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1. FEATURES

* Used the exclusive Micro-computer LSI circuit and crystal time base to offer high accuracy measurement & fast measuring time.

* Wide measuring range and high resolution.

* Digital display gives exact reading with no guessing or errors.

* Both zero value and correction value can be stored. That makes operation very convenient.

* The use of durable, long–lasting components, including a strong, light weight ABS-plastic housing assures maintenance free performance for many years. The housing has been carefully shaped to fit comfortably in either hand .

* Widely used to measure the moisture content of wood fiber materials, wooden articles, Chinese medicine, tobacco, cotton and paper etc.

2. SPECIFICATIONS

Display：3 digits, 10 mm LCD

Range：0~80%

Resolution：0.1 %

Accuracy：$\pm$（1%n+1）under 30%
$\pm$（2%n+1）over 30%

Sampling time：1.0 s

Power supply：4x1.5 AAA battery

Operating condition: Temp. 0~50℃, Humidity <80%

Size：218x76x53mm

Weight：about 260g（including batteries）

Accessory：

Carrying case . . . . 1 pc.
Operation manual . . . . 1 pc.

3. FRONT PANEL DESCRIPTIONS
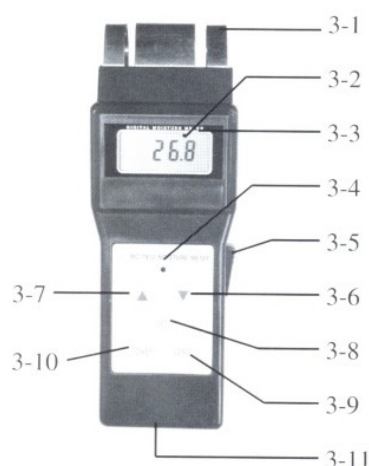
3-1 Sensor
3-2 Measuring indicator
3-3 Display
3-4 Calibration
3-5 Measuring button
3-6 minus key for correction values
3-7 Plus key for correction values
3-8 Set key for correction values
3-9 Zero set key
3-10 power key
3-11 Battery compartment/cover

4. MEASURING PROCEDURE

4.1 Push the power key 3-10 for a while to switch on power supply.

4.2 Zero set

4.2.1 Push the set key 3-8 for a while to make the correction value flash on the Display 3-3.

4.2.2 Push the Plus key 3-7 or Minus key 3-6 to adjust the reading on the display to zero. （Every time depressing the Plus key 3-7 or Minus key 3-6 for a while, The flashing reading on the display will increase or decrease by 0.5. If depressing for a long time, the flashing reading will change rapidly. The range of correction values is 0~10.

4.2.3 Depress the set key 3-8 for a while to store the flashing reading "0.0" to the memory of the meter while the steady zero will be displayed.

4.2.4 Hold the moisture meter and don't let the sensor 3-1 touch anything except Air. The measuring indicator and a certain value appear on the Display after depressing the measuring button. Zero "0" will appear on the Display if pushing the Zero set key 3-9 for a while when the measurement values are steady. The above operation is the procedure of zero set. Please remember: in the process of zero set, you must depress the measuring button and don't let the sensor 3-1 touch anything except Air. Since the zero set is stored in the memory of

the meter, it is unnecessary to set zero again next time you turn on the power supply. That makes it easy and convenient to use and measure. Of course, you can reset the zero if you suspect the accuracy of the results. To be sure that you should reset the correction value as per the kind of the wood to measure after you make a zero set.

4.3 The correction values for different wood kinds could be looked up in the table of correction values. The way of setting a correction value is similar to that of zero set. i.e. Set key 3-8 ⟶ the Plus key 3-7 or Minus key 3-6 to adjust the reading on the display ⟶ Set key 3-8 to confirm and meanwhile store the correction value to the memory. It is unnecessary to reset the correction value if measuring the same kind of wood. That makes the measurement very easy and convenient . The method to measure the moisture content is as follow.

Press tightly the sensor 3-1 to the surface of wood to measure and depress the measuring button. Release the measuring button when the reading stabilizes. The last measurement value is held on the Display. You could reset the correction value if the kind of wood to measure is different.

5. CONSIDERATIONS

5.1 Press the sensor 3-1 tightly to the surface to measure . The more rough the surface, the more tightly you press the sensor. Contrarily, the more smooth the surface, the more slightly you press the sensor.

5.2 The measurement value is relatively accurate when the thickness of wood to measure is around 50 mm. So when measuring the wood thinner than 50 mm it is recom-

mended to pile up to nearly 50 mm. Otherwise, you should make corrections as per following:

    10~20mm ; the result plus 0.6
    21~30mm ; the result plus 0.3

5.3 Under 50 mm of the sensor, any hand or metal is not allowed. Or it will incur the error.

5.4 Keep the surface clean before taking measurement.

5.5 For the wood marinated in the seawater for some time, the measurement value is much higher than the normal because of the influence of too much salt.

5.6 There is no way to measure the wood that is narrower than the size of the sensor 3-1(See the following figure).
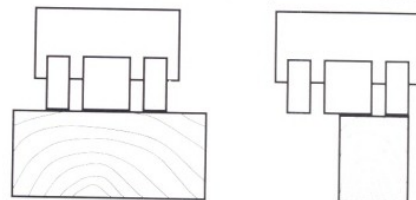
right   false

5.7 The measurement result may be different if taking the measurement from different directions of the wood. That is because water in the wood is not distributed evenly. The better way is to measure from 4 different sides and get the result by calculating the arithmetical mean value.

6. BATTERY REPLACEMENT

6.1 When it is necessary to replace the battery, i.e. battery voltage less than approx. 4.5v , the battery symbol will

6.2 Slide the battery cover away from the instrument and remove batteries.

6.3 Install the batteries (4 x 1.5v AAASize) correctly into the case.

7. TABLE OF CORRECTION VALUES(Based on larch wood)

tree kind	Corretion value	tree kind	Corretion value
algum	2.5	pear,rosewood	8.0
redwood	7.5	hydrosol	4.0
schneider zelkova	3.5	birch, calamander	3.5
basswood	2.0	elm	3.0
aspen	2.0	oak	3.5
cherry	4.0	yew	3.0
walnut	2.5	willow	1.5
China fir	1.0	fir	1.5
camphor, phoebe zhennan	2.5	kiri, paulownia	0.5
red pine	2.5	white pine	1.5
larch	2.5	black wine	3.0
cypress	1.5	maidenhair tree	3.0