

## Automatic guns sounds explained.

Each of the automatic weapons have a preview file named like this:

`gun_machinegun_auto_heavy_shot_00_automatic_preview_01`

This file will help give you a guide as to how the automatic gun should sound in game.

`gun_machinegun_auto_heavy_shot_first_00`

Automatic weapons first shot does sound different from the subsequent shots. This is due to some reverb reflections not being heard until at least the second shot is fired.

Also the gun mechanisms may take one shot to settle into a rhythm and tone, etc. This may only be a subtle difference. But worth the effort if you want realistic gun sounds.

Ideally this sound should always be played first, then followed by the random shots

(`gun_machinegun_auto_heavy_shot_01 - 08`).

`gun_machinegun_auto_heavy_shot_01 08`

These sounds are the basic shooting sounds. Generally these sounds would be set to play in random order. While all these sounds may sound exactly the same. They are in fact different shots with subtle differences. Overall these tiny subtleties will greatly help the realism of the sounds.

`gun_machinegun_auto_heavy_shot_tail_only_00`

This is a basic gun tail sound. For best results it should be set it up to play with each single gunfire, however to avoid multipliable tails playing simultaneously you should setup fade out times that best suit your weapon. Ideally you should only hear the tail once the gun as stopped shooting or has a brief pause.

`gun_machinegun_auto_heavy_shot_last_with_tta_00`

Automatic weapons last shot can also sound different from the previous shots. Maybe due to some of the reasons above. I've included this file to give you more options when setting up your automatic weapons. Although generally speaking this sound is more aimed towards cutscenes and sound design. The reason is since in-game code may not be able to know when the player will fire the last shot in a sequence (other than when the clip has 1 bullet left).

### ----Example for Best Results---

- 1) `gun_machinegun_auto_heavy_shot_first_00` - Always played on the first shot in a sequence only. (e.g when no shot is fired for x time, use this sound first)
- 2) `gun_machinegun_auto_heavy_shot_01 - 08` - Played in random for all other gun shots.
- 3) `gun_machinegun_auto_heavy_shot_tail_only_00` - Triggered at the same time of each shot. Ideally it will fade out quickly when/if the next shot plays. This should be timed to your weapons rate of fire.

Gun tail fade out example.

> = Gun shot

-- = Gun tail

\ = fade out

1) Correct way

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```

2) Incorrect way (this will sound muddy with too many tails all at once)

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```

This example may depend on the type of weapon and sound you want. Also what is possible from your engine, technology and/or programmers.  
Generally if the weapon sounds muddy or cluttered it is possible that the sounds are overlapping too much.