Renaissance Axx Compressor
User Guide
Introduction

Renaissance Axx is an easy-to-use compressor that delivers high-quality dynamics processing to any track. It's particularly well suited for instruments such as guitars and basses. Using just three controls, you can quickly achieve high-quality dynamics and level control. Renaissance Axx is built upon the power of the acclaimed Waves Renaissance Compressor, so quick and easy operation doesn’t cost you in terms of sound quality.

The Renaissance Axx has a fixed-ratio curve and automatic release control. Plus, there’s an output limiter with a color-coded limiter status indicator.

Components

There are two Renaissance Axx Components: mono and stereo. They are identical except for the number of input and output channels.
**Interface**

You can view the Renaissance Axx interface in any of three skins. Select a style with the **Skins** drop-down menu, on the left side of the WaveSystem Toolbar at the top of the interface.

- All three skins have the same controls. When you change skins, the values don’t change.
- The skin of the current instance sets the default view, so new instances will open with that skin.
Using Renaissance Axx

Renaissance Axx has three compressor controls, an attenuation meter, and input and output meters.

**CONTROLS**
- 1. Threshold Level Control
- 2. Output Gain
- 3. Attack Speed

**METERS**
- 4. Input Level Meter
- 5. Attenuation Meter
- 6. Output Meter
- 7. Limiter Activity Indicator

When you’re first getting started, we suggest you use the controls in this order:

- **Threshold**  Level at which compression begins
- **Gain**  Output level / Limiter control
- **Attack**  Speed of onset of compression

Renaissance Axx does not have a ratio control. Instead, ratio is automatically calculated as a function of the threshold.
**INPUT METER**

The full-scale **Input Meter** displays the level of the incoming signal. You can use the input meter as a reference when you set the threshold; place the Threshold control just lower than the highest peak on the meter. This is a good starting point. Beyond this, it’s up to you.

Input signal is controlled from the DAW, not the plugin input. Infinite-hold peak indicators are located below the meters. Reset peak hold by clicking the meter or the value box.

Range: -infinity dBFS to 0.0 dBFS

---

**Make a habit of providing extra input headroom.** There’s a chance that processing will cause the output signal to increase and perhaps clip. Renaissance Axx has a limiter on its output, so it won’t return an over-level signal to the DAW. Still, excess limiting can result in a disagreeable sound. Adjust your DAW so that you have sufficient headroom when feeding the plugin (usually, about 6 dB is adequate).

---

**THRESHOLD**

The **Threshold** control sets the reference point around which compression (gain reduction) starts. The more that energy exceeds the threshold, the greater the compression ratio will be, until it reaches infinity. As threshold is lowered, output gain increases, but is limited at the output.

The Threshold control is part of the input meter, so you can set the threshold relative to the input energy. We suggest that you set the threshold just below the highest peaks of the input signal. From that point on, lowering the threshold will make the signal more compressed.

Range: -60.0 dBFS to 0.0 dBFS
Default: 0.0 dBFS
**ATTENUATION METER**
The Attenuation meter in the middle of the window shows how much gain reduction is applied to the signal. It displays the combined attenuation of the compressor and the output limiter, so the meter can indicate activity even if Threshold is set to zero. Peak attenuation is shown in the value box below the meter. Click on the meter to reset peak hold.

Range: -30 dBFS to 0.0 dBFS

**ATTACK**
**Attack** time sets how long it will take for gain adjustment to reach its target. A short attack value reduces the initial transient and makes for a duller sound, with very good peak control. A long attack time allows initial transient attacks to pass unprocessed. Attenuation will be applied primarily to the sustaining part of the sound. Picks and plucks and other quick transients will be more articulate, but attack peaks can overshoot.

Range: 0 ms to 50 ms
Default: 5 ms

**GAIN**
The **Gain** control sets the output level of the Renaissance Axx and controls the activity of the output limiter. Plugin output is brickwall limited, so output will not clip regardless of the Gain setting. As gain increases, the limiter becomes more active.

Be sure to provide sufficient headroom when returning the signal to the host.

Range: -30.0 dBFS to 0.0 dBFS
Default: 0.0 dBFS
OUTPUT METER
The full-scale **Output Meter** shows the plugin output returning to the DAW. The Output gain control is integrated with the meters so that you can better understand the relationship between gain adjustment and limiting.

Above the meters, there’s a color-coded status box. It’s not a clip light. Rather, it’s an indicator of limiter activity.
- Black  no limiter activity
- Yellow normal limiter activity
- Red over-limiting, probably creating audible artifacts

If you see the limiter constantly working in the red, you should lower the gain. It’s possible that overshoots of attacks are contributing to the excessive limiter activity, so experiment with lowering the attack time. If you don’t like the way the limiter affects the character of the instrument, then you need to lower the gain. Experiment with changing the input from the DAW. This has a different effect than reducing the Gain control.

Peak output level is shown in the value boxes below the meters. Click to reset.
Range: -infinity dBFS to 0.0 dBFS
Working with Presets

Renaissance Axx offers a large collection of presets. These are found in the Load menu of the WaveSystem Toolbar. Presets are useful starting points for solving problems and creating effects—load the most relevant preset and go from there. In some cases, a factory preset will give you just the settings you need.

There are also Artist presets. These were designed by recording, mixing, FOH, and broadcast engineers so they capture a personal point of view about sound. They provide a *head start with an attitude* when you’re creating a specific sound or making a track sound better.

You can modify Factory presets and Artist presets, but you can’t save them. Instead, make your changes and then save the settings as a User preset.

There’s also a Full Reset preset that returns the plugin to its default settings.

For more information about loading, saving, managing, and comparing presets, refer to the WaveSystem User Guide, which can be found on the waves.com download page. The user guide also describes shortcuts and conventions common to all Waves plugins.