

WX150 - Test Set Software Updates

This software is **NOT** compatible with WX150 WiFi test set which can be identified by their serial number prefixes, starting with:

- a. **TR5** – WX150 Air Expert.
- b. **TGZ** – WX150 WiFi Air Expert.

Software update instructions are provided at the end of this document.

Software version 01.00.0032

March 24, 2023

Release Scope:

Maintenance Release. General availability.

New features and improvements:

1. Fixed an issue with speedtest server list not being visible in manual mode (for WiFi, 10/100/1000BASE-T and 1000BASE-X)

Known issues or limitations:

- a. No new significant issues to report.

Software version 01.00.0022

Oct 22, 2019

Release Scope:

General availability.

New features and improvements:

1. Added AP Filter to Spectrum Analyzer
2. Added the ability to group SSID in AP Scan
3. Added XML file for all results
4. Modified 2.4G band stop frequency from 2480MHz to 2495MHz

Known issues or limitations:

- a. No new significant issues to report.

Software version 01.00.0018

Apr 17, 2019

Release Scope:

General availability.

New features and improvements:

1. Remove WORLD from options list
2. Fixed BSSID display issue for Japanese language
3. Added BSSID to channel details screen
4. Fixed connection problem to APs with special characters in the password

Known issues or limitations:

- a. No new significant issues to report.

Software version 01.00.0016

Mar 29, 2019

Release Scope:

General availability.

New features and improvements:

1. AP scan automatically reconnects to last AP if WiFi signal lost
2. Added ability to view clients associated with certain APs in AP scan
3. Added ability to view BSSID of APs in channel table details
4. Increased max number of scanned APs to 2000
5. Fixed BSSID being cut off in AP scan menu

Known issues or limitations:

- a. No new significant issues to report.

Software version 01.00.0015

Mar 1, 2019

Release Scope:

General availability.

New features and improvements:

1. Fixed instability with locate function.

Known issues or limitations:

- a. No new significant issues to report.

Software version 01.00.0014

Jan 11, 2019

Release Scope:

General availability.

New features and improvements:

1. Added new option in setup menu under scan frequencies. User can now choose whether to scan just the 2.4G or 5G or both the 2.4G+5G bands.
2. Increased inactive AP time from 15min to 30min.
3. Added Ookla Speedtest capabilities.

Known issues or limitations:

- a. No new significant issues to report.

Software version 01.00.0013

Oct 17, 2018

Release Scope:

General availability.

New features and improvements:

1. New beta feature released for V-Perf Site Survey function. This new feature allows to draw on screen or import a floor map from USB (jpeg, bmp, png) and run V-Perf tests in site survey mode. In site survey mode, user marks his/her location on the map and V-Perf measurements are associated with the user's location.
2. Added support for remote software upgrade via web browser. Note that this feature will only be supported after the first upgrade (via USB) to this release.

3. Addressed authentication issue with passwords using \$ and # characters
4. Addressed display issue with SSID name containing Chinese characters
5. Added software option for disabling management port BT/WiFi

Known issues or limitations:

- a. No new significant issues to report.

Software version 01.00.0008

Jun 05, 2018

Release Scope:

Initial Release. General availability.

WX150 WiFi Air Expert Features

The following features are supported in the initial GA release:

1. Detection and connection to 802.11a/b/g/n/ac devices
2. Network discovery and display of Access Points, Clients and Channels in tabular and graphical format
3. List of AP detailed capabilities discovery including SSID, BSSID, channels, security, supported data rates, signal and noise levels, co-channel and adjacent APs and associated clients
4. Survey coverage problems with signal and noise levels tracking
5. Channel usage by utilization and number of APs
6. Discovery of associated and non-associated WiFi Clients present in the network
7. Location and track a specific AP or client
8. One button Auto-Test to analyze the health of the WiFi network with analysis of security, coverage, interference, top talkers and connectivity with configurable AP list
9. Auto Channel Selection recommendations
10. Connectivity testing with DHCP connection to APs, Ping, Trace Route and ARPWiz
11. Network performance testing with dual ended V-Perf Upload/ Download throughput testing
12. Ethernet 10/100/1000-T and 1000-X ports to verify end-to-end throughput performance
13. PoE testing
14. Optional dual band 2.4 GHz and 5 GHz spectrum analyzer to easily discover and identify WiFi and non-WiFi interference
15. Optional V-Probe Responder Accessory for V-Perf throughput performance testing
16. EZ Remote support for remote control and connection through EZ Remote Server website. Refer to instructions at the end of the document.
17. Support for Standby mode. To enter standby mode press Save + Home keys for 3 seconds and confirm. To Wake up the unit and resume operation press Home key for 3 seconds.

Known issues or limitations:

- a. No new significant issues to report.

References

Test Profiles and Test Results Backup Procedure

The test set's File Management system offers backup [To USB] and restore [From USB] functions. They can be found in the **>Utilities >Files >Saved**, on the left side of the screen.

To enable the [To USB] and [From USB] functions, insert a FAT32 USB Memory stick into the micro USB-B port (or use a micro USB-B to USB-A OTG adapter for regular USB-A memory sticks). Wait for the USB memory to be recognized (the folder icon will change appearance with a green USB memory icon).

Select the desired test results, test profiles, screen capture and protocol capture files to be saved, using the individual check boxes. For a full backup, check the master box on the header and all files will be marked.

Tap the [To USB] button to initiate the file transfer procedure and wait for the progress bar to finish. Original files won't be deleted from the test set.

When all files have been copied to the memory stick, you may tap the folder icon and select "Remove USB Drive" to make sure all cached data is transferred to the USB drive, especially when transferring small files.

It is highly recommended to select all important test profiles and results, and make a backup copy to a USB drive, before upgrading the unit's software. The software upgrade process may clean up all the data stored in the test set. After the unit has been updated, use the [From USB] function to restore the data back to the test set.

Updating the Test Set Software

To download the latest software version available, go to <https://www.veexinc.com/en-us/Support/Software>, enter the first four characters of the test set's serial number (e.g., TEBC) and use the links to download the software packages and Release Notes to the PC. Unzip the file to obtain the Software Image file (e.g., wx150-veex-arm.tar.gz).

The test set must be connected to AC/DC charger at all times during the whole upgrade process. DO NOT turn it off at any time; the update process would take a few minutes.

To verify the software version number installed, turn the test set back on, open the **Utilities** section, select **Settings**, and open **About**. You may also use the Web Remote Access to get the information.

Using a micro-B USB memory stick or USB-A Memory Stick with an OTG adapter

Make sure the test set can detect the memory stick, before starting this procedure.

- Turn the test set's power OFF.
- Copy the Software Image file to the root of the memory stick.
- Plug it into the test set's micro USB-B port or into the USB-A to micro-B USB OTG adapter.
- **Option A:** For a clean install (reset all settings and clear internal storage), turn the test set ON, by pressing the **SAVE+POWER** buttons simultaneously, until a tone (beep) is heard and wait for the boot up process to finish.
- **Option B:** To preserve some existing settings and data, turn the test set ON, by pressing the **POWER+HOME** buttons simultaneously, until a tone (beep) is heard and wait for the boot up process to finish.
- The firmware update process starts. This could take several minutes. The test set will reboot itself off at the end.
- Additional ROOTFS and/or CPLD upgrade menu(s) may be presented after the first reboot. Tap on **OK** to proceed with those upgrades as the last part of the update process.
- Reboot the test set.

Updating the Test Set Software via WiFi or LAN

Make sure the test set is ON and connected to a wireless LAN, set as an access point (AP) or connected to a LAN (using the USB-RJ45 adapter cable).

The Access point function is useful in places where no local area networks (wired or wireless) are available or accessible and/or USB memory sticks are not allowed. To enable the AP function, go to **>Utilities >Tools >WiFi Wiz**, select the **AP Mode** tab, edit the settings if required, and press **Enable**.

PCs, Mac, tablets and smartphones can be used to perform this task, as long as they provide access to the file system and allow you to select the install package file.

- Open the Web Browser and enter the IP address of the test set into the browser's address/search field (e.g., 10.0.20.1). The test set's IP address is displayed at the bottom-left corner of the screen,
- Once the test set's Web Remote Access page loads, select **Upgrade** from the menu on the left side of the screen.
- Tap or click on the **Select File** button and point it to the Software Image file.
- Tap or click on the **Upload** button to transfer the Software Image file to the test set.
- Once the file transfer is done, tap or click on **Upgrade** and let the test set go through the process, uninterrupted. This will take a few minutes.
- Additional ROOTFS and/or CPLD upgrade menu(s) may be presented after the reboot. Tap on **OK** to proceed with those upgrades as the last part of the update process.
- Reboot the test set.

Connecting to the Test Set using EZ Remote

EZ Remote is an on-demand peer-to-peer remote control functionality that works over the internet through firewalls.

- The test set supports remote connectivity and remote control via the EZ Remote Server Website.
- Connect the WX150's management interface (WiFi or Ethernet via USB to Ethernet OTG adapter) and obtain an IP address. The IP address can be public or private and provide internet access.
- Go to Utilities > Settings > More > EZ Remote
- Enable EZ Remote and press Apply
- Wait for Registration process to succeed. If Registration **fails**, verify that you have internet access.
- Instruct Remote user to open ezremote.veexinc.com on their web browser and enter Session ID in the box
- The unit can now be accessed and remotely controlled via the web browser

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