

## **RAGDOLL ANIMATOR 2**

## **Extra Features List**

## **About Ragdoll Animator 2**

- Ragdoll Animator 2 is a plugin which provides tools for **precisely adjusting ragdoll related components**, like **rigidbodies**, **colliders** and **configurable joints**. It provides tools for **detailed and easy control** over **physical body animation**.
- Plugin offers many ways to handle **ragdoll body behavior**, like animating physical bones **with currently played animation**, simulating **full body physics**, playing physical animation **when having attached body parts to the different joints**, adding **physical impacts** to the selected bones, **dragging** full ragdoll body by it's leg, and more.
- Ragdoll Animator 2 component is providing a **highly customized inspector window** (GUI) to help use it without confusion since there are a **lot of parameters to play** with.
- Package is providing many <u>example scenes</u> presenting different features, which can be **unpacked to project with** "Demo Ragdoll Animator 2" <u>unitypackage file</u>.
- Ragdoll Animator 2 offers methods for custom usage through code. These methods are starting with "User\_" like "User\_AddAllBonesImpact".
- You can combine Ragdoll Animator 2 with my other packages, like Tail/Spine/Look, Animator. Check the manual pages for more details about it.

Contact and other links you will find in Readme.txt file

Under this file, you will find a list of **Extra Features** of Ragdoll Animator 2.

Working with ragdolls requires a lot of customized behaviors. We prepared many Extra Features, which you use in your project, to get desired results without needing to do too much coding.

In the future there may be more extra features.

When a package gets updates, this list may be outdated a bit, and fulfilled after a while.

To add extra feature for your Ragdoll Animator 2 component, simply go to Extra bookmark, and add one of them with the button.

You can also code your own Extra Features. For more details check the User Manual file.

**Tutorials on Youtube** 

Features/**Auto Get Up:** Switching from fall mode to standing mode after body calms down on the ground. Use in combination with Get Up Helper feature. Best practice is using this feature in combination with the Fall-Get Up Animate feature.

Features/**Fall-Get Up Animate**: Providing helper operations for basic character Get Up mechanics, so you don't need to write as much custom code for it, just set Ragdoll Animating Mode as Falling.

Features/**Blend On Collisions**: During standing mode, not animating bones with physics, until some collision with dummy bone happens. It is generating collision handlers on the bones with enabled collision collecting!

Features/**Blend On Source Collision**: Second approach to the 'Blend On Collisions' feature. It is more expensive and involves generating trigger colliders on the source skeleton, but can provide more relevant bones blending than just dummy bones blend on collision feature.

Features/**Levels Of Detail**: This feature is handling Ragdoll Animator's physics quality settings, switching for distance based optimization.

Features/**Optimize**: This feature is handling Ragdoll Animator optimization when the character is offscreen or far away from the main camera.

Features/**Reconstruction Mode**: Switching using 'Reconstruction' mode. With this feature enabled, dummy will be generated with all lacking skeleton bones, as kinematic rigidbodies. It can improve animation matching mode, but it works poorly with Falling mode and generates garbage collectors when switching from Standing mode. It also requires chains 'Detach' disabled.

Features/**Repose Base Transform**: Changing base object position (like character controller) to be aligned with ragdolled bones when falling mode.

Features/**Position Hard Matching**: Giving access to Position Hard Matching switch. (GUI feature)

Helpers/**Event On Fall Switch**: Calling custom event when character is switching to falling state.

Helpers/**Muscles Power On Fall Mode**: Changing muscles power when character is switching to falling state.

Helpers/**Spring Power On Fall Mode**: Changing muscles spring power when character is switching to falling state.

Helpers/**Provide Velocity Value**: Sending ragdoll velocity value to the Mecanim Animator Property.

Helpers/**Switch Attachable**: Attaching / detaching attachable object from the dummy when value changes / on game start.

Helpers/**Dismemberment Manager**: Extra feature which is handling detaching bones from the body, updating their positions, applying parameters switched on dismembered rigidbodies and colliders.

Helpers/**Falling Blend Tree Poser**: Using Unity Animator Parameters, driving them to pose character according to the body falling velocity and adaptive to the ground detected below.

Helpers/**Soft Limit Anchor**: Applying soft limit to the anchor bone position spring, so it applies less power when anchor is pushed away from the target body position. In addition you can call a fall state, when the anchor bone is stretched away from the body.

Collisions/**Add Animator Bones Indicators**: Adding indicator components to the animator bones in order to give reference to the physical bone object which represents a certain bone.

Collisions/**Add Physical Bones Indicators**: Adding indicator components to the physical dummy bones which will help bone type indication or collision detection per bone.

Collisions/**Collision Events**: Sending ragdoll bones collision events to the receiver interface.

Collisions/**Collision Messages**: Sending ragdoll bones collision messages to the receiver which has method like: void **RagdollAnimator2BoneCollision**(RA2BoneCollisionHandler hitted)

Collisions/**Ignore Collisions** With: Making ragdoll dummy colliders ignore selected other colliders.

Utility/**Chains Blend Amount**: Giving access to selective bone chains blending settings. (GUI feature)

Utility/**Kinematic Bones Selector**: Giving access to selective bone chains kinematic on Standing Mode switch. (GUI feature)

Utility/**Position Spring Selector**: Giving access to selective bones position spring settings. (GUI feature)

Utility/**Comment**: Basic utility to write custom comments regarding the ragdoll setup. (GUI feature)

If you like this package please visit my <u>asset store page</u> for more or write a review for this asset;)