

## Signal Processing Chain (WNS ver 1.0)

input (.mp3 .wav)

Preprocessing  
(Decode + Load)

Initial normalization  
and headroom

DC removal & low-  
frequency cleanup

Spectral smoothing /  
mild lowpass

Click/pop and short  
glitch removal

Noise reduction

Corrective EQ  
(Surgical)

De-essing  
(vocal tracks or vocal-  
heavy mixes)

Transient shaping  
and dynamics

Multiband  
compression /  
dynamic EQ

Enhancer / harmonic  
excitation

Light ambience /  
reverb

Final tonal shaping

Final compression &  
limiter

Dither and export