

GEOMAX
Zoom45 Series
Manual Total Station



GEOMAX Zoom45 Series Manual Total Station Owner's Manual

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GEOMAX Zoom45 Series Manual Total Station



The Zoom45 is the go-to manual total station for construction surveyors and operator crews, combining rapid point measurements, durability, and straightforward operation. An ideal companion for the construction site, the Zoom45 runs X-PAD Ultimate field software with a large screen for graphical views, enabling fast measurements and layout using the instrument alone or paired with a field controller. Additionally, easily exchange data with the office via X-PAD 365 and continue working in the same software ecosystem, bringing an efficient digital dataflow to your work with manual total stations.

Specifications

- **Angle Measurements:**

- Accuracy: 2 (0.6 mgon), 5 (1.5 mgon)
- Display resolution: 0.1
- Method: Absolute, continuous, diametrical
- Compensation: Quadruple axis

- **Tilt Compensation:**

- Dual axis

- **Distance Measurements (Prism):**

- Range: 5000 m
- Accuracy: 2 mm + 2 ppm
- Time (Fast/Standard): 1.1 sec / 1.4 sec

- **Distance Measurements (Non-Prism):**

- Range: 500 m

- Accuracy: 3 mm + 2 ppm*
- Time (Fast/Standard): 1.1 sec / 1.3 sec

- **Telescope:**

- Magnification: 28x
- Field of View
- Reticle Illumination: Yes, adjustable brightness
- Laser Pointer: Laser dot size 12 x 24 mm @ 50 m

- **Physical Specifications:**

- Weight: 5.1 kg (w/o battery and tribrach)
- Operating- / storage temperature
- Protection class: IP55 dust and waterproof rating
- Humidity: 95%, non-condensing

- **Power Supply:**

- Internal battery: Removable Li-Ion 6.4 Ah / 7.4 V
- Operating time: Up to 8 h **

- **Interface:**

- Keyboard: Full numeric; 18 keys; including 10 function keys;
- Face I standard, face II optional
- Display: 5 WVGA 800 x 480 pixel, colour and touch with LED backlight
- Ports: USB mini, USB host, Bluetooth, and WLAN

- **System and Data:**

- Operating System: Android 11
- Memory (RAM): 4 GB
- Internal memory: 32 GB / 16 GB for user data
- Data Transfer: USB device, Bluetooth, WLAN

- **Laser Plummet:**

- Type: Laser point, adjustable brightness
- Accuracy: 1.5 mm at 1.5 m instrument height

200 m: 5 mm + 3 ppm

Operating time depends on configuration (display illumination, active radios, distance measurement sequence) and conditions (temperature, age of battery)

Large display for productive work

The Zoom45's 5-inch touchscreen display is optimal for working with graphics in X-PAD on construction sites and across environmental conditions.

Part of the GeoMax ecosystem

The Zoom45 with the Android operating system easily connects to software and devices across the GeoMax ecosystem, including X-PAD Ultimate field software.

All-in-one manual total station

The Zoom45 offers accuracy, rapid point measurements, and a digital workflow, enhancing the value for your investment.

Scan to find out more about the Zoom45 Product Page.



Setup and Calibration

To begin using the Zoom45 Series manual total station, ensure it is placed on a stable surface and leveled properly using the built-in compensators. Calibrate the instrument as per the user manual instructions to ensure accurate measurements.

Taking Measurements

1. Power on the Zoom45 and select the desired measurement mode (Prism or Non-Prism).
2. Aim the telescope at the target and trigger the measurement using the designated button.
3. Record the measured values displayed on the screen for further use or transfer.

Data Transfer and Connectivity

The Zoom45 can transfer data via USB, Bluetooth, or WLAN to compatible devices or software. Ensure proper connectivity settings are configured for seamless data transfer between the instrument and external devices.

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Distance meter (Prism Mode): Laser class 1 by IEC



60825-1 resp. EN 60825-1;

Distance meter (Non-Prism Mode neXus): Laser class 3R by IEC 60825-1 resp. EN 60825-1

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FAQs

Q: How do I change the measurement units on the Zoom45?

A: To change the measurement units on the Zoom45, navigate to the settings menu on the device's display. Look for the unit settings option where you can switch between different measurement units such as meters, feet, or angles.

Q: Can I use the Zoom45 in extreme weather conditions?


A: The Zoom45 is designed to withstand various environmental conditions with its IP55 dust and waterproof rating. However, it is recommended to avoid extreme weather situations like heavy rain or extreme heat to ensure

optimal performance and longevity of the instrument.

Q: How long does the internal battery of the Zoom45 last?

A: The internal Li-Ion battery of the Zoom45 can provide up to 8 hours of operating time, depending on factors such as display illumination, active radios, distance measurement sequence, temperature, and battery age.

Documents / Resources

	<p>GEOMAX Zoom45 Series Manual Total Station [pdf] Owner's Manual 2 neXus-500m, 5 neXus-500m, Zoom45 Series Manual Total Station, Zoom45 Series, Manual Total Station, Total Station, Station</p>
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References

- [Developing, manufacturing and distributing quality construction and surveying instruments and software | GeoMax](#)
- [User Manual](#)

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