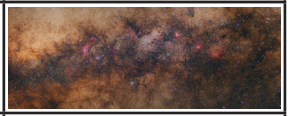
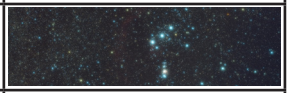
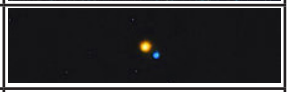
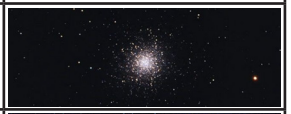
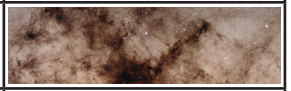
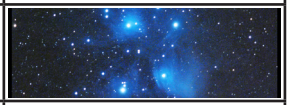
NEBULA PHOTOS GUIDE TO
PHOTOGRAPHING DEEP SKY OBJECTS BY TYPE

Type	*Typical Focal Length*	*Sky Condition*	*Ideal Filters (One Shot Color*)*	*Ideal Filters (Mono)*	*Suggestion for beginner*	*Sample photo*
1. Milky Way	8mm - 40mm	< Bortle 4	None	RGB	Sagittarius region at 24mm	
2. Constellations & Asterisms	14mm - 85mm	Any	None and/or Diffusion Filter	RGB	Orion or the Big Dipper at 35mm	
3. Double Stars	600mm+	Any	None	RGB	Albireo	
4. Open Star Clusters	400mm+	Any	None	RGB	Pleiades and Hyades at 50mm+ or M44 at 500mm	
5. Globular Star Clusters	600mm+	Any	None	LRGB	M13 at 600mm	
6. Galaxies	600mm+	< Bortle 6	None or gentle Light Pollution (e.g. L-Pro or Neodymium)	LRGB or L(Ha)RGB	M31 at 200mm+ or M81/82 at 600mm	
7. Dark Nebulae	All	< Bortle 4	None	LRGB or HaRGB	Pipe Nebula at 100mm	
8. Reflection Nebulae	All	< Bortle 4	None	LRGB	Pleiades at 200mm+	
9. Emission Nebulae	All	Any	Light pollution, multi-bandpass, narrowband, or none	Ha, OIII, SII, NII, NIR, RGB	North America and Pelican Nebulae at 200mm+	
10. Mixed Nebulae	All	< Bortle 4	None or any of the above	LRGB or HaRGB	Trifid Nebula at 200mm+	

*One Shot Color (OSC) is catch-all term for all cameras that use an internal color filter array (CFA) to produce color images. This includes DSLRs, Mirrorless, and Dedicated Color Astrocams.