



Overview of USDA DGPS Backpack

Abstract

This guide gives an overview of the USDA Configuration 1 backpacks that utilize the NDGPS system for improved positioning through real time correction.

Backpack



Contents of Note

The beacon receiver connects to the Dual GPS-Beacon Antenna, a power supply, and a handheld GPS unit (the GPSMap 76, and possibly the GPS Map 78) via a variety of cables. The GPSMap 76 can be used to set a frequency and baud rate to tune the system to an NDGPS tower's transmission. Otherwise the tuning settings can be made directly on the beacon when powered on. Power sources can be a battery carried in the backpack and connected to the system, or an external power source, such as from a vehicle.

Accuracy

The purpose of the backpack is to improve the accuracy of the GPS through a real time correction fix being transmitted by the NDGPS system and picked up by the backpack's antenna. When successfully configured, the skyplot screen on the GPS unit should indicate a 3D Differential fix, not just a 3D GPS fix. Depending on your location and proximity to a given correction tower, you may have varying improvements in accuracy. If you are out of range of a tower, you are unlikely to get a fix at all or any improvement in accuracy if you are at the edge of the tower's range. Please refer to the DGPS Coverage Map for general information on towers, their frequencies and bit rates, and their estimated range of coverage.