RDS 2500

PRODUCT MANUAL

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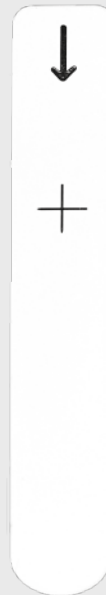Navigation Buttons

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RDS 2500 Reader
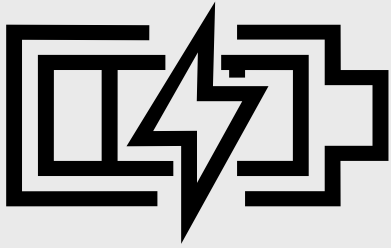
Sync Cable for Data Transfer
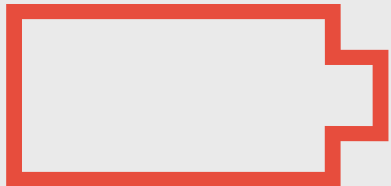
Diagnostic Cartridge

GETTING STARTED

Charging Your RDS-2500

To charge your reader, connect the power adapter to the charging port on the left side of the reader. When powered off and connected to a power supply, the reader will charge fully in 3 hours.

The battery icon on the side menu will indicate when the reader is charging. When the reader is on or in use while connected to power, it will maintain its current power state.

Messages throughout the interface pages will alert the user when the battery is getting low.

Physical Button Functionality

They keypad at the base of the front of the reader allows for quick access to several key features.

Power

Press and hold to power on the reader. This button can also be used as a hard shutdown.

Home

This button can be used on all pages to return to the main screen.

Menu

This button will open any menu available on the current page.

GETTING STARTED

Proper Storage Conditions

Store the RDS-2500 in a dry, dust-free environment at normal room temperature.

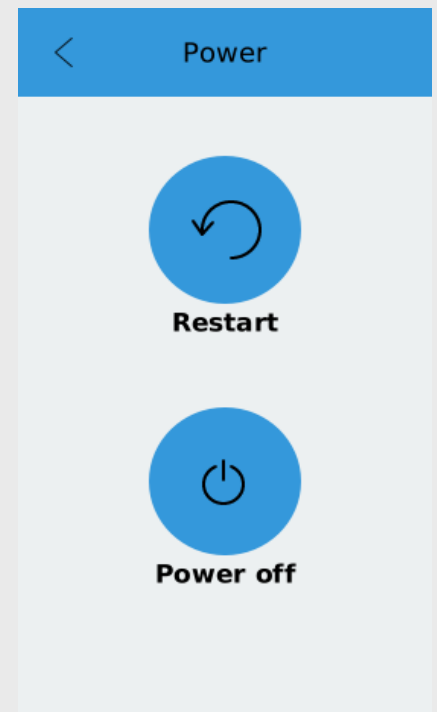## Turning the Reader On and Off

Power On

To turn the RDS-2500 on, press and hold the power button for a few seconds until the keypad illuminates.

Safe Shutdown

To power off a reader safely, navigate to the side menu and select Power. From here, the user can choose to Power off or Restart.

Hard Reset

If the reader becomes unresponsive, a hard reset may be required. This can be done by pressing and holding the power button until the reader turns off.

Micro USB Port Functionality

Left Side Micro USB

Data Manager

Import result data and images to view and generate export files on the computer.

View reader diagnostic information on the unit status page.

Right Side Micro USB

Updating

Update software or test database from USB flash drive.

Printing

Print results directly from testing routine or saved results page.

NAVIGATION

Main Menu

Settings

Connect to Network, Replace Track, Diagnostic Check, Advanced Settings

Side Menu

Battery Status, View Results, User Preferences, Unit Status, Power

12:33 PM
Jun 26, 2019

DETEKT
DESIGN • PRCTOTYPE • ENGINEER

CATEGORY

Select Category >

TEST

Select Test >

Run Test

Standard mode

60084

Enter Testing Routine

Network Connection Status

Data Transfer

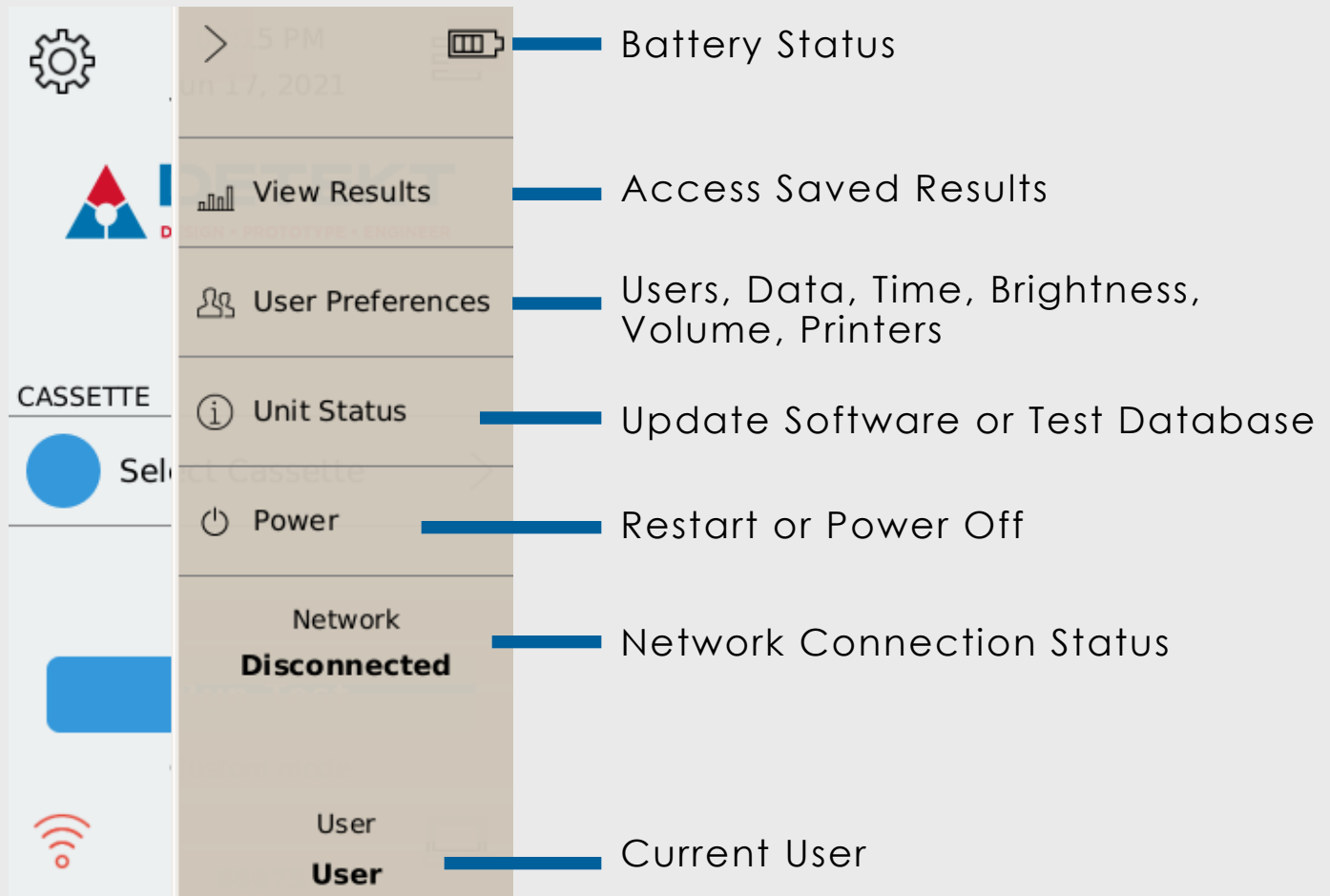Sync Results to a PC via USB or Network Transfer

The Main Menu can be accessed from any page by clicking the center physical home button or any home icon on the screen. From the Main Menu, you have access to several key features.

From this screen, the user may access settings, run a test, and enter Data Transfer mode to sync the results to the PC. Once Run Test is selected, the reader will walk you through the steps to arrive at your test result.

NAVIGATION

Side Menu

Battery Status

Access Saved Results

Users, Data, Time, Brightness, Volume, Printers

Update Software or Test Database

Restart or Power Off

Network Connection Status

Current User

The Side Menu is located on the Main Menu page and allows quick-access to key features.

The Side Menu can be opened by clicking the right-most physical button or the menu icon in the upper-right corner.

This menu allows you to check battery status, view test results, access user preferences, update the software and test database, safely restart or power off the unit, and check network connection status.

The battery status icon will display up to 4 bars indicating the level of charge, and will show a lightning bolt if the reader is currently charging.

NAVIGATION

Settings

	Settings
	Lot ID
Scan New Lot ID Information	
	Network Settings — Connect to Wifi *
Change Reader Track Settings	**Track Replacement**
	Diagnostic Check — Run Diagnostics Check
Scan Codes for Customization	**Scan Configuration**
	Advanced Settings — Access Additional Settings
Main Menu	🏠

From the Settings page you can scan new Lot ID information, connect to a wireless network, change track type, run the annual diagnostic check, and access additional advanced settings.

* For select partners who wish to use Wi-Fi to update the test database or software versions on their units, software customization is required. Contact Detekt to discuss the implementation of this feature.

NAVIGATION

Unit Status/Reader Update

Unit Status

VERSION

Software	0.0.168
Database	2/22/2019
Kernel	d1.4

DIAGNOSTIC CHECK

| Passed | 12/18/2019 |

Current Software Version

Current Test Database

Diagnostic Pass Date

Download Updates via Wifi or USB

Connect to Wi-Fi or insert USB to view updates.

Used memory
138 / 2000

Memory Usage Indicator

From the Unit Status page, which is accessed from the Side Menu, you may update the Test Database and the software version by inserting a flash drive containing the updates into the right-hand side USB port of the unit.

The used memory graphic indicates the number of test results stored on the reader. Storing more than 2000 tests can result in slower operating performance.

NAVIGATION

User Preferences

The User Preferences page can be accessed through the Side Menu. From this page you can add a user, change the time/date, and adjust the screen brightness, volume, and haptic feedback settings.
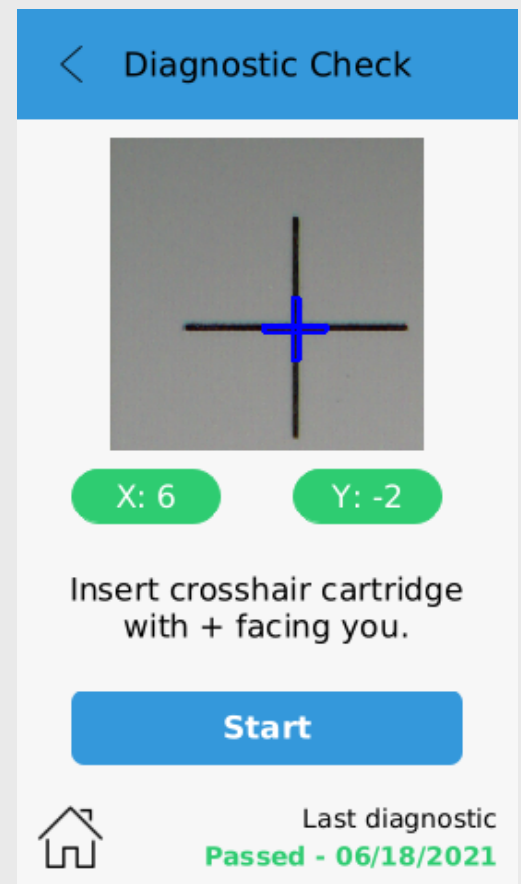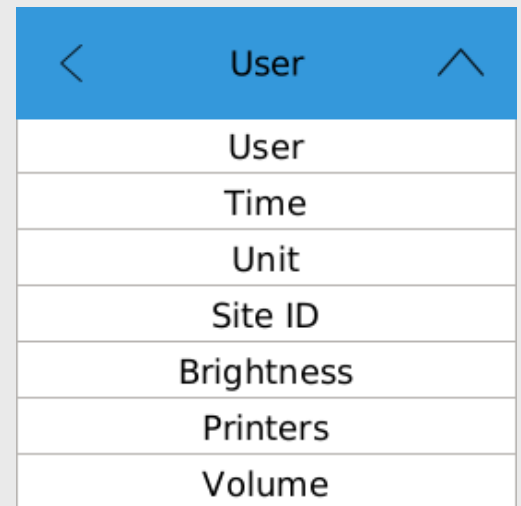
More advanced preferences can be accessed such as the quantitative unit setting, location and site ID tags, external barcode scanner, and automatic printing settings.

Diagnostic Check

The RDS-2500 requires users to perform a diagnostic check annually to validate the system's optics module.

Diagnostic Check can be found under:
Settings > Diagnostic Check

To perform the check, insert the calibrator shown to the right into the reader and follow the on-screen instructions.
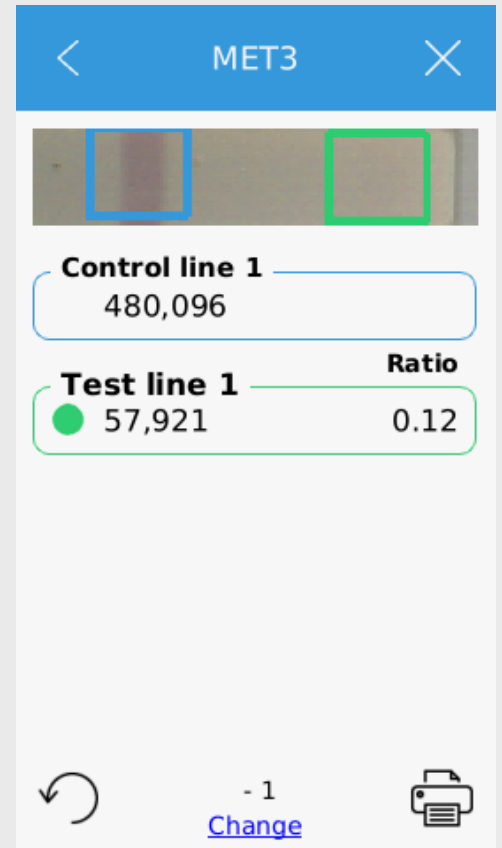
TESTING

How to Run a Standard Test

1. From the Home Screen, select the "**Category**" and "**Test**" you want to run.

2. Insert the desired populated cartridge into the reader.

3. Select the "**Run Test**" button.

4. Enter a sample ID if desired. Then click "**Accept**". If you want to scan a barcode for the sample ID, click the center button at the bottom of the keyboard to turn on the external scanner.
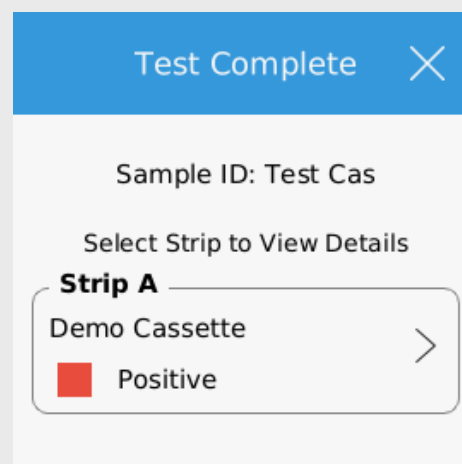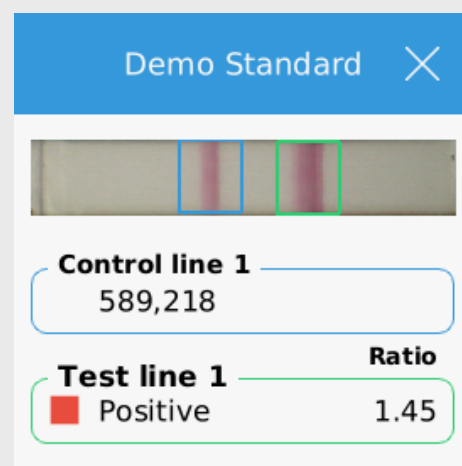
Center button for barcode scanner.

5. The test will automatically run and proceed to the result summary page.

   A. The test type is displayed at the top of the screen and the sample ID is shown at the bottom, above the word "**Change**".

   B. The image of the test strip is shown at the top of the page. The left edge of the image corresponds to the top of the strip.

   C. The colored boxes around the test lines indicate the region of analysis and match the color of the corresponding result box below.

   D. If a compatible printer is connected, you can print directly from this result page by selecting the printer icon on the screen.

TESTING

How to Run a Cassette Test

1. From the Home Screen, select the "**Cassette**" you want to run.

2. Insert the desired populated cassette into the reader.

3. Select the "**Run Test**" button.

4. Enter a sample ID if desired. Then click "**Accept**". If you want to scan a barcode for the sample ID, click the center button at the bottom of the keyboard to turn on the external scanner.

5. The test will automatically run and proceed to the result summary page.

   A. The test type is displayed at the top of the screen and the sample ID is shown at the bottom above "**Change**".

   B. If your cassette has multiple test strips, select a single test to view the detailed result.

   C. The image of the test strip is shown at the top of the page. The left edge of the image corresponds to the top of the strip.

   D. The colored boxes around the test lines indicate the region of analysis and match the color of the corresponding result box below.

   E. If a compatible printer is connected you can print directly from this result page by selecting the printer icon on the screen.

TESTING

Additional Testing Information

- To re-run a test with the same sample ID, click the refresh button. The new test result will append a -1, -2, and so on to the original sample ID.

- To run the same test type with a new sample ID click the "**Change**" button below the sample ID at the bottom of the result page. This will display the keyboard and allow you to type in the new sample ID. Insert the new test while you are on the keyboard page to accept the new sample ID and initiate the test.

How to View Saved Results

1. From the home screen, open the Side Menu. Use the physical button (right keypad button) or the on-screen button to open the Side Menu.

2. Select "**View Results**".

3. Results will load in chronological order with the most recent results appearing at the top. Use the up and down arrow keys at the bottom of the results page to scroll and view older test results.

4. To view the test details, click on the desired result summary.

5. Only the most recent 150 results will load automatically. To load older results, scroll to the last page and previous results will load.

How to Delete Results

- To delete a single result, click the desired result on the reader and click the trashcan icon.

- To delete all results, on the main results page, select the trashcan icon. The password to delete all results is 8465.
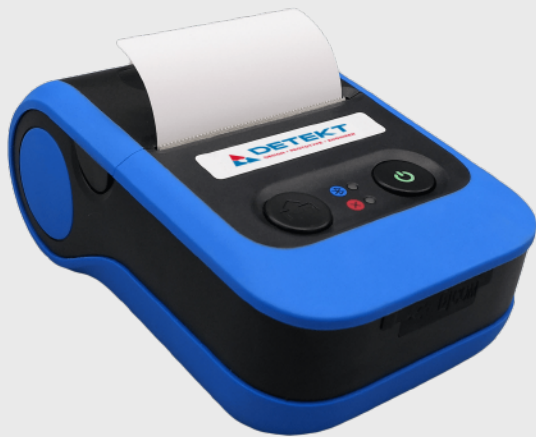
PRINTING

Compatible Printer Options

The RDS-2500 is compatible with the OM2200 and DymoLabel Writer 450 Turbo thermal printers.

Prior to printing a test result, ensure your printer is plugged into the micro USB port on the right side of the reader. A standard to micro USB adapter is included with your device for your convenience.

You can manually print a live or saved result summary by clicking on the printer icon located at the bottom right (live) or top right (saved) of the result page.

To automatically print every result, enable this feature on the printer page of User Preferences.

OM2200
OmniPrint
Battery Powered
Portable

LabelWriter 450 Turbo
DYMO
High volume paper capacity
Desktop printer

UPDATING SOFTWARE OR TEST DATABASE

The RDS-2500 can be updated using any of the following methods.

Flash Drive

1. Copy the zipped RDS-2500_X.X.XXX.tgz software update file or the RDStinfo_YY_MM_DD.json database file into the root folder of a flash drive. DO NOT unzip the .tgz file.

2. On the reader, navigate to the Unit Status page in the Side Menu.

3. Insert the flash drive into the micro USB port on the right side of the reader (the standard to micro USB converter is included in your box).

4. A box will appear on the screen prompting you to update the software and/or test database.

5. Click the desired update button and the reader will automatically update and restart.

Note: You can only update one of the files at a time. To update both the software and test database, you will need to repeat these steps for the second update.

Update Database 6/11/21	Update Software 2.2.1

Wireless Cloud

Detekt offers a subscription service that allows updating of the software and test database files. If you are interested in this advanced feature, please contact Detekt.

DATA MANAGER

Navigating the Data Manager

Open the Data Manager Software on your PC.

Results - View details of tests imported from the RDS-25000.

Settings - Customize your Data Manager.
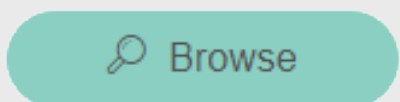
Unit Status - Generate a diagnostic report.

Import/Browse Data - Import test results from the reader or browse to view other saved results.

Export Data Options - Export your data into an excel document.

Importing Data From the Reader

Set up Data Storage Location

Click on Browse button at the top of the screen and select the folder on your PC where you want to store your data.
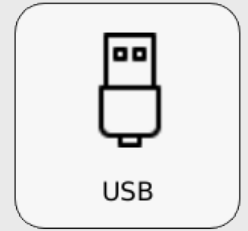
🔍 Browse

Computer Storage Location
C:\Documents\RDS-2500-Data

This folder location is used for the following actions:
- New imported results will be stored here.
- View Results table is populated with the data in this folder.
- Data available for export is loaded from this location.
- Unit Status diagnostic report is saved here.

DATA MANAGER

USB Transfer

1. Navigate to sync mode on the reader by clicking the computer icon in the lower right-hand corner of the home screen, then select the USB icon.

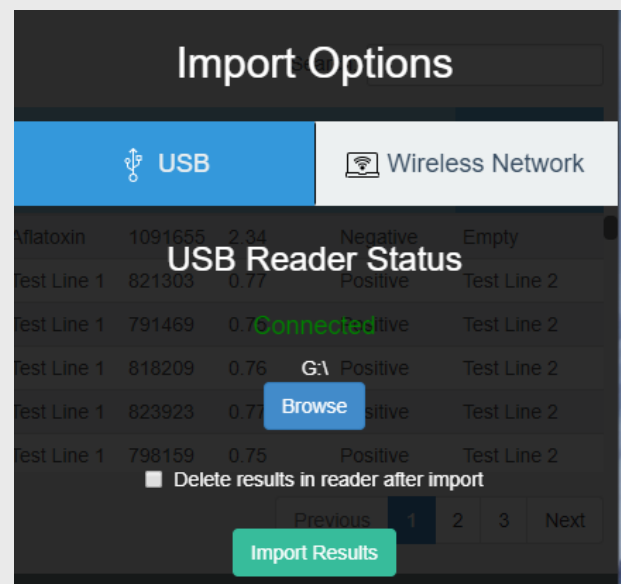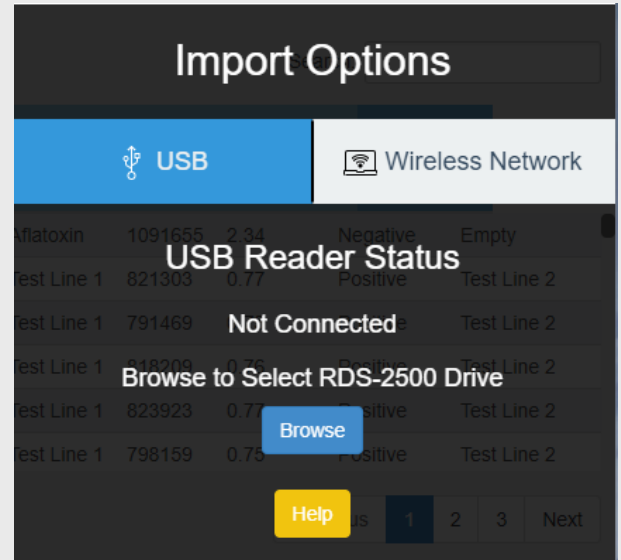   Note: Stay on this page until the import is complete.

2. Plug in the sync cable to the micro USB port on the left hand side of the reader.

   Note: The right side USB port is for peripherals (printing and software) and will not connect.

3. Under USB Transfer on the Data Manager, first click the Browse button and navigate to RDS2500, data folder then click Select Folder.

   Once the folder path is set, it should not change and future imports will not require this step.

4. Select if you want results deleted after import by selecting this option. If "delete results" is chosen, the results will no longer be available on the reader.

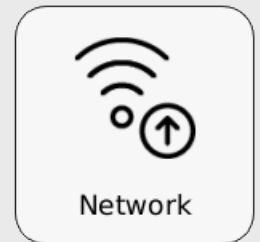5. Click Import Results. A loading bar will display the progress.

DATA MANAGER

Network Transfer

Setting up Wireless Connection

Connect the reader to the same wireless network as the computer you are importing to. Navigate to Settings then Network Settings and follow the on-screen instructions to connect.
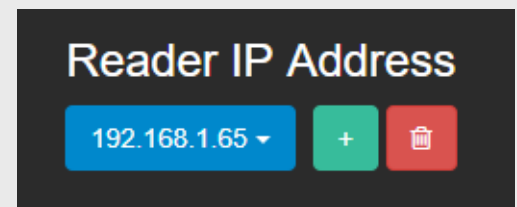

Network

On the Data Manager, under Enter IP Address, click the green + button to add the IP address of the reader. The Import Method buttons will become enabled when a valid IP address is selected.
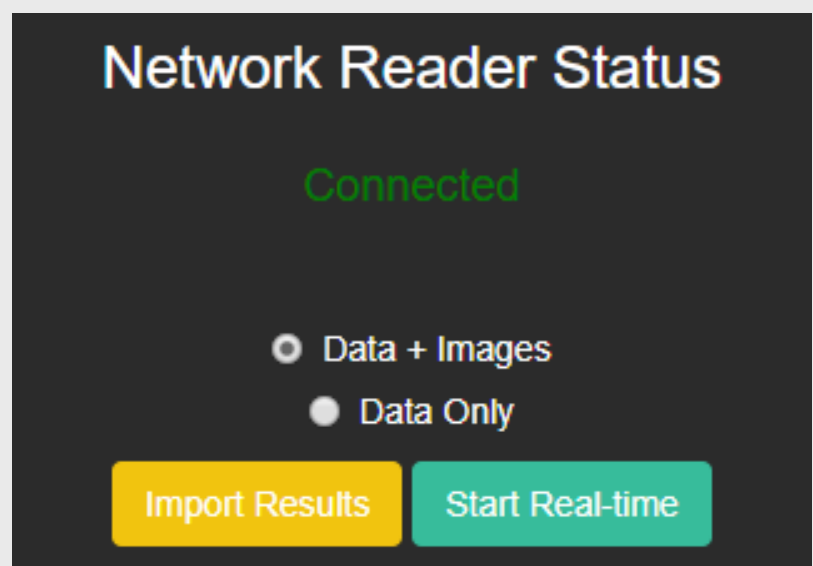
Import Results

To import previous results, the reader must be in Network Transfer mode. Navigate to sync mode on the reader by selecting the computer icon in the lower right-hand corner of the home screen, then click the network icon.

Reader IP Address
192.168.1.65 ▾   +   🗑

On the Data Manager, select Import Results. This will import all results not already in the Data Storage location.

For additional help, click the help button for more information.

Network Reader Status
Connected
○ Data + Images
● Data Only
Import Results   Start Real-time

Help

DATA MANAGER

Network Transfer

Start Real-time

Real-Time Import

Real-time Import is used to automatically import new results from the reader as they are collected.

The reader must be in live-testing mode (not Network Transfer mode) for Real-time results to be imported.

Note: This feature can only be used to import future results as they are collected. To Import older results, select Import Results.

Click the Start Real-time button on the Data Manager to start importing new results. Every minute the Data Manager will import any new results that are available. Once the Real-Time import has started, the green start Real-time button will change to a red Stop Real-time button. This button will flash, indicating that the import process is working.

To stop the import at any time, click the red Stop Real-time button

If wireless connection is lost, an alert will pop up on the Data Manager.

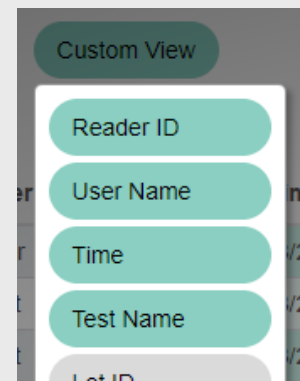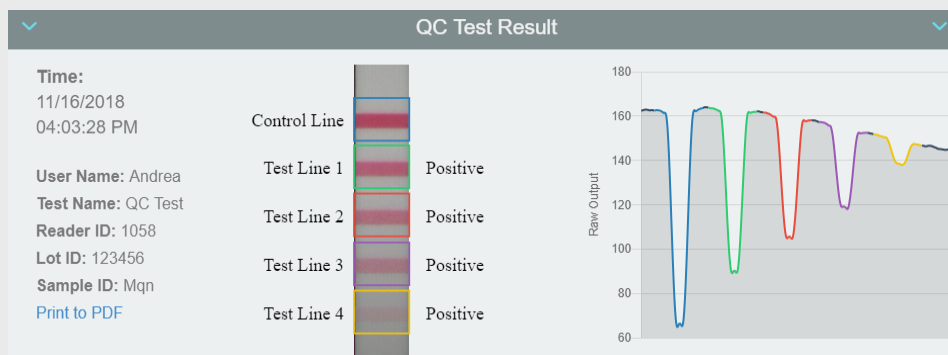
Network Reader Status

Not Connected

DATA MANAGER

View Imported Results

- Click Results tab from the navigation menu

- A list of tests will appear in the table. The Data Manager will automatically load the 250 most recent results into the table.

- To see older results, click the Load All Results button at the top. Only results loaded in this table are available for export.

- Use the Custom View button at the top of the screen to hide or show specific columns in the table. Click on an individual test to see the expanded results.
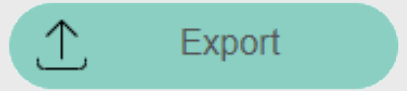

- Search for specific results using the search bar in the top right corner of the window. Sort results by any column parameter by clicking the header name. Click the header a second time to sort the results in reverse order.

DATA MANAGER

Export Results

- The Export Data feature allows you to export your results into an Excel file.

- You can filter which results you want included in the export by specifying a date range and/or selecting parameters from the dropdown options. All available options will be present in the dropdown lists. You can remove a filter by clicking on the associated green label.

- Export results by selecting Export Excel File. Use the file explorer on your PC to navigate to the folder where the file was saved and open it to view data.
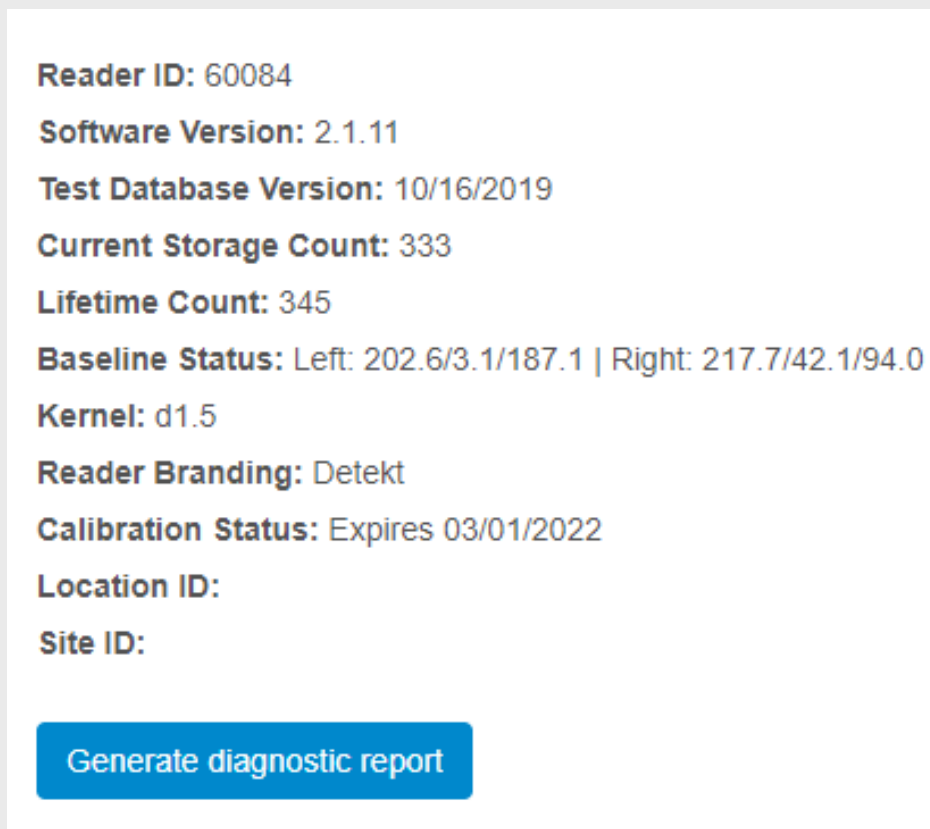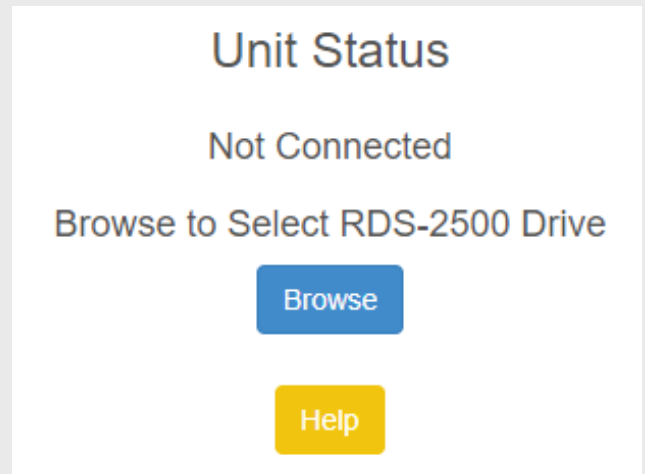
DATA MANAGER

Unit Status

- Navigate to sync mode on the reader by clicking the computer icon, then select the USB icon.

- On the Data Manager Unit Status page, browse to select the RDS-2500 data folder if the status information does not automatically populate.

Unit Status

Not Connected

Browse to Select RDS-2500 Drive

Browse

Help

- Click the generate diagnostic report button to create a zip file of important reader information that can be used to remotely diagnose a problem. The diagnostic file will be saved in the data storage folder.

Reader ID: 60084

Software Version: 2.1.11

Test Database Version: 10/16/2019

Current Storage Count: 333

Lifetime Count: 345

Baseline Status: Left: 202.6/3.1/187.1 | Right: 217.7/42.1/94.0

Kernel: d1.5

Reader Branding: Detekt

Calibration Status: Expires 03/01/2022

Location ID:

Site ID:

Generate diagnostic report

SAFETY

Service

This device has no user serviceable parts and must be returned to Detekt for service.

Power Supply

To power the device, first assemble the power cable by connecting the AC line into the main power supply block. Next, plug the 3-pronged AC line into an outlet with protective earthing and insert the barrel plug into the device. This device should not be positioned in such a way that it is difficult for the user to operate the disconnecting device of the main power supply. Do NOT replace the power supply with an inadequately rated power supply.

For a replacement, contact Detekt.

This device is designed for use under the following conditions:

Indoor use only
Altitude up to 2,000m
Temperatures 5 – 55 °C
Maximum relative humidity 80% for temperatures up to 31 °C decreasing linearly to 40% relative humidity at 55 °C.

Note: If this device, or any of its associated parts, are used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

MISCELLANEOUS

Troubleshooting

For technical support contact Detekt Biomedical LLC
2101 E St Elmo Rd, Ste 330
Austin, TX 78744 USA
(512) 912-0887 (USA)
contact@idetekt.com

Maintenance

General Care
This device contains sensitive electronic and optical components, so it should be treated with care.
To clean the touchscreen on this device, wipe it gently with a soft cloth. Avoid using any liquid solvents to clean the screen.

Spills
In the event that a cartridge overflows when it is dosed inside the device, turn off the device and carefully remove the cartridge. Keep the unit upright and allow any excess liquid to drain out of the holes at the bottom, directly below the port openings. Wipe up the liquid from under with a cloth. For any remaining liquid inside the device, use a long cotton swab to clean the internal incubators.
For minor spills on or around the exterior of the device, wipe away any liquid quickly. Ensure no liquid has come into contact with any external ports or buttons before proceeding.
In the event of a severe spill, contact Detekt.

Technical Specifications

Power Rating
5V
17 Watt
50-60 Hz

Size
8x4x4 inches (21x10x10 cm)
1.1lb (0.5 kg)