Suggested Targets for Color Imaging

Orion Nebula
R.A. 5hr 35.4min **Dec:** -5° 27’ **Exposure:** 30-60sec **Best Visible:** Oct-Mar from North America This big cloud of glowing gas is visible by eye in the constellation Orion. It's easy to tell where the stars are that are lighting up the nebula: they're right in the center of the cloud.
Trifid Nebula
R.A.: 18hr 02.3min **Dec:** -23° 02’ **Exposure:** 60 sec **Best Visible:** April-Sept from North America This is one of the few nebulae where you can see THREE different color effects of gas and dust: fluorescing red hydrogen, blue reflection from dust particles, and dark black dust lanes. Also look for differently-colored stars! Telescopes further south get a better view of this nebula.
Eagle Nebula (M16)
R.A.: 18hr 18.8min **Dec:** -13° 47’ **Exposure:** 60 sec **Best Visible:** Apr-Oct from North America
Swan Nebula (M17)
R.A. 18hr 20.8min **Dec:** -16° 11’ **Exposure:** 60 sec **Best Visible:** April-Oct from North America If Orion is not up, try this nebula in color to see the red glow of hydrogen gas. The stars that are lighting up this star-birth nebula are hidden by the dust.
Ring Nebula (M57)
R.A. 18hr 53.5min **Dec:** 33° 02’ **Exposure:** 10-30 sec **Best Visible:** Feb - Dec from North America In the constellation Lyra. Expanding at about 12 miles per second, formed about 20,000 years ago.

Albireo

R.A. 19hr 28.7 min **Dec:** 27° 52’
Exposure: 10-30 sec
Best Visible: Feb - Dec from North America
When seen through a telescope, the “tail” star of Cygnus the swan just lines up with a much more distant, dimmer star. One of these is quite red and the other much bluer. Can you tell which is which?

NGC 869

R.A. 2hr 8 min **Dec:** 57° 09’
Exposure: 30 sec
Best Visible: Year round from North America
This “open” cluster of stars is quite young – only 10 million years old or so— and is full of hot blue stars (and a few red giants as well). It is part of a double cluster of stars in the constellation Perseus that is quite visible with binoculars.

Pleiades (M45)

R.A. 03hr 47.4min **Dec:** 24° 07’
Exposure: 10-30 sec
Best Visible: July – Mar from North America
The bright stars of the Pleiades are noticeably bluish. If you overexpose your images, you may be able to just pick out the blue reflection off the dusty nebulae surrounding the brightest stars.
The Pleiades stars are about 80-100 million years old.

Hercules cluster (M13)

R.A. 16hr 41.5 min **Dec:** 36° 28’
Exposure: 10-30 sec
Best Visible: July – Mar from North America
Because all the stars in M13 are about 12 billion years old, it was selected in 1974 as target for one of the first radio messages addressed to possible extra-terrestrial intelligent races, and sent by the big radio telescope of the Arecibo Observatory.

Dumbbell nebula (M27)

R.A. 19hr 59.4 min **Dec:** 22° 42’
Exposure: 30 sec
The central star is extremely hot. The nebula is believed less than 2.5 light-years wide.