



Using the Forensic Link Adapter

Version 1.2

Update the FLA before going to the field

1. Connect the FLA to a known good wired Ethernet connection to the Internet.
2. Plug In the FLA and ensure that an IP address shows up on the main screen after booting. If the screen says Ethernet Unplugged even with an Ethernet cable plugged in, reboot the FLA. If problems persist, contact your network administrator.
3. Scroll to the System Configuration Menu by pressing the Red button.
4. Press the Green (Configure) button to enter the Configuration Menu.
5. Scroll to the Update System Clock menu and press the Green button to Update.
6. After setting the RTC Clock, Scroll to the System Configuration Menu by pressing the Red (Scroll) button.
7. Press the Green (Configure) button to enter the Configuration Menu.
8. Press Green (Update) button to perform a software update of the Forensic Link Adapter.
9. Shutdown the FLA when finished.

Set the System Time with a GPS signal

1. With a view of the sky, plug in the Forensic Link Adapter with a power source.
 - a. Power from the heavy vehicle being downloaded, or
 - b. Plug in using the cigarette lighter adapter in a vehicle, or
 - c. Plug in using the AC/DC converter if AC power is available.
2. Scroll with the Red button (4 presses) to show the Current GPS Fix Data. The date of the last GPS fix will be shown on line 3.
 - a. The FLA system clock can be updated with the time received from the GPS satellites.
 - b. The FLA can be powered down and still keep track of the time.
3. Scroll back to the main screen with the date at the top line.

Downloading data from a heavy vehicle

1. From the main screen, observe the system voltage on the third line. Use caution if the voltage drops below 11 V.
2. Press the green button to scan.
 - a. If the word "Scan" is not next to the green button, then check the ignition key switch.
 - b. If there is still No Vehicle Network, troubleshoot the vehicle systems and wiring.
3. Properly answer the permission question. The time of affirmative permission will establish the date for the download. Pressing the green button starts a data package recording.
4. The FLA will scan the network for Source Addresses and Message Identifiers.
5. The FLA will query for J1939 and J1587 defined data elements from all ECUs on the network, even if they don't have event data available.
6. Once completed, the FLA will display identifying data elements. The VIN may not match the chassis VIN.
7. Pressing Continue initiates a scan for EDR data. If the engine is one of the following, the Get Data option should be available with the Green button:
 - a. PACCAR MX
 - b. Caterpillar
 - c. Detroit Diesel DDEC IV
 - d. Detroit Diesel DDEC V
 - e. Some DDEC 6 and some Mercedes
8. The RP1210 Mode connects the DG Technologies DPA4+ adapter to the vehicle to enable using the FLA as an RP1210 compliant device. This mode requires the DPA windows drivers. It provides some Forensic Write Blocking capabilities too.
9. Once in RP1210 mode, the Green button switches between the J1708 and J1939 networks. (In the J1708 mode, a relay connects also directly connects J1939 to the DPA adapter). Switching between modes compresses the raw log files, which may take a long time.
10. Once finished with Get Data mode or RP1210 mode, press Upload to exit the data acquisition process.
 - a. If the FLA is connected to a live network connection, the Green button will enable an immediate upload.
 - b. Without an Internet connection, the FLA will safely store the data package for uploading.

Preview field data with FLA Preview

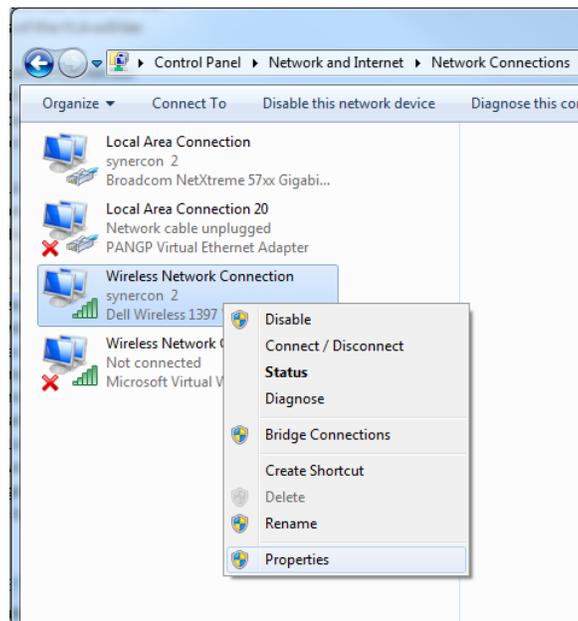
This assumes the FLA does not have an IP address.

1. Connect the FLA to a PC using one of the following techniques:
 - a. If the last four digits of the FLA Serial number is above 0068, then the USB cable can be used. The IP address of the FLA will be 192.168.7.2 even though it doesn't show on the screen.
 - b. The Ethernet cable can be connected between the FLA and a PC with a web browser. If the PC does not have an Ethernet Port, then the USB to Ethernet adapter can be used.
 - i. Scroll the FLA to System Configuration and press the Green (Configure) button.
 - ii. Scroll to the DHCP Server menu and press the Green (Enable) button.
 - iii. This should set the IP address to the FLA to a private IP of 10.0.0.1.
 - c. Connect the FLA to a network with a DHCP server (like your home or office network).
 - d. Share a network connection from your PC (See the Internet Sharing section).
2. Type the IP address of the FLA into the address (not search) bar of your web browser.
3. A list of pending data packages that will be uploaded to the server will be shown. Some data packages will preview speed data.

Internet Sharing with the FLA

If a laptop, tablet, or desktop computer has an active Internet connection, it can often be shared with the FLA using the Internet Connection Sharing feature. This can be used to share a tethered smartphone connection in the field.

1. Plug in the FLA into the PC
2. Select Control Panel ⇒ Network and Internet ⇒ Network and Sharing Center
3. Press Change Adapter Settings (in the left window pane)
4. Right Click on the network connection that provides the Internet connection. This is often a wireless device. Press Properties.



5. From the Network Connection Properties window, select the Sharing tab.
6. Select to Allow Other Network Users to access this connection
7. If needed, select the LAN network device that is plugged into the FLA.
8. If an IP address of 192.168.137.XXX does not show up on the FLA, then try rebooting the FLA.



Internet Connection Sharing can also be done with Windows 8, Windows 10, and Mac OS X.