



Quick Guide **ZORN D plus**

The ZORN D plus is made for the wireless handling of your Light Weight Deflectometer ZFG and serves the generation of complete test reports on your Android or iOS device (from Android 4.4 and iOS 8 on).

Before using the ZORN D plus, also read the operating instructions for your Light Weight Deflectometer.



Subject to change
without prior notice.
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Read the operating instructions carefully before using the ZORN D plus!

Following requirements are necessary for using the ZORN D plus:

- You need to have the ZORN D plus application on your mobile device.
- You can download the application from the Google Play Store or from the Apple App Store for free. Alternatively, you can receive the download link for the ZORN D plus application from us.
- Your mobile device must have a Bluetooth function. The Bluetooth function must be enabled for the usage with the ZORN D plus.
- Your Light Weight Deflectometer needs to be calibrated together with the ZORN D plus and they must carry the same serial number.

1. Safety Instructions

Please read the instruction manual of your Light Weight Deflectometer before using your ZORN D plus.

- Protect the device against outside influences such as excessive direct solar radiation, humidity and soiling!
- Only open the protection cap for charging the device!
- Only use the included charging cable or rather a cable of the same type for charging the device!

2. Usage


► Preparation

- Assemble the loading plate and the loading device as it is described in the according manual.
- Plug in the jack plug of the ZORN D plus into the plug socket of the loading plate. This plug socket also serves the connection between the loading plate and the usual electronic device.
- Trough the magnets at the bottom of your ZORN D plus you can place the device skid-proof on the loading plate easily.
- The built-in thermometer automatically measures the environmental temperature.

► Measurement Performance

- You can see the home screen. By pressing the button “Take measurement” you can start the measurement.
- Follow the instructions on your mobile device to perform the measurement.
- The GPS function of your mobile device must be enabled for recording the coordinates.

► Connection Establishment

- Turn on your ZORN D plus by pressing the ZORN INSTRUMENTS logo. The right blue LED underneath the ZORN INSTRUMENTS logo should blink quickly.
- Open the ZORN D plus application on your mobile device. Tap on the first button. 
- Automatically, the ZORN D plus application starts to search for Bluetooth devices in the environment. You can see your ZORN D plus.
- Select the ZORN D plus and press the button “Connect” at the bottom of the screen.
- The blue LED is now blinking significantly slower.


- After a successful measurement you can
 - directly perform the next measurement,
 - add a photo of the test location,
 - show the results
 - or go back to the main menu.

Select the appropriate button.


► Test Protocol Generation

- If you are showing the measurement results, you can create a test protocol directly from this view.
- Step-by-Step, you can take manual input in the test protocol.
 - Contractor
 - Customer
 - Project title
 - Place, Date
 - Examiner's name
 - Test point position
 - Floor assembly
 - Coating Thickness
 - Weather
- After the manual input you can see the filled protocol. You can convert this protocol into a PDF file and save this to your data.

► Measured Data Display

- Underneath the second button on the main menu you can find the measurement data, which are saved in the application. 
- You can generate a test protocol from the saved measurement data subsequently.
- You can switch between individual measurements with the arrows at the bottom of the screen.
- You can see following information:
 - Individual measured values
 - Settlement curves
 - GPS coordinates
 - Photo of the test location

3. Settings

You can open the settings by pressing the third button on the home screen. You can change following settings: 

- Appearance and Size: Changes on the user interface
- Language: Language settings in the application
- Use system time: The mobile device's time is carried over for the measurements standardly (Note: The time is given in the Standard Greenwich Mean Time Format. The according time zone indicator is given additionally.).
- Preload: Recording of the preloading pulses can be activated or deactivated.
- Bluetooth-strength scan: Time period for searching Bluetooth devices
- GPS: Recording coordinates can be activated or deactivated
- Measuring type: Choice between the configuration of your ZFG Light Weight Deflectometer loading plate diameter/falling weight (300 mm/10 kg or 300 mm/15 kg)
- Unit: Choice between MN/m² and MPa for E_{vd} value
- E_{vd} Decimal places: Number of the shown decimal places of the E_{vd} value
- s/v Decimal places: Number of the shown decimal places of the s/v value

4. Charging

During the charging process the left LED underneath the ZORN INSTRUMENTS logo glows red. Is the charging process complete, the LED glows green.

You can charge your ZORN D plus with the included Micro-USB-Cable.

5. Technical Data

- Dimensions: approx. 100 x 50 x 10 mm
- Weight: approx. 100 g
- Connection sensor: 6,35 mm stereo audio jack
- Connection mobile device: Bluetooth (Low Energy)
- Energy supply: Lithium Polymer Batterie (rechargeable)
- Control Indicator: two LEDs
- Languages: German/English



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