USER MANUAL

AIR STUDIOS REVERB

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INTRODUCTION

Introducing our first ever effects plug-in, created in collaboration with the team at London's iconic AIR Studios. Using our very own "Virtual Positioning Technology", you can tailor the acoustics of the legendary Lyndhurst Hall - one of the world's most sought-out recording spaces - in any way you desire to bring your sound to life.

QUICK SPECS

MAC SYSTEM REQUIREMENTS

Mac OS 11 to OS 14

Minimum:

2.8GHz i5 minimum (quad-core), 8GB RAM.

Recommended:

2.8GHz i7 (six-core), 16GB RAM.

Apple Silicon computers are supported and 64 bit DAW required.

(32 bit DAWs not supported)

PC SYSTEM REQUIREMENTS

Windows 10 - Windows 11 (latest Service Pack, 64-bit)

Minimum:

Intel Core 2.8GHz i5 (quad-core) or AMD Ryzen 5, 8GB RAM

Recommended:

Intel 2.8GHz i7 (six-core) or AMD R7 2700, 16GB RAM

- Download Size: 8.45GB
- Disk space required during install: 8.45GB
- Dedicated plugin (AU, VST2, VST3, AAX)

WELCOME

The Composer's Convolution Reverb

Introducing our first ever effects plug-in, created in collaboration with the team at London's iconic AIR Studios. Using our very own "Virtual Positioning Technology", you can tailor the acoustics of the legendary Lyndhurst Hall - one of the world's most sought-out recording spaces - in any way you desire to bring your sound to life.

The Pinnacle of Convolution with Spitfire Audio's Virtual Positioning Technology

After two years of meticulous research and development, Spitfire Audio proudly presents AIR Studios Reverb – a revolutionary convolution reverb that breaks new ground in sonic authenticity.

AIR Studios Reverb goes beyond traditional impulse responses, leveraging Spitfire Audio's proprietary Virtual Positioning Technology (VPT). This groundbreaking feature allows you to position your sound source anywhere within the legendary AIR Studios, capturing the precise ambience of its unique acoustic spaces.

Unveiling the Power of 67,000 Impulse Responses

Spitfire Audio has taken the concept of Impulse Response (IR) capturing to an unprecedented level, recording over 67,000 IRs to be able to recreate a plethora of positions and configurations in the hall.

The Hall: An Audio Experience Like No Other

In AIR Studios' "The Hall", musicians traditionally face the control room, which creates a distinct reverb character. However, a lesser-known yet iconic sound is achieved with musicians facing the organ — a setup that's synonymous with Hans Zimmer scores recorded at AIR.

To recreate both of these signature sounds within AIR Reverb, our team mirrored microphone placements on "The Hall" floor. Combined with dedicated speaker positioning, this allows you to position your virtual sound source facing either direction and capture the essence of these legendary recordings.

Key features

Choose the position anywhere in The Hall, with proprietary Virtual Positioning Technology.

Ability to adjust the virtual source radiation Select and mix between eight different mic signals.

Configurable hall settings, including Canopy Height, Canopy Material, and Gallery Damping.

Ability to flip the direction of virtual performers and mic setups to match two key uses of The Hall.

Fine-tuning options for adjusting source characteristics and mic signals.

Comprehensive signal control with Direct, Early Reflections & Tail level adjustments, and graphical EQ.

Diverse preset library catering to various instruments, moods, and setups

AIR Studios: Home to the Sound of Hollywood

Founded in 1970 by the legendary producer of The Beatles, Sir George Martin, AIR Studios has delivered the award-winning scores for Atonement, Phantom Thread, Interstellar, Grand Budapest Hotel and All Quiet On The Western Front.

Beyond its status as a recording mecca for composers around the world, the studios have hosted recording and mixing sessions for an array of bands and artists including Adele, Coldplay, Billie Eilish, Dua Lipa, Little Simz, Muse, Paul McCartney, and Radiohead.

DOWNLOADING & INSTALLING

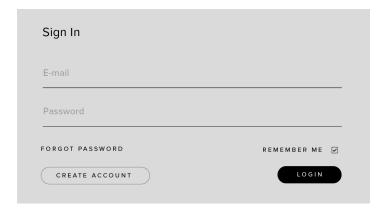
Thank you for buying AIR Studios Reverb.

If you are new to Spitfire Audio, you can get up to speed here: https://www.spitfireaudio.com/about/

First though, grab the 'Spitfire Audio App' from this link, this app will enable you to download the library: http://www.spitfireaudio.com/info/library-manager/

THE SPITFIRE AUDIO APP

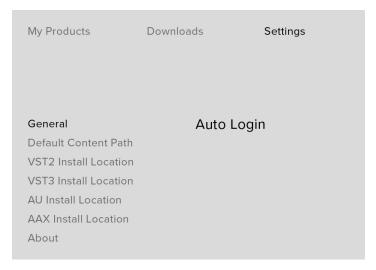
When you launch the app you will be prompted to login using the same details you use at our site. Then you'll see the page pictured below:



- 1. TABS the default tab is My Products, which shows all of the libraries on your Spitfire Account. Downloads will show currently downloading products.
- 2. FILTERS Clicking these filters will quickly display products you've yet to install, those already installed, and any available updates. Clicking again will remove the filter.
- 3. LIBRARY All libraries and plugins in your collection will appear with their artwork on the My Products tab. Clicking this artwork will open the product page. This is a great place to find information such as system requirements and instructions as well as Reset and Repair options.
- 4. INSTALL/UPDATE buttons allow you to quickly start a download directly from the My Products tab, instead of clicking through to the Library. Next to the button the size of the



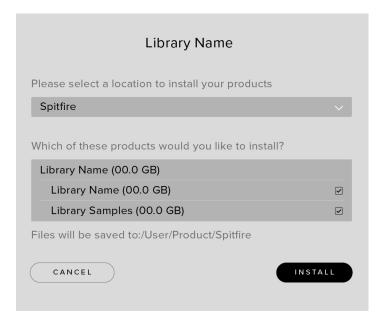
THE SPITFIRE APP PREFERENCES



If this is your first time using the Spitfire Audio App for a download you may wish to first navigate to the Settings tab.

Here you can set the Default Content location for where you wish to download your products to. You can also you can set the default VST2 install location to the folder where your DAW expects to find VST files.

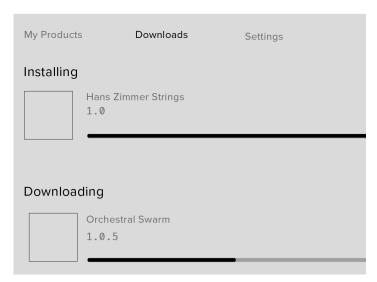
Here you can also enable Auto Login to save time in future.



Once you are happy with your preferences, simply click the Install button for the library. This is either directly on My Products tab under the library artwork, or it can be found by clicking on the library image and clicking the install button on the page that appears.

Clicking either of these will prompt you for a location, the default content location in your preferences will be suggested but you can select any suitable location. If installing from a hard drive, ensure that you choose the drive as the location.

Once you are happy with the location click Download.



After clicking install you will be directed to the Downloads tab where you can watch the progress if you like. You can of course leave the Downloads tab and start other downloads but at this point you should leave the Spitfire App open until the download completes.

THE DEDICATED PLUGIN

LOGIC PRO X

- In a project, create a new send. This creates a new "Aux" track.
- Choose the first "Audio FX' slot, and then look beneath the plugins dropdown.
- Select AU Instruments > Spitfire Audio > AIR Studios Reverb.

CUBASE

- In a project, create a new send. This creates a new "Effect" track.
- Click in the first insert slot and then look beneath the plugins dropdown for Reverb.
- You should see the AIR Studios Reverb available as an option to choose.
- After choosing, select 'Add Track'

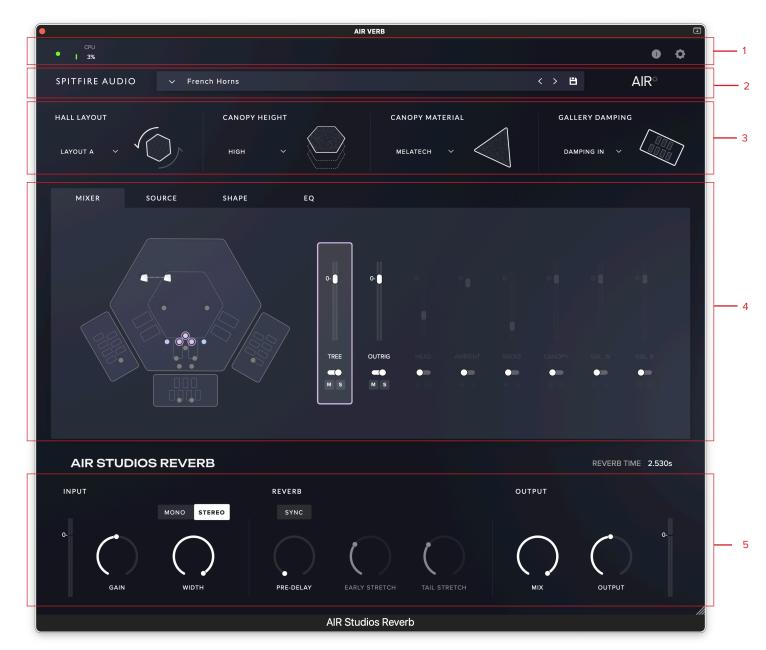
PRO TOOLS

- Go to the 'Track' menu at the top of the screen, and select 'New'
- In the pop-up, select the desired track you wish to create such as "Stereo - Aux Track", and press 'Create'
- In the first Insert slot, select multichannel plug-in and 'Reverb'
- You should see the AIR Studios Reverb available as an option.
- After choosing, select 'Add Track'

HAVE A LOOK AROUND

THE AIR STUDIOS REVERB INTERFACE

When you first open the plugin, this is what you will see



- 1. TOP MENU
- 2. PRESET SELECTOR
- 3. ROOM CONTROLS
- 4. MAIN CONTROLS
- **5. QUICK CONTROLS**

5. ROOM CONTROLS



6. MIXER

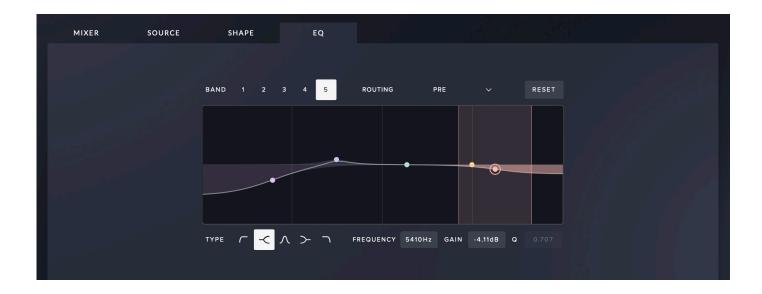


6. SOURCE

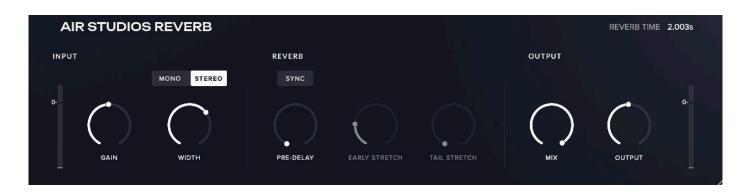




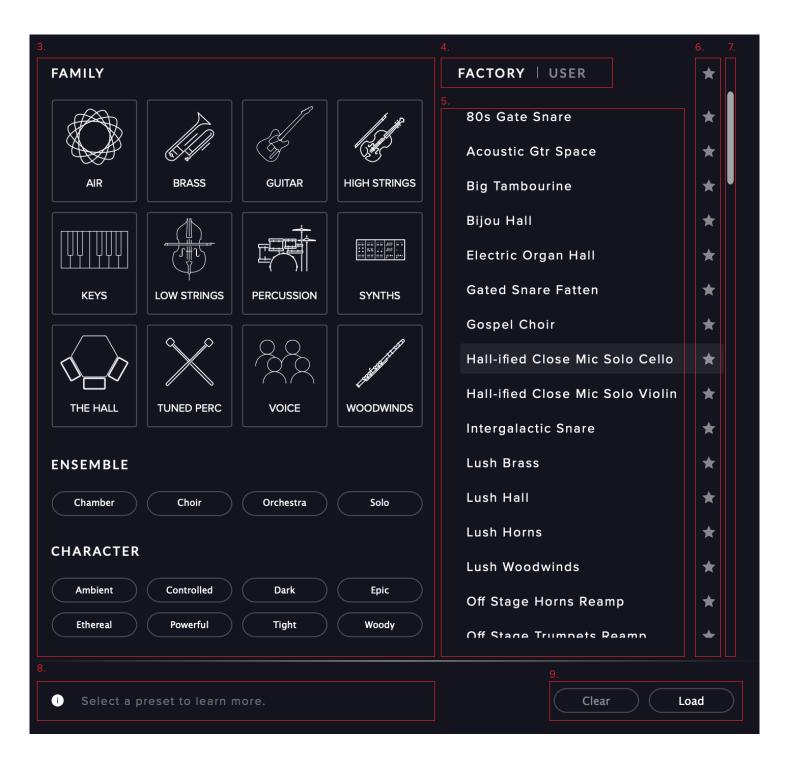
EQ



6. QUICK CONTROLS







1. PRESET NAME

Here you can see the currently selected preset.

2. NEXT, PREVIOUS AND SAVE

With the presets view collapsed, you will be able to see the Next, Previous and Save icons.

Next and Previous will simply send you to the next available preset - if you have a filter enabled, you will scroll through the filtered set of presets.

Save allows you to save your own preset, click save, name the preset and it will appear under the "user" filter.

3. FILTERS

Click on a filter to only show those preset grouped by the filter.

There are two types of filter, Instrument Family and Character.

4. FACTORY / USER

Choose whether to show the factory presets,

or show your custom user presets.

5. PRESET LIST

Scroll through the list of presets here.

Double-click to load a preset or click the 'Load' button.

6. STAR

Click a star next to a preset to add your desired preset to the "starred" filter.

Click the star at the top of the list of presets will show all starred presets.

7. SCROLL

Click and drag up or down to see more presets in the list.

8. INFORMATION

Click any preset once and information about that preset will display here.

9. CLEAR / LOAD

Select a preset and then press "load" (or double-click the preset).

Click "Clear" to remove all active filters.

HALL CONTROLS

The "Hall Controls", provide the user with the ability to modify physical attributes within the hall to control the reverb tone and decay.



1. HALL LAYOUT

Use this control to invert the room configuration.

This affects both microphones and player position

2. CANOPY HEIGHT

Here you can set the canopy to 1 of 3 different heights.

Lower values have a smaller reverberation time than higher values

3. CANOPY MATERIAL

Choose from 2 different materials on the canopy.

Melatech will give a softer, less reverberant sound than Wood.

4. GALLERY DAMPENING

Enable this to add absorption into the gallery portion of the hall.

Adding this will reduce the reverb time.

MAIN CONTROLS - MIXER



1. VIEW SELECT

Choose between the Mixer, Source, Shape or EQ view.

Each of these are covered in different chapters of this manual.

2. INTERACTIVE HALL GUIDE

The interactive hall guide shows the user a number of things:

- A. Which microphones are active, currently selected in the mixer, and where they are placed in the hall.
- B. Which way the player is facing.
- C. Which configuration the room is set up in.
- D. Whether there is damping in the galleries.
- E. Click on the grid, or drag the white puck to relocate the player position in the room.

3. SIGNAL FADERS

Adjust the level of each signal here using the fader.

4. ON/OFF TOGGLES

Here you can turn signals on or off.

If you turn a signal on, pay attention to the LED in the top left of the plugin. If it is flashing red, it means that the samples are still loading into RAM.

5. MUTE/SOLO

Active when the signal is enabled.

Click S (Solo) to isolate that signal. Hear multiple signals isolated by clicking S below multiple signals.

Click M (Mute) to silence a signal whilst keeping it active. Silence multiple active signals by clicking M below multiple signals

MAIN CONTROLS - SOURCE

Source gives the user the ability to modify the source radiation in the room, and which way they are facing.



1. ROTATION

Click and drag the white dot, or adjust the orientation value to the right, to rotate the performer where they stand on the spot.

2. LEFT

Increase this control to spread the source radiation to more in the east / left side of the hall layout. This swaps sides in layout B.

3. RIGHT

Increase this control to spread the source radiation to more in the west / right side of the hall layout. This swaps sides in layout B.

4. BACK

Increase this control to spread the source radiation to more in the north / back side of the hall layout.

In AIR Studios, this is also known as the organ end. In Layout B, "Back" becomes the control room side.

5. FRONT

Increase this control to spread the source radiation to more in the south / front side of the hall layout.

In AIR Studios, this is also known as the control room end. In Layout B, front becomes the Organ Side.

6. UP

Increase this control to spread the source radiation upward in the space.

7. SUB

We recorded individual sub IRs to get a more accurate low frequency response of AIR Studios. These IRs go from 20hz - 200hz.

With the sub control at 100%, users will hear the natural low frequency response of AIR Studios.

Adjust to taste.

8. RESET

Returns the Source controls to default position.

MAIN CONTROLS - SHAPE



WHAT IS SHAPE?

Shape gives the user the ability to augment the reverb at various points in its overall decay time.

It is useful to customise the reverb decay to suit the project needs, or to use the reverb in a more creative way.

Examples may be turning the Hall into that of a chamber, or alternatively creating huge wash reverb for synths.

1. MUTE

Mute the direct level.

2. DIRECT LEVEL

Increase this control to add more transient response to your reverb entry.

3. EARLY LEVEL

Increase the overall volume of the early reflections. Early reflections are the first reflections heard that resonate from close materials to the source.

4. EARLY STRETCH

Increase the length of the early reflections. Early reflections are the first reflections heard that resonate from close materials to the source.

5. LATE LEVEL

Increase the overall volume of the late reflections. Late reflections are the reflections post 80ms that make up the bulk of a reverb.

6. TAIL STRETCH

Increase the length of the late reflections.

7. STRETCH MODE

Choose from 5 methods to stretch the reverb shape.

Retro - alters playback speed of IR, changing the length but affecting frequency

Granular - repeats/ removes cycles of IR to change length.

Elastique Modes:

Low - low quality but faster Mid - medium quality High - high quality but slower,

MAIN CONTROLS - EQ



1. BAND

Select which node you wish to control on the EQ.

It also shows which node is currently active.

2. ROUTING

Toggle this switch to place the EQ before the reverb, or after the reverb.

3. RESET

Return the settings of the EQ to their default state.

4. TYPE

Choose the EQ curve type for the selected band.

5. FREQUENCY

Set the frequency position that the selected band is boosting or cutting.

6. GAIN

Increase or decrease the level of the selected band at its current frequency.

7. Q

Control the steepness of the EQ curve here for the selected band. The higher the value, the steeper the curve.

TOP MENU



1. LED

Shows when an instrument is loaded by lighting solid green. If this flashes, your instrument is not fully loaded.

2. CPU METER

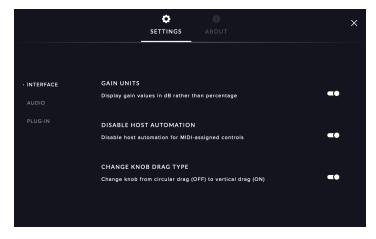
An indication of how much your CPU is being taxed, the green flash next to the CPU meter will turn red when you are overloading it.

3. TOOL TIPS

Enable and disable information about each control here.

When active, hover over any control to learn more about its function.

4. GLOBAL SETTINGS



A. Gain Units

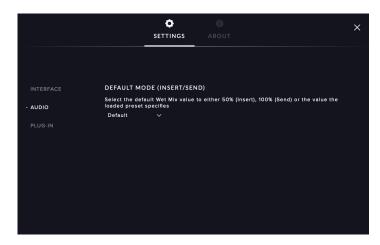
Change whether levels are displayed as a % or in DB.

B. Disable Host Automation

Remove default DAW automation controls. This is good to disable if you have conflicts with other automation types such as MIDI CC.

C. Change Knob Drag Type

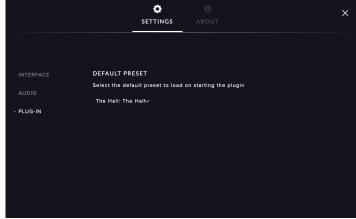
Change whether the dials are a vertical drag, or a left and right drag.



D. Default Mode

Select whether the plugin opens as insert mode or send mode.

Insert mode = 50% wet Send mode = 100% wet.



E. Default Preset

Choose which preset the plugin opens with.

MICROPHONE SIGNALS

TREE

Three omnidirectional microphones placed in the traditional Decca Tree arrangement situated high above the conductors head. These give a strong representation of the hall whilst maintaining instrument focus.

OUTRIGGERS

Two omnidirectional microphones placed midway between the orchestra on the same line as the Decca Tree. These add great natural width.

BINAURAL

KU 100 Neumann Binaural Head - located on the MD stand - this picks up the natural perspective of the MD.

AMBIENT

Two omnidirectional microphones placed towards the rear of the room, higher than the Outriggers resulting in a nice room ambience.

BACKS

An alternative Ambient Pair picking up the room rear reflections - Located directly behind the tree pointed away from the ensemble.

CANOPY

Microphones placed on the canopy looking down over the central section of the hall.

GALLERY WIDE

Microphones placed high up on the side galleries. This pair are a great option for more ambient, less directional, longer reverbs.

GALLERY FAR

Microphones placed high up on the galleries. This pair are a great option for more ambient, less directional, longer reverbs.

APPENDIX A — FAQS AND TROUBLESHOOTING

Q: WHAT ARE THE SYSTEM REQUIREMENTS?

MAC SYSTEM REQUIREMENTS

Mac OS 11 - OS 14

Minimum: 2.8GHz i5 (quad-core), 8GB RAM

Recommended: 2.8GHz i7 (six-core), 16GB RAM

32 bit is no longer supported. Apple Silicon / ARM is supported.

PC SYSTEM REQUIREMENTS

Windows 10 - Windows 11 (latest Service Pack, 64-bit)

Minimum: Intel Core 2.8GHz i5 (quad-core) or AMD Ryzen 5, 8GB RAM

Recommended: Intel 2.8GHzi7 (six-core) or AMD R7 2700, 16GB RAM

Q: I WANT TO RESET THE PLUGIN SETTINGS TO THE DEFAULT

You can delete the .settings file to reset the settings to default. This is located at:

Users/username/Music/Spitfire Audio - on a Mac

C:\Users\username\AppData\Roaming\ Spitfire Audio - on a PC.

Q: MY LIST OF PRESETS IS EMPTY, HOW DO I SOLVE THIS?

If you have moved your AIR Studios Reverb Library folder, you can solve this problem by using the "Locate Library" feature in the Spitfire Audio App.

If this does not solve the problem, the library likely needs reauthorising, to do this, use the "repair" feature in the Spitfire Audio App.

Q: I SEE A RED EXCLAMATION MARK IN THE TOP LEFT OF AIR STUDIOS REVERB, WHAT DOES THIS MEAN?

This means that there is an error, you can click the exclamation mark to open a log with further details. It is likely that using the "Repair" and "Locate Library" features in the Spitfire Audio App will solve the problem but if not, contact our support team at spitfireaudio.com/support and attach the log.

Q: CAN I INSTALL ON MORE THAN ONE COMPUTER?

With our products you have two licenses. This means that you are allowed to download and install on two computers you own, say your main rig and your mobile rig. If you have purchased the library on a hard drive, you should copy the contents of the drive on to the destination machine before completing the download with the Spitfire App. If you downloaded AIR Studios Reverb, you can copy the library folder over to the second machine and then use the "Repair" and "Locate Library" features in the Spitfire Audio App.

Q: HOW DO I AUTHORIZE AIR STUDIOS REVERB ON A MACHINE NOT CONNECTED TO THE INTERNET?

It not possible to authorise AIR Studios Reverb on a machine not connected to the internet. Authorisation is done with the Spitfire Audio App and an internet connection is required.

Q: HOW CAN I REDOWNLOAD A PRODUCT?

This can easily be done via your Spitfire Audio App. To reset both your entire library download or the latest update;

- Open up the Spitfire Audio App and log in with your account email and password.
- Select the product artwork you wish to redownload
- On this page is a "cog wheel". Select this, choose "reset" from the menu. Then "Reset Entire Download" (for a full download) or (Latest Update) for the latest update.

This will reset your latest update ready for install again. You can repeat this process for any of the libraries you own.

Note that there is a limit to how many times you can reset your downloads in a certain time frame. If you do exceed your reset limit please get in touch.

Q: DIFFICULTIES IN DOWNLOADING / INSTALLING

Customers may find that they have some difficulties in the downloading process. If you find that you are having some trouble, please check the list below for possible causes:

- The formatting of your drive, if it is FAT32 this will cause errors, because there is a maximum file size with this format of 4GB and our download files will exceed this limit. To solve this problem, reformat your drive or use a different drive. We recommend NTFS on PC and Mac OS Extended on Mac. Other possible issues:
- Spitfire App freezes in the "Extracting" stage for hours. This may be because our libraries are often very large files, and this is the stage where the compressed files are extracted and placed in their final locations on the hard drive. There could be hundreds of GB of content to unpack, so it really can take hours. If you're unsure whether it has crashed or is simply extracting files, visit

the installation folder you chose when you started the install. If everything is working normally you'll see various files appearing in the folder (or one of its sub-folders).

• If your download gets stuck and is continually cycling and not resuming, please get in touch with us, giving us as much detail as possible about your set up. It would be helpful if you can tell us your operating system, where you are downloading from (your country, and also whether you're at home or work), your ISP, and whether there are any proxy servers or firewalls between your computer and the internet.

Q: I HAVE FAST INTERNET, WHY IS MY DOWNLOAD SLOW?

We have no direct influence on your actual download speeds, our libraries are hosted on Amazon S3 servers which are normally very quick but it may well be that at certain times of the day when traffic is particularly busy, your ISP may throttle your connection speeds.

We would advise you to leave your download running overnight as speeds should ramp up at less busy times. Our Spitfire App downloader aims to use as much of the available bandwidth as possible to give you the quickest possible speeds, and may take several minutes to reach its peak.

Q: CAN I TRY BEFORE I BUY?

No - it is not currently possible to demo our products.

If you go to our Youtube channel you'll see many walkthroughs containing detailed info about all our products -- you can hear them being played in real time with no smoke and mirrors!

Q: MY LIBRARIES ARE NOT SHOWING UP IN MY SPITFIRE APP

A handful of customers may find that when they log into their Spitfire App, some of their previously purchased products do not show up in the 'Installed' section or in the 'Download Ready' section either. It may be that you have purchased these under another email address. Checking other possible email addresses for your previous purchases may help to find these missing products. If this is not the case, and these missing products were purchased a few years ago, please create a support ticket telling us your account email address, and any serial numbers you may have to go with these missing products. Our support team can also merge one or more accounts together if you'd like to consolidate all your purchases in one place.

The more information we have, the quicker we can get you back up and running!

Q: HOW DO I UPDATE MY PRODUCTS?

The main premise of downloading our products is that our Spitfire App downloads into the folder you choose, so it is important to choose the folder above where you want the download to go. The best file path for our products is something very simple, a long file path will cause errors as there is a character limit on how far the Spitfire App can read. We advise a file path of something along the lines of: Samples Drive > Spitfire Audio

When it comes to downloading / updating - if you have a folder called 'Spitfire Audio' always point the Spitfire App to the folder Spitfire Audio - never go into this folder and choose the actual library in question.

Q: HOW DO I REDOWNLOAD THE LATEST UPDATE?

With the continuous improvements to our Spitfire Audio App, we have incorporated the ability to reset your own downloads. This can easily be done via your Spitfire Audio App.

Open up the Spitfire Audio App and log in with your account email and password.

- Select the product artwork you wish to redownload
- On this page is a "cog wheel". Select this, choose "reset" from the menu. Then "Reset Entire Download" (for a full download) or (Latest Update) for the latest update.
- This will reset your latest update ready for install again.

You can repeat this process for any other updates you wish.

If you do not see the option to reset your download in your Spitfire Audio App, we would advise to download the latest version of the Spitfire App from spitfireaudio.com/info/library-manager/.

Q: I'VE BEEN WAITING AGES FOR MY DOWNLOAD LINKS?

We run all our orders through a fraud checking process. The automatic fraud check takes 20 minutes (but can take up to an hour during a very busy period, eg. Black Friday) If your order gets caught at this stage, we run a manual order check, and this can delay the processing of your order for up to 24 hours.

You should however receive an order confirmation email IMMEDIATELY upon placing your order. This confirms that your order has successfully been logged in our system and that your payment was successfully taken. Please check your junk folders before contacting our support.

CAN I DOWNLOAD ON A PC, THEN TRANSFER TO A MAC OR VICE VERSA?

Yes, you can copy the library folder and plugin files over to the second machine and then use the "Repair" and "Locate Library" features in the Spitfire Audio App. Please note that although the majority of the download can be done on a separate machine, you will always need an internet connection to finish the authorisation process.

Q: I HAVE FOUND A BUG

In some cases we can't squash them all and bugs shamefully make their way through. If you think you have found a bug, please contact us with all the relevant information;

- · A description of the bug you have found
- A screencast (video) of the bug happening, or an audio example
- The exact preset name (or presets) in question and also the library giving us as much detail as possible will help us get to the bottom of the issue.

Q: WHAT IS YOUR REFUNDS / RETURNS POLICY?

If you have NOT completed the download / installation process, and bought within 14 days then we CAN refund / return your product, please contact support with your account email address and order number so we can handle this quickly. If you HAVE completed the installation process (even if you've not yet registered your serial number), please see our EULA in regards to why we do not accept refunds and returns. We can refund hard drive orders up until the point when the drive is dispatched from our office. This is usually 1-2 days after you order.

Q: I'VE FORGOTTEN MY PASSWORD?

If you have forgotten your password, please see this link spitfireaudio.com/my-account/ login/, and click 'Forgotten Password'. If at some point in the past you asked us to merge two or more accounts but have since forgotten, you MAY find that the forgotten password isn't working for the email address you asked us to merge FROM. In this case, please contact support with your name, and any email addresses you think we might know about, and we'll work out what has happened.

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