



KeyDetector

User Guide



Introduction

Thank you for choosing Waves! To get the most out of your new plugin, please take a moment to read this user guide. For even more information, visit the Key Detector product page at [waves.com](https://www.waves.com). We also suggest that you become familiar with the Waves Support pages: www.waves.com/support. There, you'll find technical articles about installation, troubleshooting, and system requirements, as well as Waves contact information.

Waves Key Detector

Key Detector is a tool that identifies the key and scale of any audio content, with accuracy and ease. Once it identifies the key and scale, it can transmit this information to several pitch-related vocal plugins (e.g., Harmony, Ovox, and the Waves Tune family of pitch correctors) for pitch correction, voice synthesis, harmony creation, or other voice effects. Without pitch and scale values, these plugins cannot automatically determine which notes are legal and which are not. That's where Key Detector comes in.

Insert Key Detector on a DAW track, play the track, and you'll know the key. Click "Transmit" and your pitch-related vocal plugins are instantly operating with the correct key and scale. You'll also be provided two detected alternative keys so that you can quickly try out other scales.

Using Key Detector

Hover over a control and a helpful tooltip will appear in the lower-left corner.

Instantiate **Key Detector** on a track of your DAW session.

- Choose a track that best represents the tuning of the song. This can be any track or group containing the chords or harmony, but make sure to avoid detection on a track containing pitch-shifting plugins.
- Try to avoid placing Key Detector on the master buss, since there may be out-of-tune elements in the mix that can result in an inaccurate key detection.
- The track you are using for key detection is only for that: determining the key of the audio and then sending it to the vocal plugins in the session. You do not necessarily need to insert Key Detector on the vocal tracks that you will be processing. Key Detector does not affect the original audio.

Initial State: Waiting for Audio



When you first open Key Detector, you will see this message: Waiting for Audio.

Detecting Scale



Play the session in the DAW and detection begins. It will continue until the detection results in the same key for 30 seconds or until you stop playing.

Main Key Display



During the detection period, a key will appear in the main display. Detection nonetheless continues until the same scale is detected for 30 seconds. During these 30 seconds, Key Detector continues to verify the detected scale.

Note that the result is most accurate when Key Detector is allowed to complete the process.

Stop Detection



Click anywhere on the main key display to interrupt the detection process.

If Key Detector has determined the key, the displayed key can be transmitted to vocal plugins in the session. If a key has not been calculated, you will see “No Results.”

Key Found



When the detection has finished, the Alternative Scales button appears. The Transmit button is available when there are pitch-related vocal plugins in the session.

Restart Detection



You can restart the detection to find the key in a different section of the song or to use a different sample. Click the main key display to do so. Key Detector will clear the displayed key and wait for you to play audio.

Transmit Key



The Transmit Key button sends the detected key and scale to vocal plugins that are able to receive a key. Transmit Key is active when

- there are Waves vocal plugins in the session that can receive key (e.g., Harmony, Ovox, and the Waves Tune family of pitch correctors);
- those plugins are Receive Key enabled;
- a key is displayed in the main display.

Transmit sends the detected key, or a key selected manually, using the Edit window (see next page). Click the Transmit Key button to send the displayed key to the vocal plugins. Make sure the plugins in your session are Receive Key enabled.

The Receive Key on/off switch is in the Waves System toolbar in most Waves pitch-related plugins. In Waves Tune Real-Time, the Receive button is located at the bottom of the plugin.

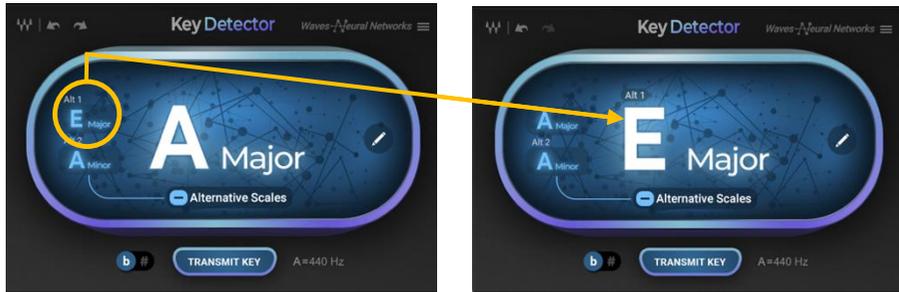


Ovox



Waves Tune Real-Time

Alternative Scales



On occasion, the detected key may not be the ideal fit for the music. During detection, two alternative keys are calculated. Click Alternative Scales to show these scales. Once you select an alternative scale, click the Transmit Key to apply it to your vocal plugins.

Select Key and Scale Manually



Use the Edit menu when you know the key and you want to transmit it to all the vocal plugins in the session. Click the Edit button and select root and scale values with the drop-down menus. Then use the Transmit Key to send this information to all Receive Key-enabled vocal plugins in the session. Note that opening the Edit window stops the detection process.

Flat/Sharp Switch



There are often two ways to notate a key. Use the b/ # button to display the key with a flat or sharp symbol. This does not alter the key you send, only the way it's displayed.

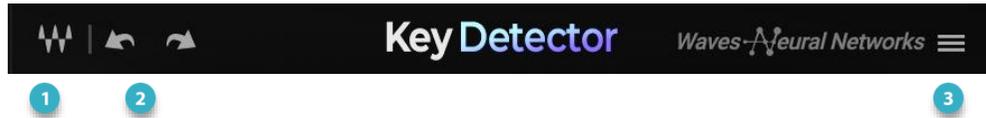
Tuning Display



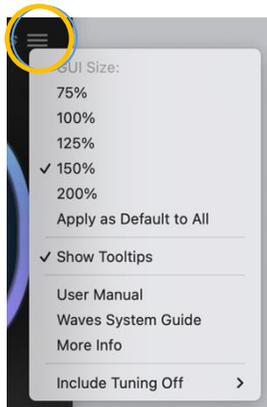
The tuning of the detected audio is shown on the lower-right side of the plugin. Knowing the tuning of the song helps you correct detunes when working with vocal plugins. If "Include Tuning" is enabled on the top menu, the tuning value can be transmitted along with the key to the Waves Tune family of pitch correctors.

Toolbar

The bar at the top of the window offers three utility functions:



- 1 Plugin version and other technical information (if you need to talk with Waves technical support).
- 2 Undo and redo steps. This function allows to view previously detected or manually selected scales.



- 3 The “hamburger” button on the right opens a multipurpose menu that lets you:
 - rescale the interface and set a view as the default;
 - access this user guide and the WaveSystem Guide;
 - visit waves.com for more information;
 - enable or disable tooltips; and
 - choose whether tuning will be included when a key is transmitted.

To learn more about the conventions for all Waves plugins, refer to the WaveSystem Guide.