ReaClassical Manual

Generated 2026-01-08 22:51:12 UTC

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For new features in ReaClassical 26 see here

Welcome

> Thank you for your interest in ReaClassical. This project is driven by a passion to create a flexible tool for musicians, composers, and sound engineers. Your support and feedback are essential for its improvement.
>
> Whether you are new to ReaClassical or have used it from the start, your trust inspires continued innovation. I hope it enhances your classical music production and supports your creative vision.

Chmaha

Introduction

If you already own REAPER then the world of classical editing including source-destination editing (aka 2-, 3-, and-4-point editing), crossfade editing and more are available at no extra cost to you via the freely available ReaClassical system. There's no need to spend any of your hard-earned money on Sequoia, Pyramix or SaDiE in order to make editing precise and efficient. As a classical engineer myself, I can say with certainty that what I am about to share with you covers all my recording, editing and mastering needs. Indeed, I couldn't return to the old way of working at this point. Your mileage may vary and I'd love to hear from you if there are functions that you feel might be missing.

Documentation

This online manual, located at https://reaclassical.org/manual, serves as the official documentation for ReaClassical. It is also available as an offline PDF from within ReaClassical by pressing H (for *help*). The benefit of the offline version is that it is always in sync with the version of the tools you are using. The structure of the manual is designed to take the user through preliminary remarks, install and update procedures for both ReaClassical and REAPER then a detailed look at workflows from creating a project through to final render. After some brief closing remarks, there follows the appendices (descriptions of all the ReaClassical functions, keyboard shortcut guide, recommended free mastering-grade plugins, system tweaks for all three major OSes, and, finally, a manual install guide mainly for academic purposes). I highly recommend doing a complete read of the manual and becoming very familiar with appendices A and B.

This manual is released under the GNU Free Documentation License v1.3. See https://www.gnu.org/licenses/fdl-1.3-standalone.html.

Website

The website reaclassical.org serves as the entry point for new users. From here you can read about key features, donate to the cause, read this manual, installation instructions, navigate to the ReaClassical community thread and more.

Coming from Standard REAPER

It is a very good idea to have a basic fluency in how REAPER works. However, much of ReaClassical relies on different workflows than you will be used to. So, with that in mind,

Do

- Learn how items are dragged and trimmed in REAPER
- Continue using REAPER's mixer to set faders, panning, mute, solo (if you wish)
- Set up a ReaClassical project by first running `Ctrl` + `N`

Don't

- Engage in any track and folder management (naming & renaming, creating, deleting, reordering etc) outside of Mission Control
- Set recording inputs outside of Mission Control
- Create custom track routing outside of Mission Control
- Create custom item groupings

Avoid

- Using regular transport controls for recording or playback

ReaClassical Community

The community thread plays an important role in the development of ReaClassical. Not only is it a place for users to suggest feature requests and point out bugs but also discuss more general classical music recording, mixing and mastering techniques. It also serves as something of a development blog as I not only announce the regular releases but also document the under-the-surface details for those that are interested.

Relatively new is the ReaClassical Discord server. This is a great place for live support, general chat, proposing feature requests, workflow discussion, and letting the community know about albums or individual pieces you have created with the help of ReaClassical.

Donate

I welcome monetary donations. You can use PayPal to do so. A good reference point for one-off donations per major release is the cost equivalent of a commercial REAPER license or higher. For

monthly donations perhaps gauge how much it costs for you to go out for a restaurant meal or do groceries in your own country.

Other Ways to Contribute

In many ways, the most important way users can contribute to the development of ReaClassical is to actually use the tools! It makes me happy to know that engineers can make whole professional-sounding and technically accurate masters from ReaClassical. Another is to suggest features or let me know about bugs. You can either do this on the thread or via the Issues page on the ReaClassical GitHub.

Spread the Word!

If you've enjoyed using ReaClassical in your projects, I'd be incredibly grateful if you could mention it in your album booklets, social media video descriptions, or anywhere you typically include session details. A simple acknowledgment alongside your usual credits helps spread the word and supports the continued development of the tool.

Buy ReaClassical Merch

Get print-on-demand ReaClassical merch like shirts, mugs, totes, pins, stickers and more through my TeePublic store!

Compatibility

ReaClassical runs on any system that is compatible with REAPER (nine architectures!). This includes 64-bit and 32-bit versions of Windows, MacOS and Linux (including Raspberry Pi).

Source Code

The source code for ReaClassical, the mastering grade ReaClassical plugins, this manual and the website can all be found here. ReaClassical is GPL-3.0 licensed.

Development Style

Due to working on GitHub and releasing the functions via ReaPack, I have the ability to push bugfixes and new features very quickly into an existing ReaClassical install. Often bugfixes happen within minutes or hours of receiving the report. When I dream up new features, the development often happens in rapid fashion over the course of a few days. However, now that ReaClassical has what I consider a mature feature set, I foresee maintenance and occasional bugfixes becoming more central to the process. This will give me more opportunity to work on this documentation, a complete video tutorial series etc. Part of development is also ensuring that ReaClassical continues to operate as expected with the latest REAPER versions. That's not to say there won't be new features appearing! As the REAPER developers add more new features, I will always check to see what might be useful for ReaClassical.

Versioning Style

ReaClassical currently uses YY.M.MICRO versioning (where M is a non-padded month) to accurately reflect how current the software is. For example, 26.3.2 would indicate a March 2026 release with 2 further updates which might include new features, improvements to existing functions, or bugfixes.

Tools and Languages

ReaClassical works on top of REAPER, the digital audio workstation and utilizes ReaPack, SWS Extensions and ReaImgui. ReaClassical functions are coded using Lua. The installers for all operating systems are shell scripts. The ReaClassical website uses Skeleton. All coding is done either in REAPER's ReaScript Development Environment, vscode or kate on Linux. The online manual is written in AsciiDoc. The ReaClassical splash screen and banner are created in GIMP.

Changelog

The changelog for ReaClassical functions can be found by double-clicking on the ReaClassical package in ReaPack and navigating to the `History` tab. Whenever you sync ReaPack via **Extensions › ReaPack › Synchronize packages** or the *ReaClassical Updater* function, this information should also appear automatically. For all updates including those not related to the functions themselves, a changelog can be found in the release notes.

Thanks

I am appreciative of the collective contributions of the REAPER community with regards the early source-destination actions (Pelleke, in particular), MPL, X-Raym, BirdBird, RCJacH, Sai'ke, Meo-Ada Mespotine, cfillion and many more. Finally, many thanks to Justin and Schwa for such an amazingly versatile DAW.

Thanks to all the ReaClassical users who make development so worthwhile.

Getting Started

Install

Easy Complete Portable Installation (official method)

Copy the command for your operating system into either your terminal (MacOS and Linux) or PowerShell (Windows).

MacOS:

```
curl --proto '=https' --tlsv1.2 -sSf https://reaclassical.org/macos | sh
```

Linux:

```
curl --proto '=https' --tlsv1.2 -sSf https://reaclassical.org/linux | sh
```

Windows:

```
irm "https://reaclassical.org/win" | iex
```

Note that if the ReaClassical folder already exists, the installer will automatically add a unique suffix to ensure nothing is overwritten.

Project Setup

1. Press `Ctrl` + `N`
2. Select the number of tracks you want per folder
3. Select a horizontal or vertical workflow

Notes

Track Count

A folder requires at least two tracks. If you really only need a single microphone pair for audio capture, consider 1) either having left and right on separate channels or 2) Having an empty second track that you can easily hide via a dedicated shortcut.

Workflow Choice

A *horizontal* workflow approach means that recorded or imported takes are arranged left-to-right in a single folder. A *vertical* workflow approach is designed for recorded takes of similar material to be stacked vertically.

Mission Control

As soon as you press OK, you will see the Mission Control window. Use this dialog to:

- Name or rename tracks
- Set recording inputs manually or automatically based on track naming
- Set routing
- Add a track to all folders
- Delete a track from all folders
- Re-order tracks in all folders
- Convert between horizontal and vertical workflows
- Add "special" tracks such as aux, submix, room tone, live bounce and reference tracks

WARNING	Do not attempt to complete any of the above actions outside of Mission Control!

Additionally you can use Mission Control to optionally:

- Reach other important ReaClassical windows via a button click
- Add FX, set volume, panning, mute/solo
- Set primary and secondary recording paths

Update

Updating an Existing ReaClassical Portable Install

Use **Extensions › ReaPack › Synchronize packages** or press `Shift` + `U`. This will sync ReaPack to get the latest ReaClassical functions.

Factory Reset

In the ReaClassical top menu, click on ReaClassical Factory Reset to return most settings back to those presented at first install.

Updating REAPER

It is highly advisable to use the version of REAPER that ships with ReaClassical. Due to potential incompatibility issues, for ReaClassical 26 onwards, the third-party REAPER update utility has been removed from the install package.

Converting a Standard REAPER Project

ReaClassical has the ability to import any REAPER project (available in the top ReaClassical menu via **Project Setup › Convert REAPER Project**). Because of the dizzying amount of custom routing and folder hierachy that is possible inside a standard REAPER project, the following occurs during conversion:

1. A new project tab is created and `_converted` suffix added to the RPP file
2. Any folders are flattened
3. Any empty tracks are deleted
4. A single folder is formed in preparation for a horizontal workflow
5. Any effects are moved to the relevant mixer tracks
6. Any custom routing is removed

At this point, a horizontal workflow is set up and all that is left for the engineer to do is recreate any custom routing using Mission Control. For example, if the original REAPER project used folders to organize orchestral section microphone channels, this would be recreated by clicking on the appropriate routing buttons to disconnect from RCMaster and instead route to one or more newly-

created submix tracks.

Too Long; Didn't Read

I highly encourage the user to read the full Workflows documentation for the best chance of becoming an expert in ReaClassical. However, if time is short and you have an upcoming project for which you need to learn just enough to become dangerous, read the following quick workflow summaries.

Create a ReaClassical project

If not done already, create a new reaClassical project via `Ctrl` + `N`. The number of tracks should equal the combined number of stereo and mono microphone channels. If in doubt, pick a *horizontal* workflow.

Quick Setup

1. Open Mission Control via `C`

2. Name your tracks. Use suffixes like "left", "R", "Pair" etc so the automatic record input button can make intelligent decisions

3. If planning to record, manually or automatically set your record inputs

> **IMPORTANT** Save your project before continuing with other workflows.

Recording

1. Open ReaClassical Record Panel via `Ctrl` + `Enter`

2. Select a parent track of a folder

3. Press Arm and monitor your signal

4. Use the buttons in the panel to control recording, pausing and stopping

5. Add ranking and notes while recording or after the fact by clicking on a previously-recorded item

6. Once all recording is completed, close the record panel (automatically disengages record-armed tracks).

Importing

While it is always better to record in ReaClassical, occasionally you might need to use audio recorded by other engineers who used a different DAW.

Smart Import

Assuming that the filenaming contains at least a take number as a suffix along with channel descriptions:

1. Copy or move source material into the media subfolder inside your ReaClassical project folder.

2. Ensure that track names match any channel text in the filenames

3. If your filenames also contain a session name, add some markers `Ctrl` + `M` and name them accordingly.

4. Via the top ReaClassical menu, click on **Project Setup › Smart Audio Import**

5. Open Mission Control `C` to add special tracks such as aux & submix, make routing adjustments etc.

Manual Import by Dragging

1. In your source folder, select items that should be aligned vertically (for example, every channel for particular take) and drag into the ReaClassical project being sure to drop onto one of the folders created by ReaClassical with a track count that matches the number of files you selected. Choose the option "Same time position on separate tracks"

2. Continue as above for each take

3. Open Mission Control `C` to add special tracks such as aux & submix, make routing adjustments etc.

Auditioning

Audition your material via mouse hover + `A` on parent or child tracks. Use mixer mute and solo buttons to further customize what you hear.

Editing

1. Set destination IN and OUT markers via `1` and `2`

2. Set source IN and OUT markers via `3` and `4`

3. Press `5` to make the source-destination edit (2-, 3- or 4-point edit depending on how many markers you set), or `F4` to make a time-stretched S-D edit (requires all 4 markers), or if only using destination IN marker and both source markers, `F3` for an "assembly" or 3-point "insert" edit

4. To finesse the edit, click on the right item of a crossfade pair and press `F`

Mixing

1. Add FX, change routing, and optionally adjust volume, panning etc via Mission Control `C`

2. Open Mixing Snapshot Manager via `Shift` + `M`

3. Create automatically-recalled mixer snapshots at edit cursor or inside time selection

Mastering

1. Choose a folder to be the basis of an album (you can create multi-disc productions!)

2. Remove all names from items on the parent track aside from those you want to be track starts. You can clear all items on the folder track via `Ctrl` + `T`

3. Enter track start names via the Notes window `N`

4. Press `Y` to open the metadata editor

Rendering

1. Press `R` to open the REAPER render dialog

2. Select an option from **Presets › All Settings**

3. Make any tweaks to dither, post-processing etc. and press **[Render]**. Alternatively first press **[Dry Run]** to quickly evaluate loudess and peak values.

Workflows

Once you are familiar with the basics of REAPER and have set up your first ReaClassical project, if you don't have a lot of time before your first project, read Too Long; Didn't Read. Otherwise, it's time to dive deeper into what is possible with ReaClassical.

Recording

Now that you have decided on a workflow, we can start recording!

Manually Setting Inputs

Use Mission Control `C` to set recording inputs and panning manually or automatically based on track name. For automatic assignment, add text like "Left", "R", "Pair", "2ch" etc. as a suffix and press **[Auto Rec Inputs]**.

Headroom

Again, I refer you to the books on classical music production but in general I suggest aiming for around -12dB peaks on the meters. 24-bit recording allows for a lot of headroom so there's no need to push close to 0dB. Adjust the individual faders to balance. Note that in a vertical workflow moving a fader will automatically move the corresponding fader in the other groups too making same-volume auditioning of different takes extremely easy. When using a 32-bit float device with dual AD converters as an interface (such as the Zoom F-series), ensure that the recording file format is switched to 32-bit float via project preferences `P`. The recorded levels might seem too low or too high during recording, but they can be easily adjusted afterward in ReaClassical without introducing any extra noise or distortion.

Classical Take Recording

Open the Record Panel via `Ctrl` + `Enter`. If the track folder isn't already record-armed (probably the case before you start your first recording of the session), the function will first simply record-arm the whole folder so you can usefully monitor incoming signal. On a subsequent press of `F9` or **[Rec]** recording begins. To stop recording, press `F9` again or **[Stop]**. In horizontal workflow, stopping a recording will maintain record arming and will begin recording on a subsequent press. In vertical workflow, this key press also automatically moves to, solos and arms the next available folder so

that recording can begin immediately on the next button press. ReaClassical will automatically create new folders as required. To manually add more folders when not recording, press `Ctrl` + `D`. Also in a vertical workflow, to move back to the first source group in preparation for recording new material, press `Alt` + `F9` while transport is stopped. To pause and unpause a recording without starting a new take, toggle the pause button in the Record Panel or use the shortcut `Ctrl` + `F9`. To quickly increment the take number during recording use `Shift` + `F9` or the dedicated button but note that this should only be used during moments of silence (i.e. inbetween quickfire session takes) as it creates a new recorded item. You can right-click on the Record Panel window to optionally override the automatic numbering and set a take number to increment from in addition to optionally setting a session name to act as media subfolder (which is automatically recalled when the window is reopened). You can left-click to recalculate the track count if you have removed some unused files from the project path. The calculated upcoming take number factors in unused files in the project path so as to avoid any file-naming conflicts. With manual override off, switching back to an existing session will also automatically set the correct incoming take number.

Once recording is complete, exit the Record Panel to instantly remove all record-arming from tracks.

Take Ranking

During or after recording, you can rank and make notes on takes. For currently recording takes, fill in rank and notes and on stopping recording these will be assigned. To edit previously recorded material, click on an existing item.

Recording Safety

When using the Record Panel for recording (essential!), there is increased safety when using classical take recording (`F9`) via the automatic switch to a restricted set of keyboard shortcuts. In addition to using the record panel, you can also access various non-disruptive functions like zooming. Note that you can still click on the transport buttons. In a future version of ReaClassical an even more robust recording safety feature will take the form of an optional unlock button.

Scheduled Recording

To start (and optionally end) a recording at specific times or manually start a recording to end at a certain time or after a certain duration, right-click on the Record Panel window and add the appropriate entry or entries in HH:MM format. After pressing **[OK]**, the Record Panel window will display information above the take number. If you enter a start or end time earlier or equal to the current time, the function will assume a next day schedule and will annotate the time with an asterisk (*). Likewise, with both a start and end time, if the end time is earlier than or equal to start, it will assume a time 24 hours later. Don't forget to arm your tracks before walking away!

Overdub Recording

To record additional material after the fact (say a separate narration track or an organ part in a church after the main recording session in a concert hall), edit the orchestral material as usual and use a mixdown as a guide track in a new project (or new project tab). To achieve this, use a vertical workflow (convert if necessary via Mission Control `C`), add a Reference track also via Mission

Control and set the ReaClassical Project Preferences option `REF = Overdub Guide` to checked (`F5`). With this setting, audio on the guide track will be audible during take recording and auditioning of folders. Use Classical Take Recording via the Record Panel as normal. You can then S-D edit and mix the overdub material to fit with the orchestral mixdown or, if further mixing and mastering work is required on the original multi-track material, bring the organ part into that project as a new track in the folders (see below).

Manipulating Tracks During a Recording Session

Disabling Channels

In a typical recording session, the musicians with the least to record are often allowed to leave the session early once their work is completed. If they were individually recorded using a spot microphone, it wouldn't make sense to continue recording on that channel. In ReaClassical there are two main ways to disable a channel. In a horizontal workflow using a single folder, it is no hassle to simply un-arm the desired track(s). For a vertical workflow with multiple folders, the task could end up being time-consuming with potential for error. So, the recommended ReaClassical way, both easy and visually obvious, is to set the rec input for the channel(s) to "None" via Mission Control.

Adding a New Microphone Mid-Recording Session

You can add a track to all folders in the project at once via Mission Control. It will prompt you for a name and then add a new track with that name to the end of each folder. This also works for a single folder while working in a horizontal workflow.

Deleting tracks

In both horizontal and vertical workflows, you can use Mission Control to quickly delete child tracks from all folders of the project.

Re-ordering tracks

In both horizontal and vertical workflows, you can re-order the mixer tracks by selecting the track in Mission Control and using the arrow buttons. This also moves all audio and assigned recording inputs.

Audio Calculator

To figure out required disk space for a duration of audio or vice versa to figure out maximum duration of audio you can record based on available disk space, use `Shift` + `H` to open a calculator. You can set units, channel count, samplerate, bit depth and format (WAV or MP3 at various bitrates).

Importing

While it is always better to record in ReaClassical, occasionally you might need to use audio recorded by other engineers who used a different DAW.

Smart Import

Assuming that the filenaming contains at least a take number as a suffix along with channel descriptions:

1. Copy or move source material into the media subfolder inside your ReaClassical project folder.
2. Ensure that track names match any channel text in the filenames
3. If your filenames also contain a session name, add some markers `Ctrl` + `M` and name them accordingly.
4. Via the top ReaClassical menu, click on **Project Setup › Smart Audio Import**
5. Open Mission Control `C` to add special tracks such as aux & submix, make routing adjustments etc.

Manual Import by Dragging

1. In your source folder, select items that should be aligned vertically (for example, every channel for particular take) and drag into the ReaClassical project being sure to drop onto one of the folders created by ReaClassical with a track count that matches the number of files you selected. Choose the option "Same time position on separate tracks"
2. Continue as above for each take
3. Open Mission Control `C` to add special tracks such as aux & submix, make routing adjustments etc.

Navigating a Project

In addition to built-in REAPER functions, ReaClassical uses a series of shortcuts to help you easily navigate your classical project. Important: I always make some dedicated time post-recording to get an overview of the recorded material, tidy up the digital notes I took during the session and perform a backup on an external drive as soon as possible.

Whole Project

Use `Ctrl` + `Alt` + `→` to see the whole project horizontally and/or `Ctrl` + `Alt` + `⬆` to see everything vertically. I chose to separate these functions because one of the axes (often the vertical) is set exactly how you need for editing and it would be a pain to have the axis reset each time. If you want to zoom both horizontally and vertically at the same time, use ` ` ` (backtick). You can also go to the start or end of the project by pressing the `Home` or `End` key respectively.

Finding Takes

Use `Enter` on the main keyboard or numpad if you have one to quickly search for a take based on the underlying filename of the media item. This will work for any file-naming system that uses numbers before the file extension such as *main_pair-T04.wav, cello-spot-take_23.flac* or even *ortf_pair(04).wav* such as created by Presonus Studio One. Note that if the imported or recorded files have zero-padding that is not a problem. If you have used an item to create an S-D edit, searching for a take will ignore these items and move directly to the original sources.

Jump to Time

Press `TAB` to jump to a specific absolute or relative time using right-aligned logic, similar to video editing applications. This can be an absolute time within the project or an relative position inside a selected item or a set of consecutive crossfaded items. Prefix with + or - to make relative jumps. Once you get the hang of using this input logic, moving to any position is extremely quick!

Some Right-Aligned Logic Examples:

Input	Meaning (based on project frame rate)
`100524`	Move to absolute position 10m 5s 24f
`1141711`	Move to absolute position 1h 14m 17s 11f
`+8`	Jump forward by 8 frames
`-1015`	Jump backward by 10s 15f
`+23000`	Jump forward by 2m 30s (and 0 frames)

Items & Markers

You can easily shuffle back and forth between item edges by using the `Q` and `W` keys. You can move between markers by using the `,` and `.` keys (by design given on my keyboard they are the same keys that have `<` and `>`).

Parents & Children

ReaClassical can hide or show children of track folders. This means that editing multi-track classical music can be as easy as editing a stereo track. When takes have been prepared (see below), all edits are automatically synchronized. Making an edit to the parent track automatically makes the same one to all the children too. To show hidden children select the parent track and press `D` (for *display*). To hide, select the parent track and press `E` (for *ensconce*). The other benefit is that a whole set of takes can be displayed vertically in the main editing window without too much effort.

Peaks Display

To adjust the visual zoom of wave peaks, use `Ctrl` + `` and `Ctrl` + ``. This is purely visual and allows for easier editing of quieter sections.

ReaClassical Toolbar

While I designed ReaClassical to be used efficiently with keyboard shortcuts, there is a custom S-D editing toolbar for those that prefer it. However I do highly recommend learning the key strokes as you will find your editing speeds improve dramatically. The floating toolbar can be opened via `F6` but will automatically open once when you start source-destination editing.

Hover over the icons to discover what is available.

ReaClassical Top Menu

At the top of the arrange window, you will see a dedicated ReaClassical menu (in between `Options` and `Extensions`). While not intended to be used as the primary way of running ReaClassical functions, it is an organized way of discovering the individual available functions and learning the keyboard shortcuts.

Summary of Track Types in ReaClassical

While some of these will be covered later in the manual, it is useful to give a summary of track types you can currently use in ReaClassical. First, we have the *regular* folder or folder of tracks shown in the arrange window. These are where you record or import takes. Second, we have the mixer tracks designated via `M:` prefix. These tracks shown only in the mixer are where you adjust the usual track controls such as names, pan, volume, phase, add FX etc. Their names are synced across the project via when added or renamed via Mission Control. Third, we have aux busses designated via `@` prefix. You can route mixer tracks to these to use as a reverb bus etc. Fourth, we have submix busses designated via # prefix. You can route mixer tracks to these as a way to collect together microphones from the same orchestral section etc. Fifth, we have a dedicated room tone track where you can place recorded or generated room tone (more on this in the mastering section). Sixth, we have the *RCMASTER* bus which leads directly to the master REAPER bus. Here you can gain stage into the master bus, add FX etc. Seventh, we have reference tracks which lie outside of the RCMASTER structure thereby allowing the user to quickly make comparisons with other imported material via the audition shortcuts. Next, have the possibility of a live bounce track. This also lies outside of the RCMASTER structure and is a way to capture a live stereo mix from the RCMASTER track. Finally, the master bus itself where again you can set final levels, add FX etc. As mentioned elsewhere, try not to delete the mixer tracks or RCMASTER. But, even if you do by accident, open Mission Control `C` to recreate them.

IMPORTANT | A reminder to do all track management in Mission Control!

Project Management

Statistics

For a complete set of statistics on the ReaClassical project, either for your own information or to assist with billing a client, go to **ReaClassical › Utilities › Show Statistics** or use the shortcut `F1`. For example, you might have a billing system that charges clients based on number of source-destination edits, or mixing/mastering based on the final length of the album. Information includes: final album length, number of CD markers, project age, total project length, total length of source material, total number of items, number of track folders, number of tracks per group, number of *special* tracks, number of regions, number of destination S-D edits, number of destination item splits, FX count and number of automation lanes.

Typing Notes

Document your takes (including ranking) using ReaClassical's Note app `N` which can be attached to the project, tracks, and items. It's a very useful tool to have docked at the bottom of the screen.

Folder Structure

ReaClassical defaults to placing media and exports into appropriately subfolders making project file navigation easier. Also, ReaClassical defaults to separate folders for automatic backups and auto-saves.

Automatic Backups

REAPER allows for powerful and complex backup routines. ReaClassical defaults to 10 time-stamped backups and 10 auto-saves every 15 minutes when not recording. Feel free to modify for your own way of working including switching to backups and auto saves for a number of unique days.

Cleaning

If in doubt, keep everything! Otherwise, the **File › Clean currrent project directory** is an excellent way to reduce the size of your projects. Note that when assigning a session name via the Record Panel Window, currently the above REAPER menu item doesn't search recursively. In a way, this reduces the chances of accidentally deleting precious takes. You can always manually delete but, from experience, it is *much* better to simply keep everything.

Archiving

There are various ways to archive classical music projects. First, you can access the Project Bay by `Ctrl` + `B` shortcut. You can then ensure that all media used in the project is contained within the project folder itself. If not, you can select as many as necessary, right click and move/copy into the project folder. After this, you can simply compress the folder as a zip and store on an external drive. A further step to guaranteeing ability to open in the future is to freeze tracks so that plugin effects are baked in (with ability to unfreeze later if possible). Alternatively you can save a copy of the project via **File › Save project as...**, converting to a format like FLAC and trimming the media as you wish. Finally, one to look out for in the future is Project Archiver. However, I don't believe it is quite ready for prime-time yet and recommend using one of the other methods for now.

Reference

Keyboard Shortcuts

When providing keyboard shortcuts, this manual assumes Windows or Linux as the operating system when modifier keys are used. MacOS users should use the typical standard substitutions. If in doubt, open up the actions menu via keyboard shortcut `?` or explore the top "ReaClassical" menu to see the current assignments. For reference (from REAPER's own user guide), here is a table of equivalent modifier keys:

Table 1. Shortcut Equivalents

PC (Windows or Linux) Key	Mac (MacOS) Key Equivalent
Shift	Shift

Control (Ctrl)	Command (Cmd)
Alt	Option
Windows	Control

The best way of becoming familiar with ReaClassical keyboard shortcuts is to hover over buttons in Mission Control `C` and the S-D editing toolbar `F6`, but most of all, explore the top "ReaClassical" menu inbetween "Options" and "Extensions".

Recommended Free Mastering-Grade Plugins

First stop: *Reaplugs*, with particular mention of *ReaLimit* which I consider one of the best free transparent limiter available. You could easily mix and master a whole album using only these fine plugins. Others include:

Analysis:

- **ReaVision** (ReaClassical metering suite). Your one-stop shop for loudness and true peak values as well as adjustable K-meter, goniometer (with adjustable visual boost), phase correlation meter, bitmeter, spectrum analyzer and spectrograph.

EQ:

- **RCChannelEQ** (ReaClassical Channel EQ, included in the ReaClassical portable install and available in ReaPack via my [repository](#)). Uses DSP from airwindows *Baxandall* and Stillwell's RBJ Highpass/Lowpass Filters for broad-strokes EQing.

- **RCMasteringEQ** (ReaClassical Mastering EQ, included in the ReaClassical portable install and available in ReaPack via my [repository](#)). Uses DSP from airwindows *Hull2* with added *Range* drop-down (*Classical* or *Full*) for transparent, musical, broad-strokes EQing.

- **ReEQ** https://forum.cockos.com/showthread.php?t=213501. An amazing Fabfilter Pro-Q clone for detailed EQ work. Also comes with ReSpectrum which is an excellent analyzer. Both are included with the ReaClassical install.

Compression:

- **RCCompressor** (ReaClassical compressor, included in the ReaClassical portable install and available in my repository). Uses DSP from Express Bus Compressor by Stillwell. Default settings and ranges tuned to classical music with auto release. Use as an insert.

- **RCParallelK** (ReaClassical parallel *Katz* compressor, included in the ReaClassical portable install and available in my repository). Also uses DSP from Express Bus Compressor by Stillwell to recreate the Bob Katz *transparent* parallel compression settings. There's only a make-up gain slider as everything else is baked in (-50dB threshold, 2.5:1 ratio, 1ms attack, peak detection mode). Use on a dedicated compressor bus and adjust the gain slider to taste (with the compressor signal somewhere between -15dB and -5dB lower than dry signal according to Katz).

Limiter:

- **RCLimiter** (ReaClassical limiter, included in the ReaClassical portable install and available in my repository). Uses DSP from Smooth Limiter by Geraint Luff to which I added 4x oversampling code. Defaults are tuned to classical music with true-peak and look-ahead functionality. Adjust the release to taste.

Reverb:

- **Convolution:** Convology XT (also runs perfectly at time of writing via yabridge on Linux) coupled with the Samplicity Bricasti M7 impulses. There are other free convolution plugins to use but, whatever the plugin choice, the Bricasti impulses in true stereo are fantastic and sound almost identical to the presets of the well-regarded Liquidsonics Seventh Heaven Professional.

- **Algorithmic:** For a free and open source option try my RCReverb (ReaClassical Hall reverb, included in the ReaClassical portable install as part of RCPlugs collection). For paid options, ValhallaDSP Room and Vintage Verb, Fabfilter Pro-R, Voxengo Sobor, Acon Digital Verberate 2 and Sonible smart:reverb are all excellent non-iLok options for classical music and work seamlessly via yabridge on Linux. Note that the Liquidsonics offerings no longer require a physical iLok so can also be used on Linux via yabridge and iLok Cloud activation if you are feeling brave.

Final mastering magic:

- *Sonnox Inflator*-**style wave-shaping:** Try **RCInflator Ultimate** (a clone of the Sonnox product) or **MagicFairyDust** on the final stereo bus. Both effects are included in the ReaClassical portable install.

- Or, for an easy complete console vibe, use the **RCConsoleChannel**, **RCConsoleBus**, and **RCConsoleFinalizer** at the end of regular tracks, busses and final 2-bus respectively. Note that RCConsoleChannel does not have any controls.

Restoration:

- **Bertom Denoiser Classic** https://www.bertomaudio.com/. **Denoiser Pro** ($25) allows for individual per-band thresholds and includes an adaptive mode.

- **RCDeEss Standard** (ReaClassical de-esser, included in the ReaClassical portable install and available in my repository). Uses DSP from airwindows DeEss.

- **RCDeEss Advanced** (ReaClassical advanced de-esser, included in the ReaClassical portable install and available in my repository). Uses DSP from airwindows DeBess.

Utilities:

- **RCGain** (ReaClassical gain plugin, included in the ReaClassical portable install and available in my repository). Uses DSP from airwindows PurestGain. Useful before or after plugins in lieu of a native channel trim knob.

- **JS Loudness Meter Peak/RMS/LUFS** (Cockos) (included with REAPER).

- **RCTime&PhaseTool** (ReaClassical timing and phase tool, included in the ReaClassical portable install and available in my repository). Add to a spot microphone channel. Achieves something similar to Merging's PanNoir to correctly align spot microphone channels with the main pair based on a fundamental Euclidean geometric relation to create a more impactful stereo image.

- **RCMidSide** (ReaClassical mid-side encoder-decoder, included in the ReaClassical portable install and available in my repository). Use the default decoder mode if wanting to convert recorded mid-side to regular left-right stereo.

- **RCDither** (ReaClassical dither plugin, included in the ReaClassical portable install and available in my repository). Uses DSP from airwindows Not-Just-Another-Dither (Monitoring version) here called *Avant-garde*. This just might be the world's finest dither. There's a drop-down to select between 16-bit and 24-bit.

For descriptions of the other 100+ jsfx airwindows ports (covering dithers, compressors, console emulations, saturation/distortion, delays, bass-specific, brightness, hard and soft clippers, reverbs, tape/vinyl emulations, exciters, stereo wideners, monitoring utilities and more, please see the dedicated REAPER forums thread and import the airwindows JSFX ports repository into ReaPack.

Room Tone Generation

In **File › Project Templates** you will find a room tone generation template. The method is derived from here.

To create endless room tone based on the venue you recorded:

1. click **[Browse]** in ReaVerb and select your few seconds of recorded reverb.
2. Enable the FX on the first mixer track
3. Adjust the length of the included region to the length of your live album
4. Render using **Bounds › All project regions**

Then drop the resulting file into your ReaClassical album project on a dedicated Room Tone track (create via `#`) and run Create CD Markers via `Y`. You will see that automation-based fades are added to coincide with opposite fade types on the first track thereby creating perfect crossfades into room tone and back without any fuss.

System Tweaks

Windows

For a modern Windows 10/11 setup, required tweaks are minimal. Ensure that you are using 'High Performance' or ideally 'Ultimate Performance'. which, if not available, can be activated by opening a command prompt and pasting:

```
powercfg -duplicatescheme e9a42b02-d5df-448d-aa00-03f14749eb61
```

You can then select it from the usual power plan dialog. For best device performance, remember to use the ASIO drivers that were included with your audio interface. Consider disabling your network card during mission-critical recording. For further tips see Microsoft's Unofficial Windows 10 and 11 Audio Workstation build and tweak guide. Of particular interest is Part 3 which discusses what *not* to do (including not setting your processor scheduling to 'background services').

MacOS

Performance should be excellent out of the box. Remember to disable energy saving (**System Preferences › Energy Saver**) so that sessions are not interrupted. Consider disabling your network card during mission-critical recording. If you are experiencing any audio issues while in your DAW, for tips see Focusrite's optimization page.

GNU/Linux

Linux users should visit my Arch Pro Audio Guide. Performance out of the box on Linux is getting better with every kernel release and is on par or better than Windows. As a starting point, ensure that your username is set up for realtime privileges (step 3) and that you set several kernel parameters to ensure you are running the performance governor, threadirqs and dynamic preempt (step 4). To make things even easier, consider using a dedicated audio/video distro like AVLinux or Ubuntu Studio where everything is already set up for you.

Cross-platform

The good news is that REAPER and ReaClassical run on nine different architectures. You should always be able to open up a project on another machine even if it is running a different OS. Plus, ReaClassical includes various mastering-grade plugins in JSFX format that run on all architectures.