

AgraVision™ Pro **Lateral Flow Device Reader**

Instruction for Use



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All sales and technical enquiries should be addressed to:

Romer Labs Division Holding GmbH

Technopark 5
3430 Tulln
Austria

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**WARNING**

Ensure that you have read and fully understood the **Safety Precautions and Limitations of Use** in Section 2 of this manual before attempting to install or operate this product.

Failure to do so could result in severe injury or may damage the unit and invalidate the product warranty.

1 Symbols Used in this Instruction Manual

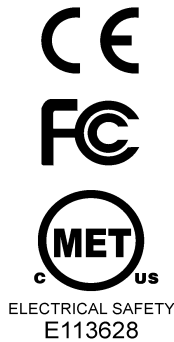
The following advisory symbols are used in this manual.

Table 1: Advisory Symbol Meanings	
 DANGER	Indicates a risk of electric shock which could, if not avoided, result in severe injury or death.
 DANGER	Indicates a risk of explosion which could, if not avoided, result in severe injury or death.
 WARNING	Indicates a hazardous situation which could, if not avoided, result in severe injury or death; or severely damage the unit.
 CAUTION	Indicates a hazardous situation which could, if not avoided, result in minor or moderate injury, or degrade or impair the functionality of the unit.
 CAUTION	Indicates an electrostatic-sensitive device for which care should be taken not to touch the exposed electrical contacts as this could degrade or impair the functionality of the unit.
 DANGER	Indicates a burn hazard which could, if not avoided, result in severe injury or death.
 DANGER	Advisory or other useful information.
⇒ NN	Refer to section “NN” for more details.
Manufacturer	
	Date of manufacture
SN	Serial number

2 Regulatory Limitations of Use

Declaration of Conformity

Romer Labs affirm that this product fulfills the essential requirements of the Low Voltage Directive 2014/35/EU and the EMC Directive 2014/30/EU, when installed and operated in accordance with the instructions in this manual.



Safety Standards

- BS EN 61010-1:2010
- IEC 61010
- UL 61010-1:2012 Edition 3
- US deviations for the MET mark

EMC Standards

- BS EN 61326-1-2013 Electrical equipment for measurement, control and laboratory use - EMC requirements - Part 1: General requirements
- FCC CFR 47 Parts 15.107 and 15.109

WEEE and RoHS Directive Compliance



The Instrument will be subject to the WEEE Directive, WEEE – Waste Electrical & Electronic Equipment, 2012/19/EU. The Instrument can be considered to be within WEEE Category 9, “monitoring and control instruments”, as “laboratory equipment for measuring”, because it measures toxins levels to assess food safety.

The Instrument will be subject to the RoHS2 Directive, RoHS – Restriction of the use of certain Hazardous Substances 2011/65/EU, because Category 9 is included in RoHS2. Do not dispose of this product into unsorted municipal waste or public landfill. Please refer to Section 14.a for details of how to correctly dispose of this product.

The AgraVision™ Pro unit is designed and manufactured under ISO 9001.

3 Field of Application

The AgraVision™ Pro reader is a novel portable device for the quantitative evaluation of lateral flow devices. The device is configured for AgraStrip® Pro test strips manufactured by Romer Labs. The reader comes with a quality control strip in a designated cartridge.

The AgraVision® Pro reader is designed to be used in the food and feed safety field.



Attention: All objects and devices which come into contact with mycotoxins or mycotoxin-contaminated material constitute a potential source of contamination. Under proper usage, no biological or chemical hazards should emanate from the device.

In case of a contamination (e.g. spreading of toxins such as aflatoxin into the reader port system), cleaning is necessary (for more information see page 40, cleaning procedure).

Spills: If liquid from the sample is spilt on or into the unit, switch the unit off and disconnect it from the power source. Carefully remove any sample cartridges before attempting to deal with the spillage. Keep the instrument upright in order to allow any excess liquid to drain out of the holes at the bottom of the port openings.

For more severe spills, please contact your Romer Labs representative.

4 General Information

4.1 AgraVision™ Pro Unit Description and Shipment

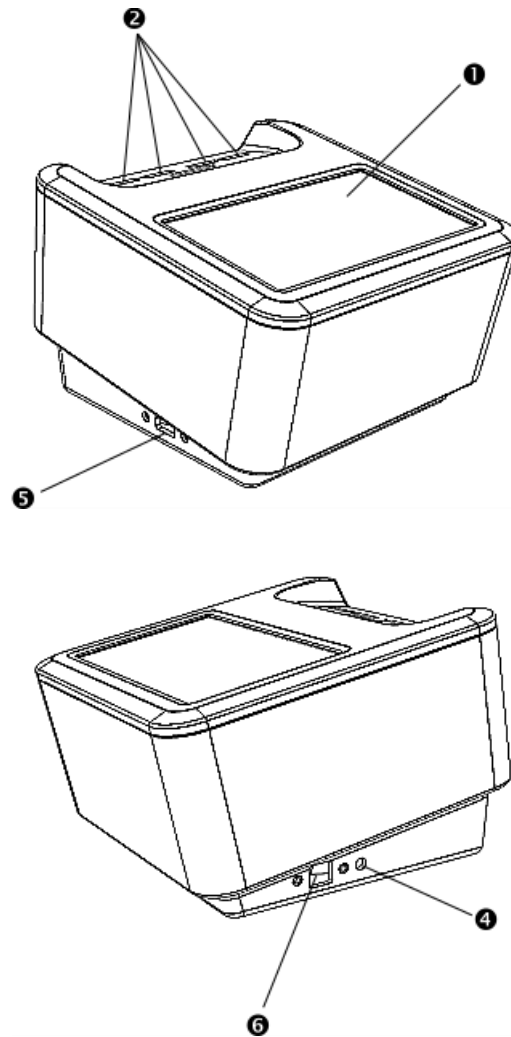
The AgraVision™ Pro reader is used to test many different foodstuffs (commodities) and ingredients intended for human and animal consumption.

The range of foodstuffs (commodities) and tests is restricted to the tests that have been developed, validated and calibrated by Romer Labs, and are programmed into the instrument software.

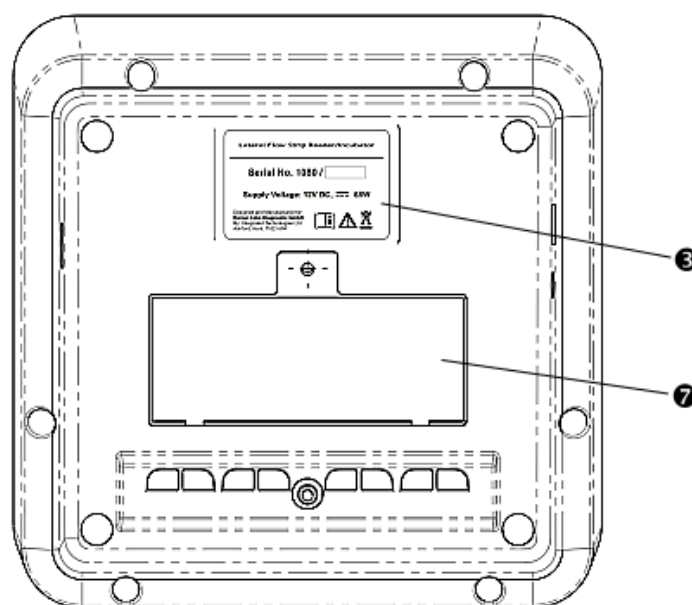
The types of test include the measurement of mycotoxins and genetically modified organisms (GMOs). The measurements provide quantitative results.

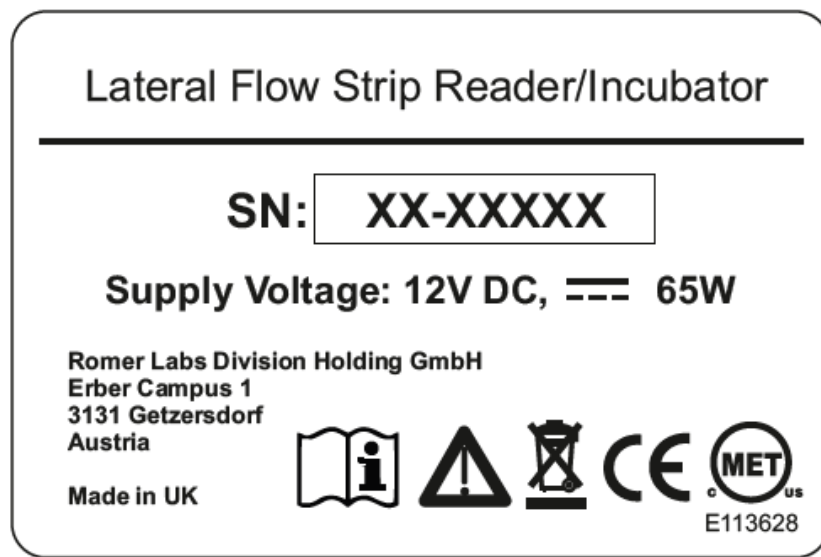
The AgraVision™ Pro is a benchtop incubator and reader, and has the following technical configuration:

Table 2: Technical Configuration		
○	LCD touchscreen user interface	⇒ 1
○	Strip holder entry ports	⇒ 2
○	Power rating	⇒ 16
○	Power inlet	⇒ 4
○	USB type A	⇒ 5
○	USB type B	⇒ 6
○	Cleaning access door	⇒ 7



The unit label is located on the underside of the unit and provides the unit serial number, voltage and power ratings.





- **Strip Holder Entry Ports and Calibration Card Entry Port**

The AgraVision™ Pro reader has four strip holder entry ports and one calibration card entry port. The strip holders must be inserted into these ports to perform the test. The strip holders and calibration cards are not supplied with the AgraVision™ Pro unit.

- **USB Type A**

USB type A port is a normal USB connection. The reader can be connected via a USB cable to a PC or to a USB memory stick.

- **USB Type B**

USB type B port is used to connect to an external printer system. The results from the AgraVision™ Pro unit can be printed if an external printer is connected to the instrument.

- **Window Cleaning Access Door**

The window cleaning access door allows access to the interior of the instrument for cleaning purposes. Follow the cleaning procedure as described in section 12.



The user should read the user manual prior to using the unit.

4.1.1 Accessories

The unit is supplied with the following accessories:

AC/DC Power Adaptor

Quality Control Strip

Memory Stick

Allen key

Dust cover



5 Commissioning and Safety Instructions

First Steps

Please read the manual thoroughly before operating the instrument.

**WARNING**

Please make sure that you have read and fully understood the safety precautions and limitations of use listed in section 2 before attempting to operate the AgraVision™ Pro unit.

Before installing the AgraVision™ Pro unit, please check that the delivery is complete (see Section 4 and that the unit and all accessory parts are intact and free from any signs of transportation damage. Remove all external and internal packaging from the unit.

If any of the contents are missing, please contact Romer Labs or your RL representative. The contact information can be found on the shipping ticket or at the beginning of the manual on page 2.



Please retain all packaging for future transportation and storage of the unit and its accessories.

The AgraVision™ Pro unit must be operated in a location that meets the following requirements:

- Safe and suitable operating environment (see Section 5)
- Solid, stable, vibration-free and level working surface
- At least 10 cm clearance around the unit to adjacent objects and walls
- Out of direct sunlight and away from sources of heat or draft

**WARNING**

Please also observe and abide by the **Unit Installation and Operating Environment** safety precautions and preconditions listed later in this section.

Attention: The quality control test cartridge must be stored under special conditions: lightproof wrapping, 18-22°C, maximum relative humidity 40%.

Attention: When disposing of the test strips, please follow the instructions from the test manufacturer (see section 14).

**WARNING**

The protection provided by this equipment may be impaired if it is not used in a manner described in this manual.

**WARNING**

The user must be aware of the potential hazards associated with the unit and its accessories.

All operators should be familiar with the safety precautions and warnings in these instructions before attempting to operate the unit.

Improper use of this unit or its accessories may impair their functionality and invalidate the manufacturer's warranty.

Unit Handling Precautions

**CAUTION**

Care should be taken not to drop the unit or subject it to rough physical handling, both during normal use and during installation, transportation and storage.

Do not use the unit if it shows any signs of damage or wear.

**WARNING**

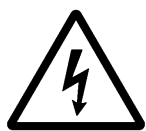
The unit should be held in both hands when being lifted or moved.

**CAUTION**

Do not strike the touchscreen.

Do not use excessive force when pressing the touchscreen or when cleaning it.

Unit Installation and Operating Environment

**DANGER**

The acceptable operating room temperature range is 10-40°C, with a relative humidity of 20% to 85% (non-condensing), at a maximum altitude of 2000 m above sea level.

**WARNING**

If the unit is stored in conditions outside of these ranges, it must be left to stand unpowered until it has acclimatized to within these environmental limits before being powered.

Unit Installation and Operating Environment



DANGER

Use only the power adaptors provided with the unit.

To avoid the risk of electrical shock, this equipment may only be connected to the supply mains with protective earth.

The power cord may not be extended by an extension cord since this increases the resistance of the protective earth and may result in electric shock.

To avoid the risk of electric shock, only the provided mains cord and power supply may be used with this equipment.



WARNING

Always ensure that the power cord is securely inserted into the connector socket of the unit.

Ensure that any excess power cord does not pose a potential trip or pull hazard.



DANGER

Do not operate the unit in any area that is, has been, or is thought to have been exposed to explosive or flammable gases, vapors or liquids.



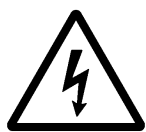
WARNING

The unit must be installed and operated on a solid, stable, vibration-free and level working surface.



CAUTION

For best results, the unit should be installed and operated in a stable thermal environment, out of direct sunlight and away from sources of heat or draft.

General Operating Precautions**DANGER**

Ensure that the power is switched off at the mains outlet before inserting or removing the power cord.

If a spillage occurs in or over the unit, switch the power off and unplug the power cord before attempting to deal with the spill.

**DANGER**

The unit is intended for use with aqueous solutions only.

Never use the unit with any explosive, volatile or highly reactive substances or chemicals.

**WARNING**

Use only strips of the type specified in Section 3.

Always follow prescribed laboratory procedures and use appropriate personal protective equipment (PPE - such as gloves, clothing, goggles, etc.) when handling samples. Test strips and strip holders may be toxic when exposed to samples and when used. They may be disposed of as hazardous. Strip holders are disposable.

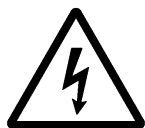
**CAUTION**

Avoid touching the contacts of the USB ports on the sides of the unit as an electrostatic discharge (ESD) could degrade or impair the functionality of the unit.

Unit Maintenance and Serviceability**WARNING**

There are no parts inside the unit that can be serviced by an operator or user.

Do not remove the unit casework. Removal of the unit casework will void the warranty.

**DANGER**

Always disconnect the power cord from the unit before performing any cleaning or decontamination procedure.

If liquid is spilt on or into the unit, switch it off and disconnect it from the power source before attempting to deal with the spillage.

**CAUTION**

Harsh chemicals and cleaning agents may damage the unit and degrade its performance.

Always follow the cleaning and decontamination procedures specified in Sections 0 and 13 of this instruction manual.

6 Getting Started

The AgraVision™ Pro unit is powered by the supplied AC/DC power adaptor. Optionally, for field use, it may be powered via a 12 V socket in a non-running vehicle or from a portable battery bag. This requires additional leads (ask your Romer labs representative for details). The AgraVision™ Pro touchscreen will light-up and display the power-up progress screen. During initialization, the instrument also performs a calibration check.

When the unit is started for the first time, the real-time clock will need to be set to your local time and date. Please read Section 7 first, and then refer to Section **7.4** for details.

**NOTE**

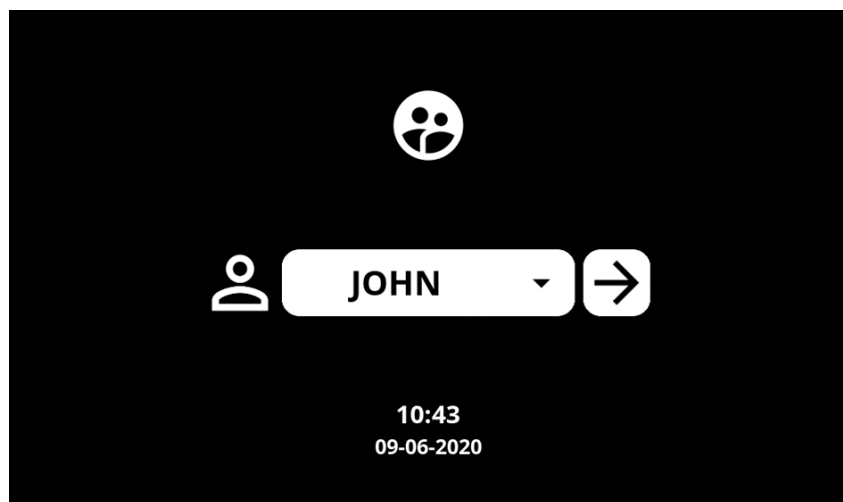
When the unit is powered for the first time, or if the unit has been in storage or left unpowered for several months, the internal real-time clock battery will need to be recharged.

Please leave the unit powered for at least 2 hours to adequately recharge the battery, or for 8 hours for a complete charge.

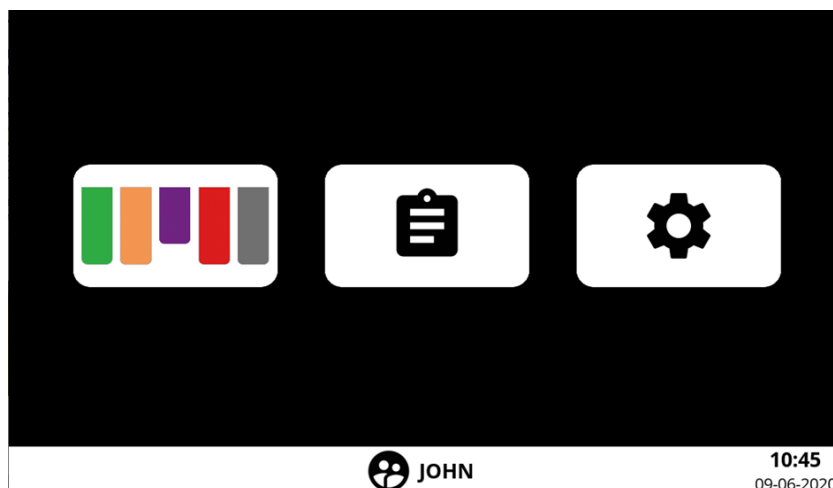
7 Unit Operation

7.1 User Display and Navigation

When the device powers up, the Romer Labs logo will appear. To proceed, please tap anywhere on the screen. Next, the user selection screen, which includes the date and time, is shown. Select either an existing user or create a new one. Once a user is selected, the home screen will appear. From the home screen, you can navigate through the AgraVision™ Pro system.



The home screen provides the user with three options: testing, results and settings. In the testing section, the user can initiate a new test. In the results section, the user can view results from previously performed tests. The settings section allows the user to configure device settings. The active user is displayed at the bottom of the menu along with date and time.



Run test: Tap the test icon (located on the left of the home screen) to run a test. Choose a test method (GMOs or mycotoxins). The AgraVision™ Pro automatically recognizes the type of test based on the data matrix code on the strip inserted. The device then prompts the user to enter the sample ID, select the quantitation range and matrix.



Results: Tap the results icon (located in the center of the home screen) to view results from previously performed tests. The results contain the test strip, sample ID, result, date and time. Users can export and print results.

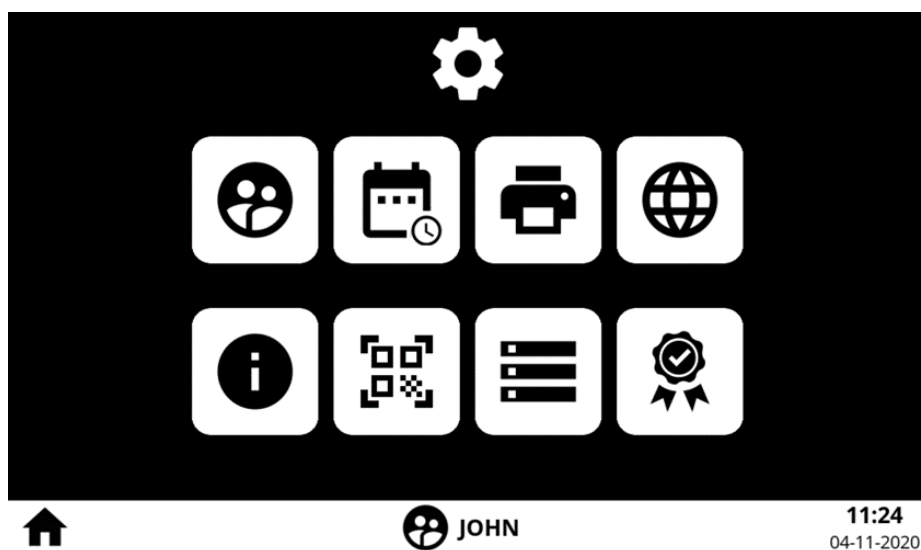


Settings: Tap the settings icon (located on the right of the home screen) to configure the device. User settings, the date and time, printer, languages, and storage information can be configured here. QR code cards can also be scanned and saved here. Quality control tests can also be performed from the setting menu.

Additional icons at the bottom of the screen allow the user to retrieve information regarding the date and time and the current user.

7.2 . Settings

Configure settings by tapping the settings icon at the right of the home screen. The settings menu will appear.



Admin and user configuration



Date and time



Printing



Languages



Instrument information and software update



Options to read and save a new QR code



Storage information



Quality control

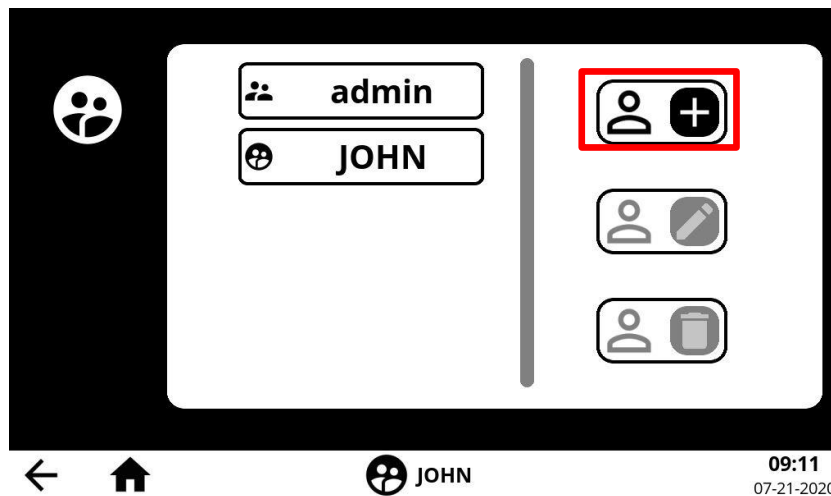
7.2.1 Admin and User Configuration

Create or delete a user or admin account in the admin menu setting.

Create a **new user/admin**: Select the + icon at the top right to create a new user or admin.

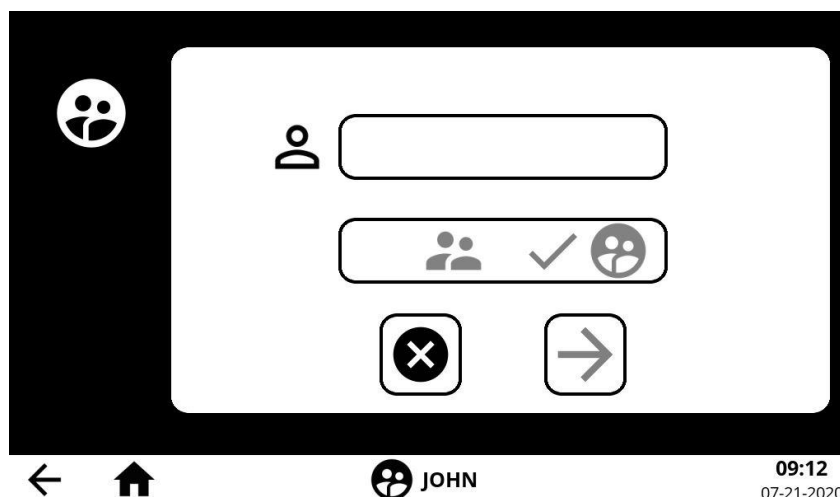
Note: Only the admin has the permissions to delete a user profile. A user cannot delete an admin profile. The admin can view all results collected on the device. A user can only access that user's results.

Configure the admin/user by selecting the pencil icon on the right or delete an admin/user by tapping the basket icon.

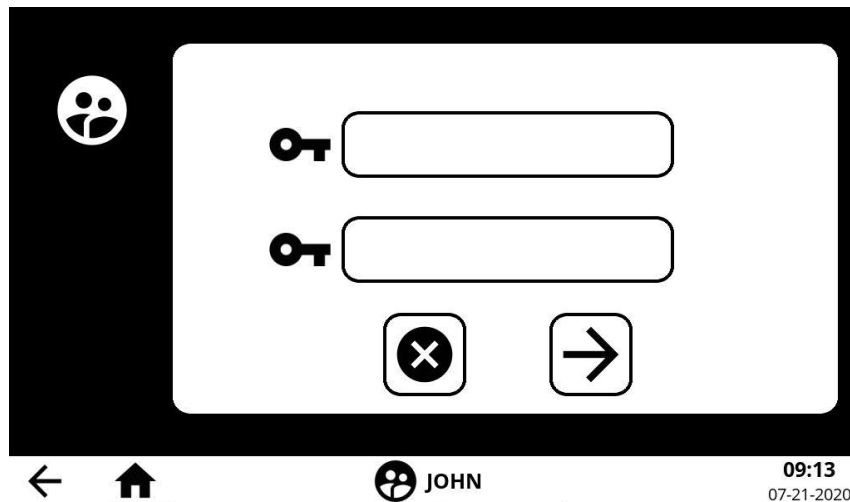


Next, create the admin by tapping  or a user by tapping .

Enter the name of the user or admin via the alphanumerical keypad. Tap the arrow icon to confirm. Select the forward arrow on the menu to create a log-in and password.

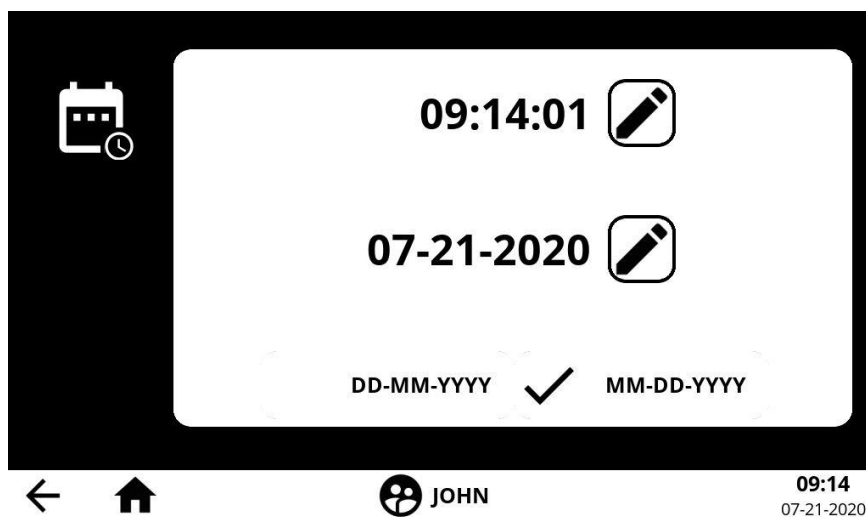


Enter the password again to confirm the setting. Note: the password must be entered twice.



7.2.2 Date and Time

Configure the date and time via the calendar icon. The following screen will appear. Select the pencil icon on the right to configure the time and date. Select the format of the date at the bottom of the menu. Advance numbers for the date and time by using the cursors.



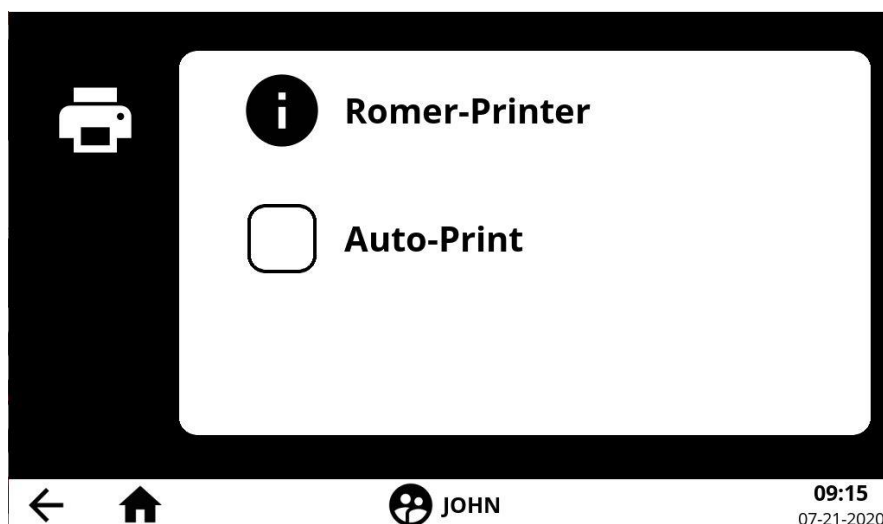
Next save your settings via the icon at the bottom right.

Note: After the time or date has been changed, the system must reboot.

7.2.3 Print Results from the AgraVision™ Pro Reader

Configure printing settings via the printer icon.

A printer that can be connected directly to the AgraVision™ Pro reader is available. Contact your Romer Labs representative for more details.

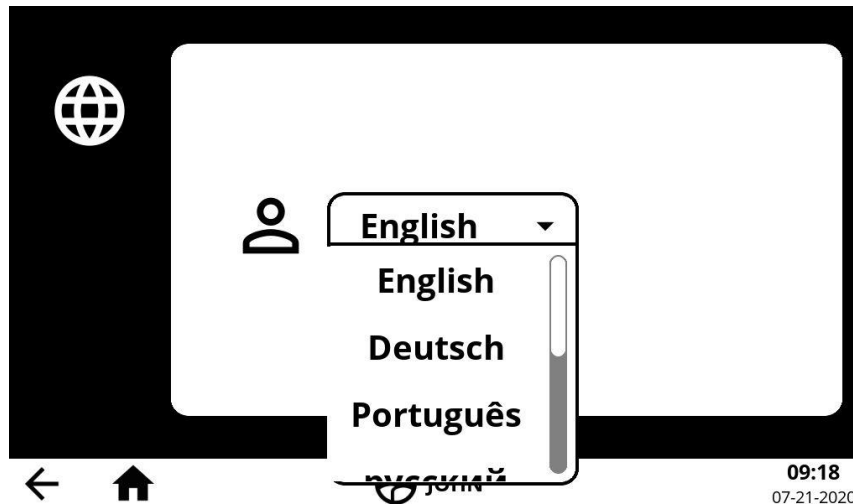


Auto-print: Enable automatic printing by checking the box next to the words “Auto-Print”. Results will automatically be sent to the connected printer and will be printed out after each test.

Note: You can also print results directly from the results menu that appears after the completion of a test run. Print results by selecting the print icon on the right. You can print the results as many times as necessary.

7.2.4 Languages

Access language settings via the world map icon. Select from English, German, Portuguese, Chinese, French, Spanish, and Russian via the drop-down menu.

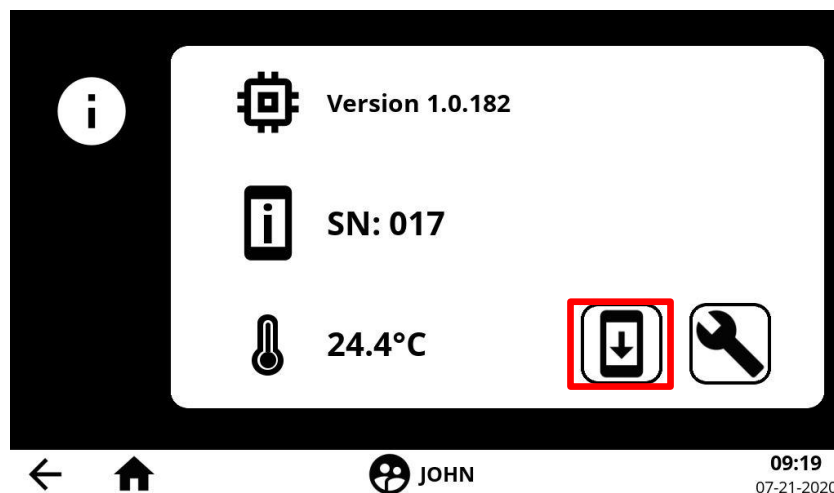


7.2.5 System Information

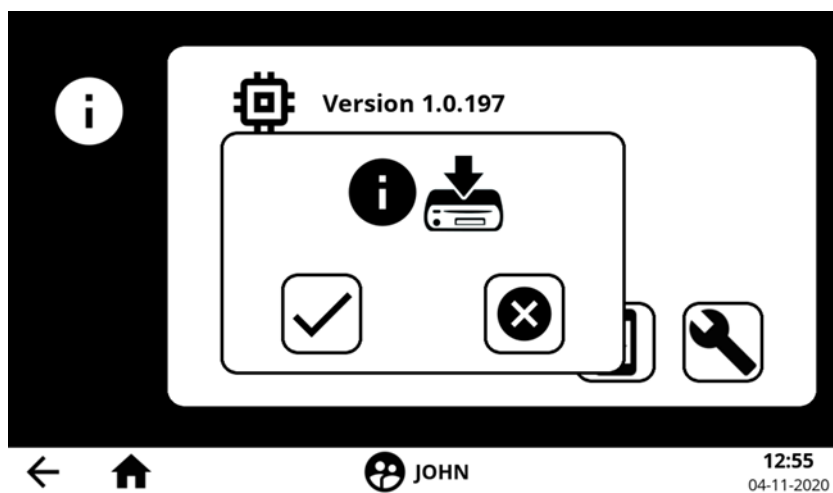
View and download the storage information via the information icon (the letter "I" in a circle). The current version of the AgraVision™ Pro software is displayed in the first line, followed by the serial number (SN). The last line displays the current temperature of the internal incubator. Technical support personnel can access the interface for troubleshooting and technical configurations via the wrench icon at the bottom right.

7.2.6 Software updates

It will occasionally be necessary to install new features such as additional test information and general software updates. To update the software, connect the device to a PC using a USB cable. Alternatively, you can connect a USB flash drive containing any software updates to the USB port on the device. Select the software update icon.



A new window will open. Select the check icon to proceed with the update. The software will then be updated.



7.2.7 Entering a QR Code

The QR code specific to the production lot comes with the test kit. The QR code carries information necessary to carry out the test. If the user inserts the test strip before scanning the QR code, the instrument will prompt the user to insert the QR code.

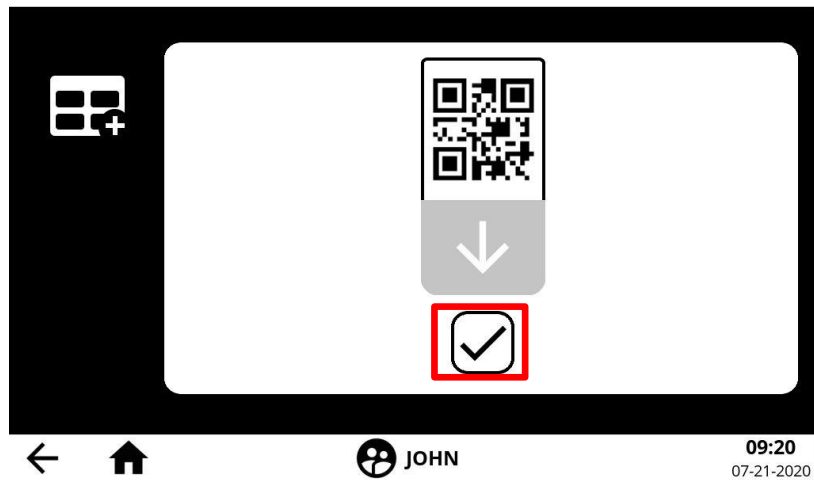
Note: The reader saves each QR code. A QR code only needs to be scanned once for each test lot.

Note: It is recommended to enter the QR code cards prior to the test run.

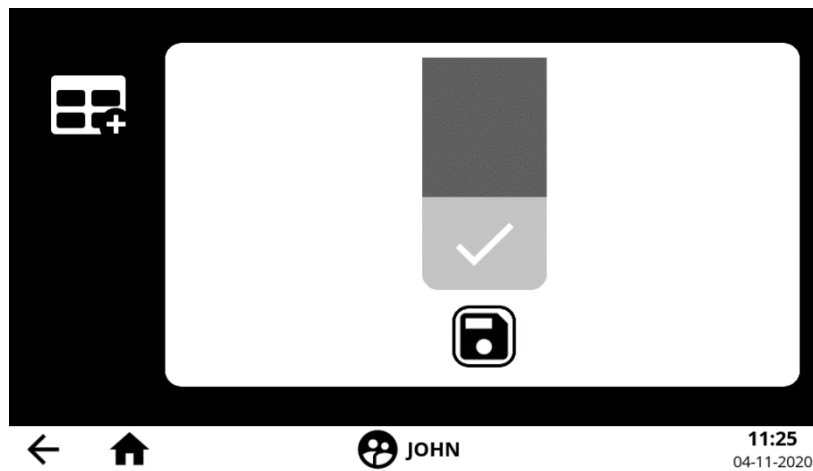
Note: The user can also run tests for customized matrices. The reader will not prompt the user to insert a new QR code when the QR code for the current lot has already been inserted into the reader and saved.

Important: Whenever a new matrix is validated for the test strip lot currently in use, the user must update the QR code to account for differences in the calibration. In such cases, the user can enter the new QR code manually. Upon inserting the new QR code for the lot, the data from the older QR code will be overwritten.

Insert the QR code into the slot in the center of the device and confirm by tapping the check icon.



The device will then scan the QR code. A clock displays the remaining time. Once the scan has finished, you can save the scanned data by selecting the disk icon.



Note: The QR code card has to be inserted accurately in the designated slot. To ensure that the QR code card is read correctly, it should be inserted straight into the slot.

7.2.8 Storage Information

Access the storage information menu by tapping the list icon.

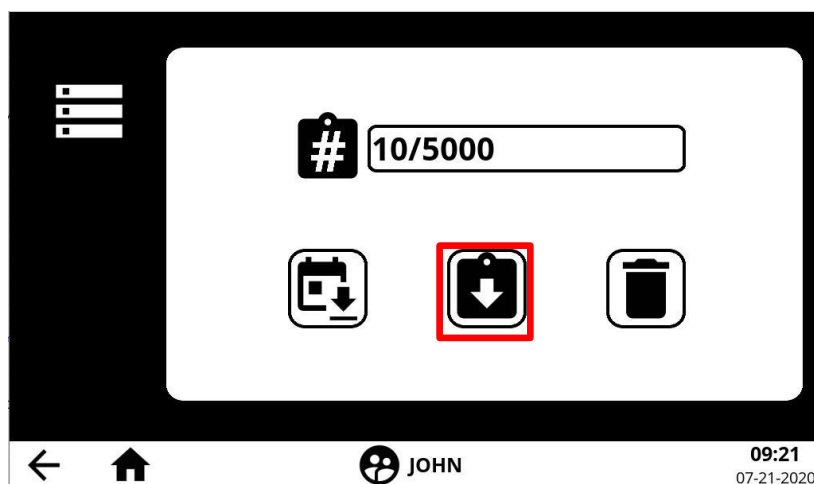
The menu displays number of samples and results saved on the reader as well as the number of open slots. The reader can save up to 5000 tests.

Delete data by selecting the wastebasket icon.

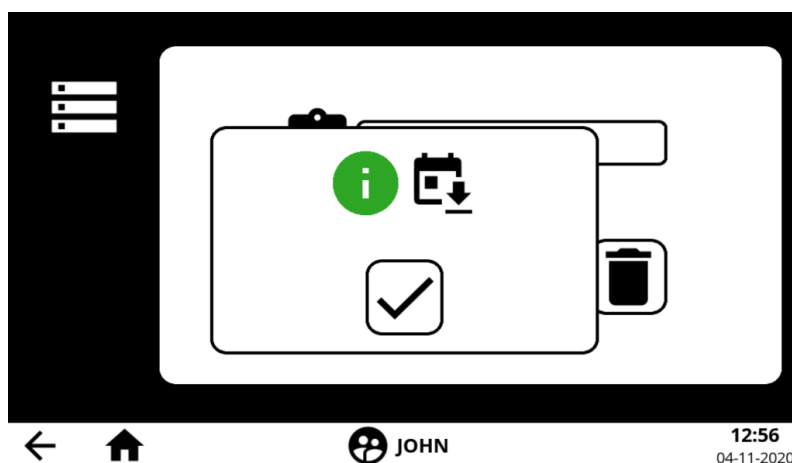
Caution: Deleted records cannot be restored. Once deleted, all sample data and measurements are permanently erased.

To export all data, select the download icon.

Export data from the current day by tapping the calendar/download icon on the left.



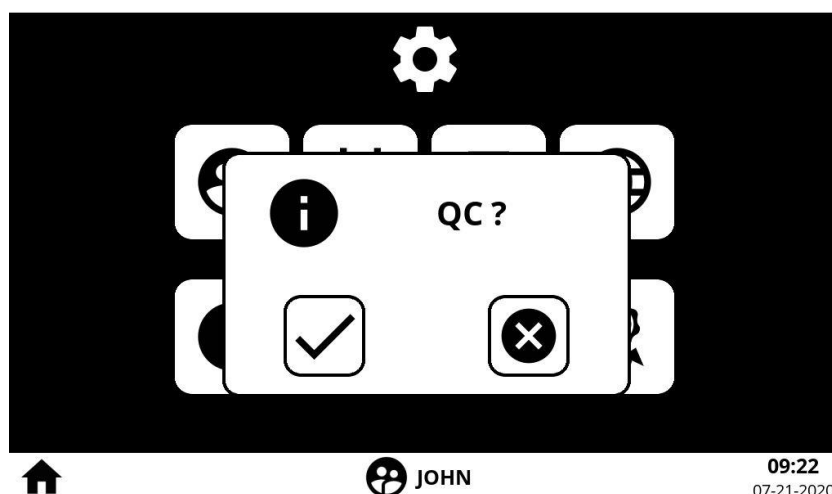
Once data are downloaded successfully (as shown via the green information button), tap the check mark icon.



7.2.9 QC – Quality Control

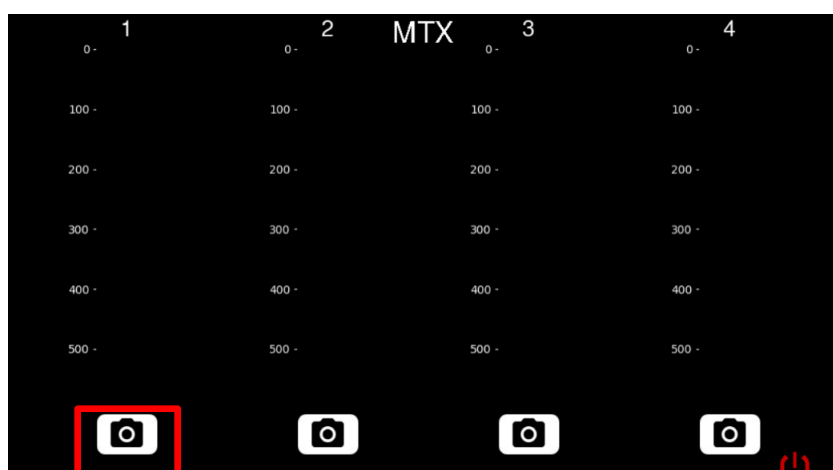
Romer Labs recommends that you periodically carry out the quality control procedure to ensure that the system is operating according to quality standards and that all slots in the reader are performing uniformly.

To carry out the customer quality control procedure, tap the customer QC icon and confirm.

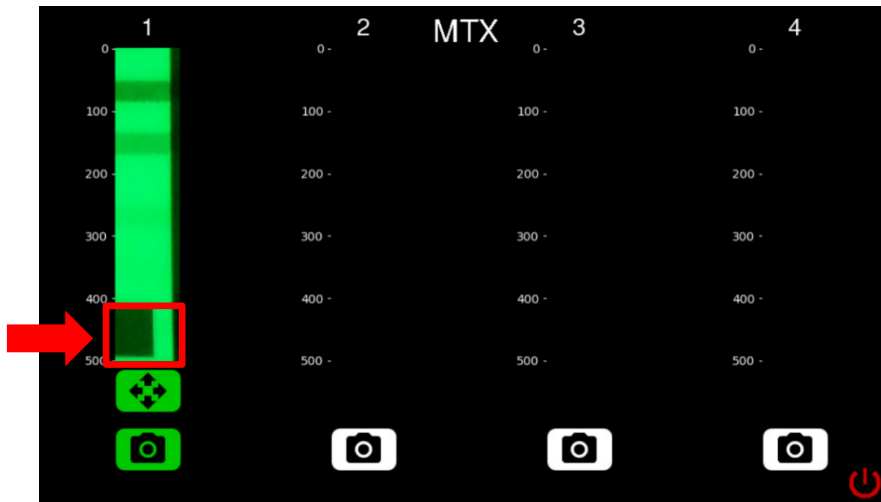


The reader comes with a quality control (QC) strip; you will need the QC strip to prepare and to carry out the QC procedure.

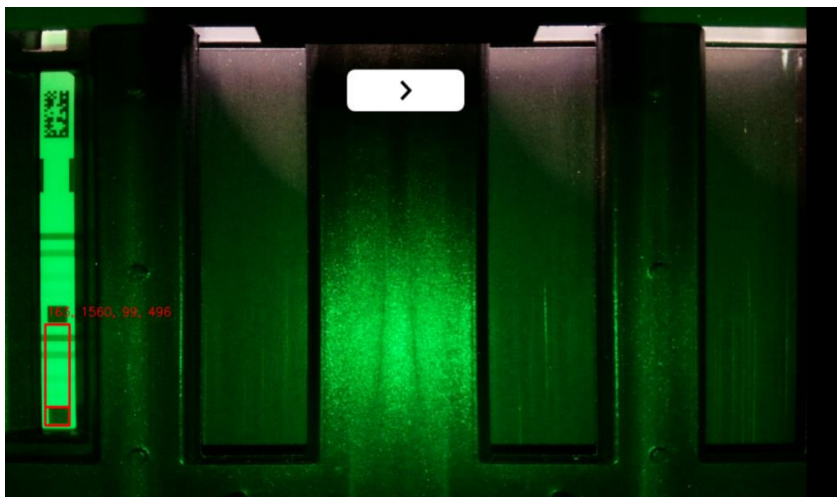
Begin by inserting the quality control strip into slot 1 and tap the camera icon for that slot as shown below.



Next, click on the symbol with the 4 arrows to adjust the window.



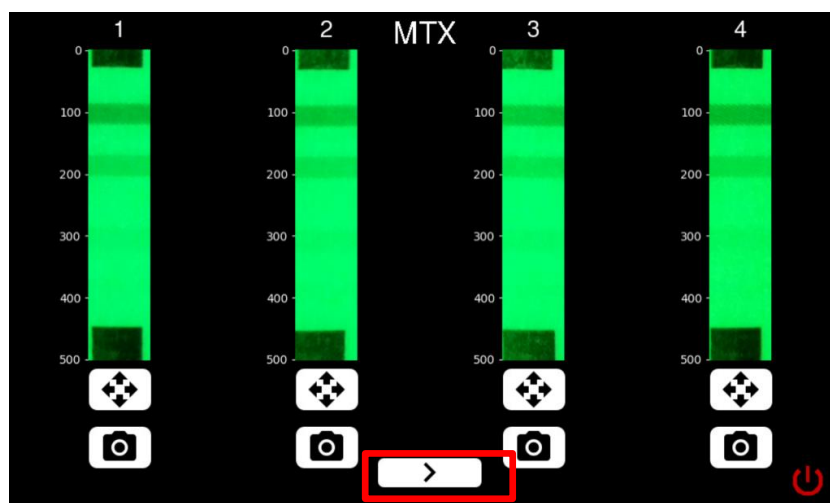
Adjust the position of the red rectangular indicator by tapping and then dragging it such that it is centered on the black area of the strip. Select



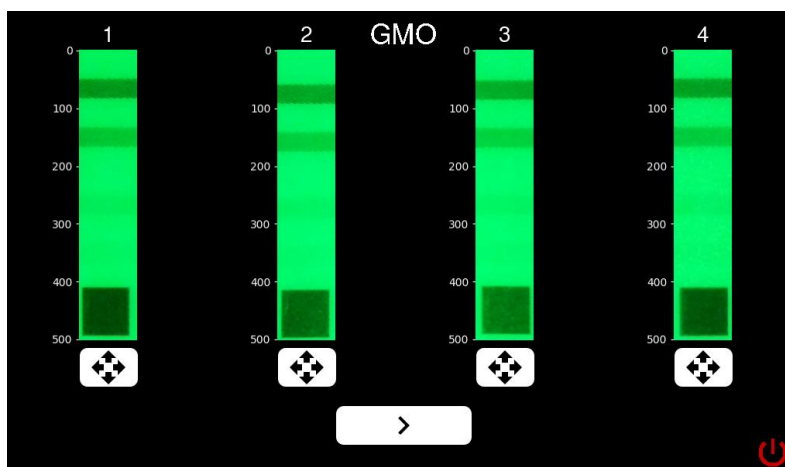
The square (window) should now be centered as shown above. Then tap the arrow icon to continue.



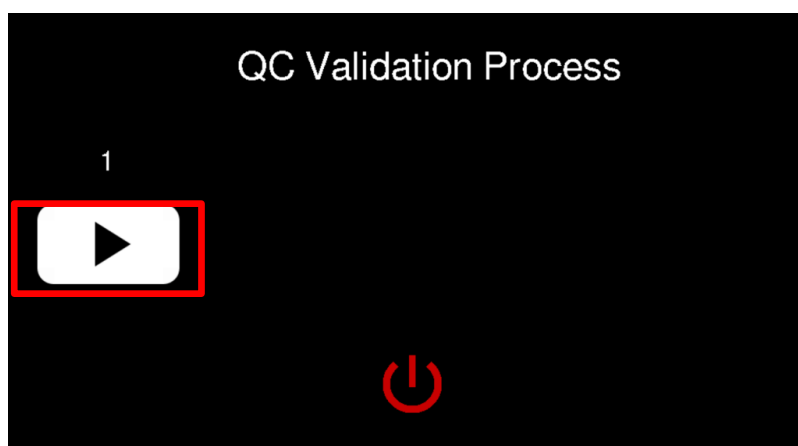
After adjusting all reader slots, tap the bottom arrow to continue. Repeat with the remaining 3 slots. When finished, simply tap the arrow to confirm.



The reader then automatically prepares the QC for GMO. For GMO it might be necessary to align the square again as it was already performed for MTX. When finished, simply tap the arrow to confirm.



Next, reinsert the QC strip into slot 1 and tap the play icon on the left. The reader may require a few seconds to complete the process. Then, repeat with the remaining 3 slots.



At the end, the QC result will be displayed. Please select red icon at the bottom to finish the QC procedure and to return to the home screen.



8 Test Procedure



Select the test menu via the multi-colored icon representing the different slots in the AgraVision™ Pro reader. The reader guides the user through the testing protocol. The four visible slots on the screen display the ports currently in use as well as other relevant information. The four slots of the reader operate independently throughout the test. The user can run up to four different tests simultaneously and in parallel.

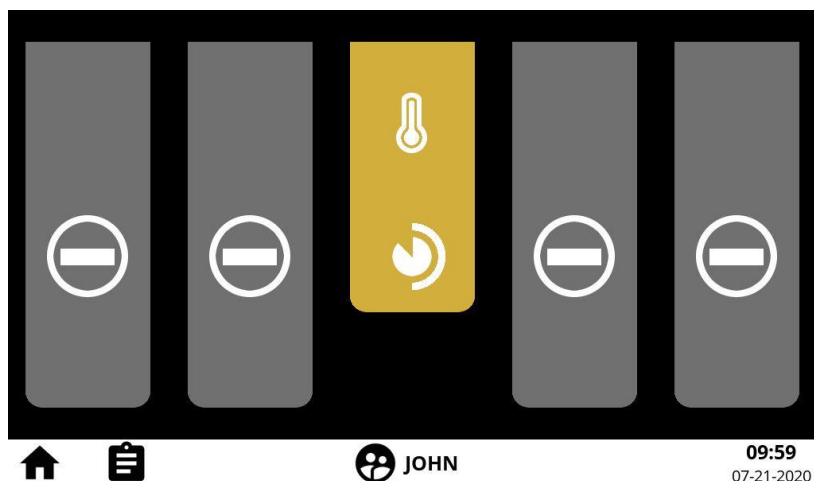
First, select the test method by tapping either the icon for mycotoxins or GMO.



Note:  Users can always access the home screen by tapping the home button on the left.

8.1 Test Preparation: Heating up the Internal Incubator

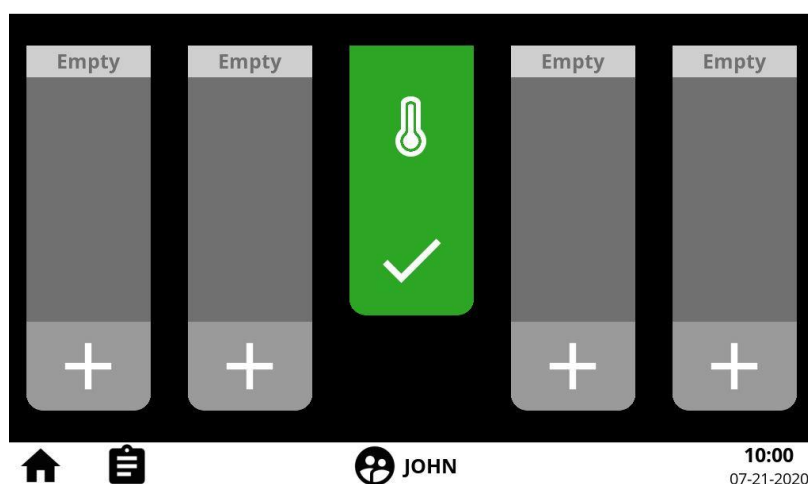
The built-in incubator must heat up to the required temperature before the reader can be used. The clock in the center of the screen displays the time remaining.



 *Note: The user can always return to the results menu by tapping the clipboard icon at the bottom of the screen.*

8.2 Insert the cartridge containing the test strip

- When the reader reaches the correct incubation temperature, slots will display the plus icon, indicating that the cartridge with the AgraStrip® Pro strip can be inserted into the reader.



Attention: Do not leave the strips in the reader when not testing, as this can lead to inaccurate results.

Specific test information is contained within the data matrix code on the test strip.

- The reader recognizes the test strip and immediately scans the test strip (via the data matrix code on the strip).
- The reader displays the type of test along with information about the lot ID, strip ID and test analyte (e.g. aflatoxin).
- The data matrix code on the test strip contains information regarding test conditions, lot ID, test strip ID, and test type.
- Whenever a strip from a lot not previously saved on the reader is introduced, it will prompt the user to insert the QR card. The QR card comes with the AgraStrip® Pro WATEX® kit.

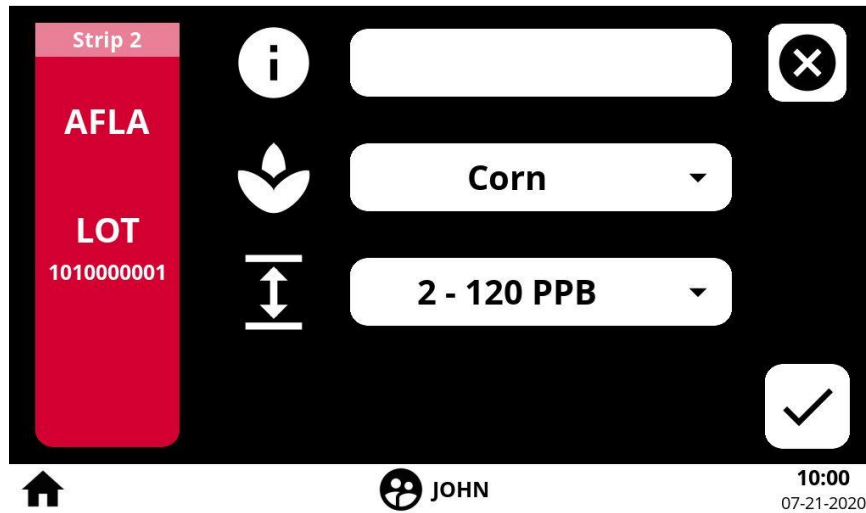
QR code: Each AgraStrip® Pro WATEX® kit comes with a card carrying a QR code with information specific to the test. The QR card from a previously unused kit must be inserted into the reader before a test can be run using a strip from this kit.

If a message appears indicating that test information relating to the test strip currently in the reader is missing, the user must insert the QR card from the same test kit before proceeding.

Please see chapter 7 (Section 7.8) for more detailed information about the QR codes

Enter the ID or name of the sample and select the quantitation range and matrix of the sample via the drop-down menu as shown below.

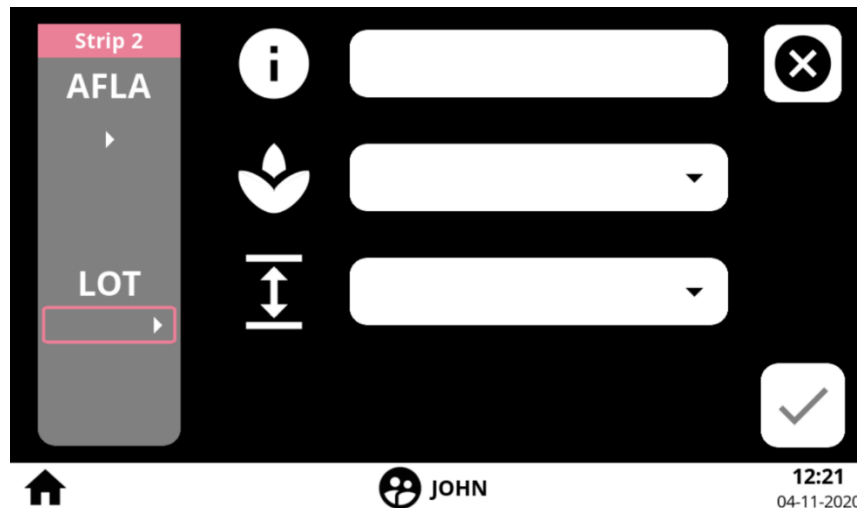
- Enter the sample ID using the touchpad on the screen and confirm by selecting the  check icon.
- The reader displays the lot ID, test type and slot number.
- After the datamatrix code of the test strip is correctly read, the test type and lot number of the test kit will appear on the left of the display.



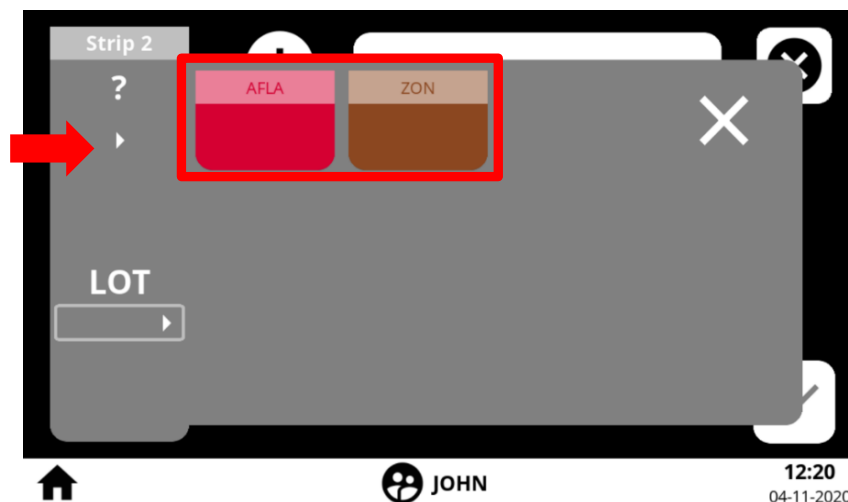
Attention: If the reader does not detect the data matrix code of the test strip, the information can be entered manually as shown below.

8.3 Test type selection for test strips without data matrix code

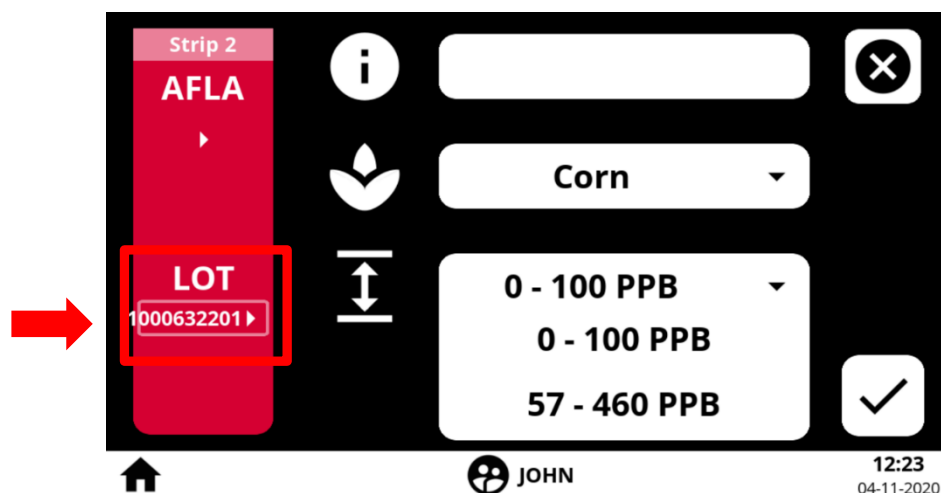
If the data matrix code is not recognized or the test strip does not contain a data matrix code, the test type display will blink red and grey.



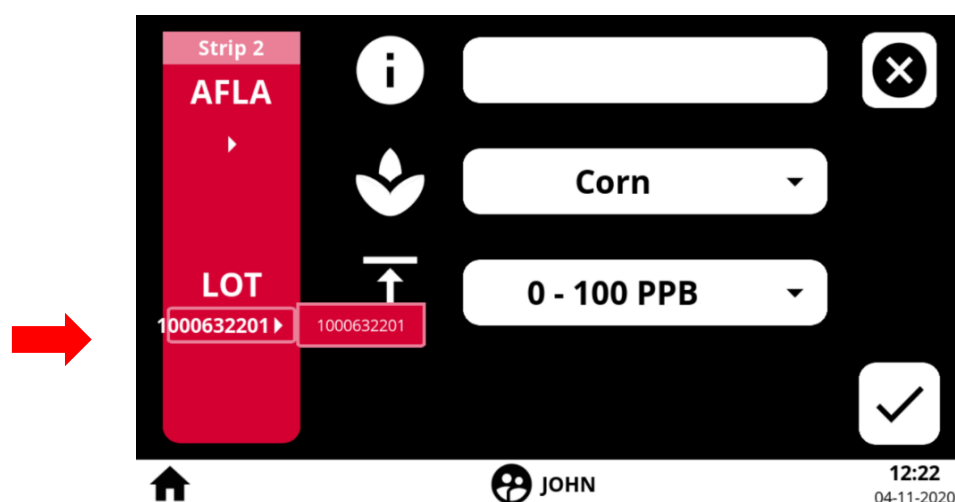
In this case choose first the test type (e.g. AFLA for aflatoxin or ZEN for zearalenone).



Then, select the lot number of the AgraStrip® Pro test kit on the left as shown below.



The lot number of the test kit can be found on the packaging. Simply choose the correct test kit lot number from the drop down box as shown.



Proceed by entering the sample ID, and select the type of matrix and the quantitation range. Confirm by tapping the checkmark icon.

8.4 Adding sample to the cartridge.

The reader will display a drop icon on the relevant port when ready for the sample to be added. The reader will display the icon after reaching the temperature required for the test strip.

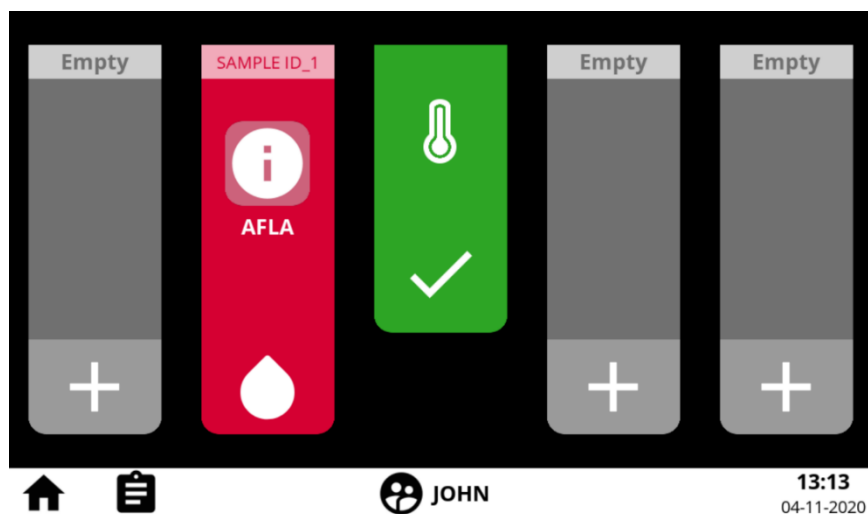
Carefully add 100 µl of the sample extract to the cartridge with the strip.

Attention: Never exceed the amount of extract stated in the test procedure of the package insert and user manual. The maximum sample volume is 500 µl/port and test at any one time.

The reader has sensors that recognize when fluid is added to the port.

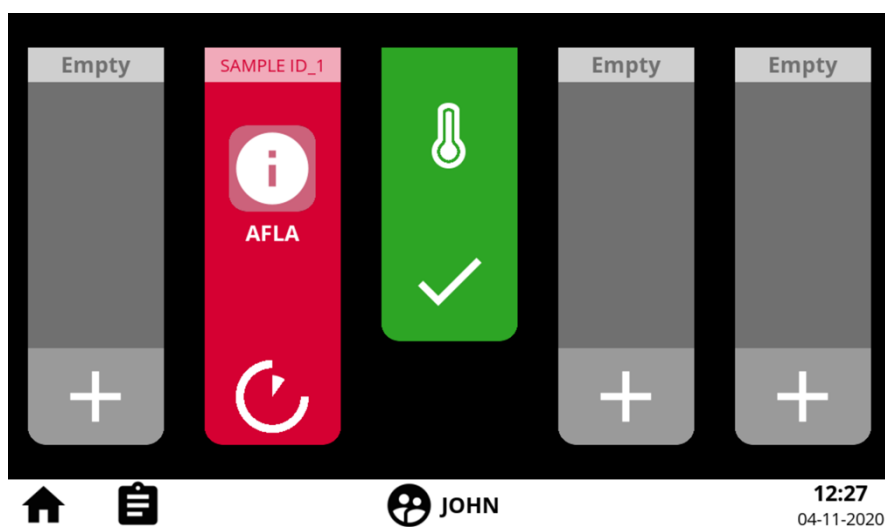
After detecting the addition of the fluid, the reader will automatically start the incubation step.

Caution: Do not add the sample until the drop icon is shown on the relevant reader slot. Do not add the sample while the display shows a clock sign. The reader requires a brief amount of time for incubation to reach the precise temperature for the test run.

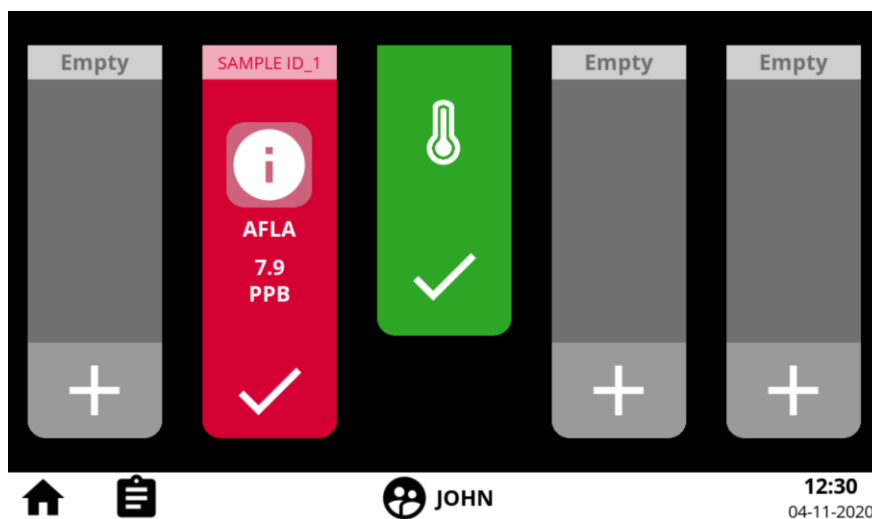


8.4.1 The reader sets the timer

When the reader has detected the insertion of the fluid, the timer will begin to count down the incubation time. Each type of test has a unique incubation time.



Once the test has finished, the reader will display the test result on the relevant port.



Attention: The reader requires approximately 15 seconds to quantify results after the incubation time has elapsed. During this time, the reader will not recognize new test strips.

After the test, the result appears on the port symbol. Tap the information icon to view the overall result. The results include the operator, the lot ID, the type of test, results, matrix, and the date and time.



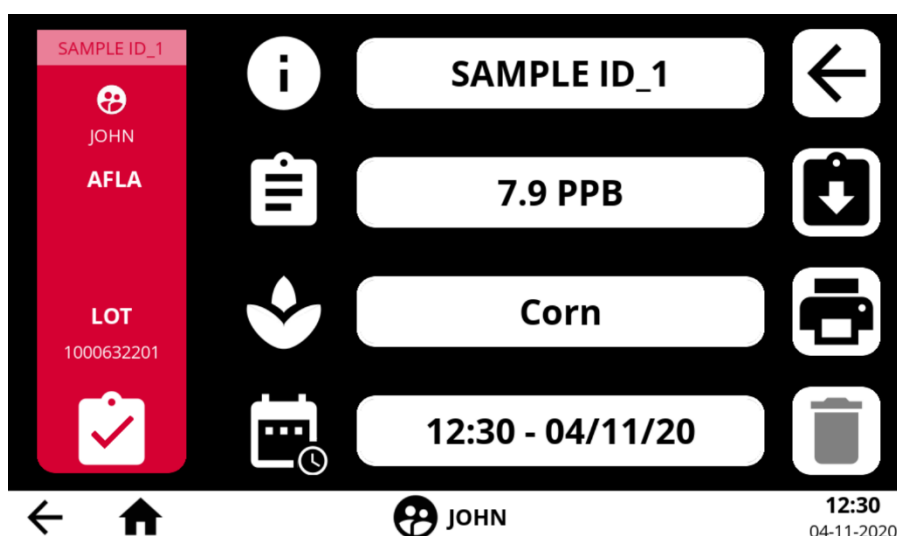
Print results by selecting the printer icon.



Export results as a .csv file by selecting the download icon.

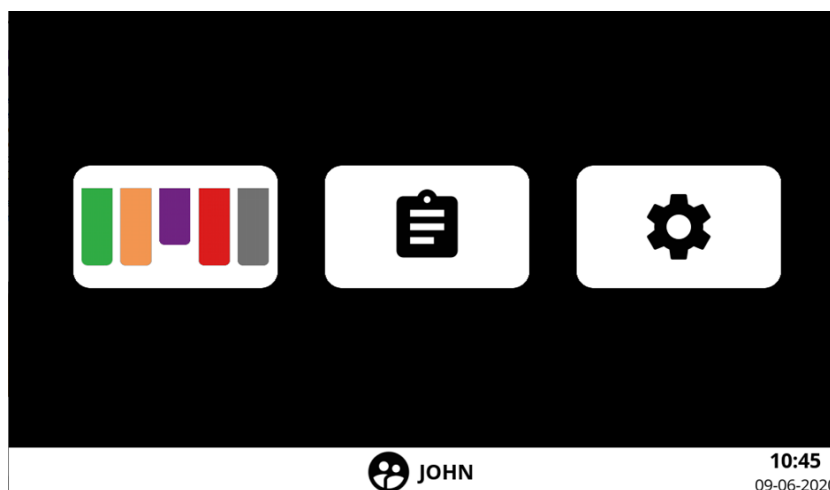


View a summary of all results by selecting the clipboard icon (see section 6.5 for more information).



9. Summary of results and data manager

Select the results icon in the center of the home screen to view a summary of all results from previously performed tests stored on the reader.

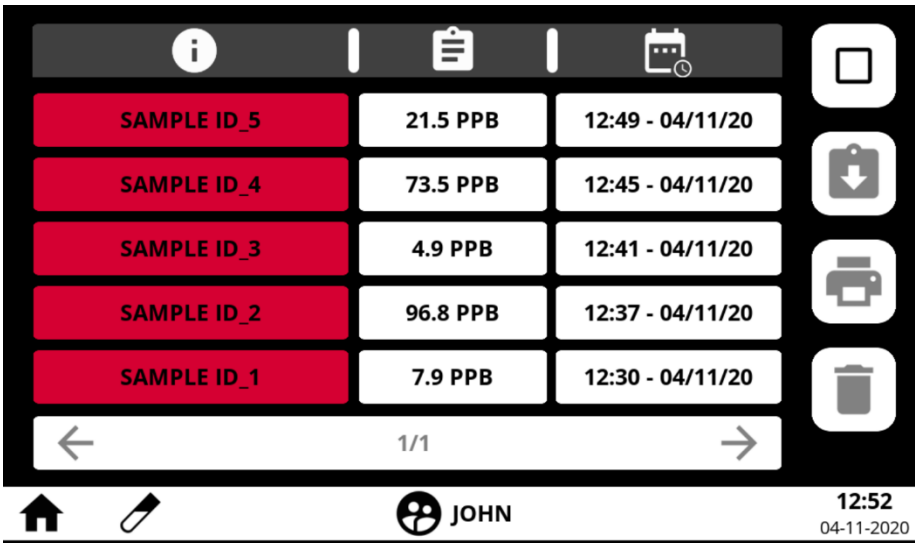


The summary of results shows an individual report from each test. The information contains:

- The type of test
- Date and time
- Test result

By selecting the individual test result, you can see specific information about the lot ID, sample ID, results, matrix, and date and time as well as the name of the user who performed the test.

	Print results by selecting the printer icon
	Export results as a csv. file with the clipboard/arrow icon
	Delete results with the wastebasket icon
	By selecting the test tube icon, users can return to the test run menu
	Select results or mark results by tapping the square icon



 *Note: Return to the test run menu by selecting the test tube icon.*

10. Export Data

The data can be exported into a common file format (csv.) for further analysis and documentation. The file format can also be used for integration into a laboratory information management system (LIMS).

Import and export data using a USB stick. The AgraVision™ Pro reader will recognize the memory stick as a mass storage device.

11. Troubleshooting

For technical enquiries, please contact your distributor or Romer Labs at the address given on page 2 of this manual.

12. Maintenance and Servicing

Although the AgraVision™ Pro reader does not require any scheduled servicing, the user should regularly clean and inspect it for defects, as described in Section 12.1 0 below.

	Observe and comply with all of the Unit Maintenance and Serviceability safety precautions listed in Section 5.
DANGER	Always unplug the unit before performing any cleaning or disinfecting tasks.
	Never remove the reader casework. There are no parts than can be serviced by the user or operator inside the reader.
WARNING	Never use alcohol-based cleaners on the black surfaces inside the lid as it will remove the coating and significantly degrade the unit's performance.
	Practice anti-static precautions by avoiding directly touching the exposed electrical contacts or using statically charged cleaning cloths.
CAUTION	

For technical and service related enquiries, please contact your distributor or Romer Labs at the address given on page 2 of this manual.

12.1 Routine Cleaning and Inspection

The reader casework should be cleaned and inspected at regular intervals and whenever contamination or spillage occurs, as follows:

1. Disconnect the power cord from the unit before performing any inspection checks or cleaning.
2. Wearing suitable PPE, clean the casework using a damp cloth or cotton bud soaked with a suitable cleaning solution (such as an alcohol wipe). Do not wet excessively.
3. Clean around the touchscreen, taking care to avoid wetting excessively or pushing debris into the bezel gap.
4. Open the window cleaning access door and clean the glass panel. Close the window cleaning access door before using the instrument.

	After cleaning, ensure that the unit is thoroughly dry before reconnecting the power cord to the unit.
WARNING	

13. Decontamination Procedure

The unit and accessories should be decontaminated using the following procedure before being stored or transported.

Certificate of Decontamination

We respect the health and safety of our clients and employees, and request that any products or accessories being returned are decontaminated in accordance with the procedure below.

1. Decontamination Procedure

Thoroughly clean all outside surfaces of the product (including any accessories, power cords, manuals, packaging, etc.) with a damp cloth soaked with suitable disinfectant solution (such as Virkon).

Allow to dry fully before packing.

2. Decontamination Declaration

Company Name: _____

Address: _____

Product Code: AgraVision™ Pro

Serial Number: _____

Reason For Return: _____

Where Product Used: _____

Please tick the appropriate option(s) below:

☐ I certify that I have decontaminated the product as per the above procedure.

Decontaminant Used: _____

☐ I certify that the product has not been exposed to any chemical or biological materials.

Title: _____

Name: _____

Signature: _____

Date: _____

Telephone: _____

Email: _____

14. Transport and Storage

The AgraVision™ Pro unit and its accessories should be thoroughly decontaminated using the procedure detailed in Section 13 before being placed in its original packaging for transportation or storage.



WARNING

Refer to Section 16 for the acceptable range of Storage and Transportation environmental conditions.

Always ensure that the unit and accessories are completely dry and free of any condensation before being packed.

a. Product Disposal

At end-of-life, this product must be disposed of in accordance with the regulations of your local authority for the disposal of potentially hazardous waste and electronic equipment.

The unit and its accessories should be decontaminated using the procedure detailed in Section 11 before disposal or shipping.



Do not dispose of this product into unsorted municipal waste or a public landfill.

Please contact your distributor (or ITL at the address on page 2 of this manual) for details of how to correctly dispose of this product.

China RoHS		This table has been prepared in accordance with SJ/T 11364 此表格表明符合SJ/T 11364标准						
Part Name 部件名称	Toxic and Hazardous Substances and Elements 有毒有害物质元素							
	Pb 铅	Hg 汞	Cd 镉	Cr6 六价铬	PBB 多溴联苯	PBDE 多溴二苯醚	EFUP 环保期限	
CASEWORK	O	O	O	O	O	O	e	
CONTROL PCB	X	O	O	O	O	O	50	
READER MODULE	X	O	O	O	O	O	25	
HEATER MODULE	O	O	O	O	O	O	e	
EFUP No (Overall) 环保期限								
O: Indicates that the part contains hazardous a substance below the level listed in GB/T 26572 表示料件所包含有害物质在GB/T 26572中列出的标准								
X: Indicates that the part contains hazardous a substance above the level listed in GB/T 26572 表示料件所包含有害物质超过GB/T 26572中列出的标准								

15. Warranty and Returns

Integrated Technologies Limited (ITL) warrants the AgraVision™ Pro product, when purchased new and installed and operated in accordance with the instructions of this manual, to be free from defects in materials and workmanship, and will repair or replace, at their discretion, any unit or accessory which exhibits such defects.

In no event will ITL be liable for any indirect, incidental or consequential damages resulting from any defect or warranty claim.

**NOTE**

Unspecified use or unauthorized modification of any part of the AgraVision™ Pro unit or its accessories or the use or attachment of any adaptor or peripheral not supplied, specified or sanctioned by ITL will invalidate this warranty.

This warranty is provided to the original purchaser of the product for one year from the date of purchase.

Under the terms of this warranty, the product must be returned in its original packaging, transportation prepaid by the sender, with a copy of the Proof of Purchase and a detailed description of the problem.

**WARNING**

The product must be decontaminated using the procedure detailed in Section 11 and a Certificate of Decontamination supplied with any return. If the product is considered too hazardous to be shipped, please contact ITL on the number given on page 2 of this manual for further instructions.

Please contact your distributor (or ITL on the number given on page 2 of this manual) to receive authorisation to return the product.

16. Technical Specification

Physical Unit Properties

Dimensions (W × D × H)	200 mm × 180 mm × 150 mm
Weight	2 kg

Power Supply Adaptor

Power adaptor input voltage	100 to 240V AC ±10%, 50/60 Hz ±5%
Power adaptor output	12.0V DC ±5%, 5.5 A

Unit Power Rating

Input voltage and current	12.0V DC ±5%, 5.5 A
Input power	65W

Auxiliary Power

Input	USB-B: 5.0V DC ±5%, 1.0A max
Output	USB-A: 5.0V DC ±5%, 1.0A max

Operating Environment

Temperature range	+10 to +40 °C
Relative humidity range	20% to 85% non-condensing
Maximum operating altitude	2000 m above sea-level

Storage

Temperature range	0 to +50 °C
Relative humidity range	5% to 95% non-condensing

Transport

Temperature range	-10 to +50 °C
Relative humidity range	5% to 95% non-condensing

Test Strip Types Supported

MTX	Mycotoxins
GMO	Genetically Modified Organisms coming soon

17. Glossary of Terms and Abbreviations

ANSI	American National Standards Institute
CSV (file)	Comma-separated values
EMC	Electro-magnetic compatibility
Incubate	Keeping an organism, cell or cell culture at the optimum temperature for growth and development
PPE	Personal protective equipment

Notes