



What is Text FX ?

Text FX is an add-on for Blender, that features a variety of tools that will help you animate text objects.

Installation

- 1- Extract the zip file.
- 2- Open the user preferences, in the Add-ons tab press "Install from File" button, then locate TextFX.py then hit enter or double click.
- 3- The add-on has now been installed you can find it in the "Animation" category, to enable it check the box to the left of the add-on.
- 4- In the 3d view toolshelf a new tab will appear named TextFX and we have a menu for adding a new text with two options simple and advanced.

How it works ?

- 1- Add a Text (Simple or Advanced).
- 2- Add effects to the text.

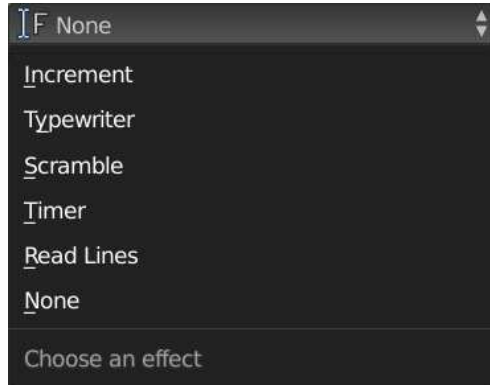
Simple

It's an ordinary Text object, with the ability to change its content over time.

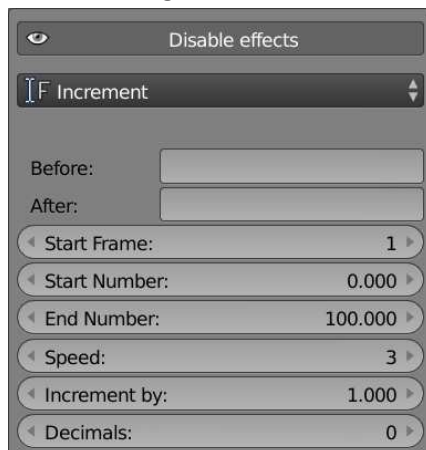
By default the effects are enabled, but you can disable the effects if you want.

The effect applied by default is "None" that mean no effect.

You can choose between 5 different effects from the drop down list.



- 1- **Increment** : with this effect you can animate numbers, by incrementing or decrementing the "Start number" until it reaches the "End number".



Before: a text that will be placed before the number.

After: a text that will be placed after the number.

Start frame: first frame of the animation.

Start number: the starting number that will increment/decrement over time.

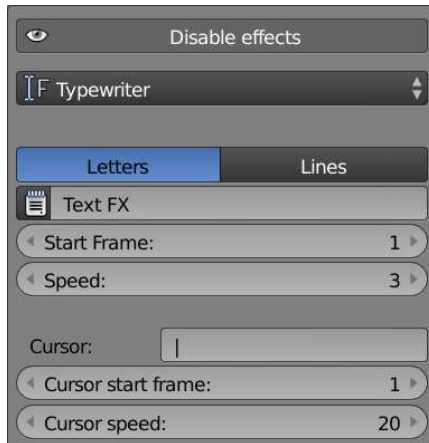
End number: the final number.

Speed: speed of the animation (in frames), for example if speed is 3, the number will increment every 3 frames.

Increment by: the number will increment by this value.

Decimals: how many decimals to display.

2- **Typewriter:** typewriting effect.



Letters: regular typewriting effect.

Lines: works better with multi lines text, the text will be displayed line after line.

Text: you can enter your text in this field, if you want a text with multi lines you can choose a text from the text editor using the drop down list in the left of this field.

Start frame: first frame of the animation.

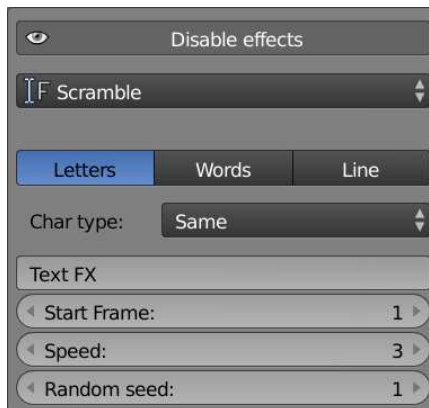
Speed: speed of the animation (in frames).

Cursor: you can use any char as a cursor, if you dont want the cursor, leave this field blank.

Cursor start frame: first frame of the cursor animation.

Cursor speed: speed of the cursor blinking, 0 = No blinking (in frames).

3- **Scramble:** start with a random text then reveal the desired text.



Letters: reveal by letters.

Words: reveal by words.

Line: reveal the whole text.

Char type: you can choose the type of characters that will be randomized before revealing the desired text.

Text: the text to be animated.

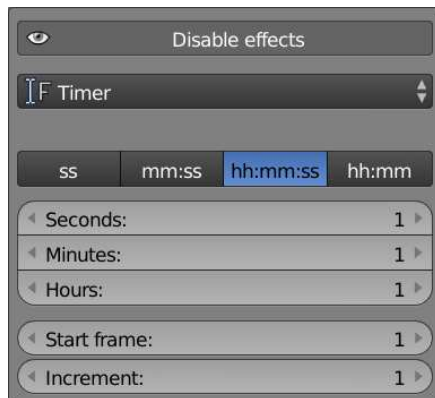
Start frame: first frame of the animation.

Speed: speed of the animation (in frames).

Random seed: for changing the randomization pattern, say you have two texts with the Scramble effect applied and that have also the same random seed then the

randomly generated text will be the same for both of them, but if you change the random seed in one of them you will get a different random text.

- 4- **Timer:** with this effect you can add a timer, for a clock, a count down ...etc



ss: display the seconds only.

mm:ss: display minutes and seconds.

hh:mm:ss: display hours, minutes and seconds.

hh:mm: display hours and minutes.

Seconds: initial value for the seconds.

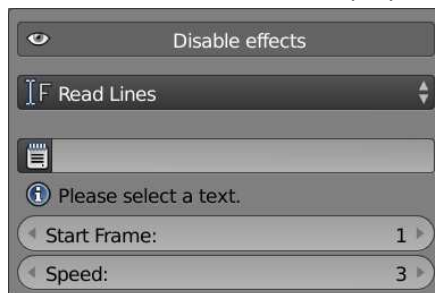
Minutes: initial value for the minutes.

Hours: initial value for the hours.

Start frame: first frame of the animation.

Increment: the seconds will increment or decrement by this value, 0 = no incrementation, -1 = decrement.

- 5- **Read Lines:** this effect is very versatile, basically you choose a text from the Text editor, and the effect will display this text line by line.



Text: enter the name of an existing text in the Text editor, or you can simply choose a one from the drop down list.

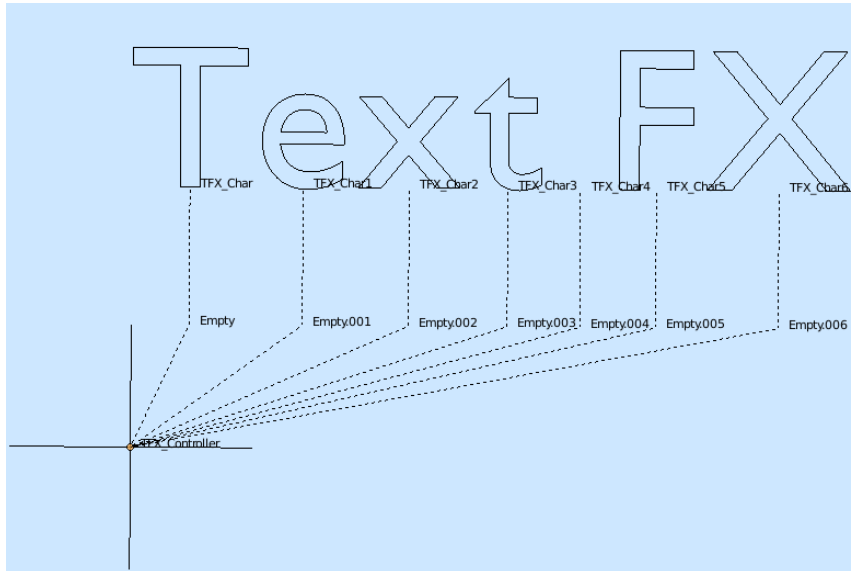
Start frame: first frame of the animation.

Speed: speed of the animation (in frames).

Advanced

The difference between this text and the simple text is that the chars in advanced text are separated, that mean we could animate every char individually with the help of three effects (Wave, Wiggle, Copy animation).

Every char is parented to an empty, to keep track for its original position, and all the empties are parented to another empty named TFX_Controller that will controle the children objects, this is basically how the rig works.

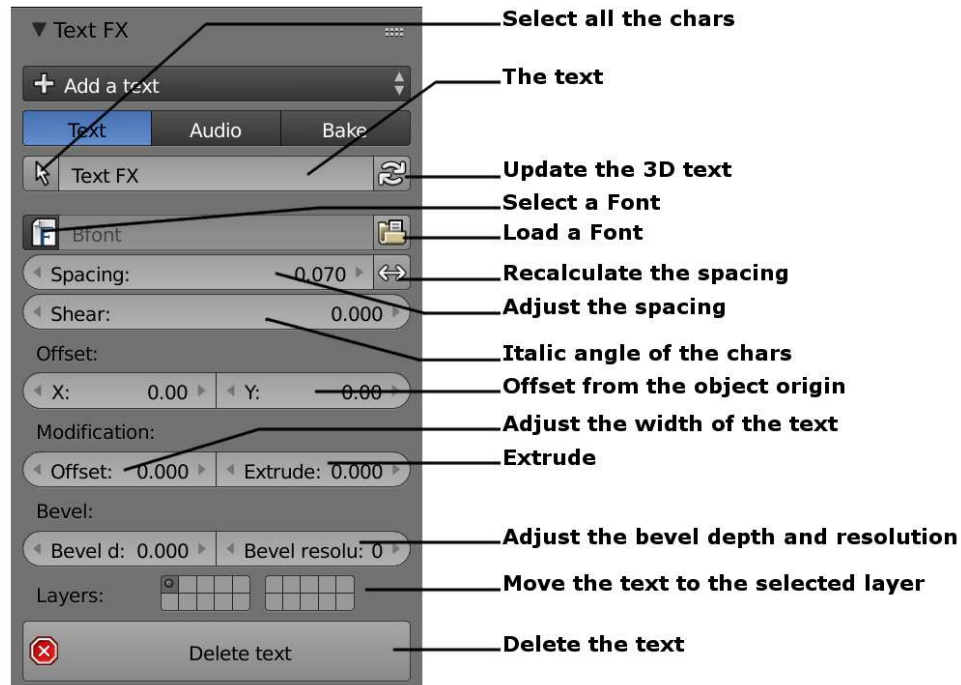


To make the options visible in the add-on's UI you need to select the controller. When adding an advanced text, two panels will appear :

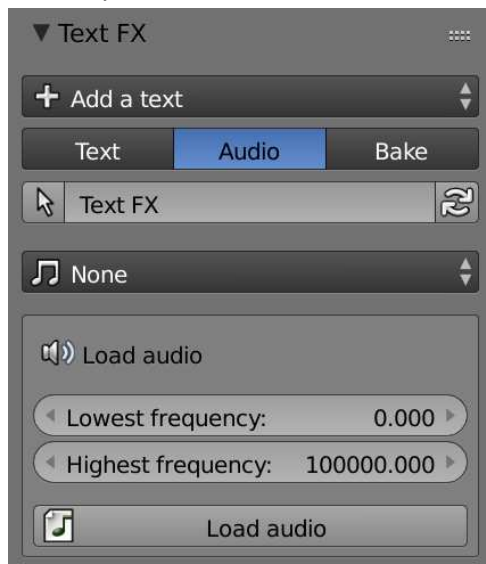
Text FX:

featuring 3 tabs (Text, Audio, Bake).

- 1- **Text:** contain the parameters to change the look (Font, Extrusion, Bevel, Spacing...), and you can quickly change the layer of the text, or delete it.



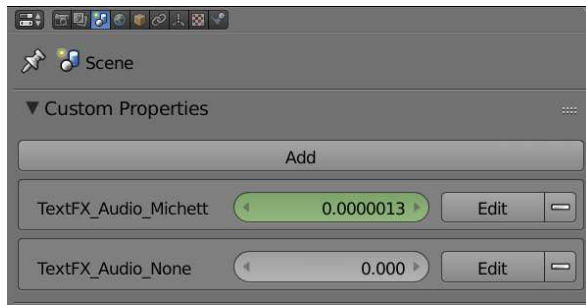
- 2- **Audio:** you can use an audio file to drive the animation.



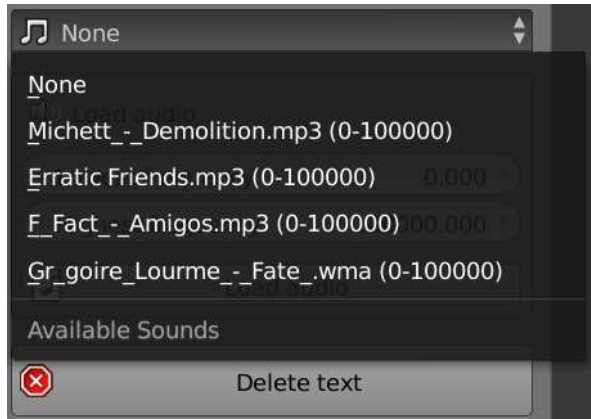
Load audio: for loading an audio file as keyframes, with the ability to choose the lowest and highest frequency.

The supported formats are (mp3, wav, ogg, wma).

The loaded audio could be found in the scene tab as a custom property.



And will be listed with the available sounds, from this list you can choose which audio file to use.



- 3- **Bake** : to bake the animation to keyframes.



You need just to set the start frame and end frame, then hit Bake.

If you want to free the bake, just hit the update text button. 

Effects:

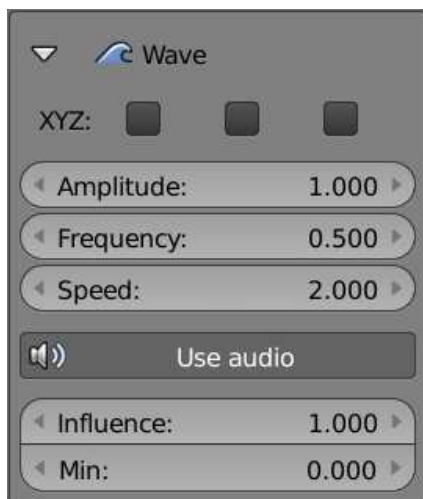
With the advanced text you have 3 different effects (Wave, Wiggle, Copy animation). The effects are disabled by default.



The effects controls the transform of the chars (location, rotation, scale) in a procedural manner, that mean this workflow is non destructive and it's calculated on the fly, the down side is the frame rate will drop down when working in a complex project (a lot of texts). Unlike the "Simple text" the text could not be changed over time, because that will needs more computation to recalculate the spacing every frame => more slow down. You can use every effect separately or combine them.

1- **Wave** : wave animation.

at least one axis must be enabled, and the amplitude must be greater than zero to see the effect.



Amplitude: height of the waves.

Frequency: length of the waves.

Speed: speed of the waves animation.

When you enable "Use audio" two more options are available.

In order to use the a sound to drive an effect (the Amplitude in the wave effect), you will need to choose a sound from the loaded sounds (audio).

Influence: how much the sound will affect the amplitude of the wave effect.

Min: minimum value to take on charge, any lower value than the Min will be set to zero, useful to get ride of the background noise.

The resulting amplitude is a mix between the Amplitude and the Influence, to get the full audio effect set the Amplitude to zero.

The "Use audio" works the same for the author effects.

- 2- **Wiggle:** to move the chars in random locations.
at least one axis must be enabled, and the Factor must be greater than zero to see the effect.



Synchronize: for synchronizing the movement of all the chars.

Easing: interpolation formulas.

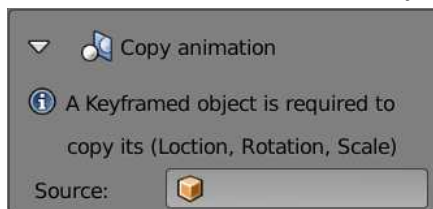
Factor: how much the chars will move.

Random seed: explained in the Scramble effect.

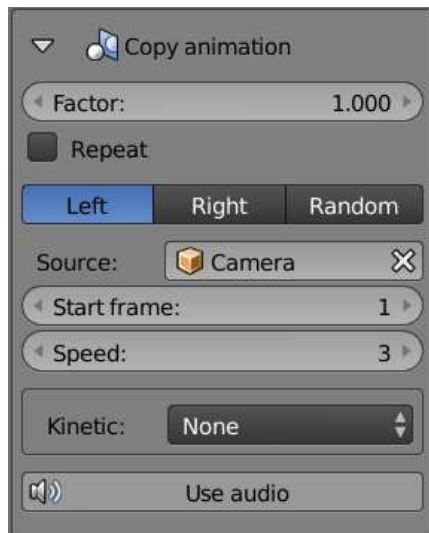
Speed: speed of the animation (in Frames).

- 3- **Copy animation:** basically all the chars copy the animation from an object with offset, with the ability to add secondary motion like bouncing.
Seems like a simple concept, but it's very effective for making complex animations.

a keyframed object is required to copy its animation (location, rotation, scale), you need to enter the name of the object in the "Source" field.



Once you choose the object, the options for this effect will be available.



Factor : same as the Wiggle effect.

Repeat : to play the animation in a loop.

Delay: delay between iterations (in Frames).

Left, Right, Random: order of the offset.

Start frame: first frame of the animation according to the source object, for example if the first frame of the source object is 10 and the Start frame is 1, then the animation in "Copy animation" will start at the frame 10, thats why its recomanded to start the animation of the source object at the frame 1.

Speed: speed of the animation (in Frames).

Kinetic: for adding a secondary motion, there are three options :

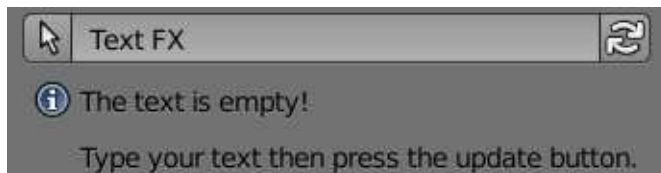
- a- **Overshoot** : a bouncing effect that decays over time.
- b- **Bounce** : simulate a rigid body hitting a surface.
- c- **None** : no secondary motion.

Important notes:

- the script execute every time the frame changes, that's why it's recommended to disable the add-on if you are not using it.
- deleting an object from the advanced text manually will break the script, use the « Delete text » button instead.
- parenting an object to the advanced text controller will also break the script.
- it's recommended to not rename any object generated by the script, that may break the script, but you could rename the simple texts.
- In the Copy animation effect don't use an empty from an advanced text as a Source, because you will get some weird results.
- in the Typewriting effect try to avoid large texts, especially using the "Lines" mode, because that will slow down the viewport and may crash Blender.
- you could add keyframes to the UI lists, it's particularly useful for changing the effects in Simple text, or changing the offset order in Copy animation.



- it's possible to duplicate an advanced text, the proper way to do that is to duplicate the controller (the Controller only), don't duplicate any other parts.



Then change the text if you want to, then hit the update button. 