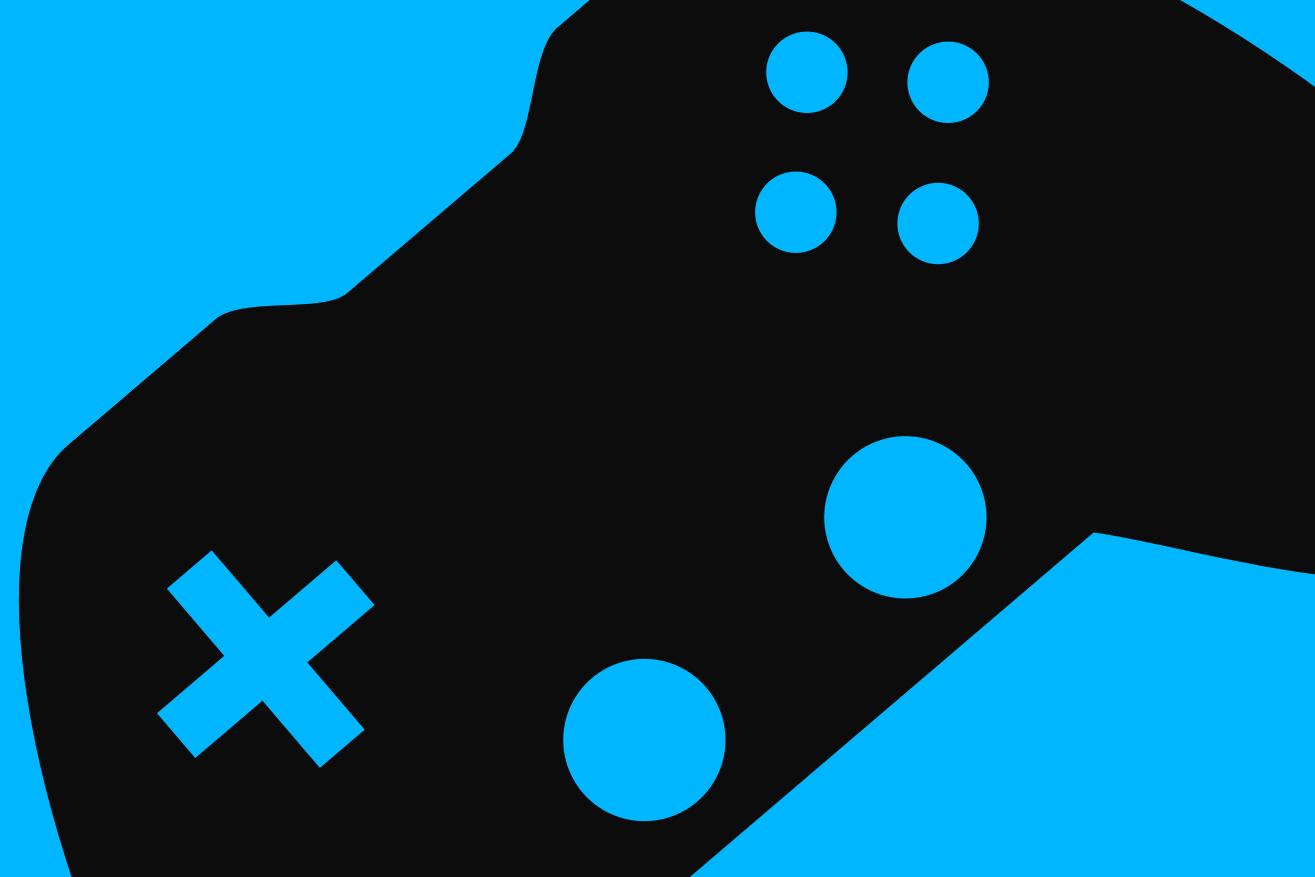




USER MANUAL
BETA VERSION

0

CONTROLS - EDITOR #1



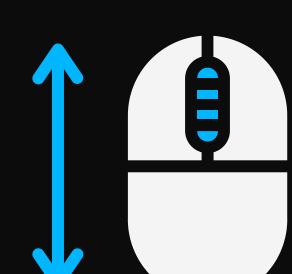
MOVEMENT



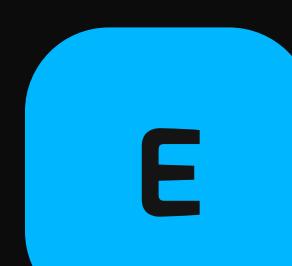
MOVE



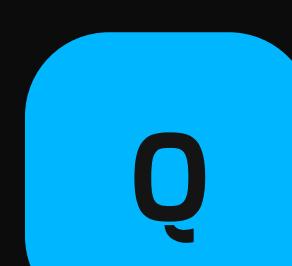
LOOK



ZOOM



ASCEND



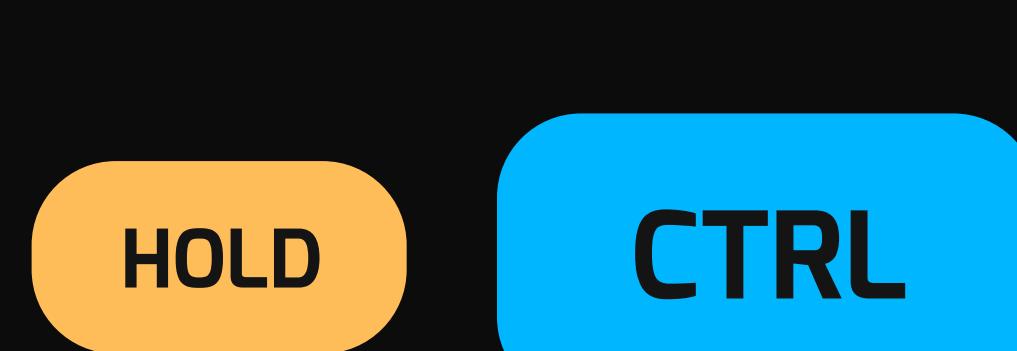
DESCEND



DRAG
VIEW

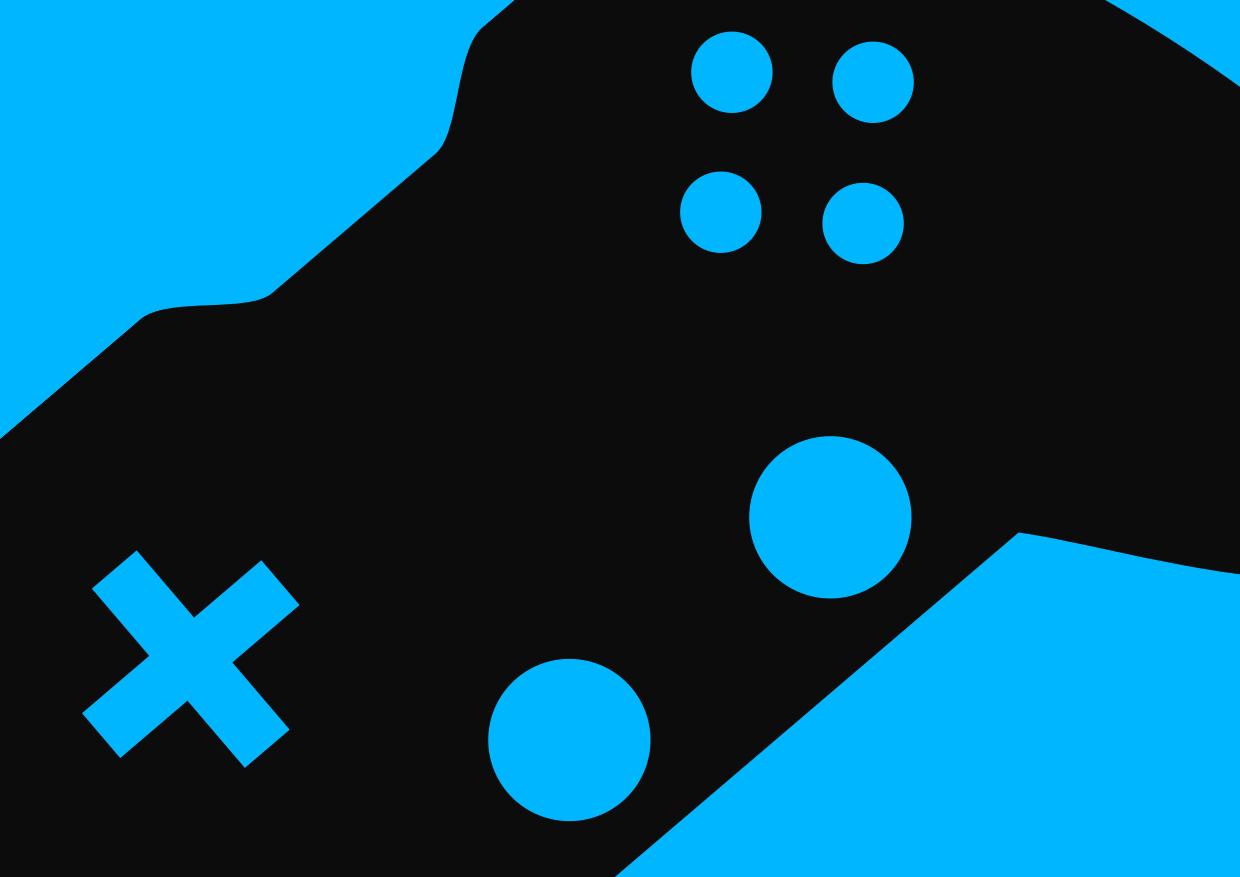


INCREASED
MOVEMENT
SPEED



DECREASED
MOVEMENT
SPEED

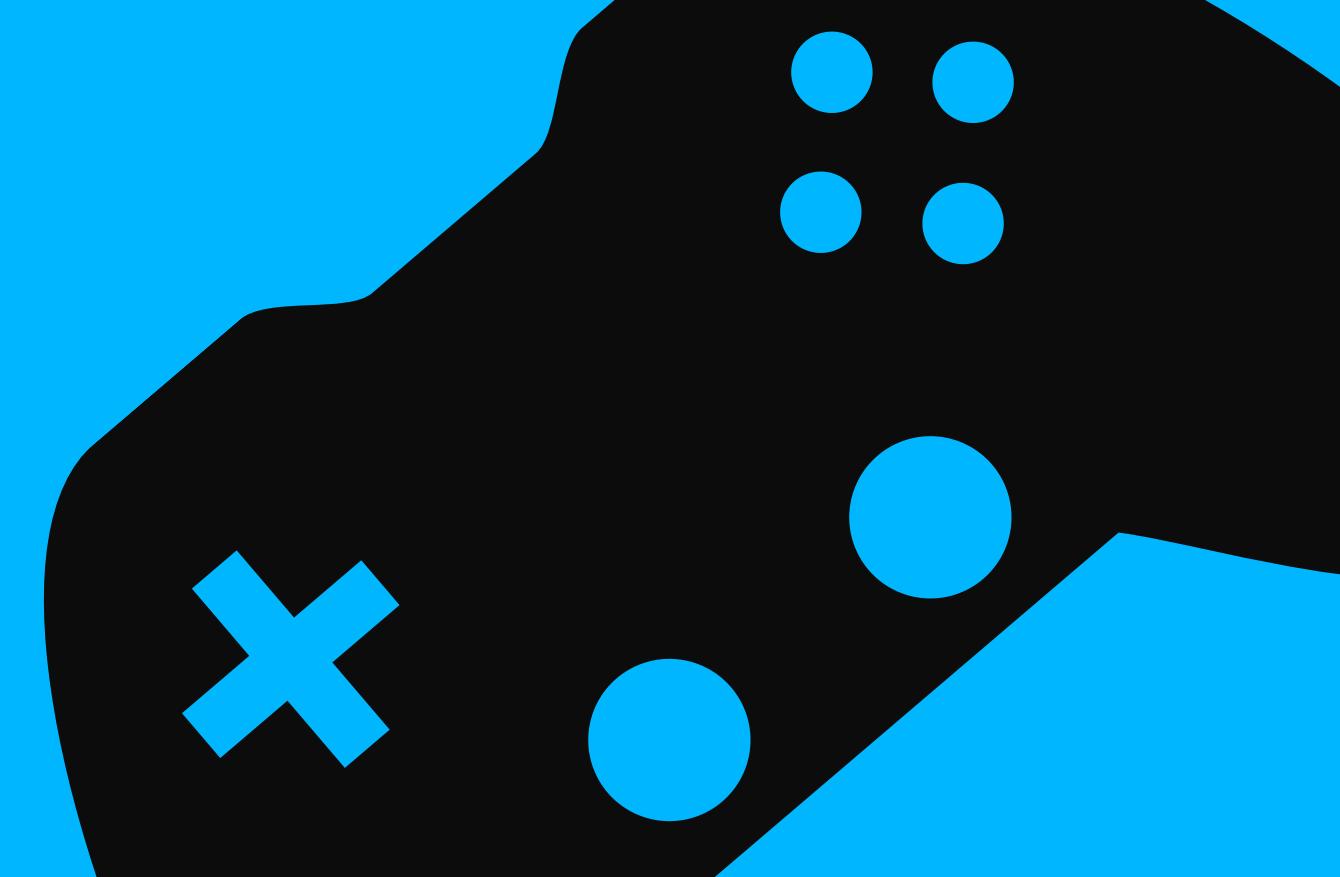
CONTROLS - EDITOR #2



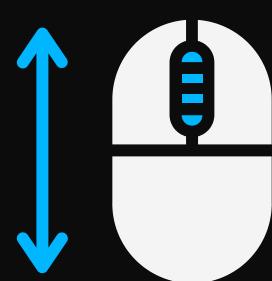
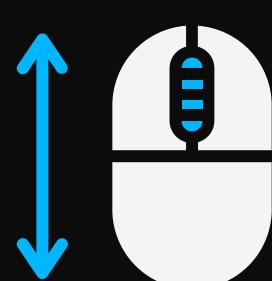
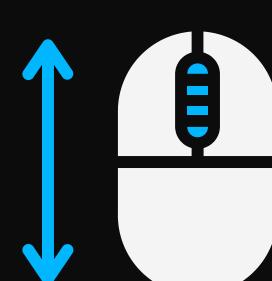
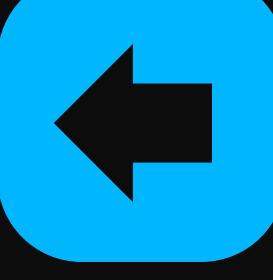
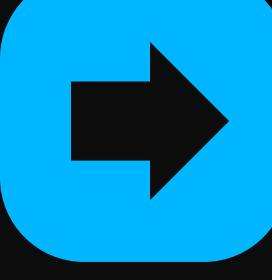
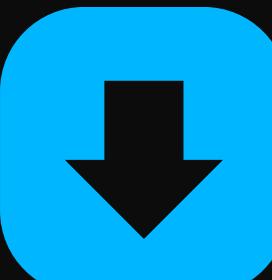
OBJECTS SPECIFIC

	ABOVE NON SELECTED OBJECT		SELECT OBJECT
	ABOVE NON SELECTED OBJECT	SHIFT	ADD OBJECT TO SELECTION
	ABOVE SELECTED OBJECT	SHIFT	REMOVE OBJECT FROM SELECTION
DEL			DELETE SELECTED OBJECT(S)
CTRL	C		COPY SELECTED OBJECT(S)
CTRL	V		PASTE COPIED OBJECT(S)
CTRL	X		CUT SELECTED OBJECT(S)
CTRL	D		DUPLICATE SELECTED OBJECT(S)
CTRL	Z		UNDO LAST TRANSFORM
HOLD			DRAW SELECTION BOX

CONTROLS - EDITOR #3



GENERAL SHORTCUTS

ESC	OPEN MENU
HOLD	TAB USE SNAPPING TRANSFORM
CTRL	1 SNAP TO CAMERA VIEW
 ABOVE ANY NUMERICAL VALUE	INCREASE/DECREASE VALUE BY 1.0
 ABOVE ANY NUMERICAL VALUE	INCREASE/DECREASE VALUE BY 10
 ABOVE ANY NUMERICAL VALUE	INCREASE/DECREASE VALUE BY 0.1
 	NEXT/PREVIOUS HIERARCHY PAGE
 	FIRST/LAST HIERARCHY PAGE
F	FOCUS ON SELECTED OBJECT

CONTROLS - PLAYMODE

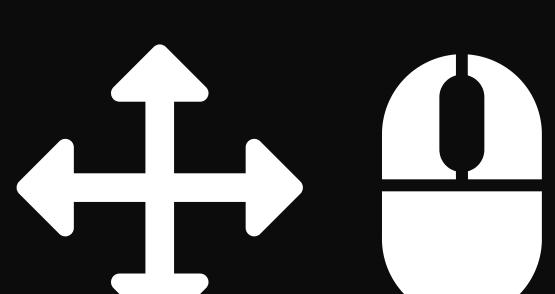
MOVEMENT



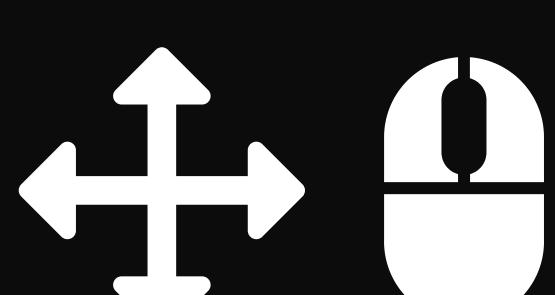
MOVE



JUMP



LOOK
(FIRST PERSON)



TURN
(THIRD PERSON)



SPRINT



CROUCH



EDIT
MODE

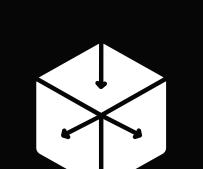
HOTBAR



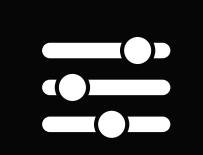
← MENU



← OBJECTS BROWSER



← SPECIAL OBJECTS
BROWSER



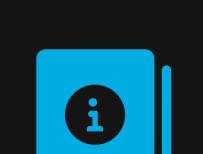
← EDITOR SETTINGS



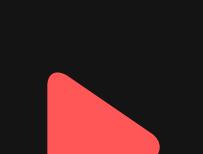
← LEVEL SETTINGS



← ANIMATION LAB



← OPEN MANUAL



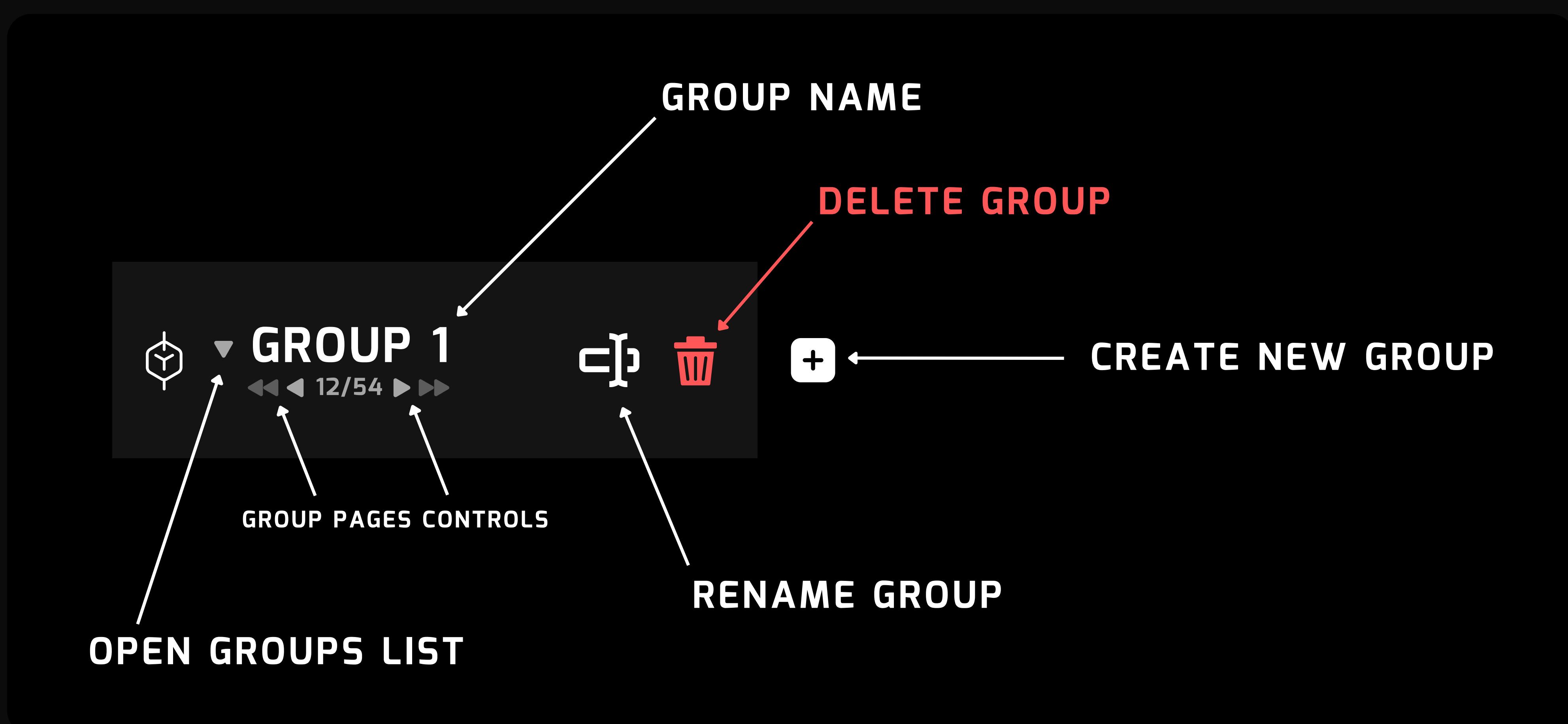
← SAVE & START LEVEL

HIERARCHY #1 - GROUPS



GROUPS HEADER

- GROUPS ALLOW CREATORS TO KEEP THEIR PROJECTS CLEAN AND ORGANIZED.
- WHEN A CERTAIN GROUP IS SELECTED FROM THE **GROUPS LIST**, THE HIERARCHY WILL ONLY DISPLAY THE OBJECTS ASSIGNED TO THAT GROUP.
- EVERY PROJECT CAN HAVE UP TO 99 DIFFERENT GROUPS AND EVERY GROUP CAN CONTAIN UNLIMITED OBJECTS.
- EVERY PROJECT COMES WITH A DEFAULT GROUP CALLED “**HIERARCHY**”, THIS GROUP CAN’T BE DELETED OR RENAMED AND IT’S WHERE ALL OBJECTS ARE ASSIGNED BY DEFAULT.
- WHEN A GROUP IS **DELETED**, ALL OF ITS OBJECTS ARE AUTOMATICALLY REASSIGNED TO THE DEFAULT HIERARCHY GROUP.
- ASSIGNING OBJECTS TO GROUPS IS EXPLAINED IN THE **ELEMENT TAB** SECTION IN **PAGE 8**.

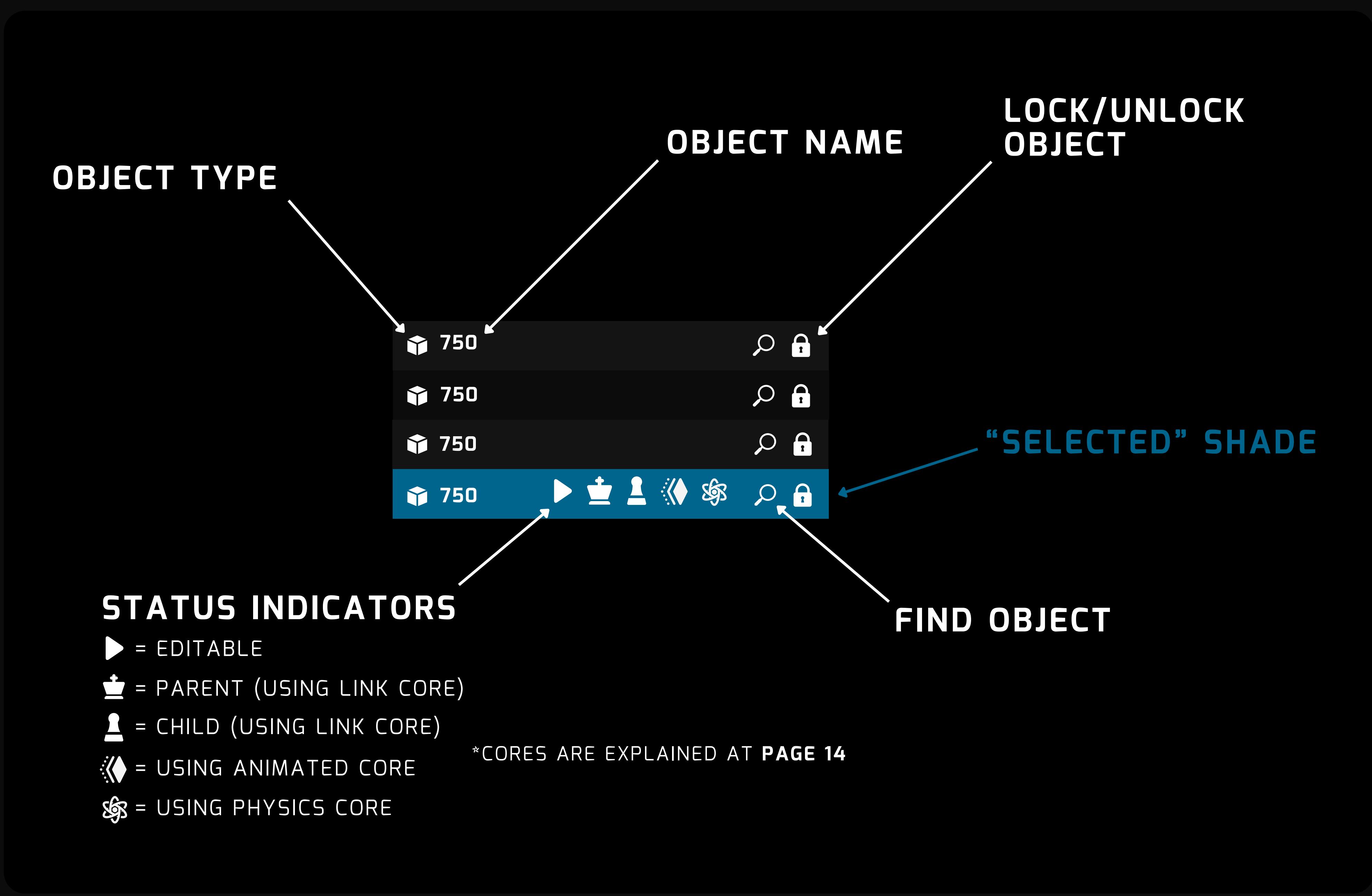


HIERARCHY #2 - LIST



HIERARCHY LIST

- UNDER EACH GROUP YOU CAN FIND A LIST OF ALL THE OBJECTS THAT BELONG TO IT, SPLIT INTO PAGES OF 35 ELEMENTS EACH WHICH CAN BE NAVIGATED WITH THE UI CONTROLS IN THE **GROUPS HEADER** OR THROUGH THE ARROW KEYS.
- WHEN SELECTING AN OBJECT, IF THE BELONGING GROUP HAS MORE THAN ONE PAGE, THE LIST WILL AUTOMATICALLY BRING YOU TO THE PAGE WHERE THE SELECTED OBJECT IS FOUND AND HIGHLIGHT ITS TAB WITH A **DARK BLUE SHADE**, THIS WORKS BOTH FOR SINGLE AND MULTIPLE OBJECTS.
- YOU CAN ALSO SELECT OBJECTS BY CLICKING ON THEIR TABS FROM THE LIST AND DESELECT THEM BY HOLDING SHIFT AND CLICKING ON AN ALREADY SELECTED TAB.
- HOLDING SHIFT ALSO ALLOWS YOU TO SELECT MULTIPLE TABS BY CLICKING ON THEM INDIVIDUALLY.
- CLICKING ON AN ALREADY SELECTED TAB WILL HIDE THE **TRANSFORM GIZMO** ON THE CORRESPONDING OBJECT.
- YOU CAN RENAME AN OBJECT FROM THE LIST BY CLICKING ON IT'S **OBJECT NAME**.

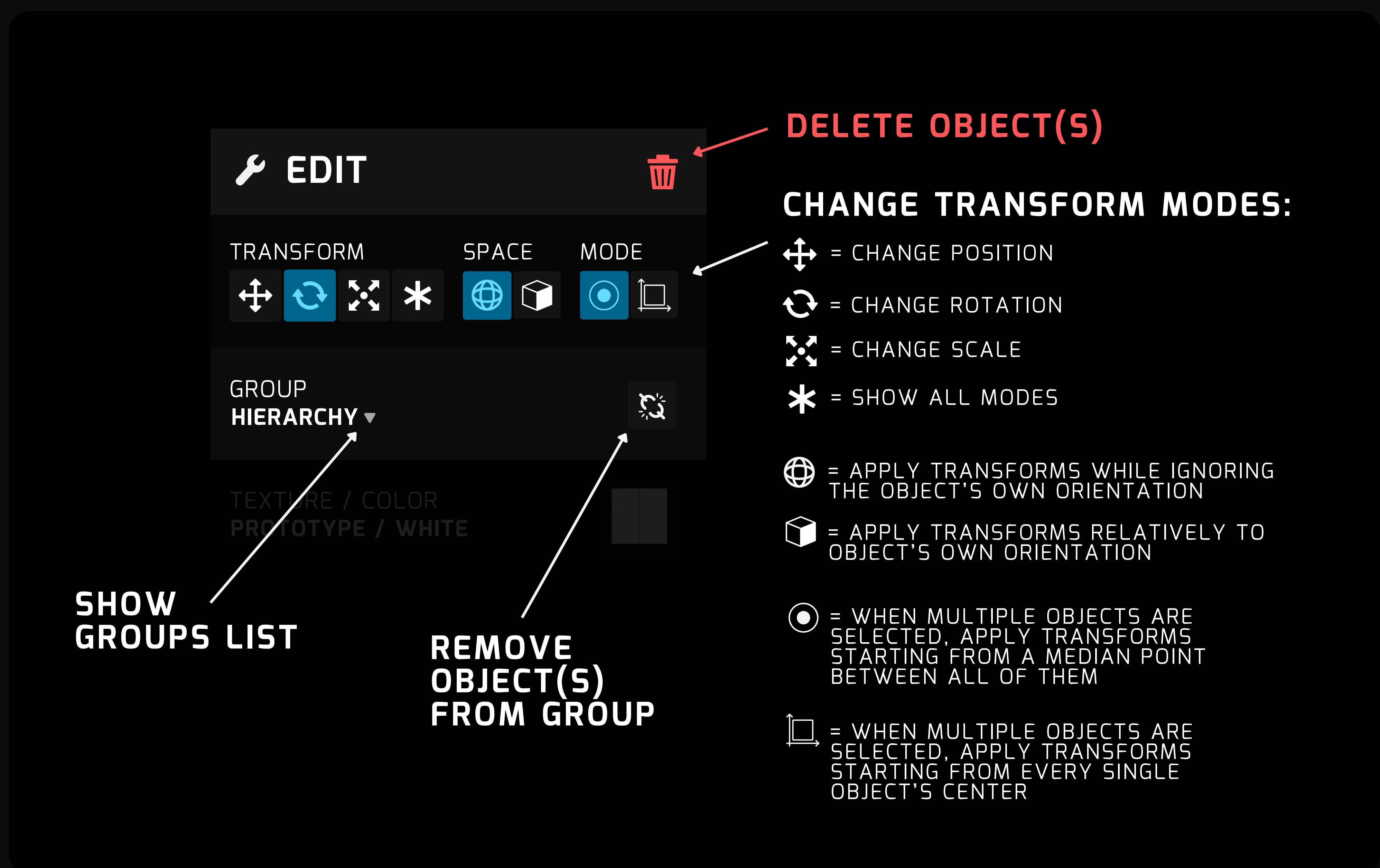


ELEMENT TAB #1

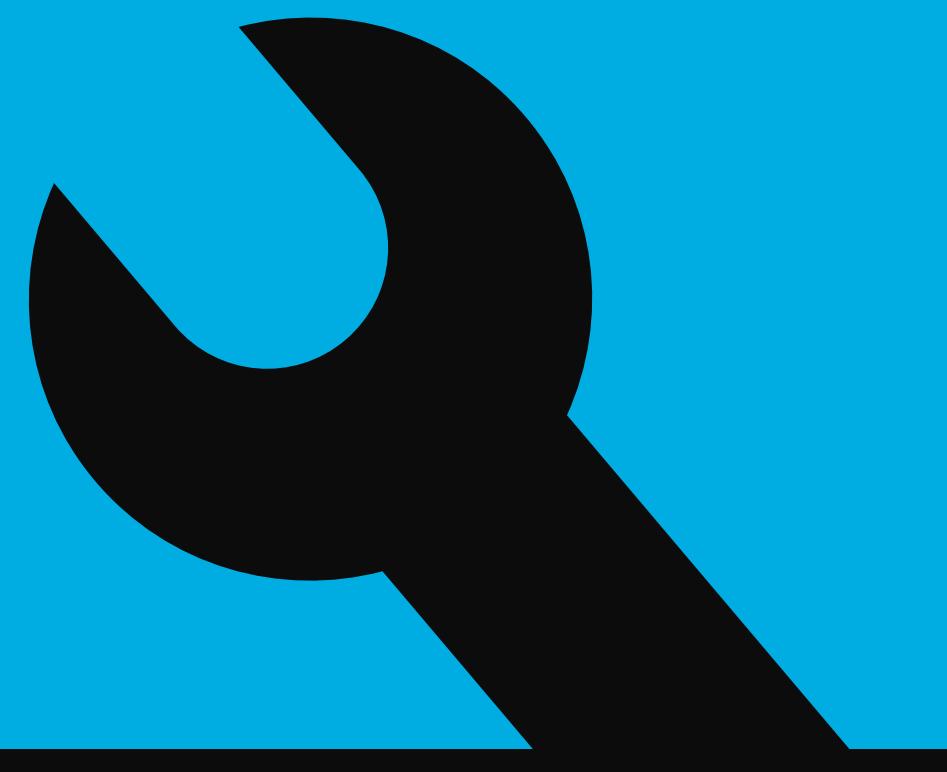


ELEMENT TAB

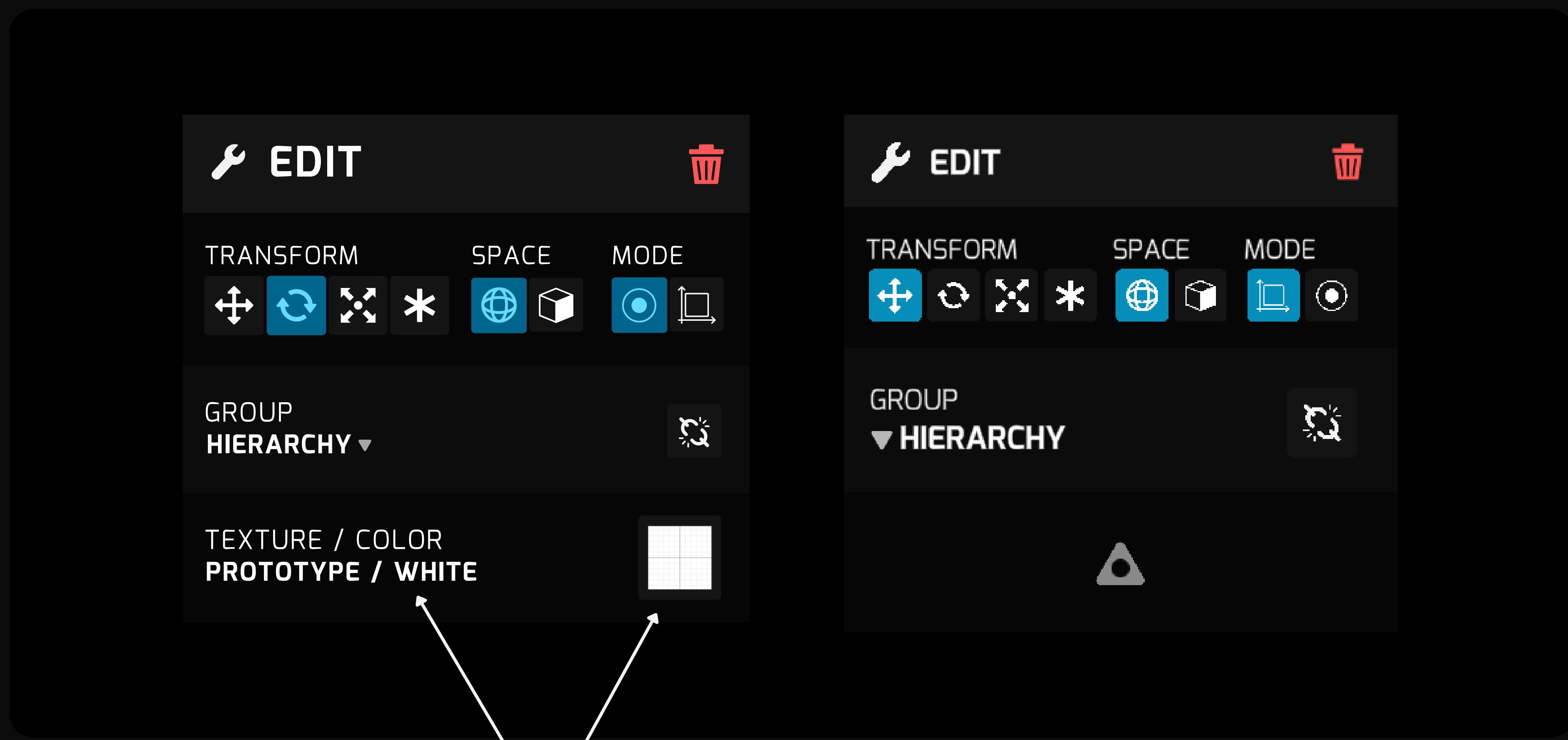
- AFTER AT LEAST ONE OBJECT HAS BEEN SELECTED, THREE TABS WILL APPEAR ON THE RIGHT SIDE OF YOUR SCREEN. THE FIRST ONE FROM THE TOP IS THE **ELEMENT TAB**.
- THE ELEMENT TAB IS DIVIDED INTO THREE SECTIONS, AND EACH ONE ALLOWS YOU TO CONTROL A DIFFERENT ASPECT OF ALL THE SELECTED OBJECTS.
- THE FIRST SECTION ALLOWS YOU TO CONTROL THE “**TRANSFORM MODES**” YOU’RE APPLYING TO THE OBJECT. **WITH “TRANSFORM MODES” WE REFER TO ANYTHING THAT IN SOME WAY CHANGES THE VISIBLE CHARACTERISTICS OF AN OBJECT, LIKE IT’S SIZE, ROTATION AND POSITION IN THE WORLD.**
- THE SECOND SECTION ALLOWS YOU TO ASSIGN THE SELECTED OBJECT(S) TO A GROUP OR TO REMOVE IT(THEM) FROM A GROUP THEY’RE ALREADY PART OF. AS EXPLAINED IN **PAGE 6**, ALL OBJECTS ARE BY DEFAULT PART OF THE “**HIERARCHY**” GROUP.
- TO ASSIGN AN OBJECT(S) TO A GROUP, CREATE ONE FROM THE GROUP HEADER (ALSO EXPLAINED IN **PAGE 6**) AND THEN SIMPLY CLICK THE LITTLE ARROW (▼) IN THE ELEMENT TAB AND SELECT FROM THE LIST THAT WILL APPEAR THE GROUP IN WHICH YOU WANT TO MOVE THE OBJECT(S).
- TO REMOVE OBJECT(S) FROM A GROUP, SIMPLY CLICK THE BUTTON WITH A BROKEN CHAIN IN THIS SECTION AND ALL THE TARGETS WILL BE MOVED BACK TO THE DEFAULT “**HIERARCHY**” GROUP.



ELEMENT TAB #2



- THE LAST SECTION OF THE **ELEMENT TAB** ALLOWS YOU TO CONTROL THE TEXTURE AND COLOR OF AN OBJECT, TO SUM IT UP, ITS VISUAL APPEARANCE.
- WITHIN PROJECT LEVELS, OBJECTS WHICH SUPPORT VISUAL MODIFICATIONS ALLOW A **COMBINATION OF A SOLID COLOR WITH A TEXTURE APPLIED ON TOP**. IF AN OBJECT DOES NOT ALLOW VISUAL MODIFICATIONS AN “ERROR” ICON WILL BLOCK THIS WHOLE SECTION.
- KEEP IN MIND THAT THE ELEMENT TAB WORKS ON **ALL** THE OBJECTS YOU HAVE SELECTED, THEREFORE, IF EVEN A SINGLE OBJECT AMONG ALL THE SELECTED ONES DOES NOT SUPPORT VISUAL MODIFICATIONS, THIS SECTION WILL BE BLOCKED AS PER BASIC MULTI-EDITING PRINCIPLES.



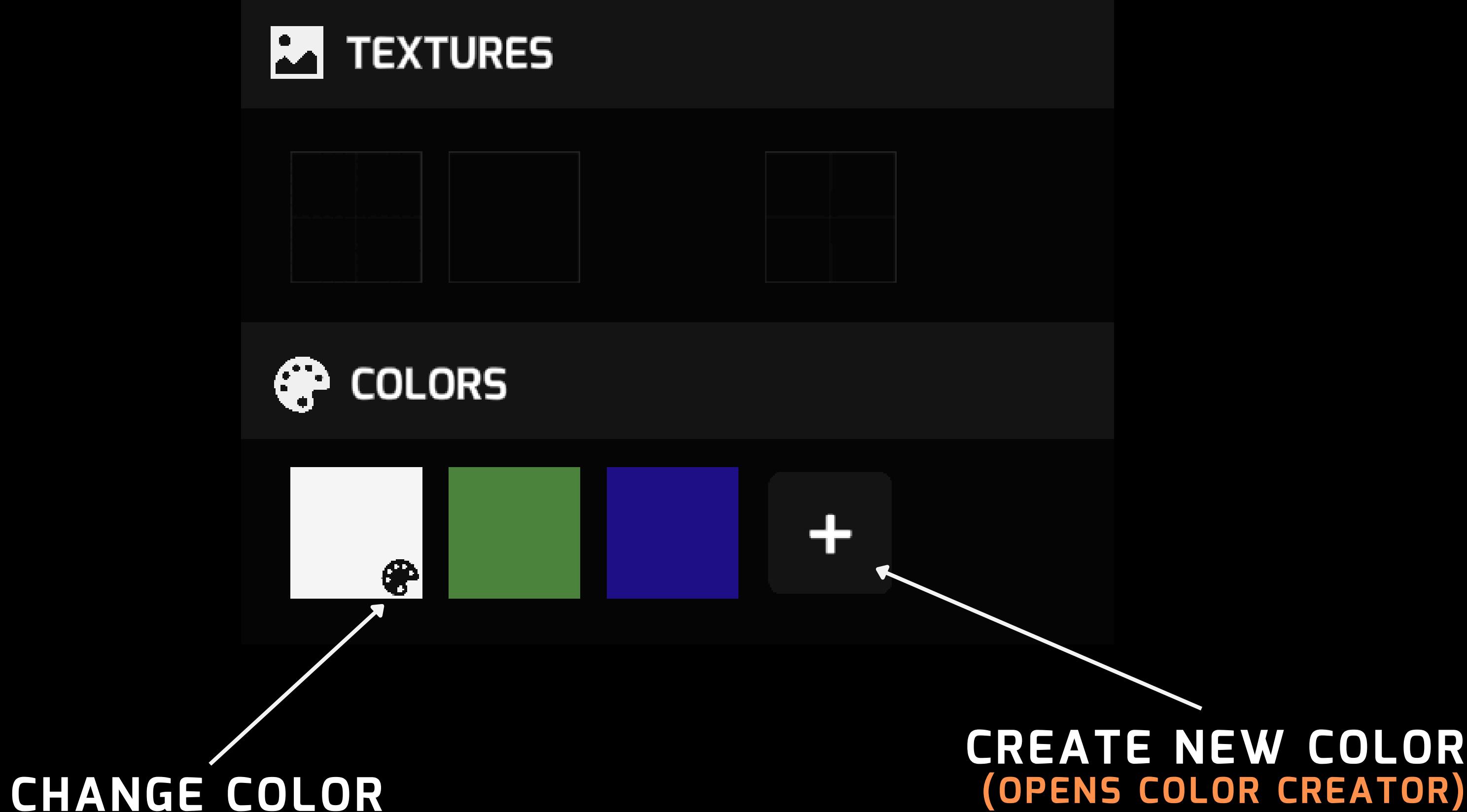
- THE LITTLE ICON ALL TO THE RIGHT IN THIS SECTION WILL DISPLAY THE COLOR AND TEXTURE OF THE OBJECT(S) THAT YOU HAVE CURRENTLY SELECTED, ALONG WITH THEIR NAMES.
- IF MULTIPLE OBJECTS ARE SELECTED AND THEY DO NOT ALL SHARE THE SAME TEXTURE AND COLOR, AN “UNDEFINED TEXTURE” PLACEHOLDER WILL BE DISPLAYED INSTEAD. THIS DOES NOT PREVENT YOU FROM CLICKING ON IT AND APPLYING A NEW COLOR AND OR TEXTURE TO ALL THE SELECTED OBJECTS AS EXPLAINED IN **PAGE 10**.

TEXTURES LIBRARY

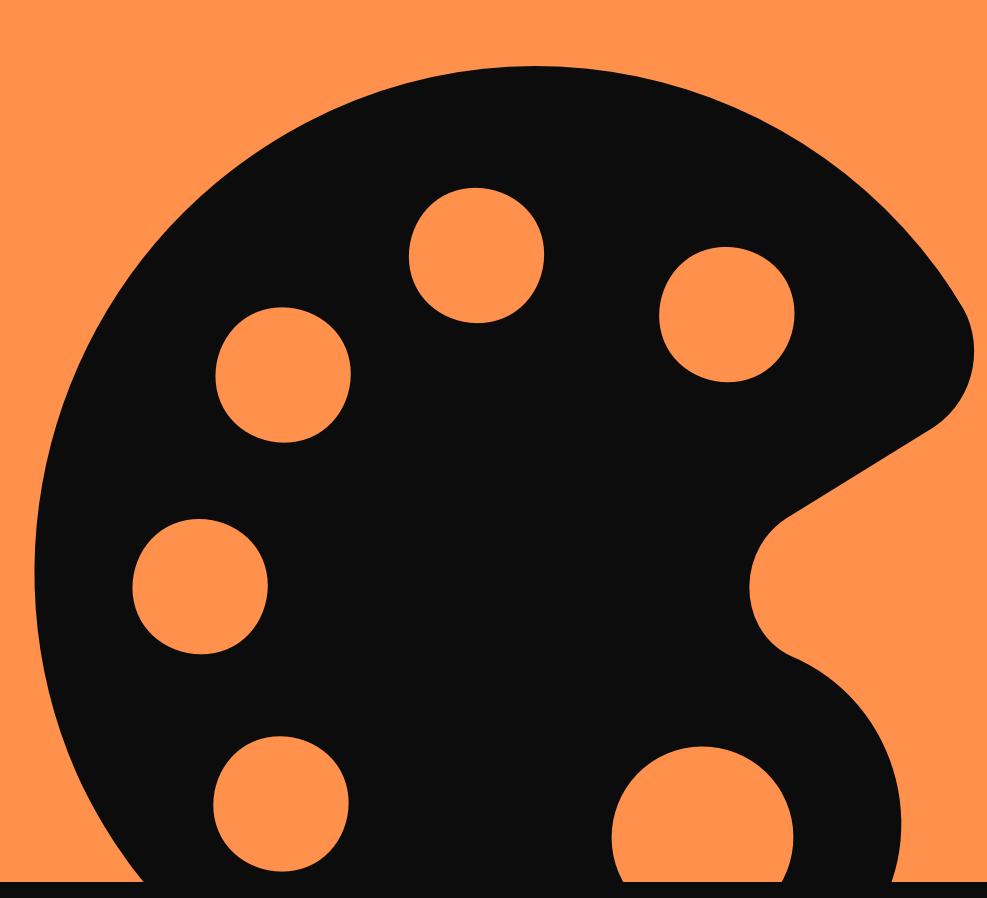


TEXTURES LIBRARY

- IF THE LAST SECTION OF THE ELEMENT TAB IS NOT BLOCKED, YOU CAN CLICK ON IT AND OPEN THE **TEXTURES LIBRARY**.
- HERE YOU CAN SEE A COLLECTION OF ALL THE AVAILABLE VISUAL MODIFIES THAT YOU CAN APPLY TO YOUR OBJECTS SPLIT INTO TWO SECTIONS; **TEXTURES AND COLORS**.
- BY SIMPLY **CLICKING ON A TEXTURE OR A COLOR** WITHIN THE LIBRARY PANEL YOU WILL APPLY SAID TEXTURE/COLOR TO ALL THE CURRENTLY SELECTED OBJECTS
- WHILE UPLOADING CUSTOM TEXTURES IS LIMITED TO DEVELOPER BUILDS OF PROJECT LEVELS DUE TO SECURITY REASONS, EVERYONE IS ALLOWED TO CREATE CUSTOM COLORS BY CLICKING ON THE (+) BUTTON AT THE END OF THE COLORS LIBRARY BY USING THE **COLOR CREATOR** WHICH WILL POP UP ON THE LEFT. ALL COLOR CREATORS WITHIN THE EDITOR ARE THE SAME AND THEY ARE FULLY EXPLAINED IN **PAGE 11**. YOU CAN HAVE UP TO 99 DIFFERENT COLORS IN A PROJECT.
- WHILE ABOVE A COLOR'S ICON, A LITTLE BUTTON WITH A COLOR PALETTE WILL APPEAR IN ITS BOTTOM RIGHT CORNER. BY CLICKING ON IT, THE COLOR CREATOR WILL OPEN UP AGAIN AND ALLOW YOU TO CHANGE THAT COLOR. ALL THE OBJECTS IN THE WORLD WHICH ARE USING THAT COLOR WILL BE CHANGED AUTOMATICALLY.

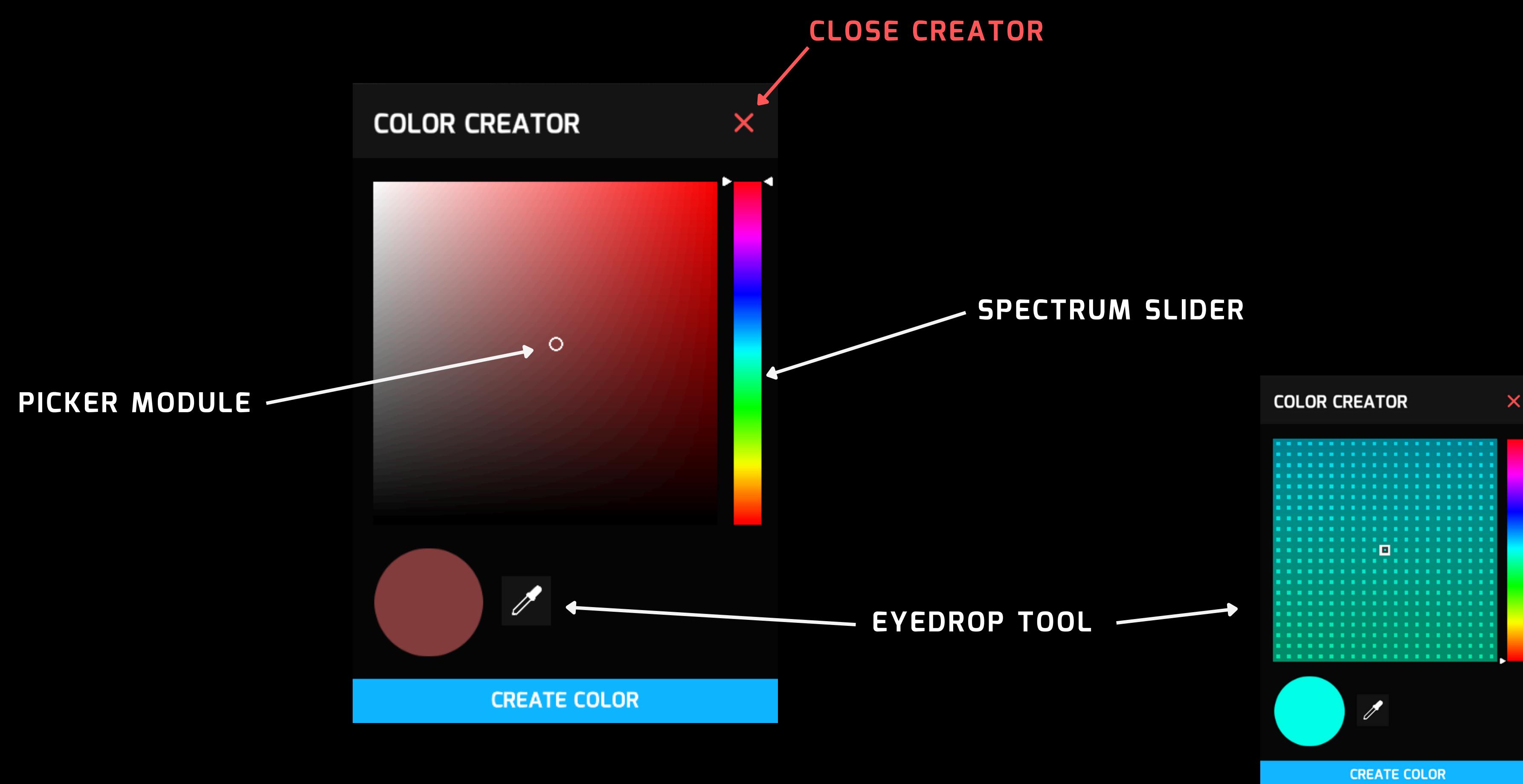


COLOR CREATOR



COLOR CREATOR

- THE **COLOR CREATOR IS** A TOOL THAT ALLOWS YOU TO PICK THE RIGHT COLORS FOR YOUR PROJECTS PRECISELY. IT WILL AUTOMATICALLY OPEN EVERY TIME YOU CLICK ABOVE A VALUE DESCRIBED BY A COLOR.
- CREATORS CAN NAVIGATE BOTH THE MAIN PANEL IN THE CENTER AND THE VERTICAL SLIDE ON THE RIGHT WITH THE MOUSE CURSOR TO IDENTIFY A SPECIFIC COLOR.
- THE COLOR YOU'RE CURRENTLY SELECTING IS HIGHLIGHTED IN THE BIG CIRCLE IN THE BOTTOM LEFT SIDE OF THE PANEL.
- THE **EYEDROP TOOL ICON** ALLOWS YOU TO PICK AN ALREADY EXISTING COLOR ON YOUR SCREEN WITH ABSOLUTE PRECISION, JUST CLICK ON THE SMALL ICON AND THEN ABOVE THE COLOR YOU WANT TO SELECT.
- ONCE YOU'RE SATISFIED WITH THE COLOR YOU'VE CHOSEN, HITTING "**CREATE**" OR "**UPDATE**" **COLOR** ON THE BOTTOM OF THE CREATOR WILL AUTOMATICALLY ASSIGN THE CHOSEN COLOR TO THE FIELD YOU WERE WORKING ON.



TRANSFORM TAB



TRANSFORM TAB

- AFTER AT LEAST ONE OBJECT HAS BEEN SELECTED, THREE TABS WILL APPEAR ON THE RIGHT SIDE OF YOUR SCREEN. THE ONE IN THE MIDDLE IS THE **TRANSFORM TAB**.
- THE TRANSFORM TAB IS ALSO DIVIDED INTO THREE SECTIONS, ONE FOR EACH **TRANSFORM MODIFICATION** APPLICABLE TO THE SELECTED OBJECT: **POSITION**, **ROTATION**, AND **SCALE**.
- EVERY SECTION HAS THREE VALUES, ONE FOR EACH DIMENSION, INDICATED BY THREE LETTERS AND COLORS, **X**, **Y** AND **Z**.
- EVERY MODIFY APPLIED TO AN OBJECT THROUGH THE **TRANSFORM GIZMO** WILL BE IMMEDIATELY REFLECTED IN THE TRANSFORM TAB.
- OF COURSE, THE REVERSE IS ALSO TRUE. MODIFYING VALUES BY CLICKING ON THEM OR USING THE MOUSE WHEEL SHORTCUTS (**PAGE 3**) IN THE TRANSFORM TAB WILL CAUSE THE OBJECT TO CHANGE IN THE LEVEL.
- IF MORE THAN ONE OBJECT IS SELECTED, THE TRANSFORM TAB, AS PER MULTI-EDITING BASIC PRINCIPLES, WILL ONLY SHOW MATCHING VALUES ACROSS ALL OBJECTS. IF EVEN A SINGLE OBJECT CAUSES A MISMATCH, THE TRANSFORM TAB WILL SHOW AN **INDEFINITE VALUE INDICATOR** (...) WHICH CAN HOWEVER STILL BE EDITED TO GIVE ALL THE OBJECTS A COMMON VALUE.
- WHILE ABOVE A VALUE IN THE TRANSFORM TAB, **CLICKING THE MIDDLE MOUSE BUTTON (OR MOUSE WHEEL)** WILL CAUSE THAT VALUE TO BECOME **EDITABLE** AND TURN PURPLE.

OBJECT#NAME
POSITION X 1500 Y 750 Z 200
ROTATION X 1500 Y 750 Z 200
SCALE X 1500 Y 750 Z 200

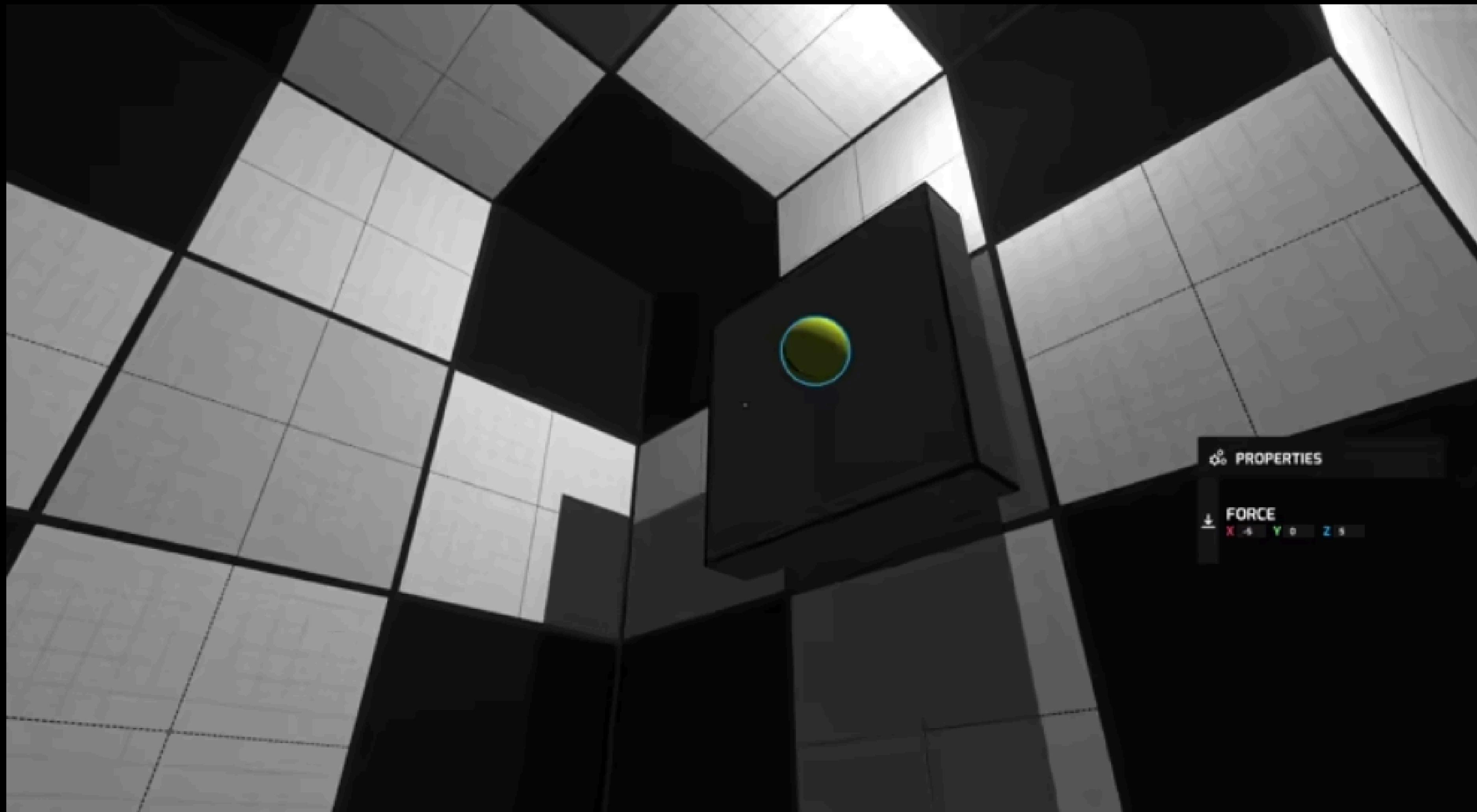
OBJECT#NAME
POSITION X [...] Y [...] Z [...]
ROTATION X [...] Y [...] Z [...]
SCALE X [...] Y [...] Z [...]

EDITABLE VALUES (MIDDLE MOUSE CLICK)

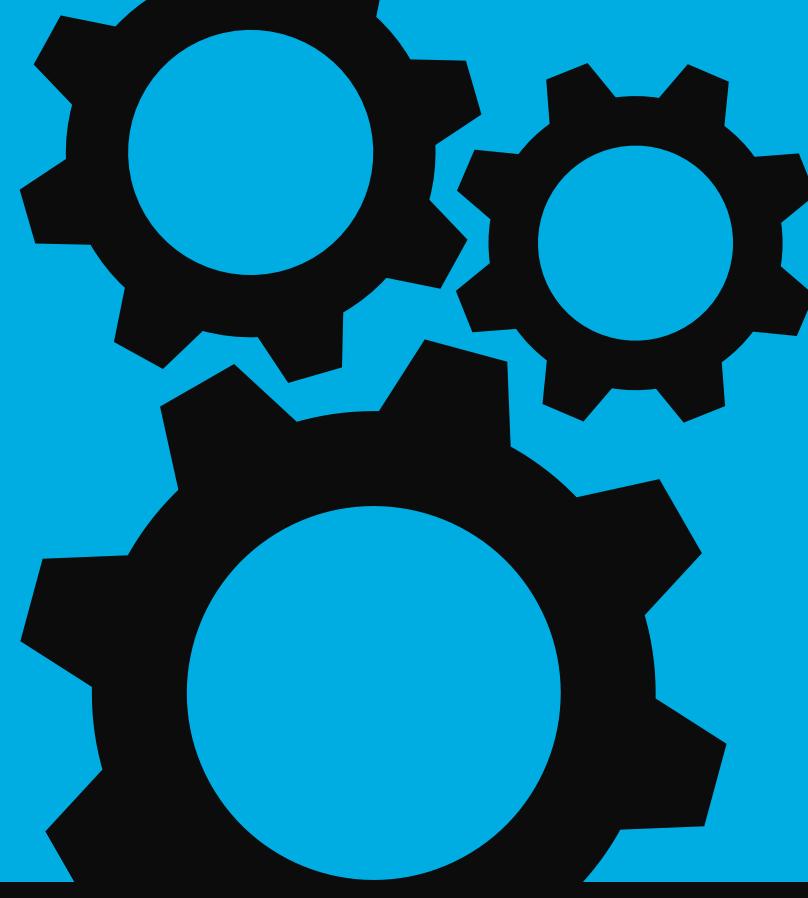
EDITABLE VALUES

EDITABLE VALUES

- AS YOU CAN SEE IN THE PREVIOUS PAGE'S PICTURE, THE TWO MIDDLE VALUES HAVE BEEN MADE **EDITABLE**, BUT WHAT DOES THAT MEAN?
- PROJECT LEVELS HAS A UNIQUE GAMEPLAY MECHANIC CALLED "**REALTIME EDITABLE VALUES**"
- WHEN A VALUE IS MARKED AS **EDITABLE**, PEOPLE PLAYING YOUR LEVEL **CAN MODIFY IT IN ANY WAY THEY WANT AND SEE THE RESULTS IN REALTIME** BY USING **EDIT MODE**, WHICH IS ACTIVATED BY HOLDING DOWN THE **(TAB)** KEY WHILE PLAYING ANY LEVEL.
- WHILE IN EDIT MODE, **THE WHOLE WORLD WILL FADE TO BLACK AND WHITE EXCEPT FOR THE OBJECTS THAT HAVE AT LEAST SOMETHING MARKED AS EDITABLE**.
- PLAYERS CAN THEN JUST **CLICK ON THE OBJECT WITH THE MOUSE CURSOR** (WHICH WILL BECOME VISIBLE) AND **MODIFY THE AVAILABLE EDITABLE VALUES** BY USING THE UIs THAT WILL POP UP.
- EDITABLE VALUES CAN BE EITHER THE **TRANSFORM VALUES** OF AN OBJECT FROM THE TRANSFORM TAB OR **ANY OF THE VALUES OF ITS PROPERTIES**. ALL ABOUT PROPERTIES AND HOW THEY CAN BE MADE EDITABLE IS EXPLAINED IN THE NEXT PAGES.



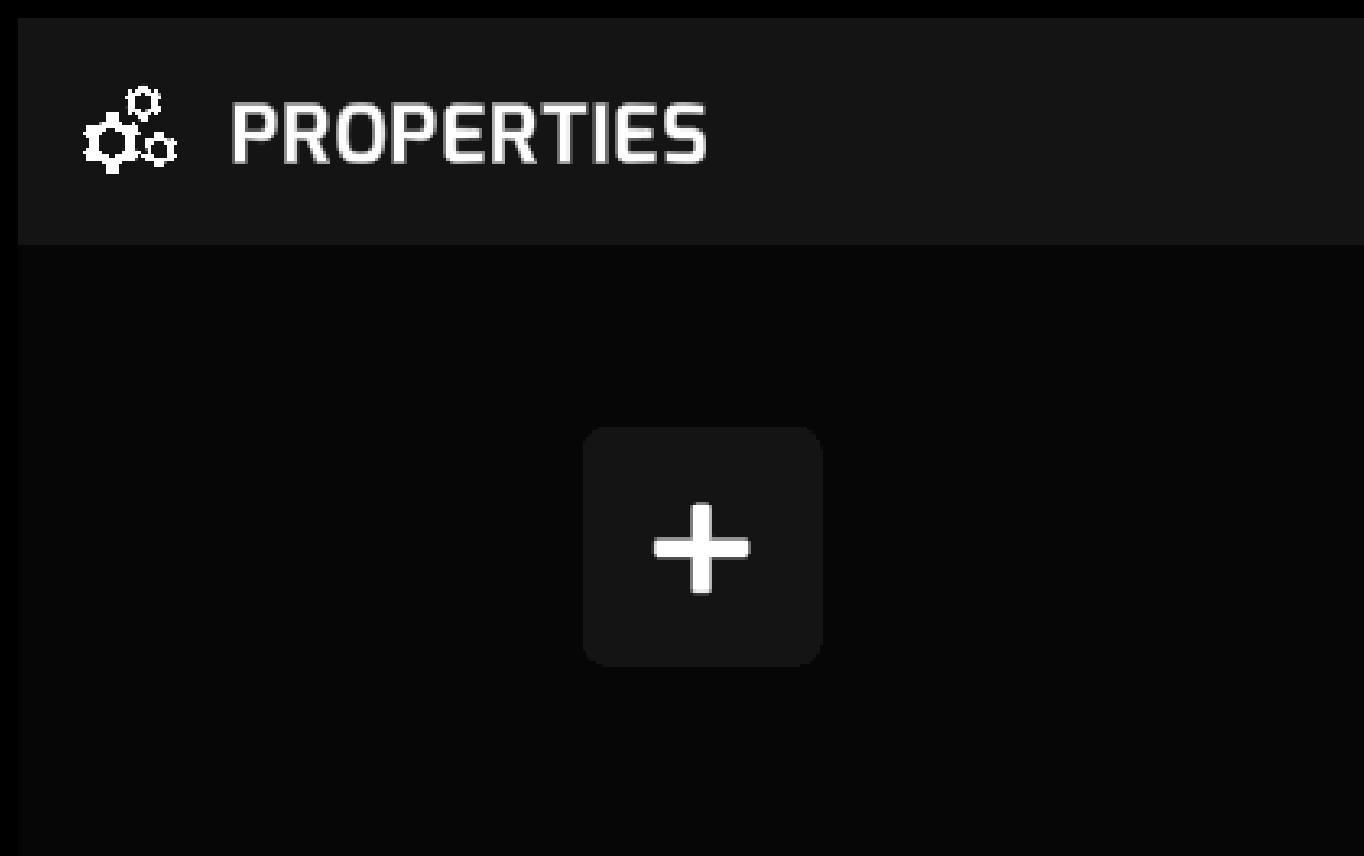
PROPERTIES TAB



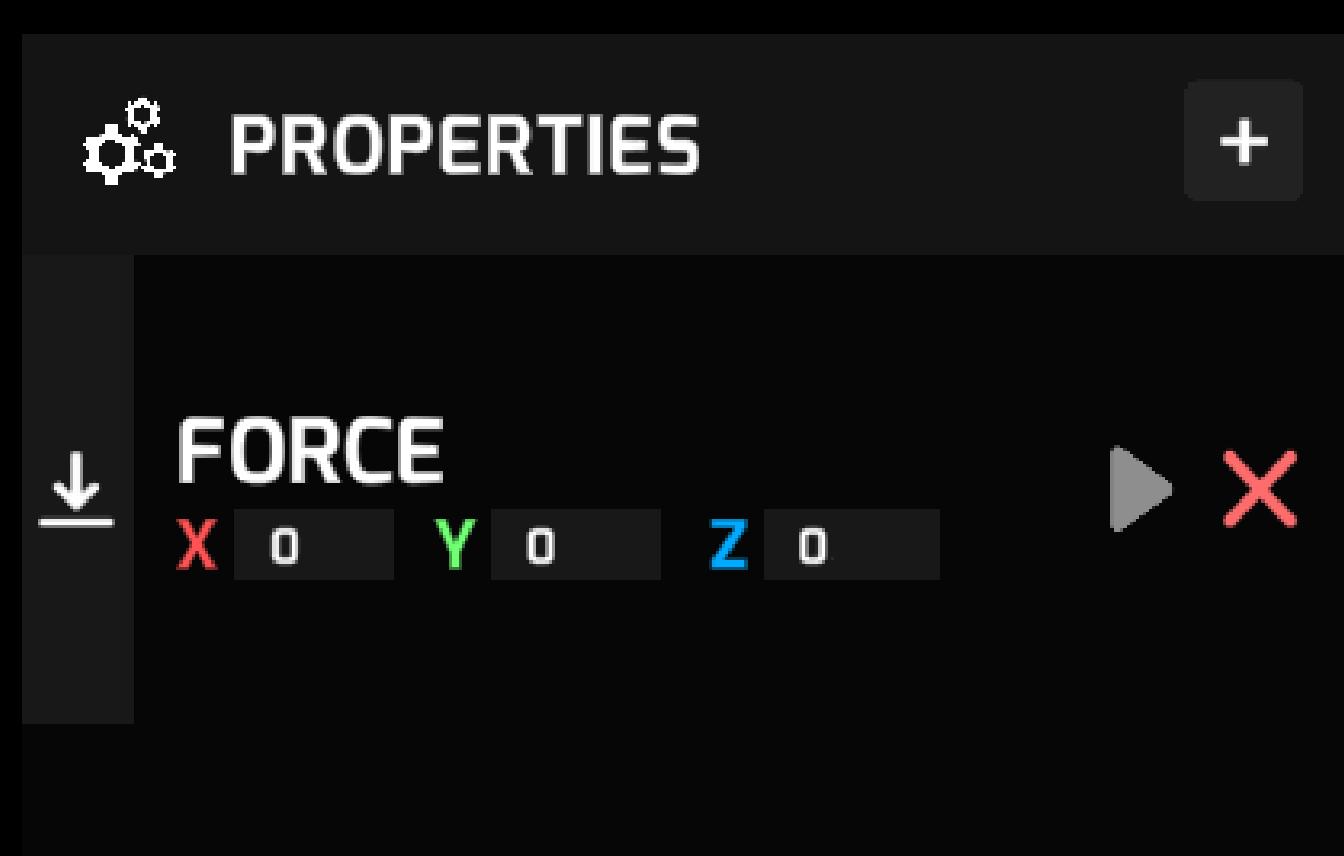
PROPERTIES TAB

- AFTER AT LEAST ONE OBJECT HAS BEEN SELECTED, THREE TABS WILL APPEAR ON THE RIGHT SIDE OF YOUR SCREEN. THE ONE IN THE BOTTOM IS THE **PROPERTIES TAB**. (**PICTURE 1**)
- THE PROPERTIES TAB WILL DISPLAY **ALL THE PROPERTIES CURRENTLY APPLIED TO ALL THE OBJECTS YOU HAVE CURRENTLY SELECTED.** (**PICTURE 2**)
- TO ADD A PROPERTY, SIMPLY CLICK ON THE (+) BUTTON AND CHOOSE THE DESIRED PROPERTY FROM THE **PROPERTIES BROWSER** THAT WILL POP UP IMMEDIATELY TO THE LEFT. ALL PROPERTIES ARE EXPLAINED ONE BY ONE IN THE NEXT PAGES.
- I SAID “PROPERTIES” A LOT OF TIMES, DIDN’T I?
- IF YOU HAVE MULTIPLE OBJECTS SELECTED WHICH DON’T SHARE THE SAME PROPERTIES, A WARNING WILL BE DISPLAYED ON THE PROPERTIES TAB. THIS DOES NOT PREVENT YOU FROM ADDING A NEW PROPERTY THAT WILL BE APPLIED TO ALL THE SELECTED OBJECTS ANYWAY. (**PICTURE 3**)
- IF, ON THE OTHER HAND, ALL OBJECTS SHARE THE SAME EXACT PROPERTY(IES), YOU CAN MULTI-EDIT THEM. AND IF THEIR VALUES DON’T MATCH EXACTLY, AN “**INDEFINITE VALUE**” INDICATOR (-) WILL BE SHOWN. (**PICTURE 4**)

PICTURE 1



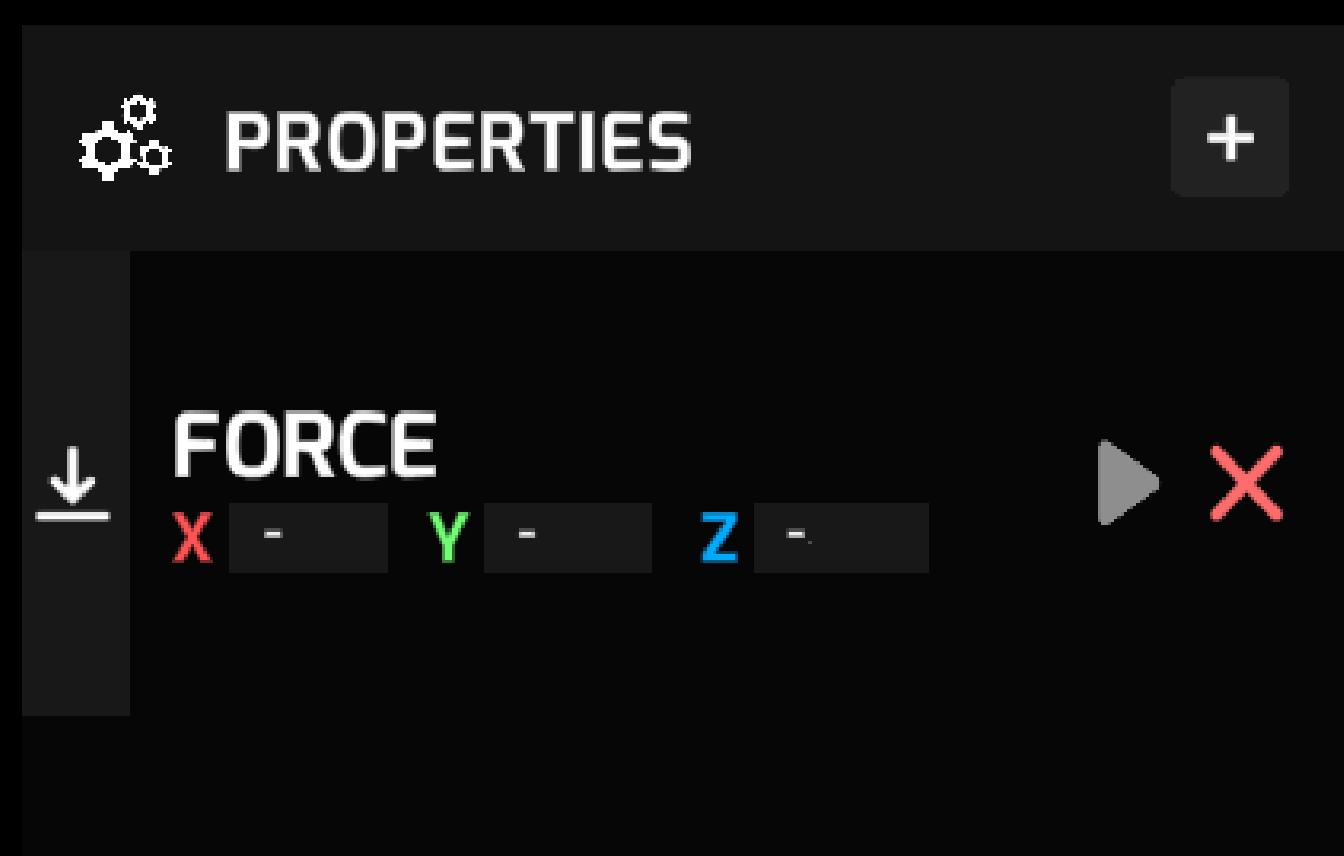
PICTURE 2



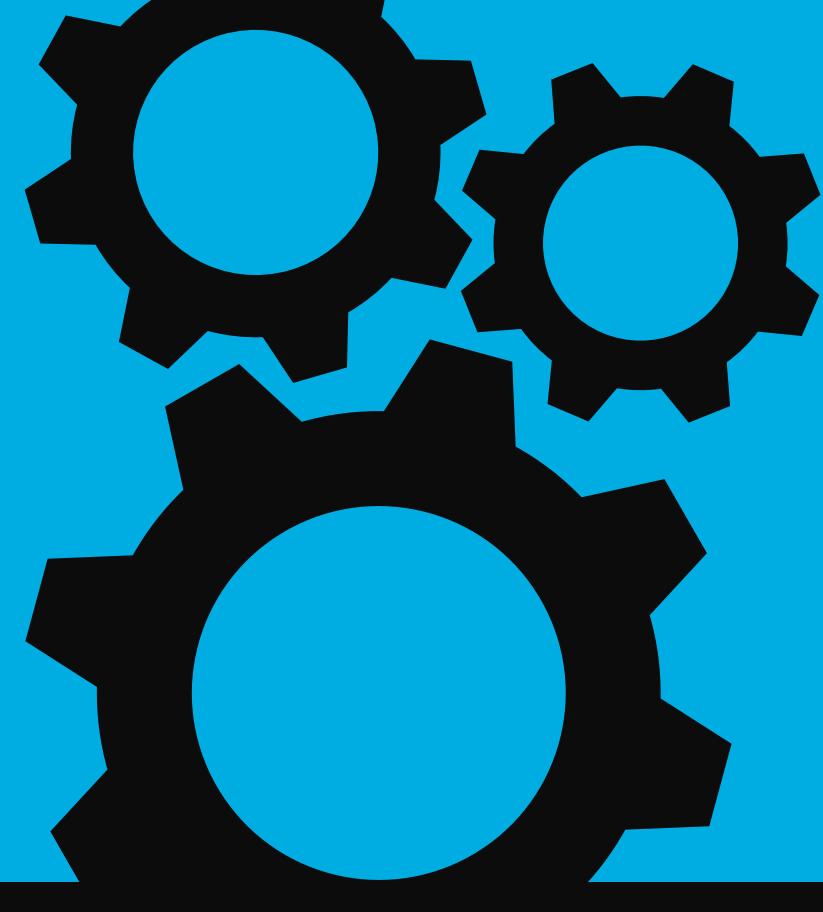
PICTURE 3



PICTURE 4



PROPERTIES BROWSER



PROPERTIES BROWSER

- AFTER CLICKING ON THE (+) BUTTON IN THE PROPERTIES TAB, THE **PROPERTIES BROWSER** WILL POP UP ON YOUR SCREEN.
- THE PROPERTIES BROWSER DISPLAYS ALL THE AVAILABLE PROPERTIES CONVENIENTLY ORGANIZED IN GROUPS.
- SIMPLY CLICKING ON A PROPERTY'S NAME, ICON OR RETICLE WILL ADD SAID PROPERTY TO ALL THE CURRENTLY SELECTED OBJECTS.
- YOU MAY HAVE NOTICED SOME PROPERTIES HAVE COLORED ICONS, THIS IS TO HIGHLIGHT THAT THEY ARE **CORE PROPERTIES**.
- **CORE PROPERTIES** DIFFER FROM REGULAR ONES BECAUSE THEY SUBSTANTIALLY CHANGE THE WAY AN OBJECT BEHAVES.
- **GREEN PROPERTIES** USE THE **PHYSICS CORE**, **CYAN PROPERTIES** USE THE **ANIMATION CORE**, **RED PROPERTIES** USE THE **LETHAL CORE** AND **YELLOW PROPERTIES** USE THE **LINK CORE**.
- YOU ARE ALLOWED TO USE MULTIPLE CORE PROPERTIES ON A SINGLE OBJECT **AS LONG AS YOU DON'T MIX PHYSICS AND ANIMATION PROPERTIES, WHICH THE EDITOR WON'T ALLOW TO AVOID SIMULATION PROBLEMS.**

PROPERTIES BROWSER

PHYSICS

FORCE

PUSHABLE

MOVE TOWARDS

UTILITY

LINK TO

CONSTRAINED

PLAYER INTERACTION

LETHAL

INVISIBLE

UNTOUCHABLE

COMPOSITION

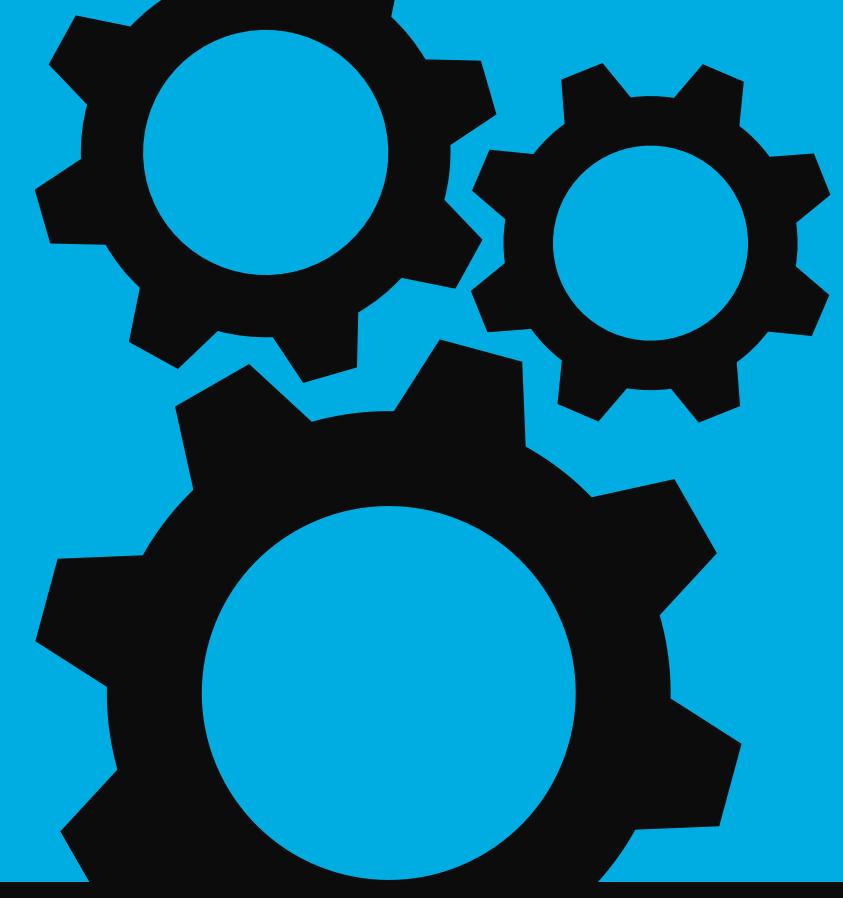
MATERIAL

BREAKABLE

ANIMATION

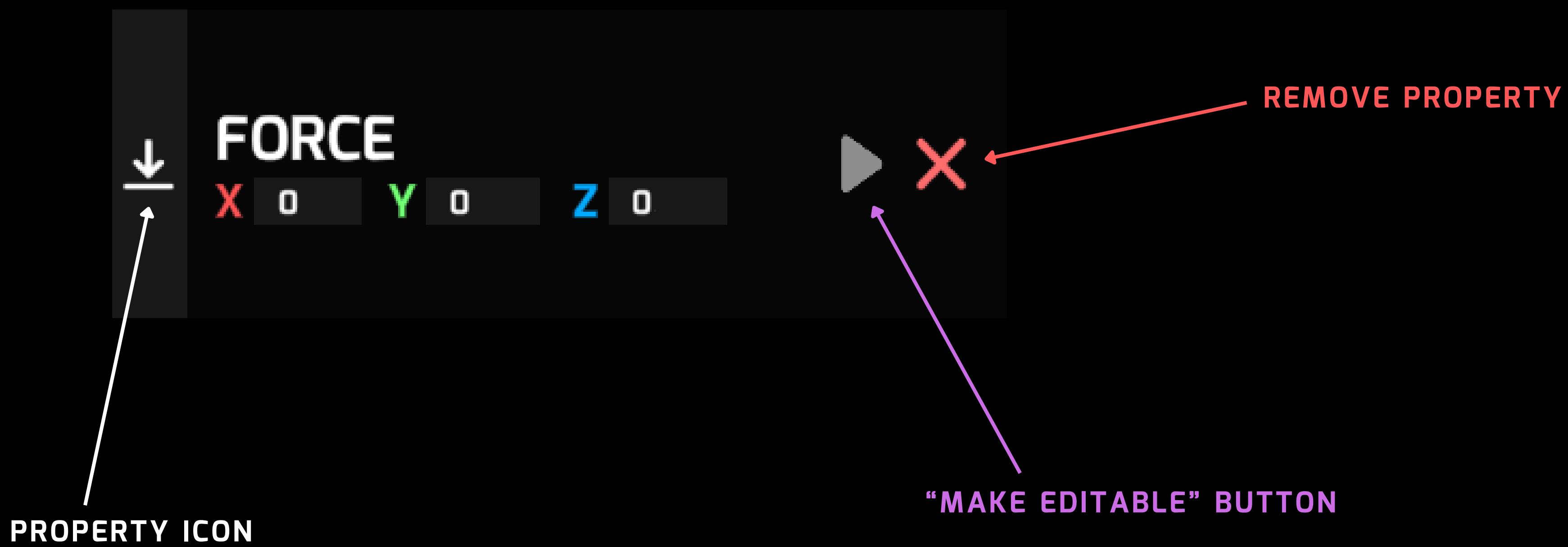
ANIMATED

PROPERTIES CONTROLLERS

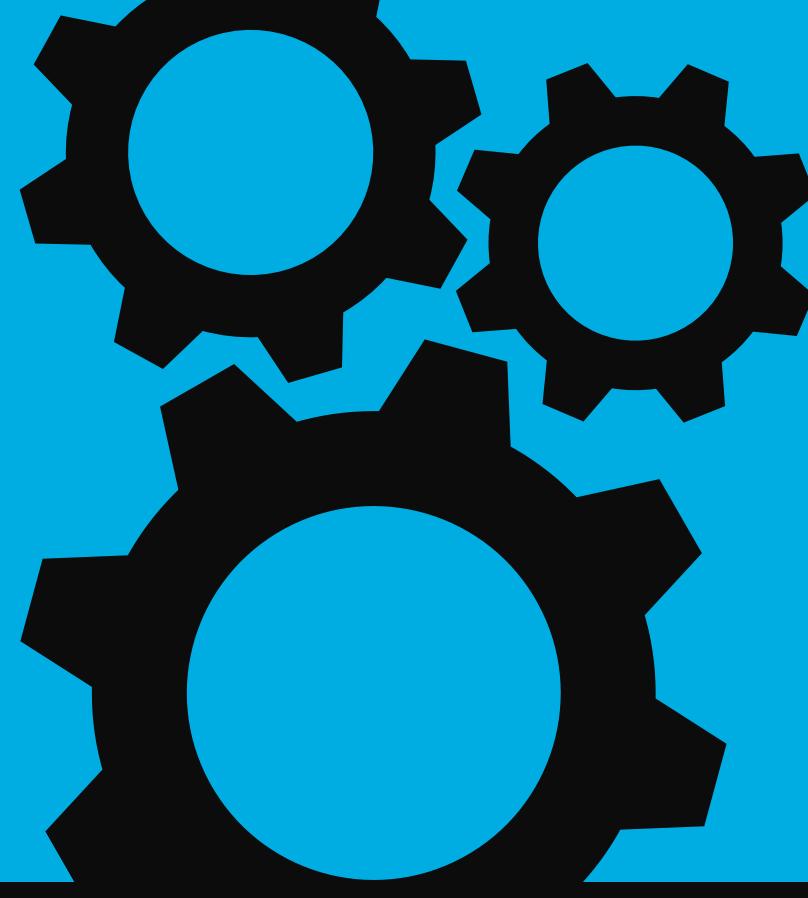


PROPERTIES CONTROLLERS

- YOU CAN THINK OF PROPERTIES IN PROJECT LEVELS LIKE YOU THINK OF ADJECTIVES IN REAL LIFE GRAMMAR. THEY ARE A WAY TO ALLOW AN OBJECT TO DO “SOMETHING MORE” THAN IT NORMALLY COULD.
- ADDING PROPERTIES TO AN OBJECT IS EXPLAINED IN THE PREVIOUS PAGES.
- ONCE A PROPERTY HAS BEEN ADDED TO AN OBJECT, YOU WILL BE ABLE TO MODIFY IT'S VALUES BY USING THE RELATIVE **PROPERTY CONTROLLER** THAT WILL DISPLAY ON THE **PROPERTIES TAB**.
- EVERY CONTROLLER IS DIFFERENT IN ORDER TO ACCOMODATE ITS SPECIFIC PROPERTY'S QUIRKS, BUT THEY ALL SHARE TWO COMMON ELEMENTS, THE **EDITABLE BUTTON** AND THE **REMOVE BUTTON**.
- WHILE **THE LATTER** IS INTUITIVE, **THE FORMER** ALLOWS YOU TO MARK THAT SPECIFIC PROPERTY ON THAT SPECIFIC OBJECT(S) AS **EDITABLE** SO THAT PLAYERS CAN MODIFY ITS VALUES IN EDIT MODE WHILE PLAYING. THIS IS EXPLAINED IN DEPTH ON **PAGE 12**.



PROPERTIES #1

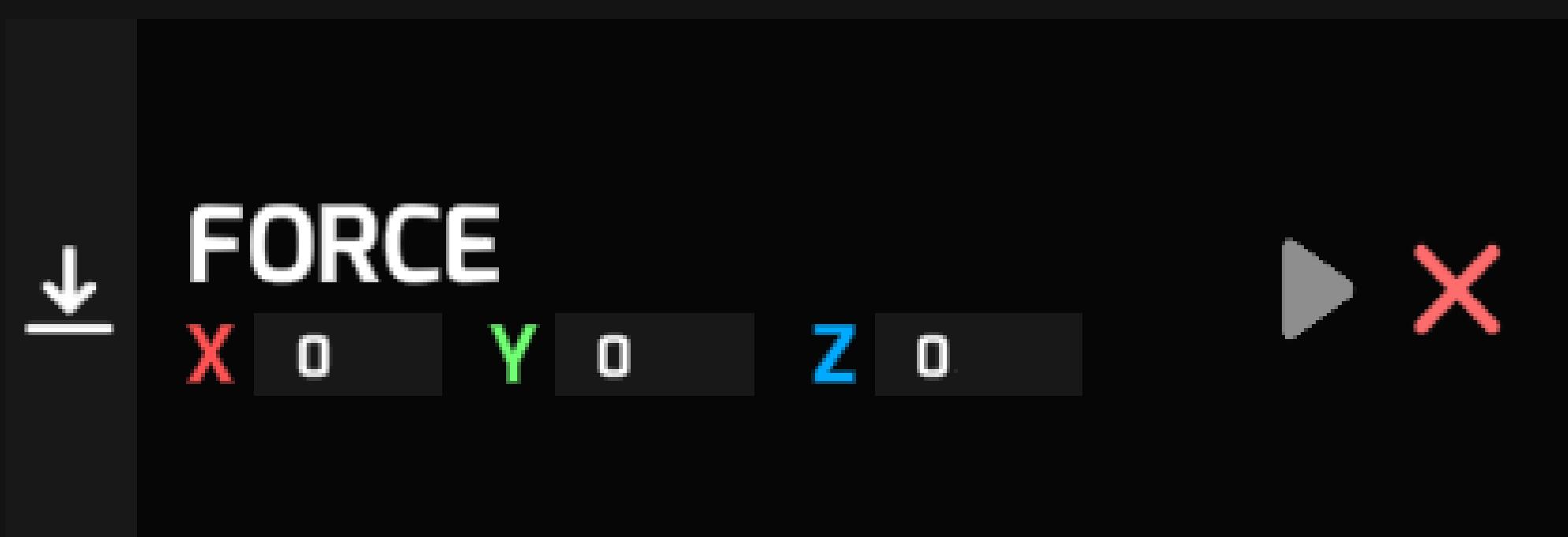


PROPERTIES

- I WILL NOW FOLLOW WITH A QUICK RUNDOWN OF ALL THE AVAILABLE PROPERTIES AND THEIR RESPECTIVE CONTROLLERS.

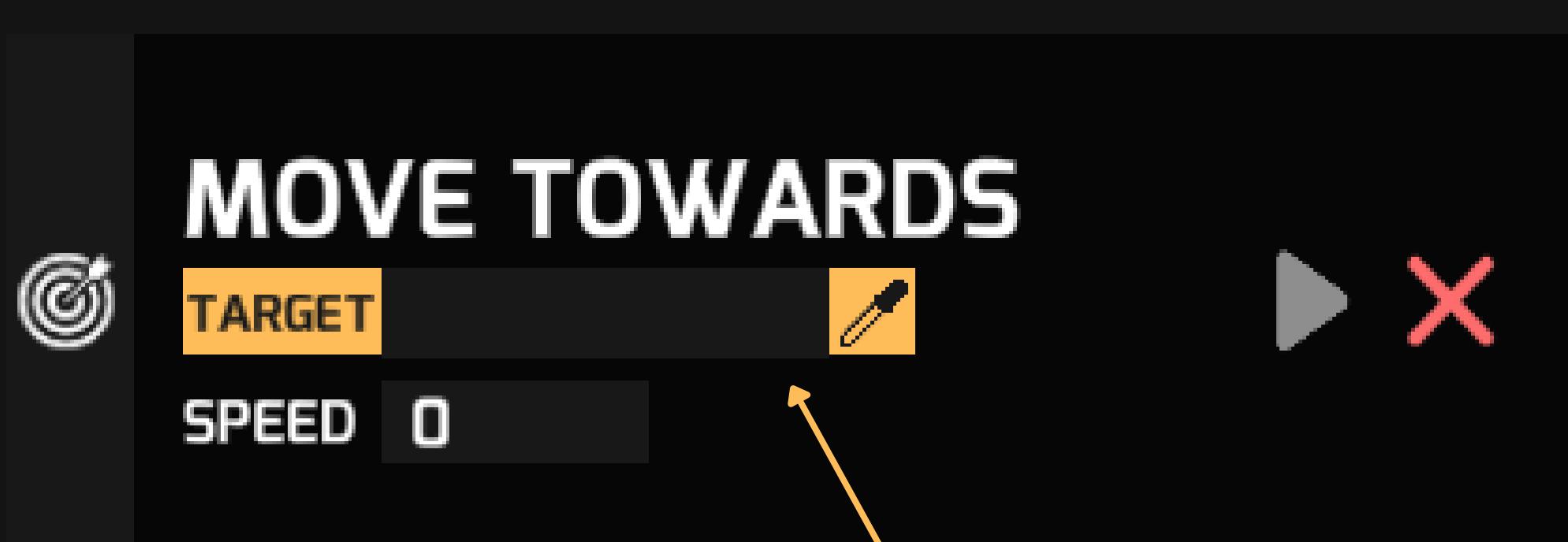
FORCE

CONSTANTLY PUSHES THE OBJECT IN THE SPECIFIED DIRECTION.



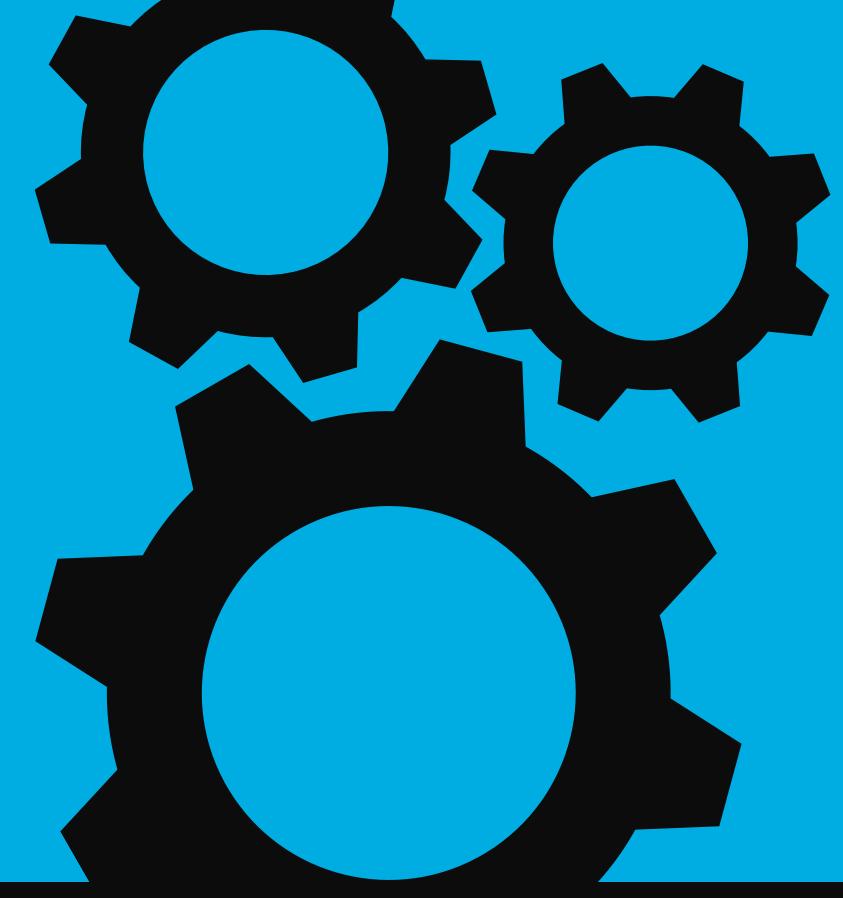
MOVE TOWARDS

MAKE AN OBJECT CONSTANTLY MOVE TOWARDS A SPECIFIED TARGET AT A SPECIFIED SPEED.



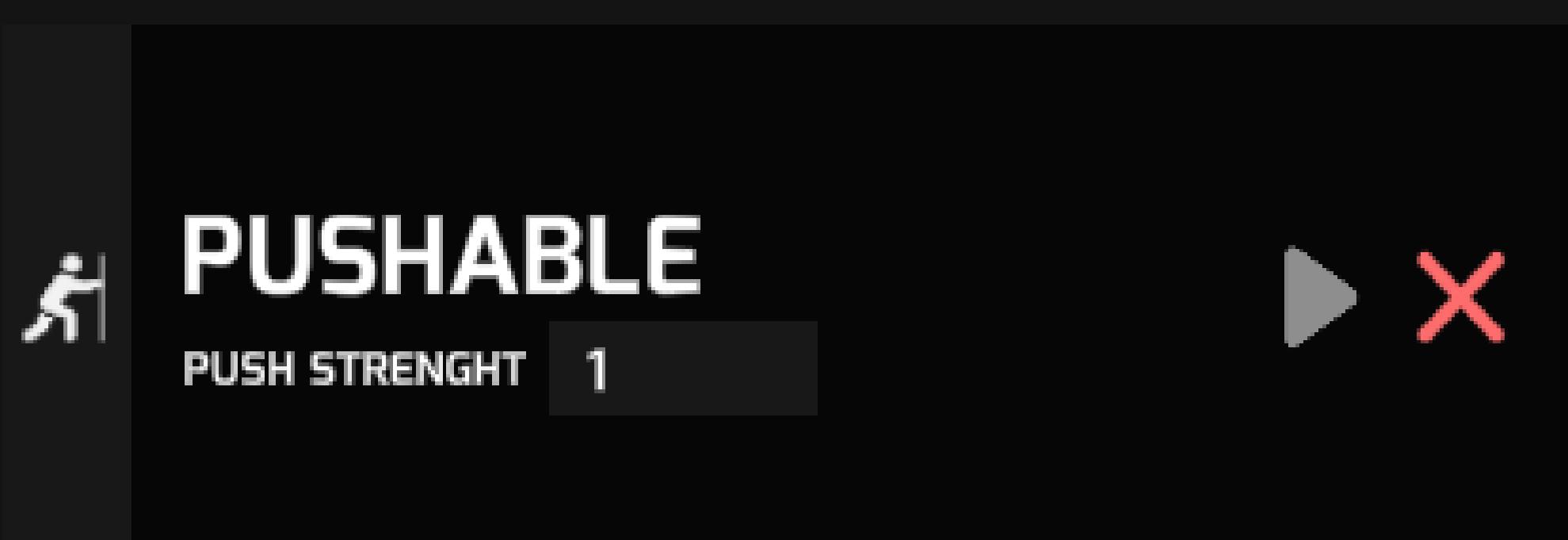
PS: THIS IS A "PICKER". CLICKING IT WILL MAKE THE INTERFACE DISAPPEAR TO ALLOW YOU TO SELECT THE OBJECT THAT YOU WANT TO PICK AS A TARGET. JUST CLICK ON THE DESIRED OBJECT AND THE EDITOR WILL DO EVERYTHING FOR YOU!

PROPERTIES #2



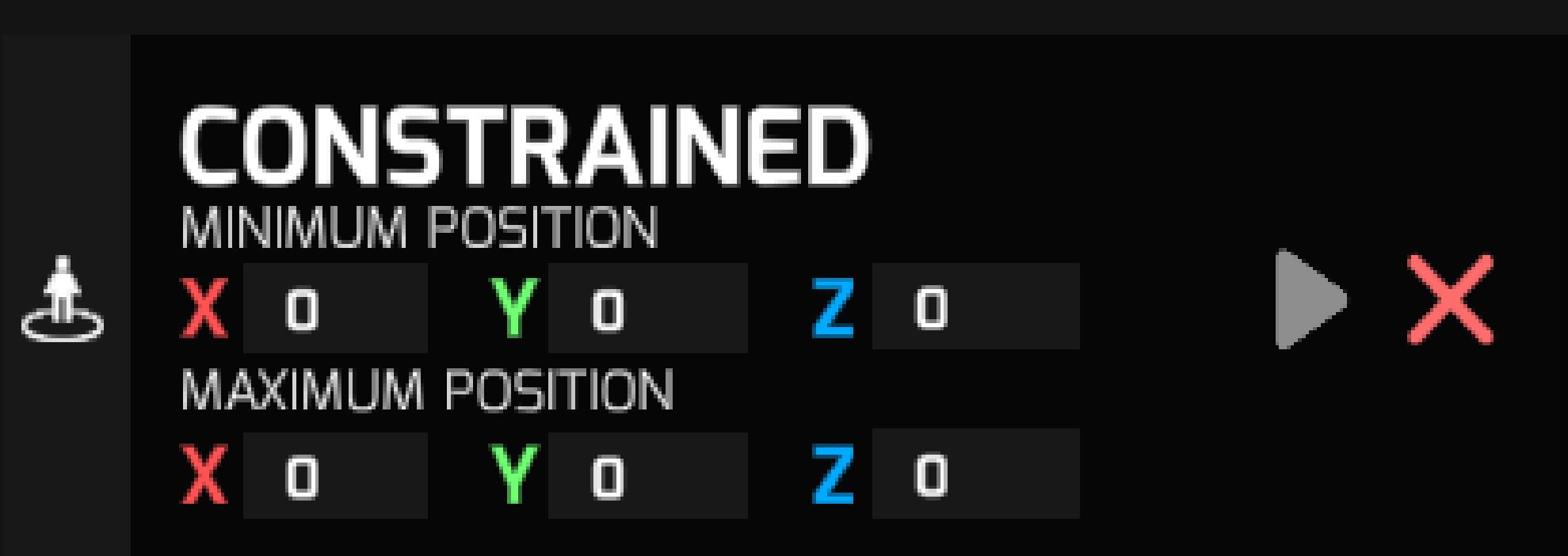
PUSHABLE

APPLIES A SERIES OF INTERNAL MODIFIES TO ALLOW AN OBJECT TO BE PUSHED EASILY. "PUSH STRENGTH" WORKS AS A MULTIPLIER FOR THE INTENSITY OF THE FORCES APPLIED TO MAKE IT EASIER OR HARDER TO PUSH.



CONSTRAINED

PREVENTS AN OBJECT FROM LEAVING A SPECIFIED AREA.

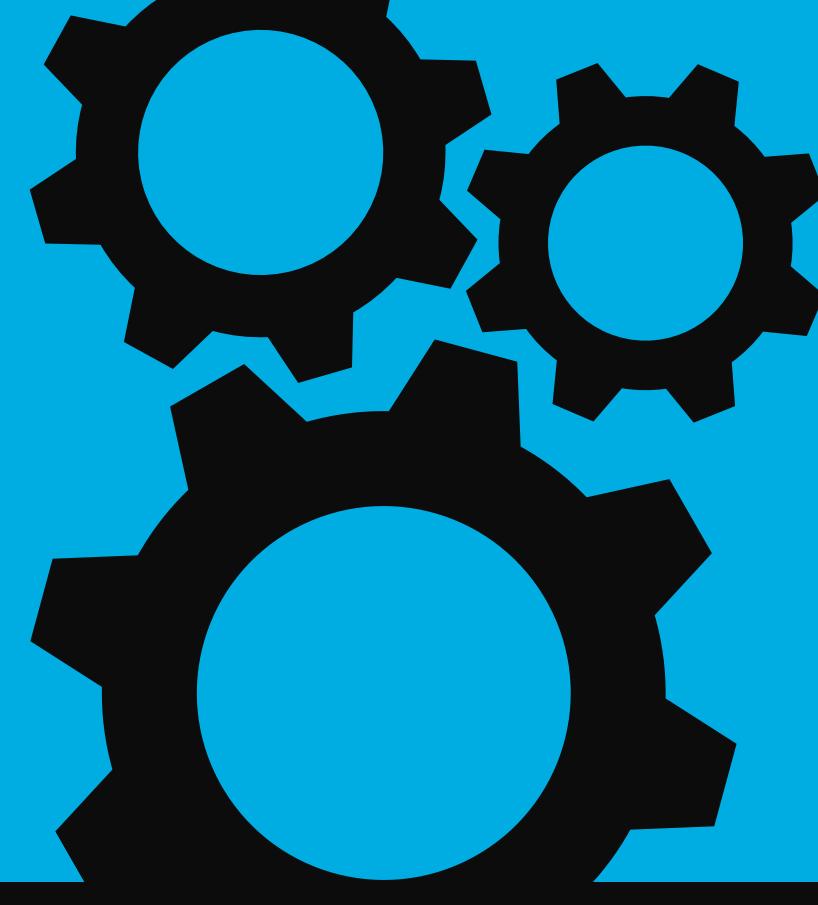


LINK TO

LINKS THE OBJECT TO A TARGET. THE LINKED OBJECT (THE ONE WITH THE PROPERTY ON) WILL THEN MIMIC EVERY TRANSFORM CHANGE THAT THE TARGETED OBJECT DOES. THIS MEANS MOVING, ROTATING, AND SCALING ALONG WITH IT. MULTIPLE OBJECTS CAN BE LINKED TO THE SAME TARGET.



PROPERTIES #3



LETHAL

MARKS AN OBJECT AS **LETHAL**. IF THE PLAYER COMES INTO CONTACT WITH A LETHAL OBJECT, IT WILL CAUSE A GAME OVER.



WARNING: A GAME OVER WILL CAUSE THE WHOLE LEVEL TO RELOAD COMPLETELY. IF YOU HAVE A BIG LEVEL, YOU MAY WANT TO CONSIDER AN ALTERNATIVE TO SPEED UP RESPAWN TIMES, LIKE FOR EXAMPLE USING A TRIGGER WITH A TELEPORT.



LETHAL



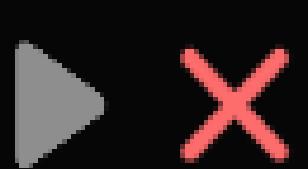
INVISIBLE

MAKES AN OBJECT INVISIBLE. CAN BE TURNED ON AND OFF.



INVISIBLE

ON OFF



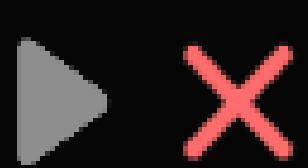
UNTOUCHABLE

MAKES AN OBJECT UNTOUCHABLE. CAN BE TURNED ON AND OFF.

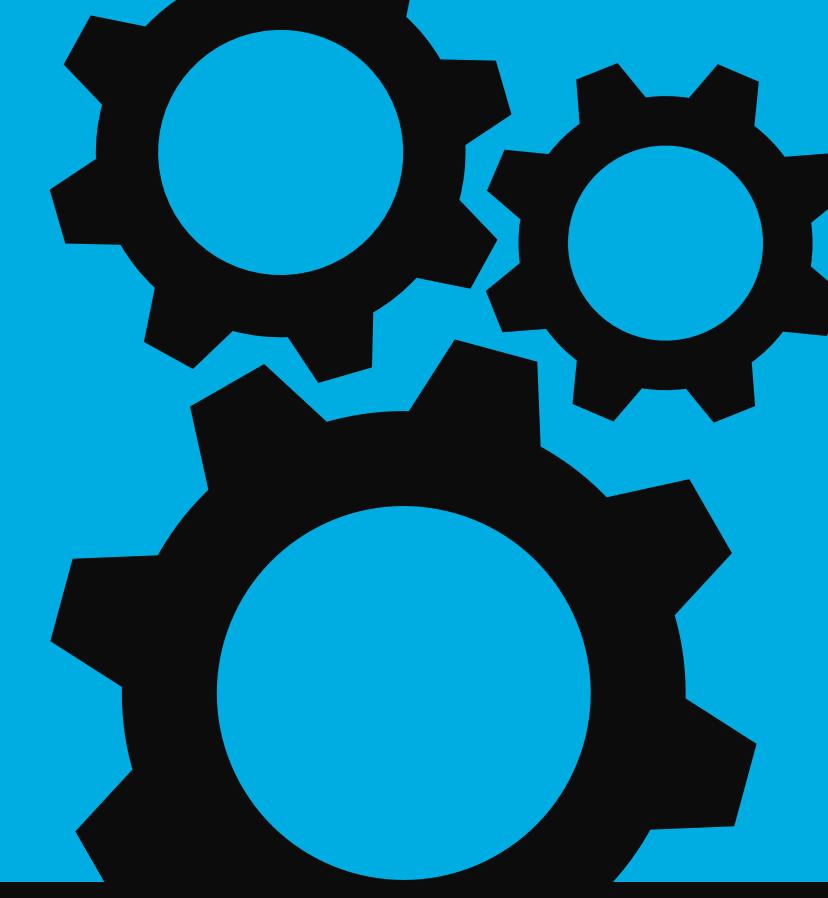


UNTOUCHABLE

ON OFF



PROPERTIES #4

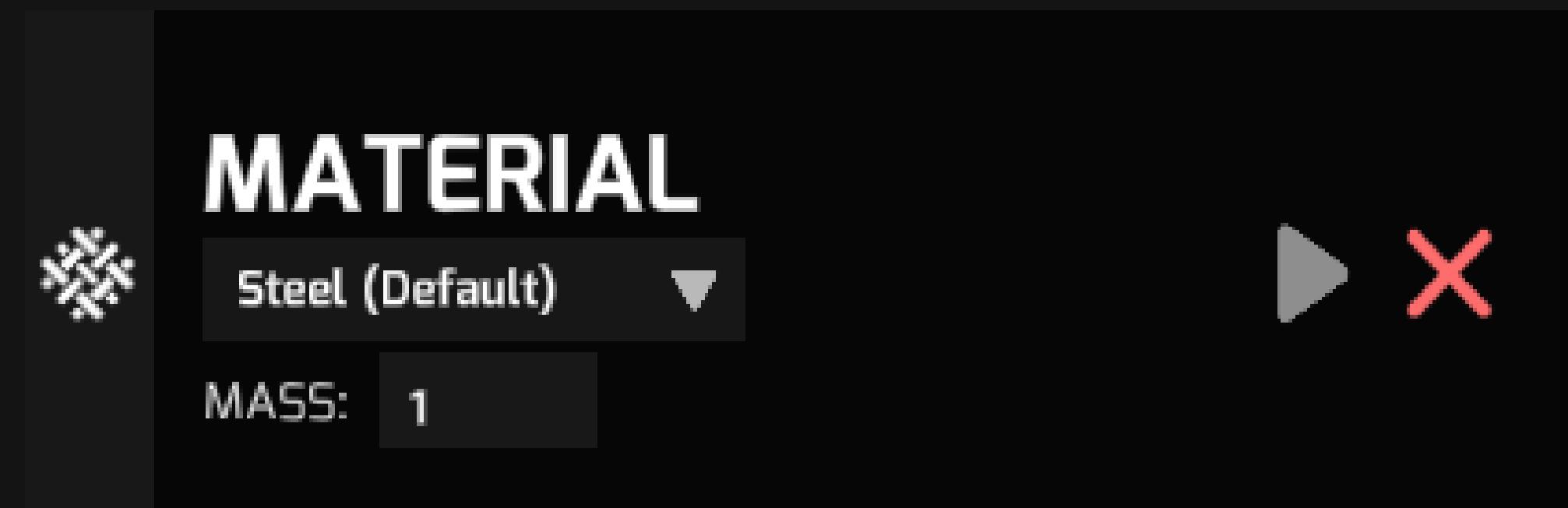


MATERIAL

ALLOWS YOU TO SPECIFY HOW OBJECTS THAT COME INTO CONTACT WITH THIS OBJECT WILL BEHAVE. ALSO ALLOWS TO DECIDE THE MASS OF THE OBJECT.



STEEL (DEFAULT) = AVERAGE FRICTION, NO ELASTICITY
ICE = ZERO FRICTION, NO ELASTICITY
ASPHALT = HIGH FRICTION, NO ELASTICITY
GUM = AVERAGE FRICTION, MAX ELASTICITY
MUD = MAX FRICTION, NO ELASTICITY



BREAKABLE

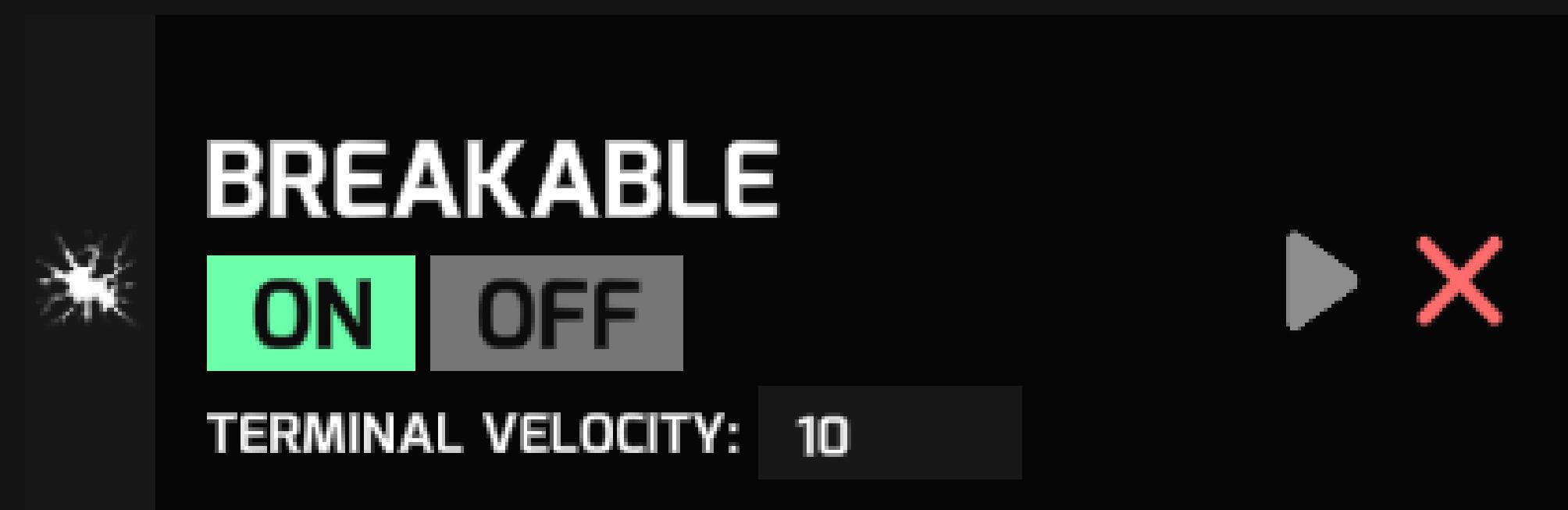
MARKS AN OBJECT AS BREAKABLE.

BREAKABLE OBJECTS WILL COLLAPSE INTO PIECES IF SHOT BY A DRONE, HIT BY A LASER OR IF THEY SUSTAIN AN IMPACT AT AN HIGHER SPEED THAN THE SPECIFIED TERMINAL SPEED.

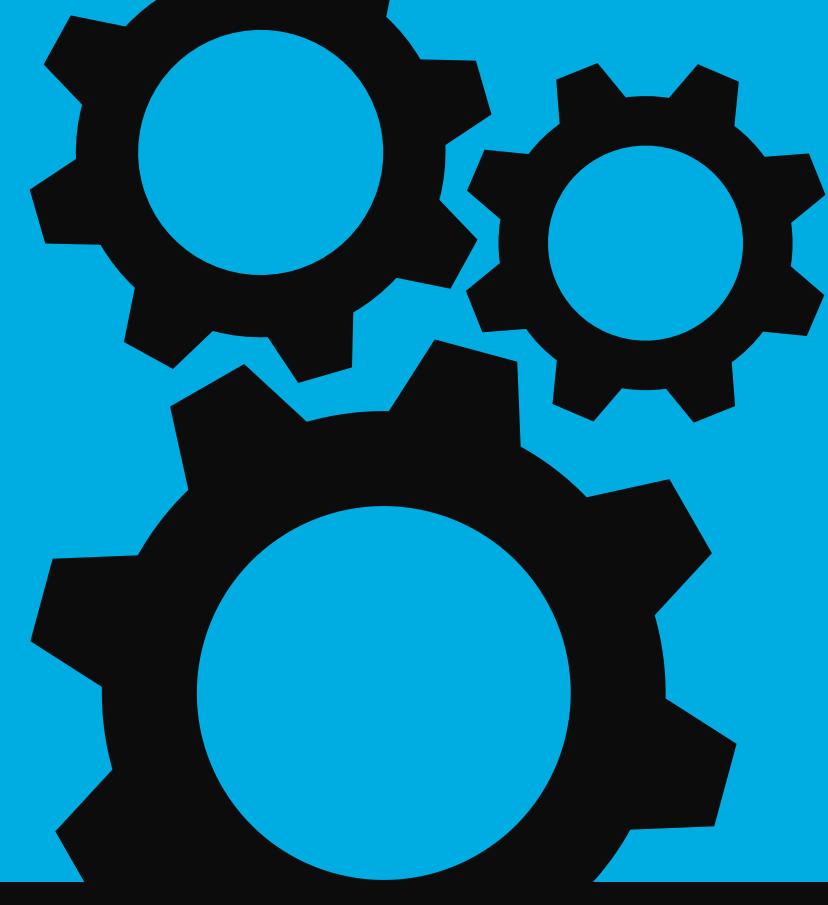


ONCE BROKEN, THE PIECES WILL STILL FOLLOW THE GRAVITY THAT WAS APPLIED TO THE OBJECT WHEN IT WAS INTACT.

PIECES WILL DISAPPEAR ONCE THE **CLEAR DEBRIS** TIMER SPECIFIED IN THE EDITOR SETTINGS RUNS OUT.

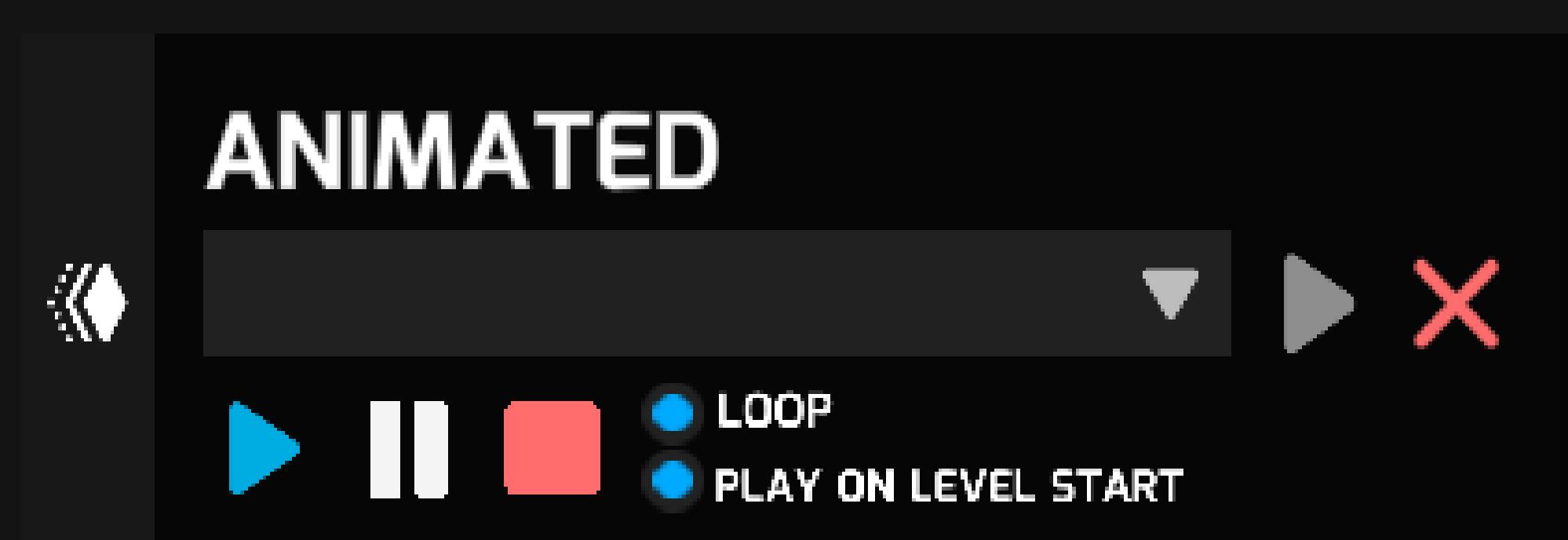


PROPERTIES #5

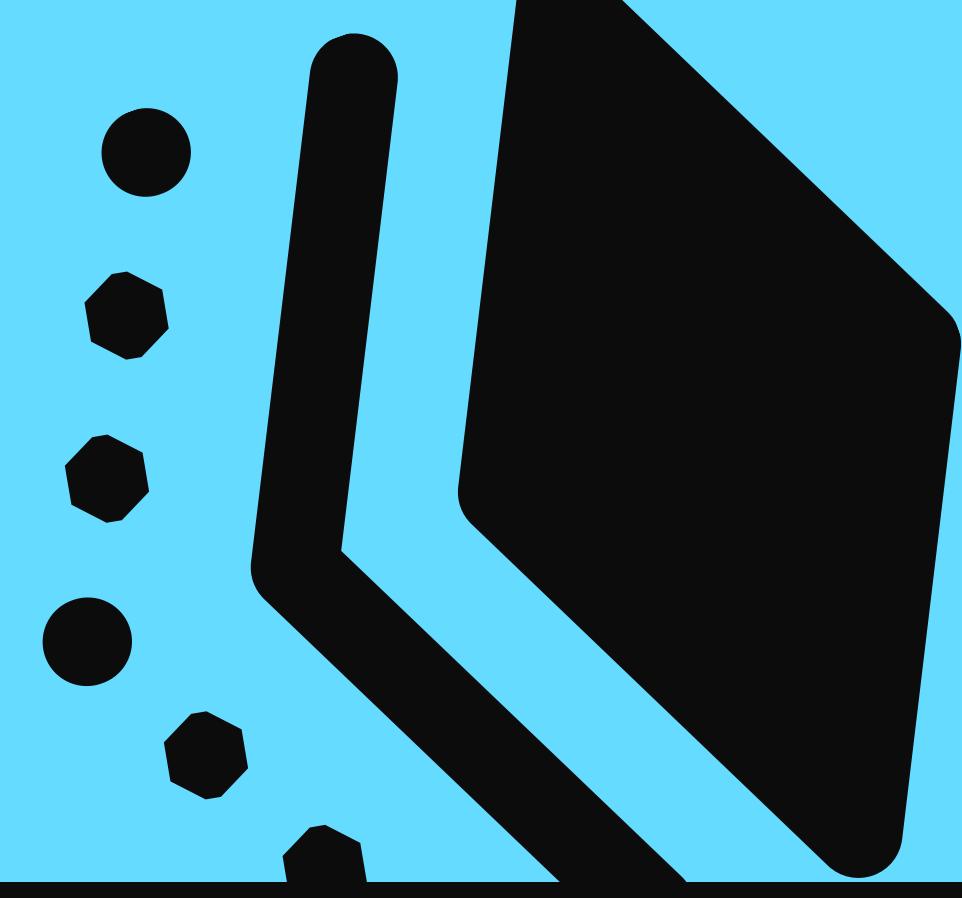


ANIMATED

ALLOWS YOU TO BIND AN OBJECT TO AN **ANIMATION**.
YOU MUST FIRST CREATE A VALID **ANIMATION** IN THE **ANIMATION STUDIO**.
ONCE YOU HAVE AT LEAST A VALID ANIMATION, USE THE DROPODOWN MENU TO
ASSIGN IT TO THE OBJECT.
YOU CAN THEN PREVIEW THE ANIMATION IN THE EDITOR BY USING THE **PLAY**,
PAUSE AND STOP BUTTONS.
“**PLAY ON LEVEL START**” ALLOWS YOU TO DECIDE IF YOU WANT THE ANIMATION TO
START AS SOON AS THE LEVEL DOES OR IF YOU WANT IT TO WAIT UNTIL
SOMETHING (A TRIGGER) CALLS IT.
YOU CAN ALSO DECIDE IF YOU WANT THE ANIMATION TO LOOP FOREVER ONCE IT
ENDS OR PLAY ONLY ONCE.

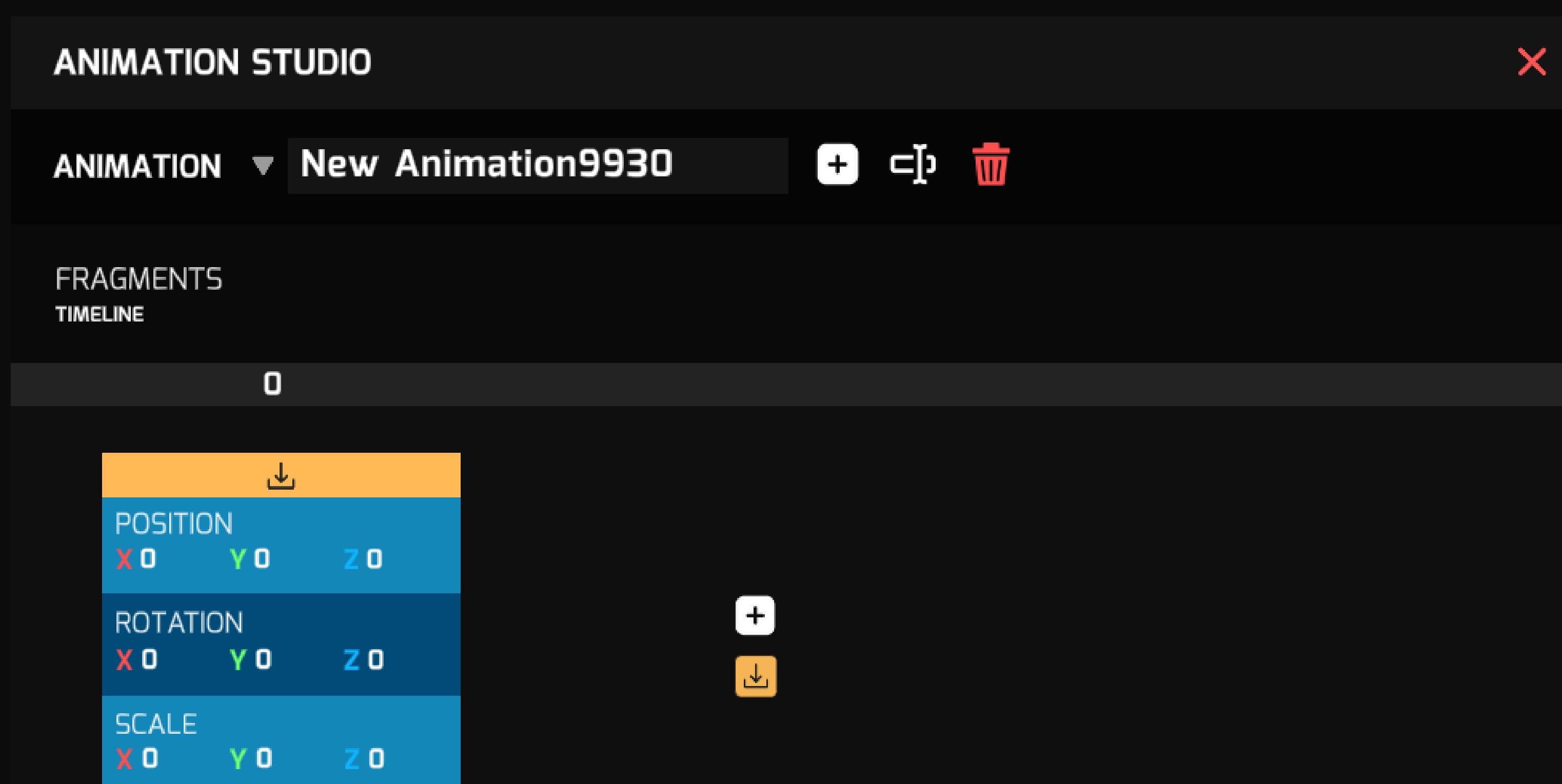


ANIMATION STUDIO #1



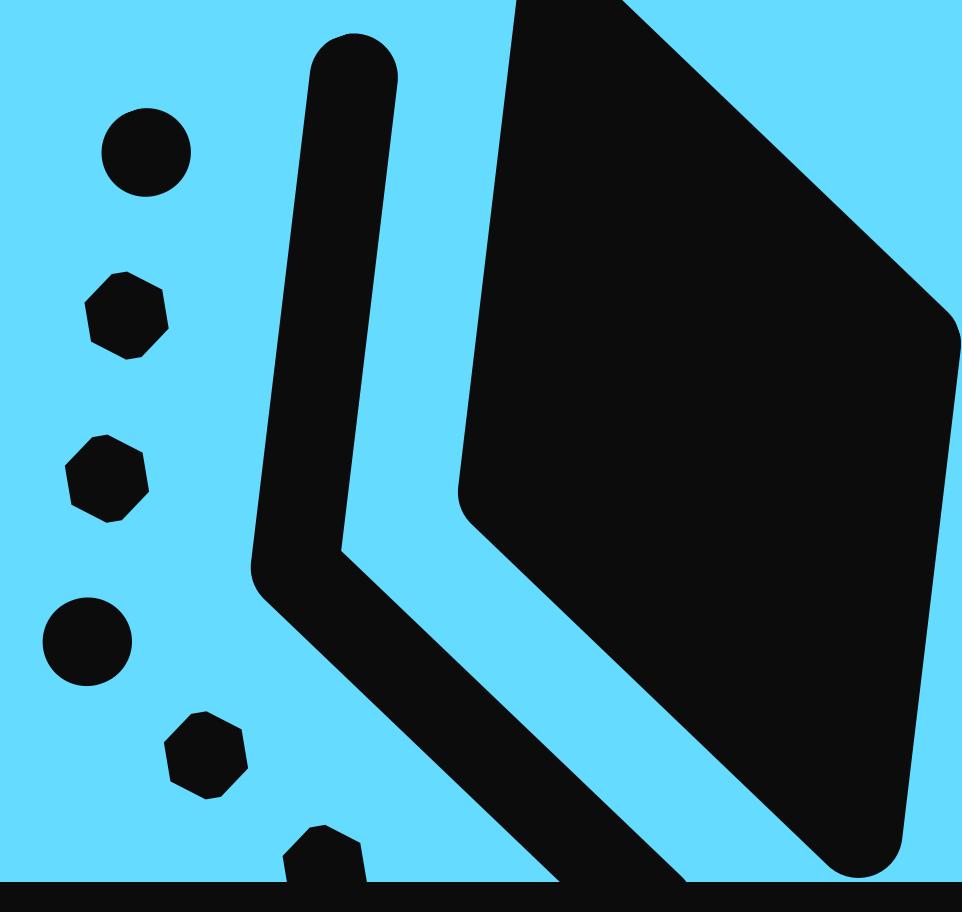
ANIMATION STUDIO

- THE ANIMATION STUDIO IS ARGUABLY THE MOST COMPLICATED TOOL WITHIN PROJECT LEVELS, SO PLEASE BEAR WITH ME IF I FAIL TO PROVIDE A CLEAR EXPLANATION. I'LL TRY MY BEST.
- FIRST OF ALL, **OPEN THE ANIMATION STUDIO FROM THE HOTBAR AND CREATE AN ANIMATION** BY CLICKING THE **+** BUTTON, YOU SHOULD NOW SEE SOMETHING SIMILAR TO THIS:



- ANIMATING AN OBJECT ESSENTIALLY MEANS TELLING IT HOW IT SHOULD “CHANGE” ACROSS A PERIOD OF TIME. THIS IS EXACTLY WHAT THE ANIMATION STUDIO ALLOWS YOU TO DO.
- THE FIRST **FRAGMENT** OF YOUR ANIMATION IS THE **BLUE SQUARE** YOU SEE ON THE LEFT. THIS REPRESENTS THE STATE OF YOUR OBJECT WHEN THE ANIMATION BEGINS.
- YOU CAN EITHER INPUT ALL OF ITS VALUES ONE BY ONE (POSITION XYZ, ROTATION XYZ, ETC...) OR YOU CAN TELL THE EDITOR TO DO IT FOR YOU BY SIMPLY HAVING THE OBJECT SELECTED AND CLICKING ON THE YELLOW “DOWNLOAD LIKE” ICON ON THE TOP OF THE FRAGMENT, CALLED THE **INHERIT** BUTTON.
- NOW THAT YOU’VE SET UP THE INITIAL STATE OF YOUR ANIMATION, YOU NEED TO ADD MORE FRAGMENTS TO TELL YOUR OBJECT HOW TO CHANGE OVER TIME AND ACHIEVE A FULL ANIMATION. TO DO SO, YOU HAVE TWO OPTIONS, REPRESENTED BY THE TWO LITTLE BUTTONS IMMEDIATELY NEXT TO YOUR (SO FAR) ONLY **BLUE FRAGMENT**.

ANIMATION STUDIO #2



- THE WHITE + BUTTON WILL CREATE AN EMPTY NEW ANIMATION FRAGMENT, WHILE THE THE YELLOW ONE WILL CREATE A NEW FRAGMENT BY COPYING THE VALUES OF THE OBJECT YOU CURRENTLY HAVE SELECTED. EITHER WAY, YOU WILL END UP WITH SOMETHING LIKE THIS:

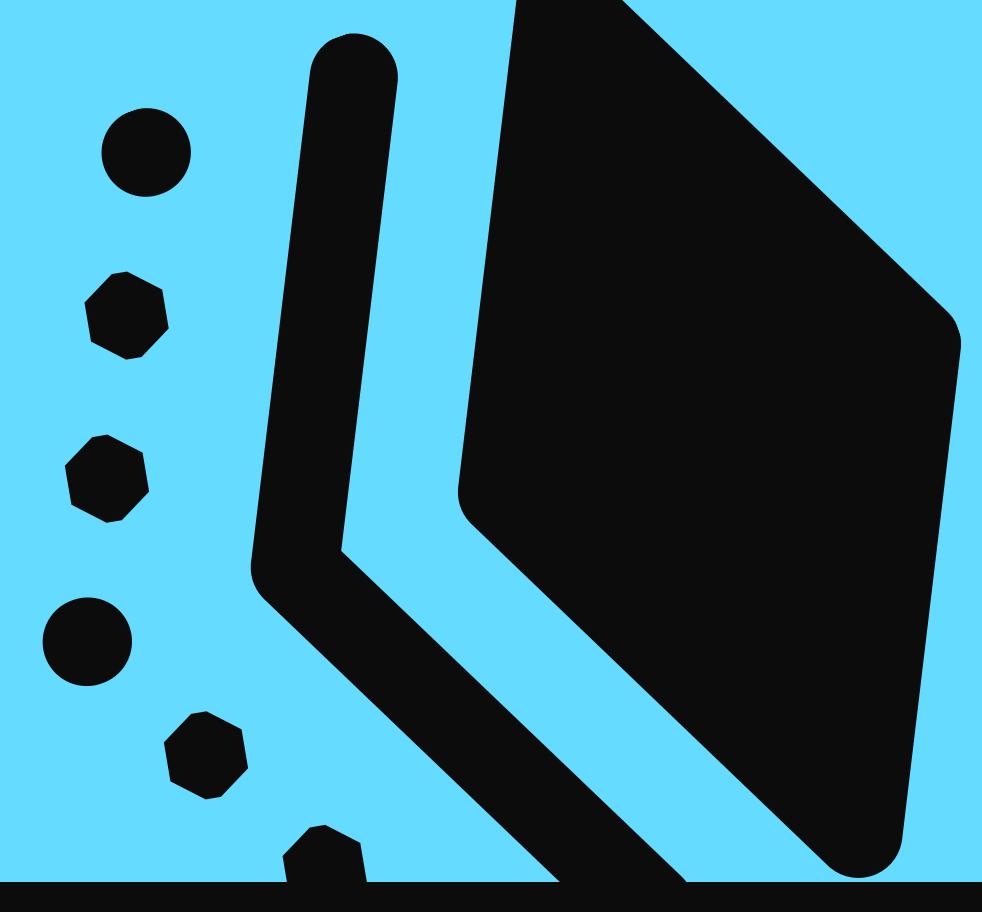
FRAGMENTS	0	3
POSITION X 0 Y 0 Z 0	POSITION X 5 Y 0 Z -5	
ROTATION X 0 Y 0 Z 0	ROTATION X 0 Y 0 Z 0	
SCALE X 1 Y 1 Z 1	SCALE X 1 Y 1 Z 1	

- WHAT YOU'RE DOING HERE IS ESSENTIALLY TELLING YOUR OBJECT: "HEY. YOU ARE INITIALLY LIKE **THIS** AND AFTER AN X AMOUNT OF SECONDS I WANT YOU TO BE **LIKE THIS**".
- TO DECIDE THE X AMOUNT OF SECONDS THAT THE OBJECT WILL TAKE TO CHANGE BETWEEN THE TWO STATES YOU SIMPLY HAVE TO MODIFY THE SMALL NUMBER PLACED BETWEEN TWO FRAGMENTS.
- LET'S ADD ONE MORE FRAGMENT AND END UP WITH SOMETHING LIKE THIS:

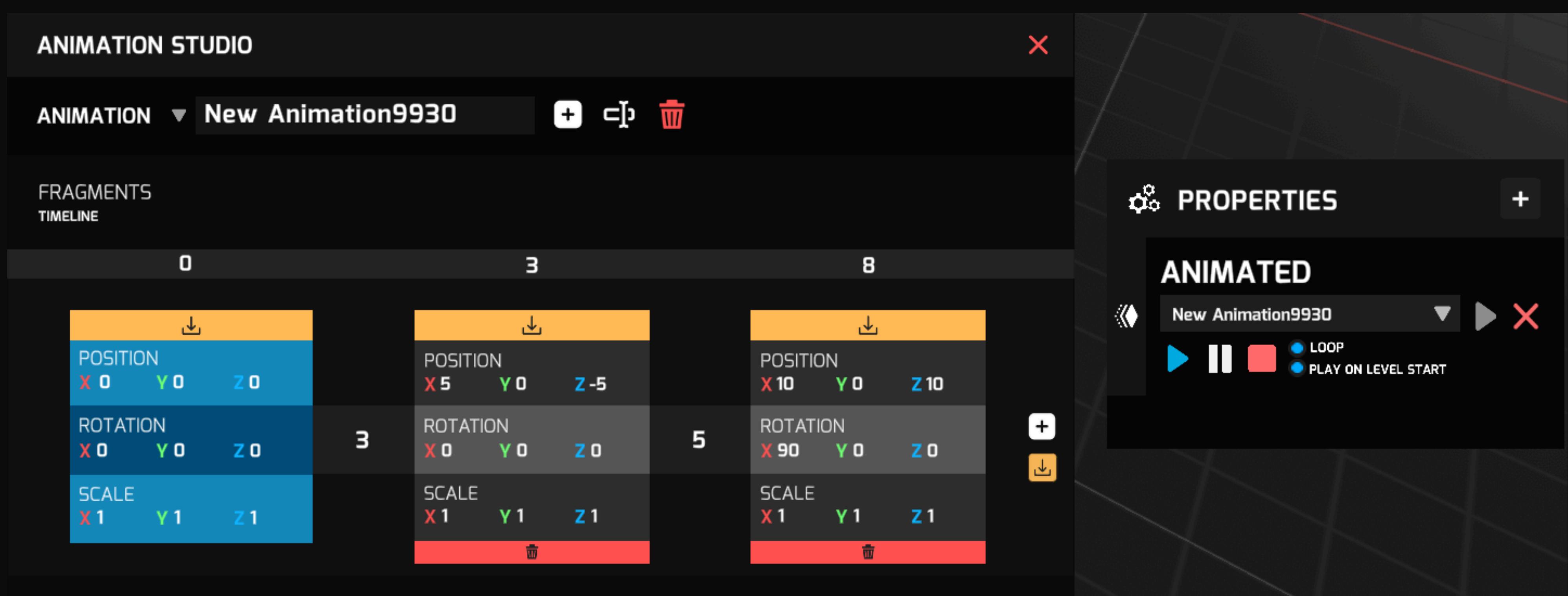
FRAGMENTS	0	3	5
POSITION X 0 Y 0 Z 0	POSITION X 5 Y 0 Z -5	POSITION X 10 Y 0 Z 10	
ROTATION X 0 Y 0 Z 0	ROTATION X 0 Y 0 Z 0	ROTATION X 90 Y 0 Z 0	
SCALE X 1 Y 1 Z 1	SCALE X 1 Y 1 Z 1	SCALE X 1 Y 1 Z 1	

- AND WHAT WE ESSENTIALLY HAVE HERE IS AN OBJECT THAT WILL START FROM THE CENTER OF THE WORLD (0,0,0), THAT AFTER 3 SECONDS WILL BE AT (5, 0, -5) AND THAT AFTER 5 MORE SECONDS WILL BE IN (10,0,10) ROTATED BY 90 DEGREES ON THE X AXIS. TAKING A TOTAL OF 8 SECONDS. THAT'S IT, YOU HAVE CREATED AN ANIMATION!

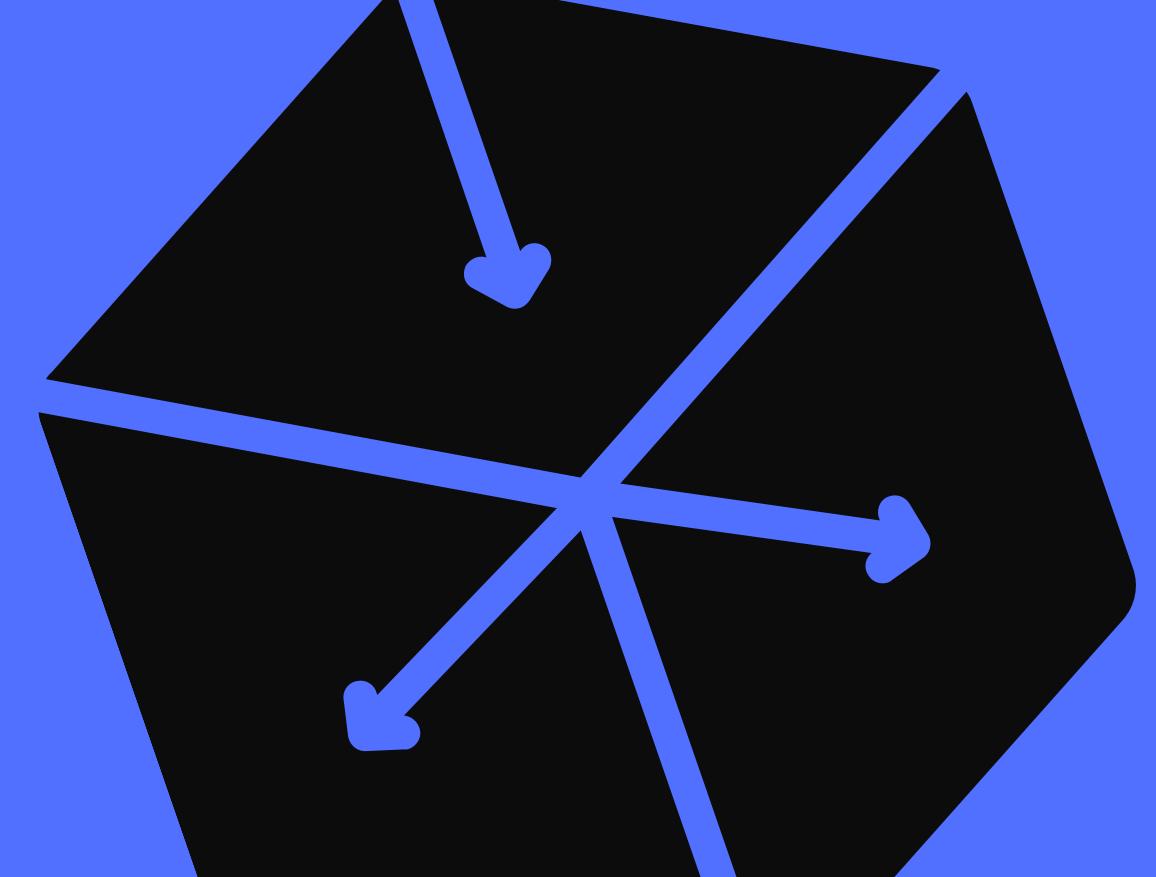
ANIMATION STUDIO #3



- ALL THAT'S LEFT TO DO NOW IS TO SELECT YOUR OBJECT, ADD AN **ANIMATED** PROPERTY TO IT, AND SELECT YOUR ANIMATION FROM THE Dropdown MENU. YOU'RE GOOD TO GO!

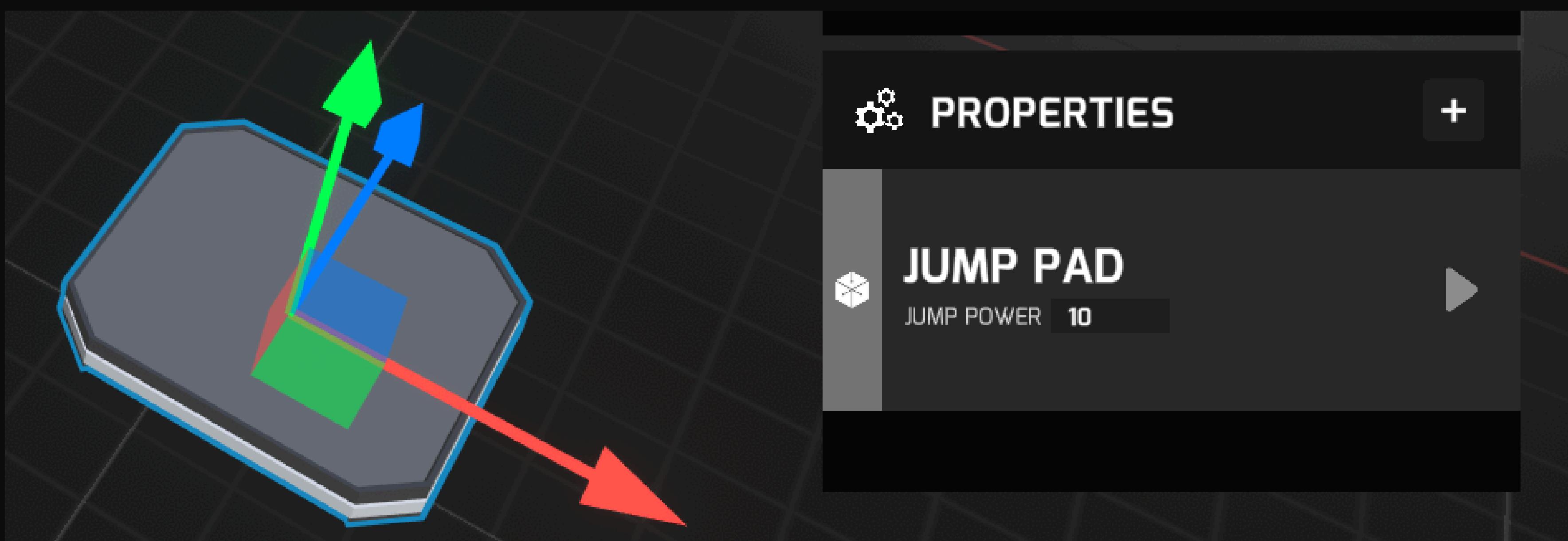


SPECIAL OBJECTS #1



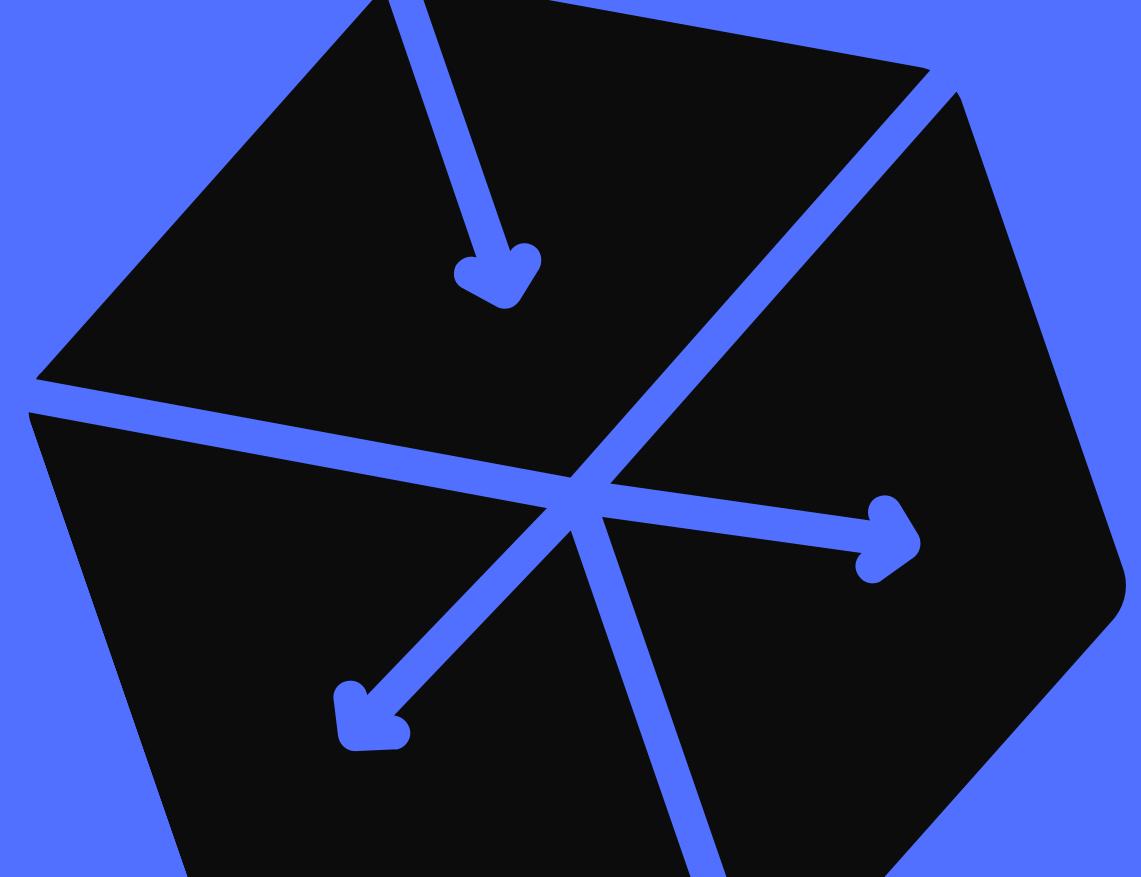
SPECIAL OBJECTS

- UNLIKE STANDARD OBJECTS WHICH ARE ONLY PHYSICAL OBJECTS WITH NO ACTUAL USE, ALL SPECIAL OBJECTS ARE ABLE TO PERFORM A “SPECIAL ACTION”, THANKS TO THEIR **ATTRIBUTE**.
- AN **ATTRIBUTE** IS A SPECIAL QUIRK THAT IS UNIQUE TO A CERTAIN OBJECT AND IT’S DISPLAYED LIKE A PROPERTY CONTROLLER ON THE PROPERTIES TAB ONCE YOU’VE SELECTED THE CORRESPONDING OBJECT, HERE’S AN EXAMPLE FROM A **JUMP PAD**:



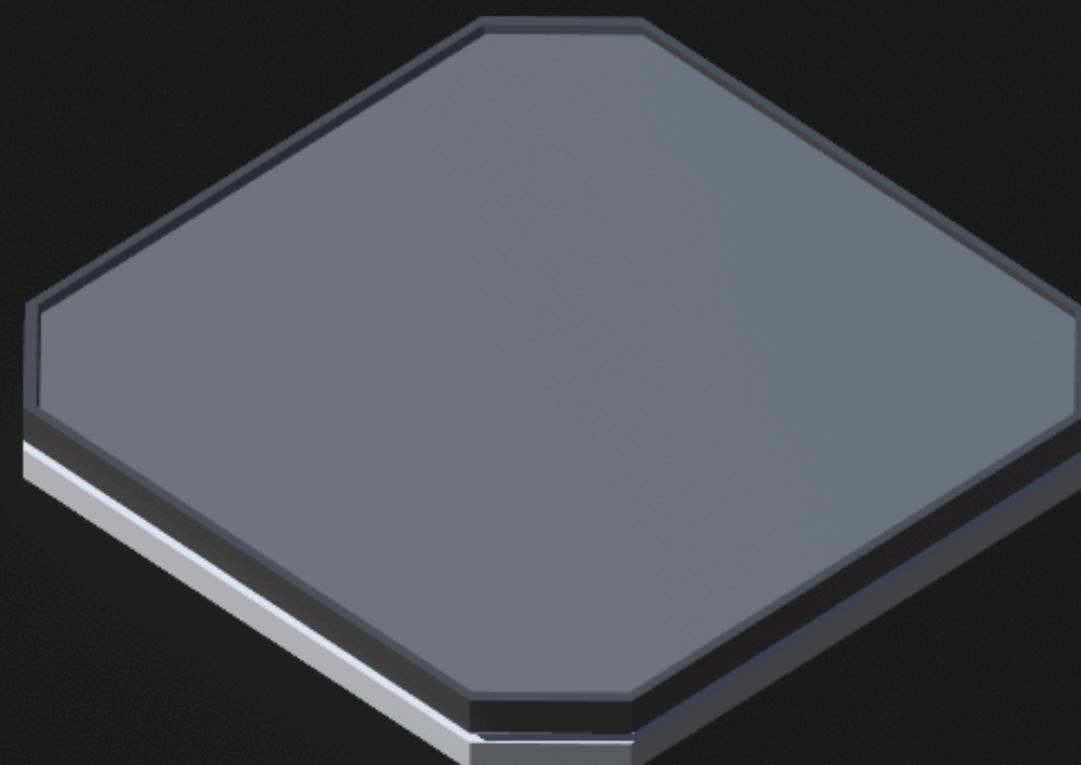
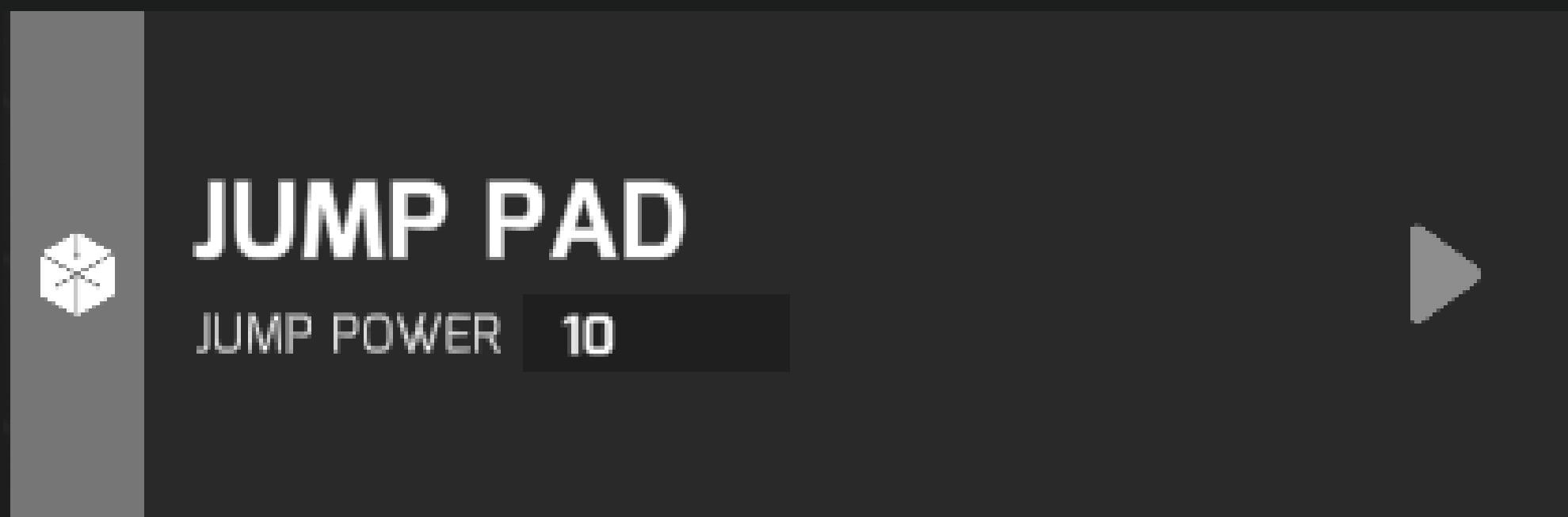
- AS YOU CAN SEE, ATTRIBUTES CAN BE MADE **EDITABLE** BUT THEY CAN’T BE **REMOVED** OR **ADDED**.
- I WILL NOW FOLLOW WITH A LIST AND A BRIEF EXPLANATION FOR ALL THE CURRENTLY AVAILABLE SPECIAL OBJECTS, ALONG WITH THEIR **ATTRIBUTE CONTROLLERS**.

SPECIAL OBJECTS #2



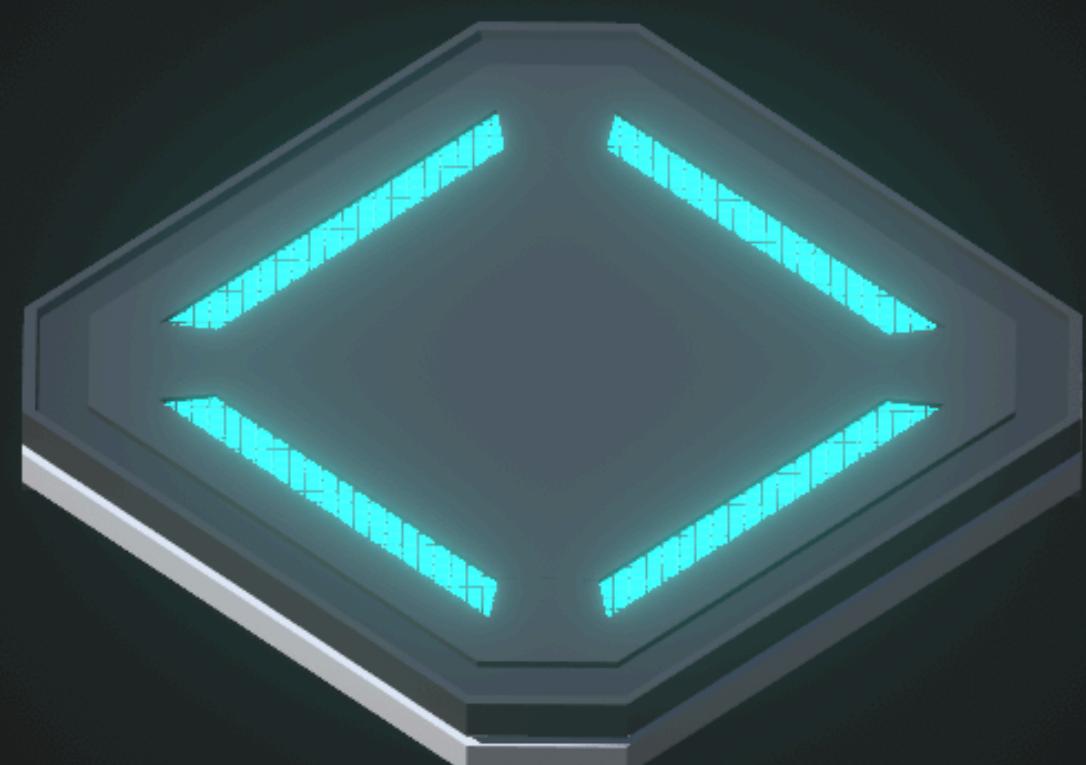
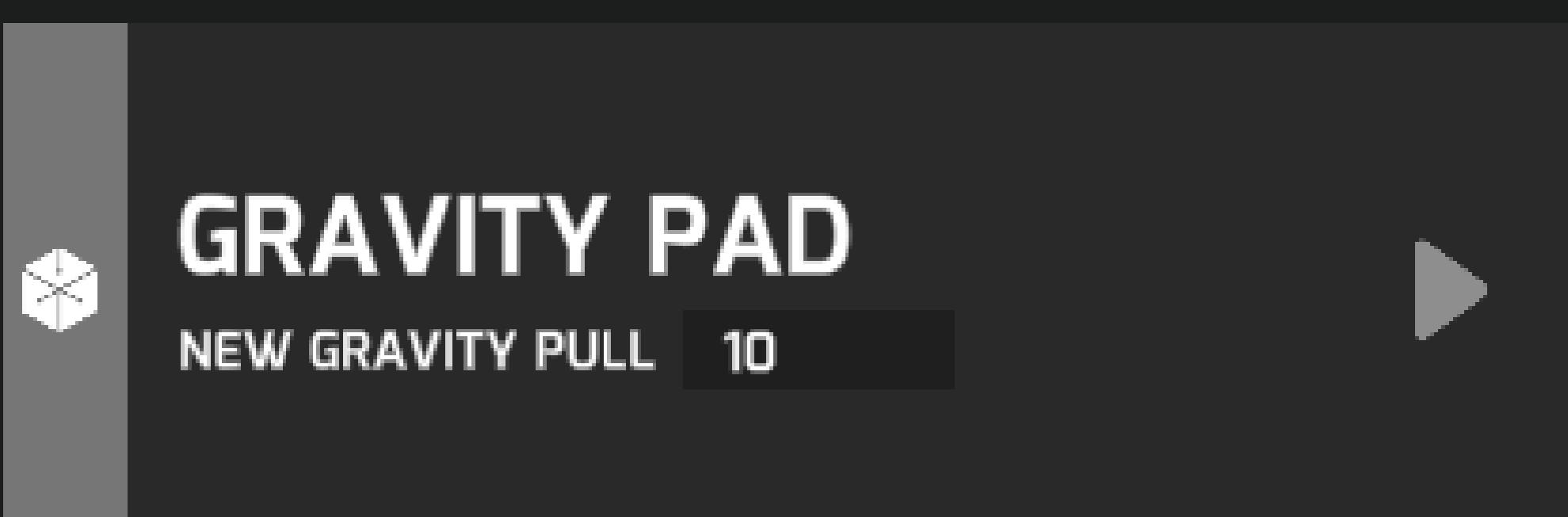
JUMP PAD

PROJECTS AN OBJECT OR A PLAYER WHICH HAS A **PHYSICS CORE PROPERTY** IN THE DIRECTION CURRENTLY PERPENDICULAR TO ITS ORIENTATION WITH A SPECIFIED **JUMP POWER**.



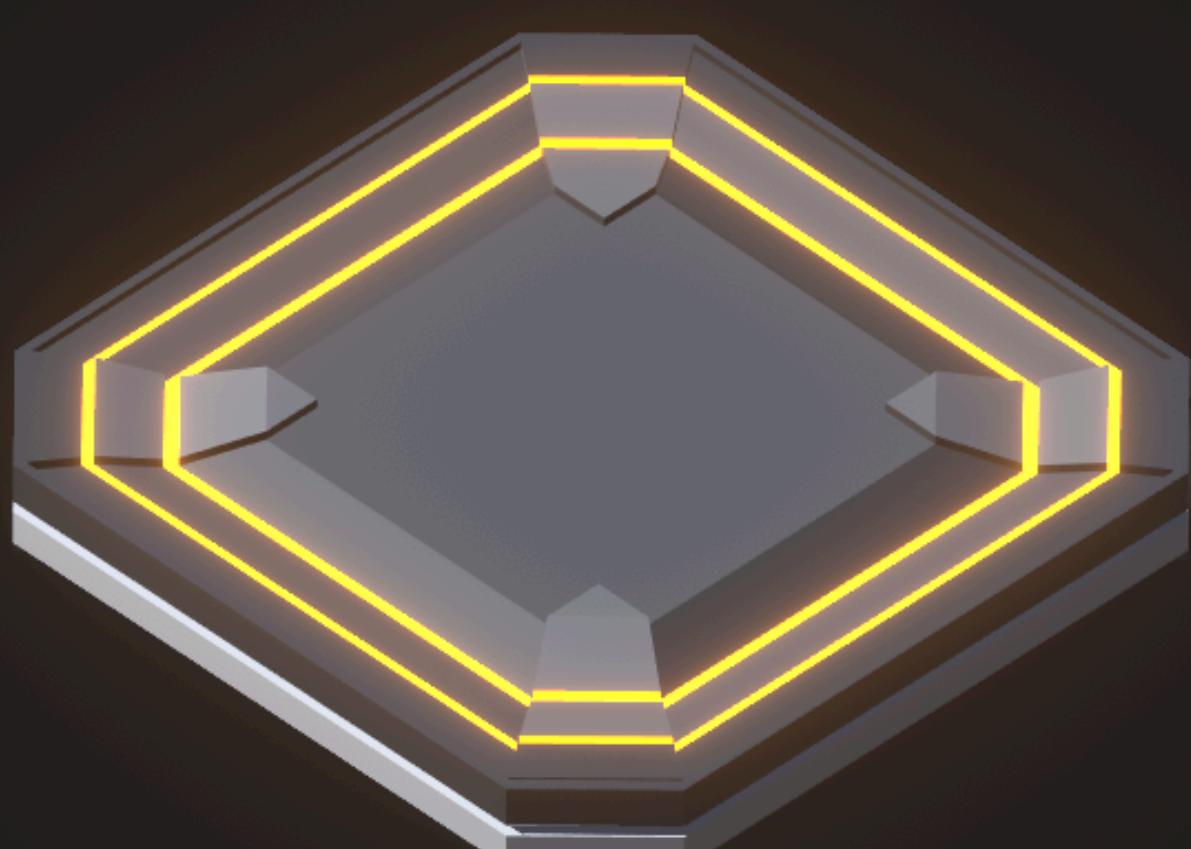
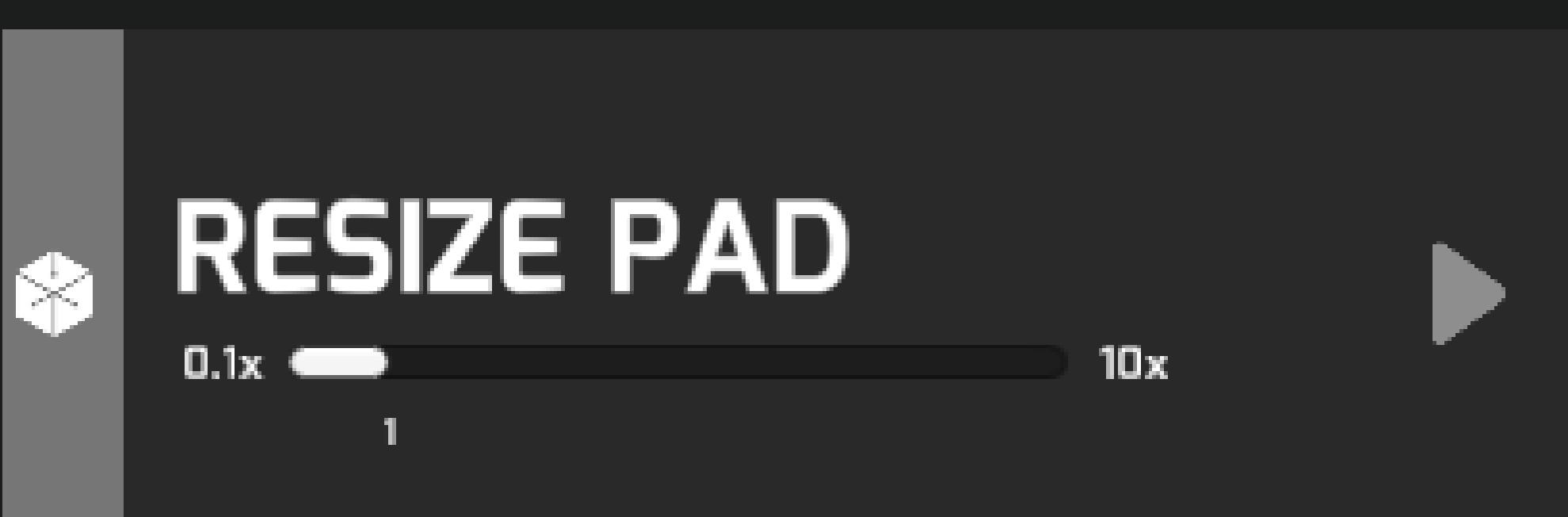
GRAVITY PAD

CHANGES A PLAYER'S OR OBJECT'S GRAVITY TO THE ONE PERPENDICULAR TO ITS OWN ORIENTATION. A NEW GRAVITY FORCE INTENSITY CAN ALSO BE SPECIFIED, BOTH POSITIVE AND NEGATIVE.



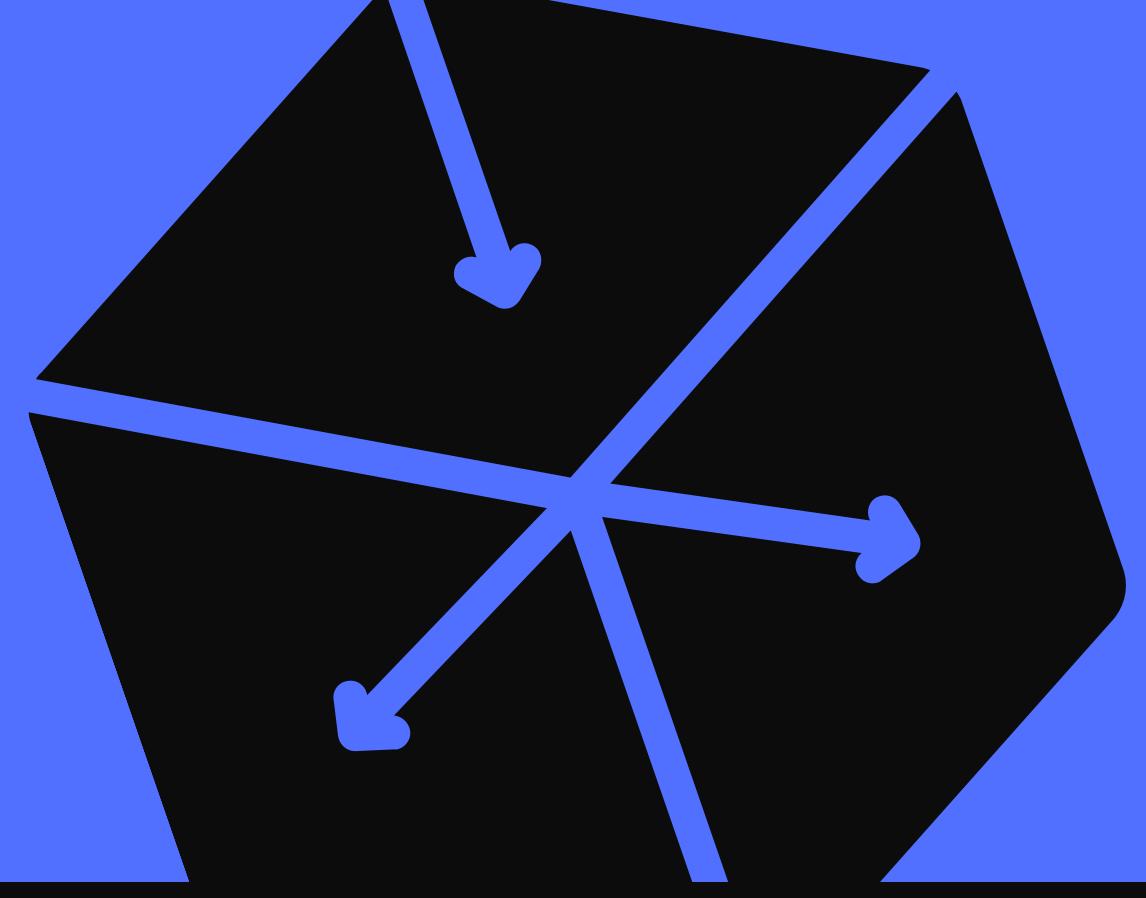
RESIZE PAD

RESIZES AN OBJECT BY MULTIPLYING HIS SCALE BY THE SPECIFIED NUMBER.
(0.1x = SMALLER, 10x = LARGER)



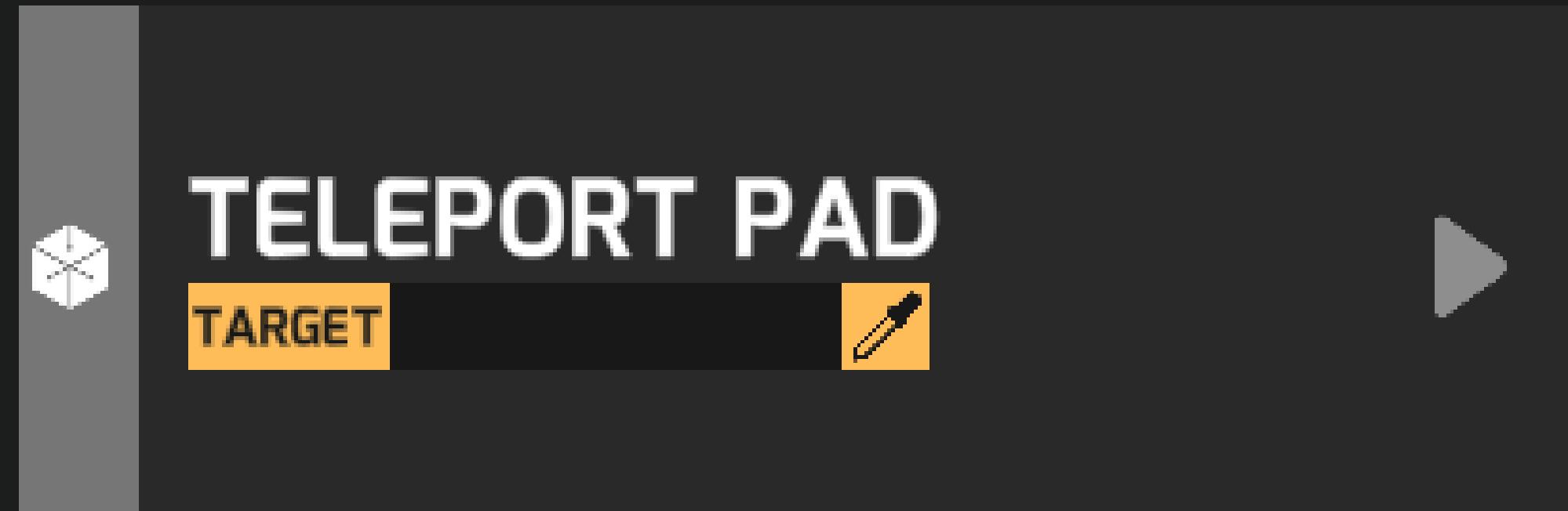
I KNOW THE HALO EFFECT MAKES THE CROP LOOK BAD I'LL FIX IT

SPECIAL OBJECTS #3



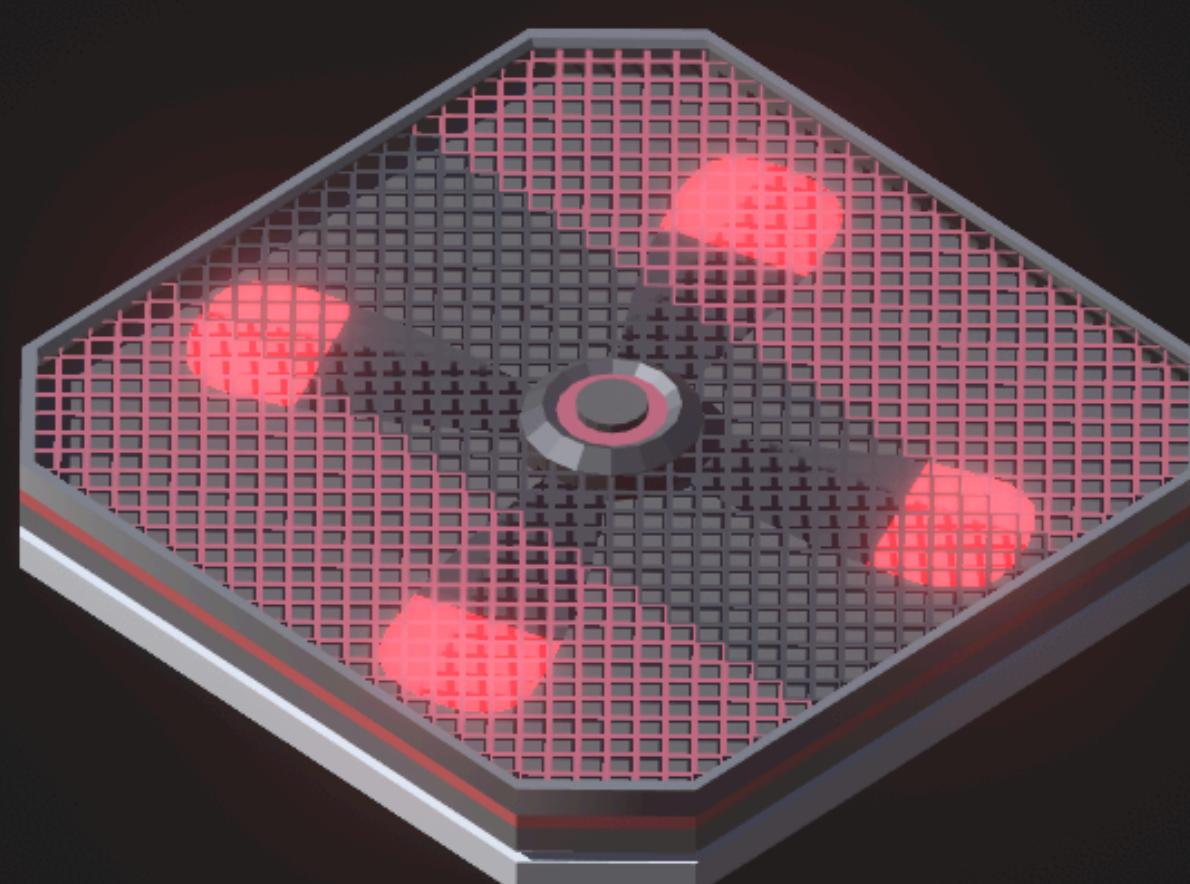
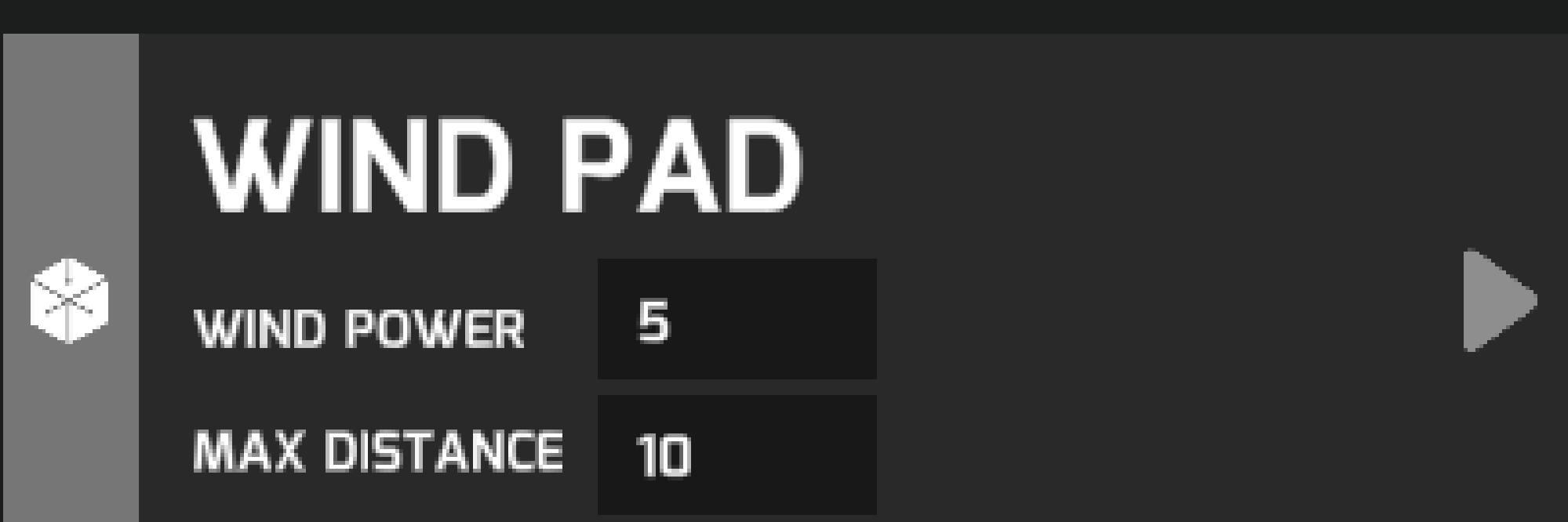
TELEPORT PAD

TELEPORTS ANYTHING THAT TOUCHES IT TO A TARGET OBJECT. YOU CAN ALSO PICK ANOTHER PORTAL AS A TARGET TO CREATE A LOOP. OBJECTS WILL MAINTAIN SPEED WHEN CROSSING PORTALS.



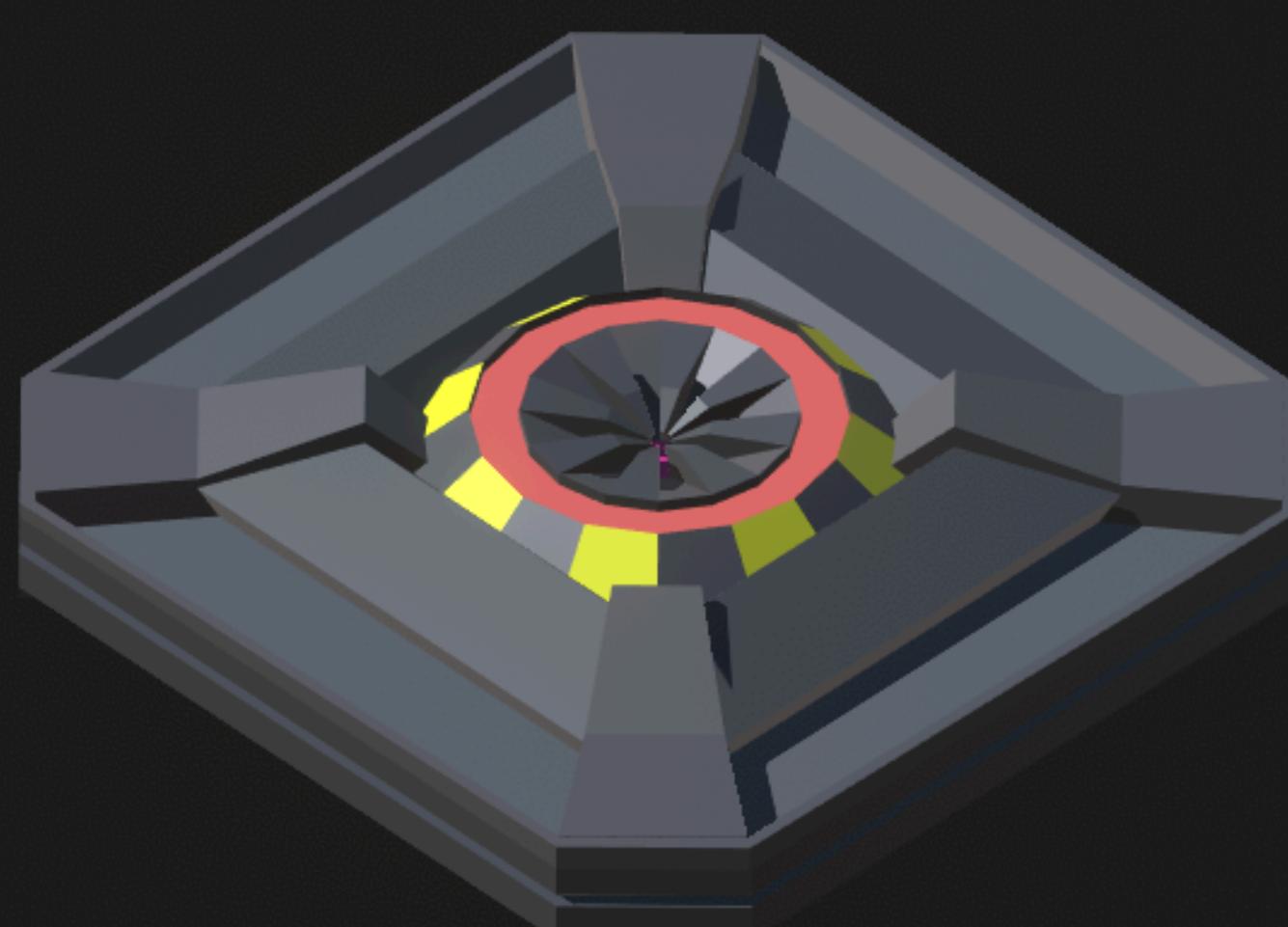
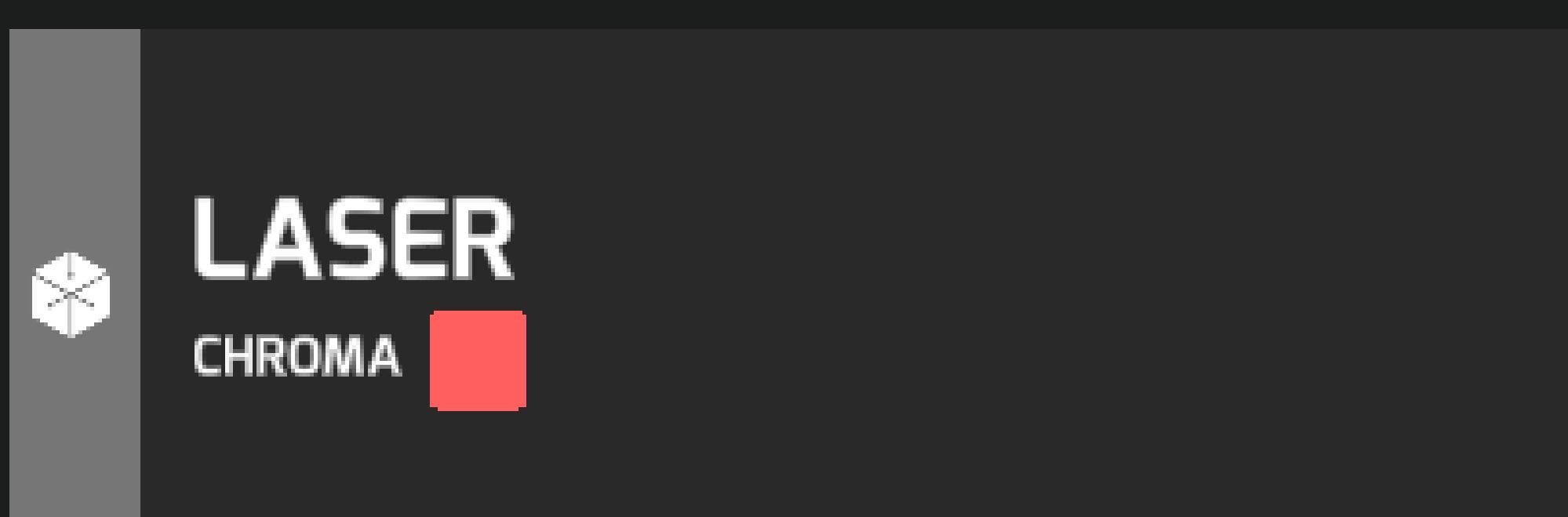
WIND PAD

BLOWS OBJECTS OR PLAYERS AWAY IF SET TO POSITIVE POWER, SUCKS THEM IN IF SET TO NEGATIVE POWER. A MAX DISTANCE OF EFFECT CAN BE SPECIFIED.

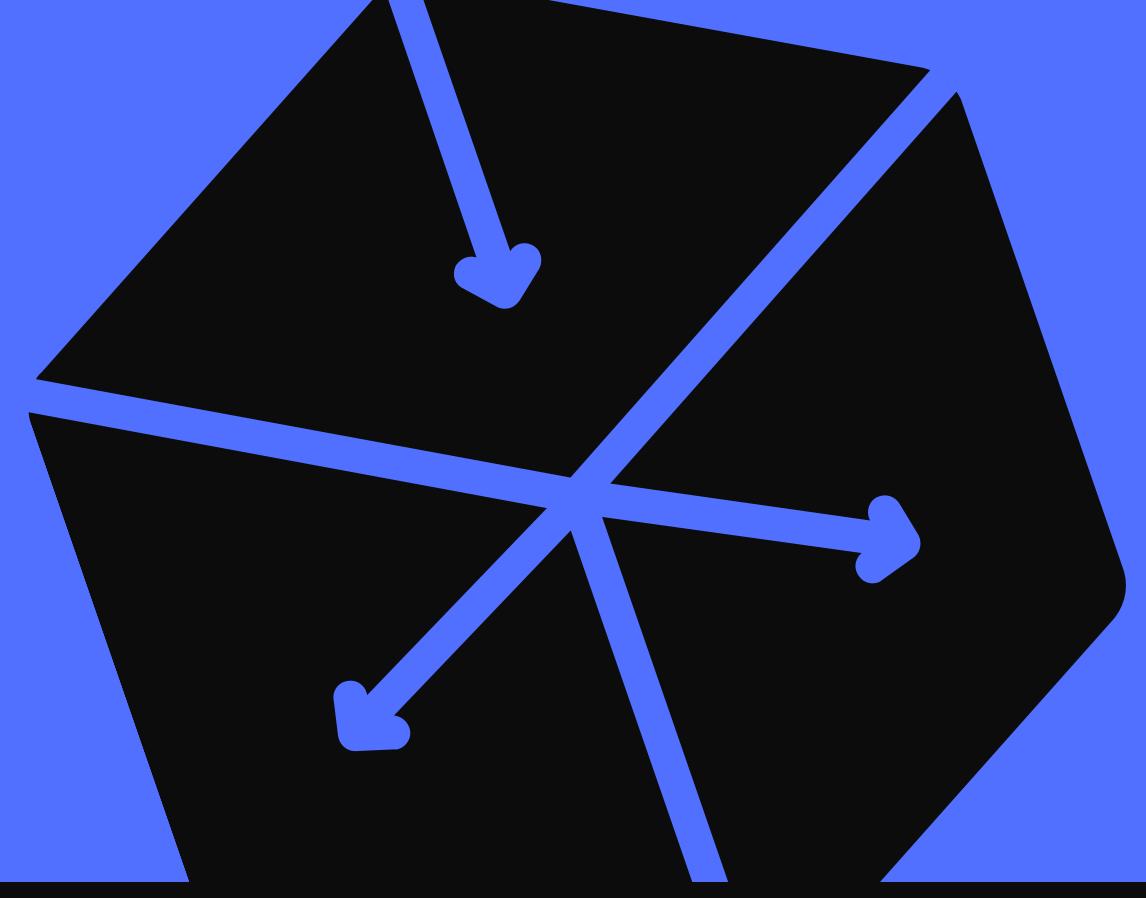


LASER PAD

SHOOTS A LASER BEAM OF THE SPECIFIED COLOR. LASERS WILL ALSO KILL PLAYERS, DESTROY BREAKABLE OBJECTS AND CROSS PORTALS.

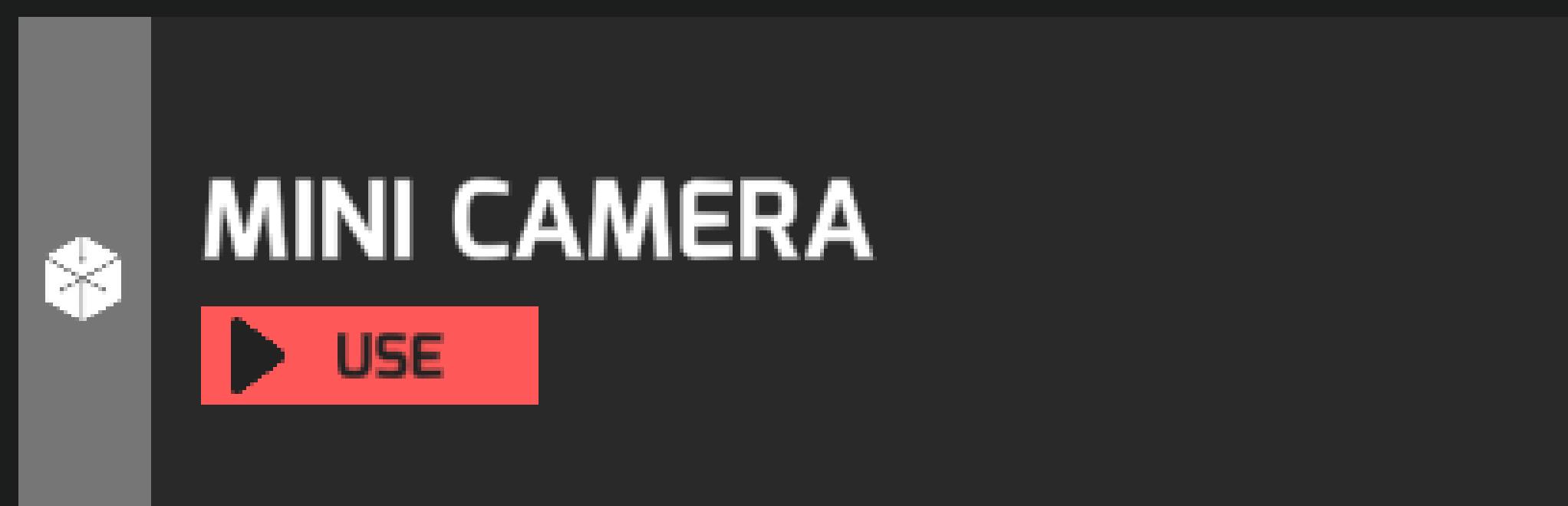


SPECIAL OBJECTS #5



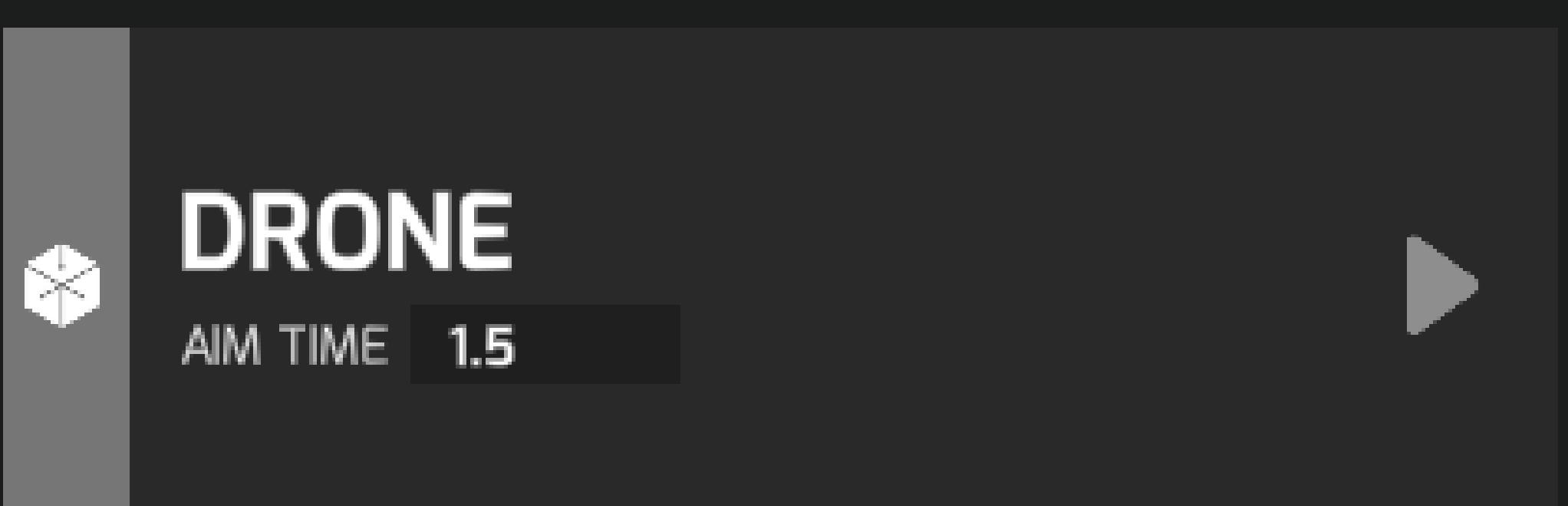
MINI CAMERA

IF CLICKED UPON, ALLOWS TO SEE THROUGH IT BY CLICKING THE **USE** BUTTON. YOU CAN ALSO SELECT ANOTHER MINICAMERA WHEN LOOKING THROUGH ONE.



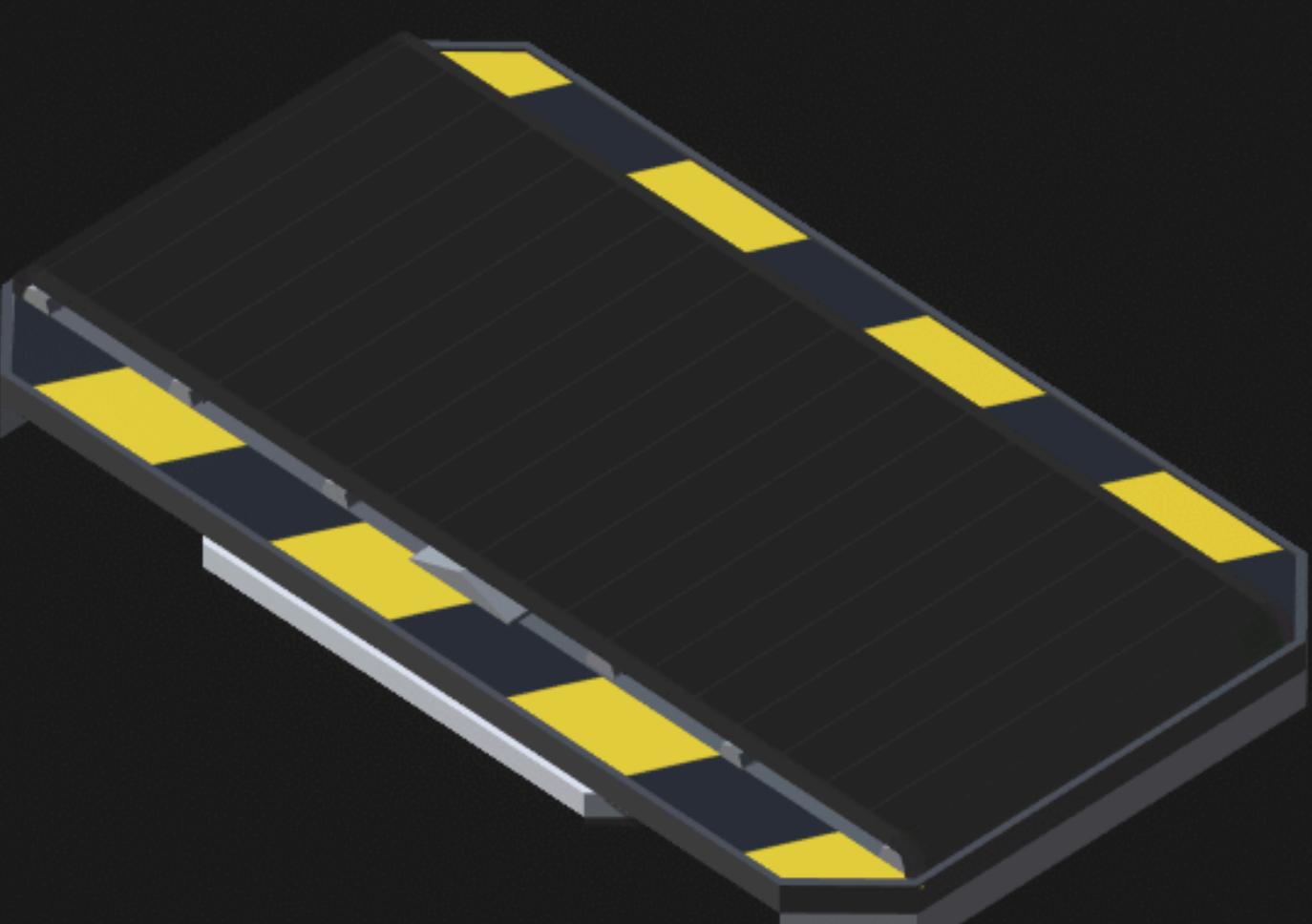
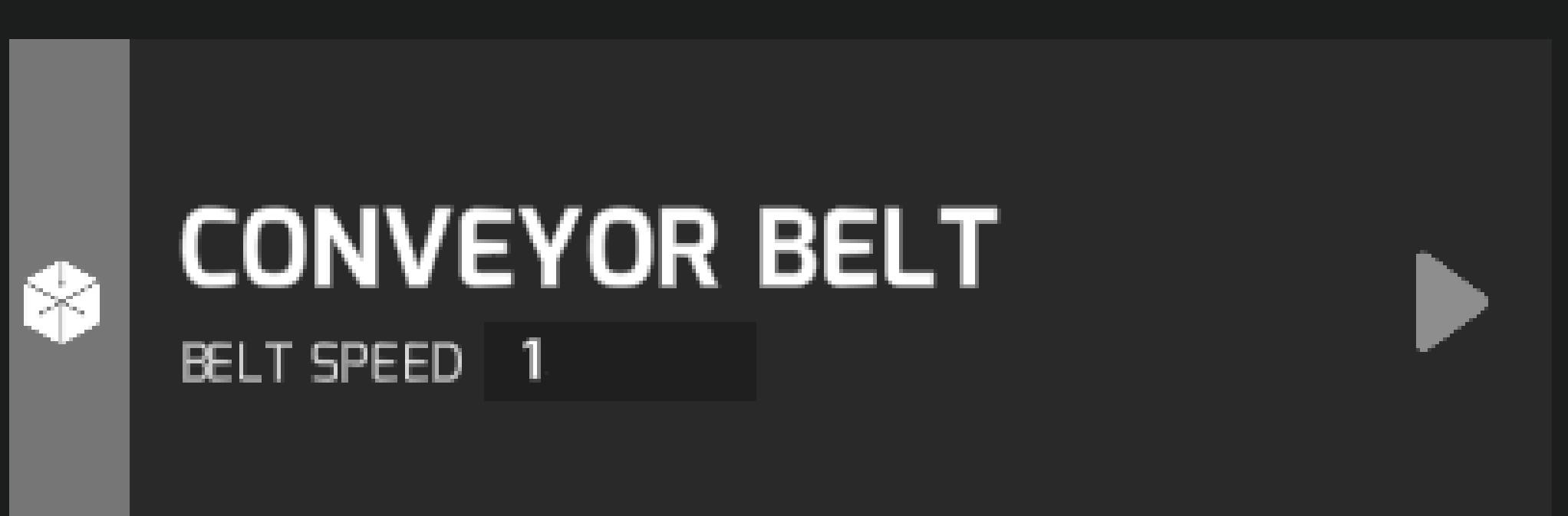
DRONE

A DRONE WILL TARGET AND SHOOT ANY PLAYERS OR **PHYSICS ENABLED OBJECTS** WHEN THEY WALK INTO ITS LIGHT. BREAKING LINE OF SIGHT ABORTS THE SHOT. TIME REQUIRED FOR SHOOTING A TARGET AFTER SEEING IT CAN BE MODIFIED WITH **AIM TIME**.

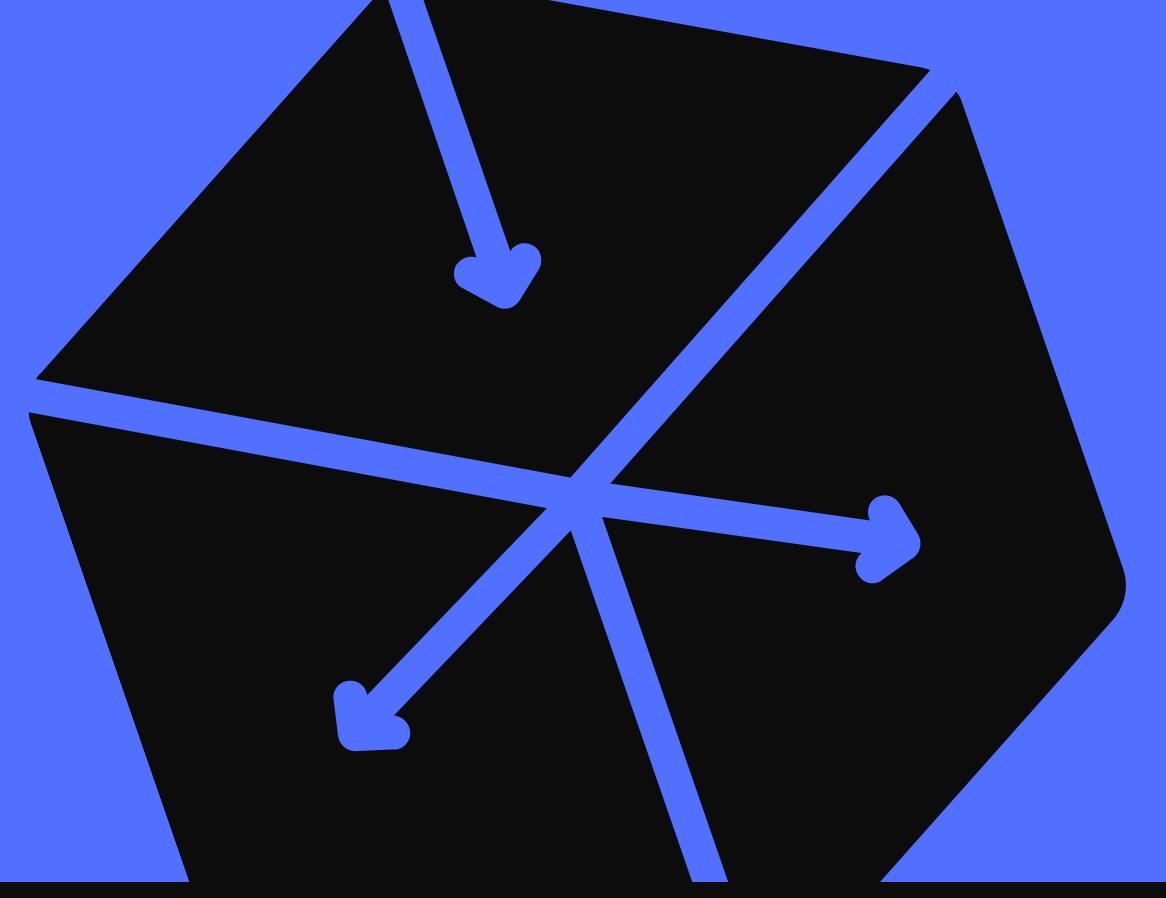


CONVEYOR BELT

DRAGS OBJECTS THAT LAND UPON ITS SURFACE WITH THE SPECIFIED SPEED.



SPECIAL OBJECTS #6

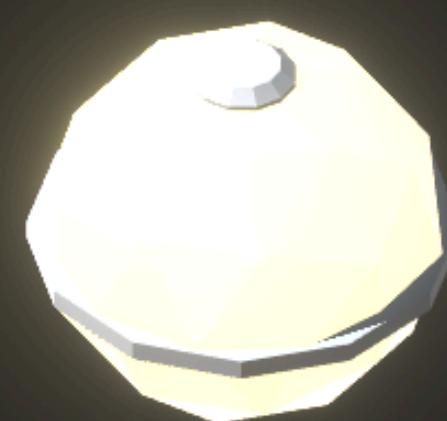


LIGHT

A POINT LIGHT THAT ILLUMINATES ITS SURROUNDINGS. YOU CAN SPECIFY ITS POWER, THE MAX DISTANCE OF EFFECT AND THE COLOR.

LIGHT

POWER	1
MAX DISTANCE	10
CHROMA	<input type="color" value="#FFFFFF"/>



SPEED PAD

GIVES A SHORT SPEED BURST TO ANYTHING THAT TOUCHES IT. IF IT'S A PLAYER, YOU CAN CONFIGURE NEW VALUES FOR ITS MOVEMENT SPEEDS.

SPEED PAD

SPEED BURST	25
NEW WALK SPEED	3.5
NEW RUN SPEED	7
NEW CROUCH SPEED	1.75

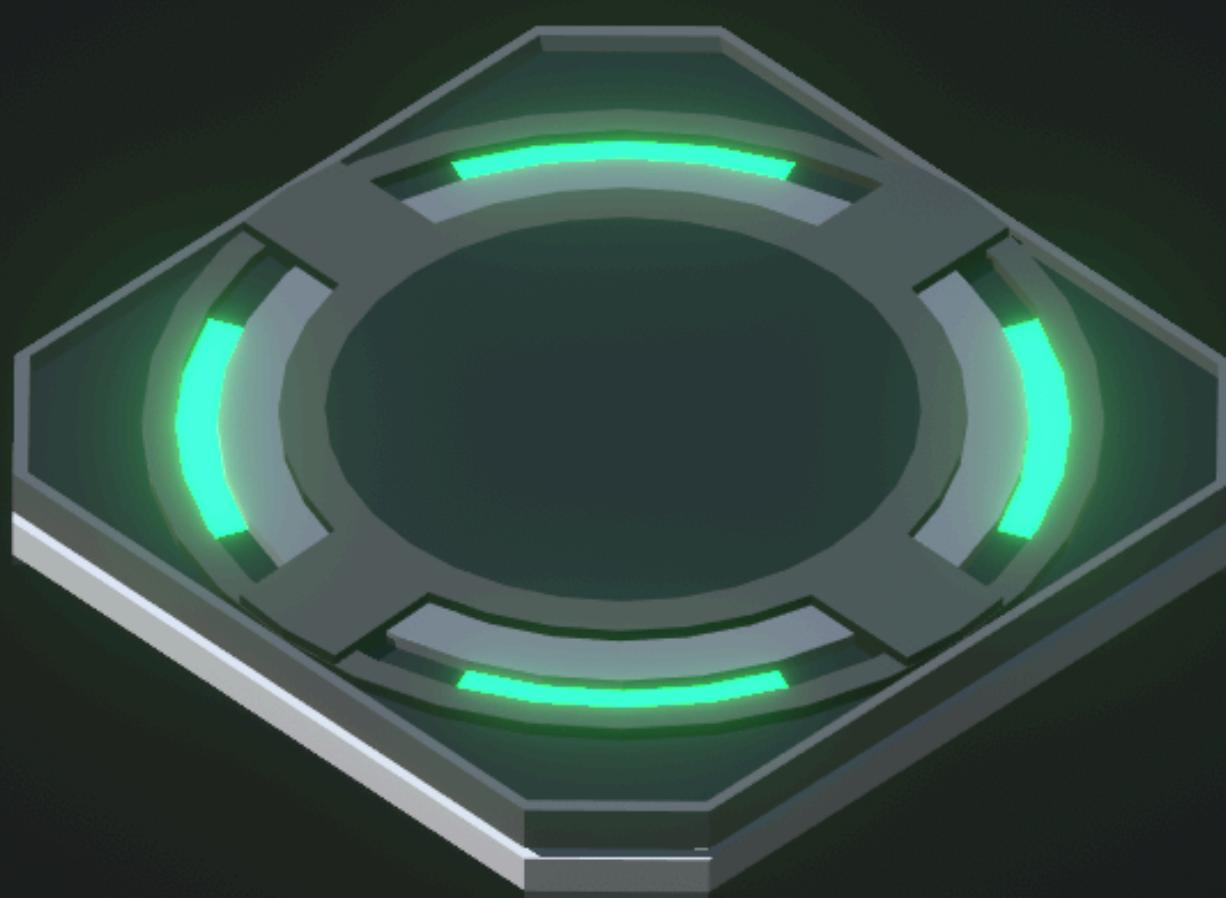


TIME PAD

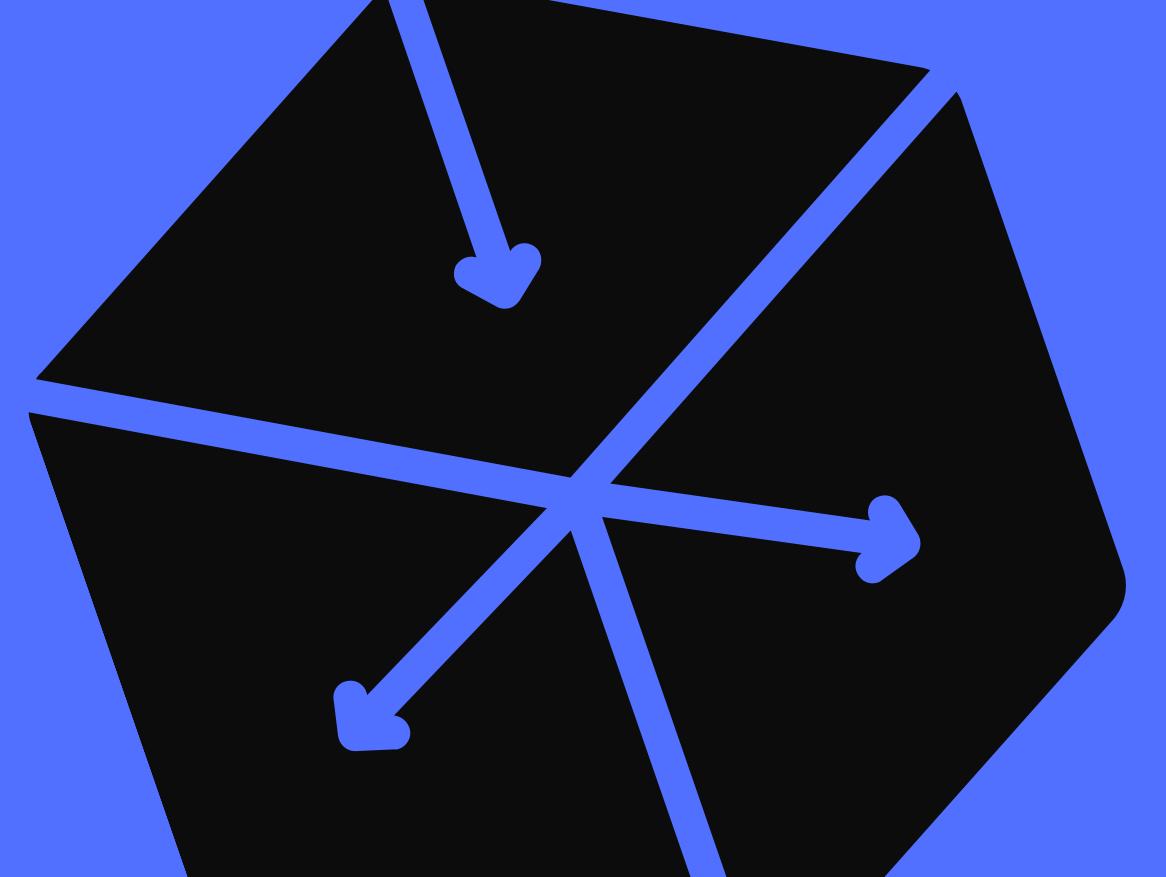
ALLOWS YOU TO CHANGE THE FLOW OF TIME, EITHER GLOBALLY OR JUST FOR THE OBJECT THAT LANDS ON IT.

TIME PAD

NEW TIMEFLOW	1
GLOBAL	<input checked="" type="radio"/>



SPECIAL OBJECTS #7



CHECKPOINT

IF A PLAYER TOUCHES A CHECKPOINT HE WILL RESTART FROM THERE WHEN A GAME OVER IS TRIGGERED.
CHECKPOINTS PERSIST ACROSS DIFFERENT SESSIONS.

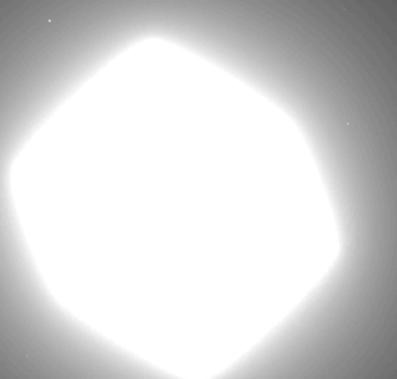
 **CHECKPOINT**



GOAL

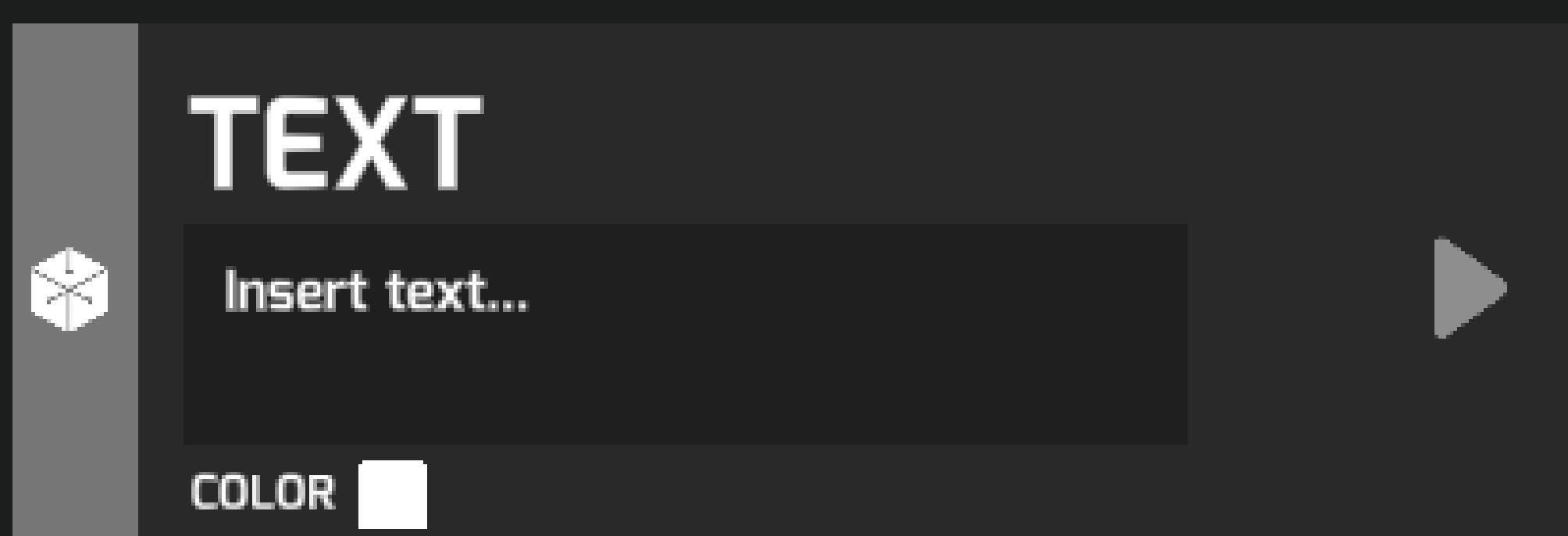
THE END OF A LEVEL. IF THE PLAYER GETS CLOSE A CUTSCENE WILL PLAY AND THE LEVEL WILL END.

 **GOAL**



TEXT

A 3D TEXT WHOSE COLOR CAN BE SPECIFIED.
RICH FORMATTING ETC... IS ALSO SUPPORTED.



AB[

THE REST OF THE MANUAL IS CURRENTLY UNDER CONSTRUCTION.

THANK YOU FOR UNDERSTANDING!

-FILI