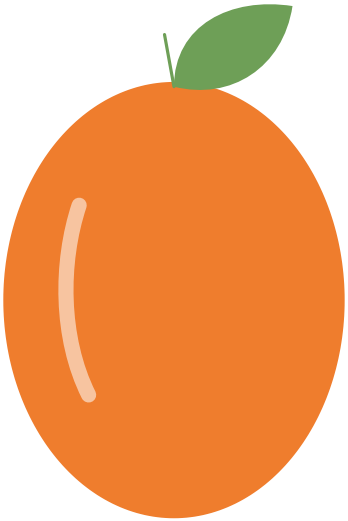


KA De-Click

Instruction manual

Kumquat Audio · Edition 1.7.11 · October 2026

kumquataudio.com

NO. 2

KA De-Click

Removes lip smacks, tongue clicks and saliva sounds.

KA De-Click removes mouth sounds from a voice: lip smacks, tongue clicks, saliva. A click is a very short burst of high frequencies that jumps out of the sound and is gone again; the plug-in finds it and fades it out for those few milliseconds, and leaves the voice underneath untouched.

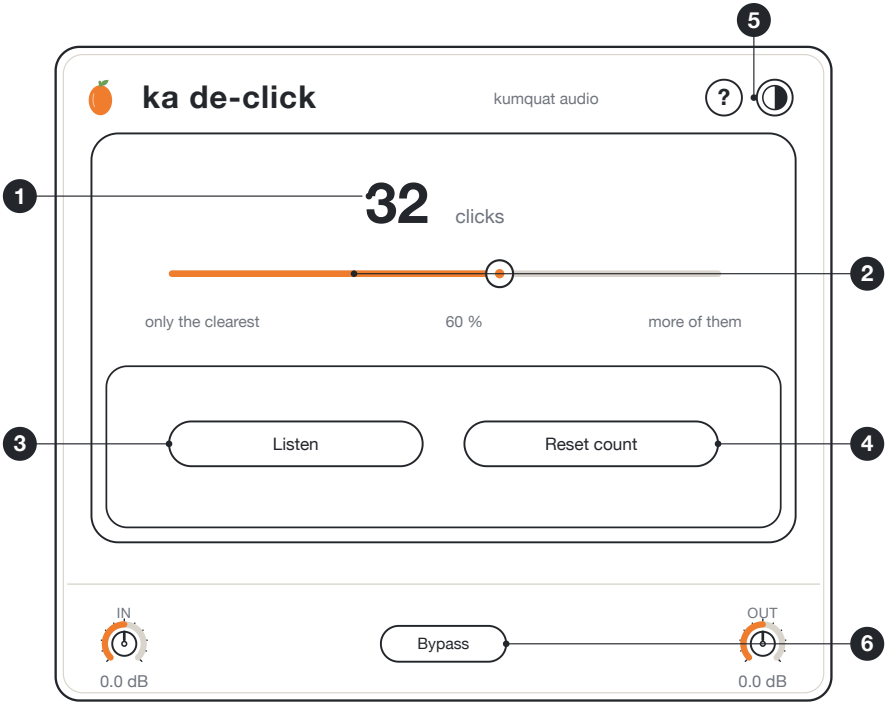


FIG. 1 The parts of KA De-Click. The numbers are explained on the next page.

Parts

fig. 1

1. **Click counter**
   How many clicks have been taken out since you last reset the count.
2. **Sensitivity**
   Left: only the clearest clicks. Right: more of them, and taken out more completely. 0 is off.
3. **Listen**
   Plays only what is being taken out. You should hear clicks and nothing else.
4. **Reset count**
   Starts the click counter again from zero.
5. **Help and light/dark**
   The ? turns the pop-up help on and off. The half circle switches light and dark.
6. **In and Out**
   In turns the sound up or down before the plug-in hears it, and Out turns the result up or down.

Operation

step by step

1. Put the plug-in on the voice track and play a stretch where you can hear the clicks.
2. Turn Sensitivity up until the clicks are gone. The counter shows how many have been taken out.
3. Press Listen. You should hear only clicks. If you hear words or tone, you have gone too far (the sounds of a hard “t” or “k” begin like a click).
4. Press Reset count to start counting from zero again.

Controls and settings

range · start

Control	Range	Starts at	What it does
Sensitivity	0 to 100 %	50 %	How many clicks it finds, and how completely it removes them. 0 is off.
Listen	on / off	off	Plays only what is being taken out.
Reset count	button		Starts the click counter again from zero.
In / Out	In ±24, Out ±12 dB	0 dB	The two knobs under the meters: before and after the plug-in.

CAUTION Very high sensitivity can touch the first part of hard consonants. Always check with Listen.

TIP It finds about twice as many clicks as it used to. Start at 50 % and listen to what is taken with Listen; raise it for a mouth that clicks a lot.

Specifications

Formats	Audio Unit, VST3
Channels	mono or stereo
Delay	1152 samples (24 ms at 48 kHz)
Window	700 × 304, can be resized

How it works

a closer look

A mouth click is a very short burst of high frequencies. The plug-in splits off the highs with filters that do not shift the phase of the sound, and measures how much sound there is above 6 kHz in every millisecond.

Each millisecond is compared with the median of the milliseconds round it: a few before and a few after. A millisecond that stands well above its surroundings is a click starting. The more you turn Sensitivity up, the less it has to stand out.

A burst that goes on for more than a few milliseconds is speech, and so is a burst after which the highs stay up (the start of a “t” or an “s”): those are left alone. A click is faded out, in the highs only, for those few milliseconds, and everything below it stays, so the voice under the click is kept. To do all this the plug-in looks 24 ms ahead.

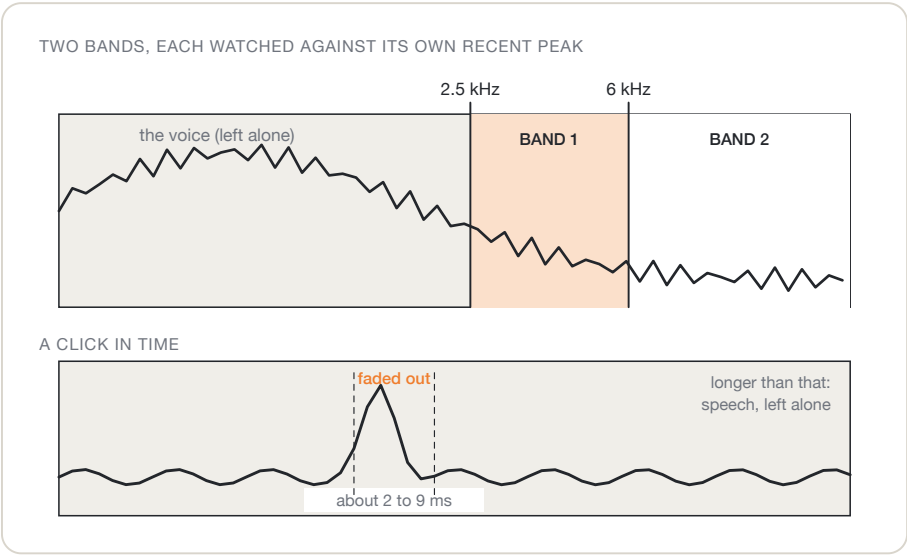


FIG. 2 Two bands are watched, each against its own recent peak.

EVERY INSERT PLUG-IN

In, Out and Gain Match

Along the bottom of most windows is a strip with two knobs, one under each level meter, and two buttons. In turns the sound up or down before the plug-in hears it, and Out turns the result up or down. Double-click either knob to return it to 0 dB. Bypass plays the sound without the plug-in (it stays in time with the other tracks, and fades in and out without a click); your music software's own bypass button for the plug-in does the same. The four plug-ins that read whole recordings, and KA Limiter, have the Bypass button at the top of the window instead.

A louder sound almost always seems better, even when it is not. That is how a setting can fool you: you turn something up, the sound gets louder, and you think it got better. Match takes that away. When it is on, the plug-in listens to how loud the sound is as it arrives and as it comes out, and turns the output up or down by the difference, slowly, so the two stay the same. That includes In: drive the plug-in harder and the output stays where it was. Now when you change a setting you hear what it did to the sound, and nothing else. Out is then yours to trim on top.

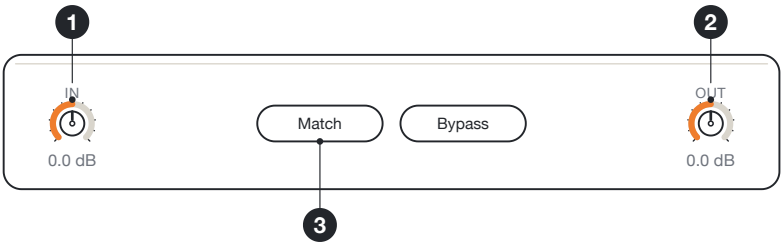


FIG. 3 The strip along the bottom of a window.

1 **In**
Turns the sound up or down before the plug-in hears it.

2 **Out**
Turns what comes out up or down.

3 **Match**
Keeps the output as loud as the sound that came in, whatever In and the plug-in do. The number beside it shows how much it is adding or taking away.

Use In to drive a plug-in harder or softer: more In into KA Saturator or KA Bus Comp gives more effect. Use Out to set the level you want to leave with; with Match on it moves the level up or down from the level that arrived. The number beside Match shows how much it is adding or taking away.

Who has what

In, Out and Match

Plug-in	The strip has	Note
KA De-Esser	In · Out · Match	Match is on hold while Listen is on.
KA De-Noise	In · Out · Match	Match is on hold while Listen is on.
KA De-Verb	In · Out · Match	Match is on hold while Listen is on.
KA De-Click	In · Out	It changes the level so little that matching is not needed.
KA EQ	In · Out · Match	Out is the level after the EQ and the suppressor.
KA Bus Comp	In · Out · Match	Makeup is still there as the compressor's own make-up gain.
KA Saturator	In · Out · Match	Drive already keeps the level close; Match finishes the job.
KA Zing	In · Out · Match	Match is on hold while Delta is on.
KA Contour	In · Out · Match	Match is on hold while Listen is on.
KA Mic Blend	In · Out	In is applied to both mics, including the sidechain.
KA Delay	In · Out	Mix is meant to change the level, so there is no Match.
KA Multiband Comp	In · Out · Match	Each band has its own Gain as well.
KA FET Comp	In · Out · Match	In is the compressor's Input: the threshold is fixed.
KA Opto Comp	In · Out · Match	Out is the compressor's make-up gain.
KA Rider	In · Out	Match would undo the ride, so there is none. Delta plays only the ride.
KA Chladni, KA Root	none	Instruments have no audio input, so no In, Out or Match: use the Level drawing.
KA Reverb	In · Out	Mix is meant to change the level, so there is no Match.

TIP To set a compressor or a saturator fairly: turn Match on, switch the plug-in off and on, and choose the setting that sounds best at the same loudness.

CAUTION KA Limiter has no In and Out: its Threshold is its input and its Ceiling is its output. The four plug-ins that read whole recordings do not have the strip. Every plug-in has a Bypass button.

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