

ShutterScholar · Camera Settings Cheat Sheet

Starting points for every scene — set them, check your meter, adjust to taste.

Crop-sensor note: for the handheld & star rules, multiply your focal length by 1.5 (APS-C) or 2 (Micro 4/3). The app tailors all of this to your exact camera.

Scene	Mode	Aperture	Shutter	ISO	Why / pro tip
Portrait (single)	Aperture Pri.	f/1.8–2.8	auto ($\geq 1/200$)	100–400	Wide aperture blurs the background and separates your subject. Focus on the near eye.
Group portrait	Aperture Pri.	f/5.6–8	auto ($\geq 1/160$)	100–400	More depth of field so everyone front-to-back stays sharp.
Landscape	Aperture Pri.	f/8–11	auto	100	Deep focus, and most lenses are sharpest here. Tripod for max detail.
Waterfall / silky water	Shutter Pri. / M	f/11–16	1/2–2 s	100	Slow shutter blurs water. Needs a tripod and usually an ND filter in daylight.
Freeze action / sports	Shutter Pri.	widest	1/1000 s	Auto (≤ 6400)	Fast shutter freezes motion; let ISO float to hold exposure indoors.
Birds / wildlife	Shutter Pri.	f/5.6–8	1/1600 s	Auto	Even faster for wingbeats. Long lens; brace or use a monopod.
Street (daylight)	Aperture Pri.	f/8	auto ($\geq 1/250$)	400	f/8 gives a deep zone so you can shoot fast without missing focus.
Golden hour portrait	Aperture Pri.	f/2–2.8	auto	100–200	Backlight for rim light; expose for the face and embrace the glow.
Indoor, low light (no flash)	Aperture Pri.	f/1.8–2.8	auto ($\geq 1/60$)	1600–3200	Open up, raise ISO. Keep shutter $\geq 1/\text{focal length}$ to stay sharp handheld.
Night sky / Milky Way	Manual	widest (f/2.8)	15–25 s	1600–3200	“500 rule”: max shutter $\approx 500 \div \text{focal length}$. Manual focus to infinity, tripod.
Car light trails	Manual	f/11	8–20 s	100	Long exposure stretches headlights into ribbons. Tripod + 2-sec timer.
Macro / close-up	Aperture Pri. / M	f/8–16	auto	100–400	Depth of field is razor-thin up close, so stop down. Tripod + manual focus help.

Three rules to remember

Exposure triangle: aperture (depth) + shutter (motion) + ISO (noise) balance one exposure.

Handheld minimum shutter: $1 \div \text{focal length}$ (50mm \rightarrow 1/50s); faster if you've had coffee.

Expose to the right: brighten until just before highlights clip — cleaner shadows, less noise.

Want this tuned to your exact camera — and the reasoning behind every setting? [Join the waitlist at shutter scholar.com](https://shutterscholar.com)