# **DeepVoice - AiKodex**

## **Documentation**

DeepVoice is an ultra-realistic Text To Voice Al solution. This Unity Editor's Extension tool can create voices from text, trim, combine and equalize audio files. Choose from 80+ voices. This service does not entail subscriptions or repetitive payments. This documentation will help you get started with using the extension and provide information on how to use the asset to its best capacity.

Intro voice sample generated by DeepVoice - Play (Lily)

## **Examples**

#### **Pause**

There are a few ways to add pauses to the generated text. One trick that seems to provide the most control and predictability is a simple dash (-) or the em-dash (—).

Ellipsis (...) also works to add a pause between words but usually also adds some "hesitation" or "nervousness" to the voice that might not always fit.

So - I think - this is something I want - <u>Play</u> (Ethan)

Or

Yeah... that seems a bit weird - Play (Olivia)

The system is always being improved upon, and we at AiKodex are currently working on adding features such as the ability to add pauses and change the speed of the generated voice overs.

Alternatively, you can achieve a pause by inserting a line break or two where you want the pause to occur. The Al will often recognize the change in the text and adapt accordingly, resulting in a natural-sounding pause. With these techniques, you can customize your voiceovers even further and create highly polished content that meets your specific needs.

It's not who I am underneath
but what I do
that defines me

Play (Batman)

#### **Emotion**

If you want the AI to express a specific emotion, the best approach is to write in a style similar to that of a book. To find good prompts to use, you can flip through some books and identify words and phrases that convey the desired emotion.

For instance, you can use dialogue tags to express emotions, such as he said, confused, or he shouted angrily. These types of prompts will help the Al understand the desired emotional tone and try to generate a voiceover that accurately reflects it. With this approach, you can create highly customized voice overs that are perfect for a variety of applications.

Please note that you need to put a backslash (\) before quotes else you may receive a 400 error.

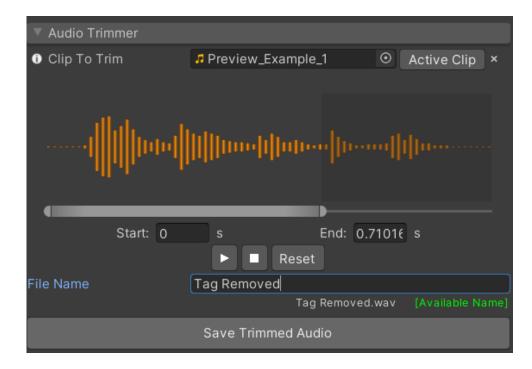
\"Are you sure about that?\" he said, confused. Play (Play without tag - Anime\_Girl)

\"Don't test me!\" he shouted angrily. Play (Play without tag - Andrew)

You will also have to somehow remove the prompt as the Al will read exactly what you give it.

## Tag Removal

Since the AI says exactly what the input is, you need to trim the part where the AI says adds context at the end. To do this, please use the Audio Trimmer.



The Al can also sometimes infer the intended emotion from the text's context, even without the use of tags.

\"That is funny!\" Play (Sophia)

\"Do you really think so?\" Play (Ruby)

This is not always perfect since you are relying on the Al discretion to understand if something is sarcastic, funny, or just plain from the context of the text.

### **Pacing**

To control the pacing of the speaker, you can use the same approach as in emotion, where you write in a style similar to that of a book. While it's not a perfect solution, it can help improve the pacing and ensure that the Al generates a voiceover at the right speed. With this technique, you can create high-quality voice overs that are both customized and easy to listen to.

\"I wish you were right, I truly do, but you're not,\" he said calmly. Play (John)

Again, the recording is not perfect as it does not entirely adhere to the dialogue tag at

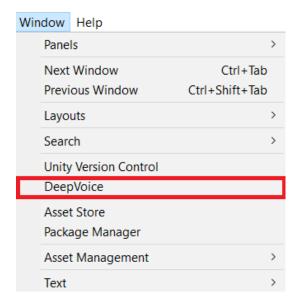
the end but changing the variability and clarity can give interesting results some of which may even be quite useful. For the above example, use the audio trimmer to cut out the "he said very slowly " tag.

# **Dependencies**

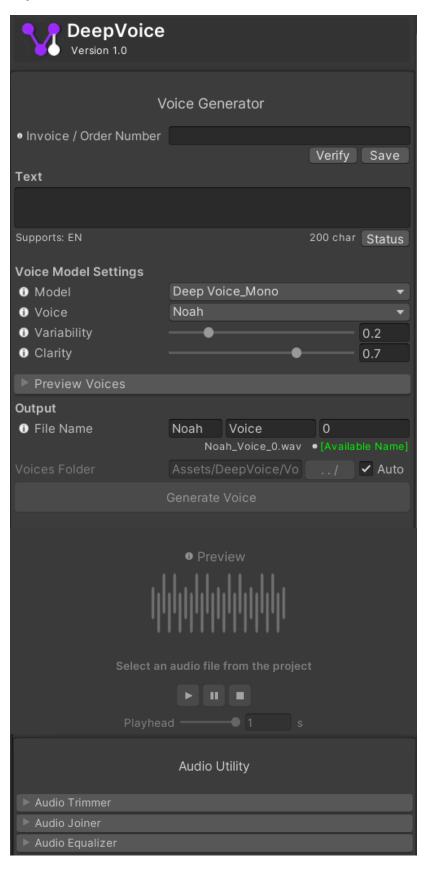
This asset requires the external package Editor Coroutines 1.0.0 which can be found in Window > Package Manager > Editor Coroutines.

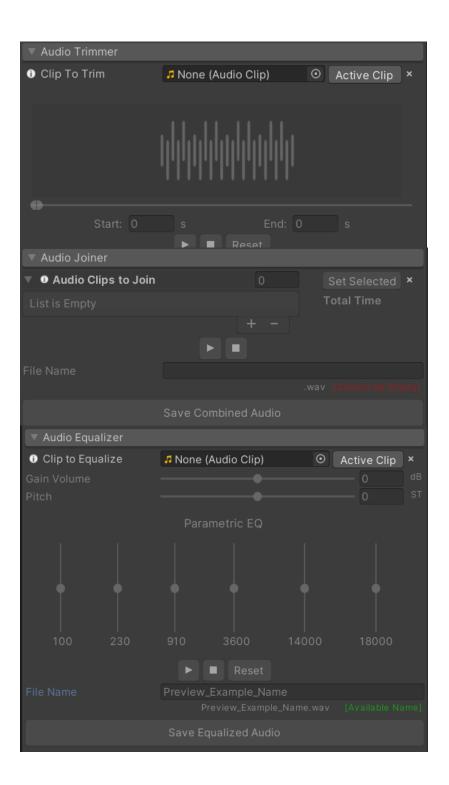
# Usage

To use the Editor's Extension please go to Window > DeepVoice



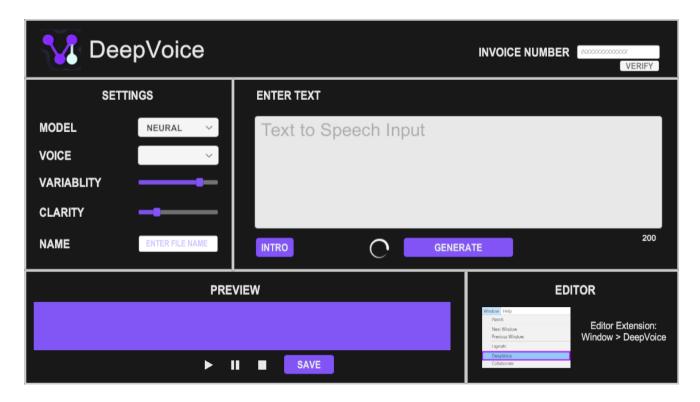
# Editor Graphical Interface:





## **Features**

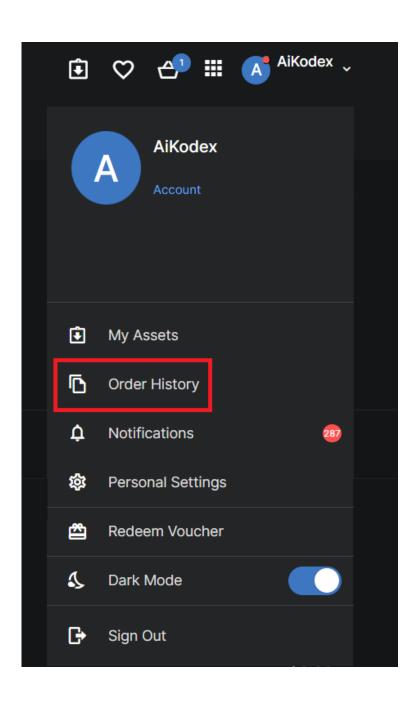
#### Scene



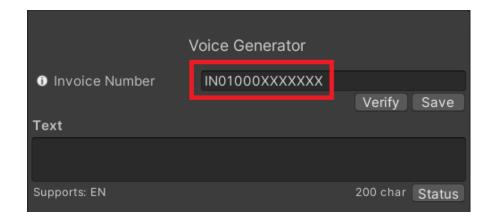
Please set the aspect ratio to 16:9 to view all the contents of the scene. Press the Intro button to load the intro file on to the preview player. The detailed functionality of the asset is explained further in the documentation including the working of this scene and other audio operations.

## **Invoice Number**

We use this to assign you the number of characters every fortnight. You can find the invoice number here in the My Orders section of the Unity Asset Store.

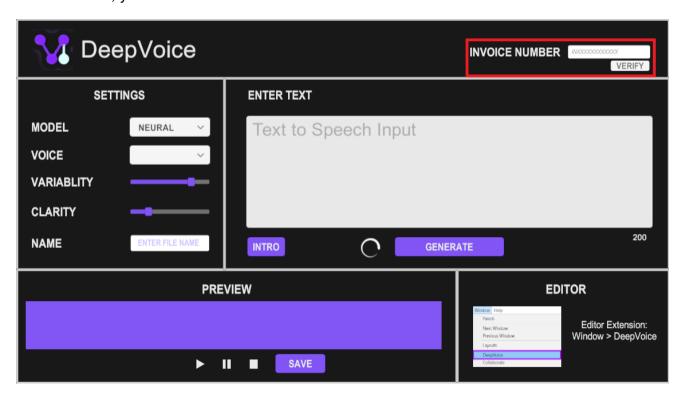


Order History						
Order Date ✓	Payment Type	Order Id	Invoice Number	Order Total	Status	
		2474	IN01000		COMPLETED	View Order Details
		2474	IN01000		COMPLETED	View Order Details
		2474	IN01000		COMPLETED	View Order Details
		2474	IN01000		COMPLETED	View Order Details



Once you have entered the number, you can then click on **verify** to check if the number you have entered is correct. If it is, you can save the number so when you launch the window again, you do not need to fill this field again. Once you have generated voices with the plugin, you can check the status of generation by clicking on the Status button. It should tell you the number of characters you have used.

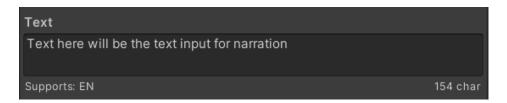
For the scene, you can enter the invoice number here:



### **Editor Window**

#### **Voice Generator**

**Text**: This field allows you to input text for narration. Enter the text you want to convert to a voice in the "Text" field. For now, the text is limited to a character count of 200. This is due to longer processing times for more tokens. Languages supported are mentioned in their two letter format.



**Model:** Model specifies text-to-speech (TTS) model file to be used for the generation of the voice. DeepVoice offers 4 models currently:

- Neural
- Mono
- Multi
- Standard

The Multi and Mono models accept parameters such as variability and clarity to offer improved customization for the output. The standard and neural voices provide different English accents and intonations.

**Voice:** Selects the Voice ID to use for the given model. Choose from a variety of different voices and find the best fit for your character.

Voices available for the model **Mono** and **Multi** are:

Obama, Biden, Trump, Queen, Batman, Andrew\_Tate, Anime\_Girl, Noah, Lily, Ethan, Sophia, Olivia, Ruby, Lucas, John

Voices available for the **Standard** Model are:

Lotte, Maxim, Salli, Geraint, Miguel, Giorgio, Marlene, Ines, Zhiyu, Zeina, Karl, Gwyneth, Lucia, Cristiano, Astrid, Vicki, Mia, Vitoria, Bianca, Chantal, Raveena, Russell, Aditi, Dora, Enrique, Hans, Carmen, Ewa, Maja, Nicole, Filiz, Camila, Jacek, Celine, Ricardo, Mads, Mathieu, Lea, Tatyana, Penelope, Naja, Ruben, Takumi, Mizuki, Carla, Conchita, Jan, Liv, Lupe, Seoyeon

Voices available for the **Neural** Model are:

Olivia, Emma, Amy, Brian, Arthur, Kajal, Aria, Ayanda, Salli, Kimberly, Kendra, Joanna, Ivy, Ruth, Kevin, Matthew, Justin, Joey, Stephen

**Variability:** Sets a tone of the voice which allows for experimentation. Decreasing variability can make speech more expressive with output varying between re-generations. However, it can also lead to instabilities.

**Clarity:** High values boost overall voice clarity and target speaker similarity. Very high values can cause artifacts, so adjusting this setting to find the optimal value is encouraged.



**File Name:** Is automatically assigned based on the selected voice. Additionally, increments the take field after voice processing. Available names are checked if the name field is modified by the user.

[Overwrite Name]: This file name already exists. Clicking on generate will overwrite and replace the current file. Proceed with precaution.

[Available Name]: This file name is available to use

**Voices Folder:** Changes the directory of generation. We recommend the directory be kept as the default.

Click on the Generate Voice button to send the inputs for processing.



#### **Preview**

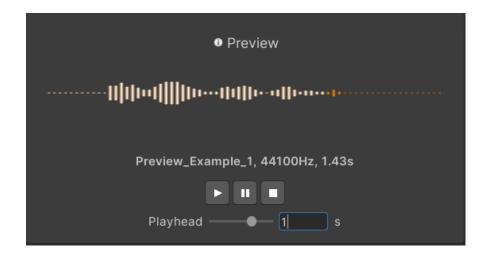
The preview section is a convenient feature that allows you to preview sound files directly within the interface, eliminating the need to switch between different windows or applications. By utilizing this functionality, you can quickly assess the contents of audio files without interrupting your workflow.

To access the preview section, simply single-click on a file within your project. Keep the plugin window active beside the scene. Hover your cursor over this panel, and you will notice that the preview section becomes enabled.

Once the preview section is activated, you can utilize the playhead, which is a visual representation of the current playback position, to navigate through different sections of the audio file. By scrubbing the playhead back and forth along the timeline, you can easily preview specific segments of the audio, allowing you to pinpoint certain parts or listen to the file in its entirety.

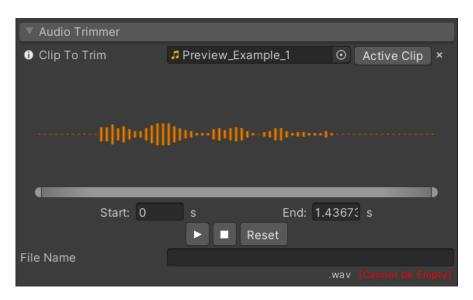
This functionality is particularly useful when you need to review and evaluate the contents of multiple voice recordings. Instead of opening each file individually in separate applications or audio players, the preview section enables you to conveniently listen to the audio files directly within the project interface.

By offering a seamless and efficient way to preview sound files, this feature helps streamline your workflow and enhance productivity. It provides a centralized platform where you can not only organize your project's audio assets but also evaluate and make informed decisions about the content of each file. Whether you're a sound designer, audio editor, or working on any project involving audio files in Unity the preview section offers a valuable tool to facilitate your creative process and ensure the optimal outcome of your work.



## **Audio Utility**

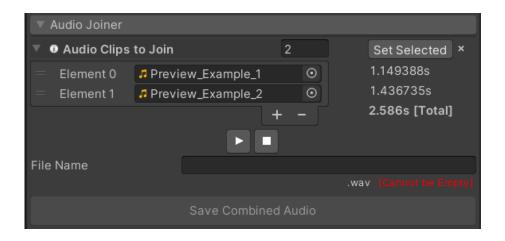
**Audio Trimmer**: Select an audio file you wish to trim. Once selected, use the slider to cut portions of the audio. When satisfied, save the audio by entering a valid name for the audio file. Click on the Active Selection button to select the clip active in the project. To remove the selection, simply click on the x button on the right side of the clip selection field.



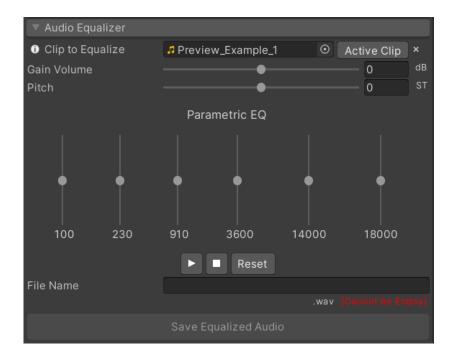
**Audio Joiner**: Select two or more audio files you wish to combine. Select the audio files from the project and click on "Set Selected" to auto populate the queue with the selected files. Please note that you cannot manually assign clips using the editor, you may only use the Set Selected Button to assign clips in this version of the asset. You can rearrange the audio clips in the hierarchy by dragging the clips. Once satisfied with the arrangement of the clips, enter a suitable name and save the file. You can clear the queue using the x button on the right of the Set Selected Button.

The Set Selected Button will be disabled until two files from the project are selected.





**Audio Equalizer**: Select an audio file you wish to equalize. You can adjust the sliders to make the voice loud, low, bassy or shrill. Once satisfied with the changes, enter a suitable name and save the file. You can reset the settings for the equalizer using the reset button.



If you have any questions or difficulties in generation of voice from text, trimming the audio clips, combining them or equalizing them, please reach out to <a href="mailto:info@aikodex.com">info@aikodex.com</a>

## **Saving Files**

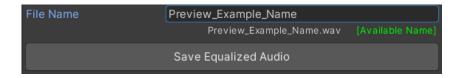
Files are saved as the name and directory provided in the asset. It is important to note that the name of the file cannot be left empty, as it serves as a unique identifier for each asset. If you attempt to save a file without entering a name, a red tag labeled "[Cannot be Empty]" will appear, indicating that a name must be provided.

Furthermore, it is crucial to exercise caution when working with files that have identical names. In such cases, there is a possibility that you may accidentally overwrite an existing file. Overwriting a file means replacing its content with the new file being saved.

To assist you in avoiding accidental overwrites, the plugin window includes a warning mechanism. If you attempt to save a file with a name that already exists within the designated directory, a red tag labeled "[Overwrite]" will appear as a warning. This visual indicator serves as a reminder that saving the file with the current name will result in the existing file being replaced. This warning helps you make informed decisions and take necessary precautions before proceeding with the save operation.

On the other hand, if the file name you have chosen is available and unique within the specified directory, you will see a green tag labeled "[Available name]". This green tag serves as a confirmation that the chosen name can be used without any risk of overwriting existing files.

By providing clear visual cues and warnings, the system aims to prevent accidental file overwrites and ensure the integrity of your audio assets. This helps maintain organization and avoid potential data loss or confusion that may arise from unintentional overwrites.



# **Troubleshooting:**

If you see the network errors:

500: Internal Server error / Cannot connect to destination host

Possible causes:

There may be times that the server is down. In this unlikely event, please check the forum for announcements by us pertaining to server maintenance or contact info@aikodex.com if this issue persists for over a day. Please check your internet connection and try again in a few hours.

400: Bad Request

Possible Causes

Occurs when the information passed is not recognized either due to syntax error or other reasons. Using special characters like ("") that have a specific meaning in coding can cause this error. Please send us an email with the Unity version included outlining your issue in as much detail. A screenshot or video of the problem will help us serve you better.

## Request Timeouts (408 Request Timeout response status code)

Possible Causes

The voice model could have run into a generative error. When this happens, the audio file becomes extremely large and is not able to be passed through the API built. Please try again with a fewer number of words using sentence chunking.

## Privacy, legal terms and misuse of service

At AiKodex, we believe that protecting the privacy of our users is of utmost importance. We provide a secure and private environment for users to utilize our Voice Generation services, without compromising on their privacy.

Our privacy policy is designed to ensure that we do not store any data or personal

information that is shared between users and our service. We do not store input text, generated voices, IP addresses or any other data, and our remote servers are configured to automatically delete any data that is left on the system.

We understand that privacy is a fundamental right, and we are committed to upholding this right for our users. We will continue to invest in the latest technologies and security measures to ensure that our users can enjoy a safe and private experience with DeepVoice.

## **Prohibited Activities and Misuse**

You shall not use these services, data or content provided by DeepVoice in any manner that is illegal, unethical, or inconsistent with the intended use of the service. You may not abuse the server by overloading requests on it or using the service from outside Unity. This may lead to termination of service.

Happy Dubbing!

- Offered By AiKodex