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# MAXREFDES103

Software package 4.0.1 release notes

11/13/2020

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## MAXREFDES103 Host Firmware Release Notes

Version	Date	History	Known Issues
4.0.1	11/13/2020	<ul style="list-style-type: none"> <li>▪ Optimized Host FW</li> </ul>	<ul style="list-style-type: none"> <li>▪ No support for SCD wavelength Selection</li> </ul>
4.0.0	10/26/2020	<ul style="list-style-type: none"> <li>▪ SCD only mode support, wavelength selection</li> <li>▪ Sensor data size reporting command</li> <li>▪ Accel selection command</li> <li>▪ IBI mode updates</li> </ul>	<ul style="list-style-type: none"> <li>▪ No support for SCD wavelength Selection</li> </ul>
3.9.1	8/07/2020	<ul style="list-style-type: none"> <li>▪ Improved firmware performance</li> </ul>	
3.9.0	6/30/2020	<ul style="list-style-type: none"> <li>▪ Configurable to support MAX32664C polling and mfio event reporting modes</li> <li>▪ Commands to enable/disable SCDSM operation on MAX32664C in mfio mode</li> <li>▪ <b>Compatible with older versions in regular polling mode</b></li> </ul>	
3.8.1	4/30/2020	<ul style="list-style-type: none"> <li>▪ Heart Rate Profile is active during flash logging.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Heart Rate Spikes from MAX32664C, Release package marked as “ALFA RELEASE”</li> </ul>
3.7.0	2/21/2020	<ul style="list-style-type: none"> <li>▪ LED firing sequence setting feature</li> </ul>	<ul style="list-style-type: none"> <li>▪ Raw PPG Data rate supported is reduced to 50 samples per second</li> </ul>

3.6.0	1/28/2020	<ul style="list-style-type: none"> <li>▪ BLE data rate is reduced to minimize packet loss in noisy environments.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Raw PPG Data rate supported is reduced to 50 samples per second</li> </ul>
3.5.0	1/17/2020	<ul style="list-style-type: none"> <li>▪ Fix on data time stamp issue</li> <li>▪ Fix on LED brightness</li> <li>▪ Improvement on battery level indicator</li> </ul>	<ul style="list-style-type: none"> <li>▪ BLE data loss in Noisy Environments</li> </ul>
3.4.5	12/19/2019	<ul style="list-style-type: none"> <li>▪ New indicator LED functionality</li> <li>▪ Single button flash logging start</li> <li>▪ Easy access to MSD-USB mode</li> <li>▪ Feature to query BLE MAC address</li> <li>▪ Feature to set BLE radio power</li> <li>▪ Fix on file system overwrite problem</li> <li>▪ Fix on flash log file date problem</li> <li>▪ New filesystem component</li> <li>▪ Support for 64Mb flash recording</li> <li>▪ Update on flash log file formats</li> <li>▪ Sensorhub Authentication components</li> </ul>	<ul style="list-style-type: none"> <li>▪ timestamp sometimes stops incrementing when watch is open for long durations</li> </ul>

## MAXREFDES103 PC GUI Release Notes

Version	Date	History	Known Issues
5.8.2.0	10/26/2020	<ul style="list-style-type: none"><li>▪ IBI mode updates</li><li>▪ See Device Studio Release Notes within Release Package</li></ul>	
5.8.1.1	6/25/2020	<ul style="list-style-type: none"><li>▪ MFIO mode selection for MAX32664C</li><li>▪ SCDSM selection for MAX32664C</li><li>▪ Fix on format passing</li></ul>	
5.8.0.0	4/3/2020	<ul style="list-style-type: none"><li>▪ Fix on battery level reporting</li><li>▪ warning for possible wrong key in me11 firmware update</li><li>▪ Fix on format passing</li><li>▪ Fix on power saving mode.</li><li>▪ Updated UI .</li></ul>	
5.7.0.6	2/12/2020	<ul style="list-style-type: none"><li>▪ Support for MRD220HR</li><li>▪ MSBL flashing support for MRD220HR older Host FWs</li></ul>	
5.7.0.5	12/17/2019	<ul style="list-style-type: none"><li>▪ Bug fix on data display in case android is connected to platform before; without power cycle</li><li>▪ Fix on saving of logs twice after disconnection</li><li>▪ Improvement on battery level indication</li><li>▪ Feature for supporting MRD101 (PPG, ECG and Temperature)</li><li>▪ Fix on Combo box editability</li><li>▪ Fix on consistent measurement triggering and initial streaming</li></ul>	

5.7.0.4	12/19/2019	<ul style="list-style-type: none"> <li>▪ Help files updated</li> <li>▪ Logging of raw settings and register dump</li> </ul>	
5.7.0.3	12/17/2019	<ul style="list-style-type: none"> <li>▪ Connection check before start monitoring and disconnect if unable to communicate</li> <li>▪ Exception error fix on tool menu command sent during streaming</li> <li>▪ Fix on reset ME11 on ppg form launch, no need to read registers from HW to populate default values</li> <li>▪ Fix on closing of ppg form gracefully on BLE connection lost event</li> <li>▪ New Name as "Maxim DeviceStudio"</li> <li>▪ New reg read scheme</li> <li>▪ Optimized USB serial scan</li> <li>▪ Fixed on dropped sample reporting</li> <li>▪ Battery level display</li> <li>▪ New charts for spo2 and hrm displays</li> <li>▪ Fix on ppg graph scaling</li> <li>▪ Logging option for 1hz data sampling</li> <li>▪ Combo box for integration time and sampling average settings</li> <li>▪ Updated tooltips</li> <li>▪ Fix on flash log parser</li> <li>▪ Command to set host BLE radio power</li> <li>▪ Command for reading host BLE MAC</li> <li>▪ Algo version display on main screen</li> </ul>	

## MAXREFDES103 Android Application – Maxim Wellness Application - Release Notes

Version	Date	History	Known Issues
3.2.0	10/26/2020	<ul style="list-style-type: none"> <li>▪ User profile UI</li> <li>▪ IBI offset updates</li> <li>▪ See Wellness Android Application Release Notes within Release Package</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> </ul>
3.0.0	6/25/2020	<ul style="list-style-type: none"> <li>▪ Integrated SQA application and SQI calculation</li> <li>▪ Post processing of output files</li> <li>▪ Integrated BP Trending application</li> <li>▪ Back to back cuff measurement time interval.</li> <li>▪ Recalibration warning is added.</li> <li>▪ History log for Calibration values</li> <li>▪ Calibration expired warning.</li> <li>▪ Repeat option for the calibration page.</li> <li>▪ Fix for SpO2 progress bar bug .</li> <li>▪ Display of SpO2 preliminary values in one shot mode.</li> <li>▪ Fix on timeout message</li> <li>▪ Zero Confidence level indication</li> <li>▪ MFIO and SCDSM support</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>

2.0.2	04/07/2020	<ul style="list-style-type: none"> <li>▪ Flash Log parser to support offline mode</li> <li>▪ Fix on respiration rate</li> <li>▪ New feature: HR Confidence Level</li> <li>▪ New Page: HR Alignment</li> <li>▪ Updated Library</li> <li>▪ Improved General UI</li> <li>▪ Improved Sports Coaching Behavior</li> <li>▪ Improved SpO2 measurement display</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>
2.0.0	2/19/2020	<ul style="list-style-type: none"> <li>▪ New Algorithm: Sports Coaching</li> <li>▪ New Feature: CVS export</li> <li>▪ New Feature: Device Filter</li> <li>▪ Improved UI</li> <li>▪ Fixed Layout Problems</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>
1.3.4	12/18/2019	<ul style="list-style-type: none"> <li>▪ Optimized file reading</li> <li>▪ Command for BLE TX power setting of MRD103 watch</li> <li>▪ Warning to user for dropped WHRM estimation samples streamed by MRD103 watch</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>

1.3.3	01/24/2020	<ul style="list-style-type: none"> <li>▪ Fix on Down sampling of samples to 1Hz .</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>
1.3.2	01/20/2020	<ul style="list-style-type: none"> <li>▪ File creation and logging on dropped BLE packet event</li> <li>▪ Change on Cadence resolution</li> <li>▪ Update of Notification messages according to the related measurement</li> <li>▪ SCD state display added to the respiration rate screen</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>
1.3.1	01/20/2020	<ul style="list-style-type: none"> <li>▪ New feature: Auto alignment on preview screen</li> <li>▪ Fix on File Parsing</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>

1.3.0	01/17/2020	<ul style="list-style-type: none"> <li>▪ New feature: Background data collection</li> <li>▪ New feature: HR data alignment with reference device</li> <li>▪ New feature: Information dialogs</li> <li>▪ Fix on WHRM timer cancellation</li> <li>▪ Mode change in stress measurement from continuous to one-shot</li> <li>▪ Fix on respiration rate chart resolution</li> <li>▪ Proper enabling of Skin-Contact Detection</li> <li>▪ Disabling of Log to File option when Flash logging on Host is on.</li> <li>▪ Optimization on offline data preview screen</li> <li>▪ Single selection option for the multi-channel charts</li> <li>▪ Fix on BLE scanning</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ No warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>
1.2.2	12/20/2019	<ul style="list-style-type: none"> <li>▪ Proper processing of sleep algorithm</li> <li>▪ Sleep data logging fix</li> <li>▪ Update on Wellness Library</li> <li>▪ Visual indication for HR results</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ No warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>

1.2.1	12/18/2019	<ul style="list-style-type: none"> <li>▪ Initial release</li> </ul>	<ul style="list-style-type: none"> <li>▪ Only Arm64 bit ARM version supported</li> <li>▪ BLE version of the device running app is required to be LMP 8.0 or above</li> <li>▪ Android-OS of the device running app is required to be minimum Android 8</li> <li>▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.</li> </ul>

## MAXREFDES102 Sensor Hub Firmware Release Notes

Please refer to Release Notes for MAX32664C published on Maxim Page:

<https://www.maximintegrated.com/en/products/interface/sensor-interface/MAX32664.html>

In Design Resources Tab.

## **MAXREFDES103 System User Notes**

MAXREFDES103 User Guide describes detailed operational instructions :