1064Defender
Quick Start Guide

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1064Defender Quick Start Guide

This Quick Start Guide provides an introduction to Safety, Battery Installation, Login Information, and Scanning. Use this guide along with the Thermo Scientific™ 1064Defender™ User Guide.

Safety

The instrument **IS NOT** designed to be intrinsically safe. Do not use the instrument in any potentially explosive or unknown gas environment.

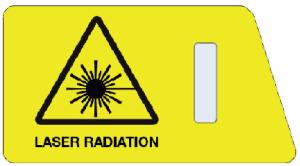
- Never point the laser in the instrument at yourself or others.
- Never activate the laser unless a sample fully covers the laser aperture.
- Always ensure that the laser is deactivated before removing the sample from the laser aperture.
- The Nominal Ocular Hazard Distance, NOHD, for the 1064Defender analyzer, is 63 inches (160 cm). Ensure that there are no people or reflective surfaces within 63 inches of the laser beam path when analyzing samples in glass or clear containers. Laser radiation may not be completely blocked by these materials.
- Never hold a potentially energetic material with your hands during a scan.
- Identify and wear appropriate protective equipment for the situation. Always wear laser safety glasses and dress appropriately to minimize exposed skin. Laser safety eye wear of OD 3 at 1064 nm must be worn when the laser hazard cannot be controlled.
- The instrument is in Vial Mode when the sample is placed in a vial, and the vial is placed in the vial holder. When mitigating hazards of energetic or thermally sensitive materials, always remove the vial cap when scanning in Vial Mode so that pressure cannot build up inside the vial, which could cause it to explode.

- Use the Scan Delay feature which allows you time to get away to a safe distance before the laser is activated. Use Scan Timeout to limit the amount of time that the laser is activated.
- Use Vial Mode whenever possible.

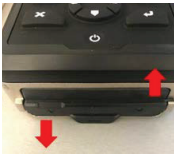
Laser Information Label: Provides information about the class, wavelength, and output power of the laser contained within the instrument. The label is located on the back of the instrument.

Laser Aperture Label: Alerts the user that the energy from the laser exits through this aperture. This radiation can harm the eyes.

Therefore, take care that the eyes are suitably protected. The label is located on the top of the instrument, above the display.



Installing the Battery into the Instrument



1. To open the battery door, twist the battery door lock counter clockwise.

2. After unlocking the battery, the door assembly will appear as shown at left. Now peel away the battery door to expose the battery.

3. To load the battery, the slotted contacts should be oriented so that they are on the upper left, ready to slide into the instrument as shown at left.

4. When installing the battery, ensure that the tab remains accessible as shown. This tab provides ease of removal when charging is required. The level of battery charge is displayed on the indicator bar near the pull-tab.

5. Fold the tab over the end of the battery, and replace the battery door. Twist the bar clockwise to close and secure.

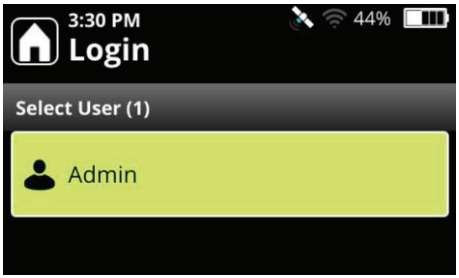
6. Once the battery has been replaced and the door has been securely closed, the instrument door will appear as shown at left.

Note: If the battery is not sufficiently charged, please refer the User Guide for battery charging instructions.

How to Login to your Instrument

1. Press and hold the Power button on the keypad until the screen lights up. The instrument takes about a minute to boot up.

   The instrument has two power states: ON or OFF.
2. The Login screen appears. Under the Select User option, tap the Admin option.

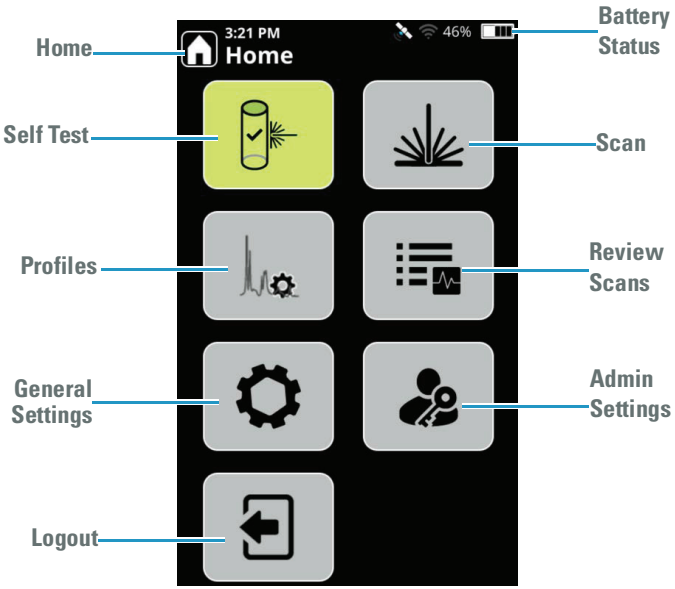


3. Enter the Administrator password. Press ↵ (Enter key).

4. The Home screen now appears.

Navigation

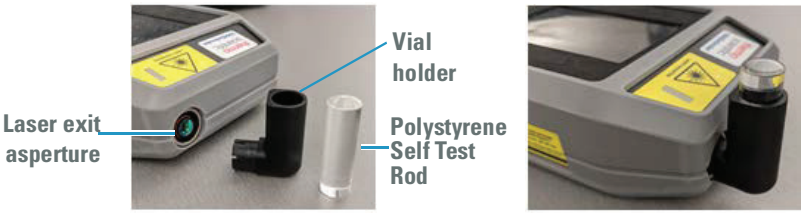
From the Home screen, use the touch screen (or keypad arrows) to access these instrument functions.



Performing the Instrument Self Test

It is highly recommended that a Self Test is performed at least daily to verify that the instrument is operating properly. The Self Test will require the use of the standard polystyrene rod (included) and vial holder accessory.

1. Locate the vial holder accessory in the 1064Defender carrying case, and carefully place the slotted opening over the laser exit aperture. Rotate the vial holder so that the large opening is vertically oriented.

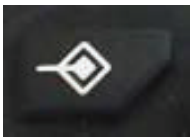


2. Place the polystyrene rod into the vial holder, as shown above.
   Press the rod firmly down into the holder so that the laser will enter the sample.

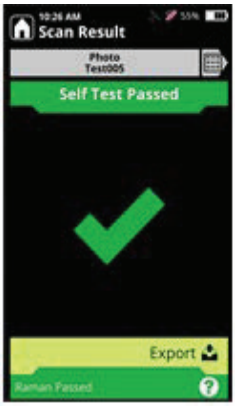
3. Ensure that any label on the polystyrene rod is rotated away from the incoming laser, otherwise the Self Test may fail.

4. Press the Self Test button on the Home Screen.

5. Press the Arm Laser button on the keypad.



6. On the Home screen, press the Scan button.
   After scanning has completed, the result will either be a **PASS** or a **FAIL**.



Self Test PASS: Instrument correctly identified the polystyrene rod, indicating proper functionality.

Self Test FAIL: Instrument could not properly identify polystyrene and should not be used until the problems are corrected. Wipe the polystyrene rod with a damp cloth, place in vial holder and perform a second Self Test. If the result is FAIL, contact Customer Support.

Sample Scanning and Scan Results

If your drug sample is in a closed transparent plastic bag, the instrument will be able to analyze the substance directly through the bag.

1. Remove the polystyrene rod from the vial holder, and remove the vial holder from the laser exit aperture.

2. Locate the nose cone in the carrying case, and carefully place the slotted end over the laser exit aperture, as shown below.

3. On the Home screen, press the Profiles button.

and select the TF_Narcotics profile, as shown.

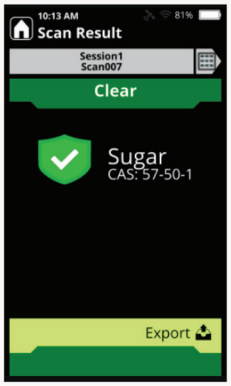
4. Click on the  Home button in the upper left corner of the Tools screen.

5. Position your bag of drug sample against the nose cone, shown below.

6. On the Raman Scan screen, press Scan to acquire a Raman spectrum. The Scan progress screen will appear.

7. If the chemicals in your sample are not in the Narcotics library, then the Scan Result will display a green “Clear.”

If a narcotic chemical is detected, then the Scan Result will display a red “Alarm,” with the name of the chemical indicated on the screen.



Getting Help and Reachback Support

Customer Support is available by telephone or email, 24/7, 365 days a year.

Telephone:	1-800-374-1992 (USA) +1-978-642-1100 (International)
Email:	support@chemid.thermofisher.com
Website:	pai.thermoscientific.com/support
Mail:	2 Radcliff Road, Tewksbury, MA 01876

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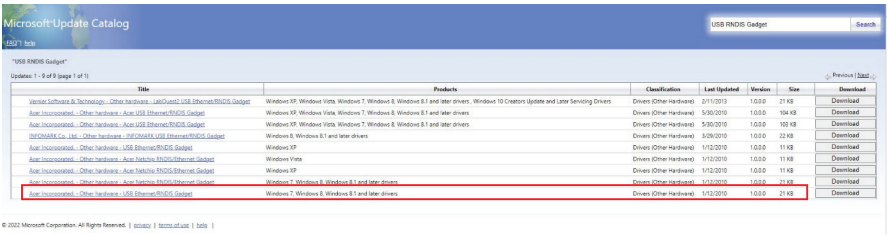
Connectivity and Data Transfer

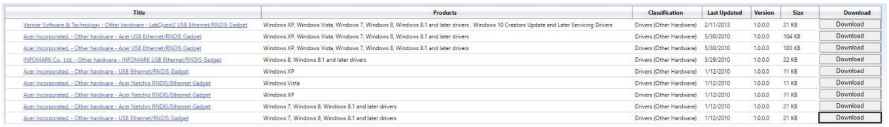
1. Pre-requisites

- Download and Install RNDIS driver using the following link:
  https://www.catalog.update.microsoft.com/Search.aspx?q=USB%20RNDIS%20Gadget

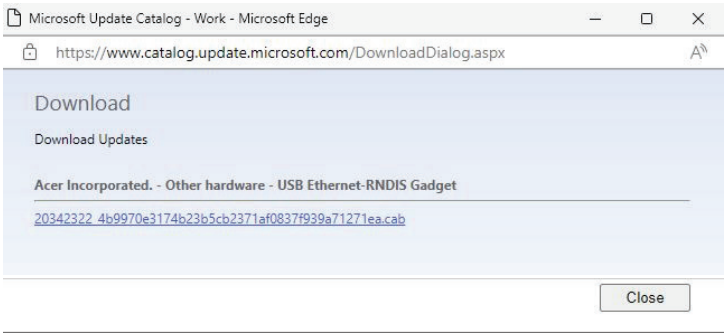
- From the list of available downloads, Download and install the **Acer Incorporated. - Other hardware - USB Ethernet/RNDIS Gadget for Windows 7, Windows 8, Windows 8.1 and later drivers**



- Click the download box on the right side of the list



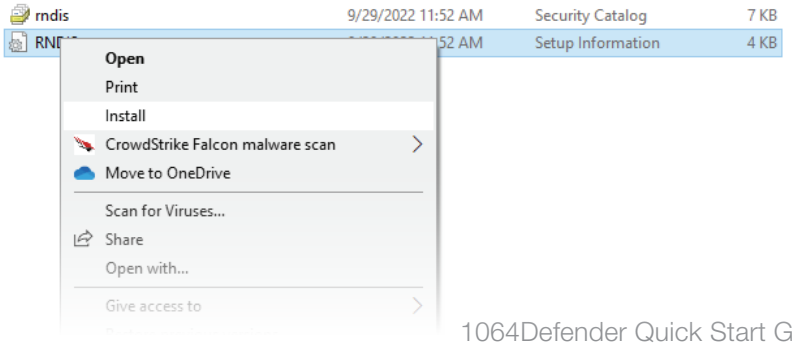
- Double-click the downloaded .CAB file:
  20342322_4b9970e3174b23b5cb2371af0837f939a71271ea.cab



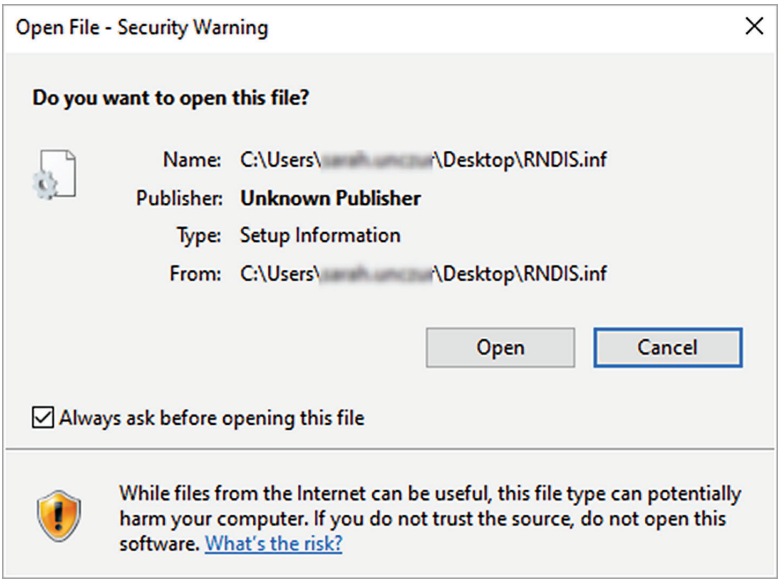
- Open the file from the computer's downloads.

- Right click, and select Extract…

- Select RNDIS.inf. Right click and select Install.



• Click Open.

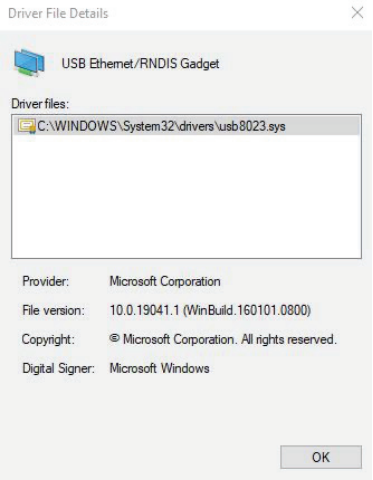


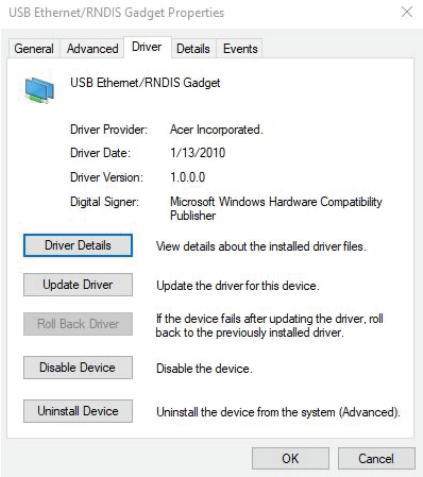
• After the operation is completed successfully, retry the connection.

To Check the download has occurred:

• Use the Device manager on the windows computer while the unit is still connected. From the list, select Network adapters and ensure that the RNDIS Gadget is present.

• When the device is selected, the following information should be displayed.





2. Connectivity

Once the RNDIS driver is installed, Refer to section 3, “Connectivity” of the User Guide.

In this section the following information can be found:

- Prerequisites
- Set-up Wi-Fi connections
- Connect to a hidden network
- Configure network shares
- Set up GPS

3. Data Transfer

Refer to section 4, “1064Defender WebUI” for information on Data Transfer.

In this section the following information can be found:

- Connectivity Overview
- Connect to the 1064 Defender WebUI
- View and edit scans
- View and edit sessions
- View and edit profiles
- View and install libraries
- Manage users
- View and install entitlements

Learn more at **thermofisher.com/1064defender**

112-00104 QUICK START GUIDE,1064 Defender,ENG

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