Dickey-John GAC 2500-AGRI

Dickey-John GAC 2500-AGRI Grain Analysis Computer User Manual

Model: GAC 2500-AGRI

1. Introduction

The Dickey-John GAC 2500-AGRI is an advanced Grain Analysis Computer designed to provide accurate and reliable grain moisture and temperature measurements. This device is engineered for ease of use, offering elevator-quality testing capabilities directly on your farm. This manual provides essential information for the proper setup, operation, and maintenance of your GAC 2500-AGRI unit.

2. Safety Information

Please read all safety instructions before operating the GAC 2500-AGRI. Failure to follow these instructions may result in injury or damage to the unit.

- **Power Supply:** Connect the unit only to a grounded power outlet with the specified voltage (110/220V, 50/60 Hz).
- **Environment:** Operate the device within the specified temperature and humidity ranges to ensure optimal performance and prevent damage. Avoid exposure to excessive dust or moisture.
- **Handling:** Handle the unit with care. Do not drop or subject it to severe impacts.
- **Maintenance:** Refer to the maintenance section for cleaning instructions. Do not attempt to open the unit or perform unauthorized repairs. Contact qualified service personnel for assistance.

3. Product Overview

The GAC 2500-AGRI features an intuitive color touchscreen interface, simplifying operation and reducing the need for extensive training. It is equipped with advanced temperature-sensing capabilities, allowing for accurate measurements of both frozen and hot grain samples. The unit can store up to 3,000 measurements in its internal memory.
Multiple USB ports are integrated into the design for enhanced functionality:

- **Rear USB Ports:** Used for software upgrades, connecting USB storage devices, and connecting to a printer or other peripherals.

- **Front USB Ports:** Designed for easy calibration imports and for connecting a keyboard or mouse to facilitate data input and setup.

Figure 1: Front view of the Dickey-John GAC 2500-AGRI Grain Analysis Computer, showing the color touchscreen display and sample input area.

4. Setup

Follow these steps to set up your GAC 2500-AGRI unit:

1. **Unpacking:** Carefully remove the GAC 2500-AGRI from its packaging. Retain all packaging materials for future transport or storage.
2. **Placement:** Place the unit on a stable, level surface in an environment that meets the specified operating conditions (temperature: 36 to 113°F / 2 to 45°C; humidity: 20 to 90% noncondensing). Ensure adequate ventilation around the unit.
3. **Power Connection:** Connect the provided power cable to the power input on the rear of the unit, then plug it into a suitable grounded electrical outlet.
4. **Initial Power-On:** Press the power button to turn on the unit. The color touchscreen will illuminate, and the system will initiate its startup sequence.
5. **Calibration Import (Optional):** If new calibrations are required, insert a USB drive containing the calibration files into one of the front USB ports. Follow the on-screen prompts to import the calibrations.

5. Operating Instructions

The GAC 2500-AGRI is designed for straightforward operation via its touchscreen interface.

1. **Navigating the Touchscreen:** Use your finger or a stylus to interact with the on-screen menus and buttons. The interface is designed to be intuitive.
2. **Selecting Grain Type:** From the main menu, select the specific grain type you intend to analyze. Ensure the correct calibration is loaded for accurate results.
3. **Sample Preparation:** Prepare your grain sample according to standard procedures. Ensure the sample is free from foreign materials. The unit can measure grain temperatures from -4°F to +113°F (-20° to +45°C) and moisture ranges from 5% to 45%, depending on the grain calibration.
4. **Loading Sample:** Carefully pour the prepared grain sample into the designated input area of the GAC 2500-AGRI.
5. **Initiating Measurement:** Follow the on-screen instructions to start the analysis. The unit will automatically measure moisture and temperature.
6. **Viewing Results:** Once the analysis is complete, the results will be displayed on the screen. These results are automatically stored in the unit's memory.
7. **Data Management:** Use the rear USB ports to export stored measurements to a USB device or print them using a connected printer.
8. **Software Upgrades:** Periodically check for software updates. These can be installed via the rear USB ports using a USB drive containing the update files.

6. Maintenance

Regular maintenance ensures the longevity and accuracy of your GAC 2500-AGRI.

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit and the touchscreen. For stubborn dirt, a slightly damp cloth with mild detergent can be used, ensuring no liquid enters the unit. Do not use abrasive cleaners or solvents.
- **Sample Area:** Regularly clean the grain input and output areas to prevent residue buildup that could affect measurement accuracy.
- **Storage:** When not in use for extended periods, store the unit in a clean, dry environment within the specified storage/transit temperature range of -4 to +140°F (-20° to +60°C).
- **Calibration:** Ensure calibrations are up-to-date for the grains being tested. Refer to the operating instructions for importing new calibrations.

7. Troubleshooting

This section addresses common issues you might encounter with your GAC 2500-AGRI.

Problem	Possible Cause	Solution
Unit does not power on	No power, loose cable, faulty outlet	Check power cable connection. Verify power outlet is functional.
Inaccurate readings	Incorrect grain type selected, outdated calibration, dirty sample area, environmental factors	Ensure correct grain type and calibration. Clean sample area. Verify operating environment.
Touchscreen unresponsive	Temporary software glitch, physical damage	Restart the unit. If issue persists, contact support.

Problem	Possible Cause	Solution
USB device not recognized	Improperly formatted USB, incompatible device	Ensure USB is FAT32 formatted. Try a different USB device.

If you encounter issues not listed here or if the suggested solutions do not resolve the problem, please contact Dickey-John customer support for further assistance.

8. Specifications

- **Operating Temperature:** 36 to 113°F (2 to 45°C)
- **Power:** 110/220V, 50/60 Hz, 30/35 VA
- **Humidity:** 20 to 90% noncondensing
- **Grain Temperature Range:** -4°F to +113°F (-20° to +45°C) (depending on grain calibrations)
- **Storage/Transit Temperature:** -4 to +140°F (-20° to +60°C)
- **Moisture Range:** 5 to 45% (grain dependent)
- **Approximate Weight:** 25 lbs. (11.43 kg)
- **Approximate Dimensions (H x W x D):** 17"H x 19"W x 14"D (43.18cm H x 48.26cm W x 35.56 cm D)
- **Memory:** Up to 3,000 measurements
- **Connectivity:** Multiple USB ports (front and rear)

9. Warranty and Support

For information regarding the product warranty, please refer to the warranty card included with your purchase or visit the official Dickey-John website. For technical support, service, or to order replacement parts, please contact Dickey-John customer service through their official channels.