FARMEX™

HT-PRO

FARMCOMP
AGROELECTRONICS

OPERATING INSTRUCTIONS **FARMEX™ HT-PRO** **PORTABLE MOISTURE AND TEMPERATURE TESTER FOR BALED HAY**	

Thank you for choosing Farmex!
Please read this instructions carefully.

1.GENERAL OPERATING INSTRUCTIONS

1.1 Install battery. The 9-volt alkaline battery (included) must be connected before the tester will work. Remove the battery door on the back of the handle and snap the leads onto the battery.

NOTE: ***After installing the battery, your tester will display "88.8"briefly upon pressing any of the buttons for the first time. This is normal and indicates that the tester is initializing***

NOTE: ***"LOBAT" will appear in the display, if the battery is running low and needs replacing.***

NOTE: ***The battery needs to be ALKALINE.***

1.2 There is no ON/OFF switch. Press any of the buttons and the HT-PRO™ will turn itself on.

NOTE: ***Upon pressing a button, there is a short delay until a reading is displayed.***

1.3. **To test moisture**, press the button above the "water drop". You will see the water content of the sample in per cent of weight.

1.4 To test temperature, press the button above the "Thermometer" symbol. You will see two readings, first the temperature in Fahrenheit and then the temperature in

Centigrade.

NOTE: ***If both switches are pressed simultaneously, the tester will not be harmed, but only a meaningless number will be displayed.***

1.5 To turn backlighting display option on or off, press the button above the "Light Bulb" symbol at the same time something – anything – is being displayed. Your HT-PRO™ will retain its backlighting mode (on or off) until changed by the operator (even if the battery is removed).

2. OPERATING NOTES

1. Moisture readings **below 8.0%** will be displayed as **"00.0"**. Readings **above 45.0%** will be displayed as **"99.9".** Temperature readings below 0˚C (32˚F) will be displayed as 00.0. Readings above 99˚C (225˚F) will be displayed as "99.9".

2. The HT-PRO™ will display "00.0" in open air. (If open air reading of 8.0 is displayed, the tip probably needs cleaning. Clean tip and recalibrate tester.)

3. Temperatures can be measured from 0˚ to 99˚C (32˚ to 225˚F). Make sure to allow the tip of the probe to adjust to the bale temperature. This can take a minute or two.

4. The tester measures only the hay in contact with the tip of the probe. Because moisture may vary widely in different parts of the windrow, it will vary within each bale. **Take readings in at least five (5) places in the bale, and use the HIGHEST reading as a guideline.**

5. Consult your local experts for recommended baling moisture.

6. Your tester is for reading moisture in hay. Placing a probe in 100% moisture – water– will NOT result in a reading of 100%.

3. OPERATION

3.1 Quality of the hay and Test Readings

Because of the many different conditions which affect test readings, the indicated moisture content should not be used as an absolute, quantitative measurement.

Test readings are, however, very useful guidelines for baling and storing hay. Understanding these conditions can help to obtain accurate test readings.

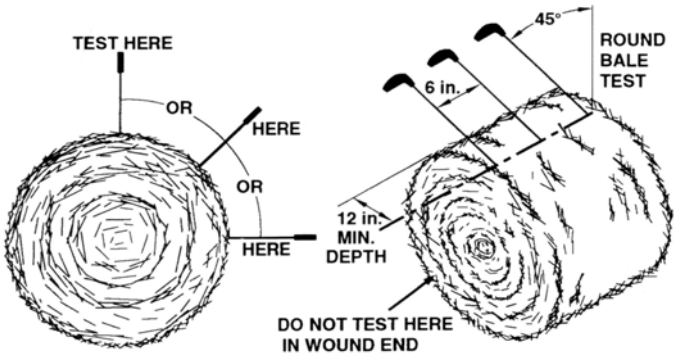
- **Bale Density:** The tighter/denser the bale, the higher t he moisture readings. Compaction also varies within each bale.
- **Natural variations within the plant during drying:** The higher the moisture content, the wider the variations. Consistency of results improve with drier crop.
- **Sweating:** Higher readings may occur during the first couple of days after baling, moisture readings may be low and then climb during the "sweating" process. As the hay dries, moisture readings should drop and continue to decline as the hay becomes progressively drier. It is important to continue to monitor moisture for several days.
- **Some preservatives increase conductivity initially:** Until the preservative is absorbed, usually in 1-2 days, it may cause the moisture reading to be 2-4% above the same hay which is untreated.
- **Tester has been calibrated on 100%** alfalfa hay. Other herbs give different readings.

Test readings are, however, very useful guidelines for baling and storing hay.

3.2 Rectangular or Square Bales:

Because the inside of each bale is not uniform in density its leaf- to -stem ratio, moisture readings will vary from one part of the bale to another. It will read highest if the probe is inserted into the "dense" side. Tester will give higher readings in tight bales than in loose bales.

For best results, insert probe into the “dense” side of bale at a 45˚ angle. Take readings in at least five (5) places (approximately 15 cm apart along the bale centre-line) and use the highest reading as a guideline.



3.3 Round Bales:

Test readings can be taken anywhere around the outside surface of the bale, NOT THE ENDS, as long as the probe tip is inside the outer wrap, since the outer layer tends to dry out first. For best results, insert probe into the outside radius of the bale at a 45˚ angle and at least 30 cm deep. Take readings in at least five (5) places (approximately 15 cm apart) and use the highest reading as a guideline (see in picture above).

4. CARE AND MAINTENANCE

1.After each use, always store your tester in a clean, dry and handy place.

2.The metal tip of the probe should be wiped clean between each use for best results. Clean both parts of the metal tip from time to time with fine steel wool and/or mineral spirits or alcohol. **A dirty tip can cause lower readings.** Keep the brass shiny for best results.

3.Never immerse the probe in water.

4.Remove the battery, if your tester will not be used for several months.

4.1 CALIBRATION

1.Clean the probe tip. While holding the probe in the air, press and hold the **√** button. The tester will begin to count down on the display "**5,4,3,2,1**" and the tester will then display "**00.0**".

2.Release the **√** button.

3.Firmly place the calibration clip on to the probe tip as shown in the clip illustrations below and then press and hold the **√** button.

4.The tester will now display 24.8%, indicating that the unit is now calibrated.

If the tester displays "99.9**" any time during the calibration process, this indicates an error has occurred. Try repeating the calibration procedure starting at Step 1.

4.2 BATTERY

1."LOBAT" will be displayed, if the battery is running low and needs replacing. Always use an ALKALINE 9-volt battery.

2.After the battery is replaced, always re-calibrate your tester (see above).

NOTE: Your tester will display 88.8 briefly just after the battery

is replaced. This signifies that the tester has re-initialized. The last calibration and backlighting (on/off) status will be utilized.

5. TROUBLESHOOTING

1.**Read this manual again.** ***Carefully.***

2.Clean probe tip and recalibrate tester.

3.If **"LOBAT"** is displayed, replace the battery with a new 9-volt ALKALINE battery. Re-calibrate the tester.

IF SERVICE IS REQUIRED Contact your Farmex reseller or Farmcomp .

IMPORTANT: **Keep original invoice or other proof of purchase. Proof of purchase is required to determine if service will be performed within the warranty period at no charge.**

6. WARRANTY

The HT-Pro moisture and temperature tester carries a one year manufacturer warranty for materials and workmanship. The warranty is valid for 12 months from the date of purchase on the receipt. To claim the warranty, the customer should return the defect product to the Manufacturer or reseller. The warranty claim must be accompanied by the description of the fault, copy of sales receipt and customer's contact information. The Manufacturer service partner will repair or replace the defect product and return it as soon as possible.

The liability of Farmcomp is limited to the price of the product in maximum. The warranty does not cover any damage that is caused by incorrect or careless use of the product, dropping the product or damage that is caused by repairs that are carried out by non-authorized personnel. Farmcomp does not accept any responsibility for any direct, indirect or consequential damages that are caused by the use of the product or the fact that the product could not be used.
The battery is not covered by the warranty.

All information, illustrations and specifications in this manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.