

RESPIRO

Physical Modeling Wind Synthesizer

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Inspired by Pedro Eustache

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INTRODUCTION

Thanks & congratulations for your purchase of Respiro!

Respiro is a monophonic virtual instrument that uses advanced physical-modeling, wavetable synthesis, and signal-processing to produce the sound and behavior of a diverse collection of instruments from around the world including woodwinds, brass, and many other types.

Respiro is compatible with Mac and Windows, and includes a standalone app, as well as 64-bit AU and VST3i plugins.

Respiro allows musicians, composers and producers to explore a wide array of new and expressive sonic timbres. The sounds can range from traditional to wildly experimental. Though Respiro is not designed to replicate any specific acoustic instruments, it provides a massive variety of richly dynamic timbres that sound and behave like real physical instruments.

Imoxplus developers have spent countless hours crafting and fine-tuning all of the included instruments. Each instrument has been adjusted note-by-note to sound natural and to respond musically, evolving smoothly across a wide range of pitches and dynamics.

Respiro uses complex processing that includes: tonguing detection, reed excitation, ramp-up during excitation, breath-pressure resistance, bell-junction resonance, energy damping, evolution across octaves, pitch-fluctuation, note-transitions, dynamic timbre-shifting, realistic breath & pipe noise evolution, screaming, growling, and chaos.

A powerful macro system gives you direct control over all the essential qualities of the sound. Effects include convolution reverb, dynamic compression, vibrato and tremolo which are fully integrated. You can further enhance each instrument's responsiveness with Respiro's extensive modulation matrix. Freely map MIDI control sources to sound parameters with customizable curves for a richly expressive playing experience.

Most instruments come with a set of variants (alternative versions) so you can choose different flavors of each instrument. You can adjust many aspects of the sound, assign your own realtime controls, and save your own variants.

A note-queueing system allows you to combine multiple instances to play polyphonically.

Imoxplus continues to refine and expand the core capabilities of the physical model and add new instruments through free updates. These instruments have been rigorously tested by experienced artists and produce marvelous playing results with popular wind-controllers, continuous expression controllers, and standard MIDI keyboards.

This manual will guide you through all the steps to configure, understand and enjoy all the powerful sonic and expressive capabilities that Respiro has to offer.

SYSTEM REQUIREMENTS

Mac OS 10.9 or higher

Windows 10 x64, includes ASIO support

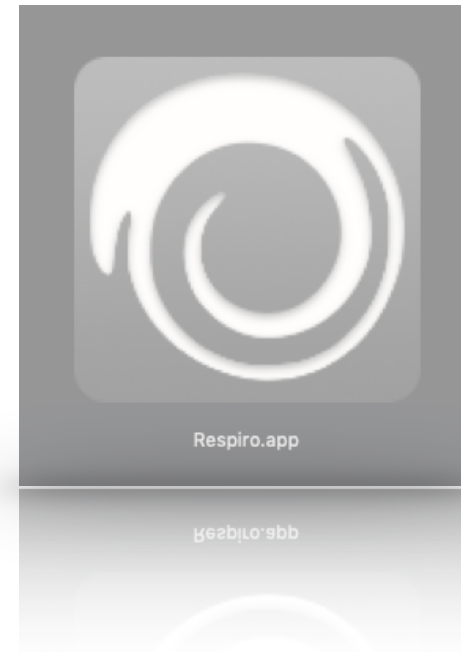
The Respiro product includes the standalone app, and both the 64-bit AU (Audio Unit) and the VST3i plugin for use in any host or DAW (digital audio workstation) that supports either plugin format.

Respiro runs many complex processes under-the-hood, but is designed be as CPU-friendly as possible. Obviously, multiple instances of Respiro on different tracks will require more CPU. CPU demands can be decreased by disabling the reverb and/or switching the output to mono mode.

RECOMMENDED DAWS/HOSTS

- Logic Pro
- MainStage
- Ableton Live 10
- MOTU Digital Performer
- Bitwig (provides extensive MPE support!)
- Reaper
- Cubase 10
- NI Maschine
- AU Lab

IMPORTANT: If your specific DAW or host is not listed, contact support@imoxplus.com with information about your configuration.



MIDI CONTROLLER OPTIONS

Respiro supports the use of MIDI wind controllers, continuous expression controllers (like Roli Seaboard, or Roger Linn's Linnstrument) and MIDI keyboards. Respiro also supports breath controllers (like TEControl and others). Breath Pressure Input settings allow you to choose a mode that matches your controller. Respiro can respond to several combinations of Notes, MIDI Continuous Controls (CC), velocity, and/or aftertouch to provide realtime control of the instruments. Typically, breath pressure is transmitted via MIDI CC02 (Breath Control) or MIDI CC11 (Expression), but other MIDI CC's can be assigned. High-resolution MIDI CC is also supported. Respiro applies a responsive smoothing algorithm to all MIDI control to ensure glitch-free natural sound.

(See Pressure Input Settings.)

IMPORTANT NOTE: MIDI Channel Aftertouch, or Polyphonic Aftertouch are commonly referred to as "Pressure". However, in this manual and in Respiro, the term PRESSURE refers to virtual "air flow" within the physically-modeled instrument and the MIDI input assigned to control it. We will always refer to MIDI "Aftertouch" rather than "pressure" in this manual to avoid confusion.

WIND CONTROLLERS

Respiro is fully compatible with the following wind controllers:

Aodyo Sylphyo

Akai EWI

Berglund NuEVI

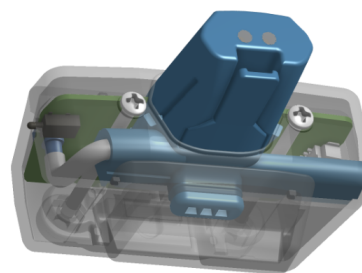
Emeo digital saxophone (Lite version of Respiro included)

Roland AE

Warbl

Yamaha WX

*Photon



Wind-controllers typically send note on/off, along with breath and pitch-bend data, which works well. Respiro incorporates a smoothing algorithm to remove jagged steps in the modulation from some older wind controllers.

(See Pressure Input Settings.)

NOTE: The Aodyo Sylphyo works very well with Respiro. It's adjustable, precise, and has very low latency. Its various sensors can be mapped to multiple Respiro parameters.

* Photon is a high-resolution multi-dimensional breath control device that is currently in development.

CONTINUOUS EXPRESSION CONTROLLERS

Respiro supports MIDI processing for continuous expression controllers such as ROLI Seaboard and Roger Linn's Linnstrument. To use MPE, choose the pressure input mode CE. Respiro will automatically set MPE Aftertouch as the CC, by default (which is at the bottom of the CC list), but you can choose a different CC in this mode. ([See the Pressure Input Modes section, below.](#))

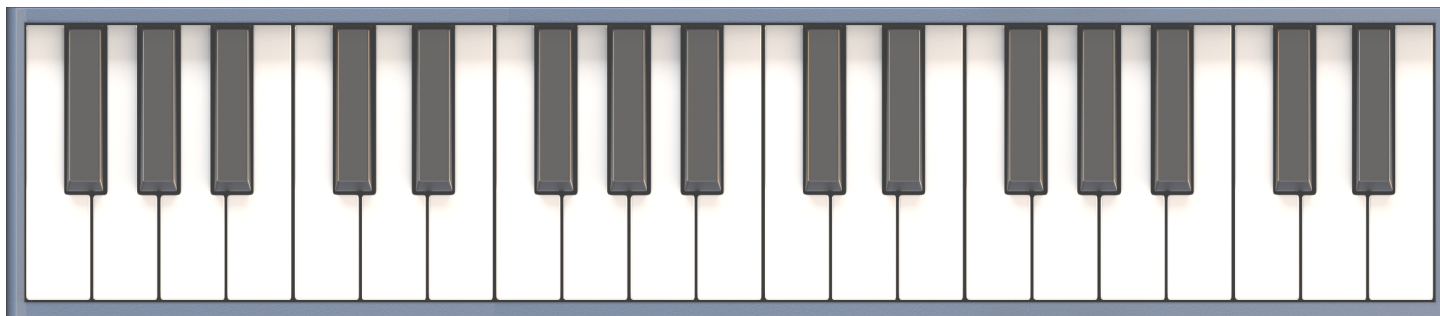
NOTE: A wide bend range may cause some Respiro instruments to sound unstable due to constraints within the physical model.

STANDARD MIDI KEYBOARDS

Respiro supports any standard MIDI keyboard controller and can control virtual pressure with MIDI velocity alone. However, to realize the full expressive potential of Respiro, a continuous control source is recommended. MIDI Breath Control (CC02), Expression (CC11), Mod Wheel (CC1), aftertouch, or any control that transmits a MIDI CC can be assigned to control the breath pressure. An actual breath controller (like the TEControl BBC2) can provide an even more realistic experience. The Photon (currently in development), is an advanced, hands-free controller/mouthpiece that allows for multi-dimensional, high-resolution control of Respiro while playing a keyboard or wind controller! Another option is the Expressive E Touché which provides several methods of realtime control.

NOTES: Some MIDI CC numbers in Respiro are reserved for specific functions.

Respiro can receive note input from one MIDI device and pressure input from a separate MIDI device. To do this, you can set up multiple MIDI input devices in the Audio & MIDI Settings window.



INSTALLATION & REGISTRATION

Double-click the installer. Follow the on-screen prompts.

The installer places the standalone app and plugins to following folders:

Mac OS

Macintosh HD/Applications/Respiro.app

Macintosh HD/Library/Audio/Plug-ins/Components/Respiro.component

Macintosh HD/Library/Audio/Plug-ins/VST3/Respiro.VST3

Windows

C:\Program Files\Imoxplus\Respiro (app)

C:\Program Files\Common Files\VST3

The Windows installer includes an unofficial VST2 version (Respiro.DLL) which if needed can be placed in the VSTPLUGIN folder.

IMPORTANT:

If Mac OS prevents installation, go to **System Preferences, Security & Privacy, General**. From there, click the lock and enter your admin password, then enable 'Allow apps downloaded from: App Store and identified developers'. Then, rather than double-clicking on the installer, right-click and choose **OPEN...** from the contextual menu. If the installer doesn't appear, it may be open in the background. While holding the COMMAND key, press TAB to move through any open apps to select the installer app, then release the keys.

REGISTRATION

After you purchase, download, and install Respiro, you will still need internet access to authorize the software. The first time you launch the standalone Respiro app, a license activation screen will appear. Enter the same email and password that you created during the registration on the Imoxplus website, this activates the software for this computer. You, the original purchaser, may install Respiro on multiple machines, as long as you alone are using the software.

If you experience registration difficulties, try temporarily disabling your firewall or antivirus during registration. For any installation issues or for off-line registration, email support@imoxplus.net

INITIAL SETUP – STANDALONE APPLICATION

1. Locate the Respiro app, double-click the icon to launch the app.
2. Click the cog icon along the left side to access **Audio & MIDI settings**.
At the top of the settings pane, choose an audio OUTPUT device.
If your audio interface has multiple outputs, another list may appear below allowing you to check a box to select a specific output pair.

The **Sample Rate** can be left at 44100 or changed as needed.

The **Audio Buffer** size affects how quickly Respiro responds but also impacts how much processing power is needed.

If you have a fairly fast computer, and need fast response you can set this fairly low, at 128 samples or perhaps lower.

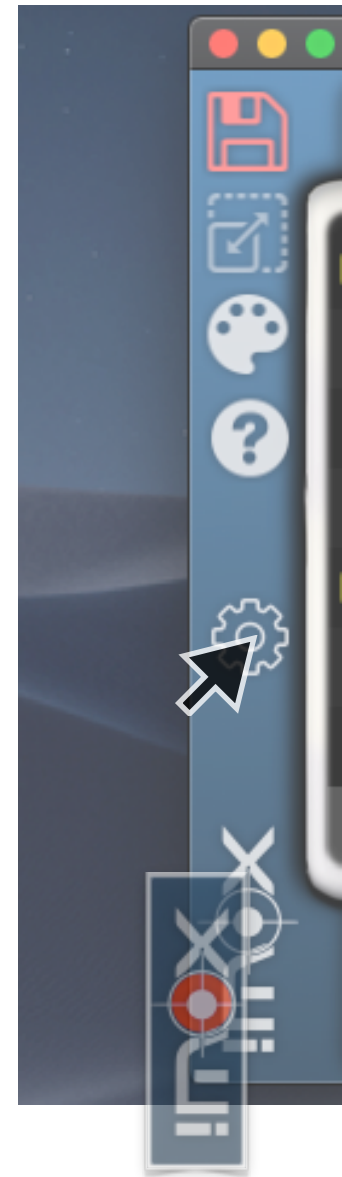
If you notice clicks or glitches in the audio, or if you have other demanding processes going on, choose a higher buffer value. If you notice too much latency (lag time in playing) try lowering the buffer value.

Select the **MIDI inputs** by checking a box next to one or more keyboards/devices/ports in the list.

If you have a Breath Controller via a separate USB device, make sure it is also checked in the list.

Close the Audio & MIDI Settings window. Now test the MIDI controller.

The "O" in the logo on the lower left edge is a MIDI activity indicator, it flashes red.



3. Below the BREATH SENSITIVITY display is the PRESSURE INPUT section, which has three settings: MODE, CH (MIDI channel), and CC (Continuous Control) which define how Respiro responds to your MIDI controller. First choose a MODE:

BC uses any MIDI CC (CC 2 by default)

VC velocity sets initial pressure of note, (can be scaled by a CC)

AT1 aftertouch controls pressure

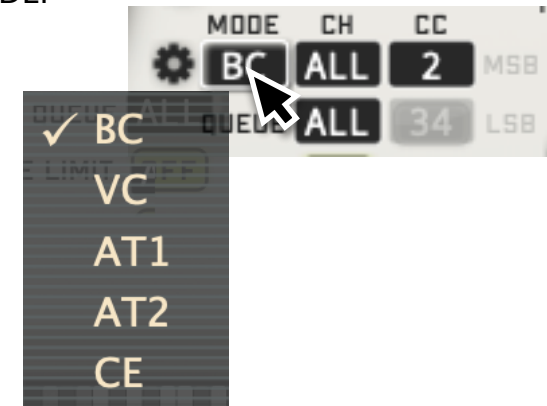
AT2 uses a combination of aftertouch and velocity to control pressure.

CE for continuous expression controllers,

can use any CC (defaults to MPE aftertouch)

The MIDI CH can be set to respond to **ALL** channels. However, if you are controlling multiple software or hardware instruments, you can set the CH to an individual MIDI channel from 1–16.

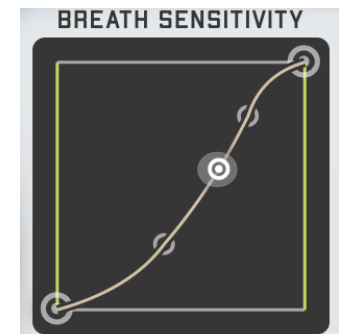
For BC, VC and CE mode, you may select a CC (continuous controller) from the list.



4. Play a note, and work the controller. Check the Breath Sensitivity to see movement of the dot along the line when playing a note and moving your assigned MIDI control.

IMPORTANT: You must be playing a note for pressure input to register on the display.

5. Choose selections from the instrument/variant list and explore the included sound library. Try changing the MACRO sliders in the MACRO wheel and listen to the sonic changes.



INITIAL SETUP – DAW PLUGIN

1. Load Respiro into your DAW/host and follow your DAW's method for creating an instance of a virtual instrument, routing MIDI and audio, and editing virtual instruments.

2. Open the Respiro plugin editor within your DAW and play your midi-controller to confirm that MIDI is being received.

The "O" in the logo on the lower left edge is a MIDI activity indicator, it flashes red.

3. Below the BREATH SENSITIVITY display is the PRESSURE INPUT section, which has three settings: MODE, CH (MIDI channel), and CC (Continuous Control) which define how Respiro responds to your MIDI controller. First choose a MODE:

BC uses any MIDI CC (CC 2 by default)

VC velocity sets initial pressure of note, (can be scaled by a CC)

AT1 aftertouch controls pressure

AT2 uses a combination of aftertouch and velocity to control pressure.

CE for continuous expression controllers,
can use any CC (defaults to MPE aftertouch)

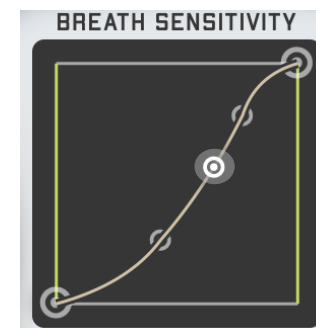
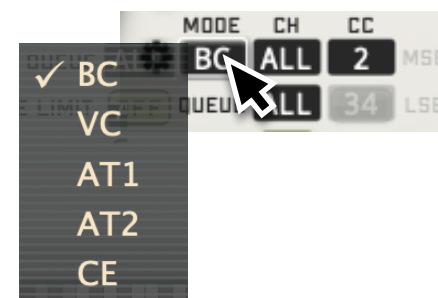
The MIDI CH can be set to respond to **ALL** channels/tracks.

You can set the CH to an individual MIDI channel from 1–16 as needed.

For BC, VC and CE mode, you may select a CC from the list.

See sections on [MULTIPLE INSTANCES](#) and [QUEUE](#) for polyphonic options.

4. Play a note, and work the controller. Check the Breath Sensitivity to see movement of the dot along the line when playing a note and moving your assigned MIDI control.



IMPORTANT: You must be playing a note for pressure input to register on the display.

5. Choose selections from the instrument/variant list and explore the included sound library.
Try changing the MACRO sliders in the wheel and listen to the sonic changes.
6. The state of all performance parameters from the DAW session is stored and recalled as part of the DAW project. To re-use these settings an other project or in the standalone app, save your settings as a variant while you are in the DAW project.
7. Respiro publishes parameters for automation within the DAW. (See DAW AUTOMATION next.)

DAW AUTOMATION

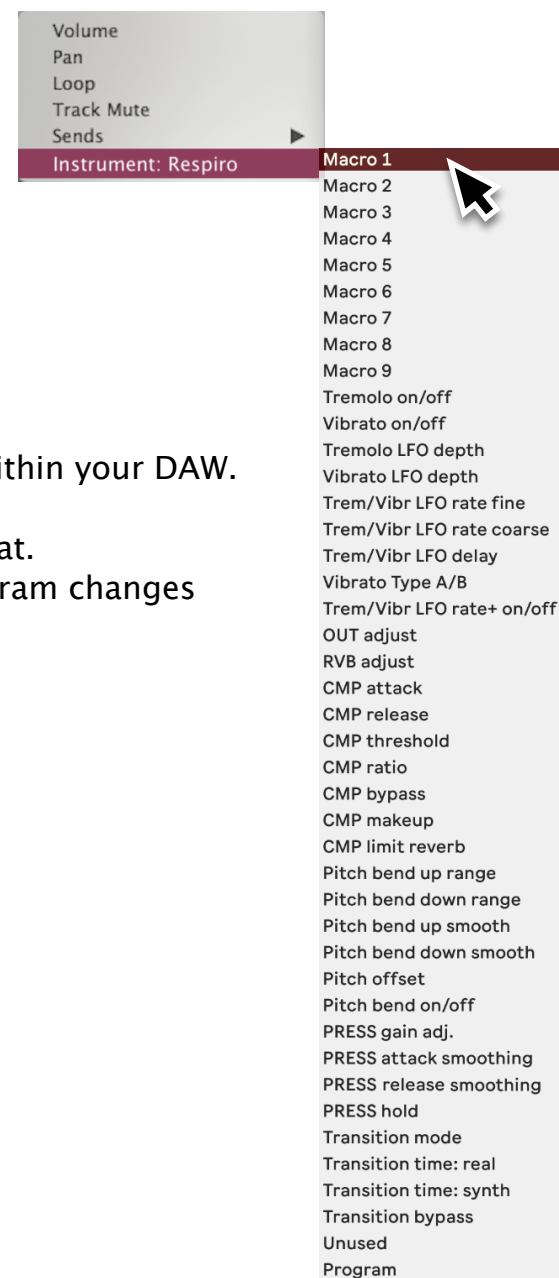
You can automate settings in Respiro in two ways.

The Respiro plugin publishes a full list of MACRO and STANDARD parameters that can be automated directly through the automation features of the DAW and the plugin format (VST3i, or AU).

Alternatively, you can control Respiro with MIDI CC's that you have assigned to control parameters within Respiro's modulation matrix. This allows you to record & edit CC's in the source MIDI track, or send CC data from a MIDI generating plugin.

The AU plugin responds directly to MIDI program changes from a MIDI track within your DAW.

However, Steinberg removed program change capability from their VST3i format. Respiro has added a special **Program** automation lane in order to receive program changes via automation (values 1–128).



PRESSURE INPUT SETTINGS

MODE: **BC** = **Breath-Control** (works for any controller)

Choose any MIDI CC to control model pressure, (defaults to MIDI CC 2)

VC = **Velocity Control** (for MIDI keyboards)

Note velocity sets the initial model pressure value for each note.

The chosen CC can be assigned to scale the values generated by velocity.

AT1 = **Aftertouch** (for MIDI devices that transmit aftertouch)

Aftertouch alone controls the model's pressure. Velocity is ignored.

AT2 = **Aftertouch** + **Velocity** (for MIDI devices that transmit aftertouch and velocity)

Velocity sets the initial value, and aftertouch provides continuous control during each note's sustain.

CE = **Continuous Expression** (for continuous expression controllers with MPE)

CC defaults to MPE Aftertouch, but the CC can be changed.

Respiro uses a special MPE engine to respond correctly to complex MPE data streams.

Choosing CE mode automatically sets the pitch-bend range to +/- 24 ST by default.

You can override these settings as needed.



The source MIDI Channel (**CH**), and MIDI continuous control (**CC**) for the PRESSURE INPUT should be set to match those of your controller.

If your controller supports high-resolution (14-bit) control for pressure, Respiro can respond to this data while in BC mode. This allows a higher degree of control, especially when playing very soft (low pressure values). From the CC menu, choose a MIDI CC from 1-31, then click the LSB number below it to activate high-res mode. The combined values from MSB (Most Significant Byte) and LSB (Least Significant Byte) provide the full 14-bit resolution. The LSB CC number is always 32 higher than the MSB CC number (for example MSB CC 2 and LSB CC 34). This behavior is fixed to ensure consistency with MIDI standards.



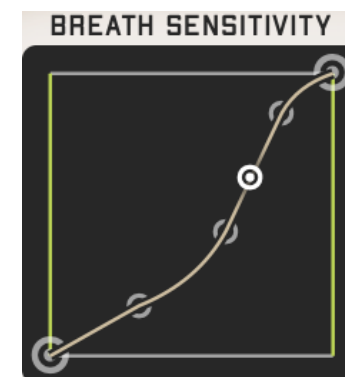
BREATH SENSITIVITY

Wind instruments have incredible expressive power. In order to harness that power with wind and breath controllers, it is essential to calibrate the dynamic response of the controller itself (with its own settings, if available) and then to fine tune the sensitivity response within Respiro. A carefully calibrated response curve can have a similar effect to selecting the right reed, or even playing a more expensive instrument. This will take some experimentation, but it is well worth your time to fine-tune these settings to further enhance your playing experience.

If your wind or breath controller has internal settings or a configuration tool, this is a good place to start for setting up the dynamic range (low and high limits) of the device, as well as a basic response curve. Work with the settings to establish a range and curve that matches your desired response. This will ensure that Respiro will receive optimum input from your actual breath pressure.

If your wind or breath controller does not have settings options, Respiro can be adjusted to adapt to the controller.

The BREATH SENSITIVITY graph is shown in Respiro's main window, just above the MODE, CH, and CC settings. This graph is where you can view and adjust the pressure response curve. This is the very important stage that establishes the relationship between your playing and Respiro's instruments. Start by playing your controller (sending both notes and the necessary control data) and watching the activity dot move along the response line. Play a wide range of dynamic levels as you would play in a musical context. Horizontal movement of the dot (on the X-axis) shows the raw values that are being received from your controller. The dot's vertical movement (on the Y-axis) shows the pressure value that Respiro will use to control the sound. As you are playing gradually from very soft to very loud, you are striving for a smooth vertical movement of the dot.



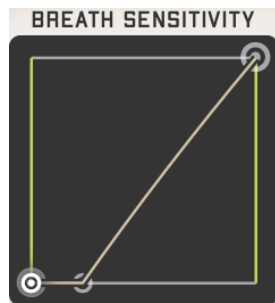
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The node on the lower left can be dragged upward to set the pressure that Respiro will produce when your source is at its lowest point. Setting this left node above zero is not recommended for general playing but may be useful for specific experimental purposes.

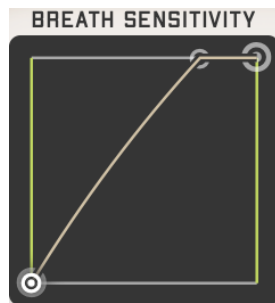
Dragging upper right node downward along the right edge will set the PRESSURE value when your controller is at its highest point. This can be an effective way to set an upper limit and reduce the dynamic aggressiveness of a sound.

The response line itself can be curved by dragging it upward or downward. Add breakpoints by right-clicking on the line. You can also drag the line between breakpoints to curve each segment.

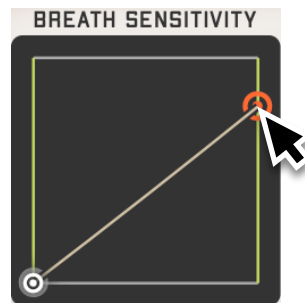
Here are some examples:



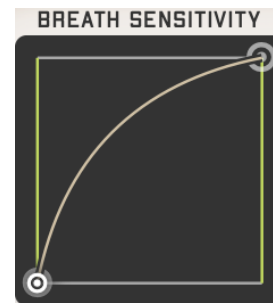
Source can't produce very lowest values



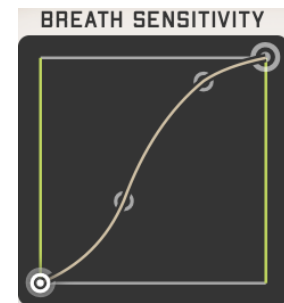
Source can't produce very highest values



To limit pressure below maximum



More aggressive pressure response



Less effort for higher pressures

NOTE:

You can create a different SENSITIVITY curve for any of Respiro's instruments/variants then save your own version.

ADDITIONAL PRESSURE SETTINGS (COG)

Internal Gain

This setting allows you to boost the control value being sent to the Pressure Input. This allows you to compensate for a low output from a breath controller, or to make an instrument respond to lower levels. This works similarly to dragging the dot on the left side of the Breath Sensitivity curve upward. Aggressive settings can cause abrupt attacks and releases with some instruments.

Attack

This setting causes the sound to ramp more slowly from silence. It affects the first note of a phrase, but subsequent legato notes are not affected– as a wind instrument would behave. If a sound responds to abruptly to hard tonguing (causing a clicking sound), you can adjust this setting to smooth out the sound. Also, if the response of your controller is jittery and difficult to stabilize, this setting smooths out the response.

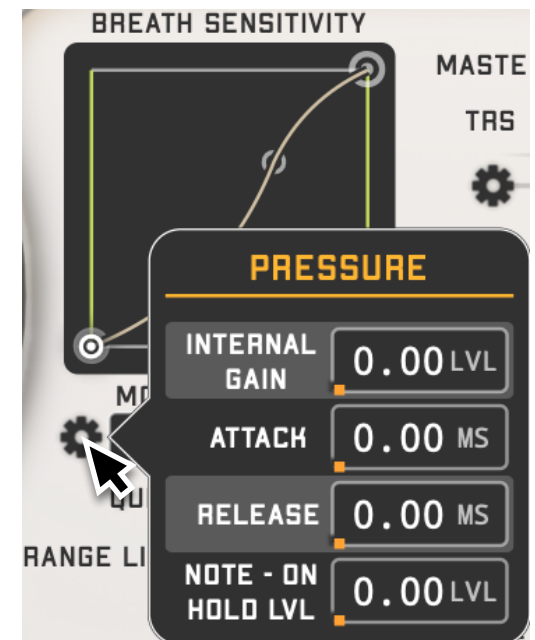
Release

This setting lengthens the time a note takes to fade to silence after the pressure input drops to zero (or note is released). As an instance of Respiro is monophonic, longer releases will only affect the final note of a legato phrase. This allows for a gentle release for long slow passages.

Note-On Hold Level

When this is turned up from zero, it allows the note to continue to sustain even after the key and pressure are released. This will allow notes to continue to sound even if you have paused to inhale, or if you lift your finger from your keyboard. This is in some ways like a sustain pedal, but with control over the volume of the held part of the note. This parameter can be controlled in realtime.

NOTE: This behavior can be mistaken for a “stuck note”, so be aware of this if you save a variant with this value set to a non-zero level.



MULTIPLE INSTANCES / ENSEMBLE POLYPHONY

An "instance" is running the standalone version of Respiro once, or a single Respiro plugin running on one channel or VI slot. You can run multiple instances of Respiro either in standalone mode or as a plugin. Each instance can run independently with a different MIDI device, or on different MIDI channels.

Respiro can be played polyphonically by using a combination of multiple instances along with the QUEUE function. You can play with standard polyphony by using the same variant per voice/instance, or you can play with "ensemble polyphony" by using different variants/instruments per voice/instance. The number of instances is limited by your computer's CPU. (See QUEUE function below.)

Windows allows multiple standalone instances to be launched in the normal way. However, Windows doesn't allow you share a MIDI device across multiple instances. You must either choose a separate MIDI device for each instance, or create virtual ports. There are tools to accomplish this. One such tool is LoopBe30:

<https://www.nerds.de/en/loopbe30.html>

For the Mac OS, open the first standalone instance in the normal way.

To open additional instances, use the following steps:

- 1 – To locate Mac's Terminal application, open Spotlight search, type terminal.app and press return
- 2 – the terminal application window will open
- 3 – in the terminal window type or paste the following (include the quotation marks):

`open -n -a "respiro.app"`

A screenshot of a terminal window with a dark background. The text 'open -n -a "respiro.app"' is visible in a light-colored font, followed by a cursor icon.

- 4 – Then press return
- 5 – You will now see a new Respiro standalone instance
- 6 – to open another instance, repeat the command by pressing the up arrow key and then press return

TIPS: Use Background Color to give each instance of Respiro a unique color to help keep track of complex setups. Adjusting the breath sensitivity differently for each Respiro instance allows each to have a unique, evolution of timbre and dynamics, more like individual players.

QUEUE / ENSEMBLE POLYPHONY / MPE

By default, Respiro is configured to respond monophonically, and the QUEUE is set to ALL. With this setting, Respiro plays single notes in the order they are received.



Multiple instances of Respiro can be played polyphonically by using the QUEUE setting. Respiro ranks and parses incoming simultaneous/overlapped notes so that each instance responds to notes with a specific QUEUE number.



For example, the first Respiro instance is set to play notes that are number 1 in the QUEUE, and the second instance is set to play any 2nd notes in the QUEUE. A long note is played by the first instance, and when a second note is played during the first note's sustain, that 2nd note is played by the second instance. In theory, you could configure up to 16 instances and voices of Respiro, each responsible for one note/number in the QUEUE. In reality, your computer's CPU will limit the available number of active instances ([see RVB tip](#)). With each instance set to the same variant, the result is standard polyphony. If the instances are set to different instruments or variants, you can create a virtual ensemble of different timbres and play this ensemble polyphonically in realtime (i.e., “Ensemble Polyphony”).

With multiple instances of Respiro set to receive on several different MIDI channels, you can play each instance monophonically as you would a multi-timbral synth. However, if you combine the unique MIDI CH settings, along with QUEUE settings, you can set up more than one “virtual ensemble”. Respiro will track the QUEUE rankings of each MIDI channel separately.

Even though Respiro is a monophonic instrument, it contains a powerful custom MPE engine that responds well to MPE data. So when you have multiple instances of Respiro in the standard polyphony, or the “ensemble polyphony” scenarios, and you are sending MPE data, Respiro will send MPE to the correct notes, and provide smooth transitioning of control between the active notes.

NOTE: The QUEUE system works by rules, and will track notes intelligently. Be aware that as you play, it may require special planning and playing technique for you to control which notes are sent to each specific instance of Respiro.

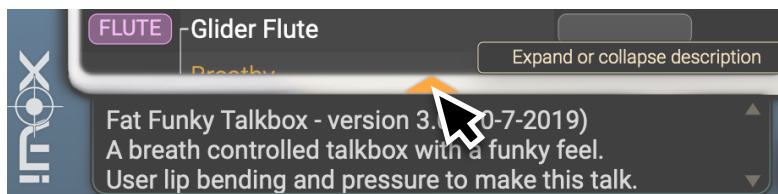
TIP: Use the [Note-On Hold Lvl](#) setting to start a single-note drone on an instance of Respiro on one MIDI CH, then, play melodies by sending notes on a different MIDI channel to another instance, that is set to the matching CH.

BROWSING INSTRUMENTS/VARIANTS

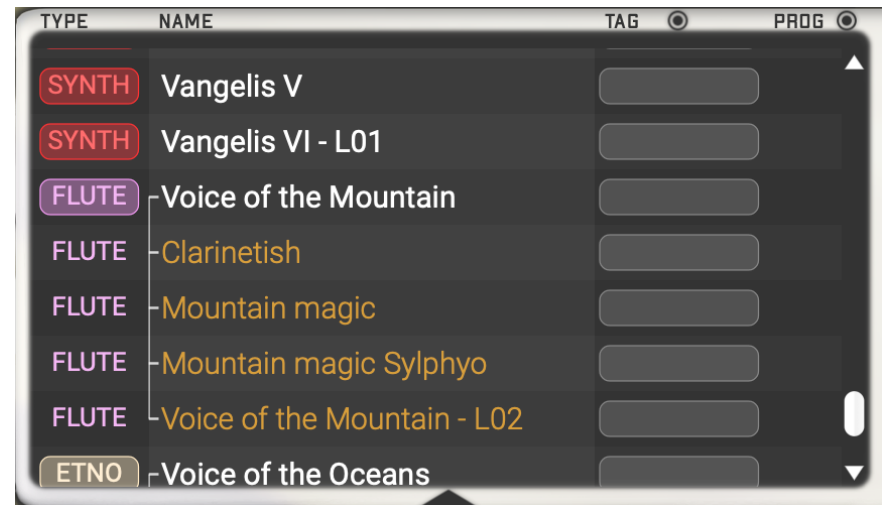
Respiro contains a large number of finely-tuned, and poetically named factory instruments that are built into the application memory for fast loading. Each instrument contains hundreds of internal physical modeling parameters which are carefully calibrated for optimal playing. Many instruments include additional variants.

As you audition each instrument, adjust the Macro sliders on the wheel to get acquainted with the personality of each instrument.

Below the instrument/variant list is a short description of the currently selected item. This text describes the parent instrument and cannot be edited. A disclose arrow opens a larger view of the description notes.



Instruments with L01, L02.. etc. at the end of the name include wavetable synthesis. L01 refers to wavetable "Library 1".



INSTRUMENT TYPE

On the left side of the instrument/variant list is the TYPE column. This shows the classification of each variant.

Because the quality of a sound can be subjective, and instruments can possess a blend of qualities, they can be difficult to categorize. You can change the TYPE for the selected item.

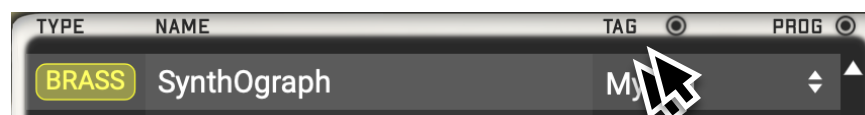
Click on the TYPE to choose from the displayed list.



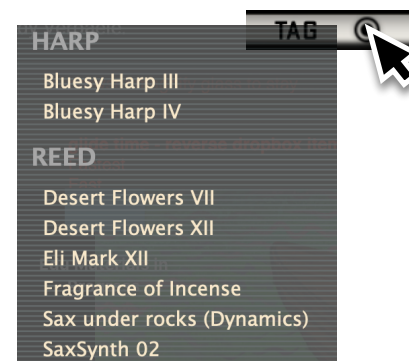
IMPORTANT: You must first select the instrument or variant before you can change the TYPE.

TAG

In addition to assigning a TYPE, you can also add your own custom TAGS to any instruments or variants. This allows you to sort and find sounds more easily. Double-click in the TAG field of the instrument/variant to enter or edit a TAG. You must type the exact same tag for any variants you want grouped together. You can also use copy and paste to enter tags more quickly for multiple instruments/variants. Type CONTROL-T to clear the TAG of the current instrument/variant.



Clicking the dot next to the TAG heading shows a list sorted by tags.

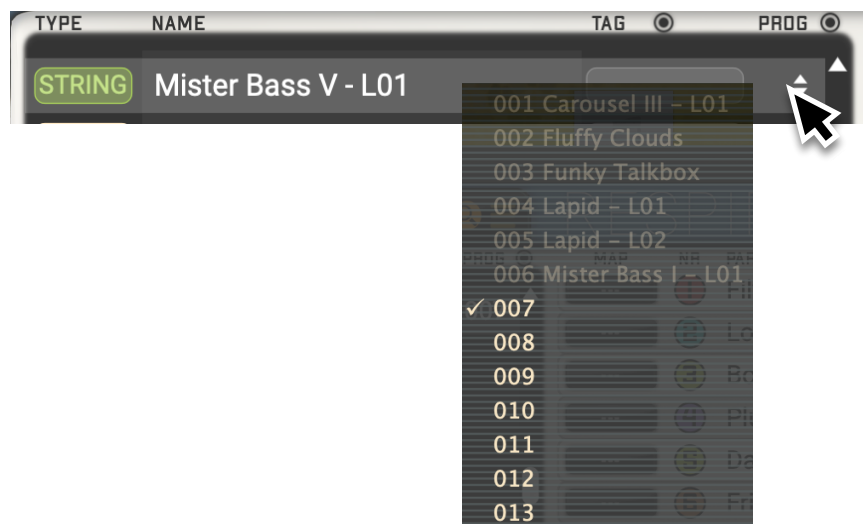


NOTE: You can only assign one TAG to each instrument or variant. Though TAG headings are shown in all caps, TAG names and sorting are case-sensitive.

PROG (MIDI PROGRAM CHANGE)

If you wish to load or switch instruments/variants from your MIDI controller, you can assign a MIDI Program Change (PROG) number, 1–128 to any instruments or variants. This also allows you to sort and view assigned instruments and variants in PROG order.

To assign PROG numbers, Click on the PROG field next to the currently selected instrument/variant. This brings up the list of PROG numbers and shows occupied slots. You must choose an available slot.



To remove an instrument/variant PROG assignment, first load that instrument, then type CONTROL-P. Or you can click on the existing PROG number and choose "--" from the bottom of the list.

Clicking on the button next to PROG column header will display a list showing current assignments in PROG order. You can choose an instrument or variant to load from this list.



Once you have assigned PROG numbers to your variants, you can send MIDI program changes to the standalone app from your controller. You can also send MIDI program changes to the AU plugin from a track within your DAW. For VST3i, Steinberg removed direct Program Change support. However, Respiro has provided a “program” automation lane to receive program changes via automation (values 1–128).

IMPORTANT:

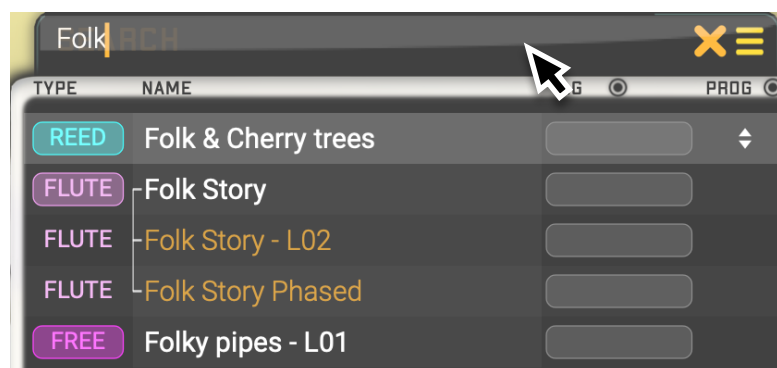
You must first select instrument/variant before you can assign/change the PROG number. You cannot choose an occupied PROG number. You must first remove the PROG assignment from the other instrument/variant by typing CONTROL-P or choosing "--" from the bottom of the list.

SEARCH

To search, you can type CONTROL-F, or simply click on the current variant name and begin typing your search text. Press return or enter, and the list will show only instruments/variants that contain that string of text.

Click the X clear the search and view the current item.

NOTE: The search is not case-sensitive.



USER

Next to the X icon is the USER list icon.



Click on this to show the sorting options.

If you have assigned either TAGS or a PROG numbers to an item, it will be added to the USER list. These can be sorted/grouped for quicker access.

ALL - instrument

shows all items in alphabetical order

ALL - type

shows all items in sorted by type

USER - tag

shows USER items in TAG order

USER - prog

shows USER items PROG order

USER - type

shows USER items sorted by TYPE

If you have assigned a TAG to an item, but did not assign a PROG number, the item will appear in the user list as having an empty PROG. Likewise, if you have assigned a PROG number to an item, but did not assign a TAG number, the item will appear in the user list as having an empty PROG. Thus, when you choose to sort by USER-tag, you will see “empty” PROGS first in the list; and if you sort by USER-prog, you will see “empty” TAGS first in the user list.

NOTE: The TYPES in Respiro are not alphabetized.

SAVE USER VARIANTS

On the left edge is a floppy disk icon. Click this to save your current settings as a VARIANT. Type your VARIANT name and click the other floppy disk icon to the right of the new name to save, or click X to cancel without saving.

Each variant is tied to an instrument, and will appear as a sub-entry under the original instrument. A small orange dot will appear next to all your user variants. Save as many variants as you want.

It is helpful to name your variants in such a way that you can easily relate them back to the parent instrument.

When you save your first variant, Respiro creates a folder which is located here:

Mac OS: MacintoshHD/users/[name]/documents/Imoxplus/Respiro/Variants/

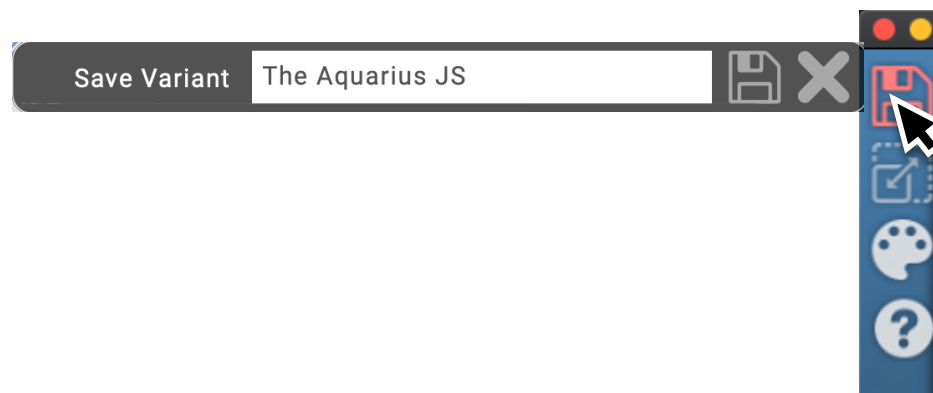
Windows: C:\Users\[username]\Documents\Imoxplus\Respiro\Variants\

You can remove and rename variant files located in the folder.

However, **NEVER** do this while you are running Respiro.

You can share variants with other Respiro users by accessing this folder.

IMPORTANT: You can't duplicate variants from inside that folder, but you CAN save multiple copies of variants from within Respiro.



RESIZE, COLOR, SETTINGS, HELP, LOGO

RESIZE

Below the save button is the resize button. Choose a size to accommodate your screen size, resolution, and vision needs. 75%, 100%, 125%, 150%, 175%, 200%

NOTE: Larger GUI sizes increase demands on CPU.

BACKGROUND COLOR

Use the palette icon to choose a background color for the main window. If you have multiple instances, you can set a different color for each to help you keep track of a more complex setup.

HELP

The ? icon reveals a list of help options, including: a link to the current manual, a link to the user forum, a link to the Imoxplus YouTube channel, and a link to send email to support.

There is also an option to show/hide tooltips. With tooltips on, you can hover over any control to see its function.

NOTE: The F1 of the computer keyboard also toggles tooltips on/off.

AUDIO MIDI SETTINGS (COG)

With the standalone version, the cog on the left edge opens the Audio & MIDI settings window. Here you can choose your Audio device & channels, set sample rate and buffer size, and choose MIDI devices.

Settings take effect after you close the panel.



IMOXPLUS LOGO (MIDI ACTIVITY/SITE LINK)

The IMOXPLUS logo in the bottom left corner shows MIDI activity by flashing a red “o” in the logo.

Clicking the logo opens the IMOXPLUS website.

MACROS / MACRO WHEEL

Physical modeling synthesis involves a vast number of sensitive interacting processes. Under the hood, if even one value is off, it can make the instrument go silent, or become too unstable. This is perhaps why physical-modeling is more rare than other types of synthesis.

Respiro's sound designers have solved this problem by carefully selecting groups of parameters, and setting and scaling the ranges to provide maximum sonic response, versatility and reliability. These parameter groups are called MACROS.

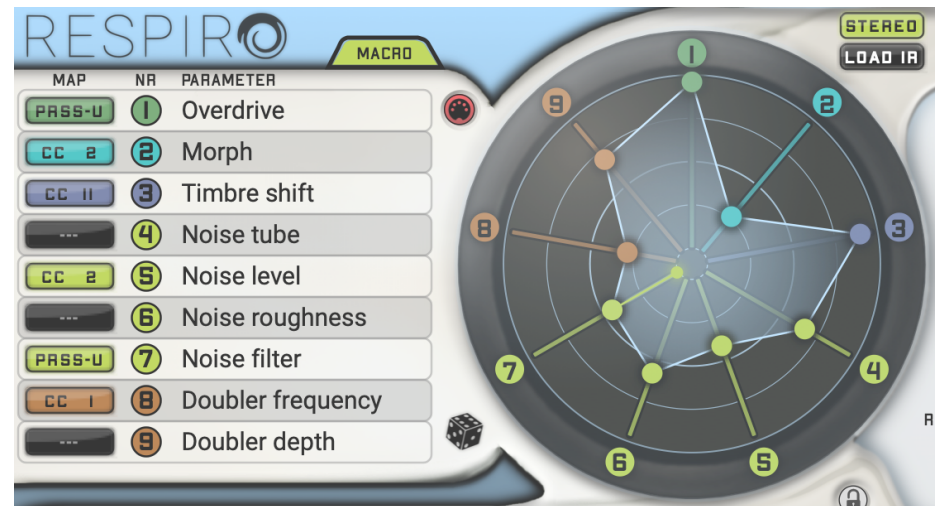
Each Instrument can have up to nine MACROS which allow the player to make subtle or dramatic changes to the sound. They appear on the MACRO WHEEL display, on the MACRO list of the MODULATION MATRIX, and are available for automation of the plugin version in your DAW.

The tab just to the right of the Respiro logo toggles between MACRO view and STANDARD view. Click on the tab (if necessary) to switch to MACRO view and you will see a list of the MACROS and their names for the current instrument.



On the MACRO WHEEL, click and drag the inner dots to adjust the MACRO values. Listen to the resulting changes for each MACRO, you will find that some of these sliders can dramatically change the quality of the instruments across their pitch ranges.

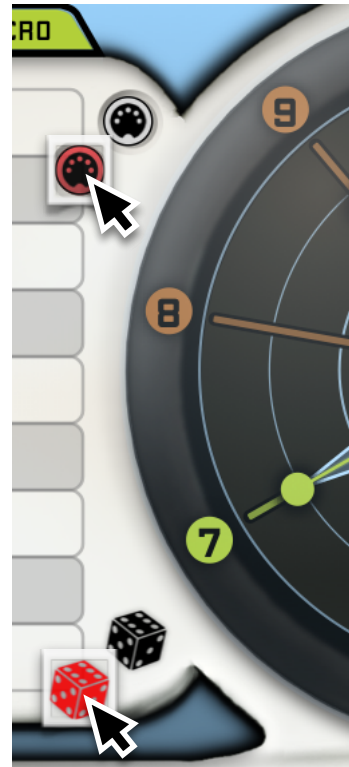
The MODULATION MATRIX allows you to map controls to change these values in realtime.



MACRO CC CONTROL & RANDOMIZE

To the upper left of the MACRO WHEEL is a small MIDI jack icon that enables CC 70–78 which are dedicated to control Macro sliders 1–9 respectively. When the CC70–78 button is active, the MIDI CC values completely supersede the values that were set on the macro wheel sliders.

Below that is a “dice” icon which sets random values for the macro sliders on the wheel.



OTHER SETTINGS

OUT (LEVEL)

Adjust the OUT volume level using the horizontal slider. Use this control to balance the levels between instruments. In the MODULATION MATRIX, you can assign a CC to control volume. This setting is the maximum value available during realtime control.

In a DAW, you can use the DAW's channel fader to adjust the overall level. You can also automate the OUT level.



STEREO/MONO

Clicking on this field toggles between STEREO and MONO mode. MONO produces all sound in one channel. STEREO mode pans different aspects of the sound to the left and right channels. This often involves Respiro's modeled mouthpiece sound on one side and the modeled pipe sound on the other. The sonic content of the left and right channels varies with the instrument.

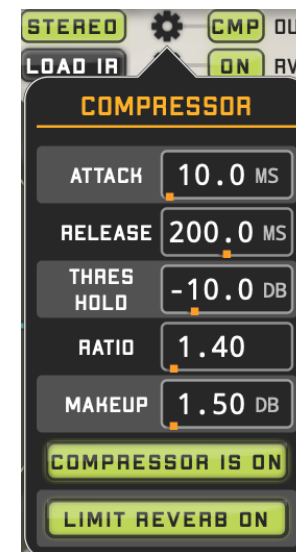
NOTE: Choosing MONO can reduce CPU demands.

CMP (COMPRESSOR)

The CMP button activates the compressor that is used to control dynamic peaks.

The cog to the left of the OUT setting opens the settings window for the compressor. THRESHOLD defines the signal level above which the compressor is engaged. ATTACK adjusts how quickly the compressor turns the signal down. RELEASE adjusts how quickly the compressor restores signal to normal. RATIO controls how aggressively the signal is reduced. MAKE-UP raises post-compressed level to compensate for compression and helps boost quiet signals.

The LIMIT REVERB button enables an independent dynamic limiter that processes the convolution reverb and prevents clipping. This can be turned on/off independently of the compressor.





RVB (REVERB)

Respiro includes a high-quality convolution reverb. Use the horizontal slider to adjust reverb level. In the MODULATION MATRIX, you can assign a CC to control the RVB level. This setting is the maximum value available during realtime control.

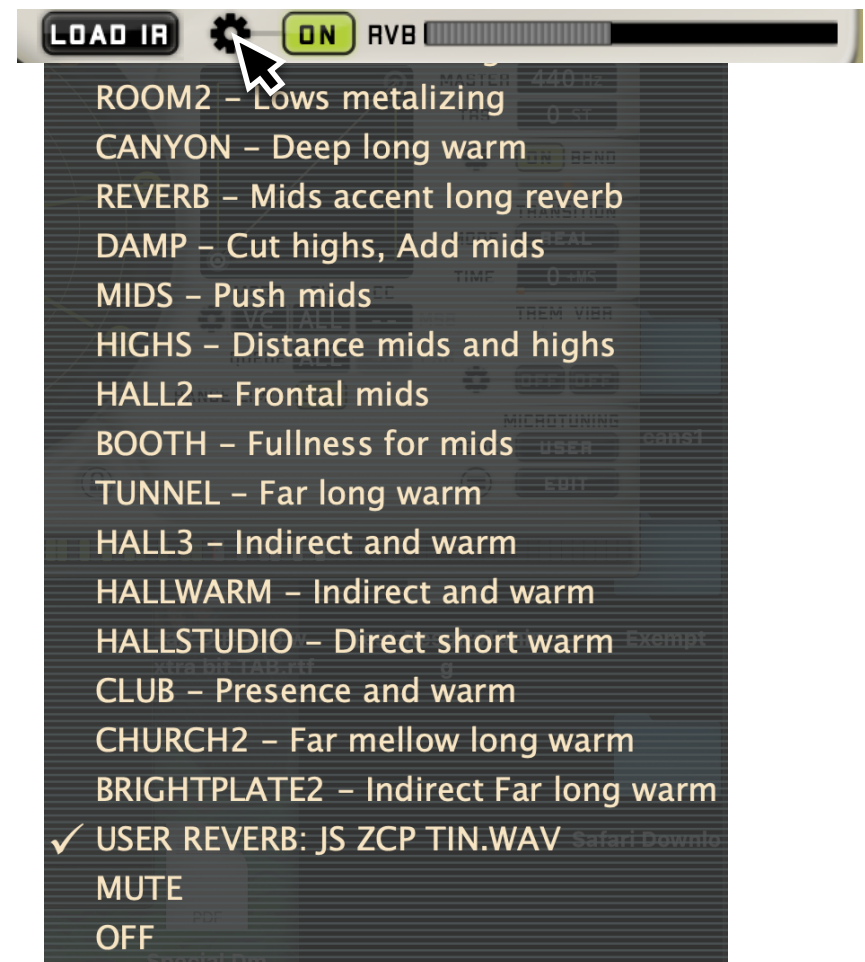
Click the button to the left of RVB to turn it on/off. Click the cog to choose from a list of built-in, high-quality reverb impulse responses.

Click **LOAD IR** to load your own impulse response. User IR files must be .wav files. Respiro will shorten IR's that are over 2 seconds to reduce CPU demands.

IMPORTANT: Respiro does not save the user IR with the variant, only the file location. Be mindful of this if you wish to share variants with other Respiro users.

Convolution requires significant CPU processing. Disabling reverb can free up CPU resources. Turning RVB off via the ON/OFF button or choosing OFF from the list disables the reverb globally. This overrides whatever RVB settings are in any variant.

The list also includes MUTE--which only affects the current variant. The reverb is restored when another variant is loaded. The mute state can be saved with the user variant.



TIP: Mute or turn off RVB to save CPU. With Respiro's output in MONO mode, and RVB off, you can reduce the audio buffer size to a much lower value for incredibly fast response. In MONO mode and RVB on, the buffer can still be set fairly low.

PITCH

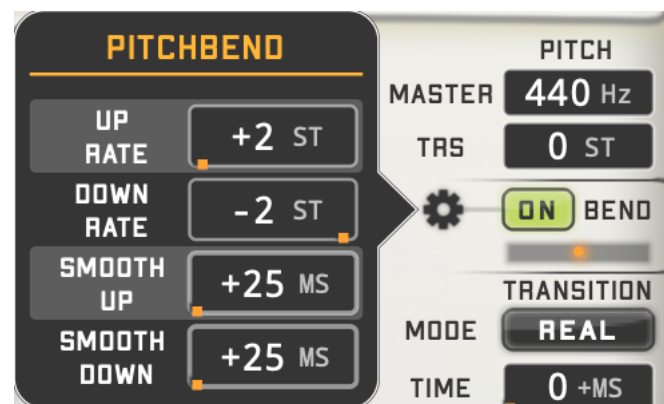
MASTER adjusts the reference/tuning pitch for the instrument from 420–460 Hz. 440 Hz is standard tuning. TRS allows you to transpose the instrument's pitch up or down 24 semitones (2 octaves).

For Pitch-Bend, make sure the BEND button is on. The cog opens settings to adjust the range and smoothing. Range and Smoothing are set separately for upward and downward pitch bends. You can adjust the range up or down up to 40 semitones (!). Smoothing adjust the response time of the bends (1–4000 ms). This can make the bends slower which may be helpful for some types of controllers, or musical situations.

Test your controller's pitch-bend to see if the Pitch Bend indicator (orange dot on grey bar) is responding.

When using a Continuous Expression (CE) controller, configure the Pitch-Bend in both the controller and Respiro to matching ranges. You can set this for a wide range of pitch control. This will ensure that the pitch bend in Respiro corresponds with the destination note on the CE controller. When CE mode is selected the pitch-bend range defaults to +/- 24 ST.

NOTE: Not all controllers produce high resolution Pitch-Bend data. With extreme pitch bend ranges, Respiro will produce smooth changes, but the degree of control may be limited.



TRANSITION/GLIDE

Respiro provides two modes for note transitions.

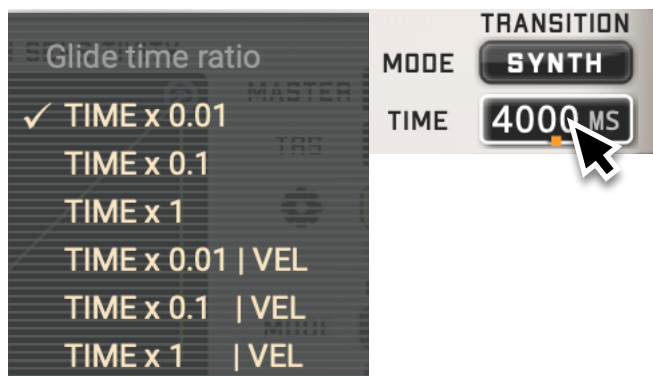
SYNTH mode provides pitch portamento (glide) between notes of different pitch.

REAL mode places a natural sounding dip in volume between changing notes.

You can set the times for each of these modes. Respiro remembers both values so you can switch between the modes.

In SYNTH mode, the glide time range is 5–8000ms. This wide range of values gives you great flexibility. However, this wide range can be difficult to control in realtime. Respiro includes a Glide Time Ratio option to scale the time range in order to make it easier to adjust and control.

To access the Glide Time Ratio options, you must first be in SYNTH mode. Now you can right-click the TIME field to reveal the Glide Time Ratio options.



TIME x 0.01 – is 1/100th of the set glide TIME

TIME x 0.1 – is 1/10th of the set glide TIME

TIME x 1 – is set glide TIME unscaled

TIME x 0.01 |VEL – 1/100th of TIME, velocity scaled

TIME x 0.1 |VEL – 1/10th of TIME, velocity scaled

TIME x 1 |VEL – TIME unscaled, velocity scaled

When **TIME x 1** is selected, the time you set in the main window is the actual glide time (i.e., no scaling).

When **TIME x 0.1** is selected, the TIME you set is divided by 10 (i.e., is 10x faster).

When **TIME x 0.01** is selected, the TIME you set is divided by 100, (i.e. is 100x faster).

Think of these options as moving the decimal of your setting over one or two places.

For example, 4000ms at TIME x 0.1 becomes 400ms, and at TIME x 0.01 becomes 40ms. The displayed TIME does not change.

For the three options that include **VEL**, the glide times will get progressively faster with increased velocity. This is especially useful for keyboard players.

NOTE: These Glide Time Ratio options are not available in REAL Mode.

TREM/VIBR

With actual wind instruments, natural vibrato is a combination of changes in volume and pitch. In Respiro, TREMOLO modulates volume, and VIBRATO modulates pitch. They both share the same LFO (low-frequency oscillator). TREMOLO and VIBRATO can be enabled separately.

Click the cog to open the settings pane, where you adjust the TREMOLO and VIBRATO.

TREMOLO controls the modulation depth for volume.
VIBRATO controls the modulation depth for pitch.

There is one LFO (low-frequency oscillator) that controls both Tremolo and Vibrato. The rate of the LFO is the sum of these two controls:

FINE controls the rate, from 0.10 to 10.00 Hz in increments of 0.01

COARSE controls the rate, from 0 to 900 Hz in increments of 0.1

In the Modulation Matrix, both the **FINE** and **COARSE** parameters are in the Standard List and can be controlled separately.

Use the FINE range for vibrato effects, and use the COARSE rate for growl effects.

DELAY is time it takes to rise from zero depth at the start of a note to the set depth of tremolo/vibrato.

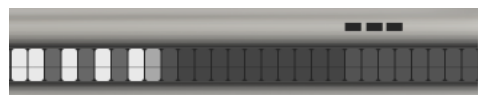


The **VIBRATO A/B** button at the bottom of the pane is used to switch between VIBRATO A which is the default pitch vibrato which doesn't change the physical model, and VIBRATO B which fluctuates the length of the virtual pipe in the model. While B can have a more natural quality, it may in some circumstances cause some instability in the model.

KEYBOARD STRIP

This keyboard display does not produce MIDI notes. It shows active notes in red. The green zone displays the recommended playing range for the instrument or variant. You can adjust the recommended range display by clicking on the keys and saving the variant.

Black dashes appear above the right side of the keyboard strip to show the number of notes held down. This is useful when working with multiple instances in conjunction with QUEUE settings.



RANGE LIMIT (KEYBOARD)

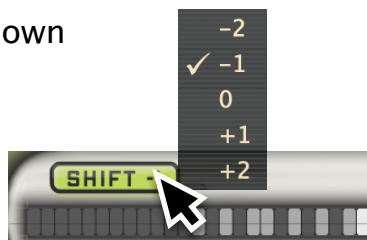


Below the QUEUE settings is a RANGE LIMIT button. Each instrument has an ideal (“sweet”) range that is shown in green on the keyboard. Turning on RANGE LIMIT will limit the playing to this green zone.

NOTE: Respiro continues to sustain the last, in-range, played pitch when subsequent out-of-range notes are played. This functionality was requested by some EWI players to help deal with incidental out of range notes.

SHIFT

Transposes the sound up or down 1 or 2 octaves.



MICROTUNING

Respiro's versatile instruments are used by musicians all over the world for many styles of music. Respiro's flexible microtuning features allow you to play with customized alternate tunings. You can quickly switch those tunings on and off for individual notes while playing, or you can control each note's tuning with a set of dedicated CC controls.

Respiro's microtuning system has four modes:

OFF

.TUN MODE

USER-NOTE MODE

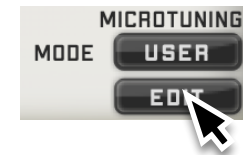
USER-CC MODE

If the microtuning is OFF, both the MODE & EDIT buttons are dark.



When **.TUN** mode is selected, you may IMPORT/Load a complete tuning map in the AnaMark (.tun) format. The chosen filename is shown, and the IMPORT button is green. The imported tuning map is saved with the variant, so the external .tun file will not be needed to reload the saved variant. Click the Trash icon to clear the tuning and return to the OFF state.

In **USER** mode, the **EDIT** button opens the editor panel which provides several ways to control the tuning of all 12 notes.



The edit panel has three possible states:

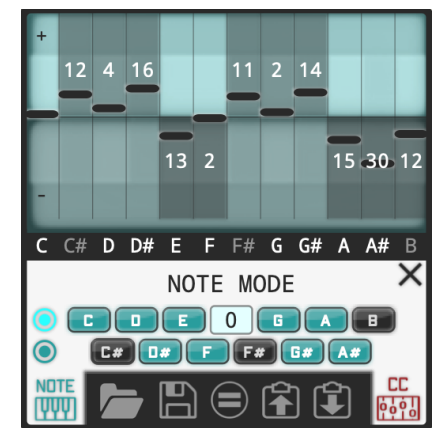
NOTE MODE – lower-left keyboard button

CC MODE – lower-right sliders button

OFF – both NOTE and CC modes are off.

To close the editor, click again on EDIT, or click the X, or press the ESCAPE key.

TIP: If you have loaded a .tun file before switching to USER mode, Respiro can toggle between your imported tuning and the USER tuning by clicking on the MODE button.





NOTE MODE allows you to use the sliders in the microtuning editor to adjust the tuning for each of the 12 notes. The tuning range of each note slider goes from -63 cents to +64 cents.

Click repeatedly in the + or - fields to adjust in 1-cent increments, or you can click and drag the pitch sliders up or down.

Use the note-buttons in the editor to activate or bypass the tuning for each of the 12 notes. The note-button must be turned on in order to hear the changed tuning for that note.

To the left of the note-buttons are two round buttons. The top round button turns on all of the note-buttons, the lower round button turns all the note-buttons off. In this case, NOTE MODE is still active even though the individual note buttons are off.

NOTE MODE also enables a set of MIDI note key-switches to turn the note-buttons on/off from your MIDI controller.



The MIDI note key-switches appear in turquoise color on the keyboard display. You may shift the range of MIDI key-switches down 1 or 2 octaves by clicking on the button between E and G in the editor. (See the image on the right.)



At the bottom of the editor, the floppy disk icon allows you to save your microtuning slider settings. The folder icon allows you load previously saved tunings.

The = button on the lower panel zeroes all the sliders so that it is back to 12-tone equal and turns on all the note buttons.

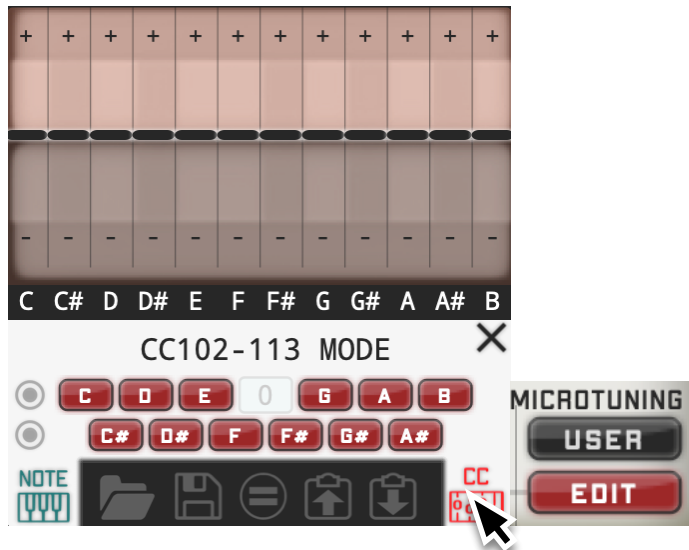
The clipboard ↑ button allows you to store your current tuning as a 'default', the clipboard ↓ button replaces the current tuning with the stored default. The 'default' clipboard persists if you quit and relaunch later.

The Load, Save, and Clipboards/Defaults affect the pitch sliders only, and not the note-button states.

CC MODE assigns direct control of the tuning sliders to MIDI CC 102–113. In this mode, the MIDI CC's take over complete control, and the on-screen tuning sliders and note-buttons, as well as the MIDI key-switches have no control over the tuning. Also, Load, Save, =, and the Clipboard/Default icons have no function in CC MODE.



Respiro indicates CC MODE by shifting the color to red, and displaying CC102–113 MODE in the editor.



To close the editor panel, click EDIT again, or click on the X, or press the ESCAPE key.

The EDIT button is red, and “CC102–113 MODE” is displayed to show the active mode.

To turn **CC MODE** off, you can click on the CC Sliders icon on the lower right of the edit panel, or click the trash icon in the main window. To return to **NOTE MODE**, click EDIT to reopen the editor (if closed), then click on the NOTE keyboard icon on the lower left of the editor panel.

NOTE: Respiro does not currently support transposing the microtuning to different root keys. However, you can create and save separate tunings in all the keys you need.

NOTE: If you have transposed Respiro using the TRS setting, the microtunings still correspond to the notes as you play them on your controller (and not the pitches as they are heard).

MODULATION MATRIX

There are three ways to adjust sounds in Respiro. First, you can manually change values in the main window of Respiro. Second, you can use automation from your DAW to directly change values as your tracks play. And third, you can use Respiro's powerful modulation matrix to assign a MIDI control source to change the values via MIDI in realtime during a performance.

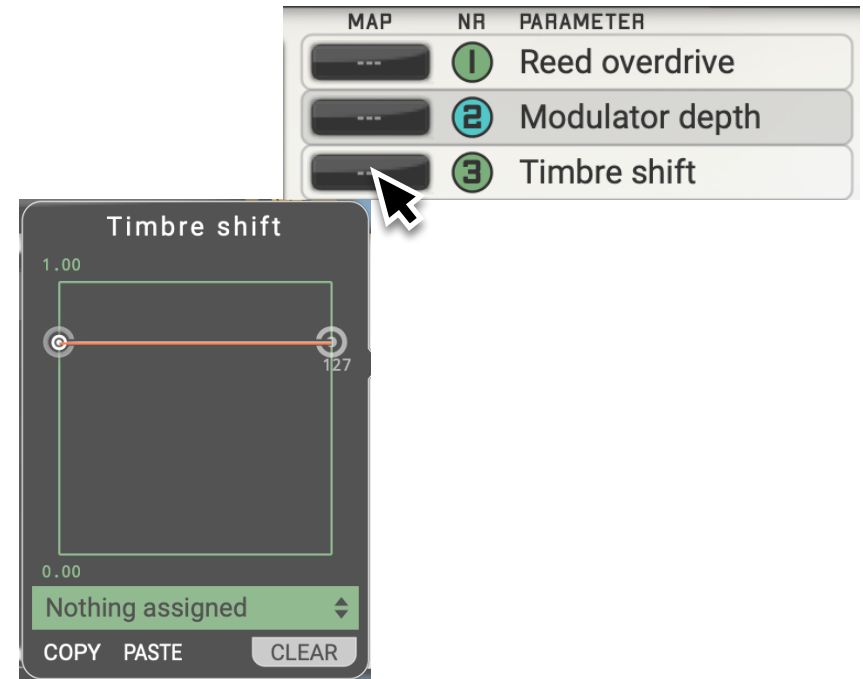
The modulation system uses two lists of parameters: The **MACRO** list contains parameters that are specific to each instrument, affecting timbre and tone qualities.

The **STANDARD** list contains parameters that are the same in all instruments and variants. Generally, these parameters control pitch, level, pressure response and effects.

Click the tab to the right of the Respiro logo to switch between the two lists.



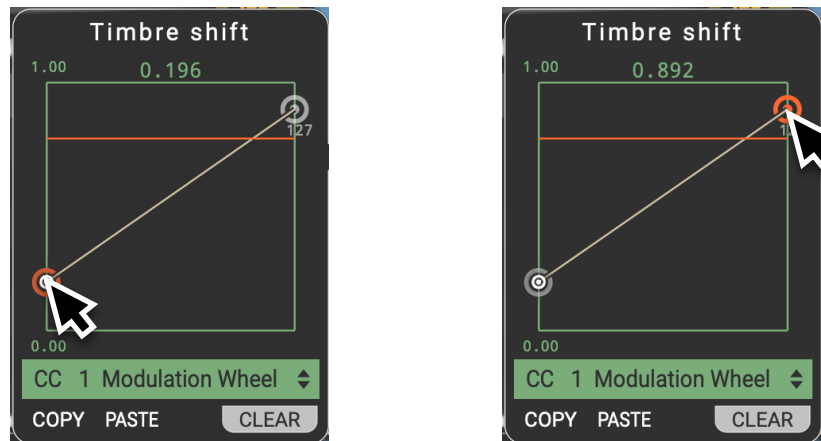
Clicking on the field in the MAP column opens the control mapping editor for that parameter.



The red line shows the current value that is set in the main window.

The pop-up list shows “Nothing assigned” (or the currently assigned controller). Click here to bring up the list of available MIDI CC's and internal control sources and choose an available controller.

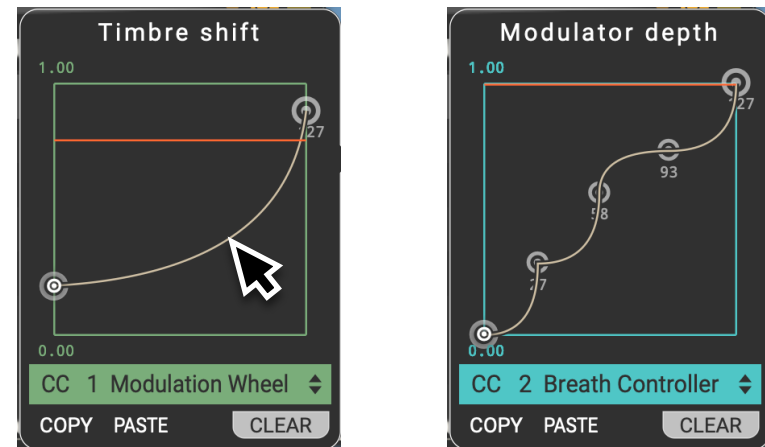
The next step is to set the range of your controller. Moving the dot along the left side sets the output value when your controller is at its low point. The dot on the right edge sets the output when your controller is at its high point.



Typically, you would set this from low to high, but you can set these values anywhere and even invert the action of the controller. A white dot traveling along the white line shows the value received from the controller, (X axis), and the resulting value of the parameter (Y axis). For most parameters, the control can move the value above and below the red line that shows your original setting.

To create the exact response you want you can create **curves** and multiple **break-points**.

To curve a segment, simply drag the line up or down. To add a breakpoint, right-click on the line. You can create very specific response curves.



Use COPY and PASTE to move curves from one mapping to another. This is useful to synchronize controller curves with very specialized shapes.

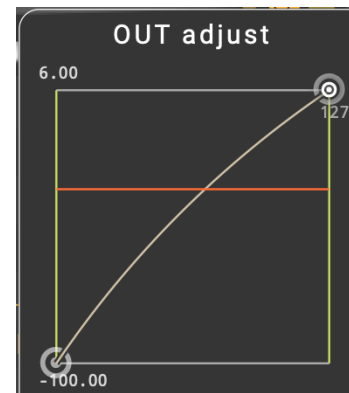
NOTE: You can only copy/paste curves within the MACRO list, or within the STANDARD list. You cannot copy paste from MACRO to STANDARD or vice versa.

CONTROLLING OUT ADJUST AND RVB ADJUST

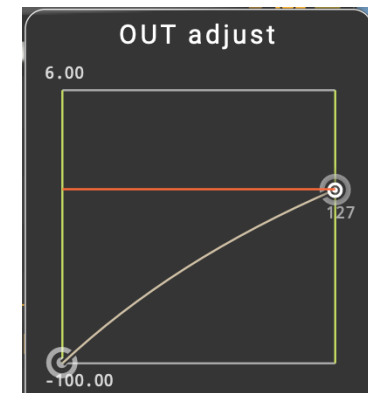
OUT adjust and **RVB adjust** behave a little differently than other parameters. When you adjust the **OUT level** and **RVB level** in the main window, this sets their maximum levels. If you map a control source, the control is scaled so that its maximum value (at the top of the graph) equals the maximum set in the main window.

Though the white control line and activity dot may go above the red line on the graph, this is misleading. The red line's position on the Y axis shows the set value relative to the full range of the parameter (which is the same behavior as all the other parameters). However, the difference for **OUT** and **RVB** is that the white line and activity dot may be shown above the red line, the actual output value cannot exceed the red line (i.e. the maximum).

This is to prevent unexpected levels on these two parameters. If you need more level, boost the main OUT or RVB sliders.



OUT/RVB
As it is shown

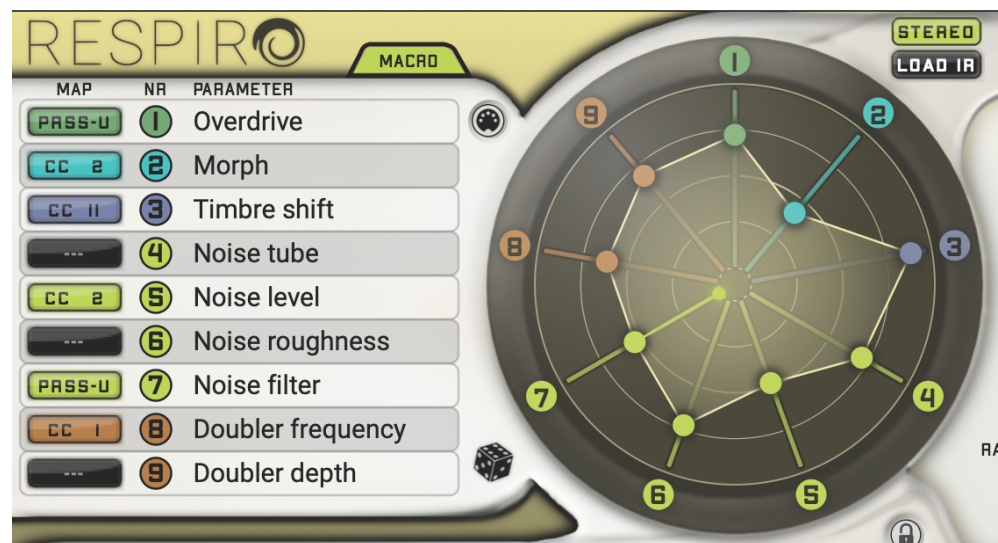


OUT/RVB
Actual behavior

MACRO (Parameter List)

MACROS are essential aspects of an instrument that are combined and scaled to give you ultimate control of the sound. Each instrument has a unique set of macros for you to modulate via MIDI or automation. Because the macros differ for each instrument, there is no predefined list.

The starting values of MACROS (before realtime modulation) are displayed and adjusted with the colored dots on the multi-spoked wheel in the center of the display. You can set the starting point to any value, and move up or down (inward or outward) with your modulation source. You have complete control.



STANDARD (Parameter List)

Click the MACROS tab to toggle to STANDARD, which shows a list of parameters that are available for modulation via MIDI or other control sources.

These settings control level, reverb, compressor, pitch-bend, pressure settings, tremolo and vibrato, and note-transitions.

NOTE: The model's Breath Pressure is directly controlled from the Pressure Input Settings. So Breath Pressure is not included in this list. However, you can assign a control source to control Pressure Gain adjustment which provides a secondary way to control pressure.

IMPORTANT! Both the OUT and RVB level controls behave slightly differently when modulated than the others in the STANDARD list. The value set on the main window is the maximum. This allows you to assign the control and not worry about outputting level that is higher than what you set on the main window. (See CONTROLLING OUT ADJUST AND RVB ADJUST.)

STANDARD PARAMETERS:

1. OUT adjust
2. RVB adjust
3. CMP attack
4. CMP release
5. CMP threshold
6. CMP ratio
7. CMP bypass (on/off)
8. CMP makeup
9. CMP limit reverb
10. Pitch bend on/off
11. Pitch bend up range
12. Pitch bend down range
13. Pitch bend smooth up
14. Pitch bend smooth down
15. Pitch offset
16. PRESS gain adj
17. PRESS attack smoothing
18. PRESS release smoothing
19. PRESS hold
20. Tremolo on/off
21. Vibrato on/off
22. Tremolo LFO depth
23. Vibrato LFO depth
24. Vibrato Type A/B
25. Trem/Vibr LFO rate
26. Trem/Vibr LFO delay
27. Trem/Vibr LFO rate fine
28. Trem/Vibr LFO rate coarse
29. Trem/Vibr LFO delay
30. Transition mode
31. Transition time: real
32. Transition time: synth
33. Transition bypass

INTERNAL CONTROL SOURCES

The control source list includes MIDI Standard CC options in the first part of the list. The second section of the list contains additional control sources that are available within Respiro that further enhance the expressive possibilities.

PRSS–N Internal Pressure (scaled)

the internal pressure signal which is scaled to optimal range for model

PRSS–U Internal Pressure (unscaled)

the internal pressure signal without scaling

IMPORTANT: Using either of these Internal Pressure controls allows you to set up modulations that will persist even if you change the PRESSURE MODE/CH/CC. These are often default control sources with Macros.

PB– ALL Pitch bend

modulation from upward or downward pitch bend

PB– UP Pitch bend (only up)

modulation only from upward pitch bend

PB– DWN Pitch bend (only down)

modulation only from downward pitch bend

Note on/off (pressure)

0 value with no note, or 127 value with note on with non-zero pressure. (note is 0/127 switch)

Note velocity (pressure)

velocity value of note with non-zero pressure

Note velocity (MIDI)

velocity value of note, independent from Pressure.

Last note velocity (MIDI)

As a 1st note is held, and a 2nd note overlaps it, the velocity of the 2nd note can be used specifically for legato options like note transitions. This is especially useful in synth mode.

Note number

value 0 – 127 directly from input MIDI note numbers
use to scale parameters across the note range.

Random by Pressure

random values 0 – 127 only as pressure is received

Random by Note

random values 0 – 127 only as note on is received

Random by Pitch

random values 0 – 127 only as Pitch Bend is received

Aftertouch

MPE Aftertouch value 0 – 127

GLOBAL SETTINGS

For virtual instruments it can be useful to have a clear understanding of what is saved with the variant, and what is global (set once for all variants).

The following settings are Global:

1. Audio & MIDI settings (standalone mode)
2. Master Pitch
3. BC Mode, BC CH & CC (MSB/LSB)
4. QUEUE settings
5. Range Limit on/off state
6. Parameter Lock on/off state
7. MACRO Automap CC on/off state
8. Reverb ON/OFF button state
also the OFF option from built-in IR list
(but not MUTE from list)

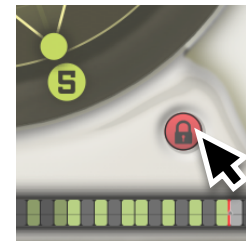
PARAMETER LOCKING

As global settings do not change when you switch variants, you can set them up and they will persist.

However, there may be times when you want to set up specific and personalized adjustments for all the other variant (non-global) settings, and then not lose those adjustments when you switch to another variant.

The Lock icon just below the circular Macro section can be used to hold your variant settings while you load another instrument/variant. You can then save the variant with the locked settings.

Because the macro structure and settings are different (and essential) these settings are exempt from the lock when changing instruments or variants. Also, the keyboard “SweetZone” is not locked either, as it is needed for each variant.



NOTE: You can't choose which settings to lock.

TIP: You can create a special variant with all of your important settings and use the lock to bring those settings into another variant, which you can then save.

TROUBLESHOOTING

ISSUE: Clicks or glitches in sound when playing.

SOLUTIONS:

If your CPU has too many processes going on, try turning off the reverb, or increasing the buffer size in the Audio & MIDI settings.

Try increasing the Attack Time in the Pressure settings.

If the clicking only happens between rapid notes, and your Transition Time is set to 0, then try increasing this value until the clicking goes away.

If you have set up PRESSURE GAIN ADJUSTMENT, try decreasing this or turning it down to zero.

ISSUE: Stuck note is sounding when I'm not playing.

SOLUTION: Click the cog next the the Pressure Mode. Make sure NOTE-ON HOLD LEVEL is set to zero. This is value should only be used when you want the instrument to continue to sound without note input. A stuck MIDI note can be stopped by sending a Panic (All-Notes-Off) message from your controller or DAW.

ISSUE:

I've launched the Mac installer, nothing happens.

SOLUTION:

Carefully follow the instructions in the "IMPORTANT" note in installation section. If you are still having trouble, post on the forum or contact support.

ISSUE: No sound from Respiro, even with MIDI indicator flashing.

SOLUTION:

Respiro needs two kinds of information to play: MIDI notes, and a source to control "pressure" in the model. You can switch the Pressure Mode to VC which will use velocity as a pressure control source. Or, you can choose BC (breath control) and assign an available CC (like CC1, Mod Wheel) to control pressure. Make sure to match Respiro's CC number with that of your controller. If you are using two separate devices such as a keyboard plus a USB breath controller, in standalone mode, select both MIDI devices in the Audio & MIDI settings. For your DAW, make sure both devices are being recorded and routed to the Respiro plugin. See Pressure Input Settings

For any other installation, setup, or use issues, please contact support at:

support@imoxplus.com

Or visit and post on the Respiro Forum at:

www.imoxplus.com

ADDITIONAL TIPS

Some fields show an orange dot which represents the current value of the parameter. These values can be changed by:

- clicking and dragging the value, or
- double-clicking and entering the value, or
- click once and use your keyboard's up/down arrows to nudge the value in increments of 1.

You will notice that this dot turns into a small modulation line when a CC is mapped to that parameter.

By assigning the internal mapping source “Note Number” to parameters, you can adjust key-scaling across the range of your instrument. Note-number assigned to OUT level can be set to make higher notes quieter, for example.

When you have the Synth Transition set for a long glide time, you can assign a controller to turn this on and off (or control high to low) so you can activate a long glide only when you need it.

Pressure attack/release smoothing are both interesting parameters for keyboard users. You can create string sounds with long attacks and/or release, or more percussive sounds with lower values.

You can adjust the speed for bend pitch changes using smooth up and smooth down. So, that small pitch errors due to unintended bite or lip movement on the wind controller can be reduced.

Transition time: In Real mode, longer time settings give you a deeper dip between legato notes. You can try using key number to modulate this so lower note transitions have a longer dip than higher note transitions. By default, the transition times are set to short values.

Convolution can be used for more than reverb. You can use the LOAD IR function to try different types of impulse responses. This can be a very effective way to further shape the tone and resonance of an instrument or variant. The RVB slider allows you to adjust the influence of any loaded IR.

CONTACTS / ACKNOWLEDGEMENTS

Please consult our forum on the website www.imoxplus.com

This forum is monitored and moderated on daily basis.

Please make use of the forum to search for answers, make suggestions,
ask questions, share ideas and help the Respiro user community.

Our goal is to constantly improve our products and your input is important to us.

Of course you may always contact info@imoxplus.net

Respiro Wind-Synth Audio Plugin was made in years 2017–2019 by:

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