



AmpedUp Audio User Manual

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TABLE OF CONTENTS

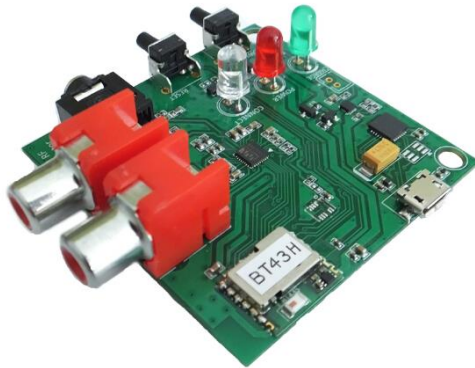
1	OVERVIEW	4
2	A2DP COMMANDS.....	5
2.1	A2DPConnect	5
2.1.1	Syntax.....	5
2.1.2	Responses	5
2.2	A2DPDisconnect.....	5
2.2.1	Syntax.....	5
2.2.2	Responses	5
3	HFP COMMANDS	6
3.1	HfpAnswer.....	6
3.1.1	Syntax.....	6
3.1.2	Responses	6
3.2	HfpHangUp	6
3.2.1	Syntax.....	6
3.2.2	Responses	6
3.3	Dial.....	6
3.3.1	Syntax.....	6
3.3.2	Responses	7
3.4	ReDial.....	7
3.4.1	Syntax.....	7
3.4.2	Responses	7
3.5	VoiceDial.....	7
3.5.1	Syntax.....	7
3.5.2	Responses	7
3.6	Volume.....	8
3.6.1	Syntax.....	8
3.6.2	Responses	8
3.7	TransAT	8
3.7.1	Syntax.....	8
3.7.2	Responses	8
4	AVRCP COMMANDS.....	9

- 4.1 AvrcpConnect..... 9**
 - 4.1.1 Syntax..... 9
 - 4.1.2 Responses 9
- 4.2 AvrcpDisconnect..... 9**
 - 4.2.1 Syntax..... 9
 - 4.2.2 Responses 9
- 4.3 AvrcpPlay 9**
 - 4.3.1 Syntax..... 9
 - 4.3.2 Responses 9
- 4.4 AvrcpPause..... 9**
 - 4.4.1 Syntax..... 9
 - 4.4.2 Responses 9
- 4.5 AvrcpNext..... 10**
 - 4.5.1 Syntax..... 10
 - 4.5.2 Responses 10
- 4.6 AvrcpPrev..... 10**
 - 4.6.1 Syntax..... 10
 - 4.6.2 Responses 10
- 4.7 AvrcpVolUp..... 10**
 - 4.7.1 Syntax..... 10
 - 4.7.2 Responses 10
- 4.8 AvrcpVolDown 10**
 - 4.8.1 Syntax..... 10
 - 4.8.2 Responses 10

1 Overview

Sonic ART is our proprietary Bluetooth audio enhancement software suite. Providing excellent performance and efficiency, it's suitable for a wide range of wireless audio applications. Sonic ART can support A2DP, HFP, and AVRCP Profiles simultaneously.

The Amped RF Bluetooth Audio Evaluation Kit integrates the BT43H Bluetooth module and a high performance audio CODEC chip, the WM8904, from Wolfson.



2 A2DP Commands

2.1 A2DPConnect

The `A2DPConnect` command is used to initiate a connection with the specified A2DP Source. The remote BD address must be specified. Dedicated bond is recommended.

2.1.1 Syntax

`AT+AB A2DPConnect [BD Addr]`

Where [BD Addr] is the remote A2DP SRC BD Address.

2.1.2 Responses

If the connection is successful, the response is:

`AT-AB A2DPConnectPending`

`AT-AB A2DPConnectionUp`

If the connection cannot be completed, the response is:

`AT-AB A2DPConnectPending`

`AT-AB A2DPConnectionDown`

`AT-AB ConnectionDown`

2.2 A2DPDisconnect

The `A2DPDisconnect` command is used to close a connection with the remote A2DP SRC.

2.2.1 Syntax

`AT+AB A2DPDisconnect`

2.2.2 Responses

If the disconnection is successful, the response is

`AT-AB A2DPConnectionDown`

`AT-AB ConnectionDown`

3 HFP Commands

3.1 HfpAnswer

The `HfpAnswer` command is used to answer the incoming call.

3.1.1 Syntax

`AT+AB HfpAnswer`

Note: Using the `HfpAnswer` command to answer the call, voice will be transmitted through Bluetooth automatically. Using the phone's button to answer the phone, a switch-voice may be needed manually (for example the iPhone.)

3.1.2 Responses

If the command is executed, the response is:

RECEIVE OK

If the command cannot be executed, the response is:

RECEIVE ERROR

3.2 HfpHangUp

The `HfpHangUp` command is used to terminate a call.

3.2.1 Syntax

`AT+AB HfpHangUp`

3.2.2 Responses

If the command is executed, the response is:

RECEIVE OK

If the command cannot be executed, the response is:

RECEIVE ERROR

3.3 Dial

The `Dial` command is used to dial a call.

3.3.1 Syntax

`AT+AB Dial [TELNO];`

Example: `AT+AB DIAL 10086;`

3.3.2 Responses

If the command is executed, the response is:

RECEIVE OK

If the command cannot be executed, the response is:

RECEIVE ERROR

3.4 ReDial

The `ReDial` command is used to redial the last telephone number.

3.4.1 Syntax

AT+AB ReDial

3.4.2 Responses

If the command is executed, the response is:

RECEIVE OK

If the command cannot be executed, the response is:

RECEIVE ERROR

3.5 VoiceDial

The `VoiceDial` command is used to initiate a voice dialing.

3.5.1 Syntax

AT+AB VoiceDial

3.5.2 Responses

If the command is executed, the response is:

RECEIVE OK

If the command cannot be executed, the response is:

RECEIVE ERROR

3.6 Volume

The `Volume` command is used to adjust the volume.

3.6.1 Syntax

`AT+AB Volume [volume]`

Example: `AT+AB Volume 10`

Note: The volume can be adjusted from 0 to 15

3.6.2 Responses

If the command is executed, the response is:

RECEIVE OK

If the command cannot be executed, the response is:

RECEIVE ERROR

3.7 TransAT

Passthrough custom AT commands through HFP.

3.7.1 Syntax

`AT+AB TransAT [AT Command]`

Example:

`AT+AB TransAT AT+CPBS=?`

`AT+AB TransAT AT+CPBS?`

`AT+AB TransAT AT+CPBS=+UTF-8+`

`AT+AB TransAT AT+CPBR=1,500`

`AT+AB TransAT AT+CPBR=51,500`

3.7.2 Responses

It's Phone's response

4 AVRCP Commands

4.1 AvrcpConnect

The `AvrcpConnect` command is used to initiate AVRCP connection.

4.1.1 Syntax

`AT+AB AvrcpConnect 0025cf92046c`

Note: Generally, the AVRCP connection is initiated by the module. Many phones will not initiate AVRCP connection.

4.1.2 Responses

`AT-AB AvrcpConnectionUp`

4.2 AvrcpDisconnect

The `AvrcpDisconnect` command is used to disconnect the AVRCP connection.

4.2.1 Syntax

`AT+AB AvrcpDisconnect`

4.2.2 Responses

`AT-AB AvrcpConnectionDown`

4.3 AvrcpPlay

The `AvrcpPlay` command is used to trigger the play button of the player.

4.3.1 Syntax

`AT+AB AvrcpPlay`

Note: Before send `AvrcpPlay` command the player application should be open.

4.3.2 Responses

`AT-AB PassThroughCommandAccepted`

4.4 AvrcpPause

The `AvrcpPause` command is used to trigger the pause button of the player.

4.4.1 Syntax

`AT+AB AvrcpPause`

4.4.2 Responses

`AT-AB PassThroughCommandAccepted`

4.5 AvrcpNext

The `AvrcpNext` command is used to trigger the Next button of the player.

4.5.1 Syntax

`AT+AB AvrcpNext`

4.5.2 Responses

`AT-AB PassThroughCommandAccepted`

4.6 AvrcpPrev

The `AvrcpPrev` command is used to trigger the Previous button of the player.

4.6.1 Syntax

`AT+AB AvrcpPrev`

4.6.2 Responses

`AT-AB PassThroughCommandAccepted`

4.7 AvrcpVolUp

The `AvrcpVolUp` command is used to trigger the Volume Up button of the player.

4.7.1 Syntax

`AT+AB AvrcpVolUp`

4.7.2 Responses

`AT-AB PassThroughCommandAccepted`

4.8 AvrcpVolDown

The `AvrcpVolDown` command is used to trigger the Volume Down button of the player.

4.8.1 Syntax

`AT+AB AvrcpVolDown`

4.8.2 Responses

`AT-AB PassThroughCommandAccepted`