

Solid-state Clipping versus Tube Distortion

Waveform A represents Waveforms B and C before they were electronically distorted.

Solid-state distortion (Waveform B) has a harsh and irritating sound.

Signals that surpass maximum electronic amplitude limits are simply cut off (clipped).

Tube distortion reacts in a more gently attenuated, rounded off fashion (Waveform B). The waveforms aren't clipped. They're acted on more like an extreme limiting effect. Even though the waveform is still distorted, the resulting sound is warmer, smoother and less irritating than solid-state distortion.

