



MODEL: GM640

Grain Moisture Meter Instruction Manual



Version:GM640-EN-00

I. Introduction

This instrument is a grain moisture tester which can measure moisture content of multiple kinds of grains fast. It applies to allocation, procurement, storage and processing of grains. This instrument can also measure temperature of the grain.

It has the following functions:

1. Select grain variety.
2. Test moisture content of the grain.
3. Measure temperature of the grain.
4. Set standard for moisture content of the grain and give warning on over-standard moisture of grain.
5. Backlight control.
6. Switch between Celsius degree and Fahrenheit degree.
7. Battery low power warning.
8. Auto power-off.
9. Data hold.

II. Safety instruction

1. Warning:

▶ Test probe of this instrument is quite sharp. In case of hurt, do not point it to other people when using it, let alone let children play.

2. Notes:

- ▶ Keep the instrument and the probe away from water and all corrosive liquid.
- ▶ Do not touch charged objects with the probe in case of damaging the instrument.

3. Prompt:

- ▶ When using the probe to measure the moisture content, grain pressure will have a great impact on the measurement. When the grains are stored in multiple layers, the higher the pressure of grains on lower layer, the larger the test value will be. You can make correction based on your using experience. When the moisture content is below 13%, grain pressure has relatively small influence on the measurement.

III. Operating instructions

1. Startup: after installing the battery, press the power key to start it up and enter the normal test mode.
2. Measure moisture content of the grain: press SELECT to choose the grain variety. There are eight options: 1. Paddy; 2. Wheat; 3. Barley; 4. Fodder; 5. Corn; 6. Rapeseed; 7. Soybean; 8. Rice. Then insert the probe into the grain to be tested to measure the moisture content. At this moment, the instrument displays moisture content of the grain. In the measuring process, if you press HOLD, the screen will display HOLD. Moisture content data will be kept on the screen. Press HOLD again to exit this mode.
3. Temperature measurement: long press °C/°F to select the temperature unit. The default unit is °C. After inserting the probe into the grain for a certain period of time, internal temperature of the grain will be displayed on the screen.
4. Backlight: after pressing the backlight key, the backlight will be turned on for night use. Press the key again to turn it off.
5. Shutdown: after the measurement, press the power to shut the instrument down. If you forget to turn it off, it will shut down automatically after 5 minutes.
6. Moisture content standard setting: you can set moisture content standard for the grain according to requirements of the user. Press SET to enter the moisture content standard setting state. Press "+" and "-" to set the data, for example: 16.5%. Press SET to exit the setting state. At this point, in the testing process, if the moisture content exceeds 16.5%, an audible alarm will be given. Meanwhile, the over-standard symbol of moisture content will be displayed on the screen.

IV. Battery Change

1. When the battery voltage is lower than the stipulated value, the "⎓" (low voltage) will be displayed on the screen. It means that you need to change the battery.
2. Open the battery door and take it out.
3. Install the battery correctly according to indication marked inside the battery compartment.
4. If you do not use this instrument for a long time, please take out the battery in case of battery leakage and instrument damage.

V. Instruction to display and components

1. Display instruction: see Figure 1

- A. Battery capacity
- B. Data hold
- C. Temperature reading
- D. Temperature unit
- E. Moisture content setting
- F. Moisture content over-standard
- G. Moisture content reading
- H. Moisture content percentage
- I. Code of grain variety



Figure 1

2. Components instruction: see Figure 2

- (1) Test probe
- (2) Connector (directional)
- (3) Screen
- (4) Power
- (5) Moisture content standard setting
- (6) Backlight/-/temperature unit switch
- (7) Data-hold/+
- (8) Variety select

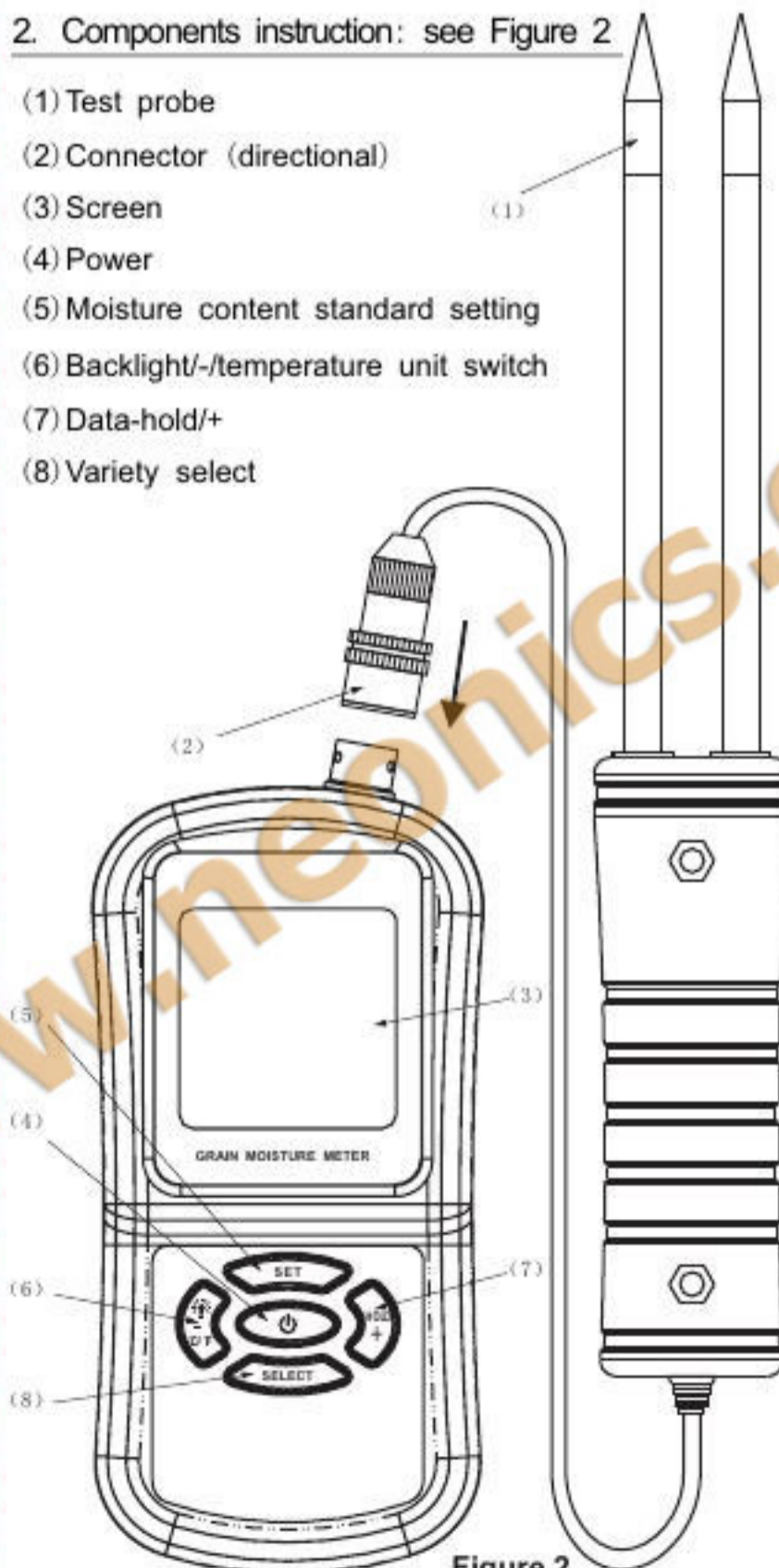


Figure 2

VI. Technical parameters

| | Measuring Range | Maximum Error | Resolution Ratio |
|-----------------------|--------------------|---------------|------------------|
| Moisture content | 5%~30% | ±(1%Rh+0.5) | 0.5% |
| Temperature | -10°C~60°C | ±2.5°C(±5°F) | 0.1°C/0.1°F |
| | | Temperature | Humidity |
| Operating environment | 0°C~40°C | 0~85%Rh | |
| | Host | Probe | |
| Weight | 190.6g | 208.3g | |
| Dimension | 72x35x145MM | 415x36x36MM | |
| Power supply | 3×1.5V AAA battery | | |

Special declaration:

Our company reserves the right to modify the product design and the instruction. We will not give further notice for any changes!

