

Duik Guide

General Tips

- **Artwork** should be arranged in **separate layers**.
- **Label the artwork** layers, for easy rigging in Ae.
- Creating a “guide” or “marker” layer, can help to arrange the anchor points in Ae.
- You may need to create “nubs” or circle shapes in the artwork in key joint areas, such as the shoulders, wrists, and ankles.
- As of **version 16**, Duik runs in “**Rookie**” mode by default. You can change the user interface to “Standard” or “Expert” mode by clicking on the wrench icon.
- If you are using the **puppet pin/bone** technique **do not rasterize** layers in Ae.
- If you use **puppet pins** with Duik, be certain to be in **Legacy mode** (default is Advanced).
- **Never copy/paste a structure layer to duplicate** - it messes with the underlying expressions. If you need to duplicate a structure, select the structure layer(s) and use the “Duplicate” option from the Duik menu.

Separate Artwork Layers

Generally, you’ll want to group up artwork in separate layers to give you better control for animation in Ae. Make certain that each layer/group is properly labeled to optimize the rigging process. Here’s a suggestion for grouping:

1. Left Shoe/Foot
2. Right Shoe/Foot
3. Left Thigh
4. Left Calf
5. Right Thigh
6. Right Calf
7. Pelvis or Hips
8. Torso
9. Left Arm (upper arm)
10. Left Forearm (lower arm)
11. Left Hand
12. Right Arm (upper arm)
13. Right Forearm (lower arm)
14. Right Hand
15. Neck
16. Eyes
17. Brows
18. Mouth
19. If applicable, hair for secondary animation (hair could be in multiple groups)
20. Head, ears, nose, hair if applicable
- all as one layer/group

Installing Duik/Enabling Scripts

- [Download the Duik from the Rainbow website.](#)
- Extract the zip download and copy the folder over to the Adobe After Effects > Scripts UI Panel subfolder.
- Launch After Effects.
- Edit > Preferences > Scripting & Expressions > Click checkbox to Allow Scripts to Write Files and Access Network.
- File > Scripts > Install Script File.
- Close and relaunch After Effects.

Basic Duik Guided Steps

Import the Artwork

- Import artwork as “Composition to Retain Layer Size”.
- Duplicate the composition. Name one comp “Source” and another “Rig”.
- Open the Rig comp. Do **not** parent layers.
- Adjust the anchor points. [Hot key = Y]
 - Tip: Do not set the anchor point for the head at the chin. Should be closer aligned to nose or ears.

Create Rig Structures

1. With the Duik panel open, click the Rigging icon (mechanical arm) and click “Hominoid” to create a rig for a human character.
2. Duik will automatically generate rig structure layers (prefix “S |”).
3. Line up or position the structures with the artwork. Start with the base of a chain, such as the hips, move accordingly in the chain (spine, spine 2, neck, head) and proceed to the end of the chain (spine tip).
4. Follow this procedure for the rest of the chains.
 - a. It is important to note that the **heel** is the **end of the leg chain**.
5. **Parent** the artwork layers to their corresponding structure layers.
6. **Test rotation** on structure layers, to make certain that layers are behaving/linked properly.
 - a. If applicable: Use “Toggle edit mode” under the Duik rigging panel to change a structure’s pivot/anchor point. Click the button again to exit edit mode.

Auto-Rig

1. Select all structure layers.
2. With the Duik panel open, click on the Links and Constraints panel button.
3. Click Auto-rig & IK.
4. New Controller layers populate (prefix ("C |").
5. Test the rig. If the arms/hands are bending in the wrong direction, then go to the Effects Control tab, and click Reverse IK.
 - a. As a personal preference, I'm also going to disable stretch in the Effects Control tab for the hand and feet controllers.

Auto-Walk

1. Set up the character rig.
2. Select all controller layers (prefix ("C |").
3. From the Duik menu, click on the "Automations" (gear icon).
4. Click "Auto-walk".
5. A new walk cycle controller layer will populate.
 - a. If an error message regarding an undefined script populates, (undo the last action) and go to File > Project Settings > Expressions and change the Engine to Legacy.
6. Customize the walk cycle from the Effects Controls panel.
 - a. Walk Cycle > General motion > keyframes 100 to 0 to walk and stop.
 - b. Walk Cycle > Main parameters > character

Great Resources on Character Animation

- [The Animator's Survival Kit](#) by Richard Williams
- [The Illusion of Life: Disney Animation](#) by Ollie Johnston and Frank Thomas
- [Classic Human Anatomy in Motion](#) by Valerie L. Winslow
- [FORCE: Drawing Human Anatomy \(Force Drawing Series\)](#) by Mike Mattesi

Duik Tutorials

- [OFFICIAL Character Rigging Course with Duik Bassel](#)