Low-Poly Greek Monster Pack

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Documentation Section 2: Incorporating Mecanim Animations

A video tutorial is available for this subject at www.ImitationStudios.com

Part 1: Incorporating Mecanim Animations

This section of the documentation will explain how to use mecanim animations with the characters. This guide will assume your character's animator already contains a base layer with the character's full-body animations and the layer has IK enabled.

Step:

1. Open your character's animator.
2. Create a new layer.
3. Set the layer's weight to 1.
4. Set the layer's mask to the 'Upper Body' mask included in the package. This mask is a basic humanoid mask with the lower body of the character disabled, including the hips.
5. Set the layer's blending to 'override'.
6. Set IK pass to true.
7. Create a new state and add your mecanim animation.
8. Use a state without an animation clip assigned if you wish to disable the mecanim layer temporarily.
9. Observe the results.

Part 2: Adjusting Mecanim Animations (As Needed)

Because the animator is not using the humanoid hip bone, the resulting animation may be facing the improper direction. To compensate for this, follow the steps below:

Please note: this portion is only used on an as needed basis. The mecanim hip correction script will allow for a combination of both corrected and uncorrected animations. ***This script may not work with other IK solutions.***

1. Verify the mecanim hip correction script is attached to the character and the animator and hip transform values are populated.
2. Verify the scripts 'animator mecanim layer' is set to the correct index of your animator layer used for mecanim animations.
3. Click on Assets -> Create -> Greek Monster Pack -> Animation Clip Record.
4. Open Window -> Greek Monster Pack -> Animation Clip Recorder.
5. In the window assign the following:
    a. Your newly created animation clip record.
    b. Your actual mecanim animation clip.
    c. If the animation is a cycle, set make cyclic to true.
6. Click on the record button and close the window.

Please note: the animation clip name in the record must exactly match the actual animation clip name.

7. If a hip correction profile does not exist yet, create a new one:
    a. Assets -> Create -> Greek Monster Pack -> Mecanim Hip Correction Profile.
8. Verify the profile is assigned to the mecanim hip correction script.
9. Open the hip correction profile.
10. Create a new entry in the animation record data list and assign your newly created animation clip record to the entry.
11. Enter play-mode, observe the results, and adjust the hip correction profile settings as needed.

Part 3: Hip Correction Profile Settings

1. Animation Record Data:
    a. Clip Record: see part 2 of this documentation.
    b. Adjustment speed: the *desired* speed at which the character's spine adjusts to correct for incorrect hip rotation.
    c. Cycle Reset Value: Setting this value to a value other than -1 will set the *current* adjustment speed to this value when the cycle reaches its end.
    d. Override Correction Factors: Setting this value to true, will cause the script to use the override correction factors in this entry instead of the default correction factors.

    e. Override Correction Factors: See correction factors below.
2. Correction Factors:
    a. Twist Factor: twists the character's spine left or right.
    b. Tilt Factor: tilts the character's spine left or right.
    c. Bend Factor: bends the character spine forward or back.
3. Default Adjustment Speed: desired adjustment speed for returning to the default spinal position. This value is used for animation states without a record data entry or for states without an animation clip.
4. Speed Ramp Factor: the speed at which the *current* adjustment speed changes to a *higher value desired* adjustment speed. The current adjustment speed will be instantly set to a lower *desired* adjustment speed regardless of this value.
5. Freeze limit: the maximum spinal angle allowed including the correction factors.