# “Stronghold Strategy Guide” Site Plan

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## WDD 130

## Overview

### Purpose

Teach players who are getting in to minecraft speedrunning two major ways of locating the stronghold

### Audience

People getting into Minecraft speedrunning

## Branding

### Website Logo



## Style Guide

### Color Palette

|  |  |  |  |
| --- | --- | --- | --- |
| **Primary** | **Secondary** | **Accent 1** | **Accent 2** |
| #1C1C1E | #FFFFFF | #32CD32 | #7F00FF |

### Typography

#### Heading Font: Oswald

#### Paragraph Font: Inter

### Navigation

Home Manual Tutorial Ninjabrain Tutorial

**Content**

[Stronghold](https://drive.google.com/drive/folders/1lE7AxiaWvZUovo4C-s_14LwOH4DSjbo0?usp=sharing)

Home

**Find the End Portal.** Will you learn to measure Eyes of Ender **manually with simple math**, or will you choose the advanced route and master **Ninjabrain Bot**?

[Eye\_of\_ender.webp](https://drive.google.com/open?id=1cwSfjvVXuBp3iAjNTou1faMTvcJ4VFYD&usp=drive_copy)

[ninjabrainLogo.png](https://drive.google.com/open?id=1Xe345dHu4q79jHNO733foXjTuGdGKbE_&usp=drive_copy)

Manual

This tutorial is based on the speedrunning technique demonstrated in this video: [Minecraft Locating the Stronghold - A Speedrunner's Guide](https://www.youtube.com/watch?v=8c29j0We2VQ)

The Stronghold Triangulation method uses two throws of an **Eye of Ender** from precise locations to form a right triangle, allowing you to use trigonometry to calculate the exact distance to the Stronghold.

### Step 1: Preparation and First Throw

To make the math work, you must be able to view your in-game coordinates and angle.

1. **Display F3 Data:** Open your debug screen by pressing **F3** (Java Edition). You need to note the Facing angle
   1. [image1.png](https://drive.google.com/open?id=1YEGs07whclG_untWNwXV2R6mz9_igVLE&usp=drive_copy)
2. **The First Throw:** Throw an **Eye of Ender**. As it hovers, quickly align the green vertical line of your crosshair with the left side of the floating Eye center pixels
3. **Note the Angle:** Record the precise angle measurement shown on the F3 screen. This is **Angle 1** (e.g., -130.7 degrees)

### Step 2: Set Up the Right Triangle

To simplify the trigonometry, you must travel a specific distance at a specific angle.

1. **Turn 90 Degrees:** Rotate exactly **90 degrees** from your first measured angle (Angle 1). This ensures you are creating a right triangle (a triangle with a 90-degree angle).
   * *Example:* If Angle 1 was -130.7 degrees, your new direction should be -130.7 + 90 = **40.7 degrees**.
2. **Travel 17.5 Blocks:** Travel precisely **17.5 blocks** in this new 90-degree direction..
   * *Estimating 17.5 blocks*
     + **Sprint Jumps:** Completing **four and a half sprint jumps** is a common way to estimate this distance.

### Step 3: Second Throw and Calculation

The second throw gives you the final piece of data needed for the calculation.

1. **The Second Throw:** Throw another **Eye of Ender** from your new position (17.5 blocks away). Align your crosshair with the center of the Eye and record the new angle. This is **Angle 2** (e.g., -131.3 degrees).
   * [image2.png](https://drive.google.com/open?id=1o2xI5Ast7l4mVvyQcCHUOiDW33NQY-2H&usp=drive_copy)
2. **Calculate Angle Variance (V):** Find the absolute difference between the two angles. This difference is the angle of your triangle that corresponds to the Stronghold location.
   * **Formula:** Angle change = |Angle 1 - Angle 2|
   * *Example:* |-130.7 - -131.3| = 0.6 degrees
3. **Calculate Distance (D):** Now divide 1000 / Angle change
   * If your variance is **1 degree**, the Stronghold is approximately **1000 blocks** away
   * For our example 1000/0.6 = 1666.667 and the stronghold ends up being 1675 blocks away
   * [image3.png](https://drive.google.com/open?id=1VgVAhEawF_LgNmXFpFNK9T4XcvVcWUNq&usp=drive_copy)

### Step 4: Final Search and Dig-Down

Travel the calculated distance (D) in the direction of your second Eye of Ender's path.

1. **Final Triangulation:** Once you've traveled the estimated distance, you must pinpoint the exact chunk.
   * Turn on chunk barriers by pressing F3 + G and throw pearls until you locate the exact chunk
2. **Dig Down:** The Eye of Ender points toward the Stronghold's starting staircase, not the End Portal room.
   * The starter staircase will be centered on chunk coordinates 4, 4 so digging there will guarantee you find the stronghold.
3. **Find the Portal:** Once inside the Stronghold, navigate the corridors until you find the End Portal room. Insert the remaining Eyes of Ender into any missing slots to activate the portal.

Ninja brain calc

This page is based on this helpful video: https://www.youtube.com/watch?v=Rx8i7e5lu7g

**Ninjabrain Bot** is a utility used primarily by speedrunners to calculate the Stronghold's coordinates with high accuracy after only two or three Eye of Ender throws, eliminating the need for manual trigonometric calculations.

### Step 1: Installation and Setup

1. [**Download the Program**](https://github.com/Ninjabrain1/Ninjabrain-Bot/releases/)**:** The program is typically distributed as a Java archive file. You'll need to download the latest release, usually named ninjabrainbot-[version number].jar.
2. **Run the File:** Save the .jar file to an accessible folder and run it to launch the calculator interface.
3. **Configure Settings:** Access the bot's settings to ensure accurate Stronghold location display:
   * **Display Stronghold Location:** Set this to **4 4**. This coordinate will place the calculated location in the middle of the Stronghold's main **starter staircase** chunk, making it easier to dig down and find the structure.
   * **Show Other Coordinates:** Keep this on to view the corresponding Nether coordinates, which is useful for setting up a portal connection.

### Step 2: Low Precision Triangulation (The Core Method)

This is the standard, most forgiving strategy for locating the Stronghold. It typically requires three Eye throws to achieve high confidence.

1. **First Throw and Input:**
   * Before throwing, stand in the **corner of 2 blocks** to correct for any potential synchronization issues (d-sync).
   * Throw your first Eye of Ender
   * Change your FOV to 30
   * Reduce your mouse sensitivity
   * Align your crosshair with the left of the center pixels
   * Press F3 + C to give Ninjabrain bot your angle
   * [image4.png](https://drive.google.com/open?id=1jzxlbLOrAnZ6f0YB61VpFu4p0-W05v11&usp=drive_copy)
2. **Second Throw and Calculation:**
   * Move away from your initial position.
   * Throw a second Eye, record the new measurement.
   * The bot will immediately display the most likely **Stronghold coordinates** and a **confidence percentage**.
   * If the confidence is low (e.g., 36%), travel to the calculated location and perform a third Eye throw to confirm the Stronghold's exact chunk. A high-confidence result (e.g., 99.0%) confirms the coordinates.
   * [image5.png](https://drive.google.com/open?id=1WnFSqMNK2T9D0nUyduB3w6okrQN8s9VW&usp=drive_copy)
3. **Dig Down:** Once the bot provides high-confidence coordinates (e.g., X: 1428, Z: -1228), travel to that location and dig down to find the Stronghold's starter staircase.

**Wireframes**

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