



THE REFERENCE PLUGIN

Magic AB User Guide
release version 1.2 (May 2014)
by Sample Magic

support, updates and videos www.samplemagic.com/details/184/magic-ab

concept Sample Magic and Marc Adamo
software development Guillaume Jeulin and Michael Olsen
artwork TSV Design
documentation Marc Adamo and David Felton
testing Sample Magic and our fantastic Beta Team





Magic AB / Disclaimer

The information in this document is subject to change without notice and does not represent a commitment on the part of Sample Magic Ltd. The software described by this document is subject to a License Agreement and may not be copied to other media except as specifically detailed in the License Agreement. No part of this publication may be copied, reproduced or otherwise transmitted or recorded, for any purpose, without the prior written consent of Sample Magic.

© 2012-2014, Sample Magic Ltd. All rights reserved.

Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.



Magic AB / System requirements

System requirements

Windows

- An SSE2-enabled processor (Pentium 4 or later).
- 4GB RAM.
- Microsoft Windows XP, Vista, Windows 7 or 8.
- Any VST / RTAS / AAX-compatible host software (32 or 64-bit).

Mac OS X

- Intel processor Mac.
- 4GB RAM.
- Mac OS X Mountain Lion (10.8), Lion (10.7), Snow Leopard (10.6), or Leopard (10.5).
- Any VST / Audio Unit (32/64-bit) / RTAS / AAX-compatible host software.

Audio files supported

- Mac: AIFF/WAV up to 24-bit / 96kHz, mp3, AAC, M4a
- Windows: AIFF/WAV up to 24-bit / 96kHz, mp3



Magic AB / Updates and support

Updates

V1.1 – Aug 2013

- Added - Pro Tools 11 support with 64-bit AAX plugin.
- Added - Logic X support with 64-bit AU plugin.
- Added - A-B stream selector buttons now work as a toggle button. Just click either A or B button to toggle between A and B streams.
- Fixed - Sample rate conversion optimised to work at all sample rates up to 96kHz between audio files and DAW session sample rate.

V1.2 – May 2014

- Added - Mini GUI player
- Added - Track unload / Load option
- Added - RAM usage display for files loaded
- Added - Gain range increased to +/- 18dB for track slots and master faders

FAQs

You can find the latest updated Magic AB FAQs in the Sample Magic Help Centre at:
<http://www.samplemagic.com/information/36/magic-ab-faqs>

Quick-start videos

The Sample Magic YouTube channel features a range of quick-start videos for getting more from Magic AB, including:

Magic AB Quick-Start: <https://www.youtube.com/watch?v=LksfUZt5Jjw>

Magic AB Smart Controls for Logic X: <https://www.youtube.com/watch?v=zdaqjl2puNY>

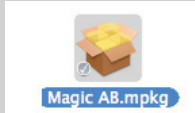
A full list of videos can be found here: <http://www.samplemagic.com/details/184/magic-ab>



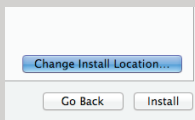
Installing Magic AB on a Mac



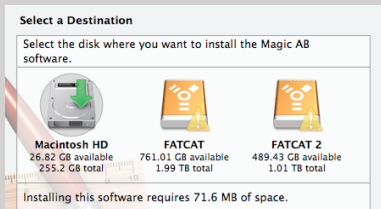
1 – Double-click on the file ‘Magic AB.mpkg.zip’. This unpacks the Zip into the installer file.



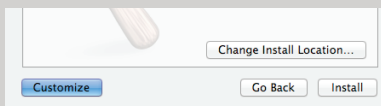
2 – Double-click on the file ‘Magic AB.mpkg’. This starts the installer which will guide you through the process. Click continue to start the install.



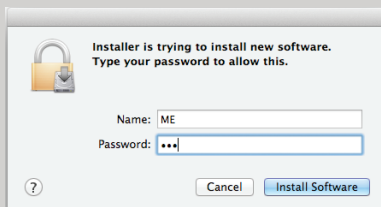
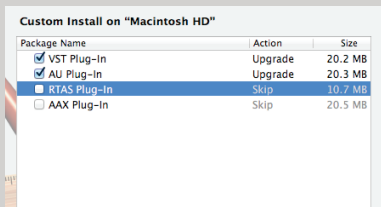
4 – If you WISH to install to a custom directory click ‘Change Install Location’.



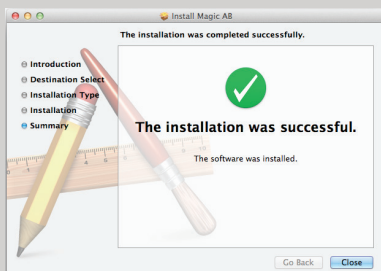
5 – Choose the drive and click ‘Continue’.



6 – The standard install will install all plugin formats. If you wish to customise the install, click ‘Customize’ and select the formats you wish to install.



7 – Enter your password if applicable and click ‘Install Software’.

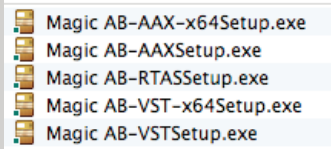


8 – The software is now installed. Click ‘Close’ to finish.

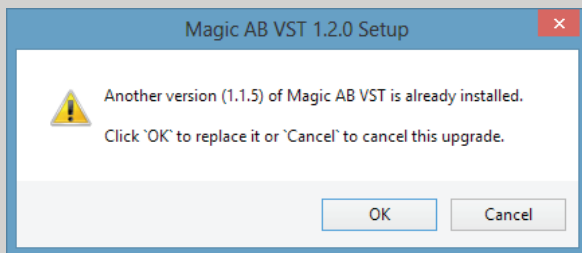


Magic AB / Installation – PC

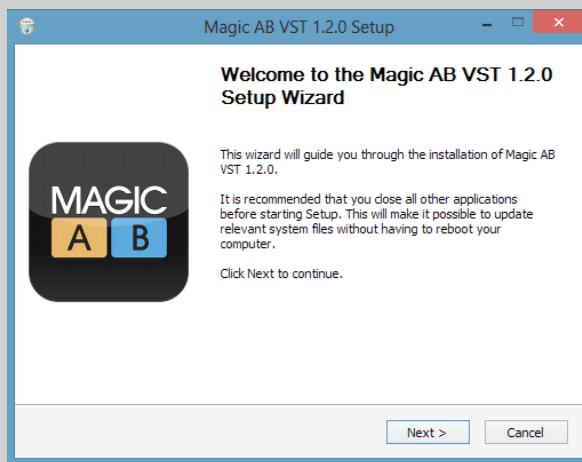
Installing Magic AB on a PC



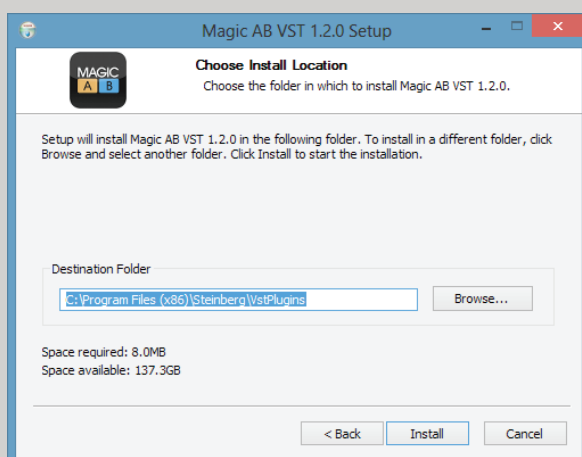
1 – Double-click the .exe file to install the format of your choice. Your computer will check that you want to install the software; click OK to agree.



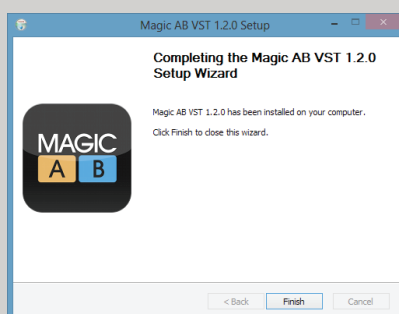
2 – If you are updating from a previous version, click 'OK' to continue.



3 – The setup wizard will guide you through the installation. Click 'Next' to continue.



4 – Choose an install location, and click 'Install' to continue.

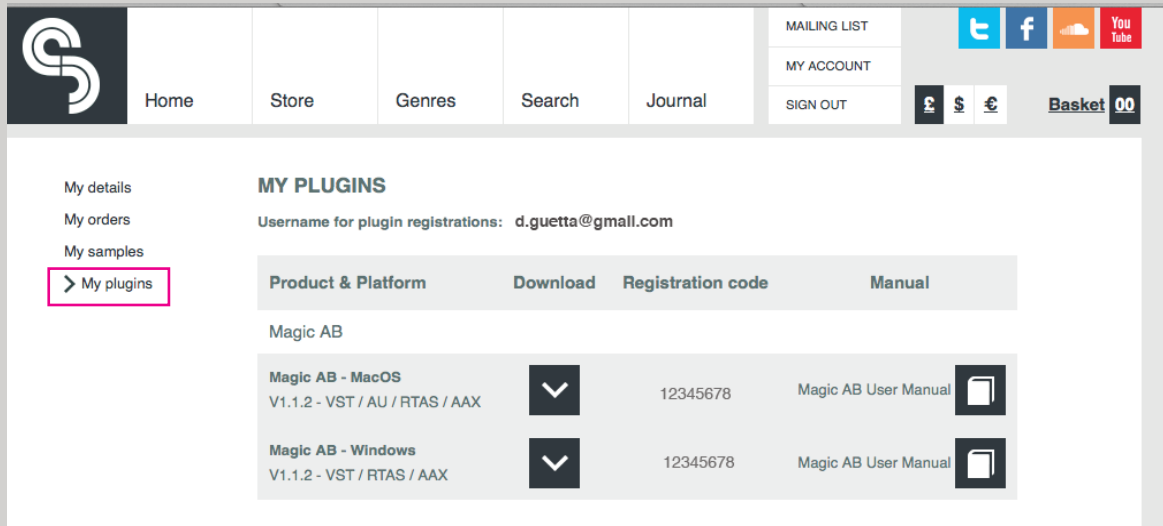


5 – Click 'Finish' to complete installation.



Downloading Magic AB

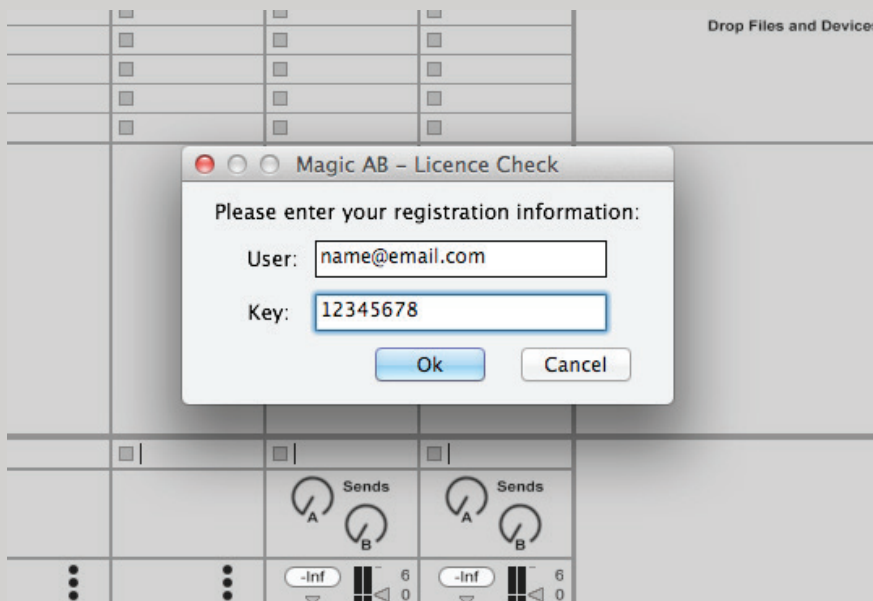
After purchasing Magic AB, you can download it from the MY PLUGINS area of your Sample Magic account. (Just login at www.samplemagic.com, click on MY ACCOUNT and then MY PLUGINS.)



Authorising Magic AB

The plugin needs to be authorised the first time it is launched.

You will be asked for the email address associated with your Sample Magic account and the unique eight digit serial number generated in your 'My Plugins' download area. Enter these details into the pop up window that comes up during loading of your DAW.



Note: If you cannot copy/paste the serial number into the box; then please type it in manually.



Welcome to Magic AB, Sample Magic's first plug-in.

The concept behind Magic AB is simplicity itself – an easy-to-use but powerful utility that allows you to compare the track you are working on with a reference track in an instant.

Magic AB is both an indispensable mixing tool and a serious workflow improver that allows the producer to:

- 1** Perform instant AB references: to compare the track you are working on in your DAW with a commercially produced reference track. Like the production values of Daft Punk? Or Pink Floyd? Or Nirvana? No problems – import your chosen reference tracks into Magic AB and then flick between them and your own in-progress track using a single mouse click.
- 2** Hone in on the details: play/cue the reference track from the part you want to hear and loop the section you want to focus on – there's no need for tiresome rewinding and endless internal waveform navigation.
- 3** Compare multiple mixes quickly and simply: create and save your own 'go-to' playlists to radically speed up mixing and mastering.
- 4** Balance the relative volume of mixes: so that you're always comparing like with like. This is a particularly function for mastering sessions.
- 5** Give your ears a chance to recalibrate: with manually changeable crossfade times. Flip in an instant, or allow a transition of up to 2000ms.

Of course, AB referencing is nothing new. Producers have been doing it for decades. In the home studio this referencing is invaluable, allowing your ears to 'recalibrate' to a well-produced commercial master recording to help you sculpt your own mix to get an ever higher quality sound. This is especially useful when your own monitoring environment or speakers are less than perfect.

But pro mixers and mastering engineers are no strangers to ABing either – regularly checking that their own mixes (or masters) stack up against other commercially produced tracks or tracks that clients have provided as benchmarks.

Every producer has their own way of ABing. Magic AB's beauty is its simplicity: in one plug-



no more setting up complex bus routings, needless channel muting, or flicking between outputs; it's all there in one stripped-back interface that does one thing in as efficient a way as possible – without draining more than a fraction of your CPU resources.

But ABing full mixes is just one feature of Magic AB. It can be just as useful when moved from the master bus onto individual channels when working on a new track, to help you emulate a beat you admire, or a kick drum, or a guitar sound. Placed on a single channel, you can AB between the source material and the part you're working on, regularly switching between the two as you hone the tone you want.

It has mastering applications too, allowing mastering engineers to compare in an instant the track they are working on not just to other commercial masters, but also to the other tracks on the album. Of course, you can do that already, by having every track loaded into the same DAW. But you'll never do the same job as quickly or effortlessly as with Magic AB. And in mastering houses time is money.

Magic AB won't give you a stunning new synth sound, or a great new kick, or a sexy reverb. But it will do two things it's hard to put a value on: improve your mixes and streamline your workflow immeasurably. Our users, like us – can no longer imagine studio life without it.

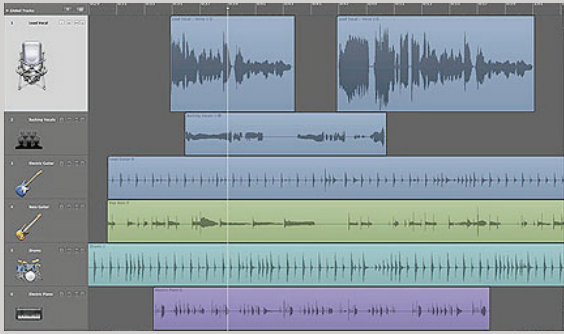
Enjoy – and, as ever, let us know how you're getting on with it.

The Sample Magic Team



Magic AB / Signal flow

Signal flow



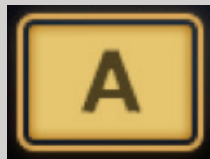
DAW stream



Magic AB stream – reference tracks (1 to 9)



Master bus effects (where applicable)



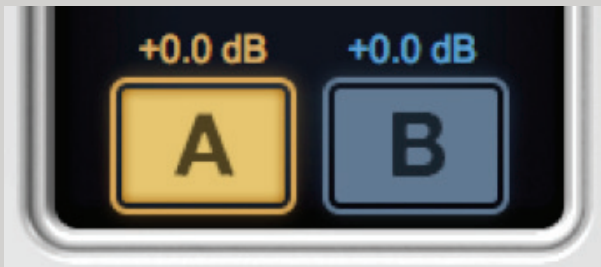
Crossfade

Stereo out



Using AB - As easy as... AB

Magic AB is usually inserted into the end of the signal path on the stereo output bus. Once inserted, you can flick between the DAW stream by clicking 'A' and your pre-loaded reference track/s by clicking 'B'. The A-B button has a toggle action so you can click either button to toggle back and forth between the A and B streams.



Magic AB loads with the 'A' DAW stream selected by default. This means there is no interruption to the audio you are working on.

Loading a reference file

To load a reference audio file into Magic AB, click on the **text box** alongside one of the 9 **players**.



The pop-up window shows two options, 'Load sound' and 'Unload sound'. Click 'Load sound'. Doing so opens a window that allows you to choose an audio file from your hard drive. Magic AB supports AIFF, Wav and mp3 formats (see **Audio files supported**, page 3). To unload a track, click on the text box and select 'Unload sound' from the menu. The track will be removed and RAM usage lowered accordingly.



When a track is loaded into a player, the **power button** on the left glows blue and the **display button** (the magnifying glass) alongside lights up. Information about the track is then displayed in the **main audio window** above.

Note: Use a player's **display button** to display the track you wish to edit in the main window. You can also use the **display button** when you want to select a track to edit in the main window, but don't want to trigger its playback.

Note: **Logic does not allow Audio Units to emit any sound until it receives audio at the plugin's inputs.** To ensure that it performs correctly, simply play some audio through the plugin before loading/back one of the Magic AB reference tracks.



Magic AB / Operation

When the **display button** is clicked, the audio file's waveform is displayed in the main edit window above.



When a track is active, you can click the 'B' button to hear the 'B' reference stream. The 'B' button will illuminate to show it is active.

Click the power button alongside the player to trigger playback. It will illuminate.



Click the power button again to pause the 'B' stream track. Use the power button to toggle between play and pause.

RAM usage



Magic AB displays how much RAM is being used to store the files for playback. As a rough guide, one minute of stereo audio in a session running at 48K will use about 23MB of RAM. A session running at 96 KHz uses twice as much RAM as a 48 KHz session. To keep RAM usage down, remember to unload any unnecessary tracks.



Magic AB / Operation

The **play/pause button** in the main display window plays or pauses the reference 'B' stream.

Note: You will only hear it working when the 'B' button is pressed, and a player is selected.



To trigger the audio file from the start point or the loop point, use the **play from start/loop point button** in the main display.



While the track is playing, click anywhere on the large waveform to jump the playback point to a new point in the track. *Note:* this only works when the track is already playing.

To change the volume of the selected reference track, drag the track's **volume fader**. To type in a value for the volume fader, double click on the fader handle and enter the value into the text box. Press enter / return to finalise.

Up to +/- 18 dB of gain is available to balance the volume between the tracks. When multiple reference tracks are loaded, the volume faders allow you to balance the relative volumes of the audio files in the different players.



Tip: To edit values by 0.1dB increments, hold the 'shift' key while dragging left/right.

Tip: During mastering sessions, keep all volumes at the same level so that you can quickly hear how the different tracks in a project relate to each other dynamically.

To select a different playback track for the 'B' stream, click the power button on the track you wish to play.





The main audio window

Use the **zoom** function to help you set the loop points in the selected reference track accurately.



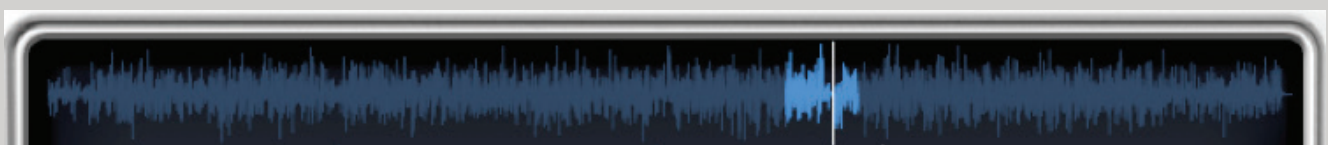
Click and drag up/down on the + and - buttons to increase/decrease the scale of the zoom. Press **zoom** to toggle between zoom and normal view.



When zoom is selected, the zoomed area is highlighted in the waveform viewer.



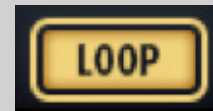
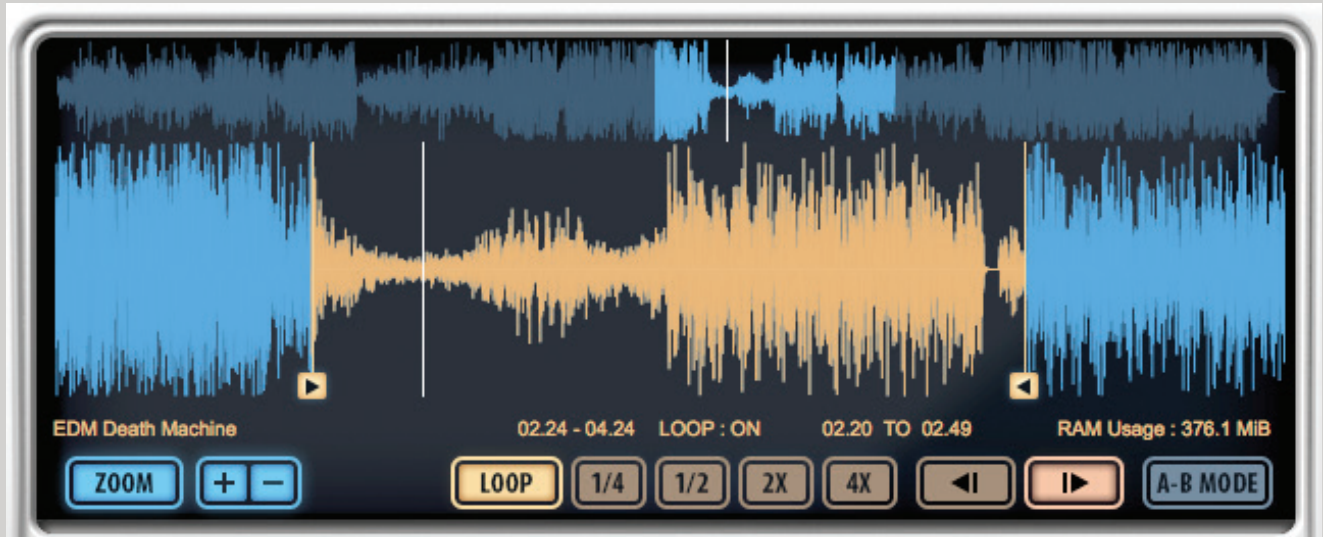
When zoom is in operation, you can navigate through the zoomed audio by using the **waveform overview** at the top of the main window. Drag this left or right to reposition the zoomed area in the viewer below.





Looping

Use the **loop tools** to select the part of the reference audio file you want to loop or the start/cue point for playback. This can be useful when you want to play from a specific point in the track.



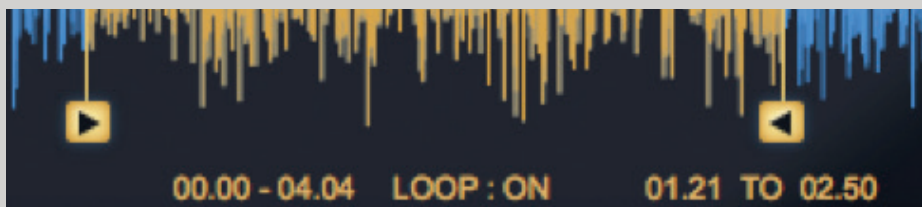
Click the **loop button** to switch the loop function on and off.

When **loop mode** is on, the text above will indicate 'LOOP : ON' and display the times of the loop start and end points.

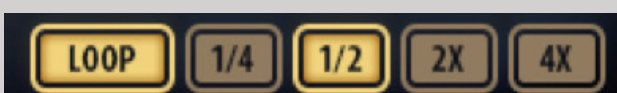
LOOP : ON 01.21 TO 02.50

Drag the left and right **loop handles** to set the loop start and loop end points.

Tip: Use the zoom function to get in close for accurate looping.

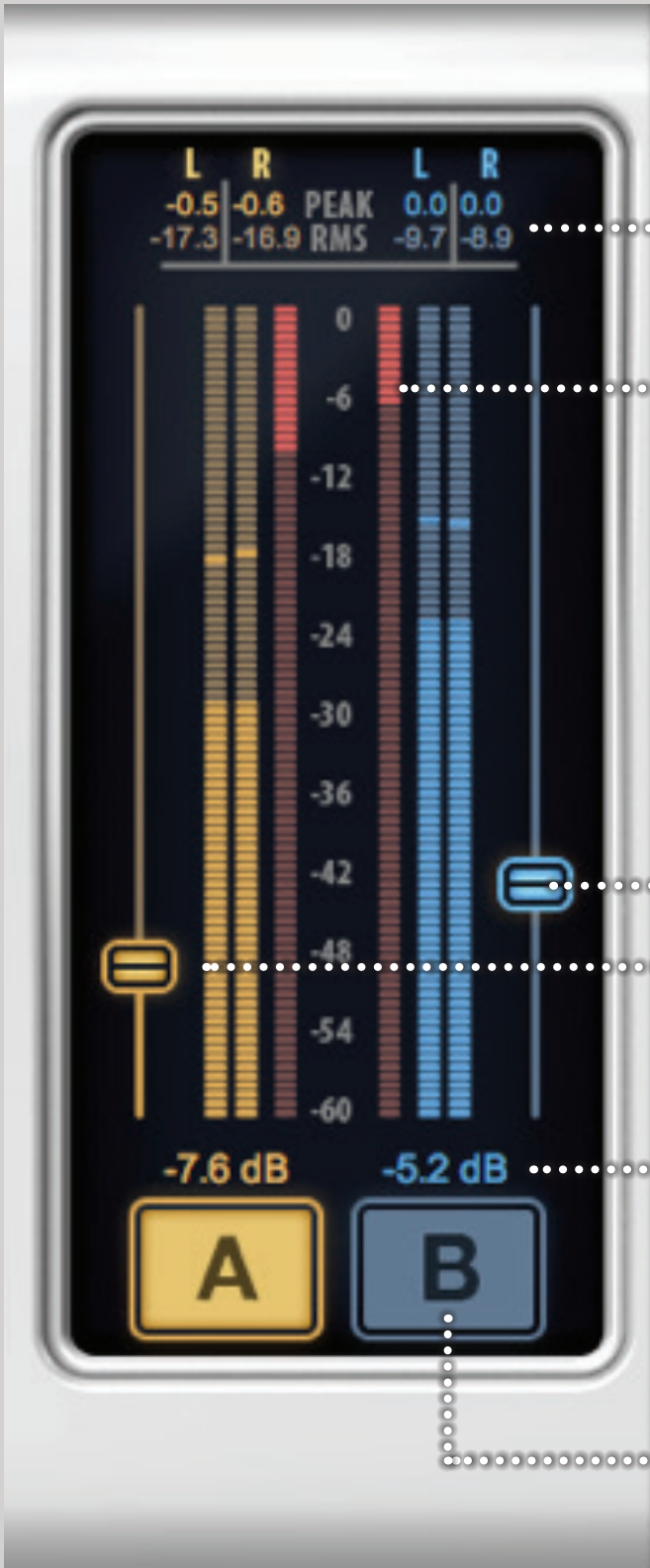


Use the **loop resize buttons** to quickly and accurately change the length of the loop.





The output meter



Peak and RMS displays (shown in dB).
Click to reset the values.

Crest value (dB) shown in red.
The 'crest factor' or peak-to-average ratio (PAR) is a measurement of a waveform, calculated from the peak amplitude of the waveform divided by the RMS value of the waveform.

Volume faders – drag to adjust the output volume of each stream. Up to +/- 18dB of gain is available.

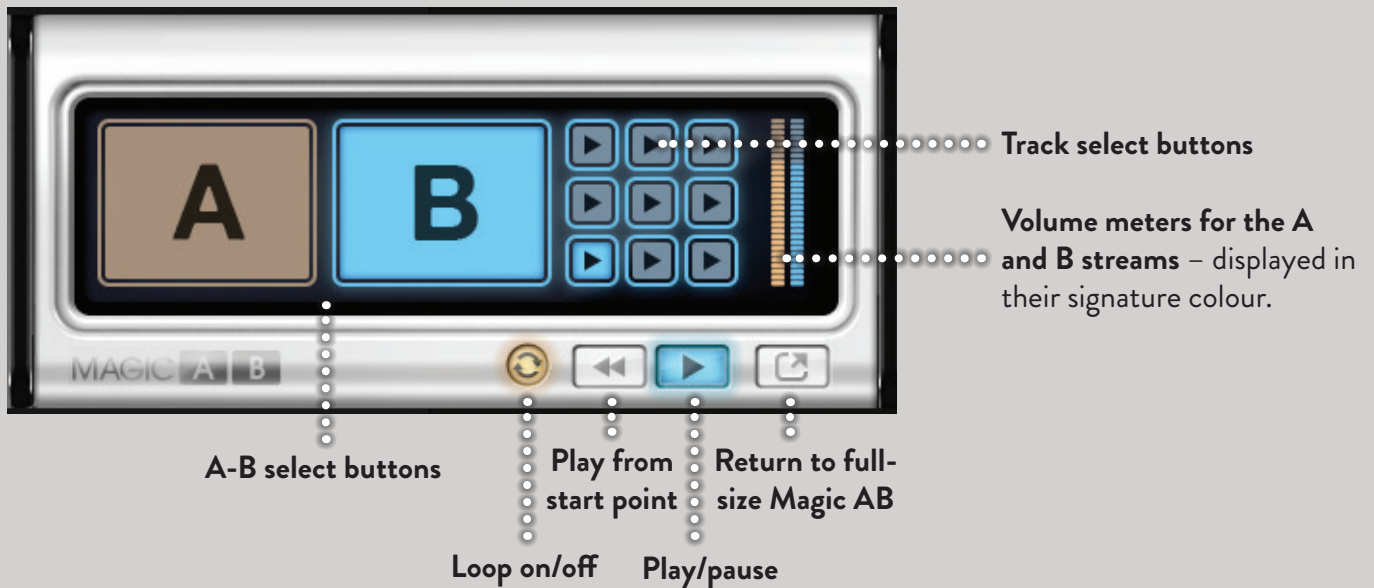
Volume gain is displayed above each stream.
To type in a value for the volume fader, double-click on the volume fader handle and enter the value into the text box. Press enter / return to finish.

AB buttons – select between 'A' (DAW) stream and 'B' (reference) stream.

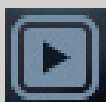




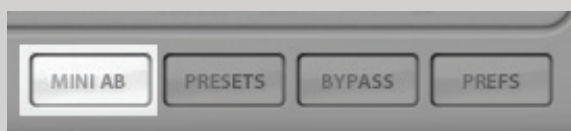
Mini AB

Mini AB is a compact version of Magic AB that uses a minimum amount of screen space. It's perfect for when you need to free screen space for other plugins. You can access the track select buttons, transport controls and loop on/off functions from inside Mini AB, making it ideal once tracks have been loaded, loops points set and volume levels balanced.



The track select buttons follow the same 3 x 3 layout as in the main Magic AB window. The buttons have three states, identified by the buttons' lighting patterns:

-  1 – Track not loaded
-  2 – Track loaded
-  3 – Track playing back



To switch to Mini AB when using Magic AB, click the 'MINI AB' button located on the lower menu row.



To switch back to full size Magic AB click the 'Return' icon on the lower right corner of Mini AB.



Preferences

There are a few important additional features that can be accessed via the preferences panel. To open this panel, click on the **prefs button**.



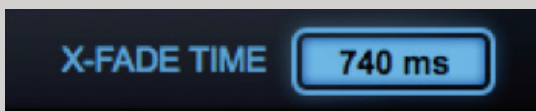
Crossfade time

By default the switch between the A and B streams is instant. But you can adjust the time it takes to crossfade between the two streams in the **prefs panel**. This will change the time it takes for the volume to fade out of the first stream and fade back in on the other.

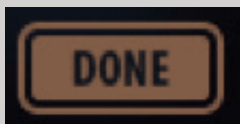


To edit the crossfade time, click and drag the mouse up/down to increase/decrease the value (displayed in ms).

Tip: You can edit the crossfade time between 0–2000ms



When you are happy with the crossfade time, click **done**.





Saving and loading presets

Click on the **presets button** to save or load a preset.

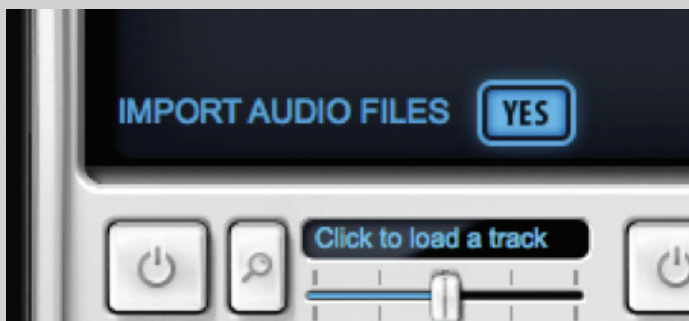


A preset saves a playlist of all reference tracks loaded into Magic AB folder, alongside all associated parameters (volume etc). This means you can store a favourite 'go-to' selection of third party reference tracks, as well as different styles of references (e.g. 'Techno', 'Metal', 'Mastering').

Import Audio: Yes/No

Clicking Yes to this will copy a version of your reference audio file/s to the following location: User/My Documents/Sample Magic/ Magic AB/Audio.

This makes it easier to find audio files when exporting or transferring presets.



Note: It's a good idea to use this function when playing tracks directly from a CD.

Bypass

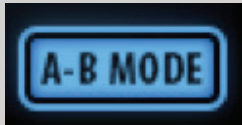
You can bypass Magic AB at any time by clicking the **bypass button**.



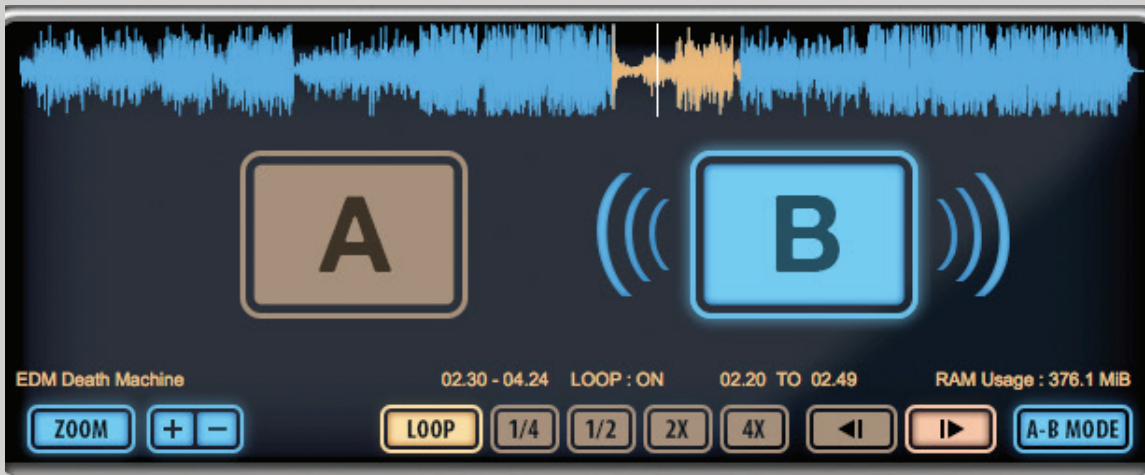


Big button mode

The furthest right button, **A-B mode**, activates the Magic AB **big button mode**. This can be useful when you want an ultra-clear visual indicator of which stream is playing.



Pressing it toggles between waveform zoom view and big button mode.



Use the big A-B buttons to select the stream in the same way as you would using the regular A-B buttons.

Using Magic AB as a standalone plugin

To use Magic AB as a standalone plugin we recommend using a VST/AU host.

There are many free hosts that can be downloaded for free. Our recommendations are listed below. Check out kvraudio.com for a more comprehensive list.

If you are successfully using a VST/AU host with Magic AB and it isn't listed below, please contact us and let us know about it so we can add it to the list.

www.tobybear.de/p_minihost.html

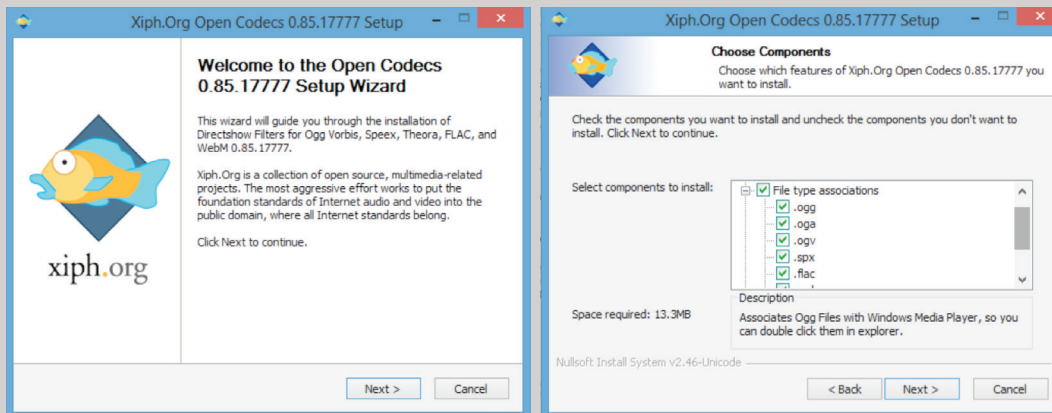


Importing FLAC files on PC

Go to <http://xiph.org/dshow/downloads/>

Download and install the Windows 32/64-bit Installer: `opencodecs_0.85.17777.exe` 2,53MB

This is a direct show filter for playing (decoding) FLAC, Ogg Vorbis, Speex, Theora and WebM files in Windows Media player. Installing this will allow FLAC files to be played in Magic AB.



Follow the installation instructions.

There is no need to change any of the default options. The FLAC codec will be installed into the correct directory. It will also install codecs for Ogg Vorbis, Speex, Theora and WebM files. If you don't wish to install these then uncheck the boxes in the drop-down menu for 'File Type Associations'.

Continue following the prompts to finish the installation.

Then you will be able to play FLAC files in MAGIC AB.

Note to Mac users



Unfortunately we are unable to support FLAC files in OSX at this time.