Audio Input Control Service (AICS)

***Bluetooth*® Implementation Conformance Statement (ICS) Proforma**

- **Revision:** AICS.ICS.p2
- **Revision Date:** 2025-02-18
- **Prepared By:** Generic Audio Working Group
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Contents

1 General principles

1.1 Implementation Under Test (IUT) identification

Using the Bluetooth SIG qualification tool, the implementer is expected to declare details about what will be implemented.

1.2 Enforcement of inter-layer dependencies

This ICS includes one or more tables with inter-layer dependencies (ILDs). ILDs are used for specification requirements that are dependent on other supporting specifications. ILDs can refer to an individual ICS item in a separate layer (individual ILD), or it can refer to the full layer (full-layer ILD).

ILDs residing in an X2Core layer will be enforced from the Bluetooth SIG qualification tool in the following conditions, depending on where the referred ILD is residing:

Referred ILD resides in	Individual ILD	Full-layer ILD
Controller layer	Core-Complete configuration, or Referred layer is supported	N/A
Lower HCI layer	HCI is supported	N/A
Upper HCI layer	Core-Host configuration, or UHCI is supported	N/A
Host layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	N/A
X2Core layer	Core-Host configuration, or Core-Complete configuration, or Referred layer is supported	Core-Host configuration, or Core-Complete configuration

Table 1.1: Enforcement of an ILD within the Bluetooth SIG qualification tool

2 ICS declarations

2.1 Versions

Table 0: X.Y Versions

Item	Version	Reference	Status
1	AICS v1.0	[1]	M

Table 0a: X.Y.Z Versions

Item	Version	Reference	Status
1	AICS v1.0.1	[3]	O

2.2 Transports

Table 1: Transport Requirements

Item	Transport	Reference	Status
1	Service supported over BR/EDR	[1] 1.5	C.1
2	Service supported over LE	[1] 1.5	C.1

C.1: Mandatory to support at least one.

2.3 Service requirements

2.3.1 Audio Input Control Service

Table 2: Audio Input Control Service

Item	Capability	Reference	Status
1	Audio Input State Characteristic	[1] 3.1	M
2	Gain Setting Properties Characteristic	[1] 3.2	M
3	Audio Input Type Characteristic	[1] 3.3	M
4	Audio Input Status Characteristic	[1] 3.4	M
5	Audio Input Control Point Characteristic	[1] 3.5	M
6	Audio Input Description Characteristic	[1] 3.6	M
7	Writeable Audio Input Description Characteristic	[1] 3.6	O
8	Notifiable Audio Input Description Characteristic	[1] 3.6	C.1
9	Autonomous Automatic Only Support	[1] 3.1.3	O
10	Autonomous Manual Only Support	[1] 3.1.3	O

C.1: Mandatory IF AICS 2/7 "Writeable Audio Input Description Characteristic", otherwise Optional.

Table 3: Audio Input Control Point Procedure Requirements

Item	Capability	Reference	Status
1	Set Gain Setting	[1] 3.5.2.1	M
2	Unmute	[1] 3.5.2.2	M
3	Mute	[1] 3.5.2.3	M
3b	Mute Disabled	[1] 3.5.2.2	O
4	Set Manual Gain Mode	[1] 3.5.2.4	M
5	Set Automatic Gain Mode	[1] 3.5.2.5	M

2.4 GATT requirements

Table 4: GATT Requirements

Item	Feature	Reference	Status	Inter-Layer Dependency
1	Write Characteristic Value	[1] 1.4	M	[2] GATT 4/14
2	Single Notification	[1] 1.4	M	[2] GATT 4/17
3	Read Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/19
4	Write Characteristic Descriptors	[1] 1.4	M	[2] GATT 4/21
5	GATT Server over BR/EDR	[1] 1.4	C.1	[2] GATT 1a/4
6	GATT Server over LE	[1] 1.4	C.2	[2] GATT 1a/3

C.1: Mandatory IF AICS 1/1 "Service supported over BR/EDR", otherwise not defined.
C.2: Mandatory IF AICS 1/2 "Service supported over LE", otherwise not defined.

2.5 SDP requirements

Table 5: SDP Requirements

Prerequisite: AICS 1/1 “Service supported over BR/EDR”

Item	Feature	Reference	Status
1	SDP record present for AICS	[1] 4	M
2-4	No longer used	N/A	N/A

3 References

[1] Audio Input Control Service Specification, Version 1.0 or later

[2] ICS Proforma for Generic Attribute Profile (GATT)

[3] Audio Input Control Service Specification, Version 1.0.1

4 Revision history and acknowledgments

Revision History

Publication Number	Revision Number	Date	Comments
0	p0	2020-12-22	Approved by BTI on 2020-11-29. AICS v1.0 adopted by the BoD on 2020-12-15. Prepared for publication.
	p1r00	2023-08-15	TSE 23656 (rating 2): Added 4/5 and 4/6 and associated conditionals C.1 and C.2. Removed the ILD column from Table 5. Updated the Feature name of 5/1, and deleted 5/2, 5/3, and 5/4. Deleted references to the GAP and SDP ICSs. Updated globally to align with the latest ICS template conventions.
1	p1	2024-07-01	Approved by BTI on 2024-04-21. Prepared for TCRL 2024-1 publication.
	p2r00–r02	2024-11-18 – 2024-12-18	TSE 25929 (rating 2): To align with E26031, added 3/3b. TSE 25983 (rating 4): To align with E26032, added 2/9 and 2/10. TSE 26907 (rating 1): Per E16466, E26031, and E26032, added Table 0a to account for AICS v1.0.1 as part of the .Z release. Updated the references list and the Reference value in Item 0/1. Updated 4/2 to Single Notification.
2	p2	2025-02-18	Approved by BTI on 2025-02-09. AICS v1.0.1 adopted by the BoD on 2024-02-11. Prepared for TCRL 2025-1 publication.

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