

**Radio Astronomy Supplies**  
**APPLICATION NOTE 2**  
**THE BASIC RADIO TELESCOPE**

***A Brief Description***

The modern radio telescope is constructed with some simple and often more complex circuitry. In the early days of radio astronomy, it was easy to obtain parts and construct a functioning radio telescope. Modern day circuitry is more complex and often designed in the microminature realm, with circuit board technology. Specialized test equipment is a must when tuning and testing is required.

*It is still possible to construct* an operating system with pre-assembled, commercially made modules. The reading material within the websites below, will point the reader in the right direction.

In any endeavor, it is best to start off with a good basis of knowledge. This Application Note offers basic illustrations, of a few radio telescope designs.

Generally, the basic radio telescope is made up of the following modules:

- ?? Antenna
- ?? Low Noise Amplifier
- ?? Mixer
- ?? Local Oscillator
- ?? IF Amplifier
- ?? Square Law Detector
- ?? A/D Converter
- ?? Computer

Some further reading is suggested on this subject. You may want to look at the following websites for related books:

**RADIO ASTRONOMY SUPPLIES**

<http://www.nitehawk.com/rasmit/ras.html>

**RADIOSKY PUBLISHING**

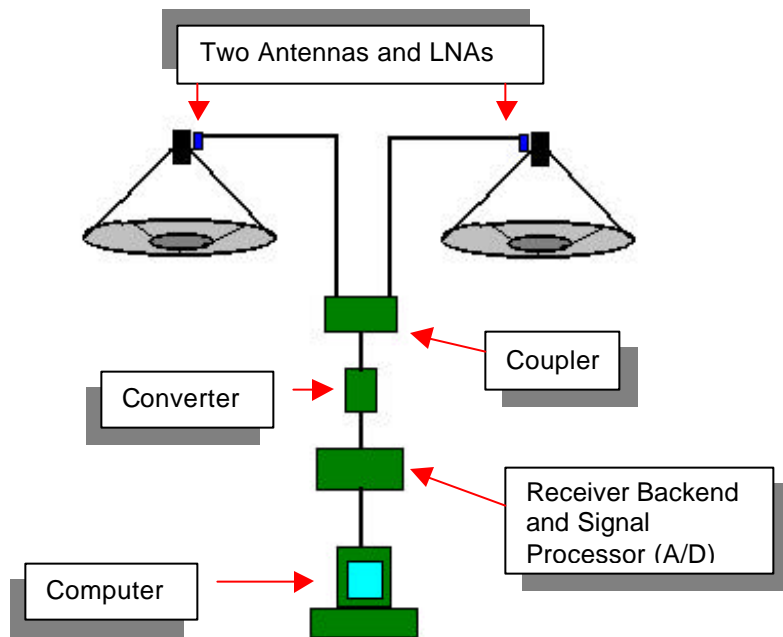
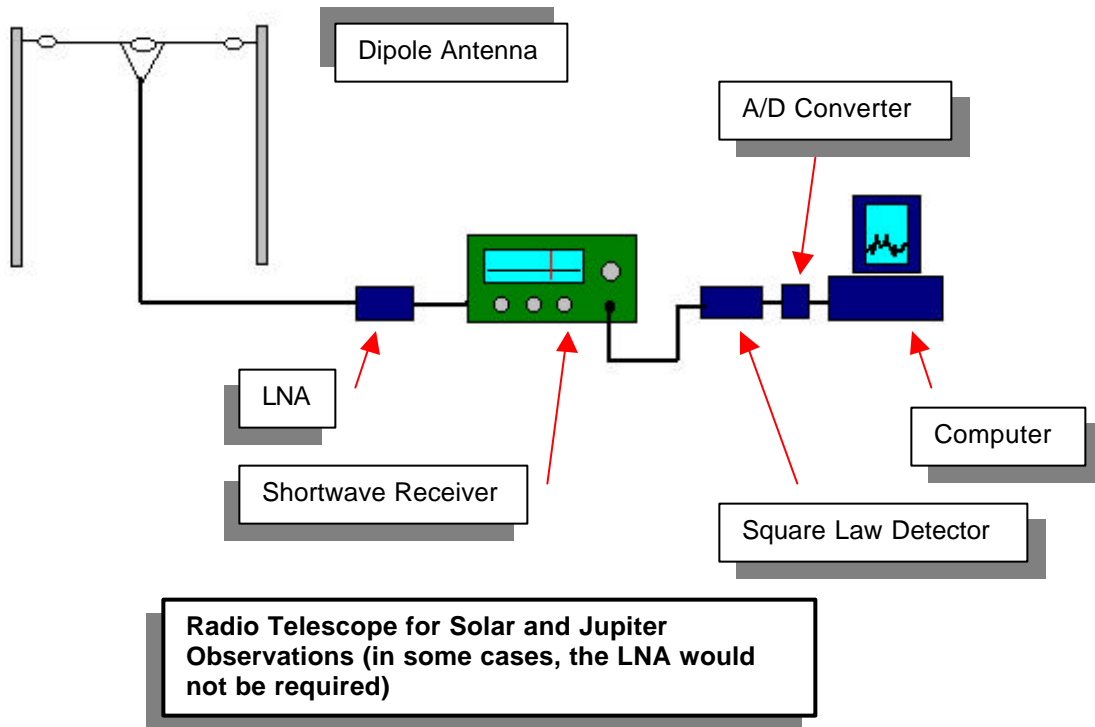
<http://www.radiosky.com>

**SOCIETY OF AMATEUR RADIO ASTRONOMERS**

<http://www.bambi.net/sara.html>

The following illustrations will give the reader an idea of the typical radio telescope.

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**Basic Layout of an Interferometer Radio Telescope. Generally used for UHF and higher frequencies.**

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