

WT-600 Series

Model: WT-610/ WT-620/ WT-630



Worltech, Inc.

Base Instrument Package (WT-630)



Couplant

Probe

5 Step
Reference Block

WT-610/ 620/ 630

<How to Connect and Disconnect the Probe to the Gauge>

1. **Connection:** When you connect the probe with the gauge (Figure A), there is no polarity distinction.
2. **Disconnection:** It is very important to pull up the outer shell of the connector while holding the shell so that the probe line and the lemo connector would not be cut off.



Figure A

<Probe Zero>

Only one Probe Zero adjustment is required before a measurement is taken.
The adjusted value will remain in the product's memory even when it is turned off.



Power Key

Reference Block

1. Press the **Power key** to turn on the gauge.
2. Place the couplant on the reference block and contact the probe on it.
3. Press the **PRB0** key.

<Probe Zero>



1. Press the **Power key** to turn on the gauge.
2. Place the couplant on the reference block and contact the probe on it.
3. Press the **PRB0 key**.

<Probe Zero>



1. Press the **Power** key to turn on the gauge.
2. Place the couplant on the reference block and contact the probe on it.
3. Press the **PRB** key.
4. If the Probe Zero succeeds, “**Probe Zero Success**” message appears on the display screen.

<Calibration>

Reference Sample

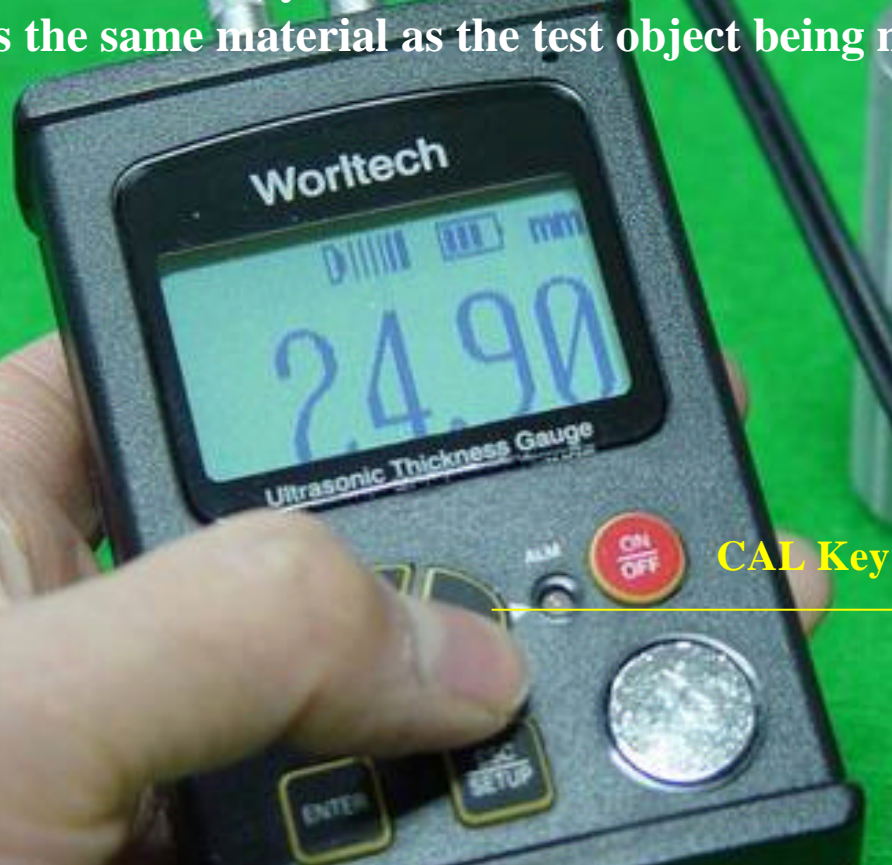
<Calibration>



To make accurate measurements, the calibration of the gauge must be performed. Calibration is setting the gauge to the correct sound velocity of the material being measured as each type of material has its own different sound velocity.

<Calibration>

* Before calibration, you must know the thickness of the reference sample that has the same material as the test object being measured.



1. Place the couplant on the reference sample and contact the probe on it.
2. The gauge shows an arbitrary thickness value of the sample on the display screen.
3. Press the **CAL key** when the sensitivity bar is full.

<Calibration>



4. Using the **Arrow Keys**, adjust the arbitrary thickness value on the screen to the actual known thickness value of the reference sample.

<Calibration>

ENTER Key

4. Using the **Arrow keys**, adjust the arbitrary thickness value on the screen to the actual known thickness value of the reference sample.
5. Press the **ENTER key**.

<Calibration>

Worltech

Thickness>

25.00 mm

Velocity>

05909 m/s

5. After pressing the **ENTER** key, the gauge automatically calculates the sound velocity of the material being measured and shows the sound velocity value of the material on the display screen.

6. Press the **ENTER** key again.

7. Now the sound velocity of the material being measured is set.

<Measurement>

Test Object
(must be same material
as the reference sample)

<Measurement>

Couplant should be placed
on the test object

25 mm



8. Now you can make an accurate thickness measurement.

<Measurement>

Couplant should be placed
on the test object

15 mm



<Measurement>

Couplant should be placed
on the test object

10 mm



<Measurement>

Couplant should be placed
on the test object

5 mm



<Measurement>

Couplant should be placed
on the test object

2.5 mm



<Measurement>

Couplant should be placed
on the test object

40 mm



<How to Detach the Probe from the Gauge>

It is very important to pull up the outer shell of the connector while holding the shell so that the probe line and the lemo connector would not be disconnected.

<How to Detach the Probe from the Gauge>

Pull up the outer shell of the lemo connector while holding the shell to prevent the cut-off of the socket from the upper part of the lemo connector



Pull up the outer shell of the lemo connector while holding the shell



*** Once you are familiar with the Probe Zero and Calibration, other option features such as Custom Storage, setting the modes, saving and loading the measured value, loading the stored settings, using B-Scan mode, and using Average mode are very easy and simple for you to use by referring the operational manual.**

Thank You for Your Interest in the WT-600 Series!