



**WI-FI OPERATION
FOR
2-OUTPUT TESTERS**

APPENDIX E: WI-FI OPERATION

This section includes the process for setting up a wireless Remote, such as an iPad, with the appropriate App for use with the Laversab 2-output Tester. The wireless Remote will function only if the tester has been installed with the optional wireless capability.

The wireless antenna is located on the Top Panel and is clearly marked. Care must be taken not to obstruct or cover the antenna with metallic objects, since this will be detrimental to effective Wi-Fi operation.

Note: The Wired-Remote must be connected to the tester and operational even when the iPad is being used.

E.1 iPad COMPATIBILITY

The Laversab App is compatible with the following iPads configured with iOS 8.1 or higher:

iPad 2, iPad Mini, iPad Mini 2, iPad Mini 3, iPad Mini 4, iPad Air, iPad Air 2, iPad Pro.

E.2 DOWNLOADING THE APP

The Laversab App must be downloaded from the Apple App Store. Although the App itself is provided at no charge, a credit card is required to create an Apple Store account which enables you to access and download the App.

Once you have access to the App Store, search for “Laversab” and the app should appear with the icon as shown below. If more than one App is displayed, select the App labeled “CH-2 / vx.xx”, where ‘x.xx’ is the version number. If more than one version of the App is displayed, select the one with the latest version number. Do not select the App labeled “CH-3 / vx.xx”, since this is intended for use only with a 3-Output tester.



E.3 NETWORK SELECTION

Once the App has been installed on your iPad, the following steps need to be performed to connect to the tester through the App.

- a. Turn ON the tester and ensure that the Wired-Remote is displaying the Main Screen. The internal wireless access-point will now be active.
- b. On the iPad select the ‘Settings’ icon. Then select the Wi-Fi section. (See Figure E.1 below). The right side will show all the Wi-Fi networks available. One of the networks will be labeled “LAV-xxxx”, where ‘xxxx’ is the serial number of the tester you want to connect to.
- c. Select the network with the correct label, ensuring that the serial number matches the serial number of your tester. The serial number of the tester can be found on the label placed on the inside of the lid of the tester’s case, towards the bottom right corner.
- d. Once the correct network has been selected, you may be asked for a password for this network. The password is “lavus505” (the first letter is a non-capitalized L). Once the password has been entered, the Settings column will show the selected network (LAV-xxxx) in the Wi-Fi section.

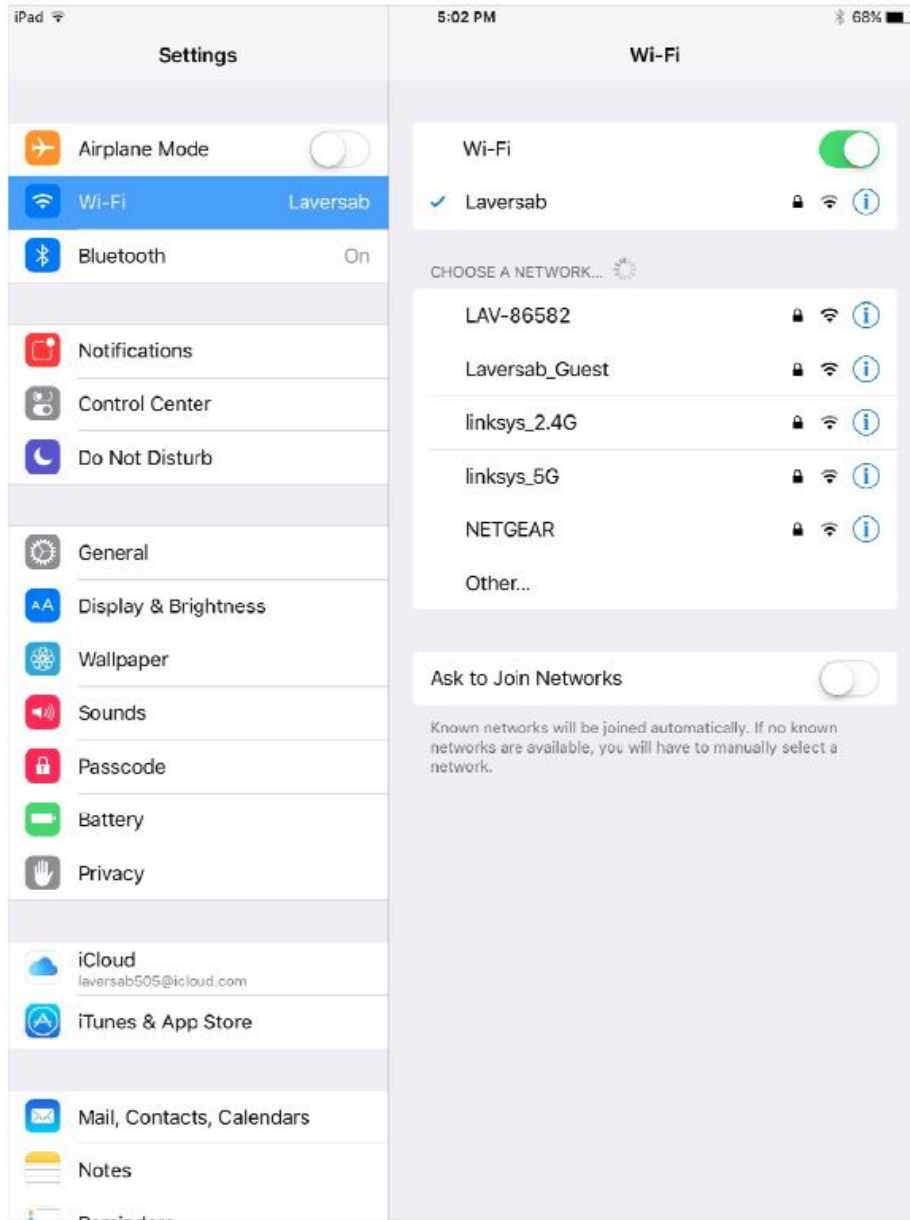


Figure E.1

E.4 STARTING THE APP

Locate and start the Laversab App labeled “2-CH / vx.xx”. The iPad screen will appear as shown in Figure E.2 below for about 3 seconds.

The next screen displayed will appear as shown in Figure E.3 below. Press and hold down the Power key displayed on the iPad screen (bottom right), for about 2 seconds. A tone will sound and the screen will appear similar to the one shown in Figure E.4 below. The screen will match the screen shown on the Wired-Remote.

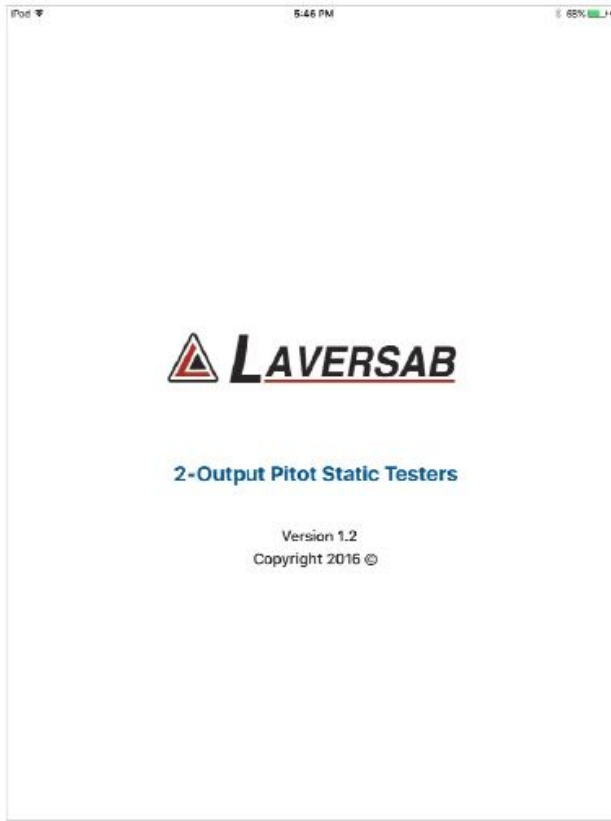


Figure E.2

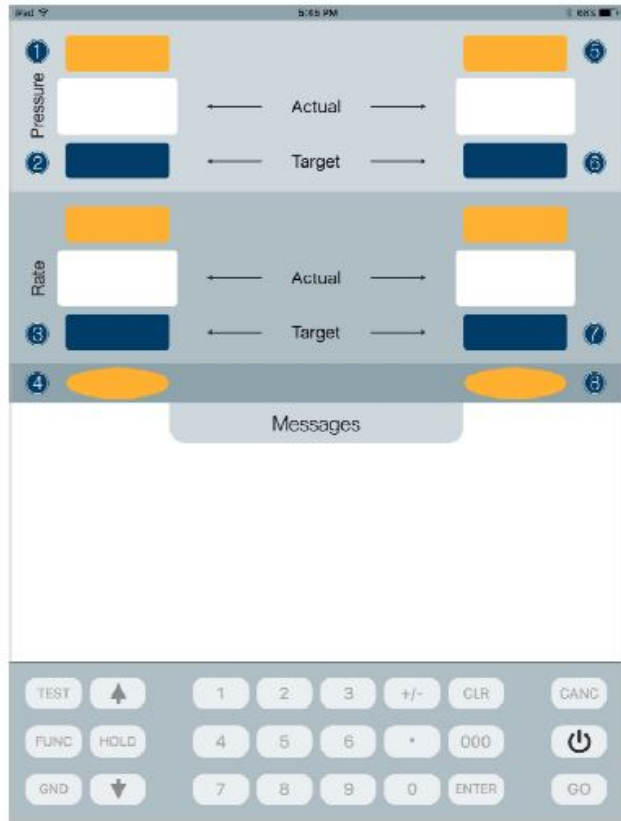


Figure E.3



Figure E.4

Note: When the iPad is connected through the App to the tester, the keypad on the Wired-Remote is locked, as indicated by the message “Wireless Remote enabled. Keypad locked”, shown on the Wired-Remote. The upper section of the display on the Wired-Remote will continue to be updated, even though the keypad is locked. Once the App disconnects from the tester, or if the wireless connection is lost, the keypad on the Wired-Remote becomes active again and the above message is cleared.

E.5 CLOSING THE APP

To disconnect the App from the tester, simply press and hold the Power key displayed on the iPad screen for about 2 seconds. A tone will sound and the screen will appear as shown in Figure E.3 above. This indicates that the App is disconnected from the tester. On the Wired-Remote, the message “Wireless Remote enabled. Keypad locked” will be cleared, indicating that the Wired-Remote is fully functional.

Note: If the App is not closed as described above, the Wired-Remote will remain locked out. However, if the iPad is turned off without closing the App, wireless communication will be lost and the Wired-Remote will automatically revert to full functionality within about 20 seconds.

E.6 LOSS OF WIRELESS COMMUNICATION

Wireless communication between the tester and iPad may be lost due to several reasons include loss of Wifi signal from the tester. If there is a loss of wireless communication between the iPad and the tester for more than 20 seconds, the tester will automatically disconnect from the iPad App and the Wired-Remote will become fully functional.

To reconnect the tester to the iPad App, in iPad Settings, check that the correct network is selected and restart the App. The Power key in the App may then be used to establish communication between the App and the tester.

Note: If the App is minimized during operation for more than 3 minutes, communication between the App and the tester will be lost. Pressing the Power key in the App to first disconnect and then once more to reconnect, will re-establish communication.

E.7 OPERATION WITH THE iPad

The tester can be operated with the iPad in almost exactly the same manner as from the Wired-Remote. However, there are a few differences, as detailed below.

- a. Instead of having to make selections only with the keypad, selections can also be made by touching the desired section on the screen. To change units, you can touch the area where the units are displayed (yellow background), or the circled number shown on the display, or the relevant number on the keypad. The same is true for target values (blue background) and modes (yellow ovals). Other selections can also be done using the touch-screen on the iPad.
- b. Function 3 (Brightness) and Function 8 (Calibration) are not activated on the iPad.

E.8 HELPFUL NOTES

- Ensure that you have selected the correct network corresponding with your tester’s serial number.
- If the wireless connection is lost, or the iPad is not operational, you can continue to operate the tester from the Wired-Remote.

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- If the wireless connection is lost, the tester will continue to perform the operation already in progress. Switching to the Wired-Remote is seamless. However, any information displayed in the lower section of the display screen will not be duplicated on the Wired-Remote when it becomes fully functional. (For example, Leak-test results or Self-Test progress).
 - If there is a large number of Wifi networks in the area (typically more than 10), it is possible that the wireless communication will not be very effective due to limitations of Wifi bandwidth.
 - When first connecting to the tester's network, keep the iPad close to the tester.
 - The Wifi signal may deteriorate significantly when the iPad is more than 100 feet away from the tester.