




IMPORTANT: Completely review this guide before contacting customer support. Refer to the contact information at the end of this document.

The DSS-5000 tester and DCA-8000 charger use WiFi connectivity to send and receive data, as well as update the tester software. The tester must be connected to a WiFi network before test data will be successfully transmitted or a software update can be received.


WiFi Setup Procedure

1. At the Main Menu, tap Settings.
2. Tap on the WiFi icon  to display a list of configured WiFi networks.




NOTE: If initial setup is being performed, the network add list is displayed by default as there are no configured networks. See Adding A Network.


If a network has been previously configured, the tool will automatically connect. An (X) will appear over the network signal strength indicator if the network is not within range or available.

3. If more than one network has been configured, the active network is displayed first in the list. To select a different network, tap the network name then tap .

When connected, the network name moves to the top of the list with ● displayed next to it. An error message is displayed if the tool was not able to connect to the selected network.

4. Tap **X** to exit and return to the network list.
5. Tap  to return to the Main Menu.

Adding A Network

1. At the Configured WiFi Networks screen tap  to add a WiFi network.



A list of detected WiFi networks is displayed.

2. Tap the network name from the list of detected WiFi networks to access the Security and IP Settings. A password may also be required (may require IT assistance).

| | |
|------------|-----------------------------|
| Security | None WEP WPA/WPA2 PSK |
| IP Address | DHCP Static |





NOTE: Passwords can be case-sensitive. Make note of passwords and the on-screen keypad to avoid connection failures due to incorrect password entry.


3. To add a network manually tap  again. Network SSID, Security and IP Settings are required fields.
4. Once the WiFi network has been successfully configured, tap  to return to the Configured WiFi Networks screen.



NOTE: If the selected network requires a User Authentication page, the message "Sign in to WiFi network" is displayed. Tap Continue to be redirected to the page. User credentials (ex. User Name and Password) may require IT assistance.

5. Once the network has been successfully configured, tap  to return to the list of available configured networks. The selected network is displayed at the top of the list with a ● next to it.
6. Tap  to return to the Main Menu.

Deleting A Network

1. Tap a displayed network.
2. Tap  to delete the network and tap Yes to confirm.

Problem: Tester Does Not Detect A WiFi Network:

- Confirm the selected WiFi network can be detected by a another device such as a phone or laptop.
- Perform network connection test using a mobile hotspot or temporary open network (may require IT assistance). If the tool connects to a mobile/temporary network, continue troubleshooting network. If the tool does not connect to temporary network, troubleshoot device with Midtronics.
- Confirm the selected WiFi network is enabled to support 802.11 b/g/n radios over a 2.4Ghz network.



IMPORTANT: The DSS-5000 and DCA-8000 do not support 5Ghz WiFi networks.

- Many WiFi network connectivity issues can be resolved by cycling the router power, even if other wireless clients are still connected. Disconnect the router from its power source for 30 seconds, then reconnect. Refer to router documentation for specific instructions.
- Check the location of the router for obstructions like metal or concrete walls. Check the router antenna for damage or obstructions/interference.

May require attention from your IT professional:

- Confirm the WiFi network router software and firmware versions are up-to-date. Refer to the manufacturer's website for the latest updates.
- Confirm the WiFi network router is not sharing a channel with another WiFi router or routers. While channel sharing is acceptable, problems can arise when there is too much interference. Consider reducing or eliminating during troubleshooting steps.
- Confirm the WiFi network router is set to let DHCP (Dynamic Host Configuration Protocol) leases expire after a specified time. If leases are set to never expire, no new device can connect to the network router once all of the leases have been assigned.
- Confirm that fixed MAC (Media Access Control) address has been disabled or add the Midtronics tools MAC addresses to the WiFi network router list. The MAC address can be found on the Info tab under the Settings menu.
- If SSID (Service Set Identifier) broadcasting has been disabled on the WiFi network router, manually enter the SSID into the tester to allow the WiFi network to be recognized.

Problem: Network Detected But Cannot Be Accessed:

- Verifying other devices such as cell phones or computers can connect to the same WiFi network
- Perform network connection test using a mobile hotspot or temporary open network (may require IT assistance). If the tool connects to a mobile/temporary network, continue troubleshooting network. If the tool does not connect to temporary network, troubleshoot device with Midtronics.
- Confirm the correct wireless network (SSID) was selected when the tool was configured by checking the WiFi settings under the Settings menu.
- If the WiFi network is password-protected, confirm the correct password is entered in the tool configuration. Case sensitive or special characters in passwords commonly cause issues when entering the password during network setup.

- Other devices operating on a 2.4GHz frequency such as cordless phones, baby monitors, microwaves, bluetooth devices, and wireless video equipment may interfere with the WiFi network. Turn off such devices and retry connecting the tester to the WiFi network.
- If available, change the tool's WiFi settings to access another available WiFi network.

Problem: Tester Connects But Does Not Transmit Data:

A warning message is displayed in Messages on the Main Menu if the data transmission was not successful.

- Ensure adequate WiFi network signal strength. If necessary, relocate the tester away from obstructions like metal or concrete walls to access an area of better WiFi coverage.
- Perform network connection test using a mobile hotspot or temporary open network (may require IT assistance). If the tool connects to a mobile/temporary network, continue troubleshooting network. If the tool does not connect to temporary network, troubleshoot device with Midtronics.
- Other devices operating on a 2.4GHz frequency such as cordless phones, baby monitors, microwaves, bluetooth devices, and wireless video equipment may interfere with the WiFi network. Turn off such devices and retry connecting the tester to the WiFi network.

May require attention from your IT professional:

- Confirm that outbound port 80 is open on the router.
- Confirm the ability to ping host "svc.midtronics.com" on the router.
- Make sure Proxy Servers are not blocking Midtronics tools.
- Make sure the WiFi network allows file attachments from Midtronics tools
- Make sure Malware Protection, Anti-Virus, and Firewall Settings are not blocking Midtronics tools.

IP Addresses

Midtronics BMIS solution uses the following IP Addresses, which should be whitelisted if network access is otherwise blocked.

| | | |
|---------------|----------------|----------------|
| 104.43.246.6 | 40.69.172.106 | 52.173.199.181 |
| 52.173.94.173 | 52.173.194.249 | 52.173.19.232 |

Connections

Midtronics tools use the following connections:

| URL | Port | Frequency of Use | Description |
|---|--------------------------|--------------------|--|
| http://svc2.midtronics.com | 80 - http 443 - https | Frequently | Used to interact with various Midtronics BMIS services |
| http://www.midtronics.com/attribution DSS | 80 - http 443 - https | Frequently | Used to determine if a network redirects to a login screen |
| http://clients3.google.com/generate 204 | 80 - http 443 - https | Frequently | Used to determine walled garden networks |
| http://midtronics.com | 80 - http 443 - https | Rarely | Used to verify network authorization during setup |
| mail.mdxbmiseng.com | 587 | When email is sent | Default email server |
| 2.android.pool.ntp.org | 123 | Frequently | Network Time Protocol |

Data

Data will be encrypted when transferred from the tool to Midtronics URLs. Username and password credentials will be required for viewing the data online. No Customer Personal Indefinable Information (PII) will be transferred using the battery testers.

| Data Transferred To BMIS | | |
|--------------------------|-----------------------------|---------------------------|
| Location ID | Voltage | Conductance Test Decision |
| Serial Number | CCA | Test Code |
| Tool Type | Rated CCA | Starter Decision |
| Service Date | VIN Capture Method | Starter Test Code |
| Service Time | Battery Units | Alternator Decision |
| VIN | Battery Temp | Alternator Test Code |
| Model Year | Temp Unit | Transmitted On |
| Vehicle Make | Battery Location | Pack Configuration |
| Vehicle Model | Vehicle Status | Pack Number of Batteries |
| Tech ID | Amp Hour | Report Date |
| Test Type | Final Battery Test Decision | Charge Time |
| Battery Type | Reserve Capacity Decision | Initial Voltage |

Additional tool performance data will be transmitted, this data will be used for software enhancements and bug fixes.



www.midtronics.com

Corporate Headquarters

Willowbrook, IL USA
Phone: 1.630.323.2800
Canadian Inquiries
Toll Free: +1 1 866 592 8052

Midtronics b.v.

European Headquarters
Houten, The Netherlands
Serving Europe, Africa, the Middle
East, and The Netherlands
Phone: +31 306 868 150

Midtronics China

China Operations
Shenzhen, China
Phone: +86 755 2374 1010

Midtronics India

Navi Mumbai, India
Phone: +91 22 2756 4103/1513
Asia/Pacific (excluding China)
Contact Corporate Headquarters
Phone: +1.630.323.2800