

War Riders Weapon Info



1. Gun Types, Characteristics and Cases

The guns in War Riders are always evolving with new guns frequently being introduced. More premium weapons will be released during the early days of the gun sale, while less powerful weapons will be introduced closer to the beta version of the game. When a certain gun is removed from the case, the only way to acquire this gun would be to purchase it from other users.

The primary distribution of the weapons in the game is organized via weapon cases that can be opened using BZN or ETH. Weapon cases are produced by a Smart Contract called Gun Factory, which is the only contract that is allowed to produce guns for the game. All weapons in War Riders resemble modern-day firearms combined with various electronic components for remote control and intelligent shooting. There are four main categories of weapons that will be produced by the Gun Factory:

- *Machine Guns*
- *Rocket Launchers/Anti-tank Weapons*
- *Flamethrowers*
- *Lasers*

However, only Machine Guns and Rocket Launchers will be available during the alpha phase. Please stay tuned for updates on the other two categories. The guns are distinguished by main weapons and secondary weapons.

1.1. Main Weapons

Main weapons are installed on the roof of the vehicle and can rotate 360 degrees. They come with a special gun shield that protects the weapon and gives it a unique appearance. The gun shield may come with a certain skin, which does not provide any special ability and is purely cosmetic. The skin makes the gun rare and desirable. There will be a limited amount of skins released, and some skins will be extremely rare. When a player opens a loot box, the gun will have a random skin or no skin at all.



1.2. Secondary Weapons

Secondary weapons are smaller and less powerful versions of main weapons. These weapons are installed on the front of the vehicle, one on each side, and have limited rotation angle (i.e they can only shoot forward). Secondary weapons have no gun shield and are sold as a pair in one NFT token.



1.3. Weapon Cases

Three main weapon cases will be initially provided by the Gun Factory:

- *Premium case*
- *Mid-grade case*
- *Regular case*

Each case will include a different mix of weapons, which is randomly generated based on the gun rarity indexes and the specified amount of skins in each case. The randomization takes into account a sample of the 100 upcoming cases, which guarantees that any sample of 100 guns sequentially opened will have all specified weapons in strict proportions (based on the rarity indexes).

1.4. Supply Overview

The game introduces a single ERC-721 weapon smart contract. The total number of guns that can be produced by the Gun Factory is uncapped. However, the emission rate is strictly limited and enforced in the code:

- *Premium case - 20 per day*
- *Mid-grade case - 100 per day*
- *Regular case - 200 per day*

The above supply limits will be automatically imposed via a Gun Factory contract on Nov 12, 2019 and cannot be changed by anyone. All limits are enforced on a *monthly basis*. The supply limits before Nov 12, 2019 are higher to accommodate all buyers in case of an initial rush:

First month of the sale:

- *Premium case - 5,000 per month*
- *Mid-grade case - 20,000 per month*
- *Regular case - 30,000 per month*

Second month of the sale:

- *Premium case - 2,500 per month*
- *Mid-grade case - 10,000 per month*
- *Regular case - 15,000 per month*

1.5. Custom Barrels

The secondary and main guns will also have different types of barrels. There are only four types of barrels that will be released in the alpha phase:

- *Regular*
- *Carbon (premium)*
- *Gold (premium)*
- *Platinum (premium)*

Premium barrels are much more rare than regular barrels. When opening a loot crate, the gun barrel will be also be chosen randomly, so the rarity will depend on luck.



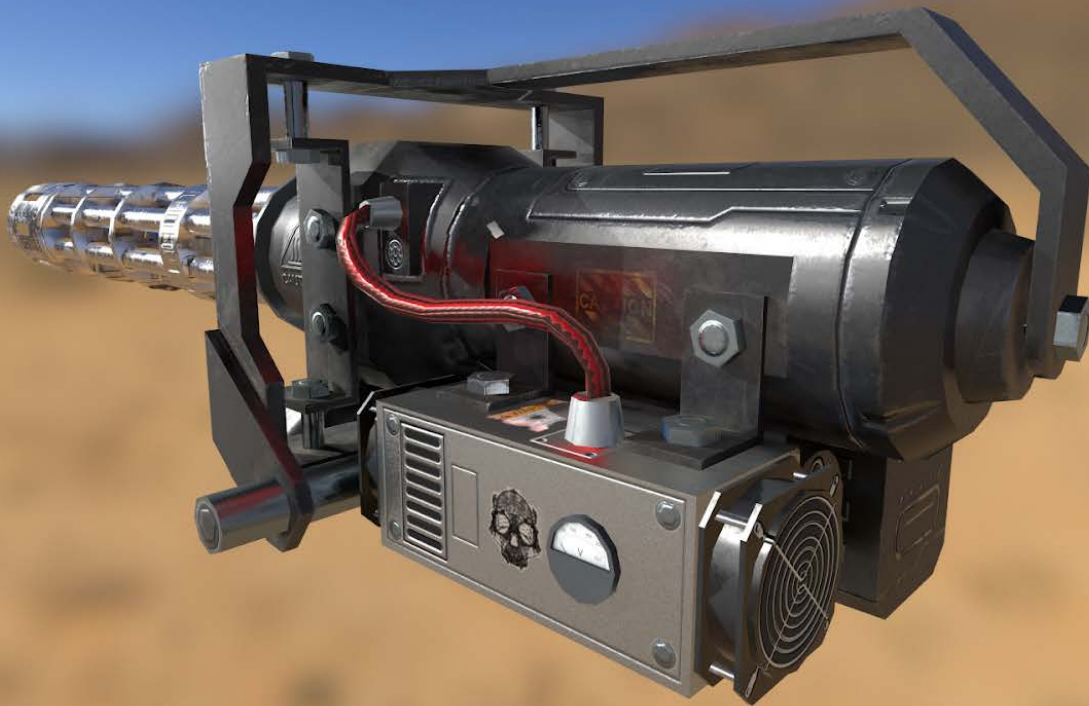
1.6. Premium and Standard Weapons

The case-opening experience will start with 3 premium gun types, 24 unique combinations of weapons and countless numbers of skins. Combined with random gun stat generation, virtually every weapon in the Wasteland will be unique.

The standard weapons will be placed on the vehicle by default if the vehicle has no other weapon installed. The system will randomly assign either the Machine Gun or Rocket Launcher to the main and secondary weapon slots.

PREMIUM WEAPONS

M134C MINIGUN



The M134C Minigun is a crypto-version of the classic six-barrel rotary machine gun with a high, sustained rate of fire. It features a Gatling-style rotating barrel with electric motor and an old cryptocurrency miner that controls the rotation and automatic firing.

Gun parameters:

Weapon type: *Machine gun*

Ammo type: *0.30" bullet*

Rate of fire: *400 – 600 rpm*

Muzzle velocity: *450 – 800 ft/s*

Effective range: *355 – 630 ft.*

Max range: *1416 – 2512 ft.*

Damage level: *1 – 3*

Stability level: *1 – 6*

Gun rarity index: *1 – 10*

Barrel: *Regular, Carbon, Gold, Platinum*

M2C BROWNING



The M2c Browning is a computer-controlled version of an automatic, recoil operated, air-cooled machine gun with disintegrating metallic link-belt that is used to feed the ammunition into the weapon. Traditional spade grips and trigger were replaced with a digital trigger that is controlled by a small, single-board computer.

Gun parameters:

Weapon type: *Machine gun*

Ammo type: *.50 BMG bullet*

Rate of fire: *300 – 450 rpm*

Muzzle velocity: *550 – 985 ft/s*

Effective range: *433 – 776 ft.*

Max range: *1729 – 3089 ft.*

Damage level: *1 – 4*

Stability level: *2 – 8*

Gun rarity index: *1 – 10*

Barrel: *Regular, Carbon, Gold, Platinum*

M5 MAAWS



The M5 MAAWS is the next generation recoilless anti-tank weapon with extended barrels for maximum effective range. Modified with an autoloader, this gun features continuous firing with no need for manual reloading. Three portable computer units with power supplies provide the weapon with necessary power and logic for fully automated firing.

Gun parameters:

Weapon type: *Rocket launcher*

Ammo type: *84 mm anti – tank rocket*

Rate of fire: *55 – 100 rpm*

Muzzle velocity: *400 – 580 ft/s*

Effective range: *315 – 457 ft.*

Max range: *1259 – 1823 ft.*

Damage level: *5 – 10*

Stability level: *5 – 10*

Gun rarity index: *1 – 10*

Barrel: *Regular, Carbon, Gold, Platinum*

STANDARD WEAPONS

MACHINE GUN



The standard Machine Gun is a fully automatic, belt-fed firearm with a single computer unit for continuous adaptive shooting. The standard Machine Gun features a competitive rate of fire with a decent shooting range. In addition, impressive reliability in the combat and intermediate rounds make this weapon a good starting kit.

Gun parameters:

Weapon type: *Machine gun*

Ammo type: *5.56×45mm NATO*

Rate of fire: *200 – 450 rpm*

Muzzle velocity: *300 – 690 ft/s*

Effective range: *236 – 544 ft.*

Max range: *945 – 2168 ft.*

Damage level: *1*

Stability level: *1 – 4*

Gun rarity index: *1*

Barrel: *Regular only*

ROCKET LAUNCHER



The standard Rocket Launcher is a fully automatic rocket-propelling device with a long barrel and standard autoloader. Capable of firing heavy anti-tank rockets at a decent muzzle velocity, this weapon is capable of causing serious damage to the enemy. Simplicity and reliability makes the standard Rocket Launcher kit a good starting weapon.

Gun parameters:

Weapon type: *Rocket launcher*

Max range: 724 – 1514 *ft.*

Ammo type: *66 mm anti – tank rocket*

Damage level: 4 – 6

Rate of fire: 40 – 90 *rpm*

Stability level: 3 – 7

Muzzle velocity: 230 – 490 *ft/s*

Gun rarity index: 1

Effective range: 276 – 386 *ft.*

Barrel: *Regular only*

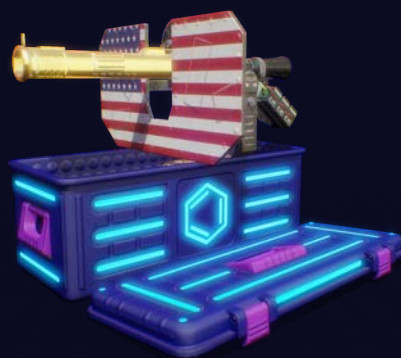
1.7. Skins

An exclusive, rare skin is what makes any gun desirable on the market. At War Riders, there are 5 categories of skins that convey different information about the rarity of the skin:

- Common - usually 40% of all skins
- Rare - around 30% of all skins
- Epic - approximately 15% of all skins
- Legendary - around 10% of all skins
- Exclusive - less than 5% of all skins

New skins are constantly being added to the mix, which will make the case-opening experience fun and exciting for a long time. You can also request a skin via Twitter, Telegram or Discord.

1.8. Premium case



The premium weapon case contains only main top-of-the-line weapons with the highest chance of receiving Exclusive skins. This case contains:

- Common skins - 10%
- Rare skins - 20%
- Epic skins - 35%;
- Legendary skins - 25%
- Exclusive skins - 10%.

Case stats:

Weapon types: *Main guns only*

Max range: 1102 – 3089 *out of 3089 ft.*

Ammo type: 0.30", .50 BMG, 84 mm

Damage level: 1 – 10 *out of 10*

Rate of fire: 60 – 600 *out of 600 rpm*

Stability level: 3 – 10 *out of 10*

Muzzle velocity: 350 – 985 *out of 985 ft/s*

Gun rarity index: 5 – 10 *out of 10*

Effective range: 276 – 776 *out of 776 ft.*

Barrel: *Regular, Carbon, Gold, Platinum*

1.9. Mid-grade case



The mid-grade weapon case contains main and alt weapons with a high chance of receiving Legendary skins. This case contains:

- No skin - 15%
- Common skins - 25%
- Rare skins - 30%
- Epic skins - 15%
- Legendary skins - 13%
- Exclusive skins - 2%

Case stats:

Weapon types: *Main and alt guns*

Max range: 945 - 2918 out of 3089 ft.

Ammo type: 0.30", .50 BMG, 84 mm

Damage level: 1 - 9 out of 10

Rate of fire: 50 - 570 out of 600 rpm

Stability level: 2 - 8 out of 10

Muzzle velocity: 300 - 930 out of 985 ft/s

Gun rarity index: 2 - 7 out of 10

Effective range: 236 - 732 out of 776 ft.

Barrel: *Regular, Carbon, Gold, Platinum*

1.10. Regular case



The regular weapon case contains main and alt weapons with a high chance of receiving Rare skins. This case contains:

- No skin – 30%
- Common skins – 40%
- Rare skins – 25%
- Epic skins – 4%
- Legendary skins – 2%

Case stats:

Weapon types: *Main and alt guns*

Ammo type: *0.30", .50 BMG, 84 mm*

Rate of fire: *40 – 550 out of 600 rpm*

Muzzle velocity: *230 – 900 out of 985 ft/s*

Effective range: *181 – 709 out of 776 ft.*

Max range: *724 – 2824 out of 3089 ft.*

Damage level: *1 – 8 out of 10*

Stability level: *1 – 7 out of 10*

Gun rarity index: *1 – 5 out of 10*

Barrel: *Regular, Carbon, Gold, Platinum*

1.11. Shooting Range Calculation

The bullet derives its maximum and effective shooting range from muzzle velocity and type of ammo. The greater the muzzle velocity is, the farther the gun will shoot. At War Riders, the game engine uses the following formula to calculate the shooting range of the projectile:

$$S = \frac{\ln(1 + v_0Dt)}{D}$$

S – shooting range

v₀ – muzzle velocity

D – projectile coefficient

t - projectile travel time

Calculating Projectile Coefficient:

$$D = \frac{C_d P S_v}{2m}$$

C_d - drag coefficient

P - air density

S_v - surface area of projectile

m - mass of projectile

Calculating Projectile Travel Time:

$$t = \sqrt{\frac{2y_0}{g}}$$

y_0 - the height at which the shot was fired

g - gravitational acceleration

2. Weapon Case Opening Details and Economics

War Riders will initiate a gun case opening in September 2019. The process will start privately for the warriors who RSVP'd to the sale. These players will have a chance to purchase guns before the sale is available to the general public.

The gun sale is handled by a case-opening smart contract on the Ethereum, called “the Gun Factory” contract, that “produces” the gun cases. If you wish to participate in the case opening, you must download a MetaMask extension for your web browser or use a mobile Ethereum wallet, such as Trust. This will allow you to create an Ethereum wallet capable of receiving ERC-721 and ERC-20 tokens. You will need ETH or BZN to participate in the sale. We have created [this](#) guide to help you get started.

The digital weapons offered for sale on our website are finished products that include a digital image and respective non-fungible token that reside on the Ethereum blockchain. These digital guns represent a unique crypto-collectible that is intended for entertainment purposes only.

2.1. Case-Opening Mechanics

All cases have a starting price in USD, which will increase by a certain percentage with every case opened; therefore, the earlier you buy, the less you pay. Even though the price will be displayed in USD, you can only open the case by paying with either BZN or ETH. The BZN value will be pegged to USD according to the [Internal Wasteland Rate](#). The ETH value will be fed into the smart contract from an Oracle system, which means that the ETH price per case will fluctuate based on a current market rate. Buyers paying with BZN will enjoy a single transaction and flawless weapon delivery, thanks to BZN 2.1! Please note that buying with BZN requires ETH, which is used to cover minting fees and other costs. When the purchase is complete,

30% of the total BZN amount spent will be burned, and 70% of BZN will go back to the Game Pool.

After the purchase, the guns will automatically appear in your wallet, gaming account, OpenSea and other marketplaces as ERC-721 tokens. You will be able to install the new shiny weapons on your war machines right away.

When opening a weapon case, players won't know exactly what kind of performance stats they are getting, as the gun is produced on the fly. Performance stats for each gun will eventually be known, but only after delivery of the weapon to the player's wallet.

2.2. Bulk case opening:

The Gun Factory will support fully automatic bulk buying with the ability to open up to 1,000 loot boxes with a single transaction. We may limit the maximum bulk opening amount during the private pre-sale. Tactical and well-equipped players will open multiple cases early on to increase chances of getting rare weapons and skins. Until now, such things were impossible because ERC-721 tokens have to be "minted" from the smart contract individually. It will take some time for the Gun Factory to deliver a large order, though guns start arriving to the user's wallet within seconds.