Super Smash Con 2018 Official

Rulebook

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1. Definitions

Best-of-X – means a Match has X number of Games, and the Player that wins a majority of the Games is declared the winner. Once a Player wins the number of Games needed to reach the requisite majority, then that Player will be declared the winner of the Match, and any Games that have not been played at that point will not be played. For example, in a Best-of-Three Match, once a Player wins 2 Games, that Player will immediately be declared the winner of that Match.

Game – a single Title Game competition between two Players.

Match or Set – Tournament play between two Players that may involve multiple Games.

Player – each person who participates in the Tournament.

Title Game – Super Smash Bros., Super Smash Bros. Melee, Super Smash Bros. Brawl, or Super Smash Bros. for Wii U.

Tournament – Singles and Doubles competitions for any Title Game.

Tournament Organizers (TOs) – Super Smash Con, any entity involved in supplying or fulfilling prizes, and any other entity involved in implementing, producing or managing the Tournament, in whole or in part.

2. Event Rules

2.1. Code of Conduct

All Players are expected to exhibit good sportsmanship and maintain respect for one another and for all TOs and spectators. Players are expected to play at their best at all times and to avoid any behavior inconsistent with the principles of good sportsmanship, honesty, or fair play. Behavior that is considered to be inappropriate and in violation of the Code of Conduct includes, but is not limited to, the following:

- Interfering with tournament operation;
- Acting in an unsportsmanlike or disruptive manner, or to annoy, abuse, threaten or harass any other person;
- Engaging in collusion (*e.g.*, any agreement between two or more Players to pre-determine the outcome of a Game or Match);
- Cheating of any sort through any means;
- Intentionally delaying or slowing gameplay or tampering with gameplay in any other known or unknown manner;
- Offensive, vulgar or obscene gamertags;
- Sexism, ageism, racism or any other form of prejudice or bigotry;
- Engaging in violence or any activity which is deemed in the judgment of TOs to be immoral, unethical, disgraceful, or contrary to common standards of decency;
- Engaging in any activity that is illegal in the jurisdiction where the affected Player is located;
- Offering any gift or reward to a Player or TO for assistance designed to provide a competitive advantage to the person offering the gift or reward or designed to impose a competitive disadvantage on any opponent;
- Using any language or wearing any clothing or apparel that is obscene, foul, vulgar, insulting, threatening, abusive, libelous, slanderous, defamatory or otherwise offensive or objectionable, or promotes or incites hatred or discriminatory conduct;
- Taking any action or performing any gesture directed at an opposing Player, official or spectator, or inciting any other individuals to do the same, which is insulting, mocking, disruptive or unsportsmanlike;
- Touching or otherwise interfering with consoles, TVs, lights, cameras or other tournament and/or production equipment;

- Engaging in any other type of behavior or conduct deemed inappropriate by the TOs in their sole discretion; or
- Otherwise violating these rules.

2.2. Notice of Filming

By entering and by your presence in the Dulles Expo Center, you consent to be photographed, filmed, and/or otherwise recorded. Your entry to the Dulles Expo Center constitutes your consent to such photography, filming, and/or recording to any use, in any and all media throughout the universe in perpetuity, or your appearance, likeness, voice, and name for any purpose whatsoever in connection with the production presently entitled Super Smash Con.

2.3. Minors

If the Player is under the age of majority in his or her state or country of residence (a "Minor"), such Minor Player represents and warrants that he or she has received permission from his or her parent or legal guardian to register for and participate in the Tournament, and all references to "Player" shall include that Minor Player's parent or legal guardian.

2.4. Event Conduct

- All attendees must be registered as a Player, spectator, or media, or have the consent of the Super Smash Con Staff to enter the venue. All attendees must keep their badge visible at all times.
- Possession of drugs, alcohol, or weapons is forbidden.
- Smoking, including e-cigarettes, is only permitted in the designated areas outside the building.
- All attendees are responsible for their own belongings. By entering the venue, you agree that anything you bring into the venue is your responsibility. Super Smash Con Staff, the Dulles Expo Center, and any sponsors therein claim no responsibility for items which are lost, damaged, or destroyed as a result of being in the venue.
- Attendees may not tamper with, manipulate, or attempt to remove any equipment in the venue.
- Recording equipment besides phones or handheld video cameras are not permitted without permission from Super Smash Con staff.
- Super Smash Con staff reserve the right to deny entry into the venue to any Player suspected of committing anything considered a crime or acting in a manner that is detrimental to the integrity of the event.
- Any issues that arise outside of these terms will be held on a case-by-case basis, and be judged by the Super Smash Con Staff.
- Violation of any of these rules may result in being ejected from the event at the sole discretion of Super Smash Con staff.

3. Tournament Rules

3.1. Format

All Players will be seeded into double elimination bracket groups (except in Super Smash Bros. 64 singles, which will use round robin groups). Players will advance either in winners bracket or losers bracket. Players who advance in losers bracket will begin in losers bracket in the next phase. In the Grand Finals, the Player that advanced from the losers bracket must win two (2) Matches to be awarded first (1st) place in the Tournament.

3.2. Set Length

All sets are best-of-3 except for the following which are best-of-5:

Melee and Wii U singles: Top-32 Melee and Wii U doubles: Top-8 64 singles and Brawl singles: Top-16 64 doubles and Brawl doubles: Top-8

3.3. Set Procedure

- Players select their characters. Either Player may elect to do **Double** Blind Character Selection (see next section)
- 2. Use Stage Striking to determine the first stage
- 3. The Players play the first game of the set
- 4. Winning Player of the preceding match bans a stage/stages*
- 5. The losing Player of the preceding match picks a stage for the next game
- 6. The winning Player of the preceding match may choose to change characters.
- 7. The losing Player of the preceding match may choose to change characters.
- 8. The next game is played.
- 9. Repeat Steps 4 through 8 for all subsequent matches until the set is complete.

3.4. Mutual Agreement

Players may select any legal stage if they both agree on it. Players may also disregard Stage Clause if both agree. Players may not play on illegal stages or change the length of a set.

3.5. Double Blind Character Selection

Either Player may request that a double blind selection occur. In this situation, a

^{*} Does not apply to Smash 64

referee or other tournament staff member will be told, in secret, each of Player's choices for the first round. Both Players are to then select their first round character, with the referee validating the character selections.

3.6. Neutral Start

If a Player requests Neutral Start, the Players must use the neutral port configuration described in Sections 3.3.4 or 4.3.6. This does not apply to Brawl or Smash for Wii U.

3.7. Port Priority

If an agreement cannot be made as to who gets what port, the Players may enact a best of 1 game of Rock Paper Scissors or Game & Watch Judgment (the Player who gets the higher number wins). Winner has the option of selecting port first.

3.8. Pausing

If a Player either intentionally or accidentally pauses the Game by either pressing the start button or unplugging his or his opponent's controller, the Player who paused forfeits a stock. The penalty may be increased to a multiple stock forfeiture or a Game forfeiture at the discretion of the TO.

3.9. Restarts

The TOs may approve a Game restart due to exceptional circumstances, such as a power outage.

3.10. Stalling

Stalling, or excessively delaying the Game or Match, may result in a Game or Match forfeit at the discretion of TOs. In Melee and Brawl, Players may stall for the purposes of waiting out a particular transformation on Pokémon Stadium. Stalling must end when the neutral transformation returns, as indicated by the icon shown on the in-game screen.

3.11. Sudden Death

If a game goes to Sudden Death, the winner is determined by stocks and percentage at the time the match ends. When the timer hits 0:00, the Player with the higher stock count is the winner. If both Players are tied in stocks the Player with the lower percentage is the winner. In the event of a percentage tie, or a match in which both Players lose their last stock simultaneously, a 1 stock tiebreaker will be played with time limit equal to the regular time limit divided by the regular number of stocks, rounded up. The results of Sudden Death do not count.

3.12. Stock Sharing

Taking an partner's stock is allowed in doubles.

3.13. "Grab and Go" Clause

In doubles, Players may not switch controllers with their teammate.

3.14. Missing Teammate Clause

If a Player's teammate is not present for a match, that Player may not replace their teammate with a CPU Player. They may play without a teammate.

3.15. Alting

You will be immediately disqualified from the tournament with no refunds if you are found using an alternate tag/tags and/or hide your identity to manipulate the bracket/seeding. The only exception to this rule is if the Player notifies a TO prior to the registration end date.

3.16. Colorblind Clause

Players may request that their opponent change colors to accommodate colorblindness or if their color is indistinguishable from either the other team color or the stage background. The request must be made before the match starts.

3.17. Warm-ups

Warm-up periods and controller tests may not exceed 30 seconds on the in-game timer. Violation of this rule may result in an automatic forfeit at the discretion of TOs.

3.18. Coaching

For Melee, Brawl, and Wii U, coaching, defined as deliberately giving or receiving advice to/from another person during a Match or between Matches during Grand Finals, is not allowed, and may result in penalties for both parties. For Smash 64, coaching is allowed and limited to 30 seconds in between Games.

3.19. Tardiness

Anyone who is not present for their match by 15 minutes past the scheduled start time, without prior communication with tournament staff, is subject to a total disqualification from the event.

3.20. Collusion

Players suspected of colluding may be immediately disqualified from the tournament. This includes intentionally throwing a match, splitting a payout, or committing any other form of bracket manipulation. The TO reserves the right to deny payout of event winnings to any Player suspected of colluding.

3.21. Misinterpretation / Misconfiguration

If a game was played under a misconfiguration of the Game Settings that could have materially affected the result of the game, a Player may petition the TO to have that game replayed. The final decision is at the discretion of the TO. This must be done immediately after the game in question; after the next game is started, the previous game shall not be replayed regardless of whether the rules were set correctly.

3.22. Final Rulings

If any unforeseen situations occur, judgment of tournament staff is final. Rules may be altered between phases of a tournament in the best interests of the event.

4. Super Smash Bros. (64)

4.1. Game Settings

• Stocks: 4

• Timer: 8 minutes

Items: Off

Team Attack: On

4.2. Characters

All characters are legal in singles. Single Pika/Kirby ("SPK") ruleset is in effect in doubles. Specifically, the team combinations of double Pikachu, double Kirby, and Pikachu & Kirby are banned.

4.3. Stage List

All matches in both singles and doubles are played on Dream Land.

4.4. Additional Rules

4.4.1. Timers

All matches will be played with an 8-minute timer.

4.4.2. Controllers

All controllers are subject to the following restrictions:

- Maximum 1:1 mapping of original buttons on first party controller allowed (Hori) (1 A button, 2 Z's, 1 R, etc. No extra buttons that aren't on the controller)
- Maximum 4 directional mappings or 2 joystick axes allowed, combinations of the two are not allowed
- Macros, other than Z+A, are illegal
- Turbo buttons and functions are illegal

Violation of above rules will result in immediate disqualification from an event and all previous wins in the event are forfeited. Examples of legal controllers are, but not limited to, the original N64 controller, Hori Mini Pad, GameCube controller, Xbox/keyboard/other wired input devices as long as they meet the restrictions above.

4.4.3. Stalling

Excessive unwillingness to engage the opponent is disallowed at the risk of being forced to forfeit the match by the TO. If there is no movement

from either Player, the losing Player is considered to be stalling.

4.4.4. Pausing

All matches will be played with hold to pause enabled. Pausing is only legal while either Player remains upon their OWN respawn platform, and only for the purpose of summoning a tournament official or in the case of a controller malfunction. Before pausing the pauser must notify the other Player(s) first. All other pauses will result in a forfeiture of the game.

4.4.5. Alternate Costumes

Only naturally appearing costumes are legal. Players reserve the right to request natural costumes for their tournament set. Natural costumes are defined as costumes available through 1v1 or 2v2 in SSB64.

There is no penalty for unnatural costumes if the match has already started and damage has been dealt on either side.

Players are responsible for noticing unnatural costumes and if no damage has been dealt, are to pause and notify a Tournament Organizer to restart the game. If damage has been dealt the game must be played out.

A Player refusing to play natural costumes will be penalized a full game.

4.4.6. Round Robin Tiebreakers

Round Robin standings are determined in the follow order: Set count, head to head, game count. In the event a tie still exists, the Players tied will play another round robin, Best-of-1 and stock differential will be recorded. The tie breaker round robin will use the same tie breaker order with stock differential being the final tie breaker. This is repeated until no ties exist.

4.4.7. Neutral Start

The following ports are to be used when a Player/team invokes the neutral start rule:

	Port 1	Port 2	Port 3	Port 4
Singles		Х		Х
Doubles	Team A	Team B	Team B	Team A

5. Super Smash Bros. Melee

Rules for Super Smash Bros. Melee are based on the <u>Melee Recommended Ruleset</u>, with the exception of Section 5.4.4. Updates to the rules will be included in the Super Smash Con 2018 Official Rulebook as long as those updates are published prior to registration closing.

5.1. Game Version

The official game version is NTSC 1.02 for the Nintendo Gamecube using standard memory card data with all characters and relevant stages unlocked.

5.2. Game Settings

• Stocks: 4

Timer: 8 minutesHandicap: OffDamage ratio: 1.0

Items: OffPause: Off

Team Attack: On

5.3. Stage List

Starter Stages

- Yoshi's Story
- Fountain of Dreams (singles only)
- Battlefield
- Final Destination
- Dream Land
- Pokémon Stadium (doubles only)

Counterpick Stages

Pokémon Stadium (singles only)

5.4. Additional Rules

5.4.1. Stage Striking

Players play a best-of-1 Rock-Paper-Scissors, and winner may choose to either strike a stage first or select a port first. Stages are struck in a 1-2-2-1 order.

5.4.2. Stage Bans

After each game of the set, before counterpicking, the Player who won

the previous game may ban one stage from either the starter or counterpick list. This rule is not in effect for best-of-5 sets.

5.4.3. Stage Clause

A Player/team may not pick any stage they previously won on during the set.

5.4.4. Controllers

First Party wired Gamecube Controllers and Licensed Third Party Gamecube Controllers are permitted as long as they do not contain turbo functions, macros, and/or hardware modifications (other than case modifications, such as notches and cosmetic changes). For other controllers, please see the Controller Addendum.

5.4.5. Neutral Start

The following ports are to be used when a Player/team invokes the neutral start rule. Players may elect to move to opposite sides of the stage and then count down prior to starting the match.

Singles:

Stage	Port 1	Port 2	Port 3	Port 4
Final Destination	Х	Х		
Fountain of Dreams	Х	Х		
Yoshi's Story	Х	Х		
Dreamland 64		Х		Х
Battlefield			Х	Х
Pokémon Stadium			Х	Х

Doubles:

Stage	Port 1	Port 2	Port 3	Port 4
Final Destination	Team A	Team B	Team A	Team B
Yoshi's Story	Team A	Team B	Team B	Team A
Dreamland 64	Team A	Team B	Team B	Team A
Battlefield	Team A	Team B	Team B	Team A
Pokémon Stadium	Team A	Team B	Team B	Team A

5.4.6. Freeze Glitch

Activating the Freeze Glitch with the Ice Climbers is not allowed; penalties may or may not be enforced at TO discretion.

6. Super Smash Bros. Brawl

6.1. Game Settings

• Stocks: 3

• Time limit: 8 minutes

Handicap: OffFriendly Fire: On

Damage Ratio: 100%Items: Off and None

• Pause: Off

6.2. Stage List

Starter Stages

- Battlefield
- Final Destination
- Lylat Cruise
- Smashville
- Yoshi's Island (Brawl)

Counterpick Stages

- Castle Siege
- Pokémon Stadium (Melee)

6.3. Additional Rules

6.3.1. Stage Striking

Players play a best-of-1 Rock-Paper-Scissors, and winner may choose to either strike a stage first or select a port first. Stages are struck in a 1-2-2-1 order.

6.3.2. Counterpick Procedure

The procedure outlined in Section 2.3 will be followed, with the loser of the previous game getting one stage ban. The loser may also opt to reselect controller ports, choosing first, if desired.

6.3.3. Stage Clause

A Player/team may not pick any stage they previously won on during the set.

6.3.4. Self-Destruct Moves

If a match ends with a self-destruct move, the results screen will determine the winner. If a sudden death occurs, standard sudden death rules apply. The only exception to this rule is using Ganondorf or Bowser's Side B to end a match, where the initiator of the move wins regardless of the outcome.

6.3.5. Rules Concerning Meta Knight

Meta Knight's infinite dimensional cape tactic is banned. Double Meta Knight is banned in doubles.

6.3.6. Ledge Grab Limit (LGL)

The LGL is 35. If a game goes to time and one Player goes over the LGL, they will automatically lose the game. If both Players exceed their LGL, then this rule is ignored.

In the event of a 1-stock tiebreaker match occurring, a LGL of 12 is used.

In teams, if a single Player on a team exceeds their LGL, that team loses. If one or more Players on both teams exceed their LGL, then the LGL rule is ignored.

In the event of a game going to time and the LGL can not determine a winner and both teams have an equal amount of combined stocks, then whichever team has a lower combined percent is declared the winner.

6.3.7. Permitted Controllers

Wired GameCube controllers are allowed, and preferred. Players may use any wireless controller at their own risk, and must properly desync it and remove the batteries after each set, with risk of DQ if this is not done properly. Turbo and other performance mods are not allowed to be used on any controller.

6.3.8. Controller Interference

If your controller is found to be the cause of disruption to the tournament (mid-game or otherwise), you are subject to complete disqualification from the event.

6.3.9. Scrooging

The act of scrooging is banned and will result in a forfeit of the match. This means that a Player may not travel underneath the main stage a second time without first landing on the main stage again (platforms do not count) or taking damage.

6.3.10. Teams Port Selection

Ports for a teams match must be picked in the arrangement of A B B A to balance port priority between Players.

7. Super Smash Bros. for Wii U

Rules for Super Smash Bros. for Wii U are based on the <u>Smash for Wii U</u>
<u>Recommended Ruleset</u>. Updates to the ruleset will be included in the Super Smash Con 2018 Official Rulebook as long as those updates are published prior to registration closing.

7.1. Game Settings

- Stock and time are set to 2 stock and 6 minutes for Singles
- Stock and time are set to 3 stock and 8 minutes for Doubles
- Handicap: Off
 Friendly Fire: On
 Damage Ratio: 1.0x
 Items: Off and None
- Pause: Off
- Custom Fighters and Custom Moves are set to off
- All DLC characters are legal
- Mii Fighters are legal with any combination of specials. Each moveset combination should be treated as a unique character with regards to counterpicking. In the case of doubles, Default Guest Miis should be picked to match the color of the team you are playing on.

7.2. Stage List

Starter Stages

- Battlefield*
- Final Destination**
- Lylat Cruise
- Smashville
- Town & City

Counterpick Stages

- Dream Land 64*
- Omega Stages**

^{*} Treated as Battlefield in striking phase. If Battlefield is struck, Dream Land 64 is also struck and vice-versa.

^{**} Treated as Final Destination in striking phase. If Final Destination is struck, Omega Stages are struck and vice versa. You may only choose the following Omega Stages: Midgar, Suzaku Castle and Wily Castle.

7.3. Additional Rules

7.3.1. Stage Striking

Players play a best-of-1 Rock-Paper-Scissors, and winner may choose to either strike a stage first or select a port first. Stages are struck in a 1-2-2-1 order.

7.3.2. Stage Bans

After each game of the set, before counterpicking, the Player who won the previous game may ban one stage from either the starter or counterpick list.

7.3.3. Stage Clause

A Player/team may not pick the last stage they previously won on during the set.

7.3.4. Self-Destruct Moves

If a match ends with a self-destruct move, the results screen will determine the winner. If a sudden death occurs, standard sudden death rules apply.

7.3.5. Team Colors

Players' character colors must match their team's color when possible, to avoid confusion (ex: Luigi on the green team must use the green costume).

7.3.6. Permitted Controllers

For ease of access, Tournament Staff recommends the use of the Nintendo Gamecube controller, however, The Wii U Pro controller (Battery removed), Wii Remote, Wii Remote + Nunchuck, Wii Remote + Classic Controller, and the Nintendo 3DS Family in controller mode are all permitted control options. Turbo/Macro options on controllers are banned. "Box" variants of the Gamecube Controller are permitted as long as they do not have macros/turbo enabled.

7.3.7. Controller Interference

If your controller is found to be the cause of disruption to the tournament (mid-game or otherwise), you are subject to complete disqualification from the event.

8. Prizes

Prizes for singles and doubles events will be paid from a variable prize pool. The amount available in the variable prize pool for each competition will be drawn solely from and will vary based in part on the number of Players or teams that register for each respective competition. Payments will be made in United States dollars. The prizes will be awarded and paid to Players in accordance with the charts below.

8.1. Doubles (Brawl)

Standing	Percentage of Prize Pool
1st	30% per Player
2nd	15% per Player
3rd	5% per Player

8.2. Doubles (64, Melee, Wii U)

Standing	Percentage of Prize Pool
1st	20% per Player
2nd	10% per Player
3rd	7.5% per Player
4th	5% per Player
5th (two teams)	2.5% per Player
7th (two teams)	1.25% per Player

8.3. Singles (Brawl)

Standing	Percentage of Prize Pool
1st	40%
2nd	20%
3rd	15%
4th	10%
5th (two Players)	5%
7th (two Players)	2.5%

8.4. Singles (64)

Standing	Percentage of Prize Pool
1st	30%
2nd	20%
3rd	15%
4th	10%
5th (two Players)	5%
7th (two Players)	2.5%
9th (four Players)	1.875%
13th (four Players)	0.625%

8.5. Singles (Melee and Wii U)

Standing	Percentage of Prize Pool
1st	45%
2nd	25%
3rd	11%
4th	8%
5th (two Players)	3%
7th (two Players)	1.5%
9th (four Players)	0.5%

8.6. Smash Masters

Prizes for Smash Masters will be announced at a later date.

9. Indemnification

All attendees hereby agree to indemnify and hold Super Smash Con staff and TOs harmless from and against any and all third party claims, actions or proceedings of any kind and from any and all third party damages, liabilities, costs and expenses, including reasonable outside legal fees and costs relating to or arising out of any breach of any of the warranties, representations, covenants, obligations or agreements of the attendee under these rules.

10. Help

Check out the FAQ or write to info@supersmashcon.com.

Controller Addendum for Super Smash Bros. Melee

This Addendum is an expansion of <u>Section 5.4.4</u> from the Super Smash Con 2018 Rulebook, covering the usage of controllers other than wired First Party Gamecube Controllers.

A. Definitions

Actuator - any device that activates a controller input.

Analog Input - the analog stick, C-stick, L (analog), and R (analog).

Analog-to-Digital (ATD) Input - any digital input that emulates an Analog Input.

Analog Adjustment Device (AAD) - any electronic device (e.g., an Arduino) that alters an Analog Input without the use of a Conditional Input, Macro, or Modifier.

Button Input - A, B, L (digital), R (digital), X, Y, Z, and D-pad up/down/left/right.

Coordinate - an (X-axis, Y-axis) value corresponding to a specific analog stick or C-stick value. For the purposes of this Addendum, all Coordinates will be written as values between -1 and 1.

Conditional Input - an Actuator that changes function based on previous or simultaneous inputs.

GCC - Gamecube Controller

Macro - any activated pre-programmed input that results in controller outputs read by the game on future frames.

Modifier - an Actuator that alters the input of one or more other Actuators.

Non-Dedicated Modifier (NDM) - an Actuator that is simultaneously bound to both a Modifier and a Button Input or ATD Input.

SOCD - Simultaneous Opposite Cardinal Direction (left and right being input simultaneously) or up and down being input simultaneously)

B. Enforcement

To ensure fairness in competition, all Players that plan to use a controller other than First Party GCCs or Officially Licensed Third Party GCCs must notify Super Smash Con via the <u>Contact Form</u> prior to August 6, 2018.

B.1. Prior to SSC

When notifying SSC of intent to use a controller other than First Party GCCs or Officially Licensed Third Party GCCs, you must include adequate documentation that reasonably demonstrates that the controller abides by the restrictions set forth in this Addendum. TOs will make reasonable effort to understand the documentation put forth and ask follow-up questions if necessary. TOs have sole determination in allowing or disallowing a controller.

B.2. During SSC

TOs may inspect any controller at any time. If a Player suspects their opponent's controller of not abiding by these parameters, they may request a controller inspection by TOs. The TO is not required to abide by this request. If TOs are unable to determine that a controller is in full compliance, that controller may be banned at the TOs' sole discretion. If a Game or Set cannot be played out in full due to a controller malfunction which cannot be fixed in a timely manner, and the Player using this controller does not have a replacement controller readily available, the Player may be disqualified at sole discretion of TOs.

C. Controller Requirements

C.1. First Party GCCs

Physical modifications such as case notches, replacement analog sticks, and cosmetic changes are permitted. Capacitors for snapback reduction are also permitted. If a First Party GCC uses a device that modifies the input of a First Party GCC in any capacity (e.g., Arduinos), that controller will be subjected to the same rules as Other Controllers (Section C.3). Any such modifications must be externally visible and housed outside of the GCC shell.

C.2. Licensed Third Party GCCs

Licensed Third Party GCCs are subject to the same rules as First Party GCCs, but any additional features (e.g., Turbo) are not permitted to be used.

C.3. Other Controllers

Controllers that are neither First Party GCCs nor Licensed Third Party GCCs must abide by the parameters in the following sections.

C.4. Input Mapping

C.4.1. Button Inputs

Each Button Input can only be actively bound to a maximum of one Actuator. An Actuator that is bound to a Button Input may not be bound to any other Button Inputs, Analog Inputs, or ATD Inputs.

C.4.2. Analog Inputs

Each Analog Input can only be actively bound to a single analog device, except as described below. If a controller features multiple methods of input for a specific Analog Input (i.e., both an analog device and ATD Inputs), only one input method for that specific Analog Input may be active at a time.

C.4.2.1. Analog Stick and C-Stick

The analog stick and C-stick may each be replaced by a maximum of 4 Actuators corresponding to cardinal directions (up, down, left, and right).

C.4.2.2. Analog L and R

A controller may only have up to one Actuator that generates L inputs and up to one Actuator that generates R inputs.

C.4.3. Controller Layout

Generally, any layout of Actuators on a controller is permitted. However, Actuators may not be arranged in a manner that guarantees simultaneous or conditional activation (e.g. an Actuator physically contained within another Actuator, such that activation of only one of those actuators is difficult or impossible).

C.4.4. Actuation

Actuators must always be manually activated. For example, an Actuator may never activate as a result of another Actuator being activated or deactivated.

C.4.5. Macros

Actuators may not activate Macros. Note that Macros are different from Modifiers and Conditional Inputs.

C.5. Analog-to-Digital Inputs

Controllers that use ATD Inputs must abide by the following restrictions.

C.5.1. SOCD Handling

If two opposing cardinal directions are activated simultaneously, the more recent input must override the less recent input. If two opposing cardinal directions are activated on the same frame, the controller may either produce a neutral input or may give priority to one of the inputs in a predetermined manner.

C.5.2. Modifiers

Modifiers, or combinations of Modifiers, may not be used with Analog Inputs, and may only change the magnitude of ATD Inputs that correspond to Analog Inputs, except for L and R, in which Modifiers may be used to switch between analog and digital activation. Modifiers may simultaneously change the magnitude of multiple ATD Inputs. Within the context of Super Smash Bros. Melee, Modifiers may not solely change the current "zone" that the analog stick or C-stick Coordinate lies in. These zones (pictured below) are the Coordinates corresponding to up, down, left, right, up-right, up-left, down-right, down-left, and neutral ("dead zone"). For example:

- If the analog stick or C-stick is pointed at a Coordinate that corresponds to "right", Modifiers cannot solely move the Coordinate to "up-right".
- If the analog stick or C-stick is pointed at a Coordinate in neutral, Modifiers cannot solely move out of neutral.

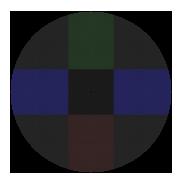


Figure 1: Illustration of all possible analog stick coordinates, visually divided into the 9 zones. (Credit: Aziz Al-Yami)

C.5.3. Non-Dedicated Modifiers

Within the context of Super Smash Bros. Melee, NDMs must obey the following restrictions in addition to those described in Section 3.5.2.

- All NDMs must be explicitly described when notifying TOs of intent to use a controller other than a GCC. TOs may reject specific NDMs at their sole discretion.
- NDMs may not be bound to Actuators that generate X or Y inputs.
- NDMs bound to Actuators that generate B inputs cannot modify analog stick or C-stick Coordinates, except to prevent a controller from inputting a neutral-B with analog stick Coordinates outside of the dead zone.
- NDMs bound to Actuators that generate A, L or R inputs may not redirect the analog stick to a Coordinate in a manner that meaningfully circumvents a stick motion that would have otherwise been necessary to perform an action. Examples include, but are not limited to performing:

- A long ledge wavedash
- Long wavedash into down-tilt
- Fastfall into a long wavedash
- Long wavedash out of Fox/Falco down-B

C.6. Analog Adjustment Devices

Controllers that use AADs must abide by the following limitations:

- All AADs must be explicitly described when notifying TOs of intent to use.
 TOs may reject specific functions of AADs at their sole discretion.
- AADs may not change the current zone that the analog stick or C-stick Coordinate lies in (see Figure 1).
- AADs may not redirect the analog stick to a Coordinate in a manner that
 meaningfully circumvents a stick motion that would have otherwise been
 necessary to perform an action (see Section C.5.3).

C.7. Conditional Inputs

Conditional Inputs generally may not be used except to implement lockouts described in Section 3.7.2. Any other Conditional Inputs must be approved by TOs.

C.8. Analog-to-Digital and Adjusted Analog Input Restrictions

Due to the potential precision and consistency of ATD Inputs and adjusted Analog Inputs, Controllers using ATD Inputs or AADs must adhere to the following limitations.

C.8.1. Banned Coordinates

Within the context of Super Smash Bros. Melee, there are certain functional analog stick Coordinates that are impossible to consistently activate with unadjusted Analog Inputs. These Coordinates may not be pinpointed.

C.8.1.1. Shield Drop

The mechanic known as "Shield Drop Down" must not be accessible in conjunction with L, R, or Z. Specifically, if digital or altered analog inputs would result in an analog stick Coordinate with Y = -0.6625, -0.6750, or -0.6875 in conjunction with L, R, or Z, the analog stick Coordinate must be such that $|X| \ge 0.7000$).

C.8.1.2. Directional Air-Dodge Angles

All angled air-dodges (wavedashing) using ATD Inputs or AADs must be within the following bounds:

- (±0.3875, ±0.9125) 67°
- (±0.9125, ±0.3875) 23°

C.8.1.3. Ice Climbers' Desyncs

The following Coordinates, allowing Ice Climbers to instantly "desync," must not be accessible.

- X = ±0.8000 Popo Smash / Nana Tilt
- $X = \pm 0.8000$ on C-Stick Popo F-Smash
- Y = ±0.6625 Popo Smash / Nana Tilt
- $Y = \pm 0.6625$ on C-Stick Popo U/D-Smash
- $X = \pm 0.7000 Popo Roll$
- Y = ±0.7000 Popo Dodge / Nana Shield Drop
- X = 0.6250 Popo Run / Nana Runbrake
- X = 0.7500 Popo Teeter Break / Nana Teeter
- Y = 0.5625 Popo Jump (out of dash)
- X ≤ 0.5875, Y = -0.5500 Nana Neutral-B
- Any Coordinate that allows Ice Climbers to perform two different aerials simultaneously with the same input.

The Coordinates (± 0.7000 , ± 7000), (± 0.7000 , ± 7125), and (± 0.7125 , ± 7000) are exceptions to this list.

C.8.1.4. Turnaround Up-Tilt and Down-Tilt

The range of Coordinates, allowing for a 2-frame turnaround vertical tilt in non-buffered situations, must not be accessible. See the Figure below for an illustration of this zone in the up-right quadrant.

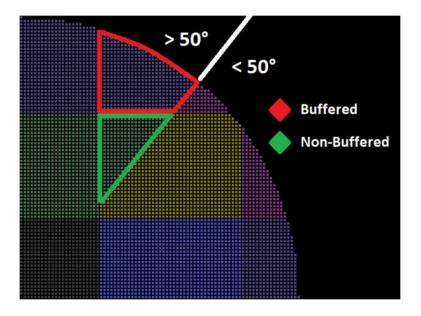


Figure 2: Illustration of the coordinates that may produce a non-buffered vertical up-tilt in the up-right quadrant. (Credit: <u>Aziz Al-Yami</u>)

C.8.1.5. "Middle-Tilted" Tilts & Smashes

The Coordinates (±0.9500, ±0.2875), allowing certain characters to access "Middle-Tilted" versions of Tilts and Smashes, must not be accessible in conjunction with A or the C-stick.

C.8.1.6. Pikachu & Pichu "Double Up-B"

The following Coordinates, allowing Pikachu and Pichu to move vertically twice during an Up-B, must not be accessible.

- (±0.5000, 0)
- (0, -0.5000)
- (±0.4000, ±0.3000)
- $(\pm 0.3000, \pm 0.4000)$

C.8.2. Analog Triggers

Within the context of Super Smash Bros. Melee, analog L and analog R values range from 0 to 140, with 43 being the minimum value that generates a shield. Certain functional analog L and analog R values are difficult to consistently activate with unadjusted Analog Inputs. Either the value 49 (equivalent to Z lightshield) or 94 (the halfway analog shield value), but not both, may be pinpointed with digital Actuators or AADs.

C.8.3. Input Lockouts

Within the context of Super Smash Bros. Melee, there are certain functional rapid input analog sequences that are unreasonable to consistently activate with Analog Inputs. These sequences may not be activated within the specified timing windows. To maintain consistency with Section C.4.4, locked out inputs must be discarded, and not activated upon expiration of the lockout window.

C.8.3.1. Smash DI

Due to the majority of valid windows for SDI being 8 frames or less, digital directional inputs should not allow for horizontal \rightarrow vertical \rightarrow horizontal (or vertical \rightarrow horizontal \rightarrow vertical) presses all within the span of 8 frames, and lock out or discard the 3rd input until 6 frames (1/10 second) have passed from the second input.

C.8.3.2. Pivot Tilts

The only pivot tilts allowed by digital input are pivot Forward Tilt and Down Tilt, with the following A and Z-input lockouts following a pivot (crossing from $X \to +/-0.800$ to $X \to -/+0.800$ within the amount of time required for it to constitute as a pivot in-game):

Upwards Angled F-Tilt - 15 frames (quarter second)

- Upwards Angled F-Tilt 4 frames (1/15 second)
- D-Tilt 4 frames (1/15 second)
- U-Tilt 15 frames (quarter second)