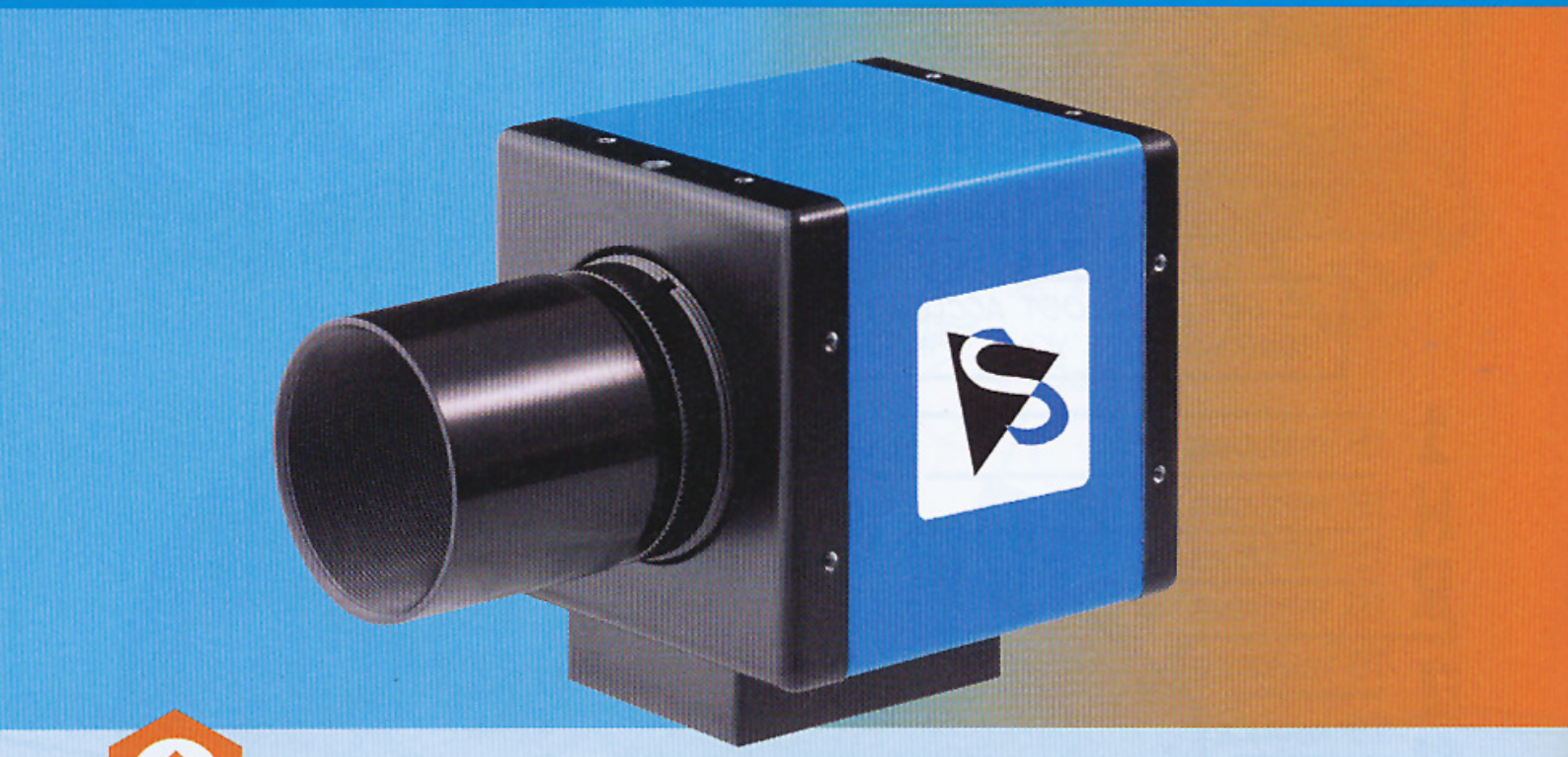
Photograph planets, record audio tracks, grab a tarp, build a shack, find true north, and learn for free.

TOOLBOX



Imaging Source USB, FireWire, and Ethernet Cameras

$350 and up astronomycameras.com

Whether you need a planetary camera for astronomy or a "grown up" webcam for machine vision experiments, you'll find Imaging Source's products appealing. These sub-megapixel USB, FireWire, and gigabit Ethernet cameras shine because of their versatility.

With a sturdy, metal-bodied construction, they're ideal for applications where a normal webcam would be too flimsy. The USB version requires no other power source. They work with all webcam software, and an especially versatile control program is included. All that's missing is audio — there's no microphone. And in some circumstances, that can be a blessing.

For astronomers, these are planetary cameras. The astronomy versions of the DMK (monochrome), DFK (color), and DBK (color plus infrared) cameras come with an adapter that fits a telescope eyepiece tube. Aim the telescope at a planet, record a few minutes of uncompressed video, then use RegiStax (freeware) to sort and align the video frames, picking out the best so you get the full benefit of brief moments of steady air. These cameras will take still pictures and time exposures, but they're not designed for faint stars or nebulae.

For the rest of us, these are also general-purpose daytime cameras that accept C- and CS-mount video camera lenses. In this role they're great for machine vision, security camera applications, and general experimenting.

If you write your own software, you can use either the regular webcam interface or a more versatile set of software tools available from the manufacturer. You can control the exposure over a much wider range than with a webcam, and unlike a DSLR, there's no shutter to introduce vibration.

—Sharon Covington

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