

EDM Mastering Tools

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Introduction

Thank you very much for purchasing the Mastering Tools.
Mastering Tools is a bundle of 4 VST dynamic effects for Windows.
Its sound is unparalleled ,
sounds loud, warm , crispy and clear.

Technology

Mastering Tools is a VST plugin bundle including 4 premium dynamic effects.
It was produced aiming to be the best sounding mastering tools on the market.

After a long research and testings we finally released some plugins that
sound clear on the low band, and cristalline on the high band.

Digital signal processing can be made in various ways.

We utilized a 2x IIR oversampling technique

and 64 bit double precision crossover over all our plugins.

This technology leave the low range frequencies unaltered avoiding their distortion, resulting
in a very warm, clear and loud sound, while it leave the sound of mid to high range crispy and
cristalline.

Installation

Double-click the Mastering Tools Installer icon, and follow the instructions.

After the installation process the instrument will be muted ,
you will need to enter your serial number in order to use it.

You will receive the serial number directly via email message whitin the order confirmed email.

Your serial number uniquely identifies your purchase,

and you will need it whenever you will need to reinstall your plug-in on a different pc.

You can always find a copy of your serial numbers into your user area on our website.

To un-install from Windows, use the included un-installer application. If you have any general
questions about using the plug-ins with your host,
please refer to this documentation or write us a message and we will be happy to help.

AML4-Multiband Limiter

Many EDM music producers prefer a Multiband Limiter for their masters and that's because it can completely transform the incoming material to the next level.

With a Multiband Limiter it is possible to pump up any sound of your track directly from the final mix, change the whole equalization, enhance any band, add loudness to a kickdrum, add warmth and loudness to the whole track, crystallize the tracks high end and many other tricks, whenever you will need to enhance the track loudness, midlow end, midhigh or high end frequencies this is the tool that will fit your needs.

Ultra warm and clean output due to its 2x IIR oversampling feature.

Double precision 64 bit internal crossover to perfectly split about frequency ranges.

it performs unparalleled sound richness avoiding any kind of artifacts, leaving low frequencies unaltered and avoiding their distortion, unlike many similar products on the market. You can expect clean and rich sound from it!

Specifics:

- 4 Bands Limiter and Volume Maximizer
- 2x IIR Oversample Audio Processing
- Double Precision 64 bit Crossover
 - Stereo Vu-Meter
- Gain Reduction Level Meters
 - Digital Screen Controls
 - Input Level
- Output Ceiling Level (Volume Maximizer)



LmX1-Limiter Maximizer

Our Limiter Maximizer utilizes a look a head compressor with an ultra fast attack to level up and limite your masters o the desired level.

It is very easy to use and can pump up your music at an unparalleled quality, sound loudness, richness and clarity.

It performs a very groovy and clean compression, outstanding the standards, without any distortion on the low end and with a crispy and cristalline high end, unlike many similar product on the market.

If You are looking for a way to groove up your track or making it bounce with the best quality as possible, this little monster is the one that will do the job!

Specifics:

- 2x IIR Oversample Audio Processing
 - 64bit algorithm
 - Gain Reduction Level Meter
 - Digital Input/Output Meters
 - Input Level
- Output Ceiling Level (Volume Maximizer)



AMC4-Multiband Compressor

AMC4 is an all purpose mastering compressor with a great dynamic range and a completely different sound respect the AML4, LmX1 or the CXe2.

We put particular attention at creating any of our compressors different from each other in terms of schematics , techniques and type of results desired.

Its sound is just perfect and unique at the same time. Probably one of the best sounding compressor ever made. Ultra warm and clean output due its 2x IIR oversampling audio processing,

64 bit double precision crossover to perfectly split around frequency ranges,
parallel compression feature included,
volume maximizer feature included,

it performs an unparalleled sound quality and richness avoiding
any kind of artifacts , leaving low frequencies unaltered and avoiding their distortion,
and with a crispy and cristalline high end range.

You can expect a clear and rich sound from it! It sound good also with very high threshold levels!

Specifics:

- 4 Bands Compressor and Volume Maximizer
- 2x IIR Oversample Audio Processing
- Double Precision 64 bit Crossover
 - Gain Reduction Level Meters
 - Stereo Vu-Meter
 - Digital Screen Controls
- Dry/Wet Mixer (Parallel Compression)
 - Input Level
 - Output Ceiling Level (VolumeMaximizer)



CX1-Mastering Compressor/Expander

The CXe2 is a must have tool for dance music producers when they go to mastering their music. Many producers prefers a single band mastering compressor to any kind of multiband compressors or limiters especially when they done a great mixing and equalizing job in their pre-masters.

This because single band compressor do the job without compromising the original equalization or mix, that was made directly when the track was in the production stage.

More of that a single band compressor applied to a full track can literally transform its groove to the best. We programmed a state of the art 'look a head' compressor with an hpf filter and a dry/wet mixer where you can mix trough low/high frequencies as well as dry and wet signal to do the very usefull parallel compression, a common technique utilized on EDM music mastering.

It features a 2x IIR oversampling sound processing and a double precision 64 bit crossover, like all our other mastering tools,
2 separate compressors , one for each stereo channel.

The sound of our mastering compressor is simply perfect!

With this tool is possible to add loudness to any track , pump up and cristallize the kickdrum in your mix, compress only the frequency range after the hpf filter, leaving the low frequencies unaltered or pumping them so much loud, enrich any incoming sound material , enanching your track groove and many other usefull tricks!

Specifics:

- 4 Bands Compressor/Expander
- 2x IIR Oversample Audio Processing
- 2 Compressors , 1 for Each Stereo Channel
 - Sidechain HPF
 - Input Level
- Output Ceiling Level (Volume Maximizer)
- Dry/Wet Mixer (Parallel Compression)
 - In-Out Level Meters with clip Leds
 - Gain Reduction Level Meters



EDM Mastering Tips

How to use AML4-Mastering Limiter

Here are tailored mastering tips for your Multiband Limiter when working with EDM/Techno, organized to align with your plugin's parameters and genre-specific needs:

1. Frequency Band-Specific Strategies

Low Band (20–150 Hz):

Threshold: Set slightly higher to avoid squashing the kick/bass transients. Let the limiter act only on extreme peaks.

Range: Use moderate settings (-3 to -6 dB) to preserve punch while controlling sub-bass buildup.

Release: Sync to track tempo (e.g., 50–150 ms) to let the kick "breathe" rhythmically. Faster releases risk losing weight; slower ones may muddy the low end.

Mid Bands (150 Hz – 2 kHz & 2 kHz – 6 kHz):

Threshold: Tighter settings here to clamp down on harsh synths or vocal sibilance.

Gain: Boost post-limiting to restore clarity in leads/pads without adding distortion.

Release: Use faster releases (20–50 ms) for transient mids (plucks, claps), slower (50–100 ms) for sustained elements.

High Band (6 kHz – 20 kHz):

Range: Apply gentle limiting (-2 to -4 dB) to tame harsh hi-hats or aliasing.

Output Ceiling: Set to -0.5 dB TP (True Peak) to prevent clipping on streaming platforms.

2. Global Parameter Tips

Input Level: Drive the input until each band shows consistent but moderate gain reduction (1–3 dB). Avoid pushing too hard—EDM needs dynamics for energy.

Output Ceiling: Leave headroom (-0.5 to -1 dB TP) for lossy encoding. Use ISP (Intersample Peak) detection if available.

Gain Staging: Ensure the input isn't clipping before hitting the limiter. Use a trim plugin pre-limiter if needed.

3. Genre-Specific Workflows

Kick/Bass Balance: Use the low band's Range to duck sub-bass slightly when the kick hits, creating sidechain-like punch without a compressor.

Midrange Energy: If synths feel buried, apply a small gain boost in the mid bands post-limiting to enhance presence.

High-End Sparkle: Limit harsh highs subtly, then add a shelving EQ after the limiter (if needed) to brighten safely.

4. Loudness & Dynamics

LUFS Targets: Aim for -8 to -6 LUFS integrated (EDM's competitive edge), but prioritize punch over loudness. Use the Output Ceiling to cap peaks while letting the limiter handle sustained levels.

Avoid Over-Limiting: If transients (e.g., snare, kick) sound flat, reduce Range in the affected band or ease the Threshold.

5. Validation & Referencing

A/B with References: Compare your limited track against pro EDM/Techno tracks. Focus on low-end punch and high-end clarity.

Mono Check: Ensure bass and kick remain solid in mono (critical for club systems).

Dynamic Range Meter: Keep DR above 6–8 dB to retain groove.

Final Chain Recommendation

Place your multiband limiter last in the chain (after EQ, compression, and saturation).

Use it to:

Tame peaks per frequency range.

Glue the mix with subtle gain adjustments.

Safeguard output levels for streaming/club play.

By balancing surgical control with genre-driven intuition, your limiter can elevate EDM/Techno masters with both power and clarity.

How to use LmX1-Limiter Maximizer

1. Parameter-Driven Strategies

Threshold & Input Level

Aggressive but Transparent Loudness:

Set the Threshold to catch the top 3–6 dB of peaks (e.g., kicks, snares, synth stabs).

Drive the Input Level until you see 4–6 dB of gain reduction (GR) on peaks. Avoid pushing

GR beyond 6 dB to retain dynamics.

EDM Hack: Use a clipper before the limiter to shave off extreme transients, letting the limiter focus on loudness rather than "rescue" duties.

Release Time

Sync to Tempo:

For Techno (125–140 BPM), use a release time of 20–50 ms to let kicks "bounce back" rhythmically.

For slower, deeper grooves (e.g., melodic house), try 50–100 ms for smoother pumping.

Avoid ultra-fast releases (<15 ms) – they risk distorting transients or dulling the kick's attack.

Out Ceiling Level

Streaming Safety: Set to -1 dB TP (True Peak) to prevent clipping after lossy encoding.

Club Tracks: Push to -0.5 dB TP for maximum loudness (club systems handle **peaks better** than streaming).

2. Genre-Specific Loudness Tricks

Preserve the Kick's Transient:

Use the limiter's fast attack (if adjustable) or pair it with a transient designer to emphasize the kick's initial "click" before limiting.

If the kick loses punch, reduce the Input Level and compensate with a post-limiter gain boost.

Bass Weight:

EDM/Techno relies on sub-bass – if limiting squashes it, add a saturator before the limiter to add harmonics (making the bass audible at lower volumes).

Avoid Over-Squashed Highs:

If hi-hats/cymbals sound dull post-limiting, apply a high-shelf EQ boost (1–3 dB at 8–12 kHz) before the limiter to let it preserve brightness.

3. Loudness vs. Dynamics Balance

LUFS Targets:

EDM masters often hit -6 to -8 LUFS Integrated (competitive loudness).

Use the limiter to push loudness, but:

Check dynamics: Keep Dynamic Range (DR) above 5–7 dB (use tools like Youlean Loudness Meter).

Loudness Secret:

If the mix already has strong compression/saturation, use the limiter for final 1–3 dB GR to "lift" the track without killing groove.

4. Workflow & Validation

Pre-Limiter Prep:

Fix mix issues before limiting (e.g., muddy lows, harsh highs) – a limiter magnifies problems.

Use a mid/side EQ to narrow the stereo bass (<100 Hz) and widen highs pre-limiting.

A/B Reference:

Compare loudness and punch against tracks like Charlotte de Witte (Techno) or Martin Garrix (EDM).

Focus on:

Kick/bass clarity post-limiting.

High-end energy (no dullness from over-limiting).

Mono Check:

Ensure the kick and bass remain punchy in mono (critical for club playback).

5. Final Chain Example

Clipper (trim peaks) → 2. EQ/Saturator (enhance harmonics) → 3. Limiter (final GR + ceiling).

Key: The limiter is the "safety net" – let earlier stages do the heavy lifting.

By balancing aggressive loudness with transient preservation, your 1-band limiter can give EDM/Techno tracks the club-ready power and streaming-safe polish they need.

How to use AMC4-Multiband Compressor

1. Frequency Band-Specific Strategies

Low Band (20–150 Hz)

Kick & Sub-Bass Control:

Ratio: 3:1 to 4:1 (gentle compression to tighten subs without killing punch).

Attack: 10–30 ms (slow enough to let the kick transient through).

Release: 50–150 ms (sync to track tempo for rhythmic pumping).

Expander Tip: Use downward expansion (threshold just above noise floor) to clean up sub-bass rumble between kicks.

Dry/Wet: 30–50% parallel compression for added weight without squashing transients.

Lower Mid Band (150–600 Hz)

Synth/Pad Glue & Groove:

Ratio: 2:1 to 3:1 (light compression to tame resonant "mud").

Attack: 5–15 ms (fast enough to clamp down on boomy synth tails).

Expander Tip: Apply upward expansion on percussive elements (e.g., toms) to enhance groove dynamics.

Upper Mid Band (600 Hz – 6 kHz)

Lead Synth/Vocal Clarity:

Ratio: 4:1 (aggressive compression on harsh leads or vocal sibilance).

Release: 20–50 ms (fast release to preserve transient energy).

Gain: Compensate with +1–3 dB post-compression to restore presence.

Dry/Wet: 50–70% parallel compression for a "hyper-detailed" effect.

High Band (6–20 kHz)

Hi-Hat/Shaker Sparkle:

Compression: 2:1 ratio with fast attack (5–10 ms) to tame harshness.

Expander: Upward expansion on hi-hats (threshold just below peaks) to add "snap" and air.

Gain: Boost highs post-compression subtly (+1–2 dB) for sheen.

2. Global Parameter Tips

Input Level: Drive into the compressor until each band shows 2–5 dB GR (adjust per band).
Output Ceiling: Set to -0.5 dB TP (True Peak) for streaming safety.
Dry/Wet: Use parallel compression (30–50% wet) to retain transients while adding density.
Output Level: Match loudness to reference tracks (EDM often targets -6 to -8 LUFS).

3. Genre-Specific Workflows

Pumping Techno Groove:

Sync the low band's release time to the track's tempo (e.g., 1/4 note) for rhythmic sidechain-like pumping.

Aggressive Synth Squash:

Crush the upper mid band with 6:1 ratio + fast attack (5 ms), then blend back with Dry/Wet to keep it punchy.

Bassline Expansion:

Use downward expansion in the low band to duck sub-bass between kicks, creating space for the kick's transient.

4. Loudness & Dynamics

Dynamic Range: Aim for 6–8 dB DR (EDM needs groove, not brick walls). Use the expander to enhance peaks.

Loudness Hack: Use the high band's compressor as a limiter (∞ :1 ratio) to catch stray peaks in hats/cymbals.

5. Validation & Referencing

A/B with Tracks: Compare against artists like Amelie Lens (Techno) or Hardwell (EDM). Focus on:

Kick/subbass punch vs. compression artifacts.

Midrange aggression without harshness.

Mono Check: Ensure the low end remains tight and centered (critical for club systems).

Spectrum Analysis: Confirm no frequency build-ups post-compression (e.g., 200–400 Hz mud).

Final Chain Example

Subtractive EQ (clean up lows/mids) →

4-band Comp/Expander (per above settings) →

Saturator (add harmonics to bass/synths) →

Limiter (final loudness polish).

By strategically combining multi-band compression, expansion, and parallel processing, your plugin can shape EDM/Techno tracks into club-ready monsters with both surgical control and organic energy.

How to use CXe2-Compressor/Expander

1. Core Parameter Strategies

Input Level & Threshold

Drive for Groove:

Set Input Level to hit 4–8 dB of gain reduction (GR) on peaks (kicks/snare).

Adjust Threshold to clamp down on transients only (e.g., -6 to -10 dB), leaving sustained elements (pads, bass) dynamic.

EDM Hack: Use a clipper before the compressor to shave off extreme peaks, reducing GR workload and preserving transient snap.

Ratio & Attack/Release

Punch Preservation:

Ratio: 3:1–4:1 for gentle glue; 6:1–8:1 for aggressive "smash" on distorted leads.

Attack: 10–30 ms (slow enough to let kick transients through, fast enough to tame synth plucks).

Release: Sync to track tempo (e.g., 50–150 ms for 125–140 BPM) for rhythmic pumping. Faster release (20–50 ms) for minimal techno; slower for atmospheric grooves.

Side Cutoff (Sidechain Filter)

Bass-Friendly Compression:

Set a high-pass filter at 80–150 Hz on the sidechain input to prevent kicks/sub-bass from over-triggering compression. This keeps lows punchy and avoids "pumping" artifacts.

Lock Ahead Amount

Transient Protection:

Use 1–5 ms lookahead to catch peaks without dulling transients. Avoid higher values to prevent unnatural "softening" of kicks.

2. Creative Processing with Expander

Enhance Groove:

Apply upward expansion (1.5:1–2:1 ratio) on kicks/snare to add punch. Set Threshold just below peak levels to emphasize transients.

Use downward expansion to suppress background noise in sparse sections (e.g., sub-bass rumble between kicks).

Dry/Wet Mixer (Parallel Compression)

Transient + Sustain Balance:

Blend 30–50% wet signal for Techno's "crushed" energy while retaining kick/snare attack.

For harder EDM (e.g., big room), go 60–80% wet to glue chaotic mixes.

Low/High Mixer (Frequency-Dependent Blending)

Bass & Clarity Control:

Low Mix: Compress lows harder (70–100% wet) to tighten sub-bass.

High Mix: Keep highs drier (30–50% wet) to preserve hi-hat/shaker sparkle.

3. Genre-Specific Workflow Tips

Kick/Bass Dominance:

Use Side Cutoff to focus compression on mids/highs, letting kicks/sub-bass stay dynamic.

Pair with a post-compressor saturator to add harmonics to compressed elements (e.g., distorted synths).

Hypnotic Techno Pumping:

Set Release to 1/4 or 1/8 note timing (calculate via BPM) for rhythmic "breathing" akin to sidechain compression.

Aggressive Highs:

Apply downward expansion on hi-hats (Threshold just above noise floor) to sharpen their attack.

4. Loudness & Output

Gain Staging:

Use Gain to compensate for GR, but avoid overloading the output. Leave 1–2 dB headroom before hitting a final limiter.

Output Ceiling:

Set to -0.5 dB TP (True Peak) for streaming; -1 dB TP if mastering for vinyl.

5. Validation & Referencing

A/B Against References: Compare with tracks like Adam Beyer (Techno) or David Guetta (EDM). Focus on:

Kick transient integrity post-compression.

High-end clarity (avoid over-expanded/compressed hats).

Mono Check: Ensure kicks/bass remain punchy and centered.

Dynamic Range: Aim for 6–8 dB DR (EDM needs groove, not squashed flatness).

Final Chain Example

Clipper (trim peaks) →

Subtractive EQ (cut mud <150 Hz) →

1-band Comp/Expander (settings above) →

Saturator (add warmth to mids) →

Limiter (final -8 to -6 LUFS push).

By combining precision compression, frequency-aware blending, and expansion-driven transient shaping, your plugin can turn EDM/Techno mixes into club-ready powerhouses without sacrificing groove or clarity.

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