



Thanks for purchasing The Almanac – a slow-moving world of celestial time rendered in sonic space awaits! A few quick notes to get you started:

It can take some time to establish a GPS lock. Best results are achieved outside, and with the unit outside of any enclosure. Once a lock is established, the lights will turn on, and your Almanac will be rendering the altitudes of the Sun, moon and planets in glorious 0-5v control voltages. For quicker GPS locks on restart, insert a CR1220 coin battery (not included) underneath the GPS unit. If a GPS lock isn't established in roughly one hour, The Almanac will use a fallback location and time, chosen at random. The fallback locations and times are: my birthplace/time, The Almanac's birthplace/time, and various astronomically significant locations around the world in their eras of activity (e.g., Machu Picchu around the year 1450).

The default mode outputs the altitudes of the Sun, moon, and planets including the dwarf planet Pluto. If a planet is below the horizon, it will read as 0v.

3 different modes are available via the switch on the back of the module:



### **Nadir mode (N):**

Nadir mode will output 0v at -90 degrees, 5v at +90 degrees, and 2.5v at the horizon. This way, you can track bodies shortly before they rise.

### **Phase mode (P):**

In phase mode, the output for Pluto is replaced with the percentage of the moon's disk that is illuminated – in other words, its phase. New moon is 0v, full moon is 5v.

### **Heliocentric mode (H):**

In heliocentric mode, The Almanac tracks the distance a planet is from its perihelion (the point in its orbit closest to the Sun). In the instant before perihelion, the output will be nearly 5v. At perihelion, the output will reset to 0v. In heliocentric mode, the moon output tracks the moon's phase, and the Sun output tracks the orbit of the Earth.

**A note on accuracy:** The Almanac's calculations are based on algorithms of varying accuracy. They should be fairly accurate until around the year 2100.

