

OwnTHD

User manual



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Chapter 1.Introduction



OwnTHD is an audio effect plugin, that makes extra distortion. Distortions can be described as gains in harmonics, which makes up the name of this product (total harmonic distortion, THD).

Different amount and styles of distortions would induce different "colors" on sound, and these colors are originated from real-world vintage equipments.

Chapter 2.Installation/Setup

Minimum System Requirements

- ✓ 64-bit Intel or AMD CPU, with SSE3 support
- ✓ Mac OS X 10.9 or Windows 7
- ✓ 1GB RAM
- ✓ 100MB free hard disk space

Please note: Logic Pro 9 is NOT supported, please use Logic Pro X or higher.

Mac:

Install OwnTHD for the first time, double click:

- OwnTHD-1.0.0-programs-en_US-retail

Then follow the instructions.

Windows:

Install OwnTHD for the first time, double click:

- OwnTHD-1.2.X-programs-retail-en_US.exe

Then follow the instructions.

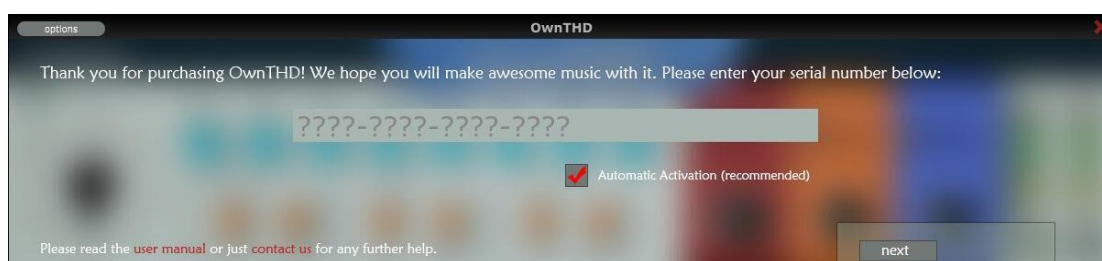
Chapter 3.Registration and Activation

Once successfully installed OwnTHD, you must register and activate it in order to use. Upon purchasing OwnTHD, a unique serial number will be sent to you. This serial number is the only proof of purchase, so please keep it safe, as it may be needed in the future. Each serial number can activate OwnTHD on three different computers. In order to distinguish between different users' computers, a unique Machine ID is generated before the authorization key is created, and each authorization key file can only match one computer.

When you first run the OwnTHD plugin, you will see the following pop-up window:

Please enter your serial number and you have two choices: automatic online activation and manual activation.

Automatic Registration



If your computer is able to connect to our server, you don't need to do anything, just check Online activation checkbox and click Next. OwnTHD will register automatically.

Manual Registration

If your computer doesn't have Internet connection, or for some reason you can't open the activation page of OwnTHD, you should unclick Online activation checkbox and click next. A page with operation guide will be shown:



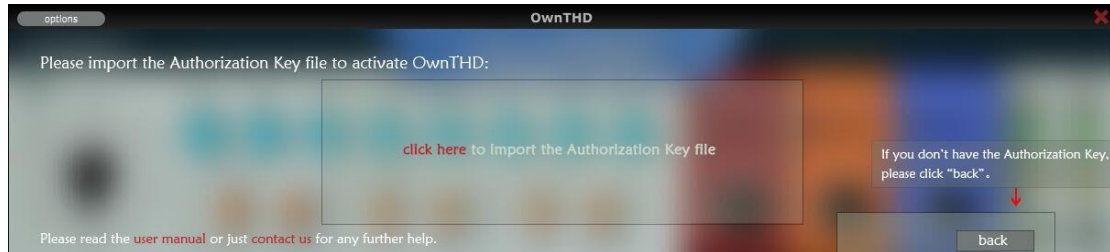
Now you need to perform a series of operations to activate OwnTHD manually:

- Click save as file button, your machine ID will be stored as a file.
- Now you need to upload this file to our website to obtain activation file. By clicking online registration button, the website will be opened for you instantly. However, as you have selected manual registration, you probably don't have Internet connection on current computer, so you should copy the machine ID file to another computer, and visit

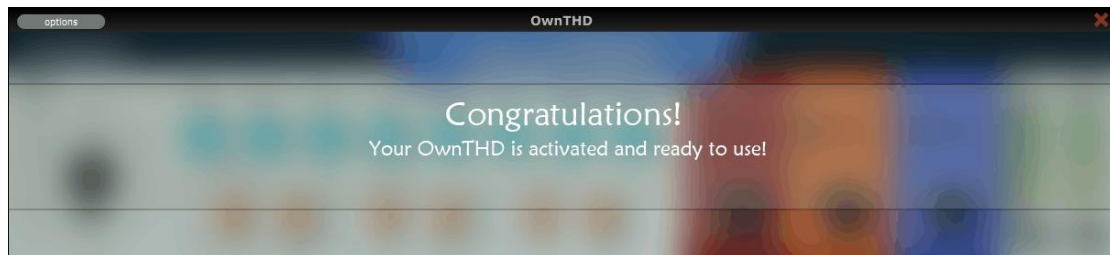
www.threebodytech.com/key to upload machine ID file there.

- Once you have uploaded a valid machine ID file, an authorization key file will be sent to you instantly. Copy that file back to the computer you are installing OwnTHD, click next and you will see this page:

Import the authorization key file here, click next, and you're all set.



No matter what activation method you used for OwnTHD, once you see this page:



Congratulations! Your OwnTHD has been activated and you can use it now.

Chapter 4. Components

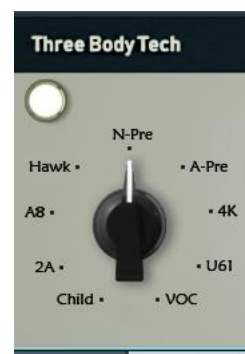
OwnTHD is composed of four components: Vintage Equipment Simulation, Solid-State Simulation, Tube Simulation and Tape Simulation. All of them are connected in serial, and each can be turned on/off individually.



4.1 Vintage Equipment Simulation

This component simulates 9 types of equipment that are commonly used in audio mixing/mastering, each has a different "color" to the sound and is suitable in different music styles. The prototype of these equipments including microphone preamps, mixers, EQs and other effect hardware, and we only simulate their "THD" part. By turning the **Type** knob, you can switch among these equipment pieces. See details below:

- N-pre: modeled from one of the most famous microphone preamps in the world. The sound is warm and has rounder, deeper low-end. When processing drum tracks, it would generate very classic Rock & roll feeling; and when processing orchestra audio tracks, it would wider the sounds.
- A-pre: modeled from another very famous microphone preamp. It is somewhat similar with N-pre but is more "focused" on mid- and low-frequency.
- 4K: modeled from a very famous equipment also. It makes punchy sound.
- U61: modeled from a tube microphone preamp that has very warm and dense mid-frequencies.
- VOC: modeled from a channel strip that has sweet high-frequencies.
- Child: modeled from a legendary limiter.
- 2A: modeled from a famous limiter.
- A8: modeled from a famous tape machine.
- Hawk: modeled from an overdrive module. This module produces the strongest distortion among all 9 modules in OwnTHD.



4.2 Overdrive Control

When modeling on each equipment, we found that the circuits contain multiple parts that generate distortions. So we provide four knobs (**Drive**, **Drive1**, **Drive2**, and **Drive3**) to control distortion level. By adjusting these parameters individually, you'll have more freedom on how to generate THD. The **Drive** button adjust total distortion level, and **Drive1/2/3** buttons adjust distortion amount of level 1/2/3 respectively.



Please notice: when setting the Drive button to maximum, OwnTHD would generate significantly distorted sounds.

4.3 Feedback Control

Some types of equipment may contain a positive or negative feedback circuit. The negative feedback decreases distortion while positive feedback increases distortion.



4.4 Bias Control

By inducing positive or negative DC offset, the upper period and lower period of waves could have different amount of distortion. In general, positive bias would produce warmer sounds, while negative bias would produce colder sounds. But in real cases, affected by other parameters (such as Feedback), the effect of bias would be much more complicated.

In some circumstances, the bias could induce low-level noises.

4.5 Depth Control

By adding a low-shelf on the feedback signal, it will have various sounds on low-frequency. The effect would be complicated, so please adjust it accordingly. Please note that when Feedback knob is set to zero, the Depth knob would have no effect.

4.6 Volume

The output volume of the Vintage Equipment Simulation component.



4.7 Sweet Spots

Each equipment has its own "sweet spots". When modeling circuits on these types of equipment, we hope user could have a way to adjust these sweet spots. We provide three sweet spots modules.



- **Freq.:** the frequency of this sweet spot.
- **Amount:** when this knob is turned to the right, the sound of this frequency becomes "loose"; when turned to the left, the sound contains more amount of THD, and becomes "rough".

4.8 Solid-State Simulation

Simulates the characteristics of a solid-state transistor under "ideal condition". The toggle button switches this component between on and bypassed. When it is on, turn up the knob for a larger amount of THD.



4.9 Tube Simulation

Simulates the effects produced by vacuum tube under "ideal condition". The toggle button switches this component between on and bypassed. When it is on, the larger the knob's value, the more THD will be produced. The amount of THD of the tube in realistic is usually large, and it is the same in our software, so the distortion amount of this part is larger than all other three parts.



4.10 Tape Simulation

Simulates the features of a tape machine under "ideal condition". The toggle button switches this component between on and bypassed. When it is on, the larger the knob's value, the more THD will be produced.

Maybe you still remember there is also a Tape Simulation (**A8**) in the equipment Simulation component. The differences between **A8** and this one is **A8** simulates a hardware in realistic, while Tape Simulation simulates the characteristic of Tape Machine in ideal condition. Please note: they don't conflict with each other, and the two could be used at the same time.



4.11 Input and Output Volume Control

This panel on the far-right controls input and output volume. The input gain would also affect the amount of distortion, higher input gain results in significant distortion.



Chapter 5.Presets

Loading Presets

You can use the preset selector in OwnTHD to load preset files.

Saving Presets

Click "Save" button to store the current state of OwnTHD to a preset file. Although you can select any location to save the file, only preset files in a specific folder can be recognized and loaded by OwnTHD preset manager. The path of the folder is:

Windows:

```
C:\Users\(yourname)\AppData\Roaming\ThreeBodyTech\OwnTHD\presets
```

Mac:

```
/Users/(yourname)/Library/ThreeBodyTech/OwnTHD/presets
```

If the file name of the saved preset is "default", then OwnTHD will load this preset every time it starts.

Chapter 6.F.A.Q

Can I use OwnTHD as overdrive/distortion effect?

Yes, but please notice that OwnTHD is not designed as an overdrive/distortion pedal, and the equipment it simulated do not have a large amount of distortion.

I don't feel an obvious effect from OwnTHD, why?

The equipment pieces simulated by OwnTHD have an almost linear response in low levels -- as we only want to color the sounds, but not distorting it -- and would have significant non-linear effects on suitable input gains. Many recording engineers would make microphone preamps working on slight overdrive level to obtain expected sounds. So if you want to have more significant effects, you may try to increase input volume, or turn up Drive knob. In one word, more gain, more harmonics. Hope you could find a delicate balance between no harmonics, suitable harmonics and too much distortion.

OwnTHD add too much distortion to my tracks, why?

Most equipment would have a large amount of distortion when input volume is too high, and so does OwnTHD. If the input volume is too high, or drive parameters are too high, it would produce significant distortion.

Sometimes, if the volume of low-frequencies is too high, it would also generate too much distortion.

Should I insert OwnTHD on every track or on the bus?

You could do both. We suggest you use it in serial, and each level increases a small number of harmonics. For instance, one for bass drum, one for drum group, and one for master track. This would make a more complicated sound and it is usually better than using only one OwnTHD.

Chapter 7.Credits

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Our friends and family

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