


iOptron SkyTracker™

**iOptron
SkyTracker™**



Dr Steve Barrett
BASoc 15 Apr 2019

From K2 to iOptron




K2 is a star tracker that I designed and built with simplicity and cheapness in mind.

UNIVERSITY OF LIVERPOOL

2

K2 – Off and On



With K2 switched off the stars trail after just a few seconds.

With K2 switched on the stars are imaged as pinpoints.

UNIVERSITY OF LIVERPOOL

3

Milky Way with 35 mm lens



20 x 60s

UNIVERSITY OF LIVERPOOL

4

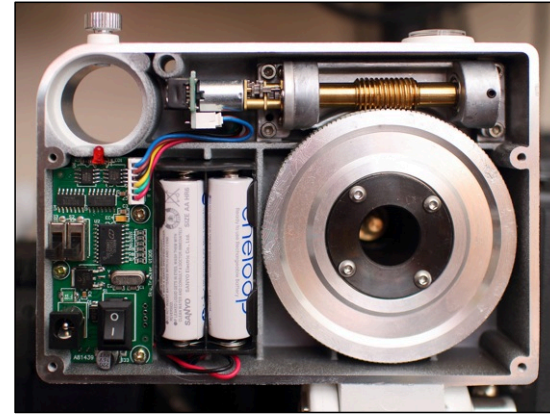
iOptron SkyTracker™

iOptron SkyTracker

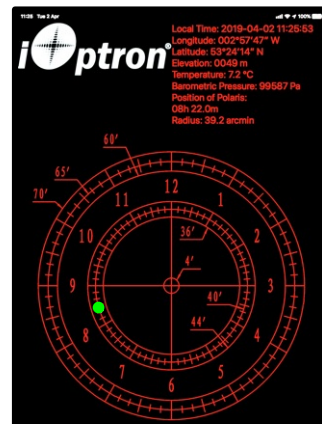
An alternative is a commercial product like the iOptron SkyTracker™.



Inside the SkyTracker



Polar Alignment

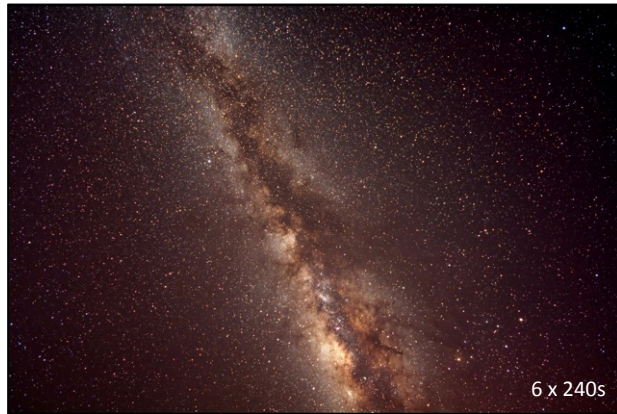


Attaching a Camera

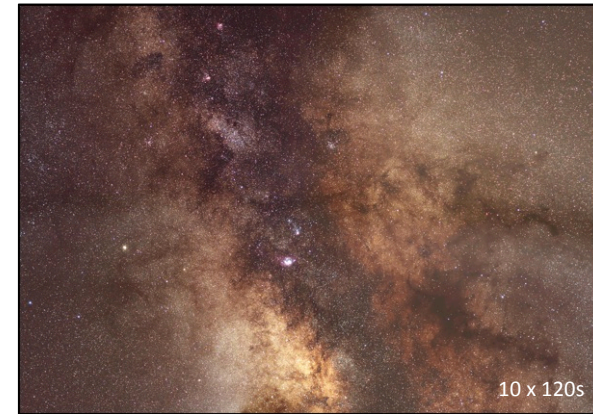


iOptron SkyTracker™

Milky Way with 10mm lens



Milky Way with 85 mm lens



Antares and Rho Ophiuchi



Antares and the Rho Ophiuchi Molecular Cloud Complex
Taken from Teide Observatory in Tenerife
60 x 120s exposures taken with a Nikon D7000 and 5.55mm f/2 lens
© Steve Barrett 2018

With a 135 mm telephoto lens more detail can be captured in the region north of Antares, including the nebulosity around Rho Ophiuchi.

Longer focal length lenses may show some trailing unless the polar alignment of the tracker is set carefully.

Shorter exposures usually gets around that problem.

iOptron SkyTracker™



www.liverpool.ac.uk/~sdb/Talks

Dr Steve Barrett

BASoc 15 Apr 2019