

Version 12 - Calibrating Sensors in TDO

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Overview

Calibrating sensors using known objects is a simple process that can be done in a few minutes. The process involves attaching a known object to the sensor, capturing a radiograph, and then using the ruler tool in Draw to measure the object. This process is repeated for each sensor to be calibrated.

Detailed Instructions

Attach an Object with a Known Length

1. Select one or more instruments with known lengths (e.g., endodontic files).
2. Secure them directly onto the sensor using tape.
3. *Example: Attach a 25.00 mm file and a 21.00 mm file.*

Take a Radiograph

1. Capture a radiograph with the known-length objects in place. This image will serve as your calibration reference.

Use the Ruler Tool in Draw

1. Go to Image Organizer and open the radiograph in Draw.
2. Under Function Tools, go to the ruler tool and select it.
3. Draw a line on the tool measuring one of the known lengths.

Select the Measurement

1. Go to the pic tool under Drawing Tools and then select that measurement.
2. You can change the color of the measurement if you want by selecting the color picker for better visibility. The wrong measurement will come up.

Create a Calibrated Ruler

1. Go to Function Tools > Ruler Dropdown > Create From Selected Ruler. A dialogue box will come up, allowing you to name your sensor and then add the Ruler length that you know

Set Sensor Name and Known Length

1. Name your sensor (e.g., XDR Sensor).
2. Input the exact known length of the measured object (e.g., 25.00 mm).

3. Confirm your input — the ruler will now display the correct calibrated length.

Calibration Confirmation - Once the calibration is complete:

The calibrated sensor name (e.g., XDR Sensor) will appear in your dropdown list. When you bring up a new X-ray taken with that sensor.

Notes

Always use a precise, known-length object for calibration.

Calibrate each sensor separately for each type if you use more than one.

Once the new ruler is created, it will only measure new X-rays taken. It is not able to measure X-rays taken before configuring.

This video provides instructions on calibrating your sensor(s) so they can be measured with the ruler tool.

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Online URL: <https://kb.tdo4endo.com/article.php?id=597>