

# PIXEL ART MONSTER - DUNGEON

Thank you for purchasing this asset pack. For any question, please email to [support@cainos.net](mailto:support@cainos.net)

## 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                    | Controlling the appearance and animation of the monster.                     |
| Monster Controller               | Controlling the movement of the monster.                                     |
| Monster Input Mouse and Keyboard | Reading mouse and keyboard input and feed into 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.

## MONSTER SCRIPTS

### Pixel Monster

Script for controlling the appearance and animation of the monster.

Properties in the **Runtime** foldout should only be modified in the runtime except Facing.

Some properties in the **Runtime** foldout will be modified by **Monster Controller** script.

|               |  |
|---------------|--|
| Renderers     | Reference to all the renderers inside the monster prefab.  |
| Animator      | Reference to the animator object inside the monster prefab.  |
| Fx            | Reference to the object that contain special effects inside the monster prefab.<br>Can be left empty.  |
| Die Fx Prefab | The special effects object to instantiate when the monster dies.<br>Can be left empty.   |
|               |  |
| Alpha         | Controls the transparency of the entire monster.   |
| Facing        | The monster’s facing.<br>Can be changed in editor to set the character’s initial facing.   |
| Is Hiding     | Is the monster hiding.<br>Only works for Mimic.  |
| Is Grounded   | Is the monster on ground.  |
| Is Dead       | Is the monster dead?<br>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. |
| Moving Blend  | Moving animation blend.<br>0.0: Idle      0.5: Walk      1.0: Run  |
|               |  |
| Attack        | Play attack animation.   |
| Injured Front | Play [Injured Front] animation.  |
| Injured Back  | Play [Injured Back] animation.   |

### 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.<br>Applied when there is no movement input.   |
| Air Brake Acc                 | Braking acceleration while in air.<br>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 fired to the moment the monster actually jumps.<br>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.<br>If you do not need this, you can set it to 0. |
| Jump Gravity Multiplier       | Gravity multiplier when the monster is jumping.<br>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.   |
| Moving Blend Transition Speed | The transition speed when modifying the [Moving Blend] property in [Pixel Monster] script.  |
| Ground Check Size             | Size of the box on character's bottom to determine whether the character is on ground.  |
| 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.<br>When turned off, it also forbids the monster to move while in attack animation.  |
|                               |   |
| 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 monster dead?<br>When turned on, it will also turn on the [Is Dead] property on [Pixel Monster] script and stop the monster’s movement.  |

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<br>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.<br>Flying monsters will have their gravity scale set to 0 when there are alive.<br>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 monster dead?<br>When turned on, it will also turn on the [Is Dead] property on [Pixel Monster] script and stop the monster’s movement.  |

Monster Input Mouse and Keyboard

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

LIGHTING SUPPORT

Universal Render Pipeline 2D Lighting

Import files from **Patch - URP 2D Lit** located at the root folder of the asset.

It will replace current monster shaders and some materials with URP 2D Lighting supported version.

Make sure your 2D lighting is properly set up so the character can be displayed correctly.

Universal Render Pipeline 3D Lighting

Import files from **Patch - URP Lit** located at the root folder of the asset.

It will replace current monster shaders and some materials with URP 3D Lit supported version.

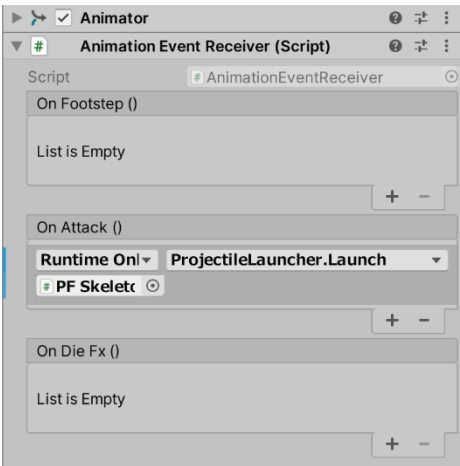
OTHER

Animation Event and Event Receiver

There are animation events already set up as **On Footstep** and **On Attack** 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 **On Attack** event is used to trigger the **Launch** function of the **Projectile Launcher** script, so the archer skeleton can actually shoot an arrow.

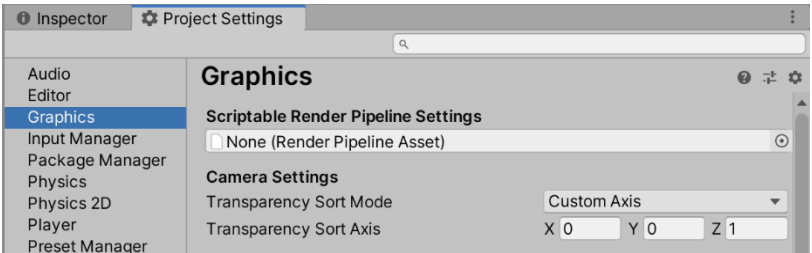


About Monster Prefabs

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.

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.



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

Skin Weights

For best animation quality, in **Project Settings/Quality**, **Skin Weights** should be set to at least **2 Bones**.

Other

Skin Weights

2 Bones

▼