



# NETWORK SERVICE ASSISTANT

QUICK START GUIDE

## Network Service Assistant (NSA) Quick Start Guide

This is a Quick Start Guide only. Please refer to NSA User Guide for more detailed instructions.

Please register your NSA at [www.aemnetworks.com/myaccount](http://www.aemnetworks.com/myaccount) to be notified of firmware and software updates and to get free access to our library of NSA Training Videos on demand.

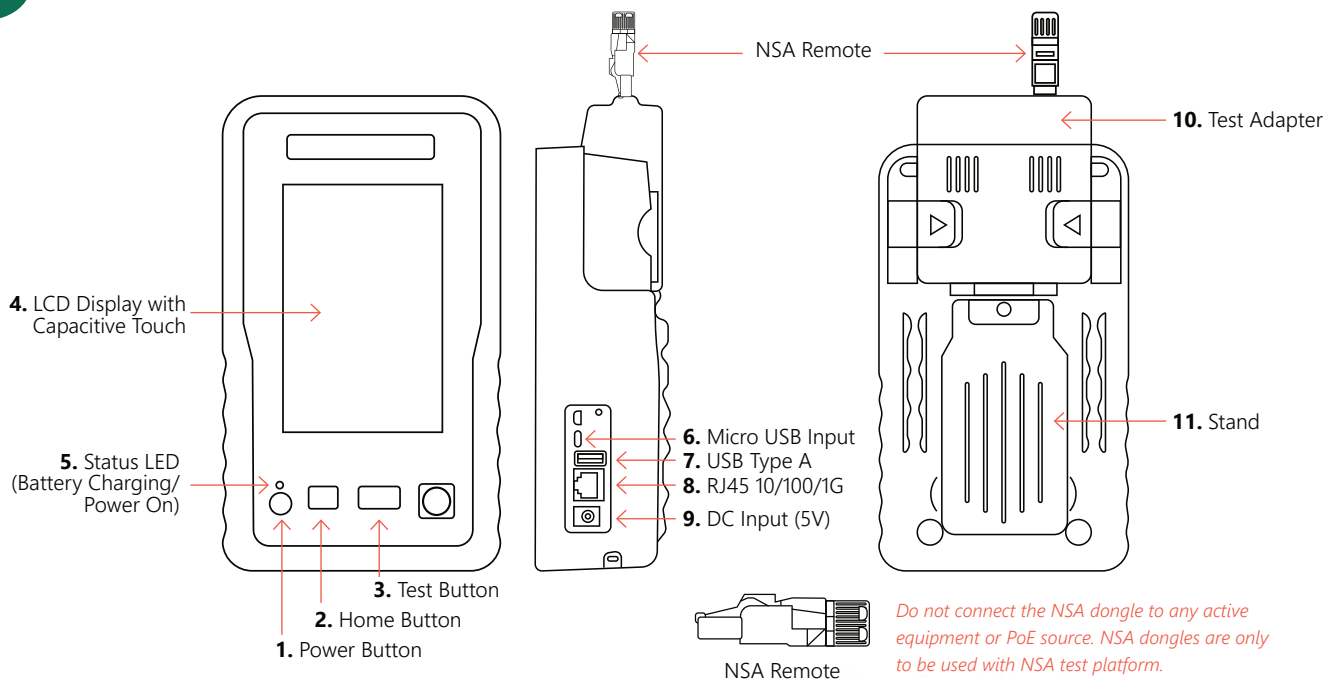


### Standard Kit Contents

- Network Service Assistant Handheld Tester
- AD-NSA Adapter
- NSA Remote Terminator
- RJ45 Coupler
- AC Power Adapter
- Hanging Strap
- Carry Case
- Quick Start Guide
- Calibration Certificate
- USB Cable
- USB flash drive with TestDataPro Results Management Software



### Network Service Assistant (NSA) Features



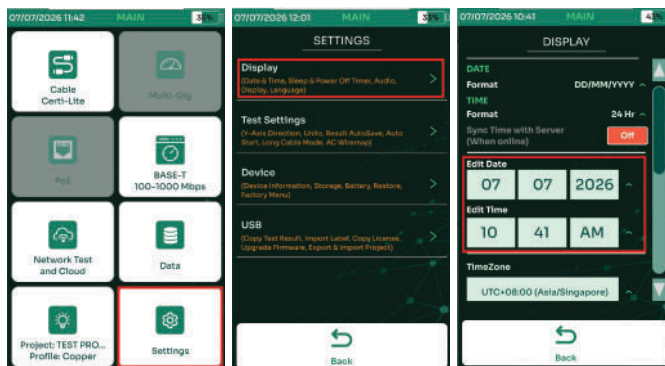
|     |                 |                                                                                                                                                                                                                                                                                                                                     |
|-----|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.  | POWER BUTTON    | <ul style="list-style-type: none"> <li>Powering on : press for 1 second</li> <li>Powering off : press the button once and then select [Power Off] on the touchscreen</li> <li>Force shutdown : press and hold the power button for 6 seconds or longer. Note that Force Shutdown may result in loss of recent test data.</li> </ul> |
| 2.  | HOME BUTTON     | <ul style="list-style-type: none"> <li>Takes you back to home screen on the touchscreen interface.</li> </ul>                                                                                                                                                                                                                       |
| 3.  | TEST BUTTON     | <ul style="list-style-type: none"> <li>Starts an Autotest (Type of Autotest depends on the adapter attached to the unit.)</li> </ul>                                                                                                                                                                                                |
| 4.  | LCD DISPLAY     | <ul style="list-style-type: none"> <li>Capacitive touchscreen, with color graphical user interface to navigate the menu and to view results.</li> </ul>                                                                                                                                                                             |
| 5.  | STATUS LED      | <ul style="list-style-type: none"> <li>Red : battery charging (when unit is off)</li> <li>Amber : battery charging (when unit is on)</li> <li>Green : battery not charging (when unit is on)</li> <li>Alternating Amber/Green: battery charging paused to regulate temperature</li> </ul>                                           |
| 6.  | MICRO USB INPUT | <ul style="list-style-type: none"> <li>Establishes a USB-based wired link between the NSA unit and a personal computer. Test results can be transferred to PC software (TestDataPro) via this connection.</li> </ul>                                                                                                                |
| 7.  | USB TYPE A      | <ul style="list-style-type: none"> <li>USB flash drive connection to store test results and for software updates.</li> </ul>                                                                                                                                                                                                        |
| 8.  | RJ4510/100/1G   | <ul style="list-style-type: none"> <li>For validation testing of cables up to 1G (functionality is built into the basic NSA kit).</li> </ul>                                                                                                                                                                                        |
| 9.  | DC INPUT        | <ul style="list-style-type: none"> <li>Connection for 5V DC supply (WARNING : Do not connect to any power supply other than the power adapter supplied by AEM).</li> </ul>                                                                                                                                                          |
| 10. | TEST ADAPTER    | <ul style="list-style-type: none"> <li>A variety of plug and play adapters can be used to change the function of the NSA modular platform.</li> </ul>                                                                                                                                                                               |
| 11. | STAND           | <ul style="list-style-type: none"> <li>Retract stand to place it on a table or any other flat surface, freeing you to perform other tasks while keeping an eye on the screen.</li> </ul>                                                                                                                                            |

## Certi-Lite Setup and Testing

Use Certi-Lite testing for validating that the cable performance meets the specified category (such as CAT 6A).

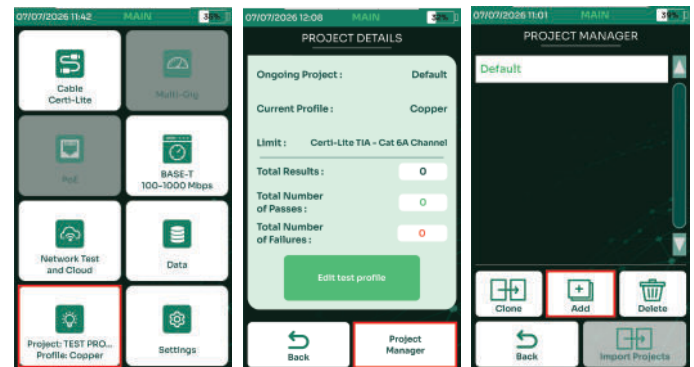
**Note:** Press the "Home" button on the front of NSA unit to return to the Home screen display at any time.

1. Insert the AD-NSA test adapter to the back of the NSA handset if not already inserted by squeezing the latches marked with arrows, aligning the adapter slots with the tabs on back of NSA and push into place until fully inserted and release the latches. To remove adapters, squeeze latches and pull adapter straight back (not up).
2. Press the Power Button to power up NSA. The unit will recognize the inserted test adapter as designated for Certi-Lite.
3. Date/Time setting: On the unit click Settings > Display then select date format (DD/MM/YY or MM/DD/YY). Select either 12 h or 24 h time format. Click on the date to open the edit date menu and scroll up/down to change. Changing the Month, Year, Hours and Minutes is the same process. After all changes are made, click Save.

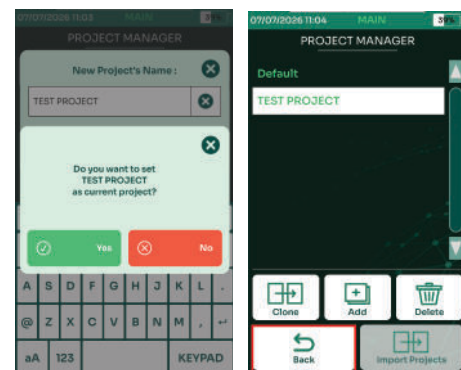


4. In the Display in the Settings menu scroll down to Sleep Mode (screen goes dark after set time, touch screen to wake), Power Off Timer and adjust the display brightness and audio volume.
5. In the Certification in the Settings menu, select Units and choose unit of measure (feet/meters).

6. To set up a project:
  - a. On the NSA unit, select the Project icon in the lower left of the screen, then click "Project Manager" > "Add New". Then enter your project name, hit the green Ok.



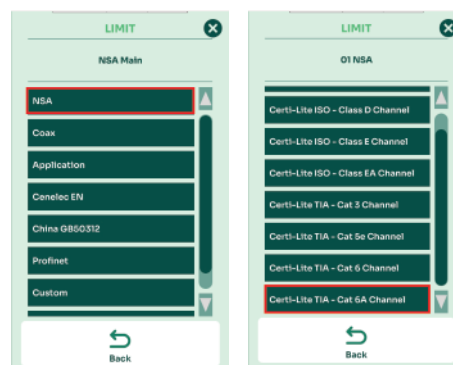
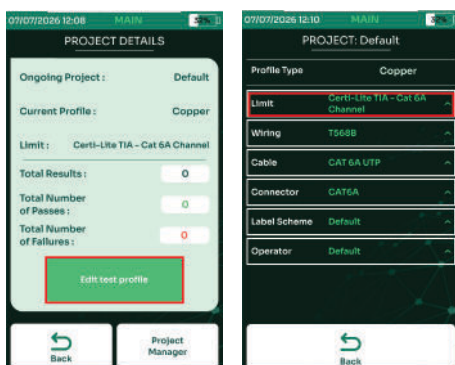
- b. When prompted, hit the green Yes to set the project as the current project.



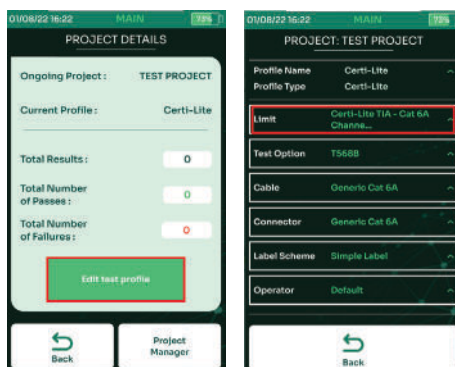
## Certi-Lite Setup and Testing

Use Certi-Lite testing for validating that the cable performance meets the specified category (such as CAT 6A)

Note: Press the "Home" button on the front of NSA unit to return to the Home screen display at any time.



7. Click "Edit test profile" and you will see the following parameters available to edit by selecting them:
  - a. Limit – select the test limit, NSA > Certi-Lite TIA Cat6A Channel for example.
  - b. Test Option – select the T568B or T568A wiring pattern.
  - c. Cable – select a generic cable, Cat6A Unshielded for example, or a specific manufacturer and part number.
  - d. Connector – choose a generic connector or a manufacturer specific one.
  - e. Label Scheme – choose the default simple label scheme, create a new one or choose an existing label created.
  - f. Operator – enter the name or initials of the person performing the tests.
8. Click "Edit test profile" and you will see the following parameters available to edit by selecting them: Once necessary changes are made to the above parameters, NSA is ready to test, click "Home" button to return to home screen.
9. Connect the NSA unit via AD-NSA adapter to one end of the cable under test and the other end of the cable to the RJ45 coupler which is then connected to NSA Remote Terminator. Once NSA is connected to NSA Remote Terminator to opposite ends of the cable, NSA will immediately get a wiremap displayed on the screen and the remote ID of the NSA Remote attached i.e. Remote ID# 1. This is called Live Wiremap and immediately indicates a good or bad Wiremap.
10. If the wiremap shows an open or short, touch the screen in the middle of the wiremap to run diagnostic to show distance to fault. If the Wiremap shows good, simply click "Autotest" on the screen, or press the Autotest button on the front of NSA to initiate the Autotest. Once completed, a test summary screen will appear indicating Pass or Fail.

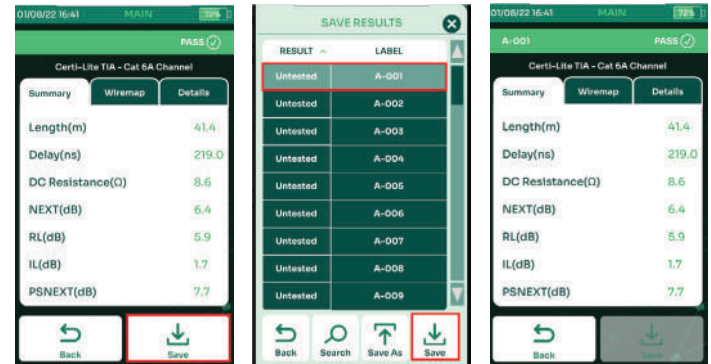
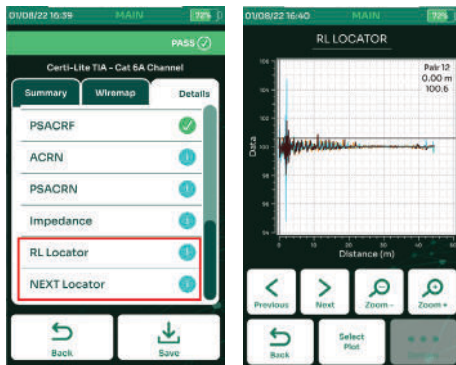


- a. If the test failed, the summary screen will indicate why it failed, additional details, including Return Loss TDR (RL Locator) and Crosstalk TDR (NEXT Locator), can help determine where the problem is located. Correct any problems and retest.

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Use Certi-Lite testing for validating that the cable performance meets the specified category (such as CAT 6A)

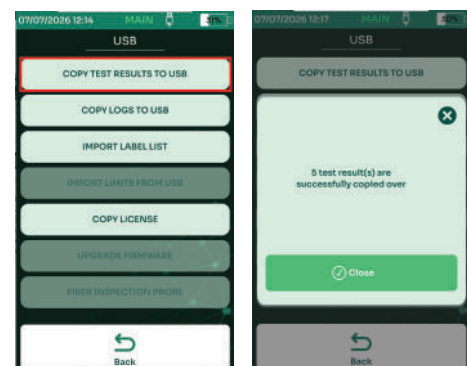
Note: Press the "Home" button on the front of NSA unit to return to the Home screen display at any time.



11. After test is saved, hit Back button. Continue to the next cable to be tested and repeat Steps 9 & 10.
12. To upload all test results once testing is complete, insert the USB flash drive into the USB port on the right side of NSA. A popup menu will appear, choose "Copy Test Results To USB". NSA will upload the tests and give an indication of how many tests were uploaded. The USB flash drive may be removed and plugged into a computer running TestDataPro to manage the test results. Please see the TestDataPro for detailed instructions on managing test results with TestDataPro PC Software.

- b. If the test passed, click the "Save" icon in the lower right of the test summary screen. The first label ID in the label scheme will be selected by default. If this is the label ID being tested, click the "Save" icon, if not, scroll the list to find the correct label ID or click the "Search" icon and type the full label ID and then the green Ok to search for the label.

The label scheme automatically advances to the next label in the chosen scheme after saving from the list. Alternately, to save a label ID not present in the current label scheme, click "Save As" then enter the label ID and click the green Ok to save it.



Validation (MultiGigabit/PoE) & Network Validation Setup and Testing: Project setup menus are similar to the Certi-Lite, but with parameters specific to those respective tests.



WARNING: Fiber laser in use. Do not stare into the beam. Use proper protective equipment and follow safety procedures.

### Notes/Serial Numbers :

**Note:**

*Please note that the Edimax adapter or any other device, such as a USB memory stick, must be removed from the USB port on the tester prior to packing it up. Failure to do so could result in adapter damage during transport. In addition, the Edimax adapter will always draw power from the tester when it is plugged in.*

## Technical Support

Live Phone Support :

Monday - Friday | 8am-5pm (Arizona,USA)

T : 480-534-1232

Email Monitored 24hrs

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For more information and detailed specifications,  
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If you need technical assistance, please visit us at:  
[aemnetworks.com/customer-care](http://aemnetworks.com/customer-care)