

## SPIRIT II Imaging Tips

Your imaging strategy when using *SPIRIT II* will need to be modified to take account of differences between it and *SPIRIT I*.

### 1. Field of View

*SPIRIT II* has a field of view of 43 arc minutes – twice the size of *SPIRIT I*. Large diffuse objects such as the Orion nebula will be easier to frame and image, however small dense objects such as globular clusters and planetary nebulae may seem less impressive in the larger field of *SPIRIT II*.

### 2. Exposure Times

*SPIRIT II* is a larger telescope with a more sensitive CCD sensor. As a general rule, exposures can be shorter. Try 30 second exposures if you normally use 60 second exposures on *SPIRIT I*.

### 3. Binning

The smaller pixel size of the CCD sensor used on *SPIRIT II* allows greater flexibility in binning modes. It is important to understand the difference between each mode.

- Bin 1 is the camera's highest resolution, but will produce very large files (36 MB). At 0.63 arc seconds per pixel, images will be 'over sampled' under the poor skies of UWA.

***Bin 1 is not recommended for the majority of targets using SPIRIT II.***

- Bin 2 provides an image scale similar to *SPIRIT I* (1.26 arc seconds per pixel), but with twice as many pixels the file size is much larger (8 MB).
- Bin 3 provides a lower resolution but higher sensitivity option. At 1.89 arc seconds per pixel, this mode is well suited for the skies at UWA, provides a file size comparable to that of *SPIRIT I* (3.5 MB) and allows imaging with much shorter exposures.

***Bin 3 is the recommended default for imaging with SPIRIT II.***

**Take a Single Image**

[Help](#)

Target Name:  [Get Coordinates](#)

Right Asc. (hrs):

Declination (deg):  *(coordinates in J2000)*

Duration (sec):  Filter:  Binning:

[Acquire Image](#)

OK! m 8 coordinates set... az=080.8 alt=63.4 rising: transit at 82.4 deg alt in 116min