

























Color Codes | Chart


Speed

					
Short Super Slow	Slow	Cruise	Fast	Turbo	Nitro Boost
					
R G B	R BK R	G BK G	B BK B	B G B	B G R





Direction & Special Moves

					
Left at Intersection	Straight at Intersection	Right at Intersection	Line Switch Left	Line Switch Straight	Line Switch Right
					
G BK R	B BK R	B R G	G R G	G B G	R G R
					
U-Turn	U-Turn (line end)	Tornado	Zigzag	Spin	Backwalk
					
B R B	B R	R G R G	B BK G R	G R G R	R G BK B







Timers

		
Pause (3 sec.)	Timer on (30 sec. to stop)	Timer off
		
R B R	R BK B G	G B BK R

Wins/Exits

	
Win/Exit (Play Again)	Win/Exit (Game Over)
	
G B	G R

Counters See reverse for definitions

Enable X-ing Counter	Enable Turn Counter	Enable Path Color Counter	Enable Point Counter	Point +1	Point -1
					
G R B G	R B G B	R G B R	R B R G	R B G	G B R

Speed

Speed codes change your Ozobot's velocity from Short Super Slow (slowest) to Nitro Boost (fastest).

- **Short Super Slow**
A three-second dose of super slow speed.
- **Slow**
A slow speed command effective until the bot reads a new speed code or is turned off.
- **Cruise**
The default speed command.
- **Fast**
A high speed command effective until the bot reads a new speed code or is turned off.
- **Turbo**
An extra high speed command effective until the bot reads a new speed code or is turned off.
- **Nitro Boost**
A three-second dose of Ozobot's highest speed.

Short Super Slow (slowest) > Slow > Cruise (default)
> Fast > Turbo > Nitro boost (fastest)

Cool Moves

Cool Move codes tell your Ozobot to bust a move!

- **Tornado**
A command to spin around twice at increasing speed, then continue following the line in the same direction.
- **Zigzag**
A command to sway right-left-right-left while moving forward, then continue moving straight.
- **Spin**
A command to spin around twice at a consistent speed, then continue following the line in the same direction.
- **Backwalk**
A command to quickly turn 180 degrees, wiggle backwards for one second, then turn 180 degrees again and continue following the line in the same direction.

Timer

Timer codes tell your Ozobot to pause or count seconds.

- **Timer On (30 sec. to stop)**
A command to make your Ozobot countdown from 30 sec., but continue to move and read codes while counting down. Ozobot will flash its light(s) at a rate of one flash/sec., flash rapidly to signify time is up, then shut off.
- **Timer Off**
A command to stop counting down seconds and return to default behavior.
- **Pause (3 sec.)**
A command to stop moving for three seconds, then continue with default behavior.

Direction

Direction codes tell your Ozobot what to do at an intersection.

- **Left at Intersection**
A command to turn left at the next intersection.
- **Straight at Intersection**
A command to continue straight at the next intersection.
- **Right at Intersection**
A command to turn right at the next intersection.
- **Line Switch Left**
A command to immediately turn 90 degrees to the left, move forward to a new line, then make a random turn to follow along the new line.
- **Line Switch Straight**
A mid-line command to continue straight after the line ends. The code will not work if Ozobot encounters an intersection before the line ends.
- **Line Switch Right**
A command to immediately turn 90 degrees to the right, move forward to a new line, then make a random turn to follow along the new line.
- **U-Turn**
A mid-line command to turn around 180 degrees and follow the same line in the opposite direction.
- **U-Turn (Line End)**
A line-end command to turn around 180 degrees and follow the line in the opposite direction.

Ozobot's default intersection behavior is random. If a given turn, i.e. 'Go Left' is not possible, Ozobot defaults back to random behavior.

Counters

Counter codes tell your Ozobot to count five intersections, turns, or line color changes.

- **Enable X-ing Counter**
A command to make your Ozobot stop following lines after it crosses five intersections ('T' or '+' intersections). After the fifth intersection, Ozobot executes a "done" maneuver, stops following the line, and blinks red.
- **Enable Turn Counter**
A similar command to the Enable X-ing Counter, except that Ozobot only counts intersections where it makes a turn. It will not count intersections where it continues straight. Ozobot can randomly choose to go straight at an intersection, or be commanded to go straight with a "Straight at Intersection" code.
- **Enable Path Color Counter**
A command to make your Ozobot stop following lines after it reads five color changes in the line. If the line Ozobot is following transitions from red to green, it counts as one color change. Transitions to and from black lines are not counted, and color segments less than two centimeters in length are not counted.
- **Enable Point Counter**
A command that tells your Ozobot to count point codes down from five. Each time Ozobot reads a "Point -1" code it counts down. After the fifth "Point -1" code Ozobot will make a "done" maneuver, stop following lines, and blink red. You can add more to the total count (not to exceed five) with "Point +1" codes. You can reset Ozobot by turning it off, then on.

Wins/Exits

Win/Exit codes tell your Ozobot to celebrate its success, then either start over or stop.

- **Win/Exit (Play Again)**
A command to perform a "success" animation, then continue to follow the line.
- **Win/Exit (Game Over)**
A command to perform a "success" animation, then stop following the line.