

Dotec-Audio DeeTrans

User's Guide

About DeeTrans

Thank you for choosing Dotec-Audio DeeTrans.

Freely customize the settings of the virtualized transformer to give it an analog feel.

Installation on Windows OS

Those plug-ins are provided as a .dll and .vst3 and .aaxplugin folder (AAX).

To install the plug-ins, simply copy it to your system's shared VST or VST3 or AAX folder.

AAX folder : C:\Program Files\Common Files\Avid\Audio\Plug-Ins

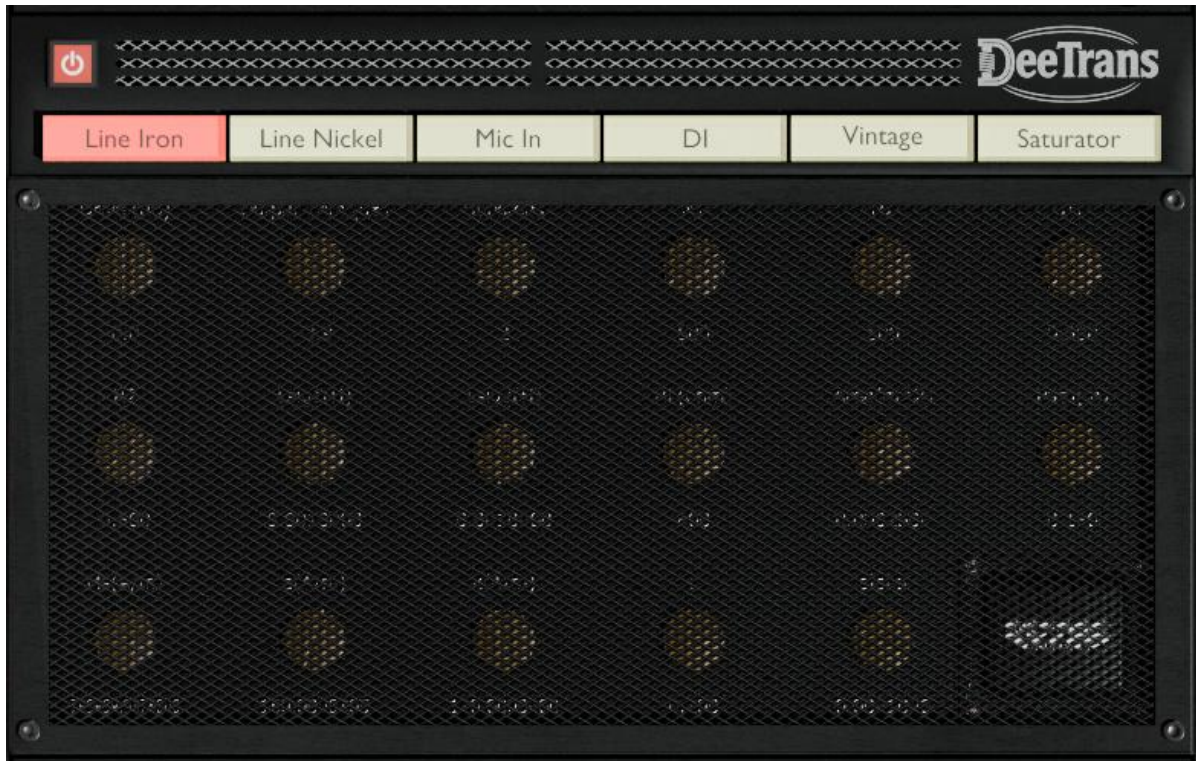
If you're not sure where that is, please consult your music software's documentation.

If your music software is already running, you'll probably need to quit and restart if before the plugin is recognised.

Installation on MacOS

1. Those plug-ins are provided as a .vst (VST) and .component (AU) files and .aaxplugin (AAX) files.
2. To install the plug-ins, open “**install.pkg**” and follow the installer instructions.
3. If your music software is already running, you'll probably need to quit and restart before the plugin is recognised.

Panel Description



Power button (left-upper):.

Enables DeeTrans. Off bypasses it.

Presets:

The selected preset will be applied.

For details, please refer to the parameter Manual.

Parameters:

Click the cover to display.

For details, please refer to the parameter Manual.

Parameter Manual

Presets (Buttons)



- * Line Iron : Thick, slightly rounded. Vocals, Drum Bus
- * Line Nickel : Clean and transparent. Mastering
- * Mic In : Low end saturates easily. Vocals, Bass DI
- * DI : Instrument input, bold saturation. Guitar, Bass
- * Vintage : Thick and gritty. Lo-fi, 70s style
- * Saturator : Saturation effect. special processing

Basic Controls

- * Drive (dB) : Transformer input drive. Recommended 0 to +12 dB
Effect = More harmonics and compression. Vocals/Snare +3-6 dB, Bass/Guitar +6-12 dB
- * Output Trim (dB) : Output level adjustment. Recommended -6 to +6 dB
Effect = Level matching after Drive
- * Substeps : Internal simulation steps (accuracy). Recommended 2-4
Effect = Higher values = more stable/high-end clarity, higher CPU load

Windings & Load

- * N1 (turns) : Primary winding count. Recommended same as N2 (1:1)
Effect = Different ratio works like step-up/step-down transformer
- * N2 (turns) : Secondary winding count. Recommended same as N1 (1:1)
- * R1 (Ω) : Primary winding resistance. Recommended 0.3-1.0 Ω
Effect = Higher = darker tone, less punch
- * R2 (Ω) : Secondary winding resistance. Recommended 0.3-1.0 Ω
- * L σ 1 (H) : Primary leakage inductance. Recommended 0.5e-3 to 2e-3
Effect = More leakage = smoother HF roll-off, vintage feel
- * L σ 2 (H) : Secondary leakage inductance. Recommended 0.5e-3 to 2e-3
- * RL (Ω) : Secondary load resistance. Recommended 600 Ω (line) to 100 k Ω (DI)
Effect = Smaller = heavier load, fatter and more saturation / Larger = cleaner

Core Geometry

- * Area (m²) : Core cross-section area. Recommended 2.0e-4 to 3.0e-4
Effect = Larger = cleaner headroom / Smaller = saturates earlier
- * Path (m) : Magnetic path length. Recommended 0.10-0.16
Effect = Shorter = fatter, saturates faster / Longer = smoother

Hysteresis

- * M_s (A/m) : Saturation magnetization. Recommended $6.0e5$ - $9.0e5$
Effect = Smaller = earlier saturation (more distortion) / Larger = cleaner
- * a (A/m) : Langevin function scale. Recommended 100-200
Effect = Smaller = faster saturation onset / Larger = more natural
- * k (A/m) : Pinning parameter. Recommended 70-180
Effect = Larger = wider hysteresis loop, more “iron-like” thickness
- * c (0-1) : Reversible component ratio. Recommended 0.1-0.3
Effect = Smaller = more irreversible, gritty / Larger = cleaner
- * α (alpha) : Mean field coupling. Recommended $1e-4$ to $6e-4$
Effect = Larger = softer/rounded curve / Smaller = harder/edgier

Quick Recipes

- * Clean : Nickel, higher M_s , lower Drive
- * Warm/Thick : Iron or Vintage, increase k and $L \sigma$
- * Aggressive : Saturator, high Drive, low a
- * Instrument DI : DI preset, $RL=100 \text{ k}\Omega$, adjust Drive for flavor

How to Register

The DOTEK-AUDIO product becomes the "**product version**" by registering the serial key and e-mail address in the "**demo version**".

This section describes how to register the serial key you purchased.

Step 1



You can register serial key by clicking registration button.

Step 2

A screenshot of the 'Registration' dialog box. The title bar says 'Registration'. The text inside says 'Please enter the serial key and your e-mail address for the registration.' There are three input fields: 'Serial key', 'E-mail address', and 'E-mail address(Verify)'. Each field has a red arrow pointing to it. At the bottom, there are three buttons: 'Open the shopping page', 'Cancel', and 'OK'. The 'OK' button is highlighted with a red rectangle.

This window will be displayed.

Please enter a serial key and your email address in the textbox and click OK button.

*** The registration requires an internet connection.**