TRIMBLE PROXRT QUICKSTART

I. System Contents



- 1 ProXRT Receiver
- 2 XRT Nomad Serial Cable (Lemo) (Part #: 59046)
- 3 Multiport Adapter / XRT Charging Adapter (Part #: 57168)
- 4 Zephyr Model 2 Antenna (Part#: 57970-00 DC 4818)
- 5 Antenna Cable (Part #: 58957-02)
- 6 XRT AC Adapter / Charger (Part #: 62546 / Model #: PW174KA1802F02)
- 7 XRT Range Pole Mounting Clamps (Quantity: 2)
- 8 Nomad Data Logger with Stylus Pen and Hand Strap
- 9 Nomad AC Adapter / Charger (Part #: ST1-Z2001 / Model #: TR30R050)
- 10 Nomad Range Pole Clamp (Part #: 5198-052)
- 11 Nomad Mount / Cradle/ Clamp (Part #: 5200-059)
- 12- Null Modem Cable (Part #: 59043)
- 13 USB Cable (Part #: EGL-Z2001)

- II. System Setup
 - A. Antenna (Zephyr Model 2) to Range Pole
 - 1. Screw onto top of pole
 - B. ProXRT to Range Pole
 - 1. Attach XRT Range Pole Mounting Clamps (2) to pole

[NOTE: DO NOT OVERTIGHTEN ANY OF THE CLAMPS SO AS TO DENT / DAMAGE THE FIBER RANGE POLE]

Tighten top clamp securely at desired position/height; tighten lower clamp "loosely" just below top clamp...

- 2. Insert ProXRT top "tab" (i.e., silver tab/bracket on "bottom" of XRT unit) into top pole clamp
- 3. Slide bottom clamp into ProXRT lower tab/ bracket & tighten clamp securely
- C. Connect Antenna Cable
 - 1. Screw right-angle connector onto antenna connector
 - 2. Screw straight connect onto ProXRT connector
- D. Nomad Data Collector to Range Pole (The Nomad must be mounted on the range pole to maintain bluetooth connection with the ProXRT)
 - Attach Nomad Range Pole Clamp onto range pole at desired position & tighten securely [NOTE: DO NOT OVERTIGHTEN ANY OF THE CLAMPS SO AS TO DENT / DAMAGE THE FIBER RANGE POLE]
 - 2. Insert Nomad Mount / Cradle into the pole clamp (push black "button" [on the clamp] to allow mount to lock into the bracket)
 - 3. Insert Nomad data collector into the mount/cradle and tighten knob to secure; adjust mount to desired viewing angle by rotating the mount in the pole clamp

III. System Startup

A. Turn on ProXRT by pressing "green" power button

Unit will sequence through "booting"/ firmware version / default SV/Rover screens

B. Turn on Nomad data collector by pressing the "green" power button

Unit will perform boot sequence to Windows Mobile "Start" screen

- C. Initialize Nomad bluetooth radio
 - 1. Tap bluetooth icon (on Windows Mobile "Start" screen) to open Wireless Manager
 - 2. Tap Bluetooth bar once (change radio from "Off" to "On")
 - 3. Tap "Done" (at bottom left) to return to Windows Mobile "Start" screen
- D. Start Trimble TerraSync [Start>TerraSync or Start>Programs>TerraSync]

NOTE THAT ITEMS 1 THRU 3 (BELOW) WILL BE PRESET WHEN YOU RECEIVE THE UNIT & SHOULD NOT NEED TO BE RESET UNLESS YOU HAVE MADE CHANGES

1. Set/Verify GPS Receiver Port Setting

[Setup>GPS Settings>"GPS Receiver Port"]

For Bluetooth Connection, port should be "COM 8: ProXRT, ..."

2. Set/Verify Antenna Type & Height

[Setup>Logging Settings>"Wrench" Icon to Right of "Antenna Height"]

Set "Height" to "2" meters or "6.562" feet (i.e., the height of the range pole)

Set "Type" to "Zephyr Model 2"

Set "Measure Height to" to "Bottom of antenna mount"

3. Set/Verify OmniSTAR Real-time Settings

[Setup>Real-time Settings>"Choice 1"]

- a. Select "Integrated OmniSTAR" from dropdown menu
- Integrated OmniSTAR Settings ["Wrench" Icon to Right of "Choice 1: Integrated OmniSTAR"]
 - i. Set "VBS Correction Datum" to "NAD 1983 (Conus) CORS96"
 - ii. Set "Name" to match your "Region" (Eastern USA)

- 4. Connect Nomad to ProXRT GPS [Tap "GPS" icon/button located near the top right of the TerraSync "Setup" screen]
- 5. (OPTIONAL) Make other configuration changes (e.g, Coordinate System or Units) according to personal preference
- 6. GENERAL NOTES
 - a. Once GPS is connected and a position is obtained, you are ready for data collection. However...
 - b. Normally, It will take several minutes for OmniSTAR to lock into "HP" (i.e., 10 cm/ 4 in) service level. To check status, in TerraSync go to "Status>Real-time" screen and note "Service Level" (The Service Level will rotate from "?" to "VBS" to "XP" and then to "HP").
 - c. Additionally, it will normally take 20 minutes to 30 minutes after unit is first turned on to achieve necessary carrier lock and related sub-30 cm / 1-ft accuracy. After this is achieved, it should be maintained from point to point with minimal time lag ...The optimal 10 cm accuracy can be achieved, but may require the unit being on continuously for 70 -90 minutes; it also may require "sitting" on a point for an extended period(e.g., 10 to 20 minutes); the longer the unit is on and locked to the Omnistar HP signal,the better the accuracy, with the optimal being around 10 cm/ 4 in.
 - d. Nomad Battery Conservation
 - i. To conserve the Nomad battery, the Bluetooth radio should be turned "Off" when GPS work is completed. Same procedure as in III. C. on page 3, above, only by tapping the "Bluetooth" bar when radio is "On", it will toggle to "Off"...
 - ii. Also, turn the Nomad unit completely "Off" by holding the green power button down for a few seconds (i.e., until a countdown screen appears) and then tapping "Shutdown" on the Power Menu screen that appears...



