

MobileXPRT 3 user manual

Introduction

MobileXPRT is a benchmark to evaluate the performance of Android devices. MobileXPRT tests are based on real-world user scenarios and produce user-relevant metrics and results.

Test and score details

MobileXPRT consists of following six tests.

- **Apply Photo Effects.** This test measures total time to apply photo effects (Sepia, Vignette, Grayscale, and Sharpen) to 20 photos (12 MP). Each effect is applied to a set of five photos.
- **Create Photo Collages.** This test measures total time to create five photo collages with four photos in each collage. Effects are added to each photo before including in the collage.
- **Create Slideshow.** This test measures total time to create a slideshow video (H.264, 720p) from a photo album.
- **Encrypt Personal Content.** This test measures total time to encrypt (AES 256-bit) 12 files (151 MB total size).
- **Detect Faces to Organize Photos.** This test measures total time to check a set of 7 photos for faces.
- **Scan Receipts for Spreadsheet.** This test measures the total time it takes to scan 20 receipts using optical character recognition. Data from the receipts is then added to a spreadsheet.

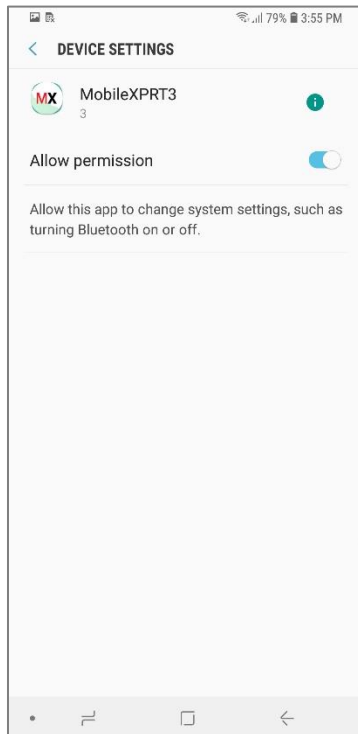
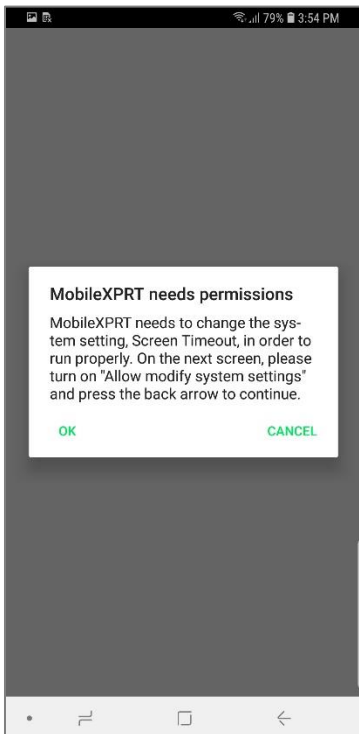
The metric for the six individual performance tests is time in seconds. The overall score is calculated by taking a geometric mean of the six ratios between individual measured times from a calibration machine (Samsung Galaxy S8) and the test device.

Installation instructions

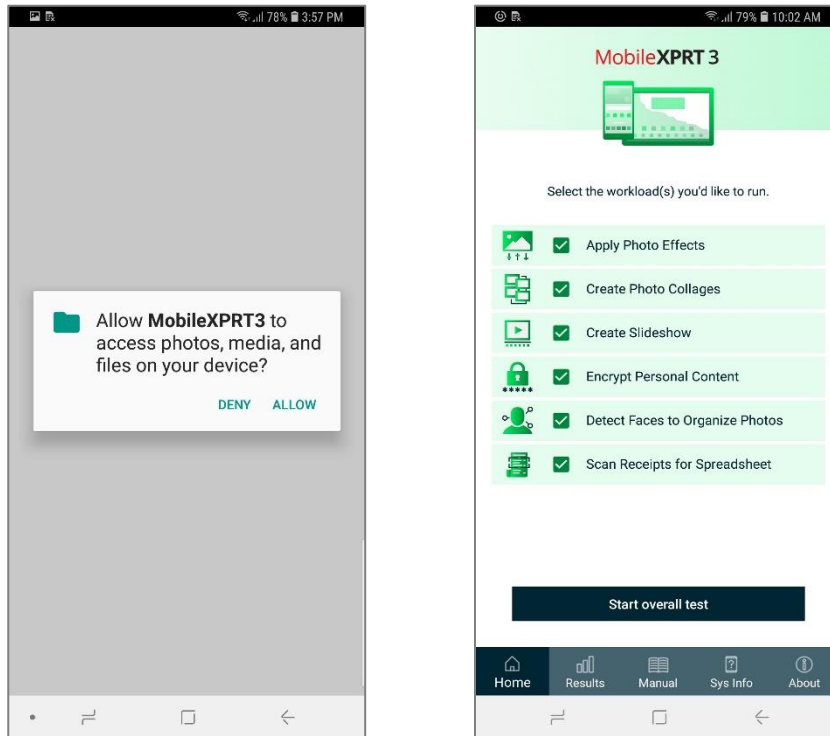
1. Download the mobileXPRT3.apk file from the MobileXPRT.com.
2. Copy the APK file to /Android/data on the test device.
3. Tap to select the mobileXPRT3.apk file.
4. If Android asks if you want to install this application, select Install.



5. On the App installed screen, select Open.
6. On the MobileXPRT3 needs permissions screen, select OK.
7. The Device settings > permissions page will appear. Change the toggle to on to grant permissions to MobileXPRT 3.



8. Tap the back button. Select Allow to allow MobileXPRT 3 to access photos, media, and files.
9. Select OK to allow the app to copy and extract test content from BenchmarkXPRT.com.
10. Once the MobileXPRT 3 home screen appears, the installation process is finished.



Test device configuration and reliable testing

The following test device configuration steps are recommended for reliable testing of MobileXPRT:

- If applicable, turn off automatic updates from the Google Play store. To do so, open the Play Store app, select the drop-down menu at the top of the screen, and select Settings. Select Auto-update apps, and choose the Don't auto-update apps option. On devices that do not access the Google Play store, you may need to turn off updates from any connected vendor services or app stores.
- Set the device to Airplane mode. Automatic system updates or alerts, if triggered during the test, could cause test failures and/or impact test results.
- Set the display screen timeout ("Settings | Display | Sleep") to the longest time interval allowed by the device. You may also be able to set the option to stay awake by checking Developer Options | Stay awake.

Testing instructions

1. Click the Start overall test button to begin the test run. All tests are selected to run by default. The test takes approximately 10 minutes to complete.

2. To run individual workloads or a custom selection, deselect the workloads that you do not wish to run. Tests that are deselected are greyed out. After selecting the individual workloads that you wish to run, click the Start selected tests only button.

Results

At the end of a successful test, the overall score and individual workload scores are automatically displayed. Results for all previous successful tests are archived on the test device and can be accessed by clicking the Results tab on the bottom menu bar.

Uninstall

MobileXPRT can be uninstalled from the device's Application Manager or via the app icon. To remove MobileXPRT results and all benchmark files completely, delete the com.MobileXPRT folder and mobilexpert3.apk in /SDCARD or /Phone/Android/data.

Support

If you need technical support or have any questions, please send a message to BenchmarkXPRTsupport@principledtechnologies.com.