

# ARLIMIT

TRUE PEAK LIMITER



VERSION  
1.0.0

FORMATS  
AU • VST3

PLATFORMS  
macOS • WINDOWS

DOCUMENT  
USER GUIDE

## 01 WHAT IT DOES

ARLIMIT is the last stage in the chain. GAIN drives the signal into the CEILING and the limiter holds it there – a TRUE PEAK ceiling, measured at sixteen times oversampling, so the inter-sample peaks that MP3 and AAC encoders bring back are caught before they exist. There is no output trim and no automatic gain compensation: opening GAIN makes it louder and denser, and the CEILING is always the real ceiling of the output. LOOKAHEAD, ATTACK, RELEASE, KNEE and the two channel links change how it sounds – never whether the ceiling holds, which was measured across thirty seven settings.

## 02 INSTALLING

### macOS

Run **ARLIMIT Installer.pkg** and follow the steps. You can choose which formats to install, and whether to install for every user or only for yourself. The package is not notarised by Apple yet, so the first time you open it macOS may refuse: right-click the installer, choose **Open**, then confirm. This is only needed once.

### Windows

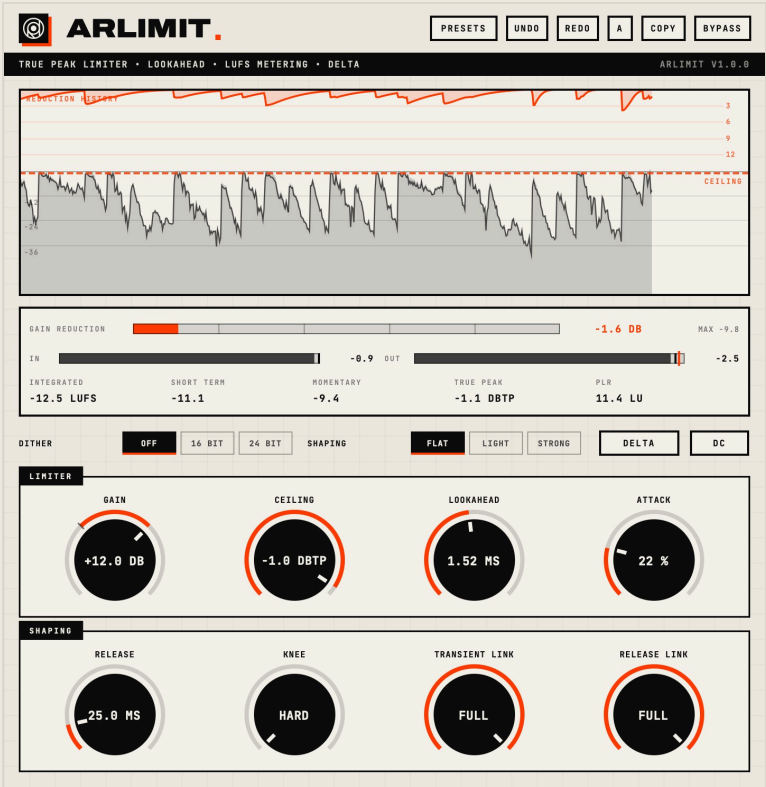
Run **ARLIMIT Installer.exe** and follow the steps. The plugin is placed in the shared VST3 folder. The installer is not code-signed yet, so SmartScreen may warn you: click **More info**, then **Run anyway**. This is only needed once.

### After installing

Rescan the plugin list in your DAW. ARLIMIT appears under **Ajanss Records > ARLIMIT**.

Requirements – macOS 10.13 or newer, Intel or Apple Silicon (universal binary). Windows 10 or newer, 64-bit. Formats: Audio Unit and VST3 on macOS, VST3 on Windows.

03 THE INTERFACE



|                   |                                                                                                                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| REDUCTION HISTORY | The top band is gain reduction over the last five seconds on its own scale; the bottom band is the signal, with the input filled in grey and the output drawn over it against the dashed ceiling. |
| GAIN REDUCTION    | How much is coming off right now, with the session maximum beside it. Click the row to reset the maximum, the peak holds and the integrated loudness.                                             |
| IN / OUT          | Peak levels either side of the limiter, with peak holds. The orange tick on the output meter is the ceiling.                                                                                      |
| LOUDNESS          | Integrated, short term and momentary LUFS, true peak and PLR – the numbers you deliver against.                                                                                                   |

## 04 PARAMETERS

| CONTROL   | RANGE              | DEFAULT   | WHAT IT DOES                                                                                                                                                                                                                                                                                                 |
|-----------|--------------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GAIN      | -12.0 ... +24.0 dB | 0.0 dB    | Drives the signal into the ceiling. This is where loudness comes from: the ceiling does not move, so everything you add here turns into density. No compensation is applied – turning it up makes it louder.                                                                                                 |
| CEILING   | -24.0 ... 0.0 dBTP | -1.0 dBTP | The true peak ceiling, measured at sixteen times with a safety margin, so the output lands under the number you set. -1.0 for streaming, -0.3 for CD. To deliver quieter, lower this – there is no separate output trim, so the ceiling is always the truth.                                                 |
| LOOKAHEAD | 0.10 ... 5.00 ms   | 1.50 ms   | How far ahead the limiter sees. Longer is gentler and louder; shorter keeps transients sharper. The reported latency does NOT change with this control – it is always the maximum – so you can automate it freely.                                                                                           |
| ATTACK    | OFF ... FULL       | 20 %      | How much of the lookahead window the reduction ramps across. OFF catches exactly at the peak, FULL spreads the descent over the whole window, which is smoother and cleaner on bass. It can never let a peak through: the ramp is a moving average of a curve that is already at target when the peak lands. |

## 04 PARAMETERS CONTINUED

| CONTROL          | RANGE                                       | DEFAULT   | WHAT IT DOES                                                                                                                                                                                                                                                                                                            |
|------------------|---------------------------------------------|-----------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RELEASE          | 20 ... 1000 ms                              | 120 ms    | How fast the gain comes back. The behaviour is program dependent by itself: deep reduction releases slower, shallow reduction recovers quickly. The lower limit of 20 ms is measured, not arbitrary – faster than that the gain modulates at audio rate and the modulation itself creates peaks no lookahead can catch. |
| KNEE             | HARD ... 12.0 dB                            | HARD      | How far below the ceiling the reduction starts. HARD is a brick wall; a wide knee starts earlier and more gently. The output still never passes the ceiling.                                                                                                                                                            |
| TRANSIENT LINK   | OFF ... FULL                                | FULL      | Channel linking for the fast stage. FULL ducks both channels together on any peak so the image stays put; OFF lets each channel catch its own peaks.                                                                                                                                                                    |
| RELEASE LINK     | OFF ... FULL                                | FULL      | Channel linking for the recovery, independent of the transient link – you can catch together and breathe apart, which keeps peaks solid while the stereo image stays alive.                                                                                                                                             |
| DELTA            | on / off                                    | off       | Plays only what is being removed. If you cannot hear it, the limiting is harmless – the fastest way to judge how hard you are pushing.                                                                                                                                                                                  |
| DC               | on / off                                    | off       | Removes DC offset before limiting. An offset eats peak headroom for nothing.                                                                                                                                                                                                                                            |
| DITHER / SHAPING | OFF / 16 / 24 BIT,<br>FLAT / LIGHT / STRONG | OFF, FLAT | Triangular dither for the final render, with optional noise shaping that pushes the noise up where the ear is least sensitive.                                                                                                                                                                                          |
| BYPASS           | on / off                                    | off       | Passes the input through untouched, keeping the latency so nothing shifts.                                                                                                                                                                                                                                              |

# 05 PRESETS

Open the browser with **PRESETS**. It has two categories: **FACTORY**, which ships with the plugin, and **USER**, which is yours. Click a preset to load it, or browse with the keyboard.

|                           |                                                                                                                     |
|---------------------------|---------------------------------------------------------------------------------------------------------------------|
| <div>↑</div> <div>↓</div> | Move through the list. The highlighted preset loads as you go, so you can audition the whole bank without clicking. |
| <div>←</div> <div>→</div> | Switch between FACTORY and USER.                                                                                    |
| <div>ESC</div>            | Close the browser.                                                                                                  |
| SAVE                      | Type a name in the field and press SAVE to store the current settings as a user preset.                             |
| RENAME • DELETE           | Act on the selected user preset. Factory presets cannot be changed or removed.                                      |

## Factory bank — 15 presets

|                  |                  |
|------------------|------------------|
| SAFETY CEILING   | DRUM BUS         |
| TRANSPARENT PUSH | VOCAL PEAKS      |
| STREAMING -14    | BASS CONTROL     |
| STREAMING -9     | EDM PUMP         |
| CD MASTER        | TRANSIENT KEEPER |
| CLUB LOUD        | WIDE MASTER      |
| LOUD AND SAFE    | CLASSICAL SAFE   |
| MIX BUS GLUE     |                  |

## 06 STARTING POINTS

Rough settings to work from, not destinations. Every one of them assumes you will move it once you hear the source.

### Streaming master

CEILING -1.0, then raise GAIN until integrated reads about -14 LUFS.

---

### How hard is too hard

Turn on DELTA. When you start hearing the melody in what is removed, back the GAIN off.

---

### Drum bus density

LOOKAHEAD 0.6 ms, ATTACK OFF, RELEASE 45 ms, TRANSIENT LINK about 80 %.

---

### Keep the image alive

TRANSIENT LINK FULL, RELEASE LINK about 20 %.

---

### Cleanest on bass

ATTACK FULL with LOOKAHEAD 3 ms and a 3 dB KNEE.

---

## 07 SUPPORT

For questions, bug reports and feature requests, please reach us on Instagram at [@ajanssrecords](#). Please include your operating system, your DAW and its version, the plugin format you are using, and the plugin version shown in the top right of the window.

ARLIMIT 1.0.0 · © Ajanss Records