



## Device Diagnostics

### Maximize the Availability of Zebra Mobile Computers

Zebra customers deploy mobile computers across globally distributed locations to keep their businesses up and running. Maximum device performance is crucial to continue to their operations. Unavailability of devices due to faultless devices sent in for repair adversely affects overall productivity.

When your users have trouble with their Zebra mobile computers, the issue is often a simple one that can be resolved on the spot — from restoring a lost wireless connection to rebooting to free up needed memory, identifying battery health and more. But without an easy way to uncover these simple-to-resolve issues, devices are often returned to the Zebra Service Center, where no fault is found, resulting in device downtime. While a Zebra OneCare™ maintenance plan may cover the costs of the repair services, your organization still pays a high cost due to devices with no fault found while out of your workers' hands. Productivity is reduced when workers outside in the field and inside your facility are without their Zebra mobile devices, affecting the overall efficiency of your entire operation. And then there is the cost of the time spent packaging, shipping and tracking devices out for repair — and reconfiguring those devices upon return.

Now, there's a tool that can help eliminate the high cost of all those unnecessary device returns and loss of productivity that could have been avoided — the Device Diagnostic Tool. With this Mobility DNA tool, administrators and end users alike can instantly test and diagnose the main operability systems on Zebra mobile computers with a simple press of a button to determine system health and functionality. Results reveal whether the issue can be fixed onsite — or whether a trip to the Zebra Service Center is required. If needed, Zebra technical support experts can leverage this data to troubleshoot the device over the phone to reach resolution and keep the device out in the field. The result? Your devices spend more time in the hands of your workers, improving productivity, device uptime, return on investment and unnecessary returns to the Repair Center. Keep your Zebra mobile devices right where they are most valuable, in the hands of your workers, with the Device Diagnostics tool — only from Zebra.

#### **Get at-a-glance easy to read “red light/green light” results**

If the device passes the test, the test is highlighted in green, while tests that fail are highlighted in red, making it very easy to determine in seconds whether a device needs a trip to the repair center, or the internal service desk.

#### **Automatically identify scanner operability on your Zebra mobile devices**

The Scanner Test checks whether the scanner in the device is operable. The test checks whether the device can successfully scan a barcode without error.

#### **Instantly pinpoint common system errors**

Certain tests reveal buttons, touch screen and audio functionality. Button test checks the operation of push-to-talk, left or right scan trigger, volume up and volume down device buttons. The touchscreen test checks for operation of the device touch display. The audio test checks for operation of the device microphone and speaker. And an SD card test checks for SD card presence, total/free space and read/write status.

#### **Identify common connectivity errors**

The Device Diagnostics tool can test all available connections — Wi-Fi (WLAN), cellular (WWAN), and Bluetooth. Wi-Fi tests check for operation of the Wi-Fi radio and returns Wi-Fi-related information such as MAC address, network test results from specified address, radio power cycle result and signal strength. WWAN tests check for operation of the WWAN radio and return related WWAN information

such as SIM state, voice state, data state, WAN type, signal strength, phone number and device ID information. Bluetooth tests check whether the Bluetooth radio is operable and returns Bluetooth-related information such as Bluetooth name, radio power cycle result, radio functional/non-functional, and discoverable/connectable.

#### **Identify common battery and charging errors**

You can see whether or not the battery is charging and if the battery isn't charging, which could potentially be a cradle issue. The test returns battery related information such as part number, manufacture date, decommission status, voltage, current and temperature, helping you identify whether or not it needs to be replaced. And you can set the maximum cycle count threshold for battery replacement to prevent old batteries that can no longer hold a full charge from impacting workforce productivity.

**ELIMINATE NEEDLESS TRIPS TO THE REPAIR CENTER AND KEEP YOUR ZEBRA MOBILE DEVICES IN THE HANDS OF YOUR WORKERS WITH DEVICE DIAGNOSTICS**

For more information, visit [www.zebra.com/devicediagnostics](http://www.zebra.com/devicediagnostics)  
or access our global contact directory at [www.zebra.com/contact](http://www.zebra.com/contact)

# Sample Device Diagnostic Tool Screens



### AUDIO TEST

Tests

Audio Test

Record audio to begin test

Record

Play

Time Remaining  
118secs

PASS FAIL

RUN TESTS

### BATTERY TEST

Tests

Battery Tests

Last run: Mon, 20th Apr 2020

Results

- Part Number BT-000314-50 R.04
- Serial Number T1678
- Manufacture Date 2018-05-09
- Decommission Status Good
- Voltage 4.168 V
- Current -671382 µA

RUN TESTS

### BLUETOOTH TEST

Tests

Bluetooth Tests

Last run: Mon, 20th Apr 2020

Results

- Name TC56
- Radio Power Cycle Test Successful
- Functional/Non-functional Functional
- Discoverable/Connectable Connectable

RUN TESTS

### BUTTON TEST

Tests

Time remaining: 4min

Press the following buttons to complete this test:

- Push to talk Button waiting...
- Left and Right Scan Buttons waiting...
- Volume Up (+) Button waiting...
- Volume Down (-) Button waiting...

RUN TESTS

### SCANNER TEST

Tests

Scanner Test

Last run: Mon, 20th Apr 2020

Scan a barcode to begin test

Time Remaining  
58secs

RUN TESTS

### SD CARD TEST

Tests

SD Card Tests

Last run: Wed, 9th Jun 2021

Results

- SD Card Present
- Read PASSED
- Write PASSED
- Total Space 29.71 GB
- Free Space 29.61 GB

RUN TESTS

### TOUCH SCREEN TEST

Settings

File path:  
Configuration import path:  
/enterprise/user/deviceselftest/configuration.xml  
Log output and configuration export path:  
/storage/emulated/0/Android/data/  
com.symbol.selfdiagnostics/files

Status Log  
status.log

History Log  
history.log

Log File Max Size(MB)  
25

IMPORT EXPORT

### WWAN TEST

Tests

WWAN Tests

Last run: Mon, 20th Apr 2020

Results

- Sim State Present
- Voice State Voice in service
- Data State Data Connected
- WAN Type LTE
- Signal Strength -81dBm
- Phone Number Valid

RUN TESTS

### WI-FI TEST

Tests

Wifi Tests

Last run: Mon, 20th Apr 2020

Results

- MAC Address Valid
- Network Test Connected
- Radio Power Cycle Test Successful
- strength -73dBm
- ssid Madhu
- ip 192.168.10.108

RUN TESTS



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