

# Duik

## Attributes

string *Duik.version*

float *Duik.versionNumber*

boolean *Duik.forceReload*

Name	Type	Description
<b><i>version</i></b>	string, read-only	Version string of libDuik
<b><i>versionNumber</i></b>	float, read-only	Version number of libDuik
<b><i>forceReload</i></b>	boolean, read-only during run time	<p>When true, forces libDuik to be reloaded each time it is included in a script.</p> <p>When false, libDuik loads only on first run and then stays available until After Effects is shut down.</p> <p>This attribute should not be changed, unless you're editing libDuik.jsxinc itself and you need to do some testing and reload it without shutting down After Effects.</p> <p>To speed up launching of your scripts even at first launch, instead of including <i>libDuik.jsxinc</i>, you can copy it in the <i>Startup</i> subfolder of the <i>Scripts</i> folder of After Effects, and rename it to <i>libDuik.jsx</i>. This way, libDuik will be available to all scripts without <i>#include</i> macro.</p> <p>This attribute must be set by directly by editing libDuik.jsxinc to work.</p>

## Classes

*Duik.uiString*

*Duik.settings*

Name	Description
<b><i>uiStrings</i></b>	Contains all string names used by effects created by Duik. You can set these strings to translate libDuik at runtime. Default values are English names.
<b><i>settings</i></b>	Access to settings used by Duik.

## Methods

//TODO explications low level, mid level, high level

//TODO tri par level

*Duik.addIK(controller, layer1, layer2, layer3, goal, clockWise, threeD, frontFacing)*

*Duik.addGoal(layer, controller)*

*Duik.addController(layer)*

*Duik.addControllers(layers)*

Name	Description	Return	Level
<b><i>addIK(controller, layer1, layer2, layer3, goal, clockWise, threeD, frontFacing)</i></b>	Adds IK on the layers	true if successful, false if anything went wrong	mid
<b><i>addGoal(layer, controller)</i></b>	Adds a goal effect to the layer, which may be controlled by a controller	true if successful, false if anything went wrong	mid
<b><i>addController(layer)</i></b>	Creates a null object (controller) at layer position and named by layer.name	AVLayer; controller	mid
<b><i>addControllers(layers)</i></b>	For each layer, Creates a null object (controller) at layer position and named by layer.name	Array of AVLayer; controllers	high

***Duik.addIK(controller, layer1, layer2, layer3, goal, clockWise, threeD, frontFacing)***

Adds IK on the layers

parameters:

controller | AVLayer

layer1 | AVLayer

layer2 | AVLayer or undefined

layer3 | AVLayer or undefined

goal | AVLayer or undefined

clockWise | boolean, used only with two-layer and three-layer IK, default: false

threeD | boolean, works only with two-layer IK, default: false

frontFacing | boolean, default: false

returns

true if successful, false if anything went wrong

***Duik.addGoal(layer, controller)***

Adds a goal effect to the layer, which may be controlled by a controller

parameters:

layer | AVLayer

controller | AVLayer or undefined

returns

true if successful, false if anything went wrong

### ***Duik.addController(layer)***

Creates a null object (controller) at layer position and named by layer.name

parameters

layer | AVLayer

returns

AVLayer controller

### ***Duik.addControllers(layers)***

For each layer,

Creates a null object (controller) at layer position and named by layer.name

parameters

layers | Array of AVLayer

returns

Array of AVLayer controllers

## Duik.uiStrings

Contains all string names used by effects created by Duik.  
You can set these strings to translate libDuik at runtime.  
Default values are English names.

### Attributes

*Duik.uiStrings.ikFkBox*  
*Duik.uiStrings.reverseBox*  
*Duik.uiStrings.fkAngle*  
*Duik.uiStrings.rootFkAngle*  
*Duik.uiStrings.endFkAngle*  
*Duik.uiStrings.goalFkAngle*  
*Duik.uiStrings.weightSlider*

Name	Type	Description
<b><i>ikFkBox</i></b>	string	"IK / FK"
<b><i>reverseBox</i></b>	string	"Reverse"
<b><i>fkAngle</i></b>	string	"FK"
<b><i>rootFkAngle</i></b>	string	"Root FK"
<b><i>endFkAngle</i></b>	string	"End FK"
<b><i>goalFkAngle</i></b>	string	"Goal FK"
<b><i>weightSlider</i></b>	string	"LookAt Weight"

## Duik.settings

Access to settings used by Duik.

### Attributes

*Duik.settings.controllerSize*

*Duik.settings.controllerSizeAuto*

*Duik.settings.controllerSizeHint*

Name	Type	Description	Default
<b><i>controllerSize</i></b>	integer	Size of controllers in pixels	100
<b><i>controllerSizeAuto</i></b>	boolean	If true, controller sizes will be automatically adapted to comp size, according to <i>Duik.settings.controllerSizeHint</i>	true
<b><i>controllerSizeHint</i></b>	integer	when controllerSizeAuto is true, 0 = small, 1 = medium, 2 = big	1