

Top Down Weapon Pack

If you have any questions, or suggestions for improvements, please email robert.wells@gandhigames.co.uk.

Attribution

The external resources used in this pack can be found below.

Sprites are provided by BigRookGames and can be downloaded from: <http://www.bigrookgames.com/files/UndeadEmpire2DAssets.zip> see <http://www.youtube.com/watch?v=5rvbbtqZh4c> for more information.

Gun Shot Audio by Luke.RUSTLTD : <http://opengameart.org/content/gunloop-8bit>

Additional Resources

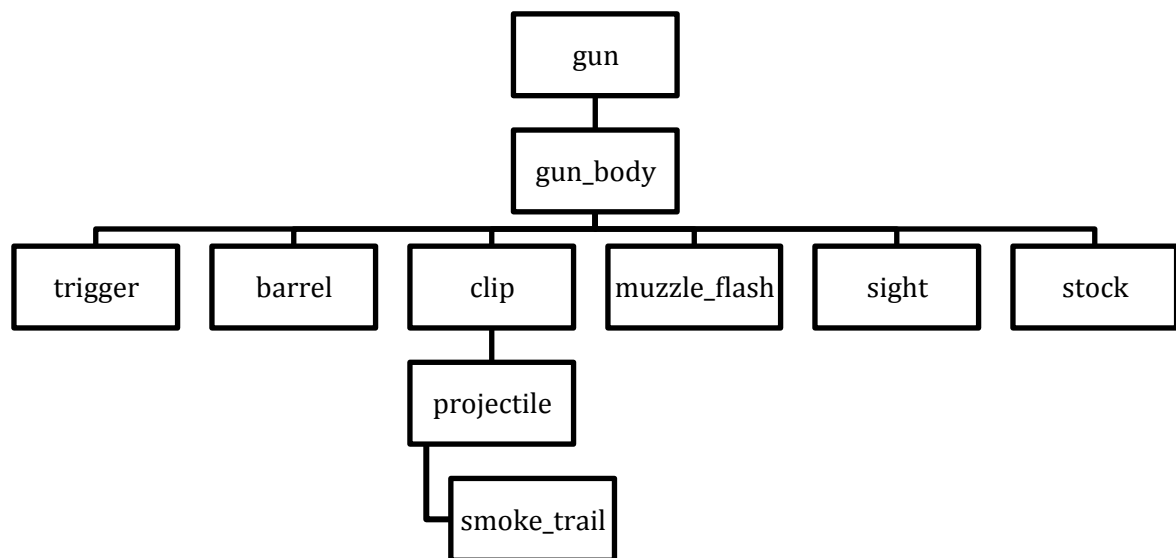
The below links to audio, while not included or affiliated with the package in anyway, are sounds that work well with the bolt and ice gun, and rocket launcher. Once downloaded to add them to the gun, add the clip to the gun_barrels "Fire Sounds" (see the gun component hierarchy for more information).

Explosion audio by Michel Baradari: <http://opengameart.org/content/2-high-quality-explosions>

Ice and electric audio by qubodup: <http://opengameart.org/content/ice-electricity-magic>

Gun Component Hierarchy

Each weapon includes some or all of the components shown below. Each component has its own function. If creating your own weapon from scratch use the hierarchy below as a guideline; i.e. attach `gun_body` as a child component of `gun` and attach `trigger`, `barrel` etc. as a child of `gun_body`.



Gun Component Overview

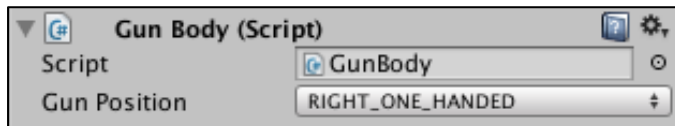
gun



Used to select whether the gun is one-handed, two-handed, or dual wield. This updates the player's sprite accordingly when a weapon is picked up.

gun_body

The `gun_body` is the container for other components and also has the weapons sprite.



Gun Position: the position of the gun on the player. Options are right_one_handed, right_dual_wield, left_dual_wield, and both_two_handed.

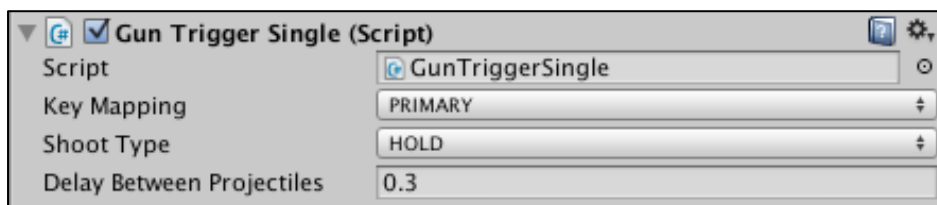
Having two gun_bodies (one set as right_dual_wield and the other left_dual_wield) will allow you to dual wield any weapons in this pack.

Important: Attach all components (except “gun”) as a child of this component.

gun_trigger

There are two different types of gun trigger: Single and burst.

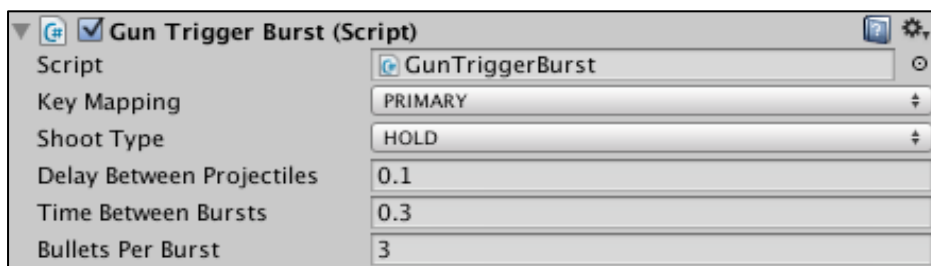
The gun_trigger defines key mapping, shoot type (click or hold mouse button), and how quickly the gun shoots.



Key Mapping: primary is right-click, secondary is left-click.

Shoot Type: hold or click mouse button to fire.

Delay between projectiles: the speed at which the gun can shoot. Lower numbers equals a faster shoot rate akin to a machine gun.



The burst trigger has two extra parameters.

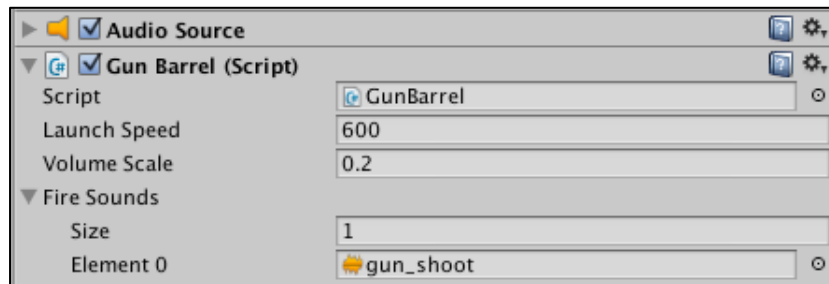
Time Between Bursts: how quickly bursts are fired.

Bullets Per Burst: the number of projectiles in each burst.

gun_barrel

There are two types of gun_barrel: Gun Barrel and Gun Barrel Delayed.

Important: The position and rotation of the barrel are important, as this will dictate the position/angle of the projectile.



Launch Speed: determines how quickly the projectile is launched from the gun.

Requires an audio source. Responsible for playing gunshot sounds.

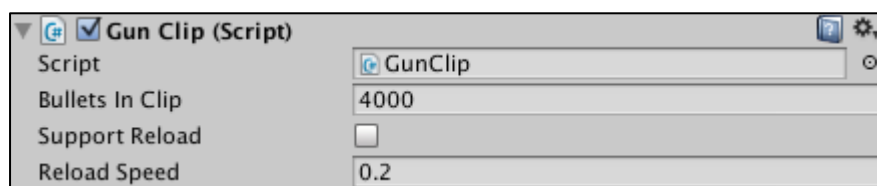


The delayed fire barrel can be used to create a more erratic fire rate. This can be seen in the gatling gun in the example scene. Three delayed fire barrels were used.

A random number is chosen between the parameters Min Fire Delay and Max Fire Delay. After this amount of time has passed the projectile is fired.

Can include any number of barrels i.e. the shotgun has five barrels at different angles to create the spread effect.

gun_clip



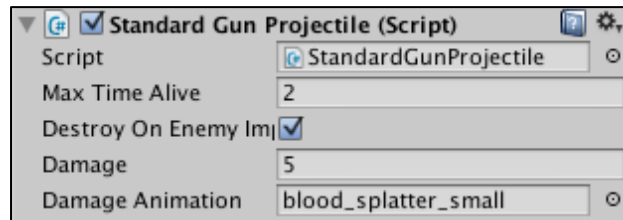
Acts as an object pool for bullets fired from this gun. When a projectile is removed from the scene it is disabled and added to the gun_clip to be re-used. This minimises expensive creation and destruction of objects.

gun_projectile

There are three different types of projectile: standard, seeking, and special.

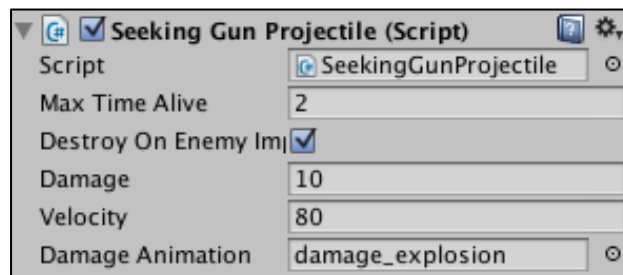
Important: You should add the projectile you wish the gun to fire as a child object of the gun_clip.

Standard Projectile



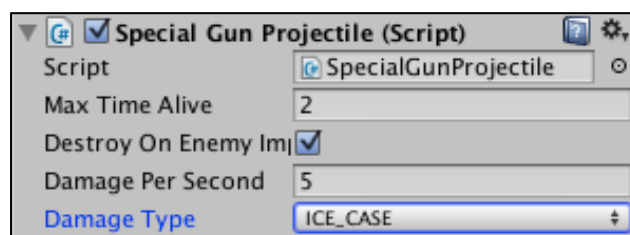
The standard projectile is used by most guns in the demo scene. Once fired, it is propelled forward at the rate defined by the gun_barrels “launch speed”. It applies damage and initiates a damage animation on collision with an object with the tag “Enemy”. You can toggle whether the bullet is removed from the scene on impact; for example, in the demo scene the sniper projectile is not removed on impact and can hit a number of enemies. Max Time Alive defines how long the bullet can remain in the scene; if a projectile does not hit a target within this period it will be removed anyway.

Seeking Projectile



The seeking projectile has many of the same variables as the standard projectile plus an additional Velocity. This refers to the velocity applied to steer the projectile towards its target.

Special Projectile



The Special Projectile differs from a standard projectile in two ways: the damage animation and the damage type.

The damage type can be selected using the Damage Type selection box. You currently have two choices: ICE_CASE and CHAIN_LIGHTNING. Both types of damage can be seen in the demo scene by using the ice gun and bolt gun respectively.

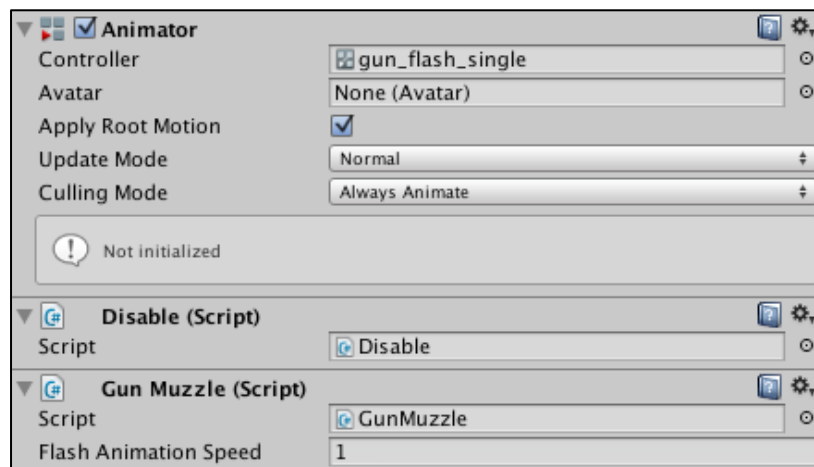
Normal projectiles apply damage once; special projectiles apply damage over time. Damage Per Second sets how much damage is applied each second.

gun_muzzle

Optional component: add to a gun to include muzzle flashes.

Important: The position and rotation of the muzzle flash defines how the muzzle flash is shown in the scene.

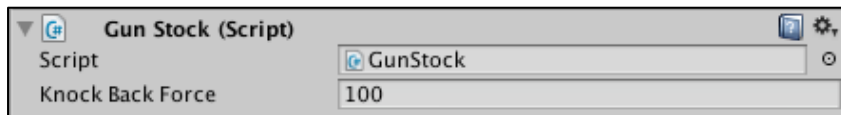
Different guns will have different sized muzzle flashes, as such there are a number of different muzzle flashes under Resources -> Gun Components -> Muzzle Flashes.



The guns muzzle flash requires two scripts. The first “Disable” is called by the flash animation to disable the muzzle flash when the animation is finished playing. The second “Gun Muzzle” sets the animation speed;

gun_stock

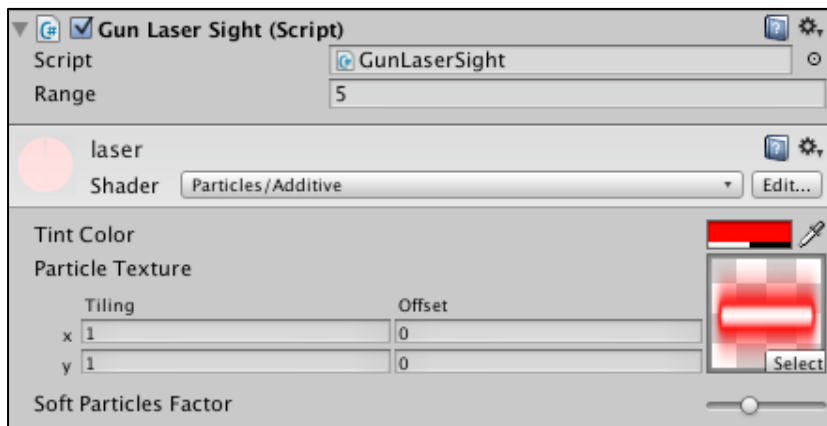
Optional component: include to add a knockback force when the gun is fired. This will move the character, by a small amount, in the opposite direction of the projectile. For example, the rocket launcher in the example scene has a small knockback force when fired.



Knock Back Force: force applied to the character when the gun is fired.

gun_sight

Optional component: attach to a gun to add a laser sight (see sniper in demo scene for example).



The GunLaserSight script is responsible for handling collisions with other game objects in the scene and changing the length of the laser accordingly.