

UNAVCO Resources: Engineering How-tos

Article Number: 330 | Rating: Unrated | Last Updated: Fri, Aug 12, 2016 at 10:13 PM

UNAVCO Resources: Engineering How-tos

Note that the some of the equipment addressed in the how-tos below is no longer supported by UNAVCO.

GPS Receivers and Related Software

- [Trimble NetRS - How to set up and take care of the UNAVCO NetRS campaign case in the field](#)
- [Trimble NetRS - UNAVCO Basic Use Guide](#)
- [Trimble NetRS - How to connect to the NetRS receiver using DHCP](#)
- [Trimble NetRS - How to send UNIX commands to a NetRS \(internal\)](#)
- [Trimble NetRS - How to configure an XP computer to connect to a NetRS via PPP](#)
- [Trimble NetRS - How to set up a PPP connection to a NetRS using Linux and wvdial](#)
- [Trimble NetRS - How to reset the receiver and reload the kernel](#)
- [Trimble 5700/R7 - How to configure the receiver using Trimble Configuration Toolbox software](#)
- [Trimble 5700/R7 - How to verify receiver tracking using Trimble GPS Configurator software](#)
- [Trimble 4700/5700/R7 - How to execute a post-processing kinematic \(PPK\) survey from start to finish](#)
- [Trimble 4700/5700/R7 - PPK Cheatsheet](#)
- [Trimble 4700/5700/R7 - How to execute a real-time kinematic \(RTK\) survey from start to finish](#)
- [Trimble 4700/5700/R7 - RTK Cheatsheet](#)
- [Trimble 5700/R7 and TSC1 Survey Controller - How to download data from the PC card](#)
- [Trimble TSC2 Data Collector and Survey Controller - Complete Quick-start Guide](#)
- [Trimble 4700/4800 - Quick Start Guide](#)
- [Trimble 4700 - How to configure a GPS receiver and a computer for SuomiNet](#)
- [Trimble WinFlash - How to load new firmware onto the Trimble 4700 receiver](#)
- [Trimble Geomatics Office \(TGO\) - How to process fast-static and post-processing kinematic surveys using TGO](#)
- [Trimble Geomatics Office \(TGO\) - TGO User Notes](#)
- [Trimble Geomatics Office \(TGO\) - How to apply precise orbits in TGO](#)
- [Trimble 4000 - Quick Start Guide](#)
- [Trimble 4000 - How to program survey sessions](#)
- [Trimble 4000 - How to configure for kinematic surveys](#)
- [Trimble 4000 - How to download using TRIM4000 for DOS](#)
- [Trimble 4000 - How to replace the internal batteries in a Trimble 4000 SSI/SSE](#)
- [Trimble - How to download a Trimble receiver using the Trimble rfile program](#)
- [Trimble GPSurvey V2.35 - How to process GPS data \(outline\)](#)
- [Topcon GB-1000 - How to configure for static surveying](#)
- [Topcon GB-1000 - How to configure for rapid static observations](#)
- [Topcon GB-1000 - How to configure for kinematic surveys](#)
- [Topcon GB-1000 - How to download data](#)
- [Topcon GB-1000 - How to download a Topcon GB-1000 receiver using lftp](#)
- [Topcon GB-1000 - How to use the Topcon Tools software, for first-time users](#)
- [Topcon GB-1000 - How to enable 20 Hz \(and other high-rate\) data logging](#)
- [Ashtech Z-12 - How to configure for static and rapid static surveys](#)

- [Ashtech Z-12 - How to configure to stream for VSAT](#)
- [Ashtech MicroZ - How to load firmware using the Universal Program Loader or MicroManager](#)
- [Allen Osborne TurboRogue - How to upgrade firmware](#)
- [Allen Osborne TurboRogue - How to download and qc data](#)
- [Allen Osborne TurboRogue - How to configure the receiver using terminal commands](#)
- [Canadian Marconi AllStar - How to configure L1 receivers](#)
- [How to execute some common file conversions](#)
- [Campaign Surveys - How to obtain high-confidence coordinates for a base station](#)

GPS Antennas, Mounts, and Monuments

- [How to align the GPS antenna to true north](#)
- [SCIGN mount - How to level the SCIGN mount](#)
- [Tech 2000 - How to set up the Tech 2000 antenna mast](#)
- [Tripod - How to set up a tripod and tribrach](#)
- [Polar mast - How to install a polar-style GPS mast](#)
- [UNAVCO/Micro Pulse L1 - How to make UNAVCO's L1 antenna](#)

Meteorological Equipment

- [How to extract meteorological records from GPS data files using teqc](#)
- [Vaisala - How to integrate the Vaisala WXT520 with the Trimble NetRS](#)
- [Vaisala - How to configure a Trimble NetRS for use with a Vaisala WXT510 metpack in the Plate Boundary Observatory](#)
- [Vaisala - How to integrate the Vaisala WXT520 with the Topcon NET-G3](#)
- [Vaisala - How to integrate the Vaisala WXT520 with the Ashtech MicroZ](#)
- [Vaisala - How to build a DB9 serial connector for the Vaisala W510/520 met pack](#)
- [Paroscientific - How to integrate the Paroscientific MET4 with a GPS/GNSS receiver](#)
- [Paroscientific - How to integrate the Paroscientific MET3 with the Topcon NET-G3](#)

Communications and Networking (see also Linux and Remote-station Software, below)

- [Iridium - How to establish Iridium communications from an XP computer to a UNAVCO polar remote GPS station](#)
- [Proxicast LAN-Cell Gateway - How to use a Proxicast for internet access](#)
- [Proxicast LAN-Cell Gateway - How to use a PBO Proxicast for internet access \(internal\)](#)
- [Proxicast LAN-Cell Gateway - How to determine signal strength](#)
- [Proxicast LAN-Cell Gateway - How to perform a hard reset on a LAN-Cell 2 modem](#)
- [Proxicast LAN-Cell Gateway - How to configure a UNAVCO LAN-Cell 2 modem \(internal\)](#)
- [Proxicast LAN-Cell Gateway - How to configure the VPN on a LAN-Cell 2 modem \(internal\)](#)
- [Intuicom - How to configure an Intuicom wireless Ethernet bridge using CommPro software](#)
- [Intuicom - How to load firmware onto an Intuicom EB-1 ethernet bridge](#)
- [Intuicom - How to run diagnostics on Intuicom ethernet bridges using CommPro](#)
- [Intuicom - How to upgrade to Intuicom firmware Rev. 5.80, 2001](#)
- [Cisco Wireless - How to configure an Aironet Wireless Bridge](#)
- [Lantronix MSS100 - How to configure the Lantronix MSS100 for data transfer](#)
- [Quatech - How to stream GPS data using a DNC/CNC system](#)
- [Raven II, Lantronix MSS100 - How to use the Raven II CDPD modem with the Lantronix MSS100 serial-to-ethernet device](#)
- [Digi EtherLite - How to configure the Digi EtherLite for data transfer](#)
- [RAD Modems - How to configure a RAD Master-Slave modem pair](#)
- [Courier V.Everything 33.6 modem - How to configure a Courier V.Everything 33.6 modem for various data transfer modes via a Linux box](#)

- [Telbit Worldblazer \(T3SA\) - Telbit Worldblazer Quick Reference Card](#)
- [PC/104 - How to install RedHat LINUX 5.2 on the PC/104](#)

Linux and Remote-station Software

- [Linux - How to configure the time and NTP on a Linux system](#)
- [Linux - How to securely network a Fedora Linux system](#)
- [Linux - How to configure Fedora services on UNAVCO field computers](#)
- [Linux - How to configure for a remote terminal session to a Linux box through a phone or wireless connection](#)
- [Linux - How to configure PPP for serial TCP/IP phone or wireless connections between a local and remote Linux box](#)
- [Linux - How to add one or more serial cards to a Linux box and avoid IRQ and memory address conflicts](#)
- [Linux - How to recover from trashed file systems \(boot and mount problem\) on a Linux box](#)
- [WIGATE - How to remotely access receivers that are being downloaded using the WIGATE software](#)
- [LAPDOGS - How to install the UNAVCO LAPDOGS software \(and other LAPDOGS documentation\)](#)
- [EGADS & SHARC - How to install EGADS & SHARC on a RedHat LINUX 7.3 system](#)
- [APCUPSD - How to configure the back-up power supply software APCUPSD on a Linux box](#)
- [PowerAlert - How to configure PowerAlert on Linux with the APC BackUPS Pro 280VA, and the PowerAlert executable](#)
- [PowerChute Plus - How to configure PowerChutePlus on Linux with the APC BackUPS Pro 280VA, and the PowerChutePlus executable \(2002\)](#)
- [Nut - How to install Nut v0.45.4-1 on Linux with the APC BackUPS Pro 280VA \(September 2002\)](#)
- [GENPOWER - How to install GENPOWER and Power Monitoring Software on a Linux box](#)

Other

- [How to assemble a Times N-Type Connector](#)
- [How to configure the Western Telematic NBB Series Boot Bar](#)
- [How to assemble folding 60W three-piece solar panel sets](#)

Posted by: **Beth Bartel** - Tue, Feb 16, 2010 at 8:40 PM. This article has been viewed 5232 times.

Online URL: <https://kb.unavco.org/kb/article/unavco-resources-engineering-how-tos-330.html>