

# Empathy

## Cronus Zen Script for PUBG: BATTLEGROUNDS

**For Controller Players Only**  
**(Not Compatible for Mouse and Keyboard Players)**

Version: 2.00

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## Requirements

This script requires the use of the latest Cronus Zen Studio version (with 32-bit compiler enabled under 'Device' tab) as well as the latest firmware. Both of which can be found here: <https://www.cronusmax.com/downloads/>

This script also requires a keyboard to be plugged into the front left USB port (A3) of the Cronus Zen. The keyboard is used to set the current weapon you are using in-game for that profile on the script. It can also change the weapon in the Anti-recoil edit screen.

## Keyboard Setup

It is recommended that you follow the instructions on the Cronus Zen website to determine if your keyboard is compatible with the Cronus Zen. Those instructions can be found here: <https://beta.cronusmax.com/step1-setup-mouse-and-keyboard#YDOZm>

It is also important that when the keyboard is determined to be compatible and recognized by the Cronus Zen, you goto the Device tab in Cronus Zen Studio, locate the Mapping section and unmap every keyboard key from being mapped to controller buttons. Without doing this, pressing a keyboard key to set a weapon in the script will also send a controller button press to the game which would most likely cause unwanted actions. When all buttons are unmapped, press the circular shaped button (black with a blue check mark in brackets) just to the left of the Mapping section to save the mapping settings to your Cronus Zen device.

## Navigating the Script

Once the script is loaded use the following instructions to properly setup and configure the script.

### PlayStation

Hold L2 and press the 'Options' button. The 'Options' button resides near the top on the front of the controller left of the 'Triangle' button.

### Xbox

Hold LT and press the 'Menu' button. The 'Menu' button resides on the controller just to the lower right of the Xbox button.

### Navigating Menus

Use the arrow pad on your controller to navigate the menu using the Up or Down buttons.

- **Enter into menu**
  - Press A (Xbox) or Cross (PlayStation).
- **Exit out of menu**
  - Press B (Xbox) or Circle (PlayStation).
  - Settings will automatically save upon exiting the menu.

### Toggling Settings

Use the directional arrow pad to toggle settings within the script.

- **Toggle option On or Off**
  - Press Up or Down

Various menus listed below will interact differently and require further instruction(s). See their respective sections of this document for further explanation.

- *Anti-drift (Calibration)*
- *Anti-recoil*
- *Profiles*
- *Settings (Deadzone)*

## Anti-drift

Anti-drift is a unique feature only found in various scripts developed by the author of this script.

Anti-drift enhances the user's experience as it allows proper joystick control and behavior by completely eliminating stick drift once configured properly.

Anti-drift allows the script to determine the drift values a joystick may (or may not) have when a joystick is released and returned to the center position. In order to use the Anti-drift feature, a calibration process must be thoroughly performed and followed by the specific directions.

**Anti-drift is optional but highly recommended.**

### Calibration

Follow the instructions to perform the proper Anti-drift calibration:

- **Change the calibration *Joystick* by pressing LB/RB (Xbox) or L1/R1 (PlayStation).**
  - LB/L1 sets the *Joystick* to *Left*.
  - RB/R1 sets the *Joystick* to *Right*.
- **Change the calibration *Direction* by holding LT (Xbox) or L2 (PlayStation) and press the arrow pad.**
  - Hold LT/L2 and press Up to set the *Direction* to *Up*.
  - Hold LT/L2 and press Down to set the *Direction* to *Down*.
  - Hold LT/L2 and press Left to set the *Direction* to *Left*.
  - Hold LT/L2 and press Right to set the *Direction* to *Right*.
- **Performing the calibration**
  - Press A (Xbox) or Cross (PlayStation) to begin.
  - 'Waiting'
    - Slowly move the *Joystick* to the *Direction* until the LED turns green.
    - Release the *Joystick* and press A (Xbox) or Cross (PlayStation).
    - **Recommended to perform this process at least three times for each *Direction* of both *Joysticks*.**
  - 'Success'
    - Calibration was successful and the value was saved.
  - 'Failed'
    - Calibration failed and should be attempted again.
- **Post-calibration**
  - Press Right to navigate to the 'Drift Test' screen.

To reset a Anti-drift value, press and hold View (Xbox) or Share (PlayStation).

**All *Directions* must be calibrated for each *Joystick*.**

## Drift Test

'Drift Test' allows the user to see the actual values of their joysticks when the joysticks are at a resting position. Moving your joysticks around will display a real-time value of the position of the joysticks in the format (X, Y). X being the horizontal movement and Y for vertical movement. Both X and Y values range from -32768 to 32767. A value of -32768 would be maximum movement left or upwards, while 32767 would be maximum movement to the right or downwards.

**If your Joystick is moved all the way to one direction and you do not see the maximum value previously described, your joysticks may need to be replaced or the thumbsticks may not be installed on the joystick correctly.**

After a proper calibration process has taken place, the user should navigate to this screen to ensure that when the joysticks are at resting position the values shown are all 0.

**If any values displayed are not 0 and the Joysticks are at resting position, the calibration process must be performed again to determine the appropriate drift range so the script can ignore those values from being processed.**

## Drift Values

This menu simply displays the drift values the script has recognized. It has no actual use to the end-user other than allowing them to see what high-resolution Joystick values are being used by the script.

## Anti-recoil (& Rapid Fire)

The Anti-recoil in this script is a time consuming process to configure as there are 30 weapons to setup which all have their own recoil values. The user should expect to take a considerable amount of time fine tuning the recoil values within Training Mode. It is recommended that weapon recoil settings are tuned with the typical attachments you would use for that weapon. It is important to understand that when weapons are found on the ground with no attachments, they may have a slight amount of recoil or when you are using a flash hider/suppressor as opposed to a compensator muzzle attachment. Recoil values should be determined when using a compensator muzzle attachment as if the values are set using a suppressor or flash hider, when a compensator is equipped it may pull the weapon lower than desired when firing.

Fully automatic weapons will have different values compared to semi-automatic weapons.

- **Fully Automatic Weapons Recoil Settings**

- V-Beg | Begin Duration
- V-Mid | Middle Duration
- V-End
- H-Beg | Begin Duration
- H-Mid | Middle Duration
- H-End

- **Semi-automatic Weapons Recoil Settings**

- V-Recoil
- R-Recoil
- R-Speed

Semi-automatic weapons do not have horizontal (H) recoil settings, however, they include settings for Rapid Fire Recoil and Rapid Fire Speed.

The Rapid Fire speed is universal and will be applied across all semi-automatic weapons within the script. Rapid Fire is not enabled by default and instructions for enabling/disabling Rapid Fire are found in the Toggles section of this document.

### Recoil Settings

- **V-Beg or H-Beg**

- Recoil strength applied when a weapon is fired.
- Compensation will be applied for the length of Begin Duration.

- **V-Mid or H-Mid**

- Recoil strength applied after V/H-Begin recoil compensation is complete.
- Compensation will be applied for the length of Middle Duration.

- **V-End or H-End**

- Recoil strength applied after V/H-Mid recoil compensation is complete.
- Compensation will be applied until the user releases the fire button.

## Modifying Values

To modify a recoil or Rapid Fire value, use the arrow pad to select a value to modify. When a value is selected, it will be outlined in a box. Use the directional buttons (Up/Down/Left/Right) to select which value you will be modifying.

- **Increasing Values**
  - Hold LT/L2 and press Right (increases by 1).
  - Hold LT/L2 and press Up (increases by 10).
- **Decreasing Values**
  - Hold LT/L2 and press Left (decreases by 1).
  - Hold LT/L2 and press Down (decreases by 10).
- **Horizontal Values**
  - Press LB/L1 or RB/L1 to switch to the Horizontal values.

## Rapid Fire

Semi-automatic weapons may be used in single-fire mode (as intended within the game) or Rapid Fire on this script may be enabled. Each weapon has its own Rapid Fire Recoil value which will be applied when Rapid Fire is enabled and the weapon is firing.

## Quick Edit Menu

Anti-recoil values can quickly be accessed by pressing the Anti-recoil quick edit button combination.

- **Enter Anti-recoil Quick Edit**
  - Hold LT/L2 and press View (Xbox) or Share (PlayStation).



## Controller

The script supports all three controller layout types: Type A, Type B and Type C.

**It is recommended that Type B or Type C is used for maximum performance.**

*Custom controller settings are not supported at this time.*

## Options

Options are additional modifications that the script can perform to enhance your gaming experience.

The script has built-in “hair triggers.” When the script is not paused (in vehicle mode), any press to LT/L2 or RT/R2 will be converted into a maximum press.

### Auto Focus

Set ‘Auto Focus’ to ‘On’ and the script will automatically hold breath to focus your aim.

*This option will not work with the Type A controller button layout settings.*

### Fast Lean

Set ‘Fast Lean’ to ‘On’ and when you are ADS & Firing, by pressing RS (Xbox) or R3 (PlayStation), your character will quickly repeatedly lean back and forth from right to left.

This is helpful in shortrange situations where the opponent will see your player quickly leaning back and forth and it may throw off their aim.

## Profiles

The script uses two profiles which are to be set to the weapon you are currently using in the game. Profiles are set by using a keyboard attached to the Cronus Zen. Pressing the 'Switch' button set in the 'Profile Buttons' menu will switch the weapon the script is using.

It is recommended that the user sets the 'Switch' button to the same button used in-game to switch weapons, which is typically Y (Xbox) or Triangle (PlayStation). This means that everytime you switch weapons in-game, the script will also switch to the other recoil settings for that weapon.

In the event that the profile shown on the Cronus Zen is out-of-sync with the weapon used in-game, the user of the script can resync the script with the weapon in-game by holding the 'Resync' button and pressing the 'Switch' button.

### Profile Buttons

Two controller buttons must be set that determine the 'Resync' and 'Switch' buttons. Select either 'Resync' or 'Switch' by pressing Up or Down then press and hold a controller button for one second to set that button as a hotkey.

The script will also display to the screen every 3.5 seconds which weapon the current profile on the script is set to in order to help remind and/or notify the user of the weapon the script is currently set to.

To reset a Profile Button, press and hold View (Xbox) or Share (PlayStation).

### Profile Colors

This script allows the user to set customized colors for their profiles to help display to the user which weapon the script is operating on. By default, the Primary weapon will be set to blue and the Secondary will be set to purple.

- **Changing profile colors**
  - Select a profile color to edit by pressing the Up or Down button.
  - Hold LT/L2 and press Right or Left to cycle through the available colors.

## Settings

### Block Rumble

Set 'Block Rumble' to 'On' to disable rumble feedback to your controller from the game. This will stop your controller from vibrating with the exception of rumble created by the script as a notification such as when enabling/disabling Rapid Fire or when the settings are successfully saved.

### Deadzone

Although the game has deadzone settings, it is recommended that the deadzone is set on the script and the in-game settings are set to 0 for both Left and Right sticks. By using a deadzone on the script and removing it from the in-game settings, you can run lower Anti-recoil values.

Depending on your sensitivity, your Anti-recoil values may be much higher or lower than somebody else's. That being said, users who run high a high deadzone and low sensitivity may run into issues properly setting anti-recoil on high-recoil weapons such as the VSS. The lower the in-game deadzone and higher in-game sensitivity, the lower the anti-recoil values will need to be.

- **Editing Deadzone**

- Select a deadzone to edit by pressing the Up or Down button.
- The selected deadzone to edit will be highlighted with a white background.
- Hold LT/L2 and press Right or Left to increase or decrease the value by 1.
- Hold LT/L2 and press Up or Down to increase or decrease the value by 10.

### Inverted

Set 'Inverted' to 'On' if you use an inverted Y-axis for aiming. This setting is very important to configure properly or else Anti-recoil cannot function correctly.

## Toggles

Toggles are combinations of buttons that could be used to enable an option in the script. Currently the only toggle available is for Rapid Fire. A toggle is activated by holding a controller button and pressing another controller button.

### Rapid Fire

Two controller buttons must be set that determine the “hold” and “press” buttons. Select either ‘Button 1’ or ‘Button 2’ by pressing Up or Down then press and hold a controller button for one second to set that button as a hotkey.

‘Button 1’ is the “hold” button and ‘Button 2’ is the “press” button.

For example, if you set ‘Button 1’ to LT/L2 and ‘Button 2’ to X/Square, you would hold LT/L2 and tap the X/Square button to quickly toggle Rapid Fire being enabled or disabled.

To reset a toggle, press and hold View (Xbox) or Share (PlayStation).

## Changing Weapons

A keyboard is required to change weapons on the current profile of the script.

- **Assault Rifles**
  - Keys **Q** through **}** (right brace)
- **Sub-machine Guns & Light Machine Guns**
  - Keys **A** through **K** (sub-machine gun weapons)
  - Keys **L**, **colon** and **quotation mark** (light-machine gun weapons)
- **DMR & Sniper & Shotguns**
  - Keys **Z** through **M** (DMR weapons)
  - Keys **<** and **>** (Sniper and Shotgun, respectively)

For example, if you want to set your primary profile on the script to use the AKM assault rifle, you would press the **Q** key on the keyboard. If you want to set your secondary weapon, press your Profile 'Switch' button (explained in a later section of this document) and then press, for example, **Z** to set your secondary weapon to a SLR designated marksman rifle.

## Vehicle Mode

Vehicle Mode is necessary when driving a vehicle so no script features are enabled such as Anti-recoil which could be activated by simultaneously pressing the vehicle drive and brake buttons. Likewise, if Rapid Fire is enabled, Vehicle Mode must be enabled or the vehicle will not drive.

- **Enter Vehicle Mode**
  - Hold RT/R2 and press Up twice.
- **Exit Vehicle Mode**
  - Exit vehicle by pressing B (Xbox) or Circle (PlayStation).

## Developer Settings

At the very top of the script, change the line "define DEVELOPER = FALSE" to "define DEVELOPER = TRUE".

Enabling 'DEVELOPER' will launch the script with the developer's settings and Anti-recoil values. Note that the Anti-drift will have to either be calibrated or turned off as it will not be specific to your controller.

The Anti-recoil values provided through the developer's settings should act as a good start and will more than likely require adjustments based on your sensitivity settings.