

## **“A” POSE OR “T” POSE - THE RETARGET MANAGER**

Some of our older packs come with a default “T” pose for the humanoid “Retarget Manager”. This is different from the new “A” pose from Epic - since at the time many users asked if we could provide a “T” that they were already using, and we obliged. Nowadays everyone wants the “A”.

### **A small history lesson FWIW (Stay awake class):**

The "right" pose is a matter of opinion, since when Epic switched (thank goodness) to the much improved new SK\_Mannequin for 4.8 it changed from a default “T” Pose to an “A” pose. This is a function of the skinning bind pose of the mesh, seemingly not a conscious design decision to retire the “T”; the new character is actually by default in the “T” Pose with all bones at zero rotation, but it was skinned with arms rotated down to match the newly modeled mesh. UE4 always imports skeletal meshes in the bind pose regardless of zero or actual bone rotations in the file. Your preference and use of “A” or “T” is up to you.

### **CHANGING BETWEEN “A” OR “T”**

The current default pose can be changed/overwritten by reimporting/merging our provided “SK\_Mannequin.fbx” files using specific settings. You can also manually eyeball rotate all those bones in the UE4 Editor Retarget Manager and update the Reference Pose, but that can be tedious and a serious drag.

### **Download the A Pose and T Pose FBX here:**

<https://goo.gl/P0IOki>

**NOTE: Depending on the UE4 Engine version, the process is a little different.**

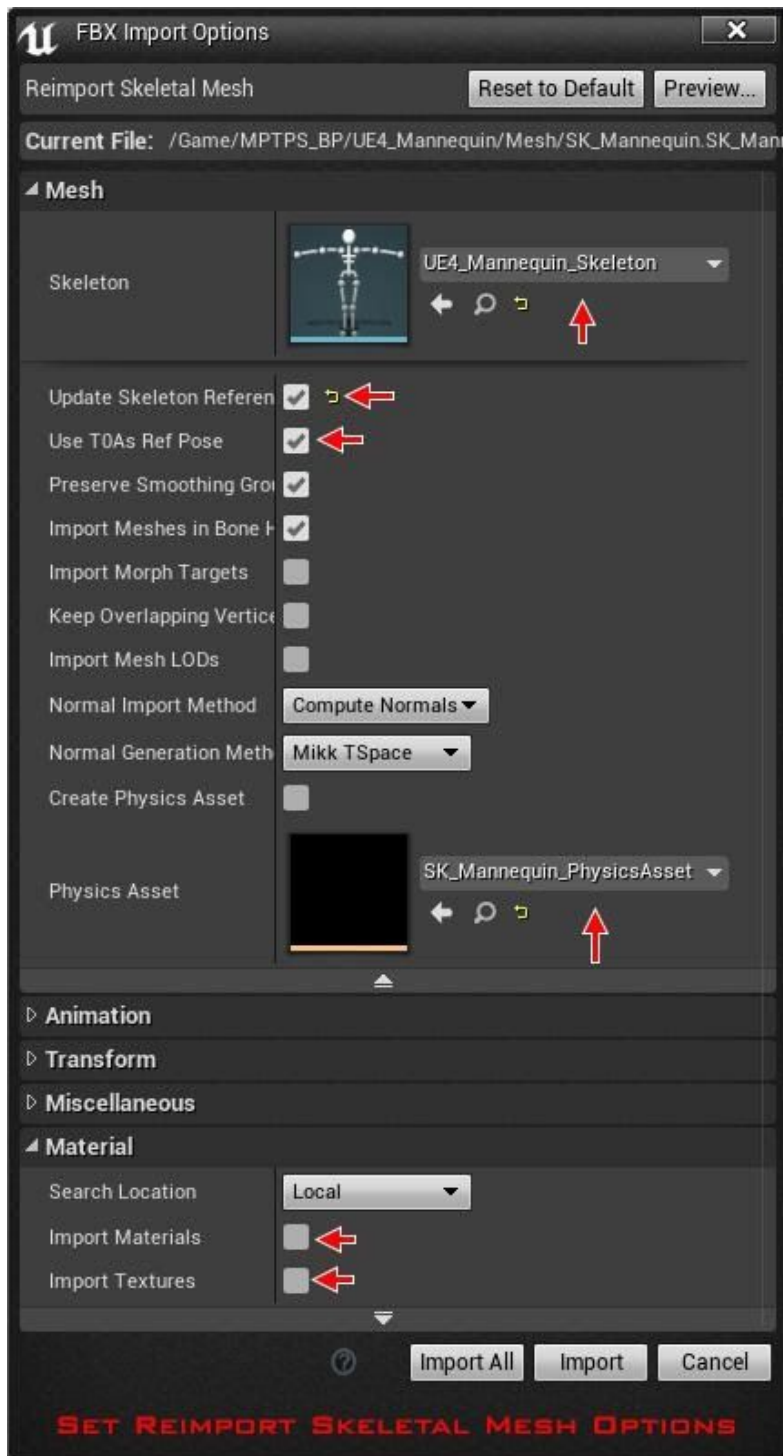
## UE4 ENGINE 4.17 - 4.xx

1. BACK UP YOUR CURRENT UE4 PROJECT. That always goes without saying.
2. Open the downloaded "SKMannequin\_A\_Pose" or "SKMannequin\_T\_Pose" folder on your HDD. This contains "SK\_Mannequin.fbx"
3. Open your Project with all the MocapOnline animations you want to convert to A or T.
4. Make sure your Editor Preferences are set to "Show Import Dialog at Reimport", or the process will fail. (See image)



5. In the Editor, go to the folder containing the "SK\_Mannequin" Skeletal Mesh.

6. Drag and drop the **"SK\_Mannequin.fbx"** into the folder in the Editor. Make sure the **"FBX Import Options"** are set as shown in the picture for Reimport Skeletal Mesh. (See image) Click **"Import"**.

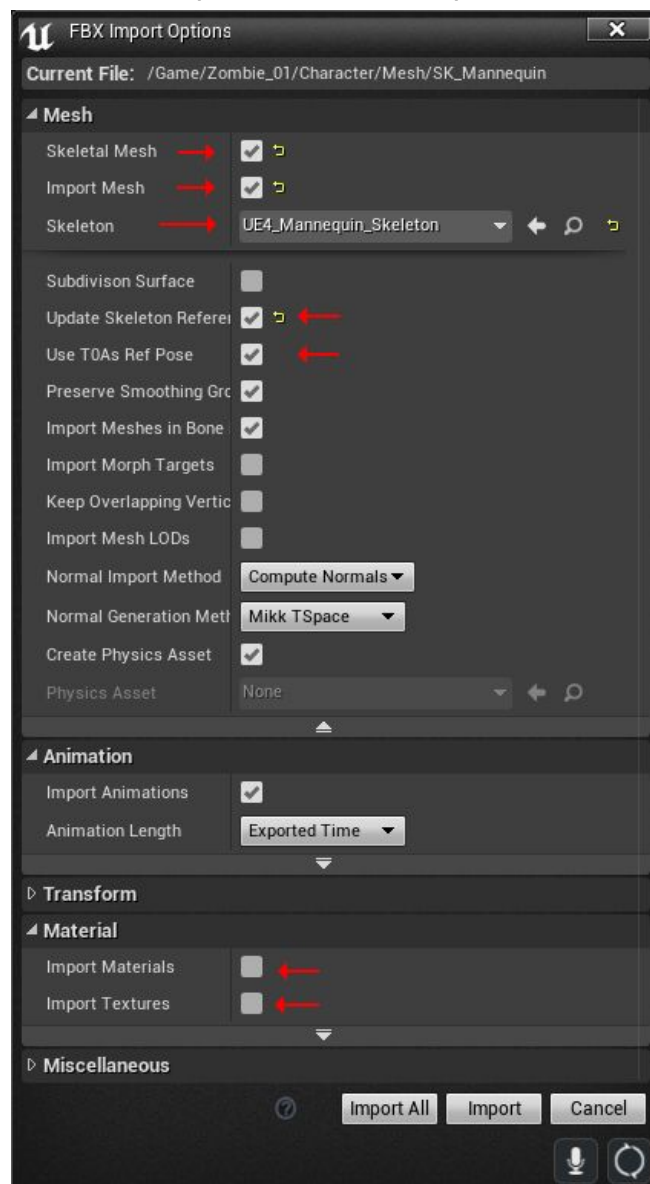


7. This will update the Skeletal Mesh and Skeleton with the new reference A or T pose. Save them both with the changes. All referenced animations will inherit the new Pose.

# UE4 ENGINE 4.10 - 4.16

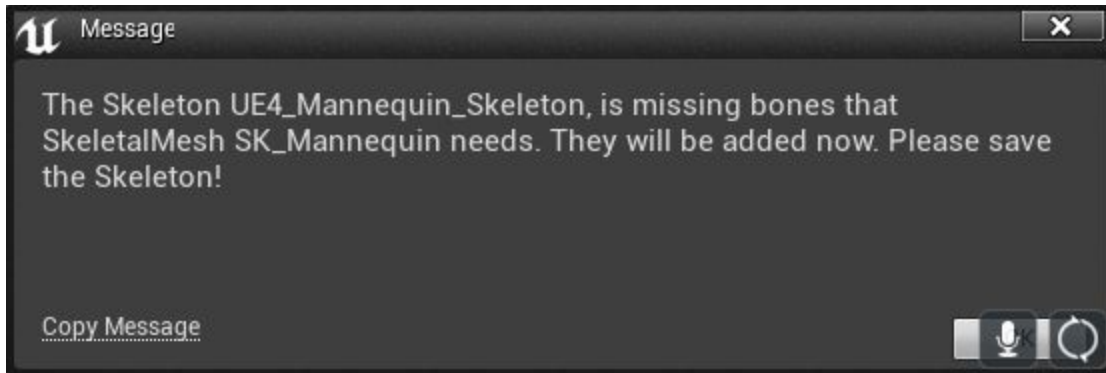
UE4 4.16 and earlier is the same basic process, but with different menus.

1. Open the UE4 pack/project containing the SK\_Mannequin that you want to convert from “A” to “T” or vice versa.
2. In the editor, go to the folder containing the “SK\_Mannequin” skeletal mesh.
3. Right-click in the folder and click “Import Asset”. Choose the desired “SK\_Mannequin.fbx” in the designated “A” or “T” folder.
4. When asked to overwrite the existing asset, click yes.
5. Use the settings as shown:
  1. Check “Skeletal mesh”, “Import Mesh”, choose the “UE4\_Mannequin\_Skeleton”
  2. Check “Update Skeleton Reference”, “Use T0As Ref Pose”
  3. Un-Check “Import Materials”, “Import Textures”



6. Click “Import”.

7. **\*\*\*NOTE:** If you are updating an SK\_Mannequin that did not already contain “wep” bones, you will get a dialog stating that they were missing and are now being added. This is normal. Adding the “wep” bones will not affect any current or future animations in your project. They are auxiliary and simply ignored and idle when not in use.



The SK\_Mannequin will be updated in-place with the new default pose and any associated animations will stay connected. Be sure to Save the new and changed assets.

**\*\*\*This is an undoable action!** So unless you are comfortable with and sure of the process you should practice with a test project. The most important parameter (they're all important) is selecting the current “UE4\_Mannequin\_Skeleton”, which keeps it in place and connected to all animations and work currently in the project. When done correctly nothing in the project will change other than the updated retarget pose and an added pose animation.

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Any other questions or comments, please contact us at: [MoCap@MotusDigital.com](mailto:MoCap@MotusDigital.com)