Using Reaper for Voice Editing

Repairing and Polishing VOX tracks

■ Recording and Processing Voiceover or Narration in REAPER

Function	Description (What it does)	How to do it in Reaper	When to use/avoid
'Normalize' 'Loudness Normalization'	Brings volume up uniformly across track. Choosing a peak of 0 or -1 dB will ensure nothing goes into the clipping range Alters volume levels differentially based on frequency (i.e. takes into account perceived loudness). Provides more natural and consistent results	Right-click the item and select Item Processing> Normalize items (peak/LUFS/RMS) Peak = Normalize RMS or LUFS = Loudness normalization Set up shortcut via actions menu	How to Normalize in REAPER – ProRec.com If you just want to visualize the peaks better, change this in View> Peaks Display Settings (this is also where you can change to spectrogram view)
Noise Reduction	Removes background noise for a cleaner vocal	FX: ReaFir Select a region of 'silence' and play/toggle repeat to loop. In ReaFir, switch Mode to Subtract, Edit Mode to Precise and Size to 1024. (Can save this as a preset.) Reset then check 'Automatically build noise profile'. Play then stop the loop to build the profile; then uncheck the box. Play another section of the track with the	

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		volume turned up high. Move the profile around with the cursor and Ctrl held down to set the noise floor at the level where it cuts the noise without damaging the sound quality.	
EQ	Boost or cut specific frequencies to improve specific vocal qualities	FX: <u>ReaEQ</u>	A Master Guide To Voice Equalization—How To Apply EQ to Voice Recordings Envato Tuts+ Something that analyses EQ and helps match can be used to make two separately recorded vocal tracks more uniform
De-ess	Removes sibilant hiss; essentially dynamic EQ	Nyquist De-esser (free) or Izotope RX10 Repair	
Compression	Makes the loudest parts of the signal quieter and the quietest parts louder so that loud peaks don't sound jarring but the quieter passages can still be heard.	Compression in REAPER (ReaComp Settings) – ProRec.com Cheat Sheet - Compressor settings for voice recordings - AudioKickstart.com Key parameters are the threshold and the attack/release gain reduction ratio. Most voiceovers will sound natural with between 2:1 and 4:1 gain reduction.	Audio Compression 101: How to Use a Compressor for a Better Mix LANDR Compression across a whole audio with whispers and loud moans may be too blunt a tool and can cause some unnatural sounds.
De-clip	Reduces clips below a threshold smoothly (is this the same as compression)?	Izotope RX10 De-clip	
De-click	Removes clicky mouth sounds	Izotope RX10 De-click	It kills wet sounds so don't apply it to the whole audio if you made them live

Plugins for speedy processing

Nectar 3 Elements - Pitch, Clarity (EQ), Compression (dynamics) Then RX 10 Repair - De-noise, De-ess, De-click, De-reverb

Editing

Function	Shortcut/Location	Function
Split track	Select point with cursor and hit S	
Delete	Select region; Ctrl + Del	
Trim/Restore	Drag end of item sideways	
Fade in/out	Drag from the top corner of the item	
Crossfade items	Overlapping items automatically creates an adjustable crossfade	
Ripple editing	This button in top left	Preserves item order and spaces. Can turn on so it acts per track or across all tracks.
Labels (Regions/Markers)	Select region and Shift + R Shift + M for a marker at one timecode Right-click these to add a label	■ This is REAPER 6 - Markers & Re
Spectral editing	Spectral Editing in REAPER Right click item and select 'Always show spectrogram' to toggle view	Remove specific bands of noise

	Right-clicking the control knobs allows you to set a value manually	
Reverse	Right-click item and 'Reverse item to new take'	
Reverb	ReaVerbate	
Echo	ReaDelay	
Envelopes - Volume, Panning	You can open an envelope for volume, panning, mute etc or for any plugin acting on the track or item. For the standard ones, right-click the track and go to Envelopes, or right-click the item, and go to Take>Take Envelopes. And/or for plugins, click on the track's envelope button (pic below) It's handy to go to the Actions menu and find 'Envelopes: show all envelopes in tracks' and assign a hotkey to it.	■ This is REAPER 6 - Envelopes & A

Recording and importing tracks

- Click on left-hand blank space for a new track
- Arm the track
- Turn off monitoring, it gives an echo
- Check levels using FX> JS Meter; should be 12-18 dB
- Hit record and remember to do 7-10 sec silence to capture background noise

- To export to mp3 etc, File> Render
- To import tracks, click and drag from file explorer or Insert>Media File

Automating plug-ins

Automating Plug-Ins (Reaper Tips & Tricks)

Any plug-in can be adjusted over time using automation.

Click the track's envelope button which is automatically set to 'Trim/Read'



Touch mode:

- Making adjustments to the plug-in live will automatically open an envelope for that plugin/parameter and record what you are doing whenever a slider/button is being 'touched'
- If you have envelopes opening a new channel, this will have a slider you can also use to adjust the FX
- This will create an envelope with a lot of points, you can fix this by right clicking on the points and selecting 'reduce number of points'.
- Video above also covers automating bypass of a FX.

Vocal EQ Cheat Sheet Boost HMF HF 9k-11k 800Hz - 1k Brightness Lyric clarity 12k+ Air 100Hz - 150Hz 3k - 6k +15 Add warmth, fullness Presence, open up vocal +5 250Hz - 500Hz 1k 5k 50Hz 100Hz 10k 15k -5 -10 12k+ -15 800Hz - 1k Below 75Hz - 100Hz Less brittle Remove nasal tone Remove unwanted 4k - 9k Remove sibilance 100Hz - 150Hz Remove boominess, small room 2.5k - 4k resonance Remove digital harshness To increase clarity: Males: 180Hz - 240Hz Cut Females: 200Hz - 300Hz * Make sure to watch the accompanying video at ultimatevocalformula.com/vocal-eq-cheat-sheet for a walk-through & explanation of the above diagram.

