DBM OTMSettings instead.

2.4.2. DIGAIRANGE

Open the menu **Program -> Settings** (you might need to login as ADMIN to access the settings) and access the tab **Crossfade-Editor**. In



the **Settings** section set a checkmark to **"OTM"**. You need to restart DigAIRange for the changes to take effect. The OTM icon will then be visible in the icon bar of the lower working section.

Optionally in the **View** tab, the OTM can be made visible in the main Toolbar by setting a checkmark at **"Show OTM icon in toolbar too"**.

Important, DigAIRange specific parameter are listed at the end of this document.

2.4.3. TURBOPLAYER

In TurboPlayer open the CrossfadeMixer (e.g. by clicking on the CFM icon in the Icon Bar). Then right click on the top of the Window (of the Windows frame, where the application name is shown) and enter the Settings. In the **Use Control** section choose **OnAIR TrackMixer** in the dropdown menu. You need to re-start TurboPlayer for the changes to take effect. The OnAIR TrackMixer is now available in the Icon Bar.



Important, TurboPlayer specific parameter are listed at the end of this document.

2.5. Logging

Following these steps OTM will create log files:

DBM:	In the default configuration the DBM-OTM log file is written to C:\Users\xyz\AppData\Local\Temp\OTM_yymmdd.log . As a parameter another filename can be defined as parameter Global/Local Settings Protocol DBM-OTM=<path>
DigAIRange:	In DigaSystem Administrator set the parameter Local Settings DigAIRange Crossfade Logging=[Path]\[Filename].log
TurboPlayer:	At TP Settings go to BCS tab and make sure under Logfiles CFM/OTM a valid path is set. See attached "OTM_TP_log.png"screenshot.

Log files should be attached in case of contacting DAVID support (support@davidsystems.com) for troubleshooting. Following these steps OTM will create log files:

2.6. Allowed Entry classes

The OnAIR TrackMixer (OTM) can be opened for the following entry classes:



2.7. Working Modes

The OnAIR TrackMixer can be used in two different modes:

- **The 1-Track Mode:** Only one audio item can be edited and there is only one track in the timeline.
- **Simulated 2-Track Mode:** This mode shows two tracks, showing the start and the end of ONE audio entry in one track each. This gives an optimal overview over the audio file. To work with this mode in DBM, the following parameter needs to be set: **Local Settings|DBM|Crossfade|PropertyTwoTrack=TRUE** (the value FALSE will enable the 1-Track Mode).
- **The MultiTrack Mode:** This mode provides up to 9 tracks and additional functions like recording. This mode is only available in BCS modules (DigAIRange and TurboPlayer), not in DBM.

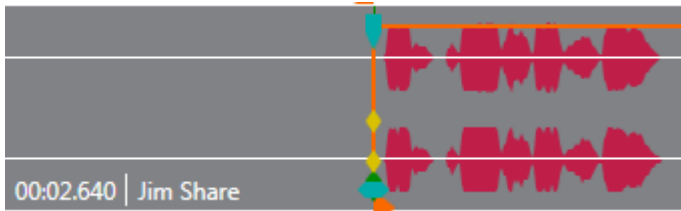


2.8. Show Duration of Element NEW

The element's duration between Mark In and Mark Out is shown in the OTM tracks. In the corresponding XAML file you may define it to additionally show milliseconds.

Show minutes, seconds and milliseconds

```
<converter:TimeSpanDifferenceToStringConverter x:Key="TimeSpanDifferenceToStringConverter" Format="mm\:ss\.fff"/>
```



Show minutes and seconds

```
<converter:TimeSpanDifferenceToStringConverter x:Key="TimeSpanDifferenceToStringConverter" Format="mm\:ss" Rounding="Seconds"/>
```



2.9. Important Parameters















For **DigAIRRange** the standard path is |**DigAIRRange**|**Crossfade**|**Extra**|.


























For **TurboPlayer** the standard path is |**TurboPlayer**|**GUI**|**Windows**|**CFM**|**[n]**|**Extra**|.

If not stated otherwise, the parameters are entered under |**TurboPlayer**|**GUI**|**Windows**|**CFM**|**[n]**|**Extra**|. Paths being shortened by “...|<folder>” are sub folders. The underlined value is the default value.

PARAMETER	POSSIBLE VALUES / DESCRIPTION
 	<p>CrossfadeTrack</p> <p>This parameter can be set in two locations with different meaning!</p> <p>Values: <u>True</u>, False</p> <p>Paths:</p> <ul style="list-style-type: none"> • ... CrossfadeFadeInParameters • ... CrossfadeFadeOutParameters <p>Crossfade track for the FADE IN/OUT track of the crossfade:</p> <ul style="list-style-type: none"> • True - Delete old FADE IN curve and create new fade in curve according to setting FadecurveType • False - Leave the current fade in curve.
 	<p>CollapsePanels</p> <p>Values: True, <u>False</u></p> <ul style="list-style-type: none"> • True - The panes "Marker Details" and "Show Overview" will collapse/expand, when the tracks are collapsed/expanded. • False - The panes "Marker Details" and "Show Overview" will not change, when the tracks are collapsed/expanded.
 	<p>DefaultMode</p> <p>This parameter can be set in two locations with different meaning!</p> <p>Values: <u>True</u>, False</p> <p>Paths:</p> <ul style="list-style-type: none"> • ... CrossfadeFadeInParameters • ... CrossfadeFadeOutParameters <p>Default mode for the FADE IN track of the crossfade:</p> <ul style="list-style-type: none"> • True - Use the current play position to calculate the fade time • False - Use the FadeTime setting as the fade time
 	<p>DuckingDuringVoiceTracking</p> <p>Values: True, <u>False</u></p> <p>Use ducking feature in VoiceTracking mode in OnAIR TrackMixer:</p> <ul style="list-style-type: none"> • False - No ducking is used in VoiceTracking Mode • True - Ducking is used in VoiceTracking Mode.

 	FadeCurveType	<p>Values: <u>Linear</u>, Log1, Log2, LogMinus2</p> <p>This parameter can be set in two locations with different meaning! Paths:</p> <ul style="list-style-type: none"> • ... CrossfadeFadeInParameters • ... CrossfadeFadeOutParameters <p>Curve type used for the FADE IN track of the crossfade:</p> <ul style="list-style-type: none"> • Linear - Creates a linear curve. • Log1 - Creates a Log 1 curve. • Log2 - Creates a Log 2 curve. • LogMinus2 - Creates a Log -1 curve.
 	FadeDownCurveType	<p>Values: <u>Linear</u>, Log1, Log2, LogMinus2</p> <p>Path: ... AutoDuck </p> <p>Curve type for FADE DOWN of the ducking feature:</p> <ul style="list-style-type: none"> • Linear - Creates a linear curve. • Log1 - Creates a Log 1 curve. • Log2 - Creates a Log 2 curve. • LogMinus2 - Creates a Log -1 curve.
 	FadeInCurveType	<p>Values: <u>Linear</u>, Log1, Log2, LogMinus2</p> <p>Curve type for "FadeIn" Button:</p> <ul style="list-style-type: none"> • Linear - Creates a linear curve. • Log1 - Creates a Log 1 curve. • Log2 - Creates a Log 2 curve. • LogMinus2 - Creates a Log -1 curve.
 	FadeOutCurveType	<p>Values: <u>Linear</u>, Log1, Log2, LogMinus2</p> <p>Curve type for "FadeOut" Button:</p> <ul style="list-style-type: none"> • Linear - Creates a linear curve. • Log1 - Creates a Log 1 curve. • Log2 - Creates a Log 2 curve. • LogMinus2 - Creates a Log -1 curve.
 	FadeTime	<p>Values: 100... (Default <u>2500</u>)</p> <p>This parameter can be set in two locations with different meaning! Paths:</p> <ul style="list-style-type: none"> • ... CrossfadeFadeInParameters • ... CrossfadeFadeOutParameters <p>Fade time for the fade in track of the crossfade in milliseconds. Used only if DefaultMode = False for the fade in track.</p>
 	FadeUpCurveType	<p>Values: <u>Linear</u>, Log1, Log2, LogMinus2</p> <p>Path: ... AutoDuck </p> <p>Curve type for FADE UP of the ducking feature:</p> <ul style="list-style-type: none"> • Linear - Creates a linear curve. • Log1 - Creates a Log 1 curve. • Log2 - Creates a Log 2 curve. • LogMinus2 - Creates a Log -1 curve.

 	<p>MinimumFadepointDistance</p>	<p>Values: 100... (Default <u>200</u>)</p> <p>Minimum distance between automatically generated fade points in milliseconds.</p>
 	<p>MouseWheelUp</p>	<p>Values: <u>MoveWaveformToLeft</u>, <u>MoveWaveformToRight</u></p> <p>Mouse wheel scrolling behavior. The parameter defines in which direction the timeline moves when the mouse wheel is moved up. This of course also defines the wheel move down.</p>
 	<p>MouseButtonRight</p>	<p>Values: <u>PausePlayback</u>, None</p> <p>Right mouse button behaviour in OnAIR TrackMixer:</p> <ul style="list-style-type: none"> • <u>PausePlayback</u> - Right mouse button pauses the playback. This is the behavior of OTM 1.0. • None - Right mouse button does not pause playback.
 	<p>OutputFaderVisible</p>	<p>Values: <u>True</u>, False</p> <p>Hides the volume fader to prevent users to change the output level</p>
 	<p>PreferSameLineForStartModes</p>	<p>Values: Manual, Sequenced, StartOnTime, EndOnTime, External, Relative (empty as default)</p> <p>Path: TurboPlayer </p> <p>If you have a configuration with multiple channels per line/fader, the parameter controls how TurboPlayer picks a channel for playing an element. It can either <u>prefer</u> a free channel for the same line as the previous element is being played (if only a single fader is used for playing a all transitions and drop-ins on the same line). It alternatively can prefer a different line while ignoring the other channels of the playing line (if each element is controlled individually with its own fader). In this parameter you must list all start modes for which the first behaviour should apply in a comma-separated list. Possible start modes are: Manual, Sequenced, StartOnTime, EndOnTime, External, Relative.</p> <p>Be aware that the parameter says "Prefer...". TurboPlayer will try to select a play channel according to this parameter but there might be a lot of other restrictions or side-effects which make a different channel more appropriate (also check the parameter "SequencedOnSameLine" which is the same/old setting but only for start mode "Sequenced".)</p>
 	<p>RecordFilename</p>	<p>Values: <valid folder\ filename></p> <p>Paths:</p> <ul style="list-style-type: none"> • DigAIRange MultiRec • TurboPlayer MultiRec <p>Enter this parameter to define a folder and file name, so OTM can create audio files when recording anything in the OTM timeline. Note: The RecordFilename parameter has to be set for each TurboPlayer GUI, if more than one is in use.</p>
	<p>SequencedOnSameLine</p>	<p>Values: <u>TRUE</u>/FALSE, 1/0</p> <p>Path: TurboPlayer </p>

	<p>Only relevant if using multiple channels per line/fader. Defines preferences (depending on other configuration details) how TurboPlayer picks a channel for playing out a sequenced element. If set to TRUE: TP <u>prefers</u> a free channel for the same line as the previous played element (useful if only one fader is used for playing a sequenced chain) If set to FALSE: TP prefers different line while ignoring the other playing line channels (used to control all elements individually with own faders)</p>
 	<p>SkipbackAfterLinkoutSet Values: 0... (in seconds; Integer Parameter, Default=0) Paths:</p> <ul style="list-style-type: none"> • DigAIRange Crossfade • TurboPlayer GUI Windows CFM n <p>User settings only! The value defines the time (in seconds) the sound head will jump back in the timeline if the user sets the LinkOut marker during playback.</p>
 	<p>SourceEnvelopeType Values: <u>Visible</u>, Hidden, VisibleOutsideOfMarkInOut Behavior of source waveform (without fading). Volume changes such as fades/ducking are reflected at the waveform.</p> <ul style="list-style-type: none"> • Hidden - No gray waveform in the background. The area before mark in and after mark out is completely hidden and fades/duckings reduce the height of the waveform. • Visible - New behavior: Gray waveform in the background of the entire audio. This is the default value. • VisibleOutsideOfMarkInOut - Behavior of CFM: Gray waveform before Mark-In and after Mark-Out. No gray waveform between Mark-In and Mark-Out.
 	<p>UseTimeOfDayView Value: TRUE Sets the Time of Day View at start up. If no parameter is set: default behavior = Relative Time View</p>
 	<p>WaveformOffset Values: 0, greater than 0 (Default=0) Shows or hides the toggle button</p> <ul style="list-style-type: none"> • 0 - Toggle button is hidden • Greater than 0 - Toggle button is shown
 	<p>WaveformOffsetInitiallyActive Values: <u>FALSE</u>, TRUE (Default = FALSE) Waveform offset is on/off at start up</p> <ul style="list-style-type: none"> • TRUE - Waveform offset is on at start up • FALSE - Waveform offset is off at start up

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