

# STEALTH COMPONENT

The Stealth Component functions as a defensive system that reduces how easily an actor can be detected by another actor's Senses Component. When the Senses Component attempts to evaluate a target, it checks for the presence of a Stealth Component and applies its calculated Total Stealth Buff as a detection reduction modifier. The higher this stealth value is, the more effectively the target can hide, making them harder to spot, track, or identify. In essence, the Stealth Component serves as the target's protection against being sensed, directly weakening the detection strength of any system trying to locate them.

## Total Stealth Buff

The **Total Stealth Buff** is the average of all currently active stealth buff values:

- Base Stealth Buff (the actor's own, active stealth effort – e.g. sneaking, crouching)
- Lumen Stealth Buff (included only if the Lumen add-on is enabled)
- Zooner Stealth Buff (included only if the Zooner add-on is enabled)

Disabled add-ons do not contribute to the calculation and are not included in the divisor.

Disabling the **Stealth Component** does **not** turn off environmental stealth. Instead, it only removes the actor's **Base Stealth Buff** from the calculation, representing a character who is no longer actively trying to be stealthy. As long as the Lumen and Zoner add-ons are enabled, the actor can still benefit from shadows and environment—just like a ninja standing upright in deep shadow still gains concealment from the darkness or bushes around them. In other words, turning the Stealth Component off stops the actor from contributing their own "effort-based" stealth, but any configured Lumen/Zoner buffs continue to apply as passive environmental bonuses.

### Example 1 (Enabled Lumen, Disabled Zooner)

- Base Stealth Buff = 0.5
- Lumen Stealth Buff = 0.5 (enabled)
- Zooner Stealth Buff = not included (disabled)

**Calculation:** Total Stealth Buff =  $(0.5 + 0.5) / 2 = 0.5$

### Example 2 (Enabled Lumen, Enabled Zooner)

- Base Stealth Buff = 0.5
- Lumen Stealth Buff = 0.5 (enabled)
- Zooner Stealth Buff = 1.0 (enabled)

**Calculation:** Total Stealth Buff =  $(0.5 + 0.5 + 1.0) / 3 \approx 0.66$

### Example 3 (Enabled Lumen, Enabled Zooner, Disabled Stealth Component)

- Base Stealth Buff = 0.5
- Lumen Stealth Buff = 1.0
- Zooner Stealth Buff = 0.5
- Stealth Component Disabled

**Calculation:** Total Stealth Buff =  $(0 + 1.0 + 0.5) / 3 \approx 0.5$

**Developer Note:** In this scenario, imagine a ninja warrior standing fully upright in a dark corner behind an indoor plant. He receives **full concealment from the shadows** (Lumen = 1.0) and is **partially obscured by foliage** (Zoner = 0.5). However, he is **not actively trying to be stealthy**—he is simply standing normally.

To represent this behavior, the Stealth Component is disabled, which removes the Base Stealth Buff from the calculation. Only the **passive environmental buffs** (Lumen and Zoner) contribute to the Total Stealth Buff. This allows the system to accurately represent situations where environmental concealment exists even without deliberate stealth effort.

## God Modes

The Stealth Component supports God Mode for both the Lumen and Zooner add-ons.

When a God Mode is active:

- If the associated Stealth Buff equals 1.0,
- Then the Total Stealth Buff is forced to 1.0, regardless of all other values.

This applies individually to each add-on.

### Example 4 (God Mode Lumen, Disabled Zooner)

- Base Stealth Buff = 0.5
- Lumen Stealth Buff = 1.0 (God Mode active)
- Zooner Stealth Buff = *not included*

**Result:** Total Stealth Buff = **1.0**

## Total Stealth Buff vs. See Awareness

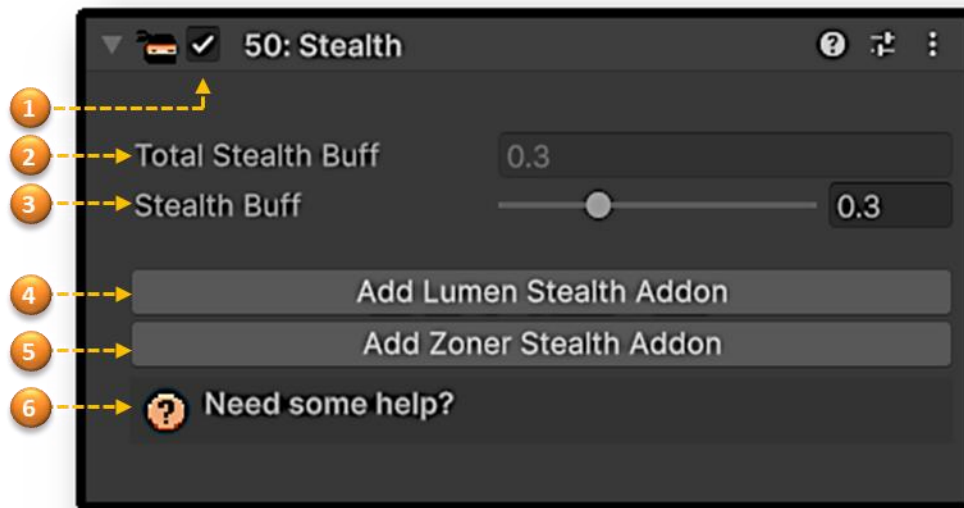
! Total Stealth Buff decreases the Delta ( $\Delta$ ) See Awareness value according to the equation:  
 $\Delta \text{ See Awareness}' = \Delta \text{ See Awareness} * (1 - \text{Total Stealth Buff})$ .

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$\Delta \text{ See Awareness} = (12.47 - 8.57) / 12.47 = 0.31$   
Total Stealth Buff = 0.5  
 $\Delta \text{ See Awareness}' = 0.31 * (1 - 0.5) = 0.155$

! Total Stealth Buff = 0 →  $\Delta \text{ See Awareness}' = 0.31 * (1 - 0) = 0.31$   
Total Stealth Buff = 0.5 →  $\Delta \text{ See Awareness}' = 0.31 * (1 - 0.5) = 0.155$   
Total Stealth Buff = 1 →  $\Delta \text{ See Awareness}' = 0.31 * (1 - 1) = 0$

## Stealth Component Inspector Tab



1	Enable	Enables or disables the <b>Base Stealth Buff</b> . When disabled, the actor no longer contributes their own intentional/active stealth (e.g., sneaking or trying to hide). Environmental stealth effects (Lumen and Zoner), if enabled, continue to function normally because they represent passive concealment from shadows and bushes, not active stealth behavior.
2	Total Stealth Buff	Current Value of Total Stealth Buff, same as value returned from ProvideTotalStealthBuff();
3	Stealth Buff	Set float value of StealthBuff.
4	Add Lumen Stealth Addon	Allows enabling Lumen Stealth Addon.
5	Add Zoner Stealth Addon	Allows enabling Zoner Stealth Addon.
6	'Need some help?'	Displays Help Information.