



AB1561/AB1562/AB1563 SDK Release Notes

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Document Revision History

Revision	Date	Description
1.0.0	4 May 2020	<ul style="list-style-type: none"> Initial release
1.1.0	8 June 2020	<ul style="list-style-type: none"> Added new features Fixed software issues
1.2.0	17 July 2020	<ul style="list-style-type: none"> Added new features Fixed software issues
1.2.1	31 July 2020	<ul style="list-style-type: none"> Fixed software issues
1.3.0	30 September 2020	<ul style="list-style-type: none"> Added new features Fixed software issues
1.4.0	25 December 2020	<ul style="list-style-type: none"> Renamed the document from “AB1561/AB1562 SDK Release Notes” to “AB1561/AB1562/AB1563 SDK Release Notes.” Added new features Fixed software issues

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1. Airoha AB1561/AB1562/AB1563 SDK Version 1.4.0

1.1. Main changes

- Software features and optimization:
 - Added support for 1562U and 1563
 - Added one-wire DFU
- Bug fixes:
 - Fixed I²C clock stretching issue
 - Fixed an issue where NTC did not work
 - Fixed cap-touch key event crash issue
 - Fixed reconnect issue after link loss
 - Fixed Google Fast Pair battery level smartphone display issue
 - Fixed an issue where earbuds received an assertion after playing music if they were connected to two smartphones
 - Fixed Google Fast Pair crash issue after RHO
 - Fixed an issue where the regen key could not power off the system normally with long press

1.2. Known issues

There are known issues with this version of the SDK. Avoid the following:

- Same as the known issues for the AB1562 SDK version 1.1.0.

2. Airoha AB1561/AB1562 SDK Version 1.3.0

2.1. Main changes

- Software features and optimization:
 - Added support for MCSync-share
 - Added support for background FOTA
 - Added support for Microsoft Swift Pair
 - Added support for I2C clock stretching
 - Added support for RACE command over 1-wire UART
 - Added support for LE resolvable private address
 - Added support for ANC calibration when device is in charger case
 - Added support for MP flag feature
 - Improved smartphone app connection stability
 - Improved audio driver sequence
 - Improved assertion WDT response time
 - Improved reconnection with smart charger case interactions
 - Improved internal cap-touch performance
 - Improved Amazon AMA stability
 - Improved smartphone connectivity
 - Improved ANC/passthrough switch synchronization
 - Improved VBUS smart charger case communication
- Bug fixes:
 - Fixed seldom system hang issue
 - Fixed memory leak issue
 - Fixed incorrect MMI state crash issue
 - Fixed Google Fast Pair ringing device issue
 - Fixed Google Fast Pair two connections issue
 - Fixed entering RTC mode fail issue during TWS idle state
 - Fixed cap-touch unexpected wake-up from RTC issue

2.2. Known issues

There are known issues with this version of the SDK. Avoid the following:

- Same as the known issues for the AB1562 SDK version 1.1.0.

3. Airoha AB1561/AB1562 SDK Version 1.2.1

3.1. Main changes

- Bug fixes:
 - Fixed In-Ear MIC enhancement (2+1 NR, 1+1 NR) feature switch issue (There is no need for an extra library patch.)

3.2. Known issues

There are known issues with this version of the SDK. Avoid the following:

- Same as the known issues for the AB1562 SDK version 1.1.0.

4. Airoha AB1562 SDK Version 1.2.0

4.1. Main changes

- Software features and optimization:
 - Added the following build options:
 - Chips: AB1562M, AB1562AM, AB1562FM, AB1561, AB1561M
 - Application: stereo headset with line-in mode support
 - Added support for In-Ear MIC enhancement (2+1 NR, 1+1 NR)
 - Added support for multiple MIC test
 - Added support for Alexa Mobile Accessory (AMA) via push-to-talk with iAP2
 - Added support for Google Fast Pair optional extensions
 - Added support for LED TWS sync option
 - Improved A2DP playback stability
 - Improved real-time ANC tuning stability
 - Improved cap-touch key stability
 - Improved BR/EDR and MCSync connection stability
 - Improved smart charger case communication
 - Improved real-time PEQ stability
 - Improved Google Fast Pair stability
 - Improved connectivity with MegaSig AudioExpert
 - Improved In-Ear detection performance
- Bug fixes:
 - Fixed MIC switch fail issue
 - Fixed wrong audio channel setting issue
 - Fixed cap-touch/In-Ear detection fail issues
 - Fixed LED filter flashing issue

4.2. Known issues

There are known issues with this version of the SDK. Avoid the following:

- Same as AB1562 SDK version 1.1.0 known issues.

5. Airoha AB1562 SDK Version 1.1.0

5.1. Main changes

- Software features and optimization:
 - Added build option for AB1562F
 - Added support for the following items in configuration tool:
 - RTC GPIO and cap-touch key configuration
 - In-ear detection by built-in cap-touch sensor configuration
 - Cap-touch key SW debounce configuration
 - AVRCP media attributes report configuration
 - Added get AVRCP version API
 - Added get A2DP stream bit-rate API
 - Improved cap-touch key stability
 - Improved AAC decoder error handling
 - Improved MCSync streaming stability
 - Improved MCSync re-connection stability
 - Improved FOTA over SPP/BLE stability
 - Improved smart charger case interaction stability
- Bug fixes:
 - Fixed LED out-of-sync issue
 - Fixed an exception with power management unit (PMU) control
 - Fixed entering sniff mode issue after call end

5.2. Known issues

There are known issues with this version of the SDK. Avoid the following:

- Connectivity problems might occur for a short time when there is a link loss with the following devices:
 - Huawei: Y9, Nova 2i, Nova 3i, Mate20, Mate30
 - Samsung: A20
 - Google: Pixel 2
 - Others: Coolpad6, C423N chrome book

6. Airoha AB1562 SDK Version 1.0.0

6.1. Main changes

- Software features and optimization
 - Bluetooth
 - Bluetooth 5.0 dual mode (BR/EDR & BLE)
 - A2DP sink 1.3
 - AVRCP 1.6
 - HFP 1.7
 - HSP 1.2
 - SPP 1.2
 - Multi Cast Synchronization (MCSync): It is an Airoha proprietary profile to support voice/audio over multiple Bluetooth Audio devices.
 - Audio
 - 1 MIC/2 MIC noise reduction, included wind noise reduction
 - Echo cancellation
 - ANC (Feed-Forward); Feedback or Hybrid ANC (AB1562A only)
 - Voice prompt
 - Pass through (ambient sound)
 - Packet loss concealment
 - Programmable EQ
 - Platform
 - Capacitive touch key
 - In-Ear detection on earbuds by touch sensor or proximity sensor
 - Battery/charger management
 - Battery/charging temperature protection by NTC (thermal sensor)
 - Earbuds cradle communication: smart charger case V2.0 via VBUS; one-wire UART smart charger case
 - Others
 - Alexa Mobile Accessory (AMA) via push-to-talk
 - Google Fast Pair
 - Applications for Android and iOS
 - Firmware-over-the-Air (FOTA)
 - Audio configuration tool
 - Voice trigger for Siri with 1-MIC Voice Activity Detection (VAD)
 - Game mode with low latency from receiving the audio packet to audio sound output

- Adaptive Latency Control (ALC)