

MAXREFDES103

Software package 4.1.5 release notes

05/12/2021



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MAXREFDES103 Host Firmware Release Notes

Version	Date	History	Known Issues
4.1.5	05/12/2021	<ul style="list-style-type: none"> ▪ SpO2 unreliable orientation flag ▪ Configurable PI threshold 	<ul style="list-style-type: none"> ▪ No support for SCD wavelength Selection ▪ No support for ME11 Algo Hub mode
4.1.1	02/26/2021	<ul style="list-style-type: none"> ▪ BLE Throughput increase ▪ 1Hz IBI mode support ▪ Indicator LED behavior fix 	<ul style="list-style-type: none"> ▪ No support for SCD wavelength Selection ▪ No support for ME11 Algo Hub mode
4.0.1	11/13/2020	<ul style="list-style-type: none"> ▪ Optimized Host FW 	<ul style="list-style-type: none"> ▪ No support for SCD wavelength Selection
4.0.0	10/26/2020	<ul style="list-style-type: none"> ▪ SCD only mode support, wavelength selection ▪ Sensor data size reporting command ▪ Accel selection command ▪ IBI mode updates 	<ul style="list-style-type: none"> ▪ No support for SCD wavelength Selection
3.9.1	8/07/2020	<ul style="list-style-type: none"> ▪ Improved firmware performance 	
3.9.0	6/30/2020	<ul style="list-style-type: none"> ▪ Configurable to support MAX32664C polling and mfio event reporting modes ▪ Commands to enable/disable SCDSM operation on MAX32664C in mfio mode ▪ Compatible with older versions in regular polling mode 	
3.8.1	4/30/2020	<ul style="list-style-type: none"> ▪ Heart Rate Profile is active during flash logging. 	<ul style="list-style-type: none"> ▪ Heart Rate Spikes from MAX32664C, Release package marked as "ALFA RELEASE"

3.7.0	2/21/2020	<ul style="list-style-type: none"> ▪ LED firing sequence setting feature 	<ul style="list-style-type: none"> ▪ Raw PPG Data rate supported is reduced to 50 samples per second
3.6.0	1/28/2020	<ul style="list-style-type: none"> ▪ BLE data rate is reduced to minimize packet loss in noisy environments. 	<ul style="list-style-type: none"> ▪ Raw PPG Data rate supported is reduced to 50 samples per second
3.5.0	1/17/2020	<ul style="list-style-type: none"> ▪ Fix on data time stamp issue ▪ Fix on LED brightness ▪ Improvement on battery level indicator 	<ul style="list-style-type: none"> ▪ BLE data loss in Noisy Environments
3.4.5	12/19/2019	<ul style="list-style-type: none"> ▪ New indicator LED functionality ▪ Single button flash logging start ▪ Easy access to MSD-USB mode ▪ Feature to query BLE MAC address ▪ Feature to set BLE radio power ▪ Fix on file system overwrite problem ▪ Fix on flash log file date problem ▪ New filesystem component ▪ Support for 64Mb flash recording ▪ Update on flash log file formats ▪ Sensorhub Authentication components 	<ul style="list-style-type: none"> ▪ timestamp sometimes stops incrementing when watch is open for long durations

MAXREFDES103 PC GUI Release Notes

Version	Date	History	Known Issues
5.8.4.0	4/15/2021	<ul style="list-style-type: none"> ▪ Support MAX86174 ▪ Added Orientation Flag feature 	
5.8.3.1	12/31/2020	<ul style="list-style-type: none"> ▪ Activity is removed for MAX30101. ▪ MFIO & SCDSM are disabled for MAX30101. ▪ Watch Flash is disabled for MAX30101. ▪ The default button bug is fixed. ▪ Percent Complete for log file is fixed. ▪ Algorithm modes are changed according to MAX30101. 	
5.8.2.0	10/26/2020	<ul style="list-style-type: none"> ▪ IBI mode updates ▪ See Device Studio Release Notes within Release Package 	
5.8.1.1	6/25/2020	<ul style="list-style-type: none"> ▪ MFIO mode selection for MAX32664C ▪ SCDSM selection for MAX32664C ▪ Fix on format passing 	
5.8.0.0	4/3/2020	<ul style="list-style-type: none"> ▪ Fix on battery level reporting ▪ warning for possible wrong key in me11 firmware update ▪ Fix on format passing ▪ Fix on power saving mode. ▪ Updated UI . 	
5.7.0.6	2/12/2020	<ul style="list-style-type: none"> ▪ Support for MRD220HR ▪ MSBL flashing support for MRD220HR older Host FWs 	

5.7.0.5	12/17/2019	<ul style="list-style-type: none"> ▪ Bug fix on data display in case android is connected to platform before; without power cycle ▪ Fix on saving of logs twice after disconnection ▪ Improvement on battery level indication ▪ Feature for supporting MRD101 (PPG, ECG and Temperature) ▪ Fix on Combo box editability ▪ Fix on consistent measurement triggering and initial streaming 	
5.7.0.4	12/19/2019	<ul style="list-style-type: none"> ▪ Help files updated ▪ Logging of raw settings and register dump 	
5.7.0.3	12/17/2019	<ul style="list-style-type: none"> ▪ Connection check before start monitoring and disconnect if unable to communicate ▪ Exception error fix on tool menu command sent during streaming ▪ Fix on reset ME11 on ppg form launch, no need to read registers from HW to populate default values ▪ Fix on closing of ppg form gracefully on BLE connection lost event ▪ New Name as "Maxim DeviceStudio" ▪ New reg read scheme ▪ Optimized USB serial scan ▪ Fixed on dropped sample reporting ▪ Battery level display ▪ New charts for spo2 and hrm displays ▪ Fix on ppg graph scaling ▪ Logging option for 1hz data sampling ▪ Combo box for integration time and sampling average settings ▪ Updated tooltips ▪ Fix on flash log parser ▪ Command to set host BLE radio power ▪ Command for reading host BLE MAC ▪ Algo version display on main screen 	

MAXREFDES103 Android Application – Maxim Wellness Application - Release Notes

Version	Date	History	Known Issues
4.0.0	04/15/2021	<ul style="list-style-type: none"> ▪ Zephyr reference device support ▪ Nonin reference device support ▪ Updated Wellness Library ▪ Updated Respiration Rate Algorithm ▪ MRD105 Support 	<ul style="list-style-type: none"> ▪ See Wellness Application Release Notes with release package
3.3.0	02/19/2021	<ul style="list-style-type: none"> ▪ Add Low power selection UI ▪ Data Generator functionality is added for 1Hz option ▪ Change the stream data function signature 	<ul style="list-style-type: none"> ▪ See Wellness Application Release Notes with release package
3.2.0	10/26/2020	<ul style="list-style-type: none"> ▪ User profile UI ▪ IBI offset updates ▪ See Wellness Android Application Release Notes within Release Package 	<ul style="list-style-type: none"> ▪ Only Arm64 bit ARM version supported ▪ BLE version of the device running app is required to be LMP 8.0 or above ▪ Android-OS of the device running app is required to be minimum Android 8

3.0.0	6/25/2020	<ul style="list-style-type: none"> ▪ Integrated SQA application and SQL calculation ▪ Post processing of output files ▪ Integrated BP Trending application ▪ Back to back cuff measurement time interval. ▪ Recalibration warning is added. ▪ History log for Calibration values ▪ Calibration expired warning. ▪ Repeat option for the calibration page. ▪ Fix for SpO2 progress bar bug . ▪ Display of SpO2 preliminary values in one shot mode. ▪ Fix on timeout message ▪ Zero Confidence level indication ▪ MFIO and SCDSM support 	<ul style="list-style-type: none"> ▪ Only Arm64 bit ARM version supported ▪ BLE version of the device running app is required to be LMP 8.0 or above ▪ Android-OS of the device running app is required to be minimum Android 8 ▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.
2.0.2	04/07/2020	<ul style="list-style-type: none"> ▪ Flash Log parser to support offline mode ▪ Fix on respiration rate ▪ New feature: HR Confidence Level ▪ New Page: HR Alignment ▪ Updated Library ▪ Improved General UI ▪ Improved Sports Coaching Behavior ▪ Improved SpO2 measurement display 	<ul style="list-style-type: none"> ▪ Only Arm64 bit ARM version supported ▪ BLE version of the device running app is required to be LMP 8.0 or above ▪ Android-OS of the device running app is required to be minimum Android 8 ▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.
2.0.0	2/19/2020	<ul style="list-style-type: none"> ▪ New Algorithm: Sports Coaching ▪ New Feature: CVS export ▪ New Feature: Device Filter ▪ Improved UI ▪ Fixed Layout Problems 	<ul style="list-style-type: none"> ▪ Only Arm64 bit ARM version supported ▪ BLE version of the device running app is required to be LMP 8.0 or above ▪ Android-OS of the device running app is required to be minimum Android 8 ▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.

1.3.4	12/18/2019	<ul style="list-style-type: none"> Optimized file reading Command for BLE TX power setting of MRD103 watch Warning to user for dropped WHRM estimation samples streamed by MRD103 watch 	<ul style="list-style-type: none"> Only Arm64 bit ARM version supported BLE version of the device running app is required to be LMP 8.0 or above Android-OS of the device running app is required to be minimum Android 8 Nor warning on Authentication failure, Algorithms within Android app just do not run.
1.3.3	01/24/2020	<ul style="list-style-type: none"> Fix on Down sampling of samples to 1Hz . 	<ul style="list-style-type: none"> Only Arm64 bit ARM version supported BLE version of the device running app is required to be LMP 8.0 or above Android-OS of the device running app is required to be minimum Android 8 Nor warning on Authentication failure, Algorithms within Android app just do not run.
1.3.2	01/20/2020	<ul style="list-style-type: none"> File creation and logging on dropped BLE packet event. Change on Cadence resolution Update of Notification messages according to the related measurement SCD state display added to the respiration rate screen 	<ul style="list-style-type: none"> Only Arm64 bit ARM version supported BLE version of the device running app is required to be LMP 8.0 or above Android-OS of the device running app is required to be minimum Android 8 Nor warning on Authentication failure, Algorithms within Android app just do not run.

1.3.1	01/20/2020	<ul style="list-style-type: none"> ▪ New feature: Auto alignment on preview screen ▪ Fix on File Parsing 	<ul style="list-style-type: none"> ▪ Only Arm64 bit ARM version supported ▪ BLE version of the device running app is required to be LMP 8.0 or above ▪ Android-OS of the device running app is required to be minimum Android 8 ▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.
1.3.0	01/17/2020	<ul style="list-style-type: none"> ▪ New feature: Background data collection ▪ New feature: HR data alignment with reference device ▪ New feature: Information dialogs ▪ Fix on WHRM timer cancellation ▪ Mode change in stress measurement from continuous to one-shot ▪ Fix on respiration rate chart resolution ▪ Proper enabling of Skin-Contact Detection ▪ Disabling of Log to File option when Flash logging on Host is on. ▪ Optimization on offline data preview screen ▪ Single selection option for the multi-channel charts ▪ Fix on BLE scanning 	<ul style="list-style-type: none"> ▪ Only Arm64 bit ARM version supported ▪ BLE version of the device running app is required to be LMP 8.0 or above ▪ Android-OS of the device running app is required to be minimum Android 8 ▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.

1.2.2	12/20/2019	<ul style="list-style-type: none"> ▪ Proper processing of sleep algorithm ▪ Sleep data logging fix ▪ Update on Wellness Library ▪ Visual indication for HR results 	<ul style="list-style-type: none"> ▪ Only Arm64 bit ARM version supported ▪ BLE version of the device running app is required to be LMP 8.0 or above ▪ Android-OS of the device running app is required to be minimum Android 8 ▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.
1.2.1	12/18/2019	<ul style="list-style-type: none"> ▪ Initial release 	<ul style="list-style-type: none"> ▪ Only Arm64 bit ARM version supported ▪ BLE version of the device running app is required to be LMP 8.0 or above ▪ Android-OS of the device running app is required to be minimum Android 8 ▪ Nor warning on Authentication failure, Algorithms within Android app just do not run.

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 :