



## Storing the YBGPS1

Store the YBGPS1 in the rear tilt stand or the module storage spacer of the NetTek Analyzer Platform.

## Enabling the YBGPS1 with the YBT250

1. Open the YBT250 application.
2. Tap the **GPS** button  (in upper right screen area).
3. Select **Tek GPS Timing Ref** from the **GPS Receiver:** drop-down list.
4. Wait between two and four minutes for the YBGPS1 to acquire and lock onto the satellite signals. If the YBGPS1 does not lock within that time, reposition the GPS antenna to obtain a less obstructed view of the sky. Use the **GPS Satellite Signal Strength** field on the **GPS** tab to evaluate satellite signal strength while positioning the GPS antenna.
5. Tap **OK** to close the dialog box.

## Usage Notes

- The YBGPS1 has two start-up modes; cold start and warm start.
  - A cold start typically requires between two and four minutes, and occurs when you use the YBGPS1 for the first time, when the NetTek Analyzer Platform real-time clock is different from the GPS satellite clock by more than 20 seconds, the last valid position provided by the YBGPS1 is greater than 100 km from the current position, or the satellite almanac data is older than 60 days.
  - A warm start typically requires between 45 seconds and two minutes, and uses GPS information saved when the instrument was last run to quickly lock onto satellites.
- If no satellite signals are acquired within four minutes (warm or cold start), try repositioning the GPS antenna for an unobstructed view of the sky. Use the **GPS** tab fields to evaluate satellite signal lock and strength.

- GPS satellite signals operate at 1.57542 GHz and approximately -135 dBm. Because of the high frequency and low signal levels, best operation is achieved when the antenna has an unobstructed view of the sky.
- GPS signals cannot be received inside buildings or enclosed structures. If you are using the YBGPS1 inside a building, place the GPS antenna as near as possible to a window.
- GPS measurements rely on the time delay between when each satellite sends out its signal and when each signal is received by the GPS receiver. GPS signals that need to bounce off of buildings to reach the antenna result in degraded accuracy and repeatability of position and timing information.
- The YBGPS1 antenna port provides +5 VDC (center positive), from 5 mA to 80 mA, for active GPS antennas. The YBGPS1 detects shorted and open GPS antenna lines.
- Do not apply power to the YBGPS1 antenna port.

## Online Help

For help on setting up the YBT250 to use the YBGPS1 Timing Reference:

1. Select **Start > Help > YBT250** to open the YBT250 online help file.
2. Select the **Index** link.
3. Scroll to and select **GPS Overview** from the index link list.

## Contacting Tektronix

Tektronix, Inc.  
14200 SW Karl Braun Drive or P.O. Box 500  
Beaverton, OR 97077  
USA

For product information, sales, and technical support:

- In North America, call 1-800-833-9200.
- Worldwide, visit [www.tektronix.com](http://www.tektronix.com) to find contacts in your area.

## EMC Compliance

### EC Declaration of Conformity - EMC

Meets intent of Directive 89/336/EEC for Electromagnetic Compatibility. Compliance was demonstrated to the following specifications as listed in the Official Journal of the European Union:

EN 61326	Annex D, EMC requirements for Class A electrical equipment for measurement, control, and laboratory use. <sup>1, 2, 3</sup>
IEC 61000-4-2	Electrostatic discharge immunity
IEC 61000-4-3	RF electromagnetic field immunity
IEC 61000-4-4	Electrical fast transient/burst immunity
IEC 61000-4-5	Power line surge immunity
IEC 61000-4-6	Conducted RF immunity
IEC 61000-4-11	Voltage dips and interruptions immunity
EN 61000-3-2	AC power line harmonic emissions
EN 61000-3-3	Voltage changes, fluctuations, and flicker

### Australia/New Zealand Declaration of Conformity - EMC

Complies with EMC provision of Radiocommunications Act per the following standard(s): <sup>1, 2</sup>

AS/NZS 2064.1/2	Industrial, Scientific, and Medical Equipment: 1992
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- <sup>1</sup> EMC compliance was demonstrated using high-quality shielded interface cables.
- <sup>2</sup> Emissions that exceed the limits of this standard may occur when the instrument is connected to a test object.
- <sup>3</sup> Minimum Immunity test requirement.

## Warranty Information

For warranty information, go to [www.tektronix.com](http://www.tektronix.com), click Support, select Look Up Tektronix Warranty, and enter YBGPS1 in the search field.

## NetTek® YBGPS1 GPS Timing Reference Setup Instructions