

antares® 

# Auto-Tune®efx

Real-Time Auto-Tune Vocal Effect  
and Pitch Correcting Plug-in

Owner's Manual

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Whew! Now that that's over, let's get on to the good stuff.

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# Welcome!



On behalf of everyone at Antares Audio Technologies, we'd like to offer both our thanks and congratulations on your decision to purchase Auto-Tune EFX, the quickest, easiest tool for real-time pitch correction and creating the Auto-Tune Vocal Effect.

Before you proceed any farther, we'd like to strongly encourage you to register and authorize your copy of Auto-Tune EFX. (You can skip ahead to the Authorization and Installation instructions on page 5. We'll wait.) Also, if you're planning on discarding that lovely Auto-Tune EFX box, it's probably a good idea to write down the serial number that appears on the bottom of the box for future reference. (The inside cover of this manual would be a good place.)

At Antares, we are committed to excellence in quality, customer service, and technological innovation. With your purchase of Auto-Tune EFX, you have created a relationship with Antares which we hope will be long and gratifying. Let us know what you think. You can count on us to listen.

Again, thanks.

The Whole Antares Crew



# Chapter 1: Getting Started



## Installing Auto-Tune EFX

Auto-Tune EFX is designed to work with a wide variety of digital audio applications. Please refer to your host application's user manual for more information on installing and using plug-ins. (Although in most cases, simply double-clicking the Auto-Tune EFX installer and following the resulting directions will be all you need to do.)

## Authorizing Auto-Tune EFX

Authorization is the process by which Auto-Tune EFX is allowed to permanently run on your computer. Detailed instructions covering the available authorization options will be found in the file "Authorization Read Me" which is included with your software download.



*NOTE: When initially installed, this software will run for ten days without authorization.*

So even if you can't authorize it right away you can still use your software in the meantime. (During this period, click the "Continue" button whenever you are presented with the Trial Period screen at launch.) But don't procrastinate too long. After those ten days are up you will no longer be able to launch Auto-Tune EFX until it's authorized.

Auto-Tune EFX authorization requires an iLok USB smart key. If you already own other audio plug-ins, you probably already have one. If not, they can be purchased from many local music stores as well as most online music technology retailers.



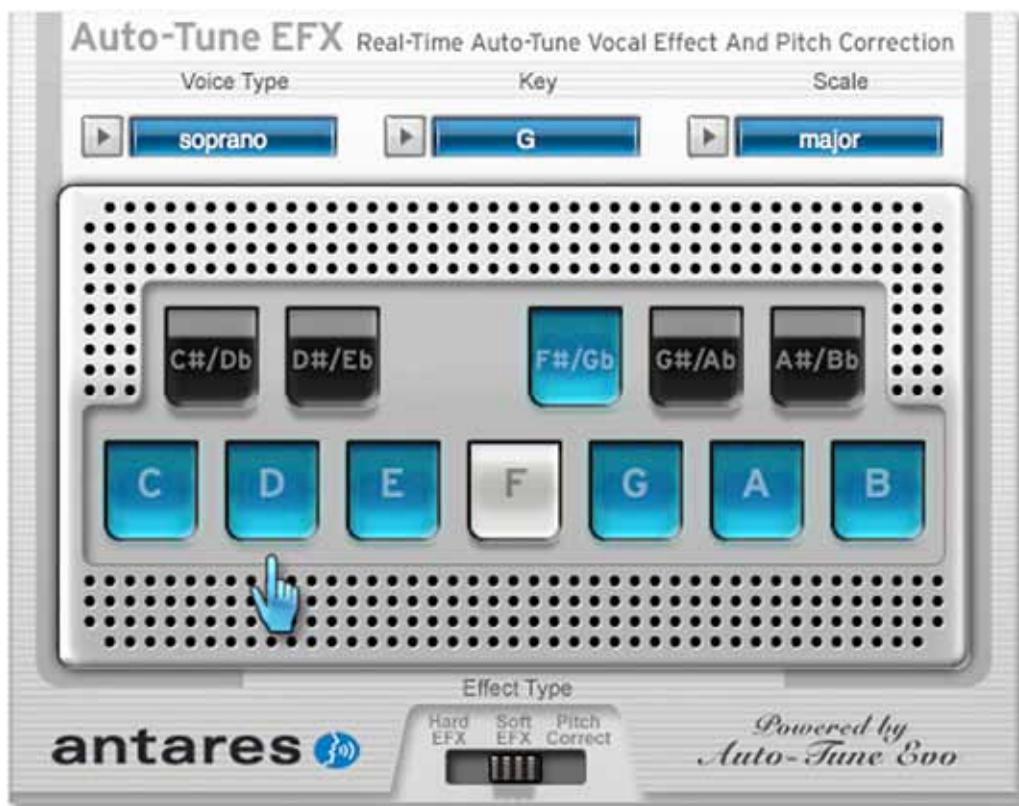
## Technical Support

In the unlikely event that you experience a problem using Auto-Tune EFX, try the following:

1. Make sure you have the latest version of the plug-in. You can download and install the latest version of Auto-Tune EFX from the following web page:  
<http://www.antarestech.com/download/update.shtml>
2. If you are having problems authorizing your software, be sure that you have the latest version of the PACE Interlok drivers. You can download and install the latest version for your operating system from the following web page:  
<http://portal.knowledgebase.net/article.asp?article=174703&p=5764>

If your problem is not resolved after taking the above actions, try the following:

1. Consult our searchable knowledgebase at:  
<http://www.antarestech.com/support/index.html>
2. Check our web page for tips, techniques, or any late-breaking information:  
<http://www.antarestech.com>
3. Submit a question directly to our Customer Support department at:  
<http://www.antarestech.com/contact>
4. Ask that guy down the street. (You know. The one who lives in his mom's basement and spends his days playing World of Warcraft™. He'll know.)



# Chapter 2: How It Works



## Some background

In 1997, Antares first introduced the ground-breaking Auto-Tune Pitch Correcting Plug-In and Recording Magazine called Auto-Tune the “holy grail of recording.” In the intervening years, Auto-Tune has established itself as the worldwide standard in professional pitch correction. Today, it’s used daily by tens of thousands of audio professionals to save studio and editing time, ease the frustration of endless retakes, or save that otherwise once-in-a-lifetime performance.



But in addition to its use in pitch correction, Auto-Tune has also gained renown as the tool of choice for what has become one of the signature vocal sounds of our time.

First heard on Cher’s 1998 mega-hit “Believe,” variations of the Auto-Tune Vocal Effect have gone on to appear on songs from a huge variety of artists. Most recently, its use by artists in the pop, R&B and hip-hop communities has rekindled intense interest in the effect and introduced the magic of Auto-Tune to an even larger community of musicians and producers.

As a result, we have created Auto-Tune EFX, an affordable, easy-to-use tool for basic real-time pitch correction and creating the Auto-Tune Vocal Effect.

## What’s it do?

Auto-Tune EFX lets you choose between two different flavors of the Auto-Tune Vocal Effect and real-time pitch correction.

### Pitch Correction

Auto-Tune EFX pitch correction works by continuously tracking the pitch of your vocal and comparing it to the notes in the (user-customizable) scale of your song. The scale note closest to the input pitch is identified as the target note. If the vocal’s pitch exactly matches the target note, no correction is applied. If the vocal’s pitch varies from the target note, either sharp or flat, the output pitch is smoothly corrected to the target note.

### Auto-Tune Vocal Effect

The Auto-Tune Vocal Effect is what is technically known as “pitch quantization.” That is, instead of allowing all of the small variations in pitch and the gradual transitions between notes that are a normal part of singing (and speaking, for that matter), the Auto-Tune Vocal Effect limits each note to an exact pitch, stripping out any variation, as well as forcing instantaneous transitions between notes.

The process of choosing the pitches to quantize to is the same as described above for pitch correction. The difference is that for pitch correction, the correction is done smoothly in order to make the process as transparent as possible. For the Auto-Tune Vocal Effect, the correction is instantaneous.

## How to do it

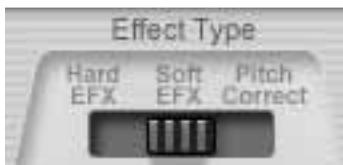
Auto-Tune EFX has been designed to make almost everything automatic. Simply follow the steps below:

### 1. Select an effect type

Auto-Tune EFX provides two alternative versions of the Auto-Tune Vocal Effect as well as real-time pitch correction.



**Hard EFX:** This is the classic Auto-Tune Vocal Effect. Sung notes will be restricted to the exact scale pitches and transitions between notes will be instantaneous.



**Soft EFX:** This version of the Auto-Tune Vocal Effect allows slight pitch variations and slightly less instant note transitions.



**Pitch Correct:** This setting provides high-quality, real-time pitch correction of your vocal, while preserving all of the expressive nuance of the original performance.

To select an effect, either click and hold on the Effect Type switch and move it to the desired setting or simply click on the desired setting to move the switch to that position.

### 2. Select Vocal Type



In order to do its magic, Auto-Tune EFX needs to figure out exactly what pitches are being sung. It will do its best job of pitch detection if it knows the general range of the vocal part. You can help it out by clicking on the Vocal Type popup menu and selecting your track's vocal type. The choices are:

- Soprano Voice
- Alto/Tenor Voice
- Baritone/Bass Voice
- Instrument (anything that isn't actually a voice)

### 3. Select Key and Scale



Use the Key and Scale popup menus to set the Key and Scale of your track. The appropriate Note buttons will light blue to indicate that they are in the scale and that the input vocal can be corrected or forced to those notes.



*A TIP: If you don't know the key of your track, trial-and-error works pretty well. Start by setting Major or Minor and then just trying one Key after another until one sounds good.*



#### 4. Play your track

Auto-Tune EFX will process your input vocal and, depending on your choice of Effect Type, will either correct or quantize it to the target scale notes. Mr. Hand will continuously indicate the current target note.

If you like the result, you're done.  
If not, continue with the next step.

#### 5. Customize the Scale

Depending on the specific vocal line, adding or removing scale notes can give you distinctly different results. Try any combination of the following:

- Click on a lit blue Note button to remove it from the scale and prevent Auto-Tune EFX from correcting or quantizing the output to that note.
- Click on an unlit Note button to add it to the scale and allow Auto-Tune EFX to correct or quantize the output to that note.

Click and play and click and play until you get exactly the result you want.

## Some useful tips

1. If you're not getting the result you want, even though you're sure you've set the correct Key and Scale, try some other keys and/or scales. Sometimes a melody might actually give a more interesting effect in other than its "correct" scale.
2. Use your host's automation facility to change the Key or Scale, or toggle the state of various Note buttons, in real time. This is particularly useful for songs with complex chord progressions or modulations.
3. Try the chromatic scale. If you are doing pitch correction and the singer is never more than 49 cents off (i.e., just less than half a semi-tone — actually a pretty huge error), everything should work just fine, regardless of key changes or modulations.  

Although our experience shows that if you're going for the classic Auto-Tune Vocal Effect, chromatic rarely provides it, for a specific song, it might be just what you want.
4. Create a custom scale for a particular vocal track. Start by selecting any chromatic scale and remove selected notes until you're left with a combination that sounds good.
5. Try re-pitching the vocal line. Watch Mr. Hand and note which notes appear in the melody. Remove one or more of those notes from the scale and try adding various adjacent notes. You might end up with something interesting (but then again, you might not).
6. Wear blue plaid boxer shorts. They not only keep you cooler in summer, but help to repel rabid marmosets.
7. Don't forget your host's Bypass function. Limiting the Auto-Tune Vocal Effect to specific phrases can provide sonic contrast in your song.
8. Have fun.

# Chapter 3: Auto-Tune EFX Tutorials



This chapter introduces you to how Auto-Tune EFX works by guiding you through two brief tutorials. The tutorials require a number of audio files. They can be found on the Auto-Tune EFX DVD, or you can download them from:

<http://www.antarestech.com/download/update.shtml>

Then just follow these steps:

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## Tutorial 1: Auto-Tune Vocal Effect

1. Create a new project in your host and import the tutorial files "hidin\_vocal.wav" and "hidin\_accomp.wav" onto two tracks of the project.
2. Play the tracks and adjust their relative levels to your taste.
3. Instantiate Auto-Tune EFX on the vocal track. Set Effect Type to "Hard EFX."
4. Set Vocal Type to "alto/tenor." Set Key to "A flat" and set Scale to "minor."
5. Play your project. Voilà! Instant Auto-Tune Vocal Effect.
6. Change the Effect Type to "Soft EFX" and play again to hear the difference.
7. Switch back to Hard EFX and click the A#/Bb button to remove that note from the scale.
8. Play the project again and note that you've subtly changed the melody. The syllable "-ther" of "together" and the word "on" at the end of the second phrase are now forced to "B" instead of their original Bb.

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## Tutorial 2: Pitch Correction

1. Mute or discard the tracks from Tutorial 1 from your project.
2. Import the tutorial files "dont\_give\_up\_vocal.wav" and "dont\_give\_up\_accomp.wav" onto two tracks of your project.
3. Play the tracks and adjust their relative levels to your taste. Note the various pitch problems in the vocal.\*
4. Instantiate Auto-Tune EFX on the vocal track. Set Effect Type to "Pitch Correct."
5. Set Vocal Type to "soprano." Set Key to "D" and set Scale to "major."
6. Play your project. Voilà! Instant pitch correction.
7. You're done. (Hey, we said they were "brief.")
  - \* *Our very talented singer made us promise to tell you that she did this on purpose at our request.*