Prairie
Grain Analyzers

MA-1200
User Manual

V1.0

MA-1200 STATIONARY GRAIN MOISTURE ANALYZER

The MA-1200 is a fully automatic stationary grain analyzer that measures **moisture**, **test weight**, and **temperature** for grains, oilseeds, pulses, beans, and seeds. It features a large **7" color touchscreen**, built-in **thermal printer**, USB storage, and multiple data ports for flexible connectivity.

PACKAGE CONTENT

- MA-1200
- Power Cord
- User Manual
- 200 Gram Weight
- Scale Calibration Stick

PRODUCT FEATURES

- **Automated Sample Processing:** Pour grain into the hopper; the unit tests and displays results.

- **Moisture Accuracy:** ±0.2 % (high-frequency testing).

- **Charts & Calibration:** Canadian Grain Commission and USDA charts included.

- **Temperature Measurement:** Measures cold, hot, or frozen samples.

- **Built-In Printer & USB:** Print results or save to USB stick. Takes 2 ¼ Thermal Paper Rolls 30mm diameter

- **Connectivity:** USB, RS-232, Ethernet, External Printer port.

OPERATION

Starting the Unit

- Plug into 110/120V Outlet.
- Turn on the power switch.
- Wait for system boot; home screen appears.

Selecting Crop

Scroll through the available crops on the home screen using the **left** and **right** arrow buttons.

To change the crop list for a different country:

1. Go to **Settings -> Country**
2. Choose the desired country
3. Return to **Settings**
4. Restart the device using the **power switch** for the changes to take effect

Running a Test

1. Pour sample into the hopper until the sensor detects enough grain.
2. The unit automatically feeds and analyzes the grain. Please wait and do not disturb the measurement.
3. Results will appear on the screen.

Viewing & Saving Results

- **Tag:** tap Tag on the screen and ID the sample.
- **Print:** Tap Print on screen → prints via built-in thermal printer

SCALE/ LOAD CELL

SCALE CALIBRATION

1. Go to Settings and select Load Cell. The password is PGA. The password is in place to ensure that the scale calibration isn't accidentally changed.
2. Tap Calibrate Scale.
3. The screen will ask you to confirm that the machine is empty.
4. When the empty calibration is complete, the screen will ask you to place a 200-gram weight into the grain tube.
5. Gently place the weight inside the cell.
6. Continue, and the device will finish the calibration.
7. Once complete, take out the 200g weight with the scale calibration magnetic stick.
8. To ensure the scale is calibrated properly, perform a scale check with the instructions below.

RESET SCALE

1. Open Settings and select Scale.
2. Tap Reset Scale.
3. Make sure the machine is empty of grain, then press Start to continue.
4. When the reset is complete, the device will automatically return to the Scale page.

SCALE CHECK

1. In Scale Settings, select Check Scale.
2. With the machine empty, the scale should read 0 grams.
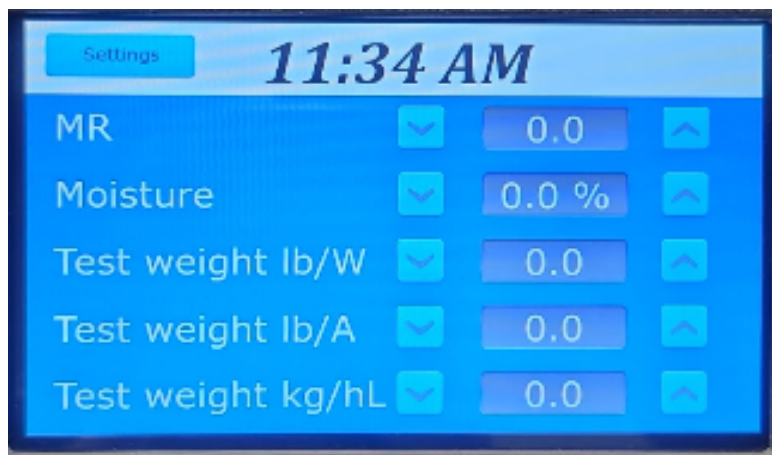3. Place a 200-gram weight into the grain tube and the scale should read 200 grams.

DEVICE CALIBRATION

While the MA-1200 comes pre-calibrated to CGC and UGMA standards, recalibration or chart updates are recommended every two to three years or when significant drift is noticed over time.

BIAS CALIBRATION

- Bias Calibration is used when your moisture readings consistently differ by the same amount compared to other reference samples.
- Please contact us before adjusting the offset to ensure accurate settings.
- Bias applies only to the current crop selected on the home screen.
- To change the crop:
    1. Return to the main menu
    2. Select a new crop
    3. Go back into Settings → Bias to adjust again if needed

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COUNTRY

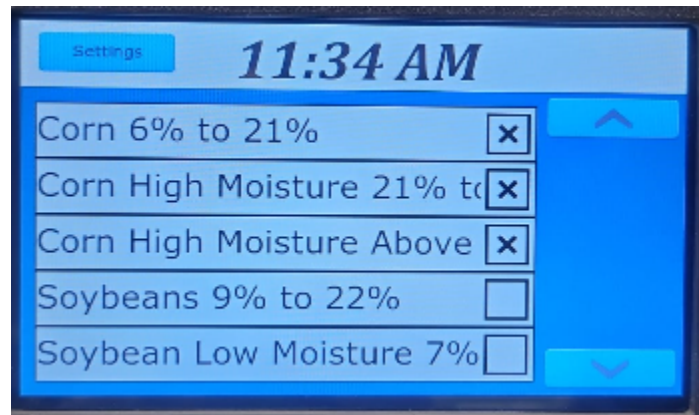- Choose your region in the Country setting.

TIME

- Update your device's time and date in the Time setting.

USER DATA

- Edit the information on the print out.

CROPS

- Select up to 8 favourite crops on the home screen to avoid scrolling through all the available crops.
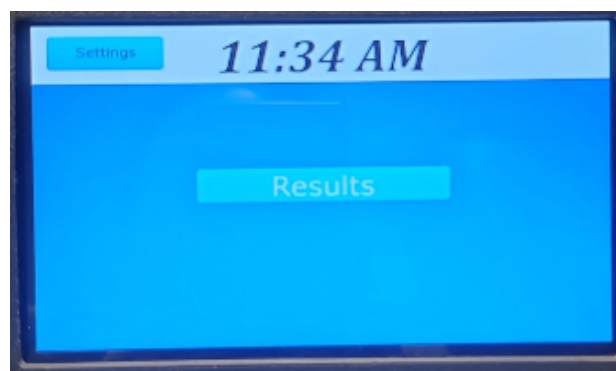

LOGS

- The device automatically stores previous test results.
- Use the up and down arrows to scroll and view the last 5 tests.

USB DATA EXPORT

TO SAVE YOUR TEST RESULTS:

1. Insert a USB drive into the port on the bottom of the machine.
2. Select Results to export your data.
3. Return to Settings and safely remove the USB drive.
4. The file is saved as a CSV.

TO OPEN THE CSV IN EXCEL:

1. Open Excel and start a new spreadsheet.
2. Click File → Import → CSV File.
3. Select the file from your USB drive.
4. When choosing a delimiter, select Semicolon (;) only.
5. Click Finish to view your data as a formatted table.

SLEEP MODE

You can choose how long the device stays on with no activity:

- Always On (no sleep)
- Sleep after 1, 5, or 15 minutes

MAINTENANCE, MOTOR, FREQUENCY SETTINGS

- Settings for service use only.

IMPORTANT SAFETY INSTRUCTIONS

- Do not expose the device to extreme heat or cold, and do not use it near flame or fire.
- Do not use solvents, thinners, or liquid cleaners on the machine. Clean only with a dry cloth.
- Do not exceed the scale load limits, as this can damage the internal weighing system.
- Avoid using or placing the machine in areas with excessive vibration.
- Avoid installing or using the device near televisions, radios, or other electronic equipment, which may cause interference.

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