

MODEL: WT660

# Wood moisture tester Instruction manual



Version: WT660-FN-00

-1-

#### A. Introduction

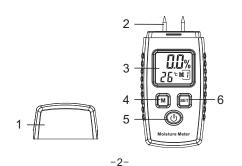
This is a wood moisture tester of DC resistance(probe type), with 4 gears wood and 3 gears construction material selection functions, which can be widely applied in the fields of testing the moisture content in the woods,bamboo ware,paper articles and traditional Chinese medicinal material, these of wood fibre construction.

#### B. Function

- 1.4 gears wood and 3 gears construction material selection
- 2. Data lock
- 3. Low battery indication
- 4. Automatic/manual shutdown
- 5. Backlight display

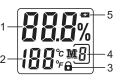
# C. Name of parts

- 1. Built-in cap
- 2. Built-in fork
- 3. LCD
- 4. Gear selection
- 5. Power/Data lock button
- 6. Temperature unit/Backlight button



#### D. LCD

- 1. Moisture content reading
- 2. Temperature reading
- 3. Data lock icon
- 4. Gear
- 5. Low battery icon



# E. Comparison table of material grade

Wood				
Wood	grade	Wood	grade	
Rhodes west teak	1	African whitewood	3	
Ormosia hosiei	1	Rose wood	3	
Brazil walnut tree	1	Elm tree	3	
Walnut tree	2	Gmelina chinensis benth	3	
Apitong	2	Hemlock	3	
White poplar	2	Dipterocarpus	3	
Teak	2	Oak	3	
Banya pine	3	Chinese red pine	4	
Douglas fir / D-fir	3	Coquito	4	
Lauan	3	Abies holophylla maxim	4	
Manchurian ash	3	Larch	4	
European silver	3	Apitong	4	
Maple	3	Birch	4	
White ash	3	Basswood	4	
Construction material				
5	Cement mortar			
6	Lime mortar			
7	Brick			

#### -3-

# F. Operation

#### 1. Power on/off

Install the battery, short press the "( $\circlearrowleft$ )" button to turn on, it will be powered off automatically if there is no further operation on the key within 10 minutes.Long press the "( $\circlearrowleft$ )" button for 2 seconds to turn off.

# 2. Gear selection

After power on, short press the "M" button to switch the gear. Refer to the "Comparison table of material grade" to select the gear, if the specie to be measured is not in the comparison table, Gear 2 is usually recommended to be used for measurement, but the measurement error caused by this is needed to be paid attention to. When measuring, the two probes should be inserted into the test object at the same time.

# 3. Data Lock

#### 4. Temperature unit setting

After power on, long press the "SET" button to switch between °C/°F.

#### 5. Backlight

After power on, short press the "(SET)" button to turn on/off the backlight.

# G. Determining the Gear

If the moisture of the measured woods is not given, please select the level as follow:

Firstly measure the even moisture woods sample with the 4 gears respectively and record the readings. Then put the sample into the oven to measure the moisture, then compare the results with the above said 4 readings and fix the level for future measurement which is closest to the output measured with oven. If you can not measure in a way said above, it is recommended to measure at gear 2, but the error may arise must be considered.

# H. Methods for measuring the moisture content in woods

Methods for measuring the moisture content in woods are drying-up method, electrical method, carbonization method, titration method and humidity method. In production, drying-up method and electrical method are generally adopted. With dry-up method, the woods weight difference between the original sample weight and dry-up weight after taking out from the oven will be calculated and be referred to as the moisture content index. This method features high precision but time-taking, just applicable to the laboratory practice. Electrical method adopts the working principal of woods electrical performance concerning with the moisture content in woods, can be widely applied in mass production.

# I. Notice

- This unit calibrate itself automatically after powering on, and the probe can not touch any subject while powering on.
- 2. The probe is very sharp, do not point it to the people or leave it to children as their toy.
- Avoid the corrosive liquid contact with the unit and the probe from any possible damage.

- 4. Do not let the probe contact the object with electricity to avoid damage arisen from that.
- When the " appears, that indicates the low battery which may effect the precision of the unit. Please replace the battery immediately.
- 6. Take out the battery if the unit is expected not in operation for a long time.

# J. Technical parameters

	grade	Range	Resolution
Wood	1	7.2%~40%	
	2	8.7%~50%	
	3	10.6%~60%	
	4	12.2%~70%	0.10%
Construction material	5	0.7%~7.9%	
	6	0.5%~8.5%	
	7	0%~15.2%	

Precision	±2% gear 1	
Operating temperature	0°C~40°C	
Operating humidity	20%RH~90%RH	
Automatic power off time	About 10 minute	
Length of probe	9.8mm	
Battery	2*1.5V AAA Battery	
Size	93.5*43*24.4mm	
Weight	44.8g	



Specific Declarations

- a. Our company shall not be liable for any derivative results of the product.
- b. We reserve the right to make changes to the product design and the content of the instruction manual without notice.
- c. Old battery dealing must be complied with the local law and regulations.