

POWER OF AR AND VR

UPBGE

Logic Bricks Editor



**Co-funded by
the European Union**



2024-1-PL01-KA220-VET-000243150

JACEK KAWAŁEK

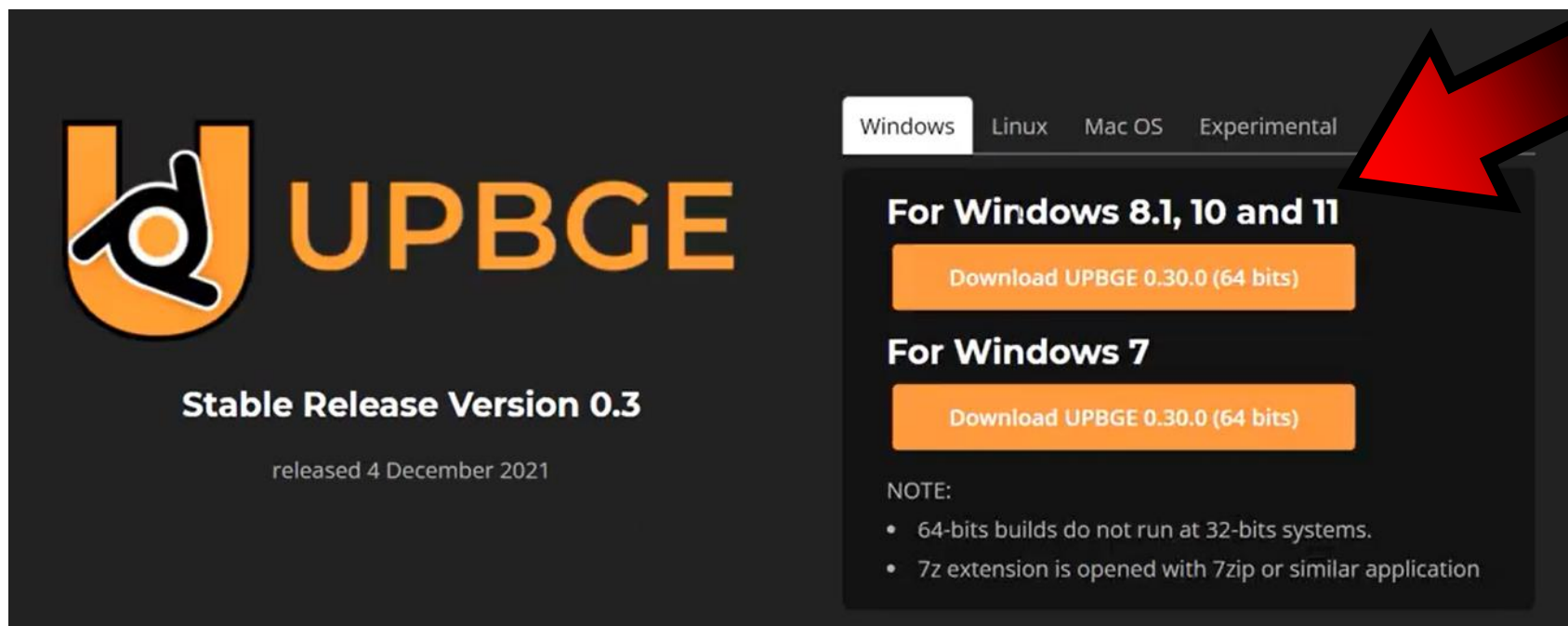
**I WILL PRESENT
ONE OF THE WAYS
OF CREATING
SCENES USING**



GO TO THE WEBSITE

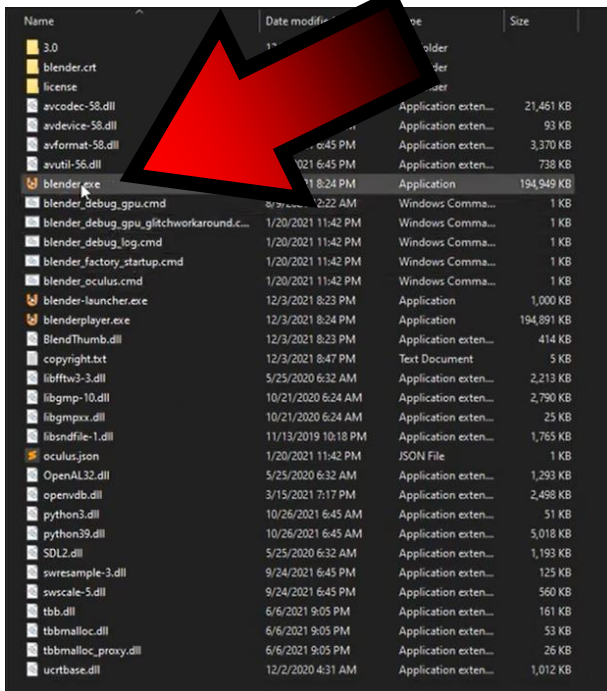


DOWNLOAD THE APPROPRIATE VERSION OF THE PROGRAM

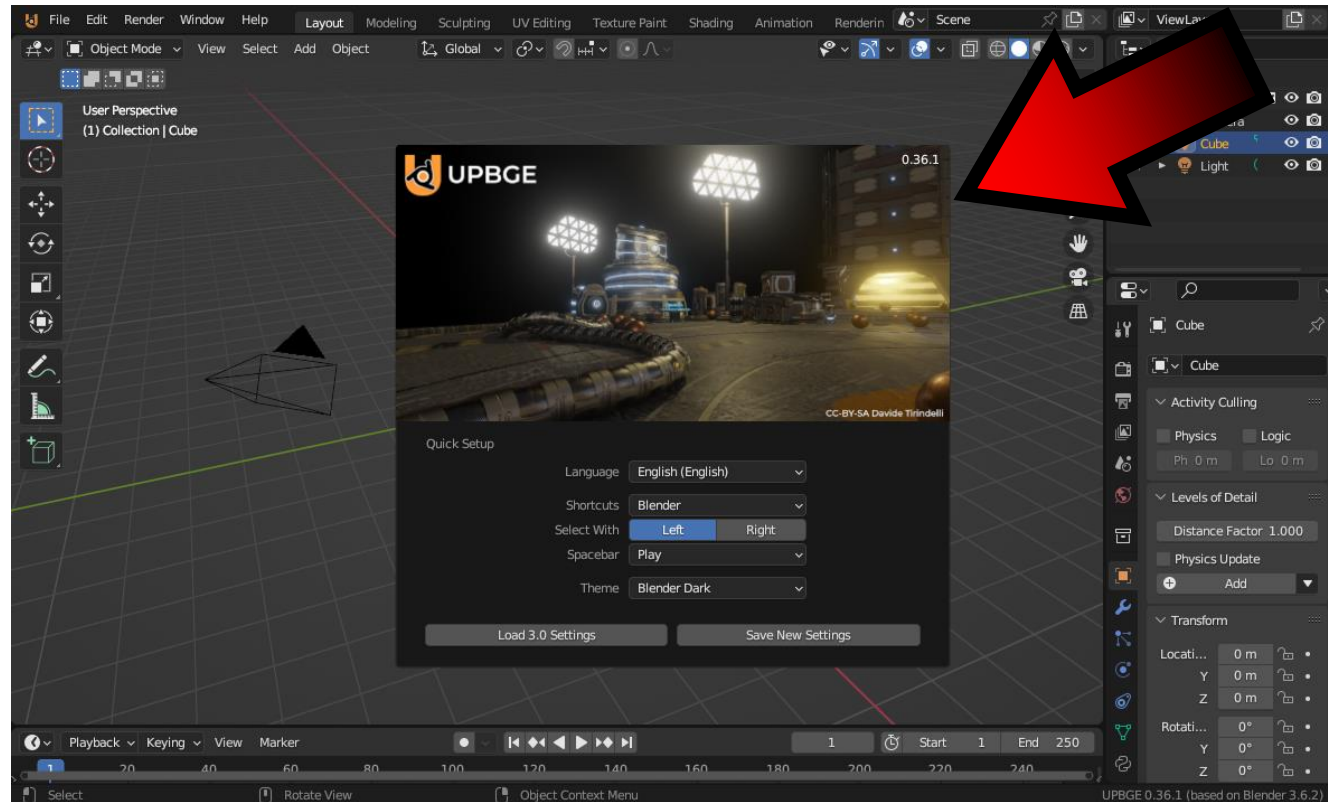


The screenshot shows the UPBGE download page. On the left, there is a logo for UPBGE (a stylized 'U' with a 'd' inside) and the text "UPBGE". Below the logo, it says "Stable Release Version 0.3" and "released 4 December 2021". On the right, there are tabs for "Windows", "Linux", "Mac OS", and "Experimental". The "Windows" tab is selected. Underneath, there are two sections: "For Windows 8.1, 10 and 11" and "For Windows 7". Each section has an orange button that says "Download UPBGE 0.30.0 (64 bits)". A large red arrow points to the "Download UPBGE 0.30.0 (64 bits)" button for Windows 8.1, 10 and 11. Below the buttons, there is a "NOTE:" section with two bullet points: "64-bits builds do not run at 32-bits systems." and "7z extension is opened with 7zip or similar application".

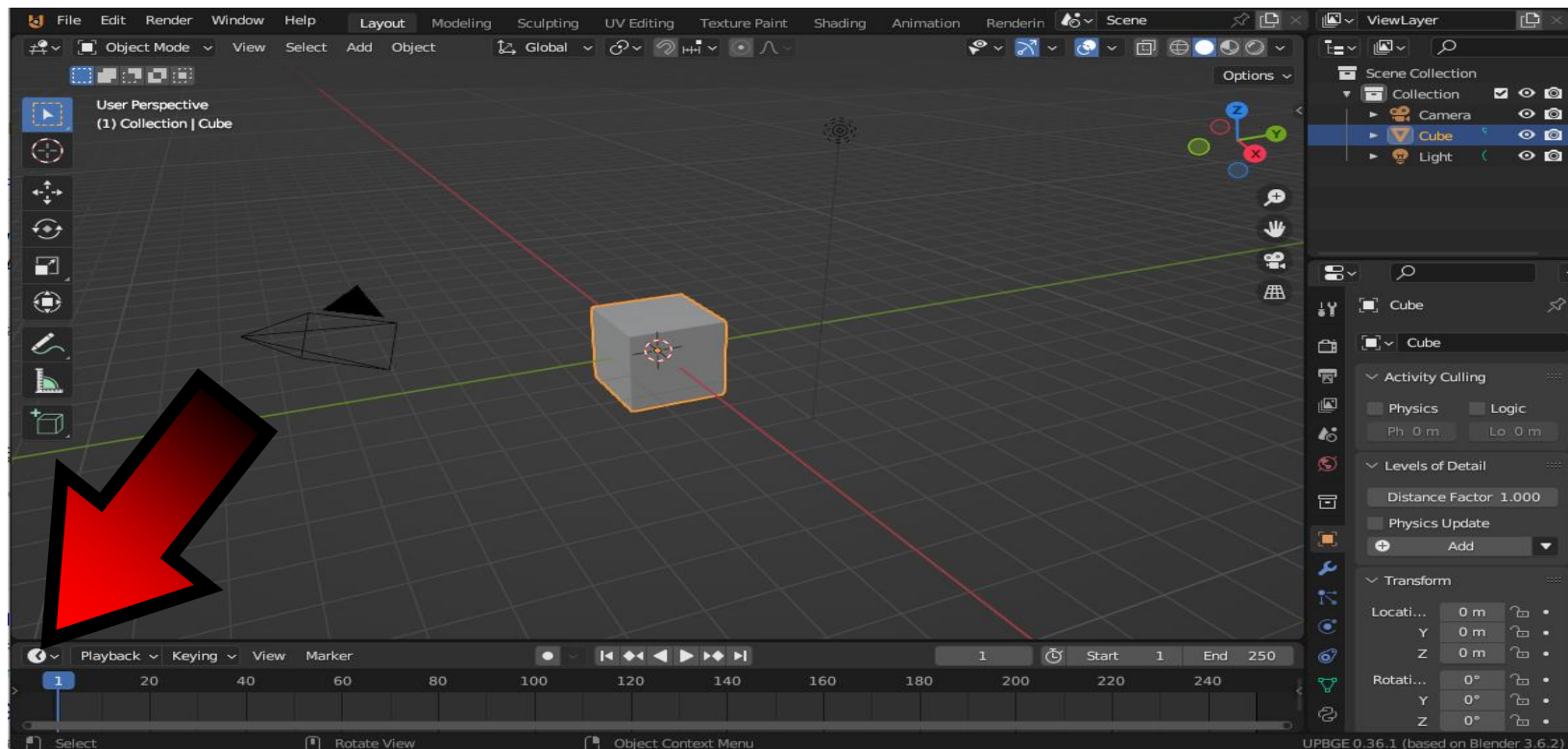
UPBGE NO NEED TO INSTALL



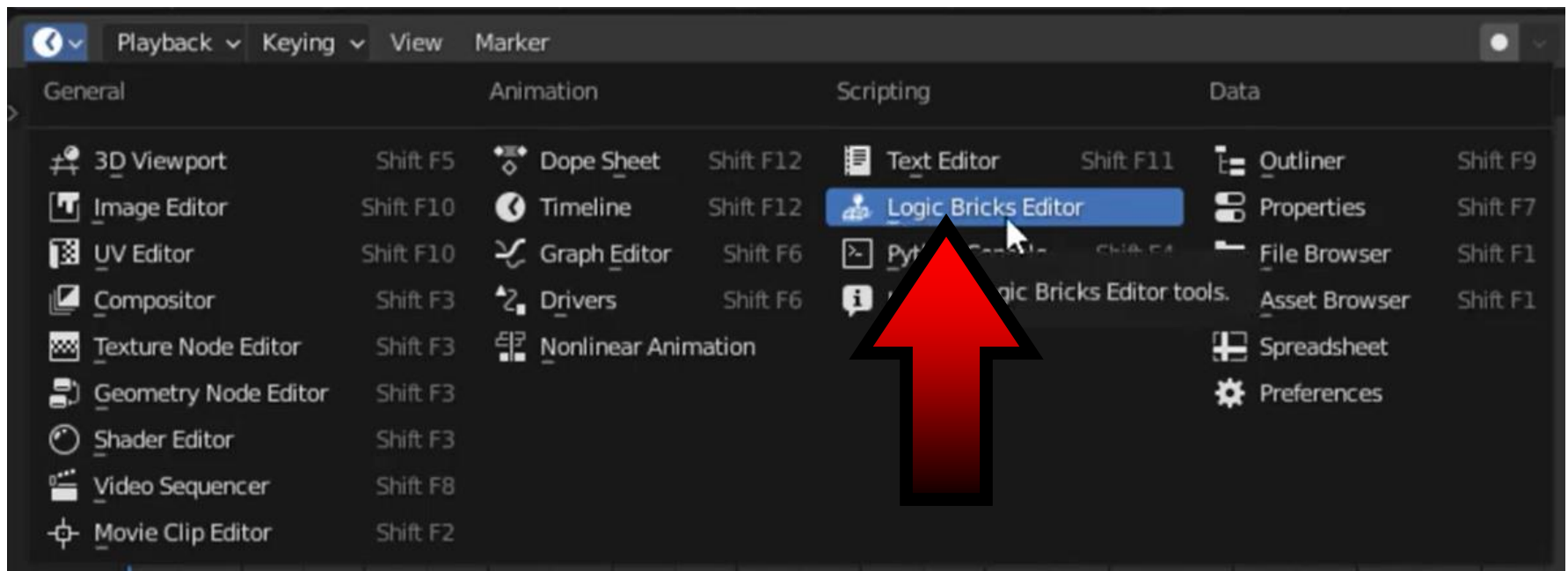
Name	Date modified	Type	Size
3.0		Folder	
blender.crt		Application exten...	21,461 KB
license		Application exten...	93 KB
avcodec-58.dll		Application exten...	3,370 KB
avdevice-58.dll		Application exten...	738 KB
avformat-58.dll		Application exten...	194,949 KB
avutil-56.dll		Application exten...	1,000 KB
blender.exe		Application	194,949 KB
blender_debug_gpu.cmd		Windows Comma...	1 KB
blender_debug_gpu_glitchworkaround.c...		Windows Comma...	1 KB
blender_debug_log.cmd		Windows Comma...	1 KB
blender_factory_startup.cmd		Windows Comma...	1 KB
blender_oculus.cmd		Windows Comma...	1 KB
blender-launcher.exe		Application	1,000 KB
blenderplayer.exe		Application	194,891 KB
BlendThumb.dll		Application exten...	414 KB
copyright.txt		Text Document	5 KB
libfftw3-3.dll		Application exten...	2,213 KB
libgmp-10.dll		Application exten...	2,790 KB
libgmpxx.dll		Application exten...	25 KB
libsndfile-1.dll		Application exten...	1,765 KB
oculus.json		JSON File	1 KB
OpenAL32.dll		Application exten...	1,293 KB
openvdb.dll		Application exten...	2,498 KB
python3.dll		Application exten...	51 KB
python39.dll		Application exten...	5,018 KB
SDL2.dll		Application exten...	1,193 KB
swresample-3.dll		Application exten...	125 KB
swscale-5.dll		Application exten...	560 KB
tbb.dll		Application exten...	161 KB
tbbmalloc.dll		Application exten...	53 KB
tbbmalloc_proxy.dll		Application exten...	26 KB
ucrtbase.dll		Application exten...	1,012 KB



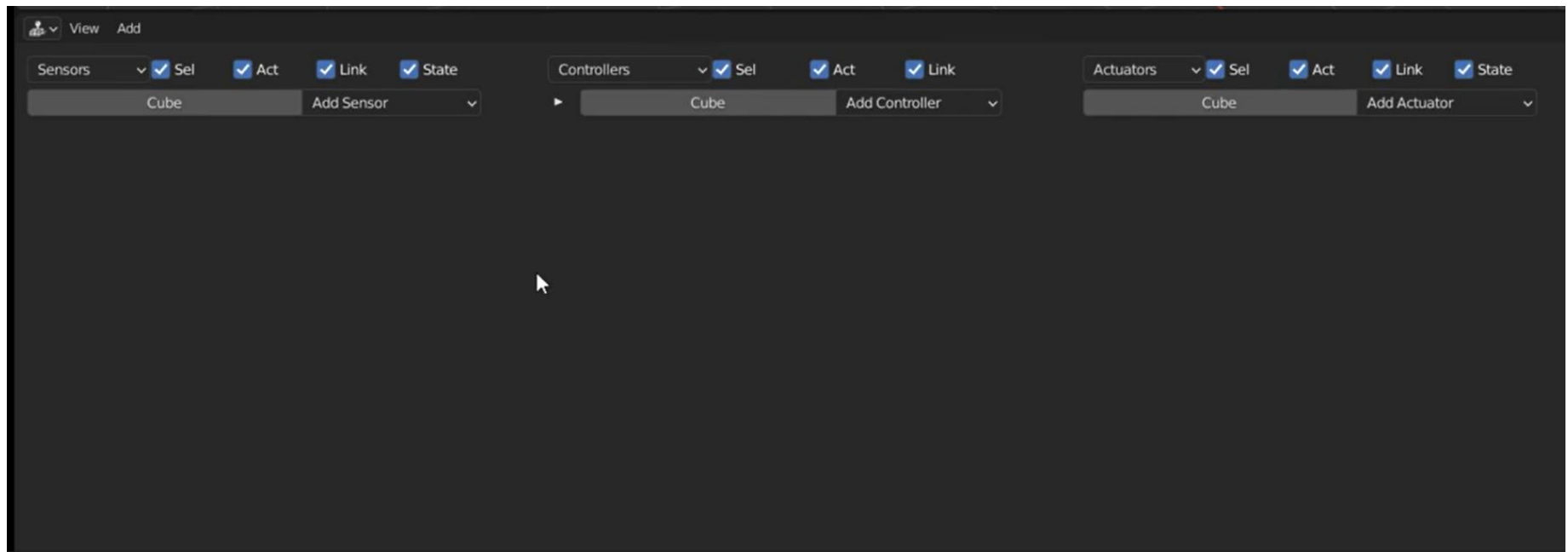
CLICK ON THE ICON IN THE BOTTOM LEFT CORNER



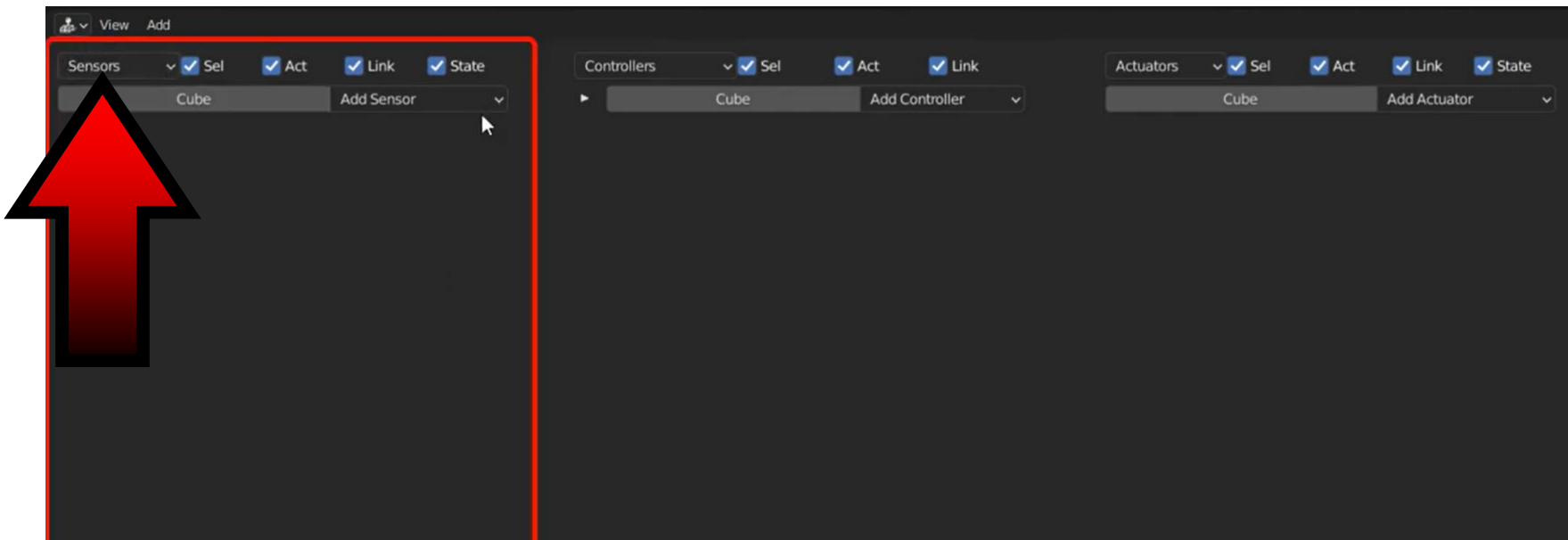
SELECT LOGIC BRICKS EDITOR



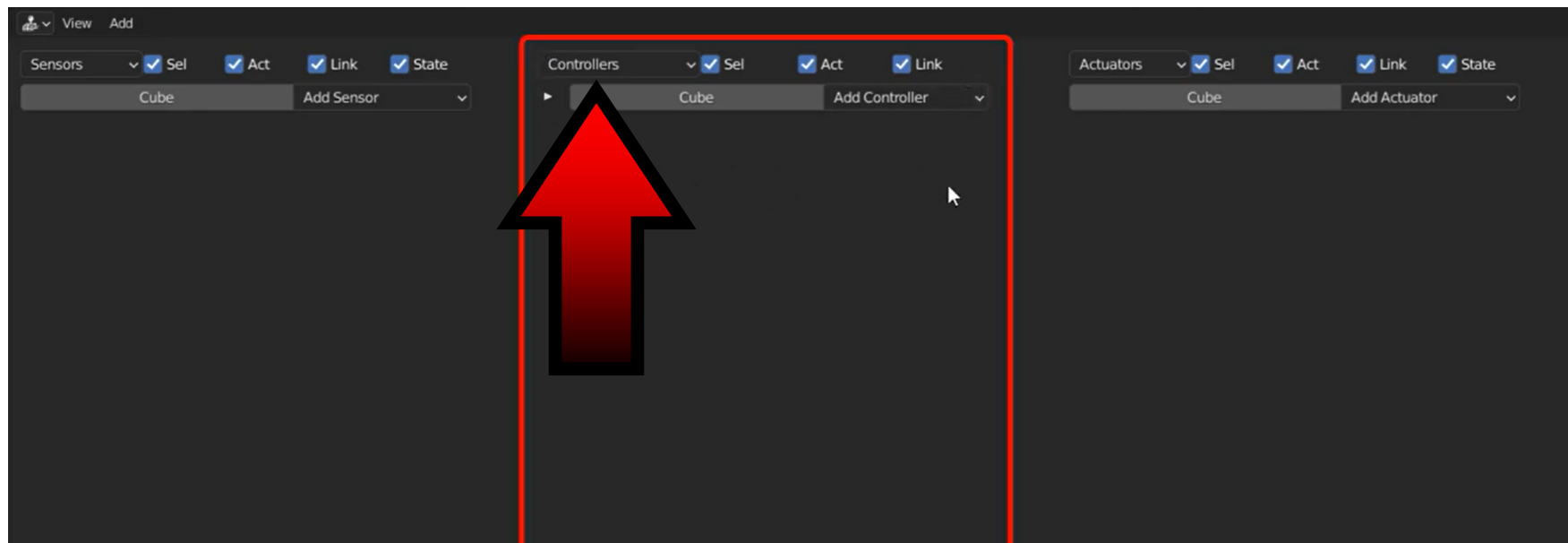
**YOU WILL SEE A WINDOW LIKE
THIS
WIDTH TREE SECTIONS**



SENSORS

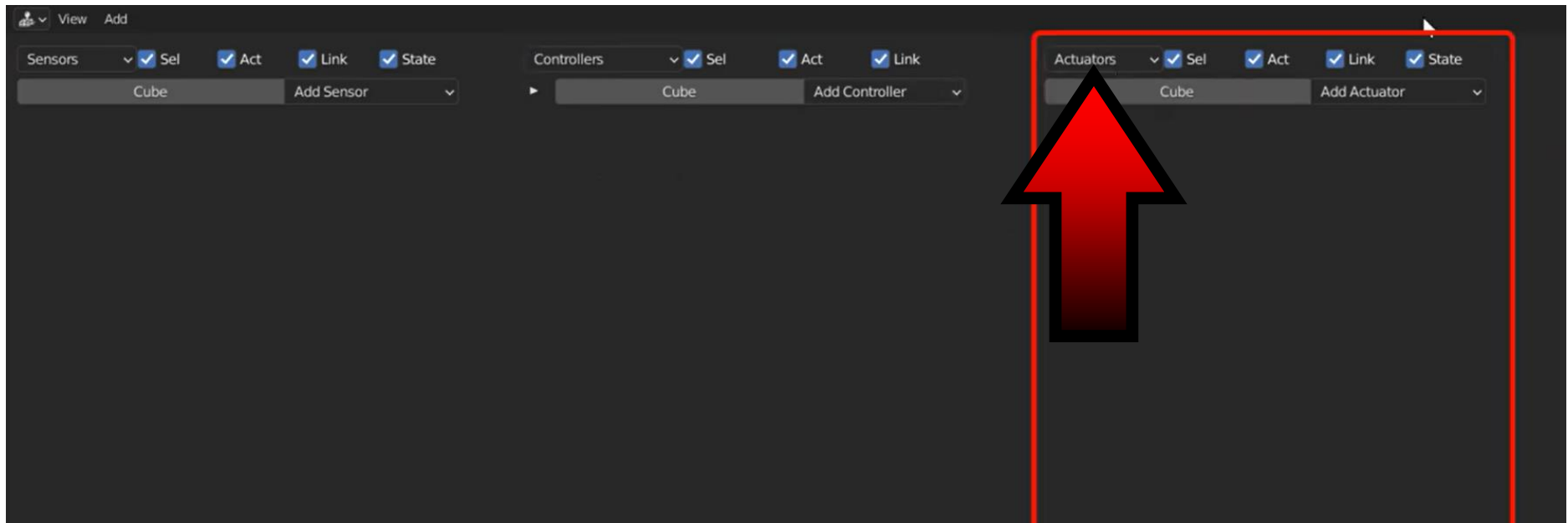


CONTROLLERS

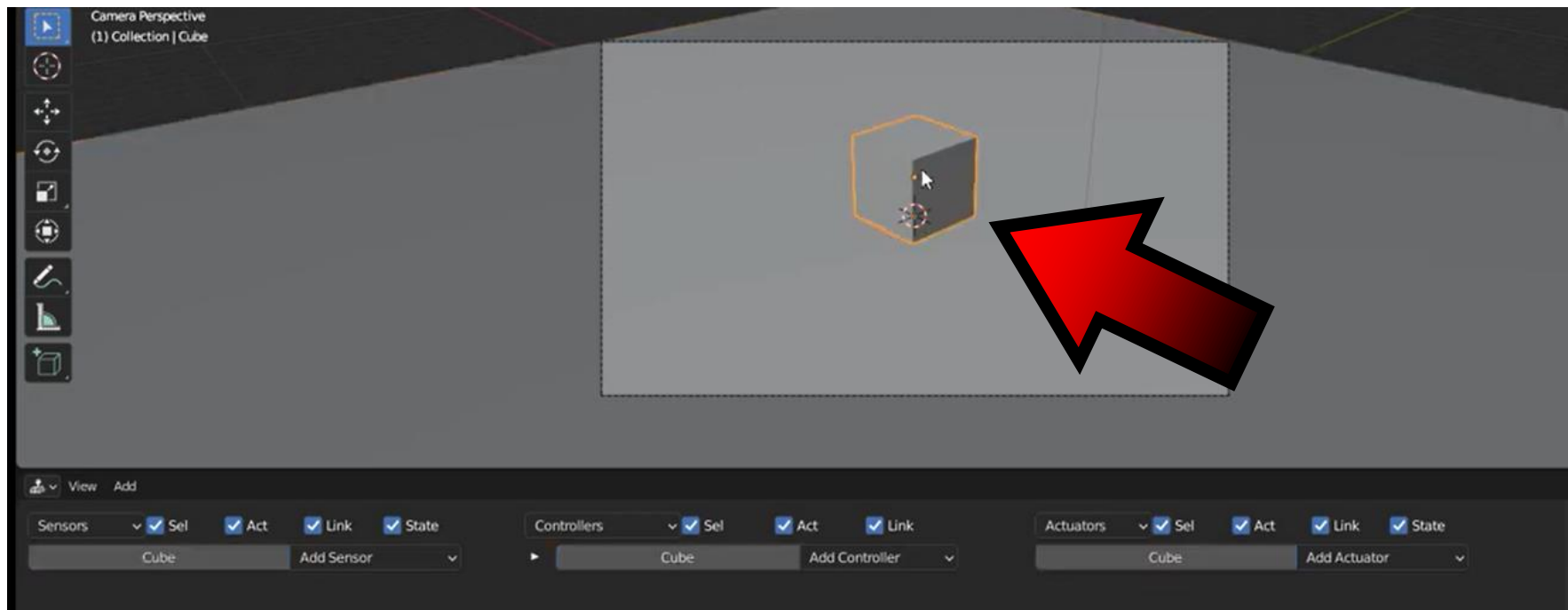




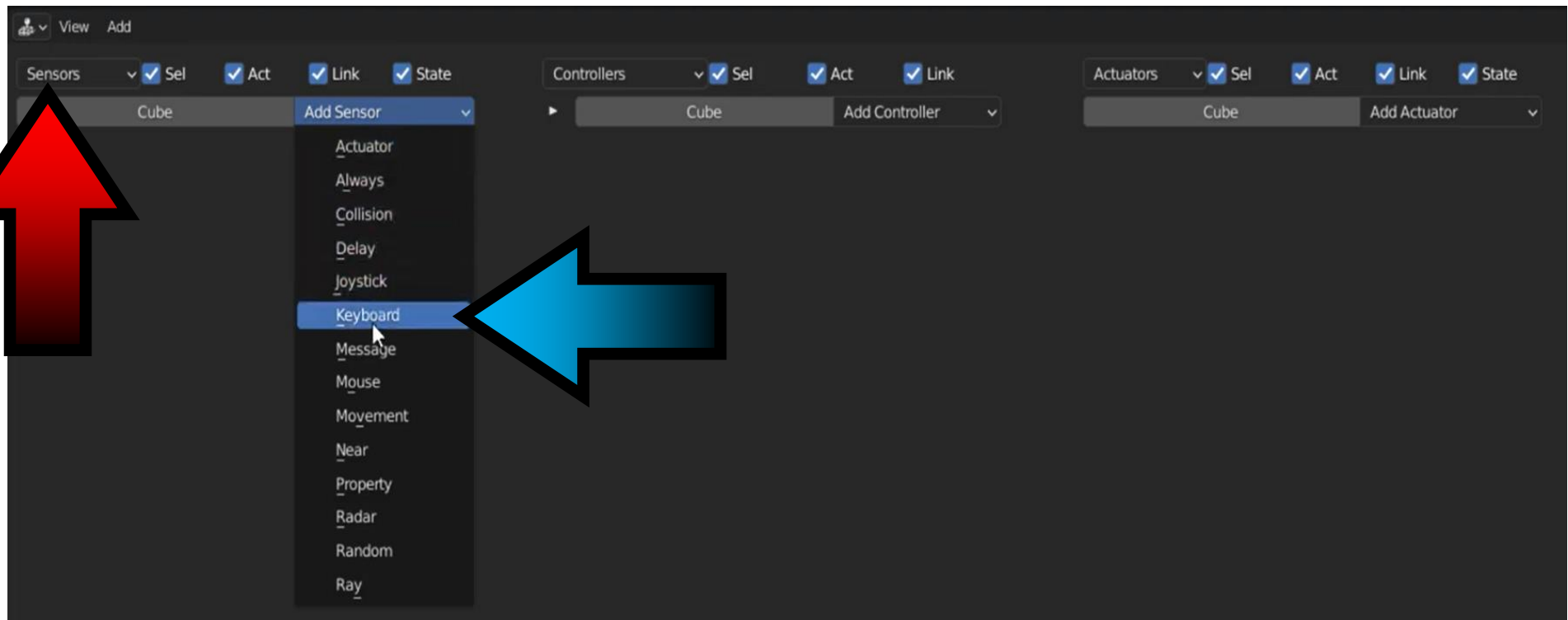
ACTUATORS



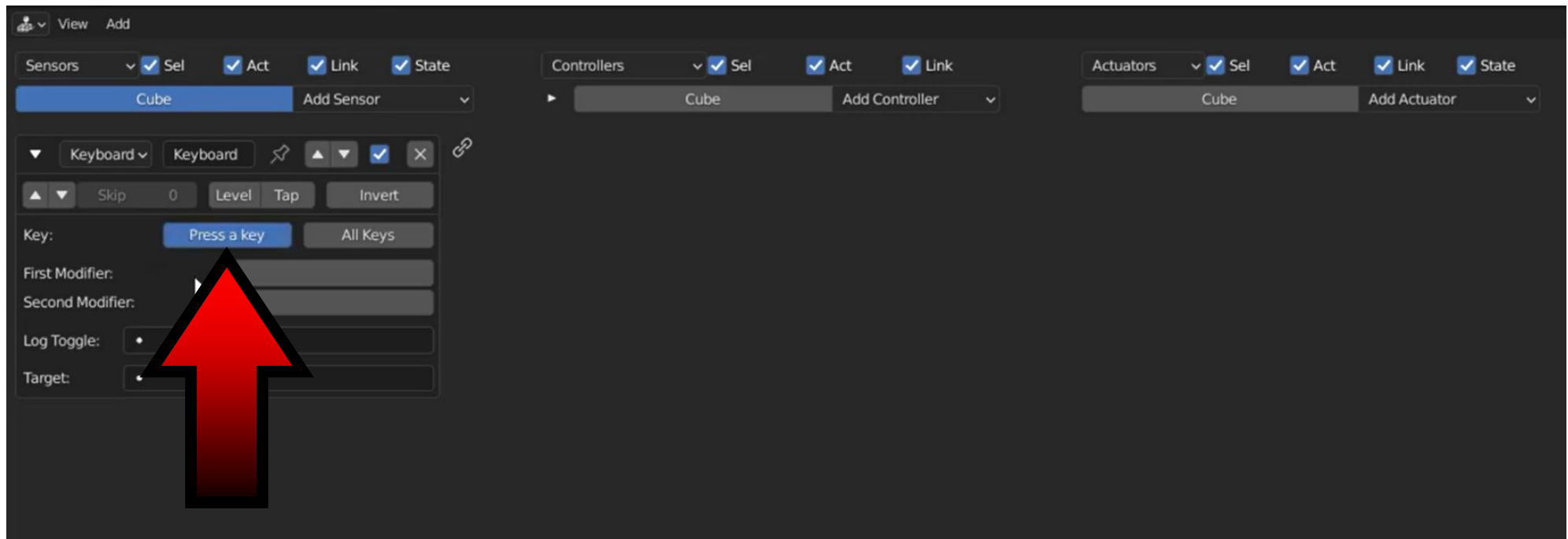
SELECT CUBE



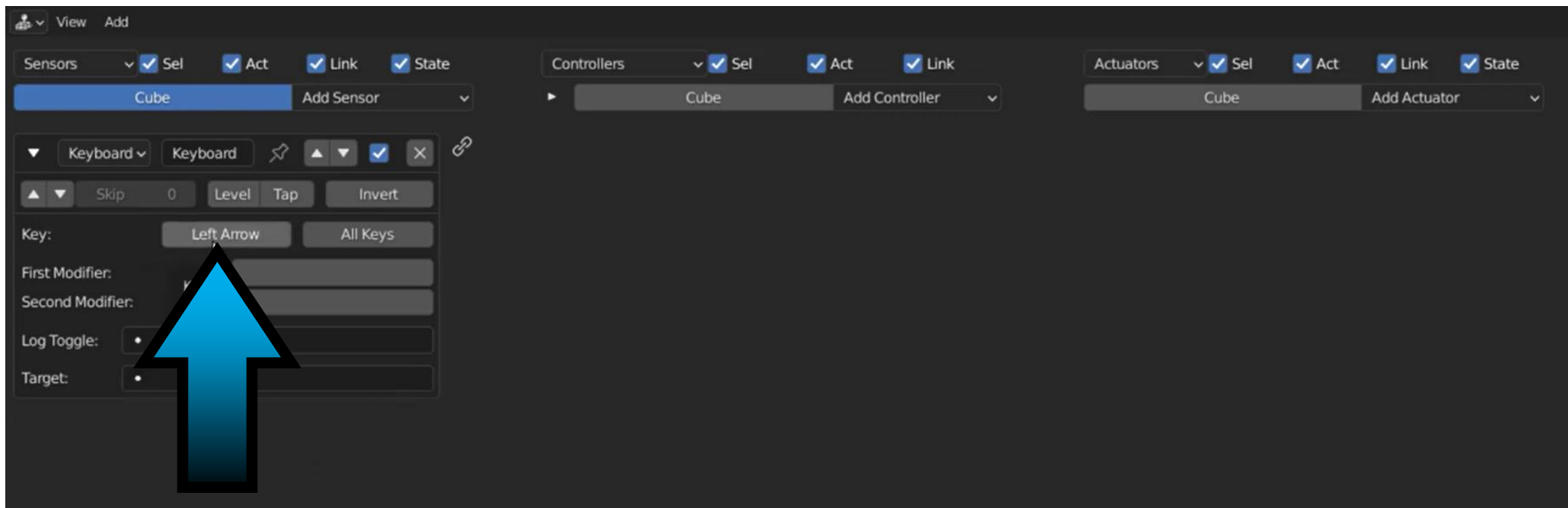
FOR **SENSORS** CHOOSE **KEYBOARD**



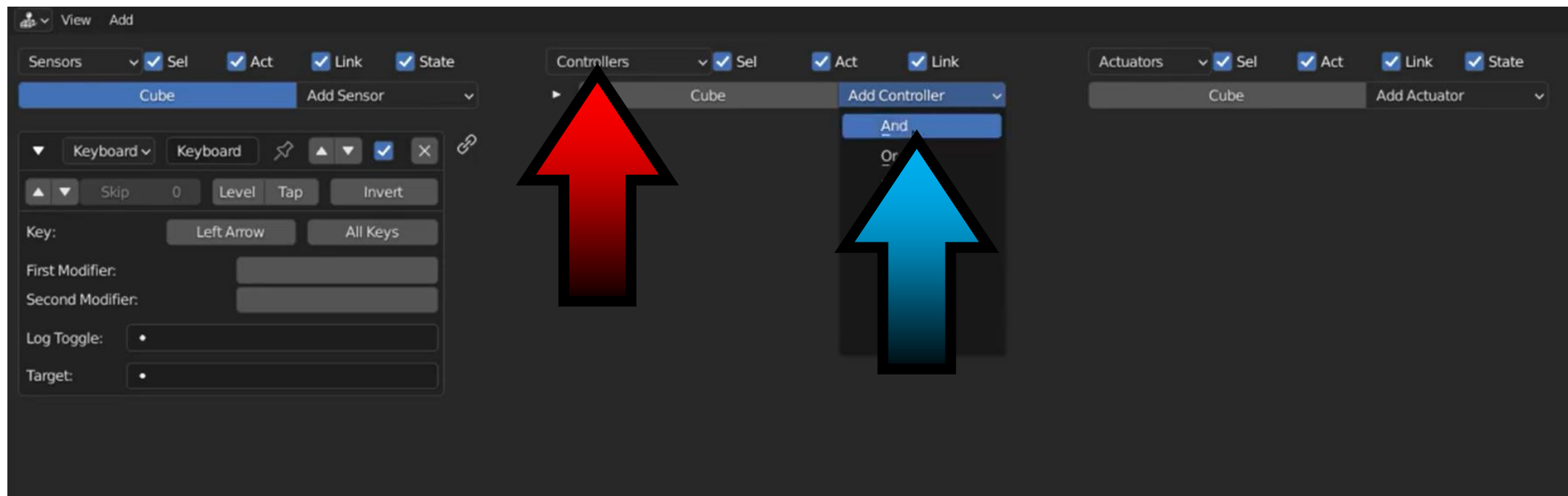
CLICK THE MOUSE IN **PRESS A KEY**



THEN PRESS
THE LEFT ARROW
ON THE KEYBOARD

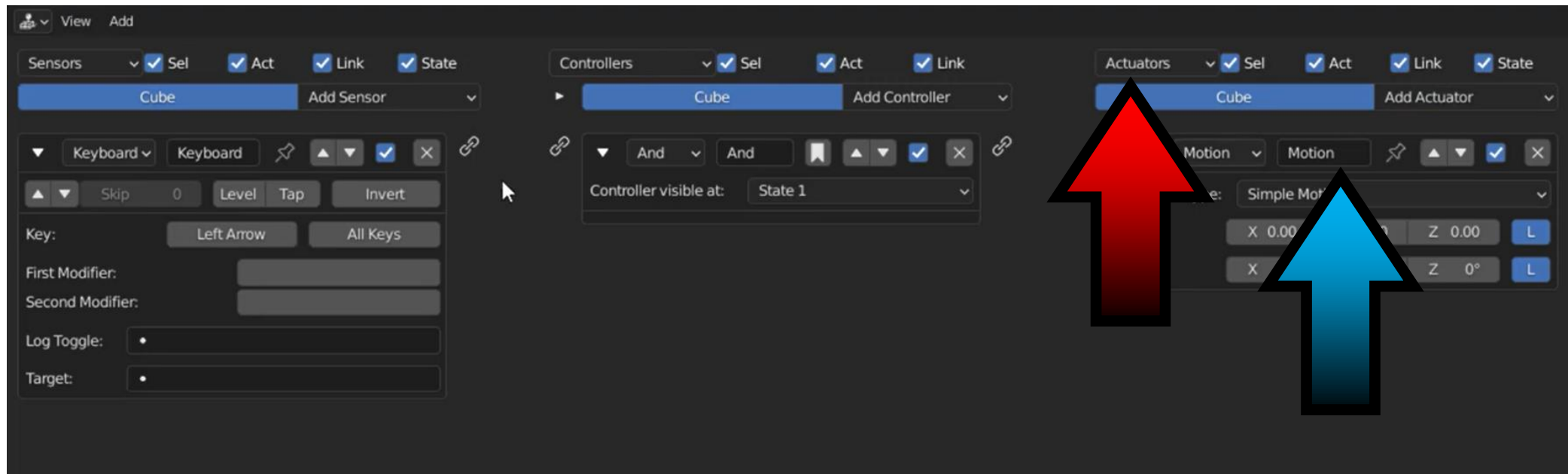


FOR **CONTROLLERS** CHOOSE **AND**



The screenshot displays a configuration panel for a 'Cube' object in a game engine. The panel is divided into three main sections: Sensors, Controllers, and Actuators. Each section has a dropdown menu to select the type of component and checkboxes for 'Sel', 'Act', 'Link', and 'State'. The 'Sensors' section is currently selected, showing a 'Keyboard' sensor configuration with options for 'Skip', 'Level', 'Tap', 'Invert', 'Key', 'First Modifier', 'Second Modifier', 'Log Toggle', and 'Target'. The 'Controllers' section is also visible, with a red arrow pointing to the 'Controllers' dropdown menu. The 'Add Controller' dropdown menu is open, showing options for 'And' and 'Or', with a blue arrow pointing to the 'And' option. The 'Actuators' section is also visible, with an 'Add Actuator' dropdown menu.

FOR **ACTUATORS** CHOOSE **MOTION**



The screenshot displays a software interface with three main panels: Sensors, Controllers, and Actuators. Each panel has a dropdown menu for selection and checkboxes for 'Sel', 'Act', 'Link', and 'State'. The Actuators panel is highlighted with a red arrow pointing to the 'Motion' dropdown and a blue arrow pointing to the 'Simple Motion' dropdown. The Actuators panel also shows a 'Simple Motion' dropdown with parameters for X, Y, Z, and rotation.

Parameter	Value	Unit
X	0.00	m
Y	0.00	m
Z	0.00	m
Rotation	0°	°



WE CONNECT **SENSORS** WITH **CONTROLLERS**

The screenshot displays a software interface with three main panels: Sensors, Controllers, and Actuators. Each panel has a header with 'Sel', 'Act', 'Link', and 'State' checkboxes. The Sensors panel shows a 'Keyboard' sensor connected to a 'Cube' actuator. The Controllers panel shows an 'And' controller connected to a 'Cube' actuator. A red arrow points to the connection between the 'Keyboard' sensor and the 'And' controller. The Actuators panel shows a 'Motion' actuator connected to a 'Cube' actuator. The 'Motion' actuator has a 'Motion Type' of 'Simple Motion' and location/rotation settings for X, Y, Z, and X, Y, Z axes.



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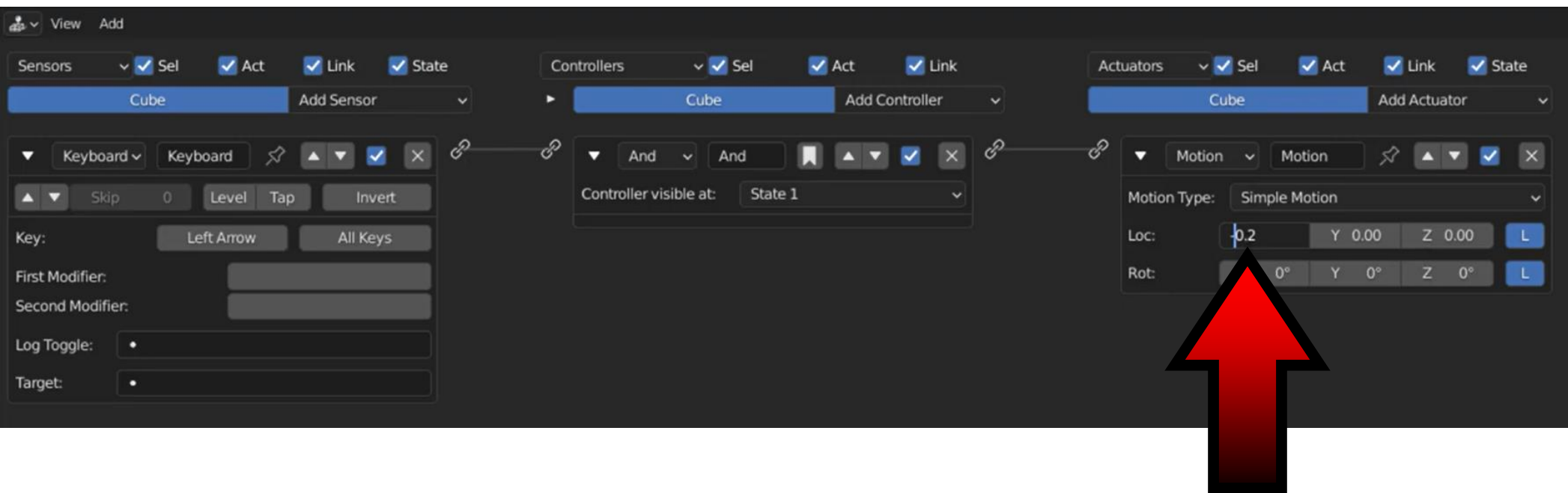


THEN **CONTROLLERS** WIDTH **ACTUATORS**

The screenshot displays a software interface with three main panels: Sensors, Controllers, and Actuators. Each panel has a dropdown menu for the object type (Cube) and checkboxes for 'Sel', 'Act', 'Link', and 'State'. The Sensors panel shows a 'Keyboard' sensor configuration with options for 'Skip', 'Level', 'Tap', 'Invert', 'Key', 'First Modifier', 'Second Modifier', 'Log Toggle', and 'Target'. The Controllers panel shows an 'And' controller configuration with a 'Controller visible at' dropdown set to 'State 1'. The Actuators panel shows a 'Motion' actuator configuration with 'Motion Type' set to 'Simple Motion' and location/rotation settings for X, Y, and Z axes. A large red arrow points to the controller configuration.

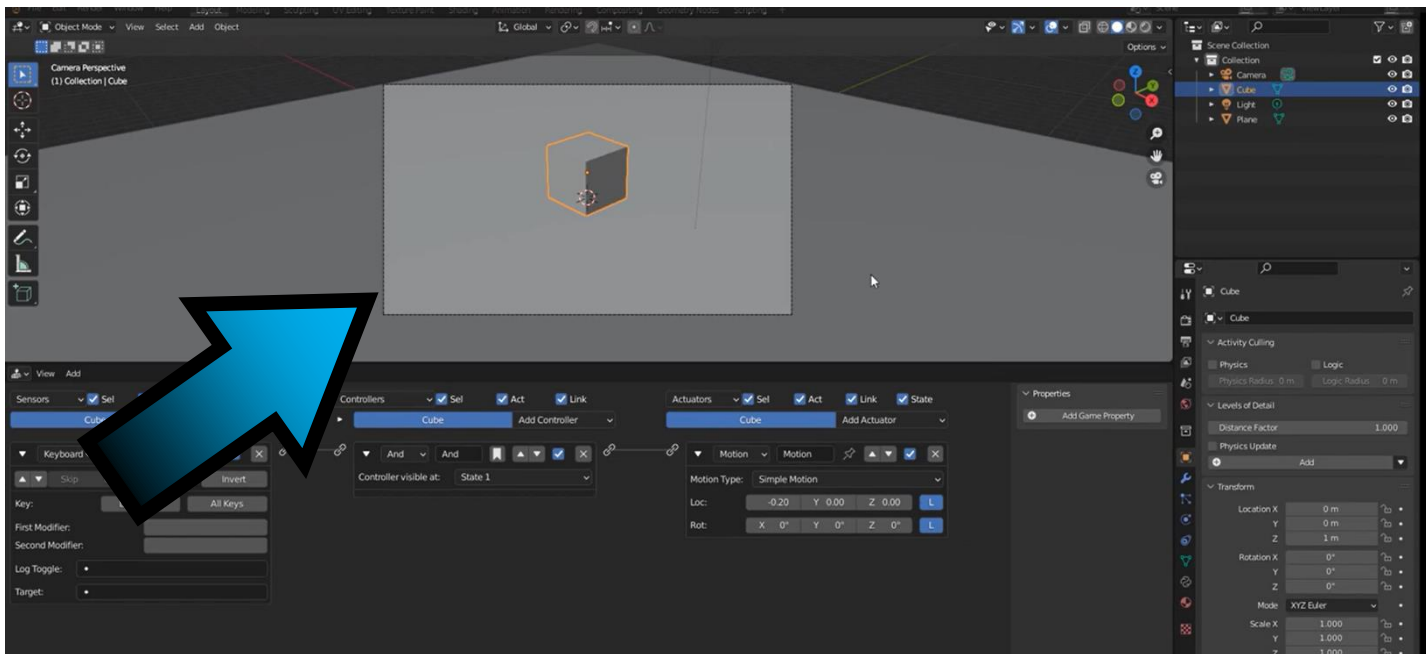
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LET'S ENTER THE DISPLACEMENT ALONG **THE X-AXIS -0,2**

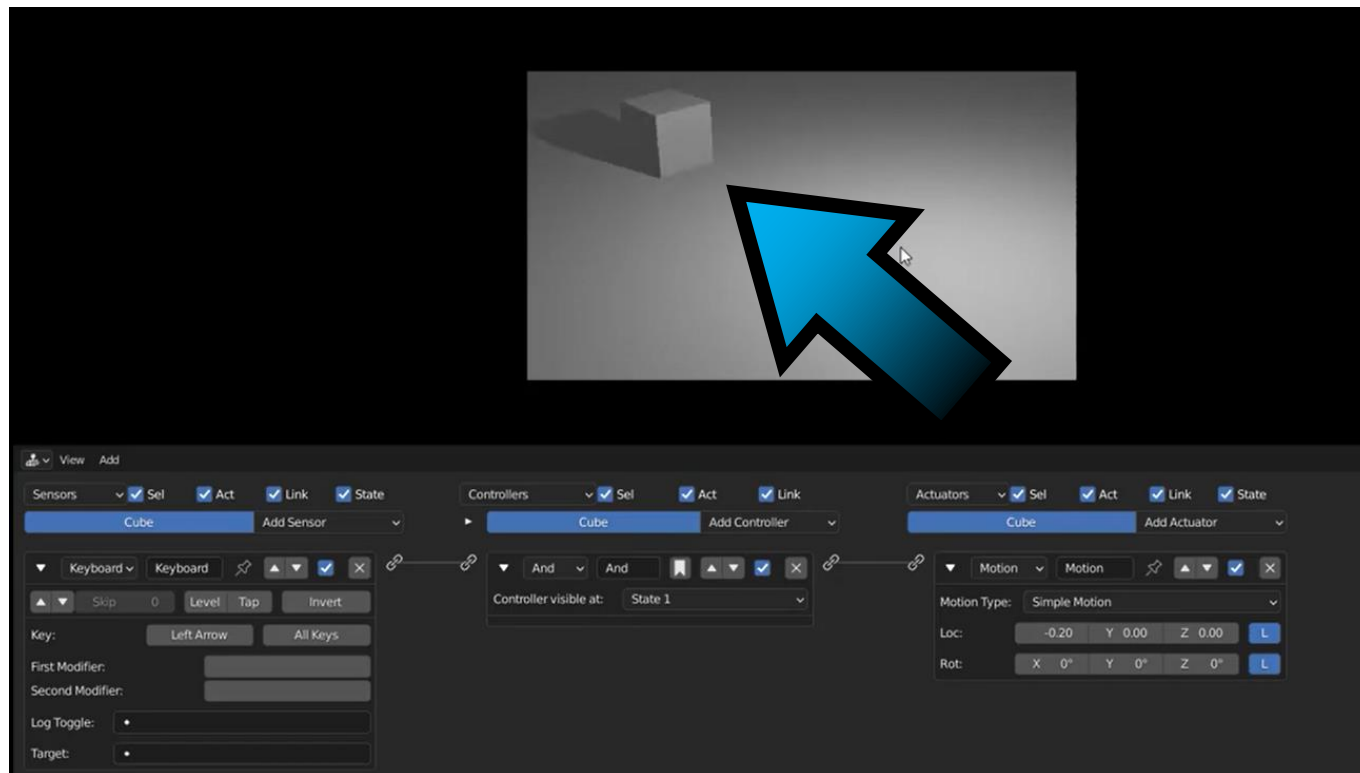


The screenshot displays a software interface for configuring a 'Cube' object. It is organized into three main sections: Sensors, Controllers, and Actuators. Each section has a dropdown menu to select the object type and checkboxes for 'Sel', 'Act', 'Link', and 'State'. The 'Actuators' section is currently active, showing a 'Motion' actuator configuration. The 'Motion Type' is set to 'Simple Motion'. The 'Loc' field is highlighted with a red arrow, showing the X-axis value set to -0.2, with Y and Z axes at 0.00. The 'Rot' field shows 0° for X, Y, and Z axes.

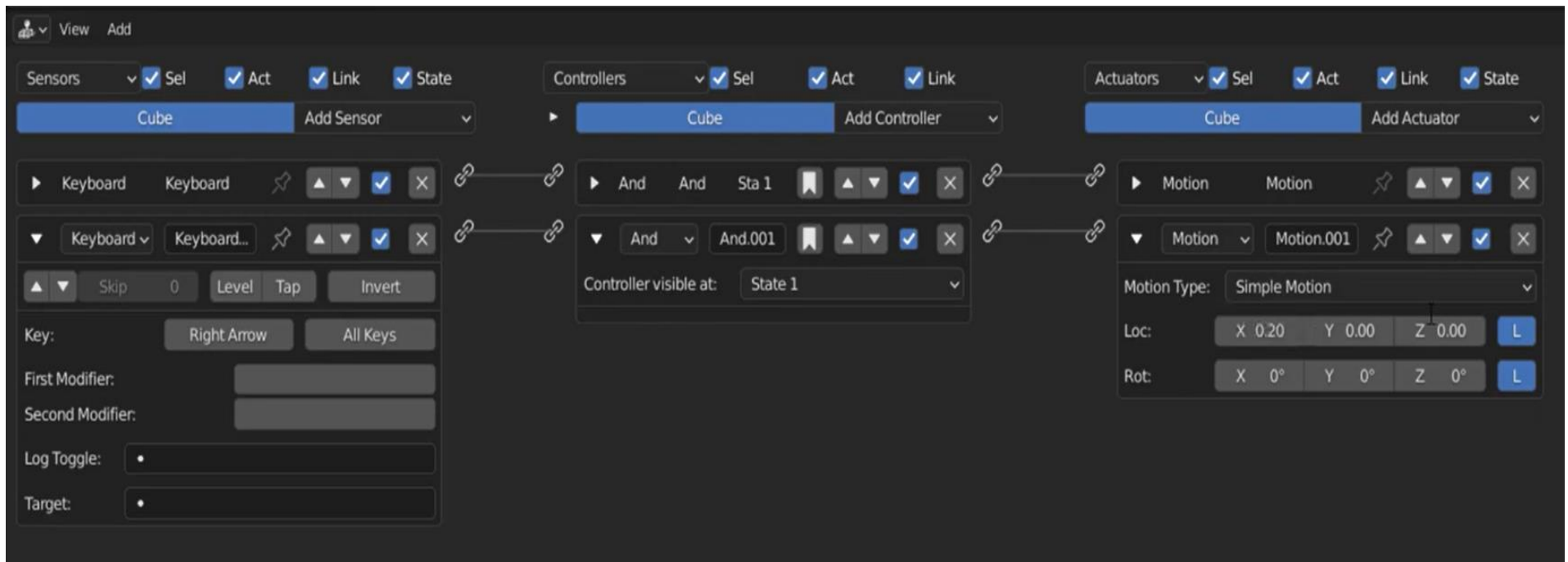
CLICK 0 (zero) FROM THE NUMERIC KEYBOARD TO GO TO THE CAMERA VIEW



**PRESS THE P KEY TO LAUNCH THE GAME,
AND THEN THE LEFT ARROW
TO MOVE THE CUBE**



ACCORDING TO THE FOLLOWING FORMULA ADD MORE ITEMS FOR THE RIGHT ARROW



The screenshot displays a software configuration interface for a cube. It is organized into three main sections: Sensors, Controllers, and Actuators. Each section has a dropdown menu to select an item (Cube) and an 'Add' button. The Sensors section shows a 'Keyboard' sensor with a 'Right Arrow' key selected. The Controllers section shows an 'And' controller with 'Sta 1' selected. The Actuators section shows a 'Motion' actuator with 'Simple Motion' selected and coordinates (X: 0.20, Y: 0.00, Z: 0.00). The interface also includes various control buttons like 'Add Sensor', 'Add Controller', and 'Add Actuator'.



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AND FOR **UP** **ARROW**

The screenshot displays a logic editor interface with three main columns: Sensors, Controllers, and Actuators. Each column has a header with checkboxes for 'Sel', 'Act', 'Link', and 'State'. The 'Sensors' column contains three 'Keyboard' sensors. The 'Controllers' column contains three 'And' controllers, with the third one expanded to show 'And.002' and 'Controller visible at: State 1'. The 'Actuators' column contains three 'Motion' actuators. The 'Motion.002' actuator is expanded to show 'Motion Type: Simple Motion' and location/rotation settings for X, Y, Z, and degrees.

Sensors | Sel | Act | Link | State

Cube | Add Sensor

- Keyboard | Keyboard
- Keyboard | Keyboard.001
- Keyboard | Keyboard...

Skip 0 | Level | Tap | Invert

Key: Up Arrow | All Keys

First Modifier:

Second Modifier:

Log Toggle:

Target:

Controllers | Sel | Act | Link

Cube | Add Controller

- And | And | Sta 1
- And | And.... | Sta 1
- And | And.002

Controller visible at: State 1

Actuators | Sel | Act | Link | State

Cube | Add Actuator

- Motion | Motion
- Motion | Motion.001
- Motion | Motion.002

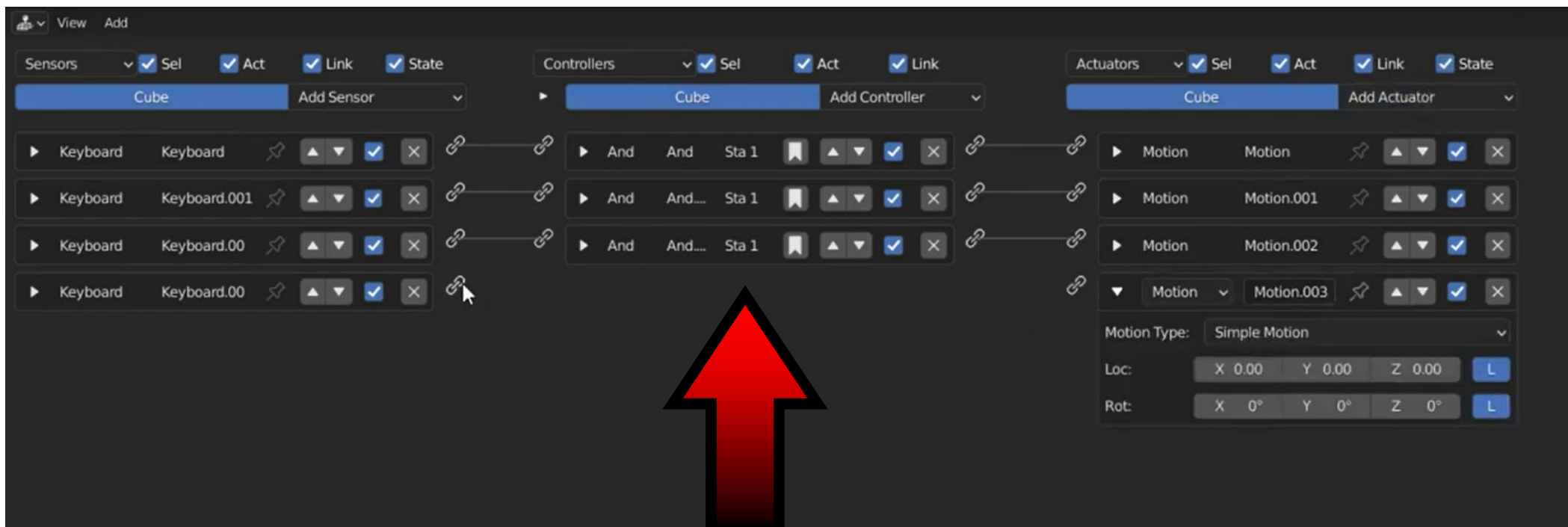
Motion Type: Simple Motion

Loc: X 0.00 | Y 0.20 | Z 0.00 | L

Rot: X 0° | Y 0° | Z 0° | L

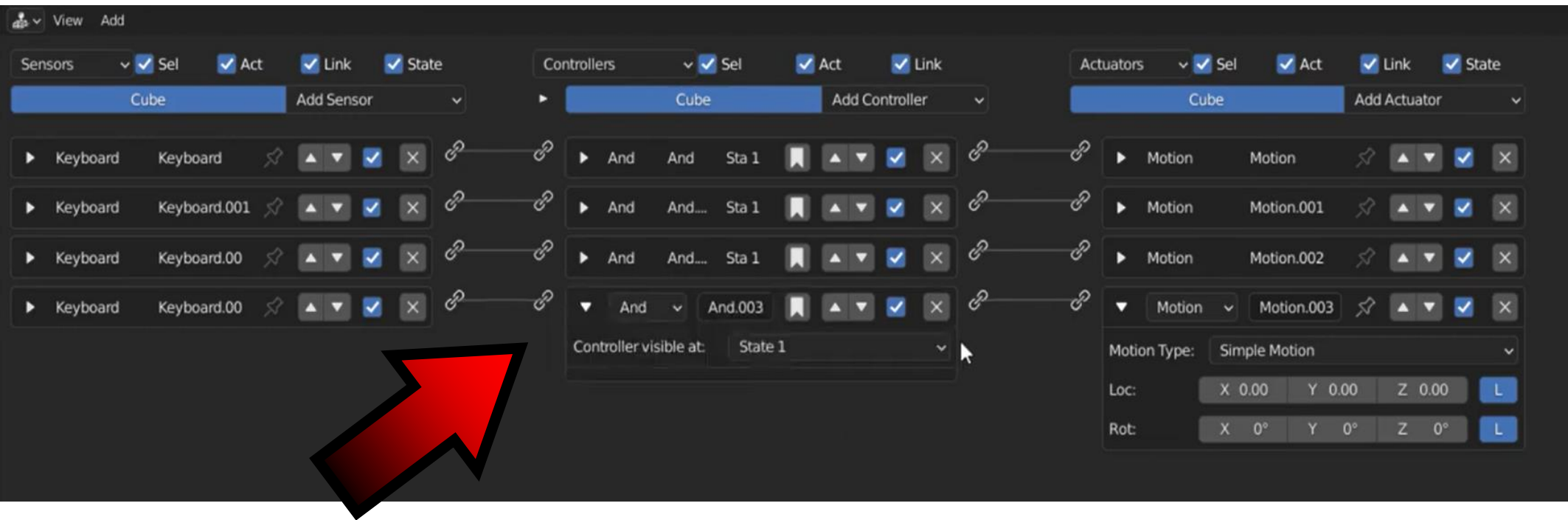
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FOR THE DOWN ARROW, DO NOT ADD CONTROLLERS



The screenshot displays a software interface with three main panels: Sensors, Controllers, and Actuators. Each panel has a search bar and a list of objects. The Sensors panel shows four 'Keyboard' objects. The Controllers panel shows three 'And' objects. The Actuators panel shows four 'Motion' objects, with 'Motion.003' selected. A large red arrow points to the 'Motion.003' actuator. The interface also includes a 'View' menu and an 'Add' button.

ONCE CONNECTED, THE SYSTEM WILL ADD CONTROLLERS



View Add

Sensors Sel Act Link State

Cube Add Sensor

- ▶ Keyboard Keyboard
- ▶ Keyboard Keyboard.001
- ▶ Keyboard Keyboard.00
- ▶ Keyboard Keyboard.00

Controllers Sel Act Link

Cube Add Controller

- ▶ And And Sta 1
- ▶ And And... Sta 1
- ▶ And And... Sta 1
- ▼ And And.003

Controller visible at: State 1

Actuators Sel Act Link State

Cube Add Actuator

- ▶ Motion Motion
- ▶ Motion Motion.001
- ▶ Motion Motion.002
- ▼ Motion Motion.003

Motion Type: Simple Motion

Loc: X 0.00 Y 0.00 Z 0.00 L

Rot: X 0° Y 0° Z 0° L



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WE SET THE SAME PARAMETERS EVERYWARE

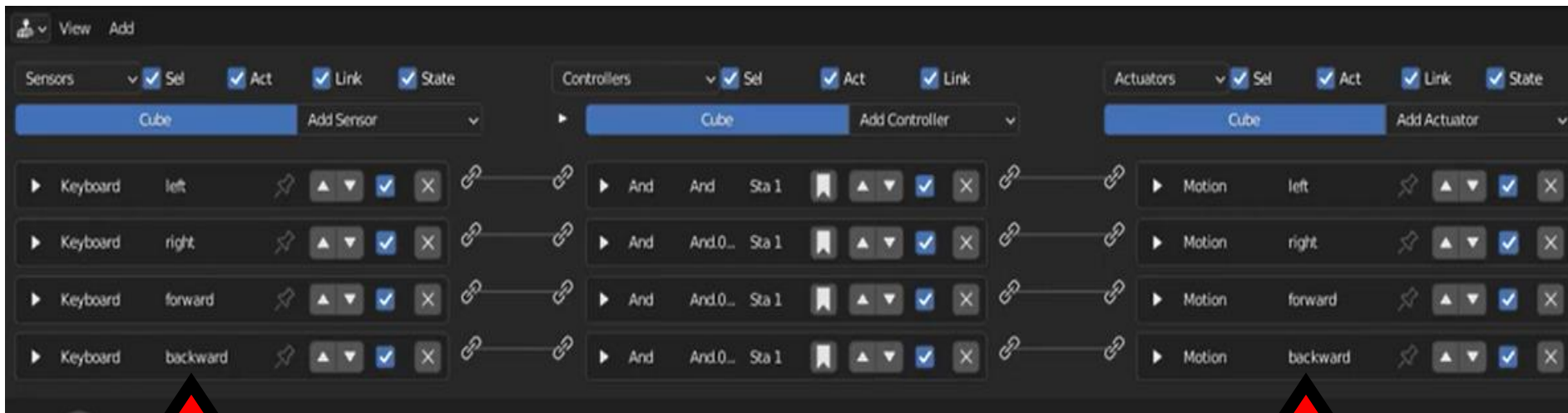
The screenshot displays a software interface with three main columns for configuring a 'Cube' object:

- Sensors:** Includes a 'Cube' header and an 'Add Sensor' dropdown. Below are four 'Keyboard' sensors, each with a name (Keyboard, Keyboard.001, Keyboard.00, Keyboard.00), a pin icon, and control buttons (up/down arrows, a blue checkmark, and an 'X').
- Controllers:** Includes a 'Cube' header and an 'Add Controller' dropdown. Below are four 'And' controllers, each with a name (And, And..., And..., And...), a pin icon, and control buttons (up/down arrows, a blue checkmark, and an 'X').
- Actuators:** Includes a 'Cube' header and an 'Add Actuator' dropdown. Below are three 'Motion' actuators with names (Motion, Motion.001, Motion.002) and one expanded 'Motion.003' actuator. The expanded actuator shows:
 - Motion Type: Simple Motion
 - Loc: X 0.00, Y -0.20, Z 0.00, L
 - Rot: X 0°, Y 0°, Z 0°, L

A large red arrow points from the Controller column towards the Actuator column, indicating a transition or relationship between the two.

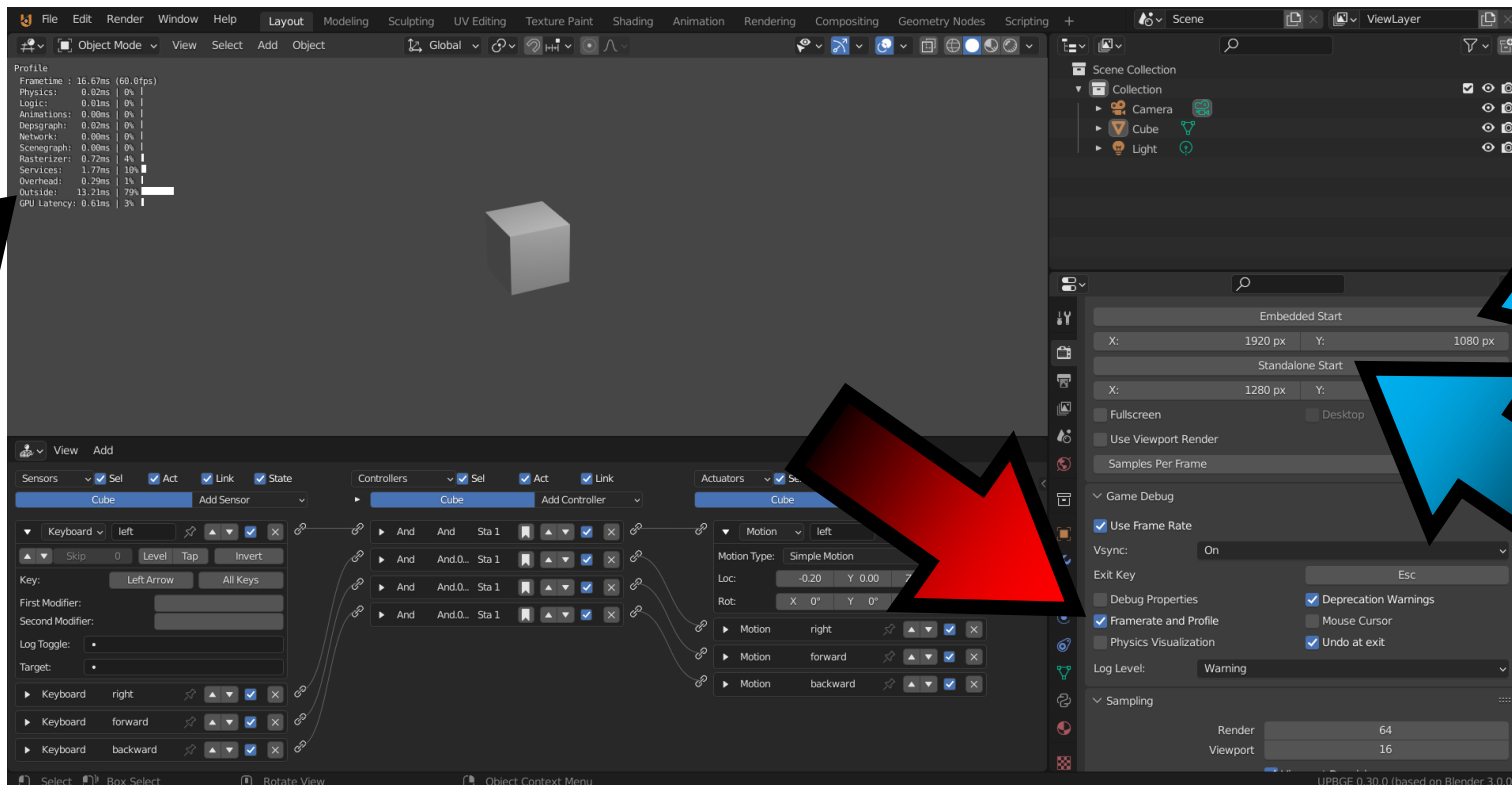
UPBGE

FOR CLARITY, WE ARE CHANGING THE NAMES



UPBGE

WE CAN TURN ON THE OPTION THAT WILL DISPLAY THE OPERATION OF THE SYSTEM



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THANK YOU FOR YOUR ATTENTION



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