



# Joe's Universal Flight Chart

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## Descriptions of the Ratings

**Range (RNG)** refers to the relative distances that the disc should predictably fly. The values here are not meant to correspond to particular distances. For most players, a disc with a higher range rating should have greater distance potential than a disc with a lower range rating.

**High speed stability\* (HSS)** refers to the disc's flight characteristics during the first part of the disc's flight. A negative rating means the disc will fly understable at high speeds and turn to the right. A positive rating means the disc will fly overstable at high speeds and turn to the left.

**Low speed stability\* (LSS)** refers to the disc's flight characteristics during the end portion of the disc's flight. The higher the rating, the more a disc will try to fade to the left as it slows down.

**Power Requirement (PWR)** refers to the amount of power that must be generated during the throw to make the disc fly with its designed characteristics. Failing to meet the power requirement will generally result in the disc flying more overstable than intended. Exceeding the power requirement will generally result in the disc flying more understable than intended. While everyone throws differently, the chart below can be used as a general rule of thumb:

### Power Requirement

- 1: less than 175' of power
- 2: 175-225' of power
- 3: 225-275' of power
- 4: 275-325' of power
- 5: 325-375' of power
- 6: more than 375'

### Plastic types

**B** = Baseline is the lowest grade of plastic in terms of price and durability.

**M** = Mid-grade is the medium grade of plastic in terms of price and durability.

**P** = Premium is the highest grade of plastic in terms of price and durability.

Discs in higher grades of plastic will generally fly more overstable than lower grades of plastic.

### Additional notes

\*All references to fade and turn assume a right-handed backhand or left-handed forehand throw and should be reversed for right-handed forehand or left-handed backhand throws. For discs available in multiple grades of plastic, the ratings represent an average across the plastic types. Discs in premium plastic will generally fly slightly more overstable than rated. Discs in baseline plastic will generally fly slightly less overstable than rated. All ratings assume a clean release and nose down throw.

Flight chart data compiled by Blake Takkunen.

B	M	P	Model	RNG	HSS	LSS	PWR
✓			Xcaliber		0.5	4.5	6
	✓		Boss		0	4	6
✓		✓	Force		0	4	6
	✓		Double D		0	4	6
		✓	Blitz		0	4	6
✓		✓	TeeRex		0	4.5	6
	✓	✓	Pulse		0	4.5	5
✓	✓	✓	Wrath		-0.5	3.5	5
✓	✓	✓	Surge		-0.5	3.5	5
✓	✓	✓	Destroyer		-0.5	4	6
		✓	Trident		-0.5	4.5	6
		✓	Groove		-1	3.5	5
		✓	Diablo DT		-1	3.5	5
		✓	Surge SS		-1.5	3	5
		✓	Spectra		-2	2.5	4
		✓	Rogue		-2	3	5
		✓	Inferno		-2	3	4
		✓	Quarter K II		-2	3.5	4
		✓	Terminator		-2	4.5	6
		✓	Monarch		-2.5	3	5
		✓	Flick		-1	4	5
		✓	Striker		0	3	5
		✓	Starfire		0	3.5	5
		✓	Quarter K		0	3.5	5
		✓	Rage		0	4	5
		✓	Venom		0	4.5	5
		✓	Max		0	5	5
		✓	Raptor-X		-0.5	3	5
		✓	Orion LF		-0.5	3	5
		✓	Mirus		-0.5	3	5
		✓	Genesis		-0.5	3	5
		✓	Avenger		-0.5	3.5	5
		✓	Illusion		-0.5	3.5	5
		✓	Crush		-0.5	4	5
		✓	Starfire-L (SL)		-1	3	5
		✓	Riptide		-1	3	5
		✓	Scream		-1	3	4
		✓	Riot		-1	3	5
		✓	Savage		-1	3	5
		✓	XS		-1.5	2.5	4
		✓	Viking		-1.5	2.5	4
		✓	Flash		-1.5	3	5
		✓	Raging Inferno DT		-1.5	3	5
		✓	Orion LS		-1.5	3	5
		✓	Helios		-1.5	3	5
		✓	Orc		-1.5	3.5	5
		✓	Beast		-2	2	4
		✓	Vision		-2	2.5	3
		✓	Wildcat		-2	3	5
		✓	Valkyrie		-2	3	4
		✓	Scream DT		-2	3	4
		✓	100m Lazer		-2	3	4
		✓	MX-1		-2	3	5
		✓	Apache		-2	3	5
		✓	Roadrunner		-2.5	1	3
		✓	Sidewinder		-2.5	2	3
		✓	Raptor		-2.5	2.5	4
		✓	Spirit		2	4	5
		✓	XXX		2	4	5
		✓	Predator		1	4	5
		✓	Teebird		0	2.5	4
		✓	Raging Inferno		0	3	5
		✓	Tsunami		0	3.5	5
		✓	Primitus		0	3.5	5
		✓	Speed Demon		0	4.5	5
		✓	Timberwolf		-0.5	2	4
		✓	Eagle-X		-0.5	3	4
		✓	Assassin		-0.5	3	4
		✓	T-Bone		-1	2	4
		✓	Teebird-L (TL)		-1	2	4
		✓	XL		-1	2.5	3
		✓	Tracker		-1	3	4
		✓	Eagle-L (EL)		-1.5	2.5	3
		✓	#2 Helix		-1.5	3	4
		✓	Wolverine		-1.5	3	4
		✓	Avenger SS		-2	2	4
		✓	Dragon		-2	2.5	4
		✓	Odyssey ULR Driver		-2	2.5	4
		✓	Swift Fox		-2	3	4
		✓	JLS		-2	2.5	3
		✓	Epic		-2	4	5
		✓	Defender		-3	1.5	2
		✓	Archangel		-3	3	3
		✓	Viper		2	5	3
		✓	Banshee		1	4	4
		✓	EXP1		1	4	4
		✓	Firebird		0.5	4	4
		✓	Hybrid		0	3	4
		✓	#1 Helix		0	3	4
		✓	Axe		0	3.5	5
		✓	Monster		0	4	5
		✓	Reaper		0	4	4
		✓	Firebird-L (FL)		0	4	4
		✓	Stalker		-0.5	2	4
		✓	Gazelle		-1	2	3
		✓	Cyclone		-1	3	3
		✓	#2 Driver		-1	3	3
		✓	Velocity		-1.5	2	4
		✓	#1 Flyer		-1.5	2.5	3
		✓	#4 Driver		-1.5	3	4
		✓	#1 Roller		-2	1	4
		✓	Leopard		-2	1	4
		✓	Xpress		-2	1.5	3
		✓	Polaris LS		-2	2	3
		✓	Cheetah		-2	2.5	3
		✓	#1 Driver		-2	2.5	3
		✓	#3 Driver		-2	3	3
		✓	Maximizer		-3	0.5	2
		✓	Whippet		2	4	3
		✓	Blaze		1	4	3
		✓	Sharpshooter #1		0	3	4
		✓	#1 Hookshot		-0.5	3	3
		✓	#2 Hookshot		-0.5	3	3
		✓	Sabre		-1	1	1

B	M	P	Model	RNG	HSS	LSS	PWR
		✓	Squall		-1	1.5	3
	✓		Medius		-1	2.5	3
		✓	Impact		-1	2.5	2
✓			#2 Roller		-1	3	3
✓			#3 Slice		-1.5	1	2
✓		✓	Panther		-1.5	1.5	2
✓		✓	Arcurus		-1.5	1.5	2
✓	✓	✓	Skeeter		-1.5	2	2
✓		✓	#1 Slice		-2	1.5	2
✓		✓	Cobra		-2	3	2
✓		✓	Eclipse		-2	3	1
✓		✓	#2 Flyer		-2	3	1
✓		✓	Kite		-2.5	1.5	1
✓		✓	Stingray		-2.5	2	1
✓		✓	Stratus		-3	1	1
✓		✓	#2 Hyzer		-1	4	3
✓		✓	Roc		0	2.5	2
✓		✓	#3 Hookshot		0	3	3
✓		✓	Cro		0	3	2
✓		✓	Wasp		0	3	2
✓		✓	Warrior		0	3	2
✓		✓	Aftershock		0	3	3
✓		✓	#1 Hyzer		0	4	4
✓		✓	#3 Hyzer		0	4	3
✓		✓	Sentinel MF		0	4	2
✓		✓	Goblin		-0.5	1.5	2
✓		✓	Core		-0.5	2	2
✓		✓	Shockwave		-0.5	2.5	2
✓		✓	Aurora MS		-1	1	1
✓		✓	Oracle		-1	1.5	1
✓		✓	Wildfire (Up)		-1	2	2
✓		✓	Caribou		-1	2	1
✓		✓	Spider		-1	2	1
✓		✓	Shark		-1	2	1
✓		✓	Legacy		-1	2	1
✓		✓	Buzz		-1	2	1
✓		✓	Backbone		-1	3	2
✓		✓	Coyote		-1.5	1	1
✓		✓	Cornet		-1.5	1.5	1
✓		✓	Hawk		-1.5	2	1
✓		✓	Tui		-2	1	1
✓		✓	Midnight		-2	1.5	1
✓		✓	Wolf		-2	2	1
✓		✓	Meteor		-2	2	1
✓		✓	Element		-2	2	1
✓		✓	#3 Flyer		-2	2	1
✓		✓	Wildfire (Down)		-2	3.5	2.5
✓		✓	Glide		-2.5	0.5	1
✓		✓	Transcend		-2.5	1	1
✓		✓	Optimizer		-3	0	1
✓		✓	#2 Slice		-3	0.5	1
✓		✓	Demon		2	4	3
✓		✓	Drone		1	4	3
✓		✓	Gator		0	3	2
✓		✓	Zone		0	3	3
✓		✓	Sharpshooter #2		0	3	3
✓		✓	Dart		-0.5	1.5	1
✓		✓	XD		-2	1	1
✓		✓	Classic Roc		-2	2	1
✓		✓	Te Moko		0	1.5	2
✓		✓	Wizard		0	2	1
✓		✓	Challenger		0	2	1
✓		✓	Banger-GT		0	2	1
✓		✓	Aviar Big Beard		0	2	1
✓		✓	Hydra		0	2	2
✓		✓	Sinus SP		0	2.5	2
✓		✓	Sinus AP		0	2.5	2
✓		✓	Voodoo		0	2.5	1
✓		✓	Titanic		0	2.5	1
✓		✓	Beaver		0	2.5	1
✓		✓	Rhyno		0	3	1
✓		✓	Warlock		-0.5	1.5	1
✓		✓	Magnet		-0.5	2	1
✓		✓	Magic		-1	1	1
✓		✓	#2 Upshot		-1	1	1
✓		✓	Aviar Putter		-1	1.5	1
✓		✓	Pure		-1	1.5	1
✓		✓	Crossfire		-1	2	1
✓		✓	Blunt		-1	2	1
✓		✓	Blowfly		-1	2	1
✓		✓	Woodchuck		-1	2	1
✓		✓	Crosshair		-1.5	1	1
✓		✓	Spike		-1.5	2	1
✓		✓	Zephyr		-2	1	3
✓		✓	Polar Bear		-2	1	1
✓		✓	Rock-It		-2	1	1
✓		✓	Omega		-2	1.5	1
✓		✓	Pindragon		-2.5	1.5	1
✓		✓	Pig		0	1	3.5
✓		✓	Ringer		0	2	1
✓		✓	Arrow		0	4	2.5
✓		✓	X-Link		0	3	2
✓		✓	Sharpshooter #3		0	3	2
✓		✓	Aero		-1	0	1
✓		✓	JuJu		-1	1	1
✓		✓	Rubber Putter		-1	1	1
✓		✓	Turbo Putt		-2.5	1.5	1
✓		✓	Wheel (flying)		1	2	3
✓		✓	Polecat		-2	0	1
✓		✓	APX		-2	0	1
✓		✓	Reef		-2	0	1
✓		✓	The Upshot		-2</		