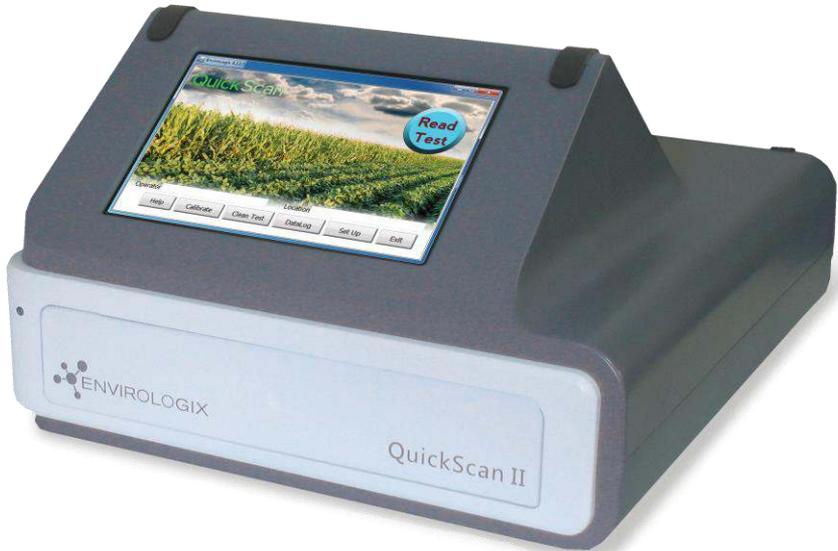


QuickScan II

USER MANUAL



ACC-331

Doc. M247-0318



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Welcome to QuickScan II™ from EnviroLogix!

QuickScan is a novel quantification and traceability system that combines digital imaging technology with advanced mathematical processing. Using a standard Windows® platform, QuickScan provides rapid, objective and quantitative results for a variety of EnviroLogix test kits. Features of the QuickScan System include:

- Flexibility in reading single test strips or multi-strip "combs";
- Per-lot quantitative standards integrated into a unique barcode system for each test strip, ensuring precise measurement across different manufactured lots and eliminating the need to calibrate the imaging device;
- Instantaneous data storage, where test results can be emailed, printed or analyzed at any time;
- A simple Microsoft Windows interface, familiar to users worldwide and minimizing training time; and
- A complete, integrated hardware and software solution with a touch-screen interface.

Accuracy of the QuickScan System is influenced by proper operation of the EnviroLogix test kits themselves. Test kit procedures are explained in EnviroLogix Product Inserts. Inserts ship with each test kit package and can also be found on our website.

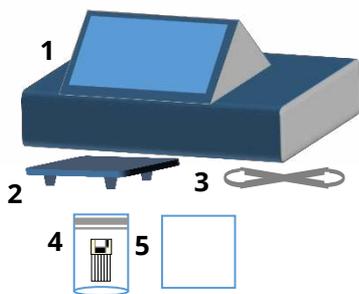
We invite you to experience our technology. Should you have questions not addressed in this User Manual, please contact the EnviroLogix QuickScan Team at 1-866-408-4597 (toll-free, US) or email techsupport@envirologix.com. Hours of operation are from 8 am to 5 pm EST, Monday through Friday.



Thank You!

The EnviroLogix QuickScan Team

PACKAGE CONTENTS



1. QuickScan II System
2. Strip / comb tray (fits within QuickScan II drawer)
3. Power cord
4. QuickScan Check Comb
5. White card for cleaning and servicing

INTENDED USE

QuickScan is part of a quantification and traceability system intended for use with specific barcoded EnviroLogix test kits. These kits, including QuickComb™, QuickStix™ and QuickTox™, are designed to analyze a variety of analytes and compounds. QuickScan will not analyze test kits from any other manufacturer. (See the Barcode Labels section for a list of EnviroLogix test kits for QuickScan.)

EnviroLogix provides test kits to detect such targets as proteins expressed by genetic modifications in crops, mycotoxins, algal toxins, chemical contaminants, and plant pathogens. Interest in detecting and measuring these targets lies in many industries, including agricultural biotechnology, grain merchandising, food and animal feed processing.

The QuickScan imager is not intended for any use other than reading EnviroLogix test strips or combs. Using the imager in unintended ways may affect QuickScan's ability to provide accurate, consistent test results.

INSTALLATION

All components required for installation are supplied (see Package Contents). Place the tray into the drawer. Connect the power supply, and turn on using the button in the back of the unit.

CALIBRATION

Calibration will occur automatically the first time the QuickScan program is opened. The program will automatically calibrate the unit every day.

Before processing EnviroLogix test strips for the first time, the QuickScan imager must be calibrated. Calibration ensures the highest image quality possible.

The unit can be calibrated by opening the QuickScan program and clicking the the Calibrate button at the bottom of the screen. The program will indicate that the unit is being calibrated, which will only take a few seconds. Please note: calibrations initiated from the main screen, as well as automatic calibrations done by the program, are recorded in the DataLog.

Incorrect calibration may lead to "streaky" images in the QuickScan Results Screen, or the inability of the system to locate barcodes on the test strips, invalidating test results. If a problem develops with the calibration process, contact the QuickScan Team at 1-866-408-4597 or techsupport@envirologix.com.

OPERATION

Upon turning on the unit, the QuickScan program will automatically open. Or, from the desktop, double click the QuickScan (QS) icon. The software will start and the Main Menu will appear on the screen.



Main Menu

The Main Menu screen (right) is the starting point for all QuickScan operations. The Menu features several utilities:

□ **Operator and Location**

The user can input the name of the QuickScan operator and location into these entry fields. This information is stored and reported across all test runs until the information is changed. QuickScan will default to the most recently stored information upon start up.

Previous Operators and Locations are stored in a drop-down menu. Just click the entry box, delete the current name, and enter the first letter of a previous name. All previous names beginning with that letter will appear.



❑ **Calibrate**

Click the Calibrate button to calibrate the unit. Calibration will be documented in the DataLog.

❑ **Read Test**

Clicking the Read Test button begins the strip-scanning process. EnviroLogix test kits must be run according to their Product Inserts and placed correctly into the strip tray before activating Read Test.

❑ **Clean Test**

The Clean Test utility starts a procedure to help determine whether dust or debris has entered the scanning area, potentially affecting test results. (See Cleaning and Servicing below.) Performance of the Clean Test will be documented in the DataLog.

❑ **DataLog**

The DataLog button allows quick access to the DataLog, a depository of all test results. DataLog files can be edited, viewed, saved, printed, or deleted by choosing the appropriate utility within the DataLog Viewer. Select rows can be saved, printed, or deleted. Also, pdf Reports can be created, viewed and printed. (For more about the DataLog, see p.16.)

- To view a Report, highlight a row from the desired report and click the "View Report" button. (See "Print Report" below for more details.)
- To print a Report, highlight a row from the desired report and click the "Print" button. A dialog window will ask if you wish to print DataLog rows or pdf Reports. (To set up a printer, see the next section.)
- To make edits, click the box where the change is to be made and edit the content. Only columns in white (entry fields) are editable; gray columns cannot be edited. To save edits, click the "Save Edits" button.
- To save the DataLog as an Excel®-usable file, click the "Save as .csv" button to select file location and name. The existing DataLog in the QuickScan program will continue to accumulate data unless deleted, in which case a new DataLog will begin.
- To save only select rows, highlight the rows to be saved and click "Save as .scsv" button. To open a .scsv file with Excel, simply change the extension name from .scsv to .csv.
- To create a new or revised pdf report, save desired edits in the DataLog, click a cell in the section from which you wish to generate a report, then click "Create Report." A new report will be generated containing all rows of data from the same scan. New reports will not contain strip images. Original reports will continue to exist with the images.

- Print or delete the DataLog by clicking the Print or Delete button. To print or delete only select rows, highlight the desired rows prior to clicking Print or Delete. Orientation of the DataLog when printed (Portrait or Landscape) can be selected in the Settings tab of the Set Up screen.
- If column header titles are changed or a new Language is selected (see Set Up, Settings), the changes will occur in the DataLog immediately. As backup, the program will automatically save a copy of the DataLog prior to the changes.
- Note: to unselect highlighted rows, click the rows while holding down the <Ctrl> key.
- To sort the DataLog, long-hold the mouse on a column title to generate row F. Enter the term you wish to sort under the appropriate column title and click the "Enter" key. To save just the sorted data, click the "Save as .scsv" button.
- If strips or combs with serial numbers have been scanned more than once, use the "Filter Alerts" button to filter for those entries.
- To create graphical output of your data depicting average results, click the Analyze button. Select test kit, and starting and ending dates. Select if you want running average and/or supplier included on the graph. Select interval (Average over Days, Weeks, Months, Quarters, or Years) and click "Create Graph." Hovering the cursor over bars on the graph will show additional information such as the supplier ID.

□ **Set Up**

The Set Up button opens a window for optional settings as well as general QuickScan version information.

- Settings Tab
 - Printers to be used by the QuickScan System are selected using the drop-down menus for Report Printer and Receipt Printer. Any printer configured in the printers folder may be selected. If no Receipt Printer is selected, the Results screen will not show a "Print Receipt" button.
 - The DataLog Orientation setting allows for the selection of Portrait or Landscape for the orientation of the DataLog when it is printed.
 - The Language setting allows selection of English, Russian, Spanish, French, or Portuguese language.
 - The Field Separator setting applies punctuation to test data exported via the Export Log function. The Field Separator can be set to a comma or semi-colon.

- The Decimal Point setting applies to the punctuation used in fractional numbers. (e.g. change 4.2 ppm to 4,2 ppm)
- Use the Export Format drop-down to select a file type for exported files.
- The Export Path button allows for the selection of the location of the DataLog file. Currently it defaults to *C:/EnviroLogix/QuickScan/Export*. Or, if using the Export feature, use the Export Path button to set the file path for exported files. Export files can be exported to a LIMS or LIMS-like system, or sent to an http: address.
- If using the Export feature, use the DataLog Path button to set the path for the DataLog. The DataLog can be sent to a folder or network location. Currently it defaults to *C:/EnviroLogix/QuickScan/Export*.
- The Results Table Column Titles setting allows the user to edit the column headers of entry fields. Select the original title from QuickScan Titles, then edit a new title into the New Titles box. To remove a column from the Results table, simply delete the text in the New Titles box. Changes will occur in the DataLog and Results screens immediately; there is no need to delete the DataLog or to restart the program. As backup, the program will automatically save a copy of the DataLog prior to changes.

To change a title, select the title you desire to change from the "QuickScan Titles" drop-down menu. For example:

Drop-down menu:

Select Comment 1:

Comment 1 will appear in New Titles box: Delete "Comment 1":

Type in your new title:

New title in Results screen:

QuickScan Results Table 1 Test Kit		
Sample ID	Supplier	Commodity
1		

Note: if you leave the “New Titles” box blank, then the column is removed from the Results screen. Do not remove the Sample ID column – you must make an entry in this column in order to save or print any results.

-Results Table Column Titles-	
QuickScan Titles	Supplier
New Titles	Supplier
Entries	Seeds-R-U's,Grain X,Cornland

You can also enter pre-defined drop-down menu items for select column headers. For example, select Supplier, and an entry box

will appear next to “Entries.” These entries will appear in the drop-down menu for that column in the Results screen.

- The Result Screen Size setting allows selection of the grid and font size in the Results table and DataLog. 

- The Receipt Print Size setting allows selection of the font size on printed receipts.

- The Widget Height setting allows selection of height for input fields.

- Daily Clean Test and Check Comb message is set “on” – users will see a daily reminder at 8:00 AM or upon startup thereafter to execute a Clean Test and Check Comb scan. Changes to the time of the reminder can be made through Settings; it is recommended that this be set so that the message is delivered upon the initial startup each day. Check the “Forced” button to require a Clean Test and Check Comb scan to occur at the designated time; if checked, the program will not allow other actions to occur until the maintenance is complete. Or, uncheck both boxes if no daily reminder is desired (not recommended).



- Selections Tab

- AutoFill selections: rather than re-enter the same information for each strip in the Results screen, enter it once, click Enter, and the program will automatically fill all rows with the same information for you. This feature will occur only to those entry fields you select.
- The Record All Results setting specifies that strips with error messages are recorded in the DataLog and Report.

Setting:	Report:
Record All Results <input checked="" type="checkbox"/>	DN: DON E10: Weak Control <input type="checkbox"/> No lines!

- The Always Update DataLog setting will save all data to DataLog, even if no Sample ID is entered in Results screen.
- The Sum GMO Results setting will total the GMO results within a scan. GMOs from corn and GMOs from soy will be summed separately. Sum will appear in Results Table and Report. For the purposes of summing the totals, <LOD is considered zero. <LOD means "less than the Limit of Detection."

Setting:	Result:
Sum GMO Results <input checked="" type="checkbox"/>	GMO Sum = 11.6

- The Save All Reports setting will automatically save a pdf report for all scans as long as a Sample ID is entered. If this option is selected, the Save Report button will not appear in the Results screen.
 - The Unit Conversions setting will convert any results with ppm units (used with Fumonisin and DON) to results with ppb units.
 - The Auto Export setting will automatically create export files. If not checked, an Export button in the Results screen will allow the user to export data as desired.
 - The Location = Program Key ID will autofill the Location field with the Program Key ID. If checked, the Location field will not be editable.
 - QSS On-Screen Keyboard: select to activate the QSS keyboard when entering data into user fields.
 - OS On-Screen Keyboard: select to activate the Operating System keyboard. Both the QSS and OS boxes must be checked to use this keyboard.
 - Mouse Scrolling: select to easily move the DataLog and Results screen grids using a mouse or on-screen touch.
 - Exit to Shut Down: select to power down the QuickScan program and unit when clicking the "Exit" button on the main screen.
- Details Tab
 - The Supported Test Kits box shows the EnviroLogix test kits that are currently supported on the QuickScan System.
 - Contact information for EnviroLogix Tech Support is provided.
 - QuickScan Tech Support generates a compilation of data that can be emailed to EnviroLogix to help trouble-shoot customer questions. Click "Generate Report" to gather system information and to generate an image for the report. The program will automatically attach the report to an email (if available) or, the "debug.msg" file can be retrieved from C:\EnviroLogix\QuickScan.

- Check the "Matrix Card" box to view kits and lots that have Multi-Matrix Barcode Card data stored in the program
- Download Tab
 - If updates are available, an "Updates to QuickScan are Available" window will appear when QuickScan is opened. Click "Download" button, then click OK to install when prompted in the Download tab. If QuickScan is not connected to the internet, updates and upgrades can be downloaded to a flash drive, from the EnviroLogix website.
- Cutoffs Tab
 - By default, QuickScan software will display and record "Accept" on the Results screen. The Cutoff feature allows the user to select an Action other than "Accept" as the default when test results are equal to or greater than a user-defined upper cutoff level, or when results are equal to or less than the user-defined lower cutoff level. When the Cutoff feature is used, the program allows the user to select Accept, Pending, or Redirect as a default Action in the Results screen.
 - Cutoffs can be defined for each Matrix Group for each of the Mycotoxin test kits. The cutoff will be applied to each individual result within the results screen, even if multiple strips of the same test are scanned at one time. Thus, strips from multiple samples can be scanned at one time; and each one will be compared individually to its respective cutoff. Likewise, multiple Mycotoxin tests run and scanned from the same sample will be evaluated independently using the cutoffs for each mycotoxin.
 - For GMOs, the defined cutoff will be applied to the Summed GMO result within the scan, either for corn or for soy. Thus, when using the cutoff feature, strips from only one sample should be scanned at a time.
 - If multiple GMO test kits from the same sample are scanned at one time (for example, a comb and a single strip), the program will sum the results and display the same Action for each. Please note, to view the calculated GMO Sum, this option must be enabled in the Selections tab.
 - Upper cutoff levels that are met or exceeded will be flagged on the Results screen in the Error column. A user-defined message (such as the default "Exceeds Cutoff") will appear shaded in red. Users can change the default error message in the Cutoffs tab. The Action column will display the default action selected by the

user in the Cutoffs tab. Please note, the user can override the default Action in the Results screen by using the toggle.

- Lower cutoff levels that are met or below the cutoff will be flagged on the Results screen in the Error column. A user-defined message (such as the default "Below Cutoff") will appear shaded in red. When setting up cutoffs, a lower cutoff does not need to be defined nor used. However, you must define an Upper Cutoff level in order to also define a lower cutoff level.

- Inventory Tab

- Enter existing inventory of QuickCombs, QuickStix, and QuickTox into the Inventory Tab to activate alerts to low inventory levels. Alerts are given when the number of strips or combs remaining equals or is less than the Low-Level Warning number. Alerts are given as a pop-up dialog in the results screen and as an email to a designated receiver (if applicable). They are also shown in the DataLog, and in red in the Inventory Tab.
- From the Select A Test Kit: drop-down menu, select the test kit for inventory tracking, then click the Add button. The kit will appear in the Test Kit column of the Inventory grid.
- Enter the number of tubes (canisters, for single-strip kits) or number of pouches (for combs) into column 1. Enter Quantity of Tubes or Pouches. The program will automatically convert number of tubes to strips (50 strips per canister), or convert number of pouches to combs (5 combs per pouch).
- Enter the number of remaining strips or combs to activate a Low-Inventory warning into column 2. Enter Level for Low-Inventory Warning (Strips or Combs) and click Enter. Program will show "0" as the Inventory Level, and will activate the Inventory Count button in column 3.
- Column 3. Set Strip / Comb Inventory Count will calculate the number of strips or combs to be added into current inventory. Click the Add # Strips / Combs button in column 3 to add the number into Current Inventory. This number will appear in the Current Inventory Level (Strips or Combs) column.
- Click Save button to save the new data. To manually remove strips or combs from the inventory count (if lost or expired), click the Ok button, then go back to the Inventory Tab. The button in column 3. will read Remove 1 Strip / Comb – click this button until

Test Kit	Current Inventory Level (Strips or Combs)	2. Enter Level for Low-Inventory Warning (Strips or Combs)	1. Enter Quantity of Tubes or Pouches	Kit Unit	3. Set Strip / Comb Inventory Count
1 OHIO Corn Combs 178	25			pouch	Remove 1 Strip / Comb
2 Allatoxin	25			tube	Remove 1 Strip / Comb

the desired inventory level is shown. Inventory can also be added to existing inventory to adding a new number of tubes or pouches to column 1.

- If you wish to set up an email notification, enter an email address in the Notification box in the lower left corner and click the Save button. Please note: this requires an email program to be installed and set up on the QuickScan II. Contact your IT Department to set up an email account.

❑ **Help**

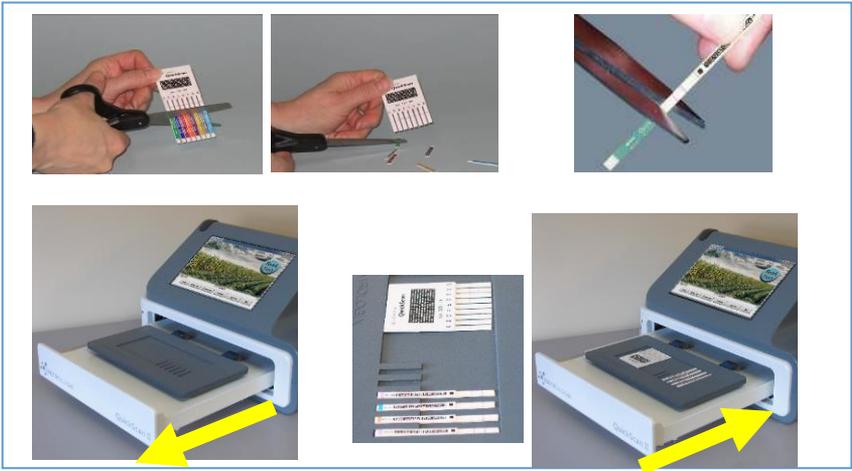
The Help button activates an electronic version of the QuickScan User Guide, indexed by topic. It also provides contact information for EnviroLogix Customer Service. Each screen in the QuickScan program has a Help button. When the Help button is clicked, the program will open the file to the relevant section.

❑ **Exit**

If "Exit to Shut Down" is checked in the Selections tab, the Exit button closes the QuickScan application and shuts down the instrument. If not checked, the Exit button just closes the QuickScan application.

Reading Test Strips

Test strips and combs must be read immediately after the required reaction time, i.e., while still "wet." (Details of test kit operation can be found in each Kit's Product Insert.) Before reading tests, verify or edit the operator/location information at the bottom of the Main Menu.



With scissors, cut the reacted test strips just above the colored arrow tape. Open the QuickScan drawer by pushing in the drawer face – it will pop open. Place single strips on the right side of the tray – slip them into the slots designed to hold the strips. The strips must be facing up, with the barcode end of the strip closest to you – the barcoded end slides into the strip slots. Place combs, also face-up, onto the left side of the tray. QuickScan has the ability to read various combinations of combs and/or strips simultaneously.

Press the drawer closed. From the Main Menu, click Read Test. The reading process will take several seconds before QuickScan advances to the Results Screen. At that time, remove strips from the tray in preparation for the next read.

Reading Multi-Matrix Barcode Cards

Multi-Matrix Barcode Cards enhance the functionality of test strips by increasing the variety of matrixes that can be tested with the strip. Unique standard curves are applied to each Matrix Group, and are encoded as barcodes on the Barcode Card included in the kit box.



The curves must be uploaded into the program prior to running the test strips. To do this, open the drawer and slide the MMBC – face up – into the clips in the back of the drawer, close the drawer, then click “Read Test” from the QuickScan Main screen.

Once the unit has finished scanning the card, a dialog will appear indicating that the barcodes have been uploaded.



Please be sure to verify that all of the barcodes have been successfully uploaded by matching the Matrix Groups shown on the card to the Matrix Groups shown in the dialog. Once barcodes are uploaded, they will remain permanently in the program’s memory, and thus the card will not need to be scanned again. Please note: the Barcode Card will need to be scanned each time you receive a new lot of strips.

Once uploaded, the test strips can be run and scanned as described in the “Reading Test Strips” section. Prior to advancing to the Results Table, however, you will be prompted to select your Matrix Group. You will see an abbreviated Results Table with the “Test Kit” and “Matrix Group” columns:

Select the Matrix Group for each strip from the drop-down menus in the Matrix Group column. For

Test Kit	Matrix Group
1 AQ-209 BG	<ul style="list-style-type: none"> AF MG1: Corn (EB17 extraction) - brown rice - wheat AF MG2: Corn germ - cottonseed (delinted) - DDGS - rice bran AF MG3: Coconut meal - corn gluten meal - corn silage - hominy feed

ease of selection, the matrixes included in each Matrix Group are shown in the drop-down menu. When all Matrix Groups have been selected, click the “Ok” button to proceed to the Results Table. Please note: you are not required to select a Matrix Group for kits that do not include Multi-Matrix Barcode Cards.

Interpreting Results

Following the reading process, test results are automatically displayed in a separate Results Screen (see example ->). The screen features a Results Table, an image of the scanned strips, and utility buttons for recording and documenting test results.



Results Table

QuickScan generates a table that matches the analyte or compound tested with the

This is another view of the 'Results Table' from the QuickScan software. It displays the same data as the first screenshot, including the table with columns for Sample ID, Supplier, Comment 1, Comment 2, Action, Test Kit, Analyte, Result(%), TL, CL, and Lot. The table contains data for various analytes like Cry1Ab, CP4 EPSPS, Cry3Bb, CryIF, PATtoe, Cry3A, and mCry3A. A summary row shows 'GMO Corn Sum = > 11.39 (conservative est.)' and '< 11.09'.

corresponding test result. Results are presented in a quantitative range specific to each test, and in measurement scales applicable to the target. For example, the measurement scale for GMO strips is percent (%) while the scale for mycotoxins is ppb or ppm.

- For GMO tests, results will fall between <LOD (the limit of detection) and the upper limit of the quantitative range. (See the Product Insert for each test kit for more detail.)

If “Sum GMO Results” was selected in the Set Up, the program will automatically calculate the GMO total and display it in the last row of the Results Table.

- For mycotoxin tests, the results will fall between <LOD (the limit of detection) and the upper limit of the quantitative range. A “Select Dilution” column will appear in the Results table. Select 1:1 for samples run in the standard test protocol, or select the appropriate dilution for high samples that are further diluted. (See the Product Insert for each test kit for more detail.) Please note, do not use the “Select Dilution” function for results that are <LOD.

Calculation of test results is determined by measuring line intensities of each strip. The calculation uses lot-specific standard curves embedded within the barcodes for each strip lot. This mathematical procedure is unique for each analyte or compound being tested.

More about "Select Dilution": If you run a mycotoxin test kit with a high result, it can be further diluted, as per the Product Insert.

For example, Aflatoxin – if no dilution was made, leave the selection at 1:1 (1 part in 1), or neat. The final result is 11 ppb:

Test Kit	Analyte	Select Dilution	Result(ppb)
AQ-109 BG	AF: Aflatoxin	1:1	11

If a dilution was made as per the Product Insert, click the down arrow in the Selection Dilution field. Choose the dilution, as instructed, from the drop-down menu, in this case 1:6:

Test Kit	Analyte	Select Dilution	Result(ppb)
AQ-109 BG	AF: Aflatoxin	1:1	11
		1:1	
		1:6	

Please note that in some cases, the dilution pulldown menu will display a letter instead of a number, for example "1:A" or "1:B".

The program will then automatically calculate the result, 65 ppb:

Test Kit	Analyte	Select Dilution	Result(ppb)
AQ-109 BG	AF: Aflatoxin	1:6	65

Please note, the results are given in 2 significant digits. In this example, while it could be assumed to be multiplying the 1:1 result of 11, it is actually multiplying an exact result that goes out several decimal places, for example, 10.8938.

The Results Table features five user-input options, intended to enhance the traceability of deliveries or shipments. A drop-down menu for the user-entry columns will remember the last 30 entries made. Previous entries can be selected without re-typing them. The entries in the drop-down menu can be removed by holding the Control key, arrow down to the item you wish to remove, and hitting the Delete key. Please note: if entries are defined in the Results Table Column Titles section of the Settings screen, they will re-appear in the next scan even if they are deleted here. If multiple test kits are scanned at one time, the program can autofill the entries for all kits after the first has been entered. You can override the autofill by re-entering the desired text in the appropriate box. (See "Operation, Setup" for detail on Results Table Column Titles.)

- A scale-ticket number or trace identification number can be entered into the box directly under the "**Sample ID**" header
- A supplier name or number can be entered directly into the box under the "**Supplier**" header

- Notes or comments can be added to the **“Comment 1”** and **“Comment 2”** columns. (See "Operation, Setup, Results Table Column Titles")
- The operator has the option to select **Accept**, **Redirect** or **Pending** (for the materials being delivered or shipped) in the drop-down box directly under the **"Action"** header. QuickScan software defaults to Accept.
- The matrix tested can be added to the **“Matrix”** column.

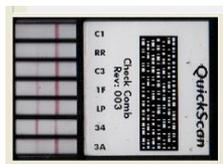
Sample ID	Supplier	Comment 1	Comment 2	Action	Test Kit	Analyte	Res.(%)	T1	C1	List
1 Truck ABC	Farmer Bob			Accept	AQ-003 BG C1: Cry1Ab		0.60			33
2 Truck ABC	Farmer Bob	Com		Accept	AQ-005 BG C2: Cry2A		3.1			21
3 Truck ABC	Farmer Bob			Accept	AQ-037 BG 3A: mCry3A		4.2			42
4 Truck ABC	Farmer Bob			Accept	AQ-054 BG 3A: Cry3A		< LOD			74

If more than one strip has been loaded into the tray, scroll down the Sample ID column to view the image of the strip for that row of data. The image will also show the strip's position in the tray; i.e., highlight row 2, see the image in position 2. (Note:

Row 2 highlighted, Image 2 shown

a misplaced strip or scanning error will affect the order in which strips are reported.)

The QuickScan Results Screen provides a digital image of the scanned strip or comb. The image shows the identification label / barcode on the strip, test lines, and the strips themselves.

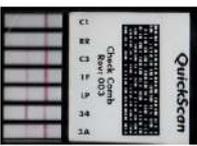


The Results Screen also features six utility buttons:

☐ **Save Report**

The Save Report button saves test results, sample identification data, and an image of each scanned strip or comb into an Adobe Acrobat® (.PDF) file. Reports can be accessed from the DataLog on the Main Menu or a shortcut on the desktop, and are stored in a subfolder within the QuickScan directory: C:\EnviroLogix\QuickScan\Reports. Reports in the folder can be identified by time and date saved, as well as by the Sample ID assigned to a test. Reports can be opened, printed or emailed at any time. A Sample ID must be entered in the Results Table in order to create a Report.

QuickScan
18 March 2013 12:23



Operator: Dalanya
Location: EnviroLogix
Sample ID: A162C3
Supplier: Farmer Sue
Action: Accept
Test Kit: AQ-036 TC: 13-8
Comment 1: Com
Comment 2: Truck

Analyte	Result	T	C
C1: Cry1Ab	< LOD %		
RR: CP4 EPSPS	0.89 %		
C3: Cry3Bb	1.4 %		
1F: Cry1F	2.1 %		
LP: PAT1pat	1.9 %		
34: Cry34	3.7 %		
3A: mCry3A	1.4 %		
GMO Corn Sum =	> 11.39		
(conservative est.)	(< 11.89)		

Each report consumes about 130 KB of hard disk storage. Each 1 GB of storage can hold nearly 7,700 reports. QuickScan II is shipped with approximately 15 GB of storage, capable of holding over 100,000 reports.

❑ **Print Report**

Pressing the Print Report button sends the Report file (see Save Report above) to any printer selected from the QuickScan configuration window. Available printers are the same as those configured on the QuickScan. A Sample ID must be entered in order to print. Unless the Save Report utility has been activated, however, the content of the printed report will not be permanently saved in the Report folder. Printing automatically appends the permanent Export Log (see Export Log below).

❑ **Print Receipt**

Print Receipt sends an abbreviated Report file to any thermal printer selected from the QuickScan configuration window. The printed receipt does not include an image of the tested strips. (See Print Report above for more information.) The Print Receipt button only appears if a receipt printer was selected in the Set Up screen.

❑ **Export**

Click the Export button to create an export file. Export file type can be selected from the Export Format drop-down located in the Settings tab. Export files can be exported to a location defined using the Export Path button in the Settings tab. If no file path has been defined, then exported files will populate in C:\EnviroLogix\QuickScan\Export by default. If Auto Export has been checked in the Selections tab, then export files are automatically exported and the Export button will not be shown.

❑ **Help**

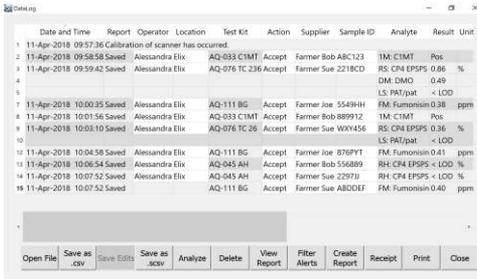
The Help utility activates an electronic version of the QuickScan User Manual, indexed by topic. It also provides contact information for EnviroLogix Customer Service.

❑ **Close**

Pressing the Close utility button closes the Results Screen and removes options to save or print reports. Closing the results screen without having entered a Sample ID will generate a dialogue box warning that data will be lost and asking for a sample identifier. *If no Sample ID is entered, QuickScan will not export or save any results data.*

DataLog

Activating any utility buttons on the Results Screen will automatically export test results to a permanent Export Log file, the DataLog. *The exception to this rule occurs when closing the Results Screen without entering a Sample ID.*

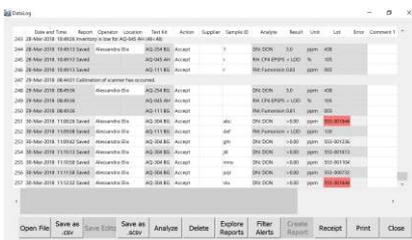


The file contains all test results from all test strips read on the QuickScan Reader (see example below). Data is stored in the QuickScan directory C:\EnviroLogix\QuickScan\ Export (unless the file path was changed in the Set Up screen), and can easily be accessed by

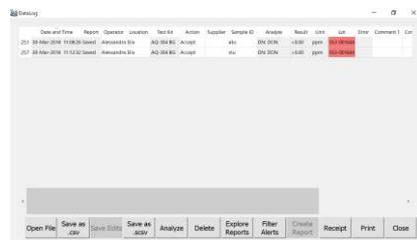
clicking the "DataLog" button on the Main screen. This opens the file in a friendly format for analysis, printing, or archiving.

WARNING: Although the file may also be opened by other programs that recognize a .csv format such as Microsoft Excel, the data log file **must not** be in use or open with these other programs when the QuickScan Reader is in operation. The data file will be locked and all subsequent results **will be lost**. Use the DataLog button to save this file elsewhere if needed.

More about Unique ID in the DataLog: Some products have barcodes with strip identifiers, ID numbers unique to each device which are captured with the lot number within the DataLog. When a product has been encoded with a Unique ID, it is possible to clearly and quickly identify within the DataLog when a device has been scanned more than once. Such entries are shaded red within the DataLog, and if the Filter Alerts button is pressed, only duplicate IDs are displayed. When combined with the permissions and log-in requirements available in QuickScan's User Authentication feature, it becomes a powerful quality and compliance tool that can hold specific users accountable. Visit www.envirologix.com/user-authentication to learn more.



DataLog showing red highlights for tests scanned more than once



"Filter Alerts" button shows only duplicate IDs to avoid scrolling

BARCODE LABELS

EnviroLogix QuickStix, QuickTox and QuickComb Test Kits are manufactured with QuickScan barcodes. These barcodes are critical components of the measurement and traceability system. Barcodes contain:

- A product code that identifies each test strip.
- A manufacturing lot number of the test kit.
- For select test kits, serial numbers are included for each individual strip or comb. These numbers are added to the lot number.
- Parameters for the lot-specific standard curve, used by QuickScan to interpret the color intensities of test lines on the strip and to quantify the result.

During operation, QuickScan sees the barcodes before reading the test lines, automatically identifying the information needed for processing. The barcode is specific to each manufactured lot and incorporates changes in test strip configuration and standard-curve parameters, providing greater precision and reducing the need for on-site system upgrades or re-calibrations.

Importantly, barcodes should not be removed from the strips, and should not be shared or exchanged across different strips. Altering the barcode in any way will affect performance of the QuickScan System. When processing strips, barcodes should be free of dirt, debris or liquid from the test sample.

QuickScan will process the test strips in the table below. Some of these tests may be configured as a QuickComb, which combines many strips under a single barcode label.

Test Strip / Trait / Analyte		ID on Barcode	Test Strip / Trait / Analyte		ID on Barcode
GMO CORN	Cry1Ab	C1	GMO SOY	CP4 EPSPS	RS
	CP4 EPSPS	RR		PAT/ <i>pat</i>	LS
	Cry3Bb	C3		Cry1Ac	1S
	Cry1F	1F		DMO	DM
	PAT/ <i>pat</i>	LP			
	Cry34	34	GMO HAY	CP4 EPSPS	RH
	mCry3A	3A			
	Cry2A	C2	MYCO-TOXINS	Aflatoxin	AF
	Vip3A	VP		DON	D3, DF
	eCry3.1Ab	E3		Fumonisin	FM
eCry3.1Ab	XC	Ochratoxin		OA	
			Zearalenone	ZN	
GMO CANOLA	CP4 EPSPS	RC	T2/HT2	T2	

If, for any reason, barcodes cannot be read, QuickScan will generate an error message in the Results Screen. (See Error Messages for more information.)

QUICKSCAN CHECK COMB

Included in your accessories is a Check Comb, used during installation to ensure the system is functioning normally. It can also be used by customers to document consistency and proper performance. To use, insert and read the comb as a normal QuickComb. "Check Comb" will automatically appear in the Sample ID column.

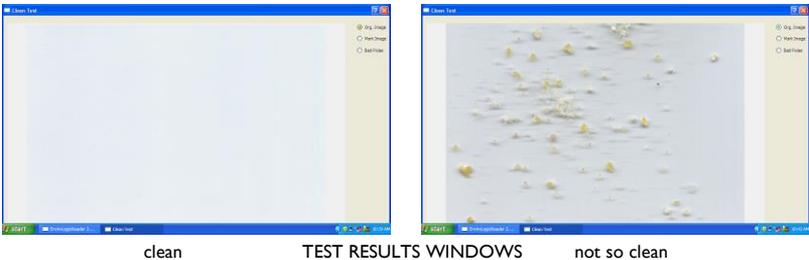
The program will automatically indicate whether or not the results fall within the Expected Values. If "OK" does not appear for any value in the Results column, contact Technical Support for assistance.

To ensure long-term stability and performance of the Check Comb, do not expose it to direct sunlight or dirty environments. Store it in the bag provided, in a drawer away from strong light. Check Combs will continue to produce Line Intensities within the expected values for at least five years if stored under these conditions. Mark the back of the Check Comb with the date received if needed.

CLEANING AND SERVICING

QuickScan II is designed to minimize dust or debris entering the scanner area and interfering with the reading of test strips. It is important to keep the scanner drawer closed when not in use. In addition, the following cleaning steps are recommended:

- At the start of daily operation, run a Clean Test procedure. Place the supplied white card into the clips in the back of the drawer and close the drawer. Press Clean Test on the Main Menu. Wait about 15 seconds. Any dust or debris on the plate will be displayed in the Clean Test results window, indicating a need to clean the surface.



- To access the scanner glass, remove the tray from the drawer, power off the QuickScan and unplug. Gently invert the unit and remove the plate on the bottom. Open the drawer and use the kick stand to prop it open. Using a soft, lint-free cloth, like a microfiber cloth, wipe off any dust from the scanner glass. If the glass still has smudges or other contaminants, use a little bit of glass cleaner on a microfiber cloth and wipe the glass.

Don't spray cleaner directly onto the glass. Do not use glass cleaners that contain acetone, ammonia, benzene, or carbon tetrachloride. Allow a few seconds' drying time before closing cover. Clean Test results can be viewed with different backgrounds and pixel colors by toggling the radio buttons in the results window. Close window to return to the Main Menu.

- Periodically examine the scanner surface for visible debris or markings. If the surface appears dirty, clean the glass plate as described above. If the scanner surface has been scratched or cracked in any way, contact EnviroLogix Technical Support.
- Periodically inspect the tray. Gently brush or wipe away any build up of sample material.

DAILY MAINTENANCE

Recommended daily maintenance:

- Calibrate the QuickScan unit using the "Calibrate" button on the main screen. A record of calibration will be stored in the DataLog.
- Perform the Clean Test. Clean the scanner surface, place the White Card into the drawer and click the "Clean Test" button on the main screen. A record of the Clean Test will be stored in the DataLog.
- Scan the Check Comb. Place the Check Comb into the tray and click the "Read Test" button on the main screen. Ensure that the results fall within the Expected Values range.

ERROR MESSAGES

QuickScan has internal diagnostic capability that detects scanning, processing or configuration errors requiring corrective action. The following table identifies common error codes and recommended corrective actions.

Error Code	Description	Recommended Action
E3 – Scanner failed / scanner not found	Unit is not recognized.	Restart the QuickScan System
Scanning error	QuickScan did not read the barcode properly.	Check that test strips have been placed correctly in the tray, that the barcode is in place, and that no debris is on the barcode or the scanning surface.
No cassettes found	QuickScan cannot locate the test strips in the scanning area.	Check that the scanning surface is clear of obstructions, and that the strips have been placed in the tray correctly. Press Read Test again.

Error Code	Description	Recommended Action
E5 – Unknown Test	QuickScan did not recognize the test kit, and a software upgrade is probably required.	Check that the test strips have been placed correctly in the tray, and read again. If error message reoccurs, contact EnviroLogix Tech Service.
Various codes for control lines, test lines and background	Imaging software cannot read the strips properly. Flow of liquid sample up the test strip may have been impeded or failed.	Examine the test strips for proper flow. Check that the strips have been placed correctly on the tray. Consult test kit Product Insert for proper kit operation, as new test may need to be performed.
E20 – Printer not activated	A printer has not been selected in the QS configuration window, or intended printer not been installed.	Make sure the intended printer has been installed on the QuickScan, then select that printer in the QuickScan configuration window.
E30 – Outside image border	Test strips have been placed in tray incorrectly.	Reposition strips and read again.

DIMENSIONS AND WEIGHT

Length: 37 cm

Width: 33.5 cm

Height: 20 cm

Weight: 11.15 lbs / 5.06 kg

SAFETY AND PRECAUTIONS

1. QuickScan is a precision system that combines a digital imager with proprietary software. Never attempt to dismantle the unit. There is a serious danger of a powerful electric shock. Never attempt to alter the software.
2. Do not leave or operate the unit in locations exposed to direct sunlight.
3. Do not store or use the unit close to a flame.
4. Do not drop the unit or otherwise subject it to strong impact.
5. QuickScan contains precision electronic components. To ensure that scanning operations are performed correctly, do not subject the unit to impact or shock while a scan is being run.
6. Do not use or store the unit in very humid places; places subject to extreme temperature increases such as in direct sunlight, a closed car in summer, or extremely cold places; places subject to strong vibration; places affected by smoke or steam; places subject to strong magnetic fields (such as near motors, transformers, or magnets); sandy places, such as beaches or deserts, or places where there is wind-borne sand and dust.

7. Avoid moving the unit suddenly from a cold location into a warm location, as condensation may occur.
8. The unit should be cleaned on a regular basis, per the instructions provided in this User Manual.

ENVIROLOGIX LIMITED WARRANTY

EnviroLogix Inc. ("EnviroLogix") warrants the QuickScan unit against defects in materials and workmanship, when used in accordance with the applicable instructions, for a period of 12 months from the date of shipment.

QuickScan is a precision testing system that requires very careful handling.

This Warranty does not cover physical mishandling of the unit in any manner, including but not limited to, storage or operation in an unprotected environment, excessive exposure to direct sunlight, liquid spillage on any part of the surface or interior, objects falling on top of the unit and/or the unit being dropped onto the floor or any other surface from any significant height.

If the QuickScan unit does not conform to this Limited Warranty and the customer notifies EnviroLogix in writing of such defects during the warranty period and returns the unit to EnviroLogix for evaluation, EnviroLogix will repair or replace the unit at its option.

During the period of defects evaluation, EnviroLogix will swap the defective unit with a loaner unit from its loaner pool located at its Portland, Maine, headquarters. Upon completion of necessary repairs, or upon determining that a replacement unit will be provided to the customer, the loaned unit will be reverse-swapped with the customer's repaired unit or the replacement unit, as the case may be.

CUSTOMER SERVICE

EnviroLogix maintains a dedicated field staff and in-house technical support. For QuickScan questions or problems, please contact the QuickScan Team at 866-408-4597 (US toll free) or 207-797-0300. Ask for technical support for QuickScan. Help is also available via email: techsupport@envirologix.com. Our Internet address is www.envirologix.com. Business hours are from 8 am to 5 pm EST Monday through Friday.

TRADEMARKS

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