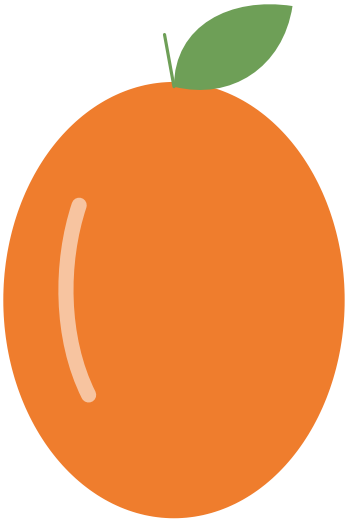


KA FET Comp

Instruction manual

Kumquat Audio · Edition 1.7.11 · October 2026

kumquataudio.com

NO. 17

KA FET Comp

A fast, aggressive compressor that gives drums and vocals their bite.

KA FET Comp is a fast, forward compressor. Its threshold is fixed: you push the sound into it with In and choose how firmly it is held with Ratio. Its attack is very short, so it takes the front off a sound, and its color adds a little saturation the harder it works. Use it on drums, vocals and anything that needs bite.

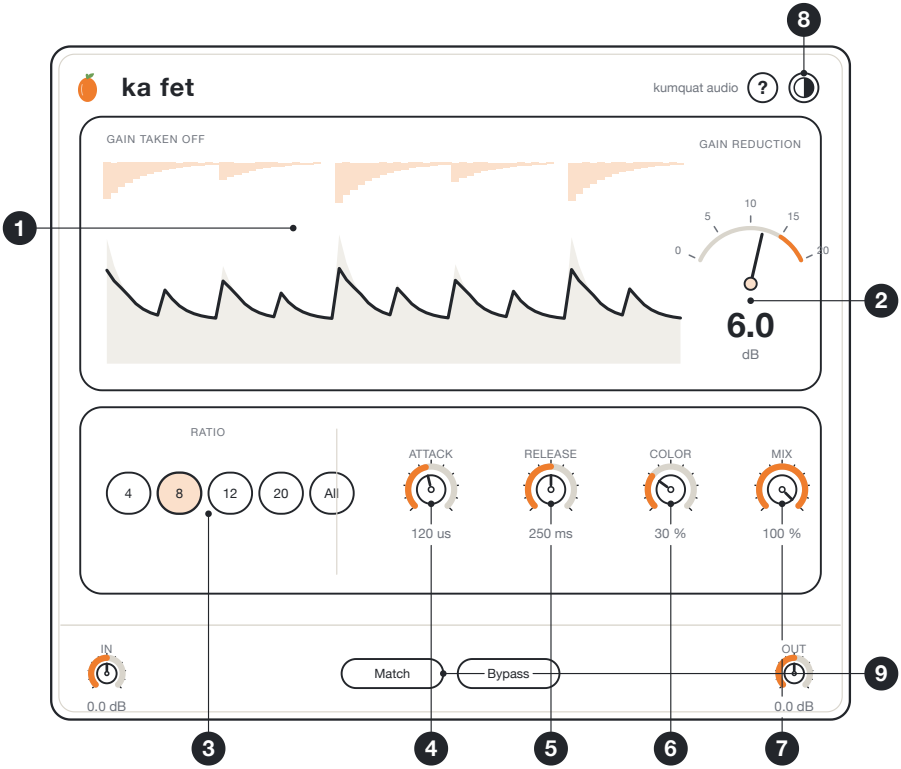


FIG. 1 The parts of KA FET Comp. The numbers are explained on the next page.

Parts

fig. 1

1 The picture
The level coming in (grey), the level going out (the line), and the gain being taken off, hanging from the top in orange. The threshold is fixed.

2 Gain reduction
How many dB it is turning the sound down now, on a needle that flicks with every hit. The last quarter of the dial is red. The number holds the deepest value for a moment so that it can be read.

3 Ratio
How firmly the sound is held once it is over the threshold: 4 to 1 is gentle, 20 to 1 is close to a limiter. All is every button at once: much firmer, a little faster, and more color.

4 Attack
How fast it grabs a loud sound, from 20 microseconds to 0.8 milliseconds. Very fast takes the front off a drum hit; that is where the bite comes from.

5 Release
How fast it lets go. It is quicker after a short peak and up to three times slower after hard work.

6 Color
A little saturation after the compressor, more of it the harder it works. At 0 it is only the compressor.

7 Mix
How much compressed sound is blended with the original (parallel compression).

8 Help and light/dark
The ? turns the pop-up help on and off. The half circle switches light and dark.

9 In, Out and Match
In pushes the sound into the fixed threshold: it is the compressor's Input control. Out is the gain after it. In turns the sound up or down before the plug-in hears it, and Out turns the result up or down. Bypass plays the sound without the plug-in. Match keeps the output as loud as the sound that came in, whatever In and the plug-in do, so you hear what a setting does and not just a change in loudness.

Operation

step by step

1. Put the plug-in on a drum, a voice or a bus and play a loud passage.
2. Turn the In knob (at the bottom left) up until the picture shows the gain reduction you want, 3 to 8 dB for most sources. The threshold is fixed: In is the Input control.
3. Choose a Ratio. 4 is gentle, 8 and 12 are firm, 20 is close to a limiter, and All is every button at once: much firmer and more color.
4. Set Attack. 20 microseconds takes the front off a drum hit and gives it bite; a few hundred lets it through and keeps the punch.
5. Set Release. A fast release is lively and can pump; a slow one is smooth. After hard work it takes up to three times longer. The needle on the right shows each hit.
6. Use Color for a little saturation after the compressor, and Mix below 100 % for parallel compression. Out sets the level you leave with.

Controls and settings

range · start

Control	Range	Starts at	What it does
Ratio	4, 8, 12, 20, All	4	How firmly the sound is held once it is over the fixed threshold.
Attack	20 to 800 µs	120 µs	How fast it grabs a loud sound.
Release	50 ms to 1.1 s	250 ms	How fast it lets go (longer after hard work).
Color	0 to 100 %	30 %	Saturation after the compressor; more of it the harder it works.
Mix	0 to 100 %	100 %	How much compressed sound is blended with the original.
In / Out	–24 to +24 dB	–6 dB / 0 dB	In pushes the sound into the threshold and starts at –6 dB, so it begins gently: turn it up for more. Out is the gain after the compressor.
Match	on / off	off	Keeps the output as loud as the sound that came in, whatever In and the plug-in do. See In, Out and Gain Match.

TIP For a drum bus: Ratio 4, Attack 800 µs, Release 150 ms, and push In for 3 to 4 dB of reduction. For a room-like pump, try All.

TIP The harder it works, the more the top comes forward (up to about 2 dB above 3 kHz) and the sooner the grit starts.

CAUTION A very fast attack with a very short release can sound distorted on low sounds, because the compressor then follows the waves themselves. Slow one of them down.

Specifications

Formats	Audio Unit, VST3
Channels	mono or stereo (the two sides are linked)
Delay	none
Window	700 × 520, can be resized

How it works

a closer look

The compressor listens to the louder of the two sides with a very fast peak detector, and measures how far the sound is over a fixed threshold. The harder you push the sound in with In, the further over it goes. Ratio says how firmly it is turned down: at 4 to 1, a sound 12 dB over comes out 3 dB over.

The attack is between 20 microseconds and 0.8 milliseconds, so the compressor takes the very front off a sound. The release is program dependent: it is as set after a short peak and up to three times longer after hard work.

All is every ratio button at once. It holds the sound much more firmly, a little faster, with a threshold 4 dB lower, and the color is driven harder. Color is a lopsided saturation after the gain stage, without aliasing, and more of it the harder the compressor is working.

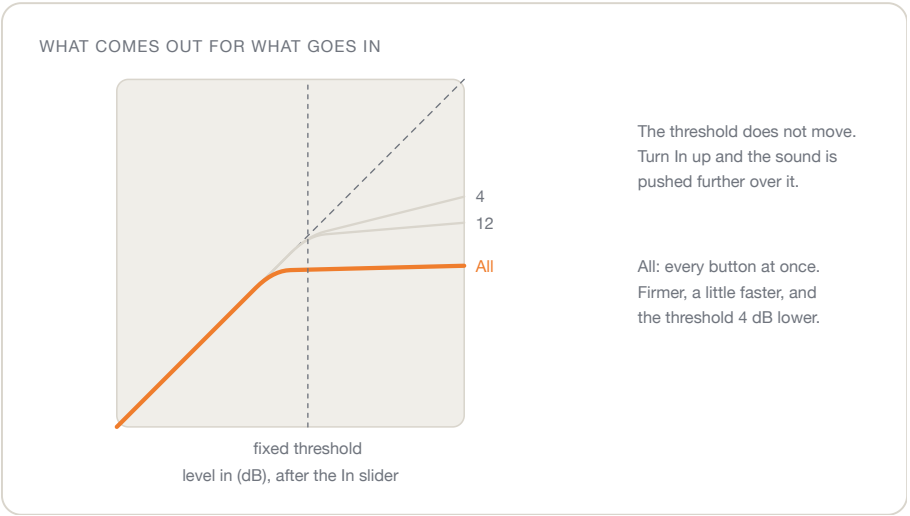


FIG. 2 The threshold is fixed; In pushes the sound over it.

CARE

Care and troubleshooting

If this happens	Do this
A plug-in does not appear in the list	Restart the music software. In Logic Pro, open the Plug-in Manager, select the Kumquat plug-ins and choose Reset & Rescan Selection.
An old name is still showing	Quit Logic with Cmd+Q and open it again. If it persists, remove the old copies from /Library/Audio/Plug-Ins/Components.
My key was not accepted	Copy all of it, from KA1 to the end, with no spaces added or lost. A key for one plug-in does not unlock the others.
The pop-up help does not show	Press the “?” at the top of the window to turn it on. It is one choice for all the plug-ins.
Which part of the picture does a knob change?	Point at the knob, or hold it down while you turn it: the part of the picture it controls lights up, with the knob’s name and value.
KA Drum Gate, Silence Trim, Auto Mixer or Time Align shows a message instead of a picture	Open Logic Pro using Rosetta, put the plug-in first in the Audio FX list, select a region and press play.
The sound is late	KA De-Click, De-Verb, De-Noise, Contour, Mic Blend, Saturator (it oversamples), EQ (with the suppressor), Multiband (in Linear phase) and Limiter delay the sound a little and tell the music software, which lines everything up. Do not compensate by hand. For playing through a plug-in, the Saturator, EQ and Multiband have a Live switch that takes the delay away; the compressors, De-Esser, Delay, Reverb and Rider have no delay at all.
A window is too small or too big	Drag the corner at the bottom right. The size is remembered, and it is the same for all the plug-ins: make one bigger and the others open that big.
The Limiter pumps	Leave Release on Auto, or set 60 to 100 ms. A release of a millisecond or two is the dirtiest setting.

If something is not right, write to **audiokumquat@gmail.com** and say which plug-in, which music software, and what you were doing.

FOR YOUR OWN NOTES

Notes