1. PIXEL ART MONSTER - DUNGEON

Thank you for purchasing this asset pack. For any question, please email to *support@cainos.net*

2. QUICK GUIDE

First, just play around in the demo scene to see each monster and their skin variations.

Drag and drop one of the monster prefabs in "Cainos\Pixel Art Monster - Dungeon\Prefab" into your scene and then you can control it with your mouse and keyboard.

For every monster prefab, there are 3 scripts attached to it:

"Pixel Monster" script for controlling the animation of the monster,

"Monster Controller" script for controlling the movement of the monster

"Monster Input Mouse and Keyboard" script for feeding player inputs to the "Monster Controller" script.

Generally, you would let an AI rather than players to control the monsters. In this case, delete the "Monster Input Mouse and Keyboard" script and let your AI to feed in the input values to the controller script, or you can only keep the "Pixel Monster" script and take full control of the monster's movement by yourself.

3. SCRIPT EXPLANATION

3.1 Pixel Monster

Script for controlling the animation of the monster.

Properties in the Runtime foldout will be modified by "Monster Controller" script.

Animator

Reference to the animator object inside the monster prefab.

Renderer

Reference to the mesh renderer inside the monster prefab.

Fx

Reference to the object that contain special effects inside the monster prefab. Can be left empty.

Die Fx Prefab

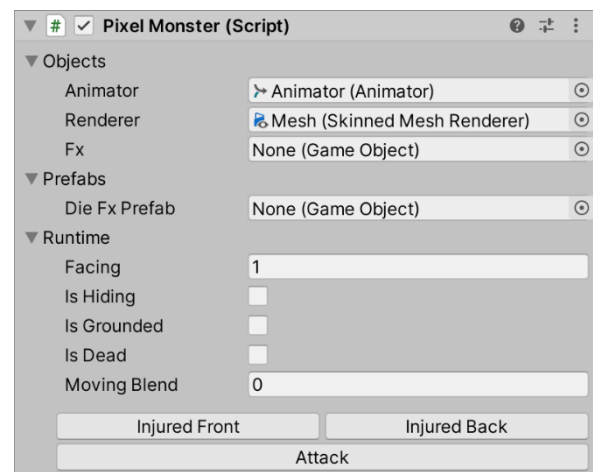The special effects object to instantiate when the monster dies. Can be left empty.

Facing

The monster's facing.

-1: Facing left   1: Facing right

Is Hiding

Is the monster hiding? Only works for Mimic.

Is Grounded

Is the monster on ground?

Is Dead

Is the monster dead?

Turn this on will only let the monster play the die animation. If you also want to stop the monster's movement. Turn on the "Is Dead" property of the controller script instead.

Moving Blend

Moving animation blend.

0.0: Idle   0.5: Walk   1.0: Run

Injured Front

Play "Injured Front" animation.

Injured Back

Play "Injured Back" animation.

Attack

Play attack animation.

3.2 Monster Controller

Script for controlling the monster's movement. It will modify some of the parameters in the "Pixel Character" script to control animation.

Default Movement

Default movement type, walk or run.

Walks Speed Max

Max walking speed.

Walks Acc

Walking Acceleration.

Run Speed Max

Max running speed.

Run Acc

Running Acceleration.

Air Speed Max

Max move speed while in air.

Air Acc

Air acceleration.

Ground Brake Acc

Braking acceleration while on ground.

Applied when there is no movement input.

Air Brake Acc

Braking acceleration while in air.
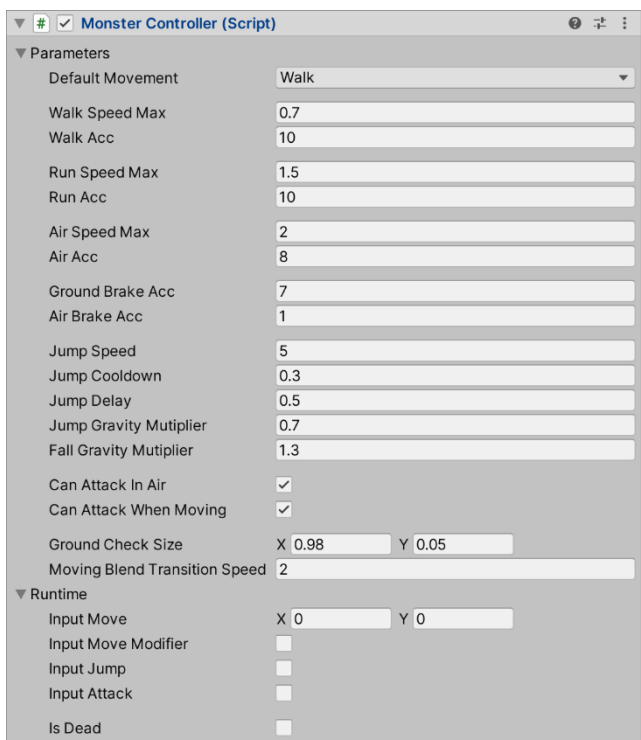
Applied when there is no movement input.

Jump Speed

Speed applied to the character when jump.

Jump Cooldown

Time needed to be able to jump again after landing.

Jump Delay

Time it takes from the moment the jump input is triggered to the moment the monster actually jumps.

During this time, the jump prepare animation will be played to achieve a more realistic jump behavior, and you will need to press the key for a little while until the monster actually jump.

If you do not need this, you can set it to 0.

Jump Gravity Multiplier

Gravity multiplier when the monster is jumping.

Set it to lower value so that the longer you press the jump button, the higher the monster can jump.

Fall Gravity Multiplier

Gravity multiplier when monster is falling.

Can Attack in Air

Can the monster perform attack action while in air?

Can Attack When Moving

Can the monster perform attack action while moving? When turned off, it also forbids the monster to move while in attack animation.

Ground Check Size

Size of the box on character's bottom to determine whether the character is on ground.

Moving Blend Transition Speed

The transition speed when modifying the "Moving Blend" property in "Pixel Monster" script.

Input Move

Movement input, x for horizontal, y for vertical, x and y should be in [-1.0, 1.0].

Input Move Modifier

Input to switch between walk and run.

Input Jump

Jump input.

Input Attack

Attack input.

Is Dead

Is the character dead?

When turned on, it will also turn on the "Is Dead" property on "Pixel Monster" script and stop the monster's movement.

3.3 Monster Flying Controller

Same as "Monster Controller" script, but for monsters that can fly.

Speed Max

Max moving speed.
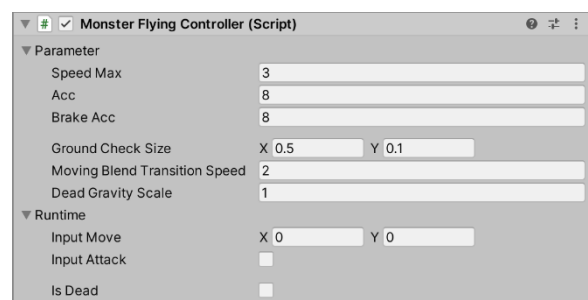
Acc

Moving Acceleration.

Brake Acc

Braking acceleration

Applied when there is no movement input.

Ground Check Size

Size of the box on character's bottom to determine whether the character is on ground.

Moving Blend Transition Speed

The transition speed when modifying the "Moving Blend" property in "Pixel Monster" script.

Dead Gravity Scale

Gravity scale when the character is dead.

Flying monsters will have their gravity scale set to 0 when there are alive. So, this parameter actually controls whether the flying monster should fall to the ground when it is dead.

Input Move

Movement input, x for horizontal, y for vertical, x and y should be in [-1.0, 1.0].
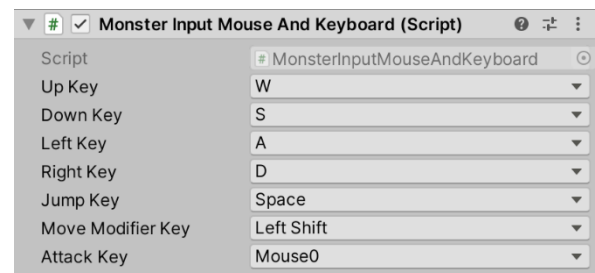
Input Attack

Attack input.

Is Dead

Is the character dead?

When turned on, it will also turn on the "Is Dead" property on "Pixel Monster" script and stop the monster's movement.

3.4 Monster Input Mouse and Keyboard

Script for feeding player inputs to "Monster Controller" script using mouse and keyboard.

# ✓ Monster Input Mouse And Keyboard (Script)		
Script	# MonsterInputMouseAndKeyboard	
Up Key	W	
Down Key	S	
Left Key	A	
Right Key	D	
Jump Key	Space	
Move Modifier Key	Left Shift	
Attack Key	Mouse0	

4. 2D LIGHTING SUPPORT

Support for 2D lighting is achieved with additional shader.

Select all the materials in "Cainos/Pixel Art Monster – Dungeon/Material" and change their shader to "Cainos/Pixel Art Monster – Dungeon/Transparent – 2D Lit"
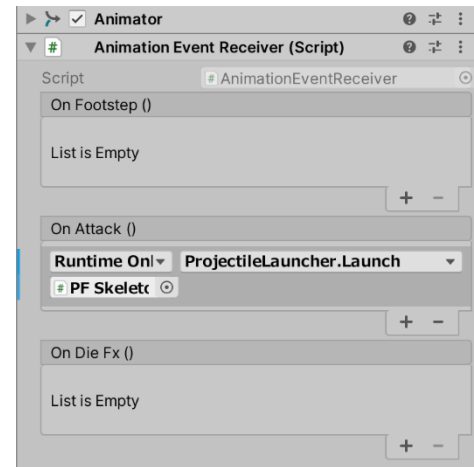
30 Materials	
Shader	Cainos/Pixel Art Monster - Dungeon/Transparent - 2D Lit
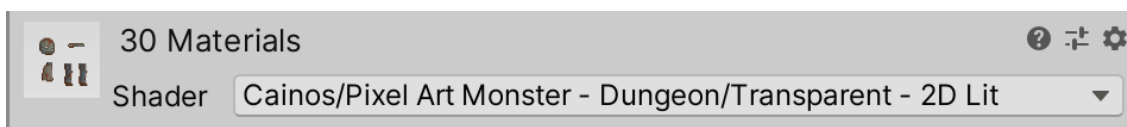
5. OTHER

5.1 Animation Event and Event Receiver

There are animation events already set up as "OnFootstep" and "OnAttack" at the monster's animation files.

At the "Animator" object inside a monster prefab, there is a "Animation Event Receiver" script attached to it, which will receive these events and can be used to trigger some functions when the event is fired.

For example, in the "PF Skeleton – Archer" prefab, the "OnAttack" event is used to trigger the "Launch" function of the "Projectile Launcher" script, so the archer skeleton can actually shoot an arrow.


5.2 About Monster Prefabs

For every kind of monster, there is only one original prefab, and the skin variations are set up as prefab variant of that original prefab. In each prefab variant, only the material of the mesh is overridden.

5.3 Custom Sort Axis

It is recommended that you set "Transparency Sort Mode" to "Custom Axis" and "Transparency Sort Axis" to (0,0,1) at the graphics settings.
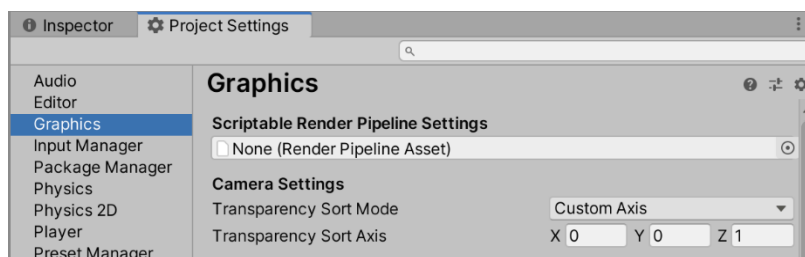

5.4 Sorting Order Glitch with Multiple Monster

You may see some glitch when two monsters are too close. It happens when the two monsters take up the same z space. Give them different z position value will solve the problem.

You can set the monster's z scale to a smaller value like 0.1 (but avoid setting it to 0), so that it takes up less z space.

When the two monster are too close

and their position.z values are all at 0.0

You can see their sprites got mixed together
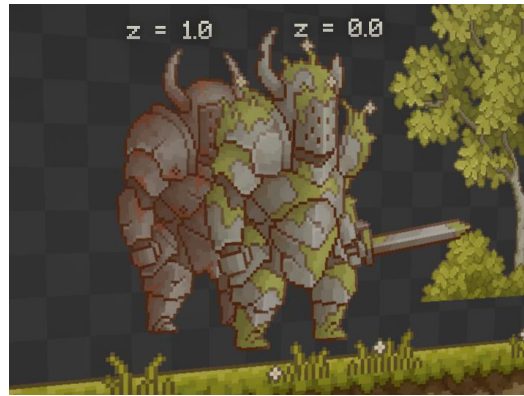
Give them different position.z values

Displayed in 3D view

Now they are properly displayed

5.5 Skin Weights

For best animation quality, in [Project Settings] -> [Quality], [Skin Weights] should be set to at least [2 Bones].