



Concept Attributes System

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Version 1.1

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1 Introduction

The attributes system is one of the most important systems in a game. For this game, the attributes system governs what's do-able, and what's not for specific characters. This document will also cover in detail functions that govern its use on specific attributes, which is nearly all playable functions in the game.

We will start of with the fundamental attributes, then move onto derived attributes and then to player functions, their use, and their effect.

1.1 *Version History*

- Version 1.1
- CHANGED – Ascension maturity from 20 to 10
 - CHANGED – Concentrate, Kaioken and USSJ formulas so they follow a standard (makes it easier for the coder to understand)
 - CHANGED – Renamed Movement Penalty to Movement Bonus to actually mean what it suppose to mean (before you would have a 0.3 MP, which means in laymans terms the opposite of what I was trying to cover)
 - CHANGED – Concentrate, Kaioken and USSJ formula values (to depict the real-life counterparts)
 - ADDED – Movement Bonus for Kaioken (Upto 3 times movement bonus ontop of the 2.5 speed attribute increase)
 - ADDED – PL ratio modifiers for each concentration technique to prevent loophole (i.e. always fight in concentrated mode with increased PL experience)
 - ADDED – Page numbers :p
 - REMOVED – Irrelevant kaioken forumulas
 - REMOVED – Some concentration examples – with the modified formulas they make much more sense.
 - REMOVED – Concentration Technique durations. For all I've added Stamina consumption to offset.
- Version 1.0
- Initial Release

1.2 *Example Character*

Throughout this document, many of the attributes and functions will have formulas. I'll use **Goku** as an example with the following attributes:

```
PL: 1,100,000  
WP: 50  
SP: 25
```

These are our main core attributes which are used to calculate a lot of things. Keep these values in mind when reading examples, as we will use these values in our calculations

2 Attributes

The attributes of a character is the most important to keep in mind when choosing a character. Each character will have a specific set of attribute values unique to them which will basically illustrate that specific character's strategy. Its attributes can also identify it's weaknesses towards other players, through high or low values.

Each Character have 3 distinct attributes assigned to them:

2.1 *Powerlevel (PL)*

The strength of your attacks. This governs a lot of the attacks you pull off as well as the amount of Health, Active KI and Stamina you have. Picking a higher PL will give you a benefit in higher overall strength.

Powerlevel is affected by performing attacks, which inflict damage to someone. To increase your PL, you must perform an attack (melee or KI based attack) which makes the opposition lose health.

2.2 *Gaining PL*

PL is gained by doing attacks. Attacks that hit your enemy. For every ounce of KI used to hurt someone, that value adds onto your PLx100. So ratio is 1:100 here.

e.g. Goku has 144KI. He charges KHH, which take 20% of Active KI. He hits someone. 20% of 144KI or **28.8pts** will goto his PL x 100 = **2880**. Goku's new PL is 1,102,880.

As well as beamstruggles go, the more struggling, the more KI added to the beam and the more stronger you become if you win the battle. Possibly the loser can still salvage some of his effort possibly as 1:1. Beamstruggles will be covered more in detail in it's own section.

But keep in mind you cannot lose PL. Own damage does not decrease your PL, nor does it increase it.

2.3 *Willpower (WP)*

The endurance of the character. This attribute governs the all important stamina attribute. Picking a higher WP attribute will give you a benefit in beam struggles, concentration techniques and prolonged movement.

2.4 *Speed (SP)*

Not to be confused with only the movement speed of the player. This attribute governs how fast the character moves and regenerates stamina and KI. Picking a higher SP attribute will give you a benefit in quick movement and fast regeneration, allowing you to pull off attacks quicker and more effective stat regeneration (i.e KI and ST)

3 Derived Attributes

Derived attributes are attributes which use a mixture of the core attributes to make a value of itself.

3.1 Health (HP)

```
Total Health = Base Amt 100 * ( PL / 1,000,000 )
Goku's Total Health = 100 * ( 1,100,000 / 1,000,000 ) = 110
```

Powerlevel governs this trait. Being strong will mean not only unleashing powerful attacks, but make you more resilient to other people's attacks. HP governs how much damage you can take in before you die.

Even though your maximum HP changes when your PL changes, the maximum HP you have will be reflected after you respawn. Health is static and won't regenerate over time.

3.2 Active KI (AK)

```
Total Active KI = Base Amt 100 * ( ( ( PL / 1,000,000 ) + ( SP / 100 ) ) )
Regeneration Rate (per second) = Total AK * ( 0.05 + ( SP / 100 ) * 0.05 )

Goku's Total Active KI = 100 * ( ( 1,100,000 / 1,000,000 ) + ( 25 / 100 ) )
                        = 100 * (1.1 + 0.25) = 135
Goku's KI Regeneration Rate p/s (simplified) = 144 * (0.05 + 0.0125) = 9 KI/s
(or 6.25% regen rate, 16 seconds to fill up Active KI from 0)
```

Active KI Pool is governed by PL and Speed of the character. The juice of which allows characters to pull of melee and KI attacks. Once used up, You must wait for it to be filled up, i.e. cannot refill with a button. It is fast regenerating; regeneration rate is 5%+ an extra maximum of 5% depending on speed also. So at the lowest regeneration rate it takes less than 20 seconds to regenerate to full.

3.3 Stamina (ST)

```
Total Stamina = Base Amt 1000 * ( ( PL / 1,000,000 ) + ( WP / 100 ) )
Regeneration Rate (per second) = Total ST * ( 0.003 + ( SP / 100 ) * 0.003 )

Goku's Total Stamina = 1000 * ( 1.1 + 0.5 ) = 1600
Goku's Stamina Regen Rate p/s = 1600 * (0.003 + 0.00075) = 6 ST/s
(or 0.375% regen rate, 267 seconds to fill stamina up from 0)
```

All attributes govern this trait. Stamina is storage of KI, which is used to fuel movement such as running, flying, sprint-flying and teleportation. Stamina is stored in huge quantities so takes long to refill compared to active KI, but when flying or Sprint flying it takes very long to deplete. The amount of Stamina left also governs the strength of your attacks. Stamina is not used at the start of an attack, but when you reach a beamstruggle, and out of Active KI, the player can use stamina to active a unique ability to bring the struggle to their advantage.

Example: Goku and Vegeta are in a beamstruggle. For simplicity lets pretend all meters are full. Goku has

now ran out of Active KI. Goku is now losing the beamstruggle with the lack of Active KI. Goku then holds both mouse buttons to quickly convert 10% of his stamina to send a burst of energy to the collision. With this break Goku's active KI would have replenished a few percent so he can now manage the attack.

Example of extended use: You are Vegeta SSJ. Vegeta then uses 20% of his stamina to charge up into USSJ, where he has improved strength and speed and Active KI regeneration rate is increased.

The prevention of abuse is to not refill the stamina bar to full once the player dies. For example if one player has only 50% stamina, once they die they respawn with 50% x 1.2. Dieing using the console will not refill stamina. Because stamina governs strength consistent use of stamina will weaken you even if your powerlevel is high. Players with 0% stamina will respawn with 20% stamina. This allows strategic use of stamina stores and spamming may give you the advantage for a few minutes, but once the effects wares off the consequences are devastating.

3.4 Movement Speed (MS)

```
Ground Speed = 500 + ( 400 * ( SP / 100 ) ) * MB
Air Speed = 550 + ( 500 * ( ( SP / 100 ) ) ) * MB
Sprint Fly Speed = 1800 + ( 600 * ( SP / 100 ) ) * MB
Water Speed = 200 + ( 200 * ( ( SP / 100 ) ) ) * MB
```

Movement speed is the actual speed a character moves. SP govern this trait. Movement Bonus (MB) is normally 1, but specific techniques like USSJ will set a detrimental value for MB.

4 Functions

Functions are things that the player can perform that use the attributes.

4.1 Concentration

Concentration is a technique which improves a player's strength and speed. There are many different types of concentration techniques, but most branch off to race or form of the player and are based on the generic Concentrate technique.

4.1.1 Concentrate

Increased strength, speed and KI regeneration but with a chunk of stamina used. While in concentrated mode, stamina will not increase. A player in concentrated mode will have an aura for the whole duration.

```
CL = Concentrate length (the amount in seconds you held the concentrate button)
Stamina Consumption (per second) = 1% of total stamina (up to 25%)
Temp PL Increase Multiplier = 1.0 + ( 1.0 * ( CL / 25 ) )
Speed Attribute Multiplier = 1.5 + ( 1.5 * ( CL / 25 ) )
Stamina Consumption while in state = Stamina Regen Rate * ( 5 * ( CL / 25 ) )
PL increase Ratio = 1: ( 100 / ( 1.0 + ( 1.0 * ( CL / 25 ) ) ) )
```

When the player is in concentrated mode, the benefits do not decrease as time passes. Once the duration is met, the benefits will quickly drop. The aura will then also quickly fade. A player can get out of concentrated mode by pressing the charge button.

4.1.2 Kaioken

Kaioken is like concentration but much more potent, and only for goku. It does much better in the power department but with a tradeoff of decreasing stamina. Multipliers are determined by the length of charge. This technique allows a Goku character to increase his form, leading to a faster movement speed.

```
CL = Concentrate length (the amount in seconds you held the concentrate button)
Stamina Consumption (per second) = 1% of total stamina (up to 25%)
Temp PL Increase Multiplier = 1.0 + ( 1.5 * ( CL / 25 ) )
Speed Multiplier = 1.0 + ( 1.5 * ( CL / 25 ) )
Movement Speed Bonus = 1.0 + ( 2.0 * ( CL / 25 ) )
Stamina Consumption while in state = Stamina Regen Rate * ( 15 * ( CL / 25 ) )
PL increase Ratio = 1: ( 100 / ( 1.0 + ( 1.5 * ( CL / 25 ) ) ) )
```

4.1.3 Ultra Super Saiyan (USSJ)

Similar to concentration but more potent, and only available to saiyans in SSJ1 mode. Its benefits are pretty much similar to those of kaioken, but not as strong. Its tradeoff is the speed detriment.

```
CL = Concentrate length (the amount in seconds you held the concentrate button)
Stamina Consumption (per second) = 1% of total stamina (up to 25%)
Temp PL Increase Multiplier = 1.0 + ( 3.0 * ( CL / 25 ) )
Speed Attribute Multiplier = 1.5 + ( 1.5 * CL / 25 )
Movement Speed Bonus = 0.7 - ( 0.4 * CL / 25 )
Stamina Consumption while in state = Stamina Regen Rate * ( 8 * ( CL / 25 ) )
PL increase Ratio = 1: (100 / ( 1.0 + ( 3.0 * ( CL / 25 ) ) ) )
```

5 Ascension

Ascension will be unlocked once you reach a specific PL. This PL value must be reached in your normal form not in concentrated mode (where PL is inflated).

Transformations take the longest once you hit the peak of the PL. Now the more you transform, the more faster you can transform (i.e. transform experience).

Transformations will use up a bit of stamina, maybe 5%. So spamming trans just to get your experience up will only kill your stamina. It will take 10 transformations to reach maturity and then you will be able to transform nearly instantly.

```
PL increase formula = Current PL * ( WP / 100 * 4 ).
```

```
e.g. Goku's SSJ PL = 1,100,000 * ( 50 / 100 * 4 ) = double 1.1mil = 2,200,000
```

```
Willpower positively affects your ascension PL bonus so a higher willpower will mean a stronger ascension form.
```

6 Player Movement

6.1 Running / Walking / Flying

Basic movements with nearly unnoticeable/no drainage of stamina

```
Walking Usage = 0
Running Usage = 1
Flying Usage = 3
```

As you can see, with our example Goku his stamina regeneration rate is much higher than all these values.

6.2 Sprint Flying

Flying in turbo mode. Character will follow mouse crosshair, so player can control the character similar to that of a plane. Just think of normal flying but at a faster rate. Drainage is greater than stamina regeneration rate but as you are stronger in PL, this gradually offsets the decrease.

```
Stamina Consumption = ( StaminaRegenerationRate * 2 ) / ( PL / 1,000,000 )
```

Double tapping a direction will make them teleport there. For example, double tapping right will teleport them to the right. This allows smooth dodging of attacks when you are sprint flying to a player who is launching a barrage of KI balls at you.

```
Stamina Consumption = SprintFlyingConsumptionRate * 2
```

6.3 Teleportation

Offsets the player in the direction they were moving.

```
Stamina Consumption = SprintFlyingConsumptionRate * 2
```

7 Attacks

Note, all attacks do damage:

```
DMG (in HP) = KI Usage * ( Current ST / 80% of Total ST
```

7.1 KI Blast

```
KI Usage = 4% of Total Active KI  
Charge Time = Instant  
Delay = 1000ms - (500 * SP/100)
```

7.2 KI Beam

```
KI Usage (minimum) = 10% of Total Active KI  
KI usage per second (after min charge) = 1% of Total Active KI  
Charge Time (minimum) = 2 seconds
```

7.3 KamehameHa

```
KI Usage (minimum) = 20% of Total Active KI  
KI usage per second (after min charge) = 4% of Total Active KI  
Charge Time (minimum) = 5 seconds
```

Etc. etc.

8 Beam struggle moves

Beam struggle moves are moves you can pull to give yourself the upperhand.

8.1 Stamina PushBack (SPB)

```
KI usage per second = 4% of Total Stamina  
KI Usage (minimum) = 8% of Total Stamina  
Charge Time (minimum) = 2 seconds  
Ratio (Stamina to KI) = 1:0.8
```

SPB is a charge. This technique allows you to convert your stamina quickly into usable KI. This KI will move along the beam and add onto the power of your beam, hopefully giving you the upperhand in the struggle. Stamina converted though is not 1 for 1 in KI. You lose 20% of KI in the conversion process.

8.2 Concentrate

You are able to do the generic concentrate technique to give yourself the regeneration bonuses to maintain a strong powerstruggle.

8.3 Ascension

You are able to ascend to the next level. This is only available when you have experienced ascension for a while (e.g. 50% maturity).