

INSTALLATION INSTRUCTIONS



MINI GAC[®] PC APPLICATION TOOL

DICKEY-john's PC Application Software tool provides a convenient method to edit grain calibrations in the mini GAC unit via a computer.

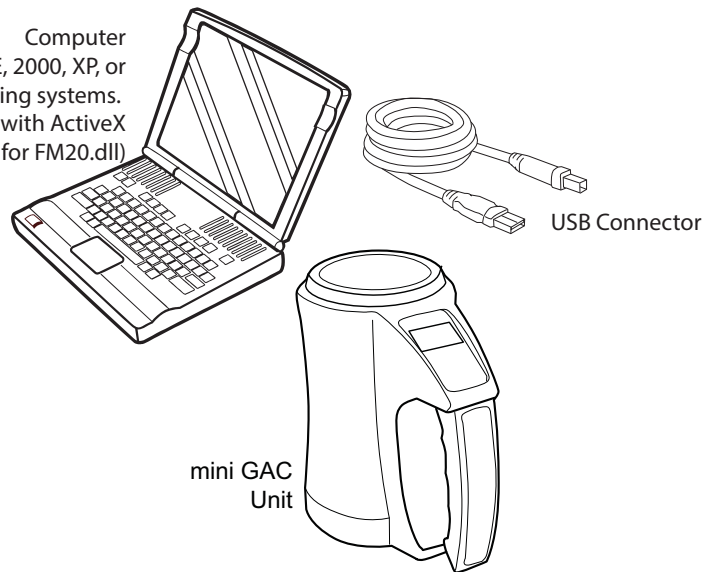
IMPORTANT: Grain calibration values vary based on region. Regions outside of North America should obtain calibrations from a local distributor.

The mini GAC application software is compatible with Windows 98SE, 2000, XP, and Vista operating systems. Also, Windows 7 and 8 with ActiveX Control Pad for FM20.dll. A downloading error will occur if the software is attempted to download on a system other than the ones listed.

Figure 1

Downloading Requirements

Computer
(Windows 98SE, 2000, XP, or
Vista operating systems.
Windows 7 and 8 with ActiveX
Control Pad for FM20.dll)



INSTALLATION INSTRUCTIONS



PC SOFTWARE INSTALLATION

IMPORTANT: If Microsoft Office is not the computer operating system, refer to the Troubleshooting section before proceeding.

To Install:

1. At the www.dickey-john.com home page, navigate to the mini GAC PC Application software by clicking on the following path:
 - Products
 - Agriculture
 - Moisture Testing
 - mini GAC
 - Get Support
 - Downloads
2. At the product page, select mini GAC PC Application Software.
3. Click to open the Application Setup Wizard.

APPLICATION INSTALLATION WIZARD

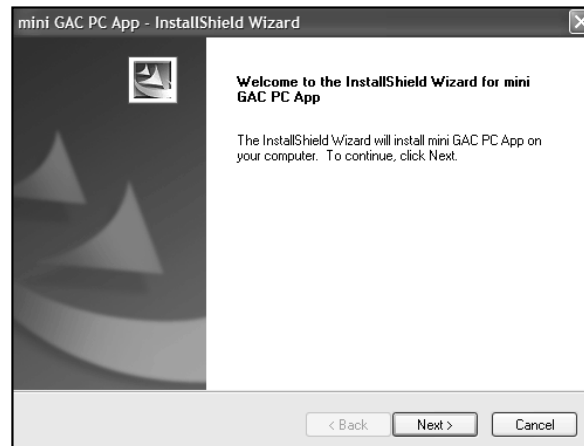
4. Follow the wizard instructions to complete the software download.
5. If you choose “Run”, the software file destination defaults to C:\Programs\DICKEY-john\mini GAC PC App unless redirected to another file location during setup.

Figure 2

Application Wizard Main Screen



Desktop Icon



6. After a successful installation:
 - From the Start/Programs menu, click the **mini GAC PC App** to start the PC application tool
 - (Optional) Copy the PC Application Tool to the desktop

INSTALLATION INSTRUCTIONS



HARDWARE CONNECTION

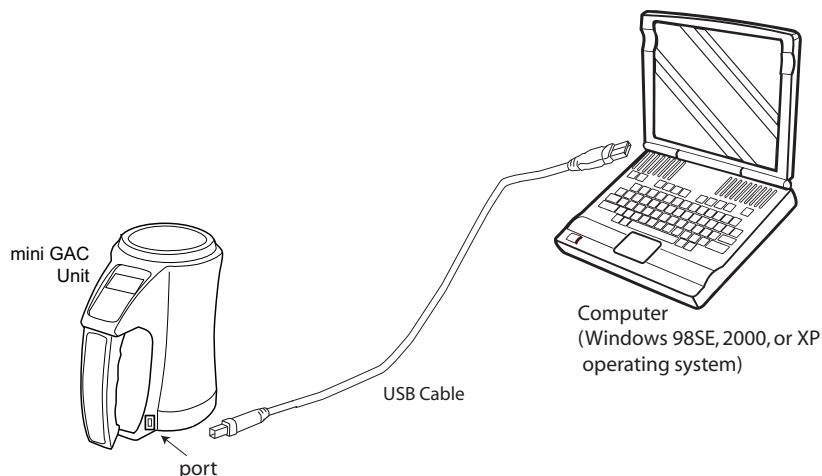
NOTE: Calibrations for download to the mini GAC must be manually entered into the PC Application. See Page 5 for instructions.

NOTE: mini GAC functions are inoperable while connected to the PC Application Tool.

To download grain calibrations from the computer to the mini GAC, a USB cable is required.

1. Connect the USB cable to an available USB computer port.
2. Remove the dust protector from the mini GAC port located on the bottom of the unit near the handle and connect the other end of the cable.
3. When properly connected, the USB symbol will appear on the mini GAC display. The mini GAC will power on when it is plugged in, however, if the unit sets idle for a period of time, it will eventually turn off.
4. If the mini GAC unit is off, press the on/off button to power on.

Figure 3
USB Connections



GRAIN CALIBRATION CONSTANTS

The Moisture Meter Calibration Constants document available at the DICKEY-john website provides the latest USDA certified calibrations. This form can be printed as a reference guide when manually entering updated constants into the mini GAC PC Application Tool for download to the mini GAC unit.

NOTE: Grain calibration values vary based on region. Regions outside of North America should obtain calibrations from a local distributor.

1. At the www.dickey-john.com home page, double click on the **Moisture Testers** link found at the Agricultural or Analytical section.
2. Click either the mini GAC or mini GAC plus link.
3. At the product page, scroll to the Downloads section and select the **mini GAC & mini GAC plus Calibration Constants** link.
4. Click to open.
5. Print the Calibration Constants document or write down the constants to update.



PC APPLICATION TOOL

The following functions are found on the main screen of the PC Application Tool.

File

- Opens files that are saved to the computer for download to a mini GAC.
- Saves calibration files to the computer as a .txt file at a user-specified location.

Tools

- Connects and disconnects communication with the mini GAC.

About

- Provides information regarding the PC Application Tool software and version.

Language

- A drop down list of languages automatically uploads from the mini GAC to the PC Application Tool.

Product

- A drop down list of products automatically uploads from the mini GAC to the PC Application Tool. Up to 20 products per language are stored on the mini GAC.

Get File

- Uploads the selected product's grain calibrations from the mini GAC to the PC Application Tool.

Delete File

- Delete the selected product file on the mini GAC that is not used. New product files can be created to replace the deleted ones.

Send File

- Downloads the product grain calibrations from the PC Application Tool to the mini GAC.

Product

- The Product section is the area that grain calibrations are manually entered for download from the PC Application Tool to the mini GAC.

Advanced

- Advanced features allow entry of moisture and test weight adjustments and entry of Auto Ranging parameters for download to the mini GAC. Refer to the Advanced Features section.

INSTALLATION INSTRUCTIONS



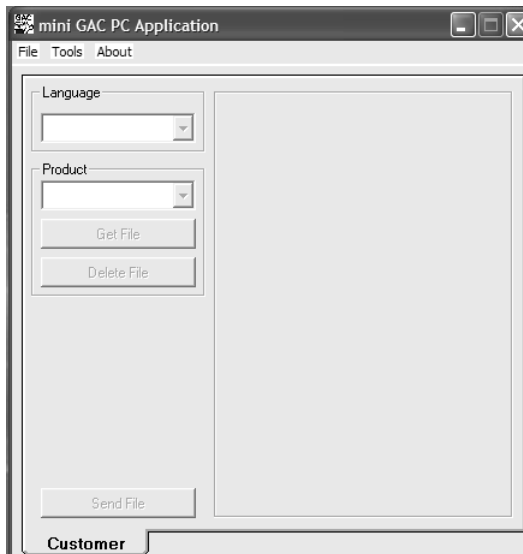
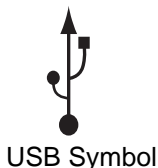
USING THE PC APPLICATION TOOL

NOTE: For Operating systems other than Microsoft® Office, reference the Troubleshooting section for possible download errors and resolution.

1. Open the mini GAC PC Application Tool file. The USB symbol must be displayed on the mini GAC unit for the communication between the PC and the unit to be active.
2. The Main PC Application page will display.

Figure 4

PC Application Main Page



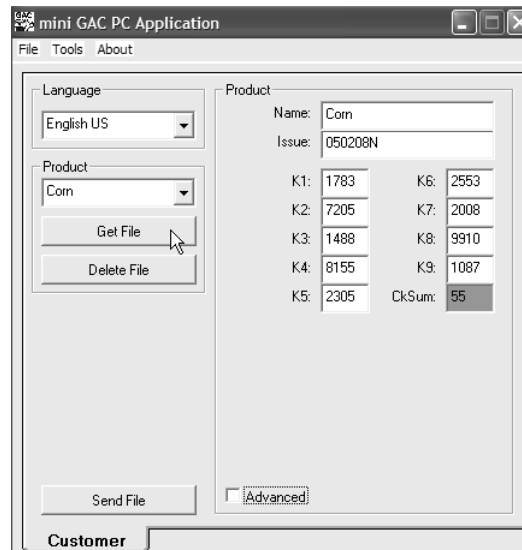
3. The language and product files will automatically populate with the mini GAC unit settings, refer to (Figure 5).
4. Use the Product drop down box to select the appropriate grain to update.
5. To view the current settings stored on the mini GAC, press the **Get File** button. The existing calibrations loaded on the unit will automatically populate the Product fields.
6. To change a product name and/or constant, select the appropriate field and manually enter the desired entry.
7. When all grain calibrations have been entered, verify that the Check Sum (Ck Sum) field totals 55. If the total is greater or less than 55, the input box will change from green to red indicating an invalid constant has been entered and the calibration will not download to the mini GAC.
8. Check the constants and correct any errors.
9. Each time a product constant is changed, the moisture and test weight bias will reset to zero.
10. Press the **Send File** button to download the new calibrations to the mini GAC.
11. A confirmation will display on the computer verifying a valid download.

NOTE: Language settings cannot be changed on the mini GAC unit using the PC Application Tool.

INSTALLATION INSTRUCTIONS



Figure 5
Product Field Entry



ADVANCED FEATURES

Moisture and Test Weight Bias

The mini GAC uses the same grain constants as the DICKEY-john federal standard GAC[®]2100 and is calibrated to USDA certification.

In situations where moisture or test weight differences occur with a local elevator, the Bias function allows entering of a correction factor in moisture and test weight to compensate for those differences.

This Bias adjustment can be done from the PC Application Tool or from the mini GAC.

Auto Ranging (Jump Maximum and Minimum)

If a product tests out of the moisture range of the selected product, entering a Jump Maximum and Minimum will allow the mini GAC to automatically adjust to the higher or lower grain calibration. Normally, this feature is automatically set and does not require any adjustment. Refer to the operator's manual for additional information.

To Adjust Bias and Auto Ranging from the PC Tool:

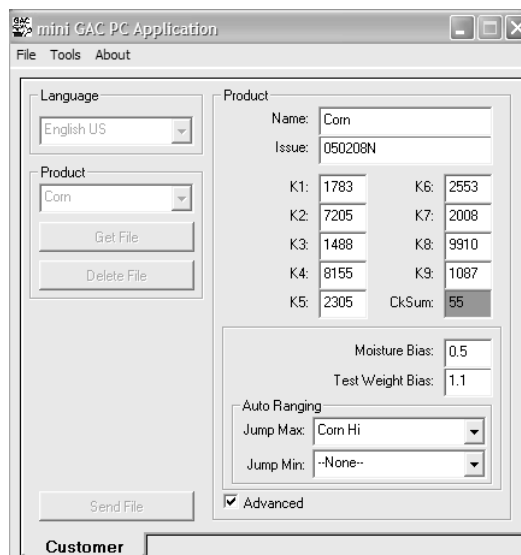
1. Select the Advanced input box to open the Advanced window, refer to (Figure 6).
2. Enter the desired Moisture and/or Test Weight Bias, if any.
3. Enter a product name in the Jump Max and Min input box, if desired.

NOTE: Test Weight does not display on the mini GAC model; only the mini GAC plus.

INSTALLATION INSTRUCTIONS



Figure 6
Advanced Features



TROUBLESHOOTING

NOTE: For troubleshooting assistance, contact DICKEY-john Technical Support at 1-800-637-3302. Regions outside of the United States should contact a local distributor.

Issue	Probable Cause	Corrective Action
Abandon changes.	Discards changes without saving	"Yes" clears the changes and defaults to the previous settings. "No" keeps the changes to allow a save.
Error occurred during transfer.	1) Lost communication between mini GAC and computer. 2) mini GAC battery is dead. 3) mini GAC is turned off.	1) Check USB cable connection on the mini GAC and the computer ports and the connection status of the PC Application tool (lower left corner of window). 2) Replace the 9V battery. 3) Power on mini GAC.
Device not connected.	1) Lost communication between mini GAC and computer. 2) mini GAC is turned off.	1) Check USB cable connection on the mini GAC and the computer ports and the connection status of the PC Application tool (lower left corner of window). 2) Power on mini GAC.
Product file checksum error. Calibration constant entry invalid. File not sent.	A Calibration constant entered in the PC Application tool is incorrect.	Correct constant, save, and resend.
Filename is not empty, Overwrite?	The file being sent will overwrite an existing file on the mini GAC	Accept to overwrite the existing file. Select no to return to the PC Application Tool without sending to mini GAC.
Unsupported file selected.	Selected a wrong file type.	Select the correct file.
FM20.DLL error	Microsoft Office is not installed.	Install the FM20.dll file by executing the setup program (setuppad.exe) for ActiveX Control pad located in the install directory.



PC APPLICATION TOOL DOWNLOAD ERRORS

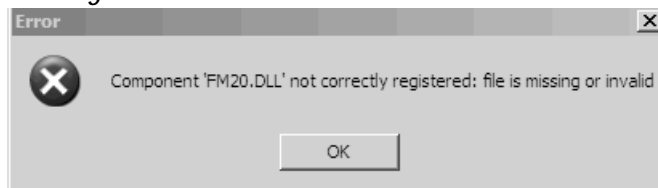
FM20.DLL FILE MISSING ERROR

If Microsoft® Office is **not** installed on the computer, a download error will display when the mini GAC PC Application is executed indicating the FM20.dll file is missing.

To install the FM20.dll file, execute the setup program for ActiveX Control pad (setuppad.exe) located in the C:\Program Files\DICKEY-john\mini GAC PC App folder.

Figure 7

Error Message



INSTALLATION NOTES

Computers with operating systems other than Microsoft Office will require an additional step to install the ActiveX Control Pad in order to use the miniGAC PC Application software.

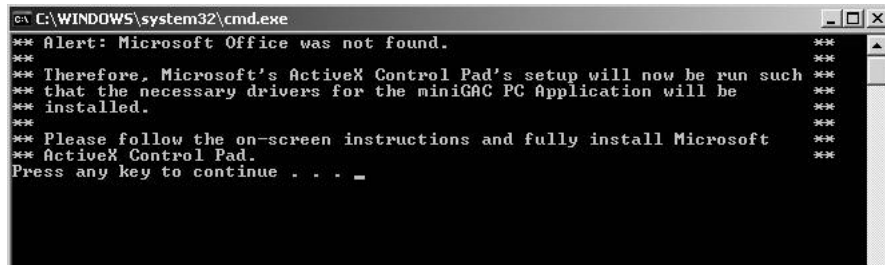
IMPORTANT: ActiveX Control Pad setup can only be completed by an Administrative user in Administrator mode.

Press any key to launch the ActiveX Control Pad setup and follow the onscreen instructions.

WARNING: Aborting setup before a complete installation will not properly install the ActiveX Control Pad. The miniGAC PC Application may indicate the installation was successful, but the FM20.dll error may persist. To resolve, uninstall the program and re-install.

Figure 8

ActiveX Control Pad Setup Screen



After setup completion, execute the program for ActiveX Control pad (setuppad.exe) to confirm a successful installation located in the C:\Program Files\DICKEY-john\mini GAC PC App folder.