# Car Wars Sixth Edition — Bots by Sam Mitschke

These rules allow you to add autonomous cars to *Car Wars Sixth Edition* games that have fewer than four players. These "bots" follow logic scripts as outlined below. A human player is required to manage each bot's dashboard, tokens, and dice rolls over the course of the game, and we are presuming that player already has a solid understanding of the *Car Wars Sixth Edition* core rules.

# CAR CONSTRUCTION

For the most part, a bot car build is just like any other. For your first few games using a bot, we suggest using the build recipes provided in the *Car Wars Sixth Edition Vehicle Guide* as a starting point.

Note that bots *always* activate items and abilities each time the opportunity arises, and they *always* take actions that would be optional for a human player. Some cards provide choices that are not always obvious (such as when to use the *Targeting Computer* or when to activate the *Thundercat Battery*). You should not pick these cards unless you decide beforehand how the bot will use them; choose other cards of the same value.

## **STARTING POSITIONS**

Use the starting positions described in the core rules, based on the number of players in the game (each bot counts as a player). You must assign where each bot starts in the arena.

Place the turning key against the edge of the arena as shown in the core rules, then place the bot's car base directly on top, aligned with the long side of the turning key.

Align the back of the bot's car base over the turning key so that it is one car length away from the arena edge. Hold the base in that position and remove the turning key, and the bot is ready to start.

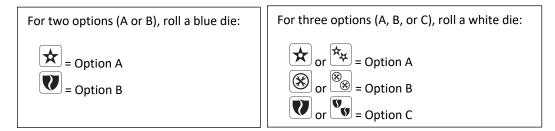
## **GENERAL RULES**

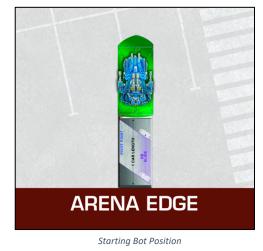
Bots follow the normal game rules except where noted below.

Crew abilities are used by bots every time there is a valid opportunity to do so.

Bots earn **x** for maneuvers, and they spend them on items, abilities, and re-rolls every time there is a valid opportunity to do so. They do not reserve tokens for later use.

When a bot is required to choose between multiple options, use dice to determine the outcome:





If a bot is expected to adjust speed above its maximum speed, it only adjusts up to its maximum speed.

When a bot makes a turn, its car base pivots far enough over the turning key to fully cover the section matching the required turn difficulty. On slight turns, the car base should fully cover the "SLIGHT" section.

If a bot goes out of control *as the result of a driving roll,* it takes 1 from the supply after resolving any tire damage or spin. If a bot goes out of control for any other reason, it does not receive this bonus token.

When a bot is given an opportunity to re-roll dice, it continues re-rolling until all available re-rolls are spent or the dice all show successful results. A bot cannot re-roll a successful result in order to improve or modify the result.

Determine which dice *can* be re-rolled, then roll them in the following order based on the bot's current step:

(1) white > (2) yellow > (3) green > (4) blue > (5) red > (6) black

(1) yellow > (2) green > (3) blue > (4) white > (5) red > (6) black

DEFENDING:

(1) blue > (2) red > (3) white > (4) yellow > (5) green > (6) black

ALL OTHER CIRCUMSTANCES: no re-rolls unless an ability specifies otherwise.

## **Avoiding Collisions**

Before a bot spends a movement point, use the turning key to measure directly in front of the car base, pointing straight ahead relative to the car's direction — if the turning key overlaps any *heavy obstacles* or *walls*, the bot must use its next movement point to turn toward the center of the arena.

Roll a blue die to determine the difficulty of the turn:

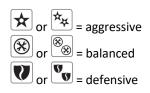


## **BOT PERSONALITIES**

Each bot's personality will be *aggressive, balanced, defensive,* or *desperate*. This will change from turn to turn.

At the start of each round, check to see if any bot has had its armor reduced to 0 on three or more sides. If so, that bot becomes *desperate* and remains so for the rest of the game.

Then roll a white die for each bot that is not *desperate*. The die result determines the personality type for that bot until the start of the next round:



We suggest using a marker, such as a standard die, near a bot's dashboard to indicate its current personality. It is very useful to have a visual reminder during play as the personality may change several times during the game.

Rules Draft December 7, 2020

#### 1. Aggressive

Do NOT avoid heavy obstacles (as any other bot would) unless the front armor is reduced to 0.

Ignore fires during the manage fires step.

During the *adjust* speed step, if at speed 2 or lower, hard-accelerate. If at speed 3 or 5, adjust to speed 4. If already at speed 4, remain at that speed.

During the *movement* step, if the nearest opponent is within the front firing arc OR if the bot has 3 or fewer , drive straight, making slight turns toward the center of the nearest opponent's car base. Otherwise make either a D1, D2, or D3 turn — whichever points the front of the car as close as possible to the center of the nearest opponent's car base.

## 2. Balanced

If possible, extinguish 1 fire during the manage fires step by paying the required cost.

During the adjust speed step, if at speed 3, remain at that speed. If not, adjust speed by 1 toward speed 3.

During the *movement* step, if the nearest opponent is within the front firing arc OR if the bot has 3 or fewer control, drive straight, making slight turns *away* from the center of the nearest opponent's car base. Otherwise make either a D1 or D2 turn — whichever points the front of the car as close as possible to the center of the nearest opponent's car base.

#### 3. Defensive

If possible, extinguish 1 fire during the manage fires step by paying the required cost.

During the *adjust speed* step, check the location of the nearest opponent:

If the nearest opponent is within the *back* firing arc, adjust speed by 1 toward speed 4. If already at speed 4, remain at that speed.

If the nearest opponent is *not* within the rear firing arc, adjust speed by 1 toward speed 2. If already at speed 2, remain at that speed.

During the *movement* step, if the bot has 3 or fewer comme, or if the nearest opponent is in the back firing arc, drive straight. Otherwise make a D1 turn toward the center of the nearest opponent's car base.

#### 4. Desperate

If possible, extinguish 1 fire during the manage fires step by paying the required cost.

During the adjust speed step, if at speed 2, remain at that speed. If not, adjust speed by 1 toward speed 2.

During the *movement* step, if this bot has 3 or fewer como, drive straight, making slight turns to point toward the center of the nearest opponent's car base. Otherwise make a D1 turn toward the center of the nearest opponent's car base.

### COMBAT

A bot fights according to the rules of the core game, but it may need help with some decisions:

#### Attacking

As long as both of a bot's crew members are still alive, the gunner fires first, followed by the driver.

Follow the list below to determine which opponent to target and which weapon to use. If there is not a valid target that meets the description, move to the next numbered item.

- 1. Attack with the highest-cost weapon that is able to target an *out-of-control* opponent.
- 2. Attack with the highest-cost limited-range weapon that is able to target any opponent.
- 3. Attack with the highest-cost weapon that is able to target any opponent.
- 4. Attack with the highest-cost sidearm that is able to target any opponent.
- 5. Do not attack this turn.

If there are multiple targets that match the highest item in the list, the bot attacks the nearest valid target. If there are multiple weapons available for a bot to fire, roll a die to determine which is used.

When a bot must choose which side of an opponent to attack, it chooses the side with the lowest armor value. If the armor values are equal, the bot aims for the left or right side (whichever can be targeted).

#### Defending

Bots defend according to the core rules and spend 🕱 for equipped items and defensive re-rolls whenever possible. If a choice arises, roll a die to decide.

#### DAMAGE CARDS

Some damage cards require a decision to be made by the bot, such as where to assign damage. Follow the criteria below to resolve those choices. If a decision still cannot be made, roll a die to decide.

#### Weapon & Accessory Results

Apply the incoming damage to the lowest-cost item on that side that has taken the least damage.

EXCEPTION: If an item would be destroyed, but another item *of the same type* on that side would *not* be destroyed, apply the damage to the other item — spread the damage as evenly as possible.

## **Crew Results**

Apply the incoming damage to the crew member that has taken the least damage. If they are tied, apply the damage to the driver.

If a crew member would be killed by incoming damage, but the other crew member would not, apply the damage to the other crew member — spread the damage as evenly as possible.

#### **END OF GAME**

The end conditions for a game with bots are identical to those of the core game.