

Spray Pattern Generator for Unity

This utility lets you create a Spray Pattern and Recoil for a weapon.

You can use one of the examples already made to create your own custom weapon (Spray Pattern Generator/SPG/Examples).

Follow the steps provided below or watch a tutorial [video](#).

1. Duplicate one of the example prefabs.
2. Create a new weapon asset (Assets>Create>Tools>Spray Pattern Generator>Create a weapon)
3. In the “Weapon” field in the Inspector window select the previously created weapon prefab.
4. Create a new spray pattern (Tools>Spray Pattern Generator)
5. Type in Spray pattern size (16 or 32 preferred)
6. Click “Generate”
7. Click the array buttons to generate a spray pattern (keep in mind that the “Spray size” equals to weapon magazine capacity)
8. Type in the “Spray name” and click “Generate spray pattern”
9. Select the previously created weapon asset and edit the fields in the Inspector window:
 - Weapon Name - your weapon name.
 - Current Type - “Automatic” for Full-Automa weapons; “Semiauto” for Semi-Auto; and “Shotgun” for shotguns.
 - Spray Pattern - select your spray pattern asset.
 - Fire Rate - fire rate of your weapon. For example, a value of 1 will shoot only 1 bullet each second; a value of 0.1 will shoot 10 bullets per second, so the lower the value the higher the fire rate.
 - Reload Time - how long does it take to reload your weapon.
 - Weapon Change Time - how long does it take to change to another weapon in your inventory.
 - Spray Pattern Multiplier - how strong does the shooting follow the spray pattern.
 - Spray Moving Multiplier - how strong does the player's movement affect the spray pattern.
 - Speed - how fast does the recoil follow the spray pattern.

10. Select the weapon prefab you created previously.
11. In the 'Inspector window>Weapon (Script)' select your weapon asset in the "Weapon" field.
12. Place the weapon prefab in the Scene (optional).

- Character controls are based on the “Third Person Character Controller”. You can adjust the camera position if you need it to be in first-person.
- You can drop weapons by pressing the “G” button on the keyboard
- To change weapons use the mouse scroll wheel
- The main script of the Spray Pattern recoil can be found in ‘Spray Pattern Generator/SPG/Scripts/SprayPattern.cs’
- When creating a new character don’t forget to set the tag to “Player” and Layer to “PlayerSelf”
- Collision matrix:



- Bullets shoot out of the weapon's muzzle and the crosshair position may need adjustments for different positions.
- My website is <https://evaldasbu.github.io/unity/>