Measurement Protocol

Measurement Object	23T04Z80629 WCDMA
Description	FCC Volume control
Model Name	B160V
Sample Number	UT78a
IMEI	356197680005216
Test Band	WCDMA FDD2
Test Date	20231217
Tester	Zhu Hongye
Test System (ACQUA System)	ACQUA V5.1.200,CMW500 (SN:170430),Labcore (SN:77000136)
HATS Type	HEAD HATS (HMS II.3, SN: 12306194(torso13740182))(0,0,5)
Environment	Temp.15~35 'C, 20~75%RH, Acoustic Chamber
Location	The NO.52 of Huayuan North Road

Project	TIA 5050 v1
Report Generation Date	2023/12/17 12:59
Responsible Person	STA

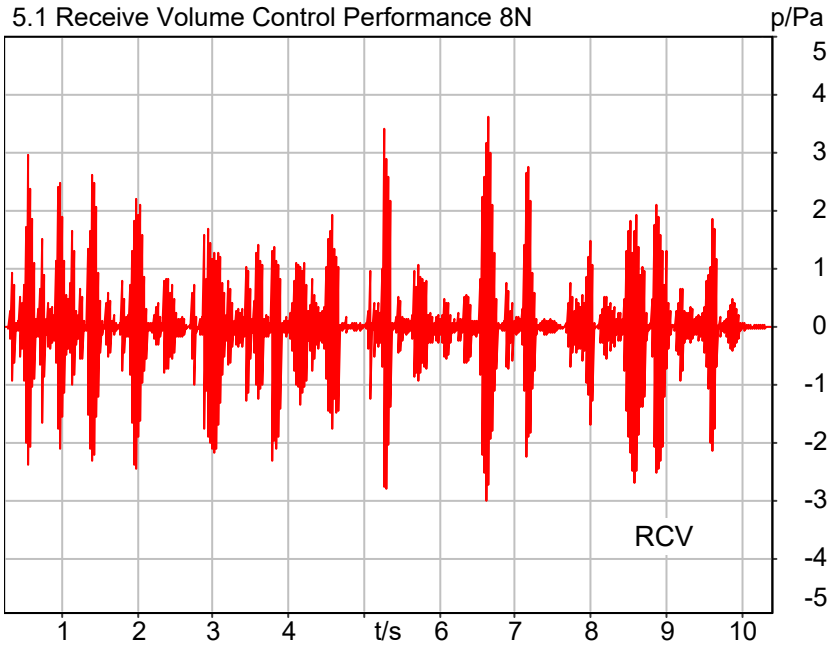
Status Overview

SMD	Status	Single Value Description	Single Value	Object
5.1 Receive Volume Control Performance 8N 4.75kbps	Done	Speech Level [dB[SPL]]	83.92	23T04Z80629 WCDMA
5.1.1 -1 Conversation Gain 8N 4.75kbps	Ok	Calculated Value [dB]	13.92	23T04Z80629 WCDMA
5.1 Receive Volume Control Performance 8N 6.6kbps	Done	Speech Level [dB[SPL]]	83.87	23T04Z80629 WCDMA
5.1.1 -1 Conversation Gain 8N 6.6kbps	Ok	Calculated Value [dB]	13.87	23T04Z80629 WCDMA
5.1 Receive Volume Control Performance 2N 4.75kbps	Done	Speech Level [dB[SPL]]	80.45	23T04Z80629 WCDMA
5.1 Receive Volume Control Performance 2N 12.2kbps	Done	Speech Level [dB[SPL]]	81.39	23T04Z80629 WCDMA
5.1 Receive Volume Control Performance 2N 4.75kbps;Band 4	Done	Speech Level [dB[SPL]]	80.56	23T04Z80629 WCDMA
5.1 Receive Volume Control Performance 2N 4.75kbps;Band 5	Done	Speech Level [dB[SPL]]	80.70	23T04Z80629 WCDMA
5.1.1 -1 Conversation Gain 2N 4.75kbps	Ok	Calculated Value [dB]	10.45	23T04Z80629 WCDMA
5.1.1 -1 Conversation Gain 2N 12.2kbps	Ok	Calculated Value [dB]	11.39	23T04Z80629 WCDMA
5.1.1 -1 Conversation Gain 2N 4.75kbps;Band 4	Ok	Calculated Value [dB]	10.56	23T04Z80629 WCDMA
5.1.1 -1 Conversation Gain 2N 4.75kbps;Band 5	Ok	Calculated Value [dB]	10.70	23T04Z80629 WCDMA
5.1 Receive Volume Control Performance 2N 6.6kbps	Done	Speech Level [dB[SPL]]	80.62	23T04Z80629 WCDMA
5.1 Receive Volume Control Performance 2N 12.65kbps	Done	Speech Level [dB[SPL]]	81.14	23T04Z80629 WCDMA
5.1.1 -1 Conversation Gain 2N 6.6kbps	Ok	Calculated Value [dB]	10.62	23T04Z80629 WCDMA
5.1.1 -1 Conversation Gain 2N 12.65kbps	Ok	Calculated Value [dB]	11.14	23T04Z80629 WCDMA

5.1 Receive Volume Control Performance 8N

ANSI/TIA 5050-2018 \ 8N HAC OFF \ NB

4.75kbps



Speech Level RCV: 83.92 dB[SPL], Act.: 93.37%

2023/12/17 12:44 ACQUA 5.1.200

Meas. Setting STD:DRP/ERP OFF

Source: ieee_male_dual_nb.dat

Level adj. Ch1	-90.0 dB	Level adj. Ch2	-4.0 dB

Calibration

Input ch.2: 1.37 dB 2023/11/29 (HATS 3 (HMS II.3))
Output ch.2: 0.00 dB (Radio Tester 1 (CMW500))

Output Equalization/Filter

Mouth Eq. Ch.1: HATS 3 (HMS II.3)

Analysis

Direction	Out 2 -> In 2		
Range start	250.00 ms	Range length	10200.00 ms
Bandpass filter	Narrow Band	Margin (15.9dB nom)	15.90 dB

Special Features

Compensate delay	195.7000 ms (D_RCV_NB, Delay (Cross))
Store to variable	rcv_vol_nb

Hardware Config Settings

Used Setting STD:Mobile test both channels

labCORE Settings

labCORE Serial	77000136	Nickname	
Firmware	3.2.46	Sync Source	Internal
Clock Pitch	0.00 ppm		

---

labCORE Routing

Out Channel 1 ->	Power Amp. 1/2 1 -> HATS 3 (HMS II.3) Speaker
Out Channel 2 ->	Analog Out 1/2 1 -> Radio Tester 1 (CMW500) In
In Channel 1 <-	BEQ Filter 1 L <- Mic Amp. 1..4 In 1 <- HATS 3 (HMS II.3) Mic. Left
In Channel 2 <-	BEQ Filter 1 R <- Mic Amp. 1..4 In 2 <- HATS 3 (HMS II.3) Mic. Right

---

Analog In Mainboard Settings (Analog In 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Analog Out Mainboard Settings (Analog Out 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Microphone Settings (Mic Amp. 1..4)

Channel In 1 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 2 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 3 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

Channel In 4 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

BEQ Settings (BEQ Filter 1)

Block mode	Bypass

Artificial Head Settings (HATS 3 (HMS II.3))

Ser. Nr.	12306194	Pinna Type	Type 3.3

5.1.1 -1 Conversation Gain 8N

ANSI/TIA 5050-2018 \ 8N HAC OFF \ NB
4.75kbps

Correction

rcv_vol_nb	83.920 dB[SPL]	2023/12/17	Measured	5.1 Receive Volume Control Performance 8N

rcv_vol_nb-70

Calculated Value: 13.92 dB Ok

Ok

2023/12/17 12:45 ACQUA 5.1.200

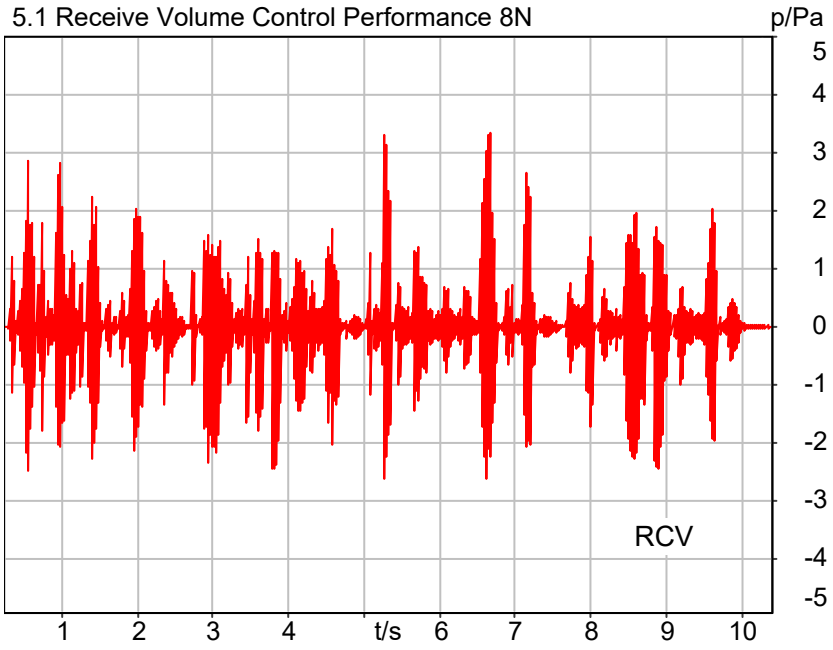
Limits

	lower
Run 1	6.00 dB

5.1 Receive Volume Control Performance 8N

ANSI/TIA 5050-2018 \ 8N HAC OFF \ WB

6.6kbps



Speech Level RCV: 83.87 dB[SPL], Act.: 93.35%

2023/12/17 12:48 ACQUA 5.1.200

Meas. Setting STD:DRP/ERP OFF

Source: ieee_male_dual_wb.dat

Level adj. Ch1	-90.0 dB	Level adj. Ch2	-4.0 dB

Calibration

Input ch.2: 1.37 dB 2023/11/29 (HATS 3 (HMS II.3))
Output ch.2: 0.00 dB (Radio Tester 1 (CMW500))

Output Equalization/Filter

Mouth Eq. Ch.1: HATS 3 (HMS II.3)

Analysis

Direction	Out 2 -> In 2		
Range start	250.00 ms	Range length	10200.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Special Features

Compensate delay	195.3000 ms (D_RCV_WB, Delay (Cross))
Store to variable	rcv_vol_wb

Hardware Config Settings

Used Setting STD:Mobile test both channels

labCORE Settings

labCORE Serial	77000136	Nickname	
Firmware	3.2.46	Sync Source	Internal
Clock Pitch	0.00 ppm		

---

labCORE Routing

Out Channel 1 ->	Power Amp. 1/2 1 -> HATS 3 (HMS II.3) Speaker
Out Channel 2 ->	Analog Out 1/2 1 -> Radio Tester 1 (CMW500) In
In Channel 1 <-	BEQ Filter 1 L <- Mic Amp. 1..4 In 1 <- HATS 3 (HMS II.3) Mic. Left
In Channel 2 <-	BEQ Filter 1 R <- Mic Amp. 1..4 In 2 <- HATS 3 (HMS II.3) Mic. Right

---

Analog In Mainboard Settings (Analog In 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Analog Out Mainboard Settings (Analog Out 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Microphone Settings (Mic Amp. 1..4)

Channel In 1 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 2 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 3 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

Channel In 4 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

BEQ Settings (BEQ Filter 1)

Block mode	Bypass

Artificial Head Settings (HATS 3 (HMS II.3))

Ser. Nr.	12306194	Pinna Type	Type 3.3

5.1.1 -1 Conversation Gain 8N

ANSI/TIA 5050-2018 \ 8N HAC OFF \ WB
6.6kbps

Correction

rcv_vol_wb	83.870 dB[SPL]	2023/12/17	Measured	5.1 Receive Volume Control Performance 8N

rcv_vol_wb-70

Calculated Value: 13.87 dB Ok

Ok

2023/12/17 12:48 ACQUA 5.1.200

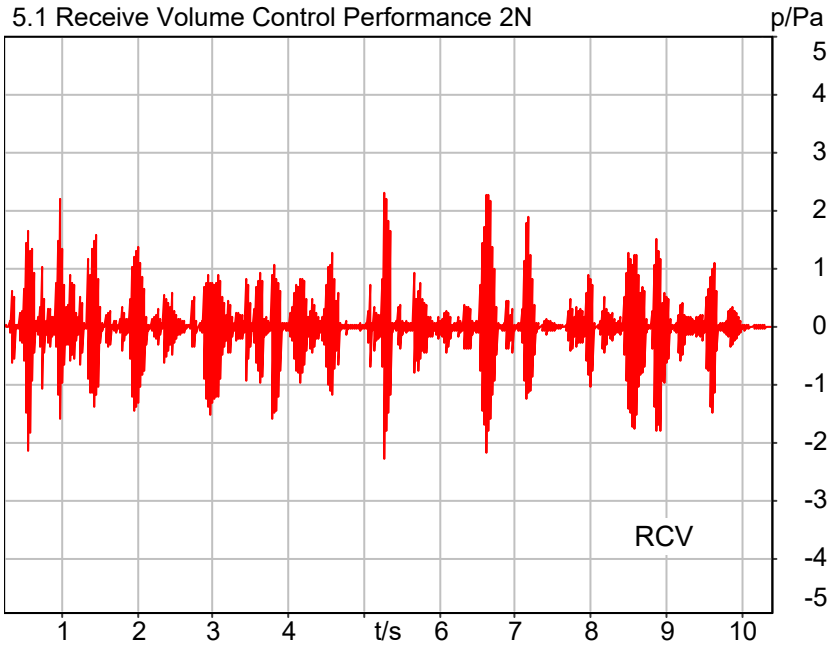
Limits

	lower
Run 1	6.00 dB

5.1 Receive Volume Control Performance 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ NB

4.75kbps



Speech Level RCV: 80.45 dB[SPL], Act.: 93.21%

2023/12/17 12:54 ACQUA 5.1.200

Meas. Setting STD:DRP/ERP OFF

Source: ieee_male_dual_nb.dat

Level adj. Ch1	-90.0 dB	Level adj. Ch2	-4.0 dB

Calibration

Input ch.2: 1.37 dB 2023/11/29 (HATS 3 (HMS II.3))
Output ch.2: 0.00 dB (Radio Tester 1 (CMW500))

Output Equalization/Filter

Mouth Eq. Ch.1: HATS 3 (HMS II.3)

Analysis

Direction	Out 2 -> In 2		
Range start	250.00 ms	Range length	10200.00 ms
Bandpass filter	Narrow Band	Margin (15.9dB nom)	15.90 dB

Special Features

Compensate delay 174.9000 ms (D_RCV_NB, Delay (Cross))
Store to variable rcv_vol_nb

Hardware Config Settings

Used Setting STD:Mobile test both channels

labCORE Settings

labCORE Serial	77000136	Nickname	
Firmware	3.2.46	Sync Source	Internal
Clock Pitch	0.00 ppm		

---

labCORE Routing

Out Channel 1 ->	Power Amp. 1/2 1 -> HATS 3 (HMS II.3) Speaker
Out Channel 2 ->	Analog Out 1/2 1 -> Radio Tester 1 (CMW500) In
In Channel 1 <-	BEQ Filter 1 L <- Mic Amp. 1..4 In 1 <- HATS 3 (HMS II.3) Mic. Left
In Channel 2 <-	BEQ Filter 1 R <- Mic Amp. 1..4 In 2 <- HATS 3 (HMS II.3) Mic. Right

---

Analog In Mainboard Settings (Analog In 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Analog Out Mainboard Settings (Analog Out 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Microphone Settings (Mic Amp. 1..4)

Channel In 1 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 2 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 3 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

Channel In 4 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

BEQ Settings (BEQ Filter 1)

Block mode	Bypass

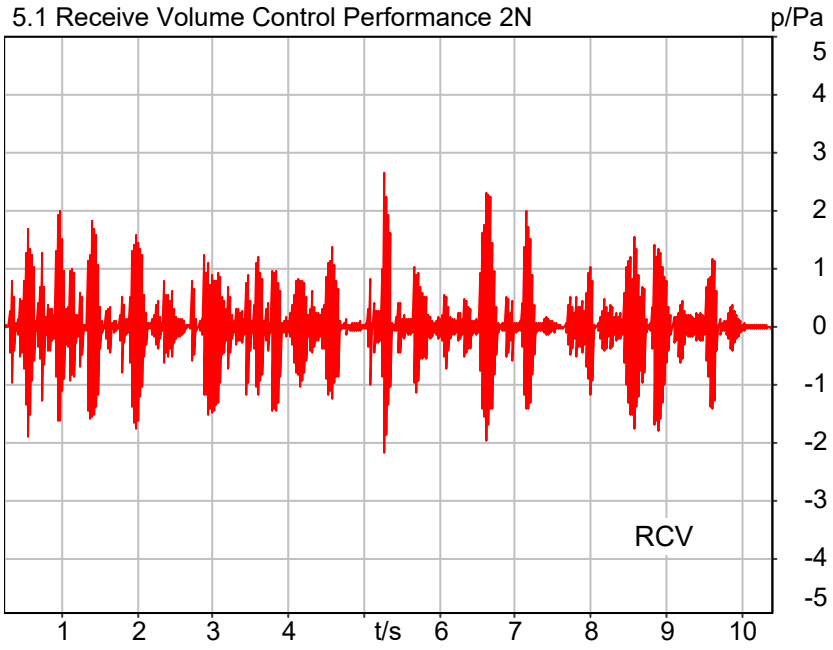
Artificial Head Settings (HATS 3 (HMS II.3))

Ser. Nr.	12306194	Pinna Type	Type 3.3

5.1 Receive Volume Control Performance 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ NB

12.2kbps



Speech Level RCV: 81.39 dB[SPL], Act.: 93.25%

2023/12/17 12:54 ACQUA 5.1.200

Meas. Setting STD:DRP/ERP OFF

Source: ieee_male_dual_nb.dat

Level adj. Ch1	-90.0 dB	Level adj. Ch2	-4.0 dB

Calibration

Input ch.2: 1.37 dB 2023/11/29 (HATS 3 (HMS II.3))
Output ch.2: 0.00 dB (Radio Tester 1 (CMW500))

Output Equalization/Filter

Mouth Eq. Ch.1: HATS 3 (HMS II.3)

Analysis

Direction	Out 2 -> In 2		
Range start	250.00 ms	Range length	10200.00 ms
Bandpass filter	Narrow Band	Margin (15.9dB nom)	15.90 dB

Special Features

Compensate delay	174.7000 ms (D_RCV_NB, Delay (Cross))
Store to variable	rcv_vol_nb

Hardware Config Settings

Used Setting STD:Mobile test both channels

labCORE Settings

labCORE Serial	77000136	Nickname	
Firmware	3.2.46	Sync Source	Internal
Clock Pitch	0.00 ppm		

---

labCORE Routing

Out Channel 1 ->	Power Amp. 1/2 1 -> HATS 3 (HMS II.3) Speaker
Out Channel 2 ->	Analog Out 1/2 1 -> Radio Tester 1 (CMW500) In
In Channel 1 <-	BEQ Filter 1 L <- Mic Amp. 1..4 In 1 <- HATS 3 (HMS II.3) Mic. Left
In Channel 2 <-	BEQ Filter 1 R <- Mic Amp. 1..4 In 2 <- HATS 3 (HMS II.3) Mic. Right

---

Analog In Mainboard Settings (Analog In 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Analog Out Mainboard Settings (Analog Out 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Microphone Settings (Mic Amp. 1..4)

Channel In 1 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 2 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 3 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

Channel In 4 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

BEQ Settings (BEQ Filter 1)

Block mode	Bypass

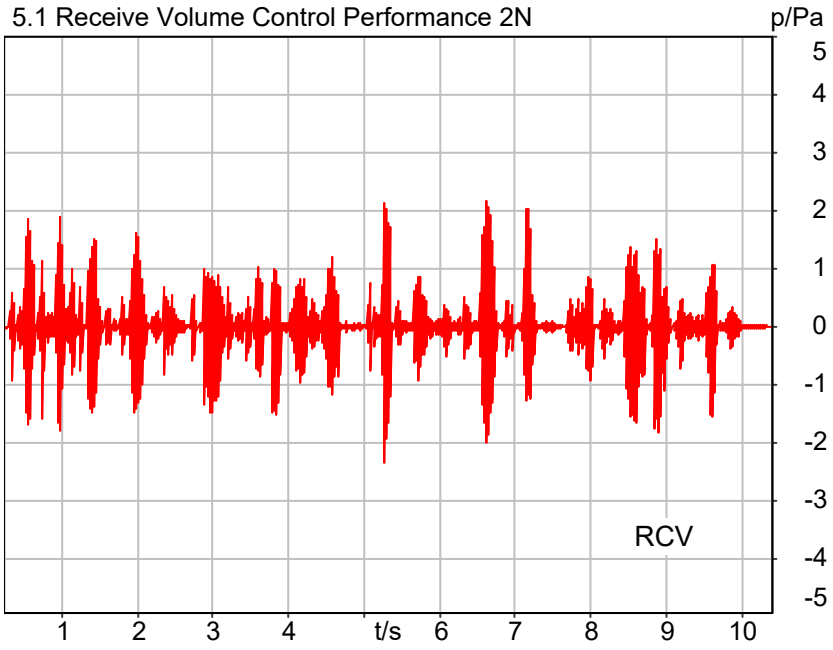
Artificial Head Settings (HATS 3 (HMS II.3))

Ser. Nr.	12306194	Pinna Type	Type 3.3

5.1 Receive Volume Control Performance 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ NB

4.75kbps;Band 4



Speech Level RCV: 80.56 dB[SPL], Act.: 93.32%

2023/12/17 12:56 ACQUA 5.1.200

Meas. Setting STD:DRP/ERP OFF

Source: ieee_male_dual_nb.dat

Level adj. Ch1	-90.0 dB	Level adj. Ch2	-4.0 dB

Calibration

Input ch.2: 1.37 dB 2023/11/29 (HATS 3 (HMS II.3))
Output ch.2: 0.00 dB (Radio Tester 1 (CMW500))

Output Equalization/Filter

Mouth Eq. Ch.1: HATS 3 (HMS II.3)

Analysis

Direction	Out 2 -> In 2		
Range start	250.00 ms	Range length	10200.00 ms
Bandpass filter	Narrow Band	Margin (15.9dB nom)	15.90 dB

Special Features

Compensate delay	195.7000 ms (D_RCV_NB, Delay (Cross))
Store to variable	rcv_vol_nb

Hardware Config Settings

Used Setting STD:Mobile test both channels

labCORE Settings

labCORE Serial	77000136	Nickname	
Firmware	3.2.46	Sync Source	Internal
Clock Pitch	0.00 ppm		

---

labCORE Routing

Out Channel 1 ->	Power Amp. 1/2 1 -> HATS 3 (HMS II.3) Speaker
Out Channel 2 ->	Analog Out 1/2 1 -> Radio Tester 1 (CMW500) In
In Channel 1 <-	BEQ Filter 1 L <- Mic Amp. 1..4 In 1 <- HATS 3 (HMS II.3) Mic. Left
In Channel 2 <-	BEQ Filter 1 R <- Mic Amp. 1..4 In 2 <- HATS 3 (HMS II.3) Mic. Right

---

Analog In Mainboard Settings (Analog In 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Analog Out Mainboard Settings (Analog Out 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Microphone Settings (Mic Amp. 1..4)

Channel In 1 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 2 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 3 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

Channel In 4 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

BEQ Settings (BEQ Filter 1)

Block mode	Bypass

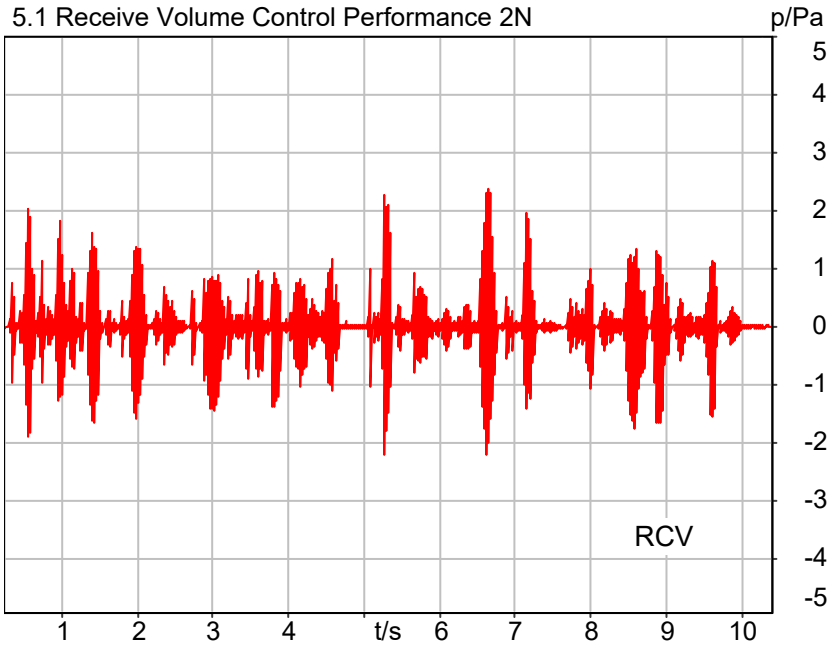
Artificial Head Settings (HATS 3 (HMS II.3))

Ser. Nr.	12306194	Pinna Type	Type 3.3

5.1 Receive Volume Control Performance 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ NB

4.75kbps;Band 5



Speech Level RCV: 80.70 dB[SPL], Act.: 92.93%

2023/12/17 12:58 ACQUA 5.1.200

Meas. Setting STD:DRP/ERP OFF

Source: ieee_male_dual_nb.dat

Level adj. Ch1	-90.0 dB	Level adj. Ch2	-4.0 dB

Calibration

Input ch.2: 1.37 dB 2023/11/29 (HATS 3 (HMS II.3))
Output ch.2: 0.00 dB (Radio Tester 1 (CMW500))

Output Equalization/Filter

Mouth Eq. Ch.1: HATS 3 (HMS II.3)

Analysis

Direction	Out 2 -> In 2		
Range start	250.00 ms	Range length	10200.00 ms
Bandpass filter	Narrow Band	Margin (15.9dB nom)	15.90 dB

Special Features

Compensate delay	195.8000 ms (D_RCV_NB, Delay (Cross))
Store to variable	rcv_vol_nb

Hardware Config Settings

Used Setting STD:Mobile test both channels

labCORE Settings

labCORE Serial	77000136	Nickname	
Firmware	3.2.46	Sync Source	Internal
Clock Pitch	0.00 ppm		

---

labCORE Routing

Out Channel 1 ->	Power Amp. 1/2 1 -> HATS 3 (HMS II.3) Speaker
Out Channel 2 ->	Analog Out 1/2 1 -> Radio Tester 1 (CMW500) In
In Channel 1 <-	BEQ Filter 1 L <- Mic Amp. 1..4 In 1 <- HATS 3 (HMS II.3) Mic. Left
In Channel 2 <-	BEQ Filter 1 R <- Mic Amp. 1..4 In 2 <- HATS 3 (HMS II.3) Mic. Right

---

Analog In Mainboard Settings (Analog In 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Analog Out Mainboard Settings (Analog Out 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Microphone Settings (Mic Amp. 1..4)

Channel In 1 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 2 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 3 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

Channel In 4 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

BEQ Settings (BEQ Filter 1)

Block mode	Bypass

Artificial Head Settings (HATS 3 (HMS II.3))

Ser. Nr.	12306194	Pinna Type	Type 3.3

5.1.1 -1 Conversation Gain 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ NB
4.75kbps

Correction

rcv_vol_nb	80.450 dB[SPL]	2023/12/17	Measured	5.1 Receive Volume Control Performance 2N

rcv_vol_nb-70

Calculated Value: 10.45 dB Ok

Ok

2023/12/17 12:54 ACQUA 5.1.200

Limits

	lower
Run 1	6.00 dB

5.1.1 -1 Conversation Gain 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ NB
12.2kbps

Correction

rcv_vol_nb	81.390 dB[SPL]	2023/12/17	Measured	5.1 Receive Volume Control Performance 2N

rcv_vol_nb-70

Calculated Value: 11.39 dB Ok

Ok

2023/12/17 12:54 ACQUA 5.1.200

Limits

	lower
Run 1	6.00 dB

5.1.1 -1 Conversation Gain 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ NB
4.75kbps;Band 4

Correction

rcv_vol_nb	80.560 dB[SPL]	2023/12/17	Measured	5.1 Receive Volume Control Performance 2N

rcv_vol_nb-70

Calculated Value: 10.56 dB Ok

Ok

2023/12/17 12:56 ACQUA 5.1.200

Limits

	lower
Run 1	6.00 dB

5.1.1 -1 Conversation Gain 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ NB
4.75kbps;Band 5

Correction

rcv_vol_nb	80.700 dB[SPL]	2023/12/17	Measured	5.1 Receive Volume Control Performance 2N

rcv_vol_nb-70

Calculated Value: 10.70 dB Ok

Ok

2023/12/17 12:58 ACQUA 5.1.200

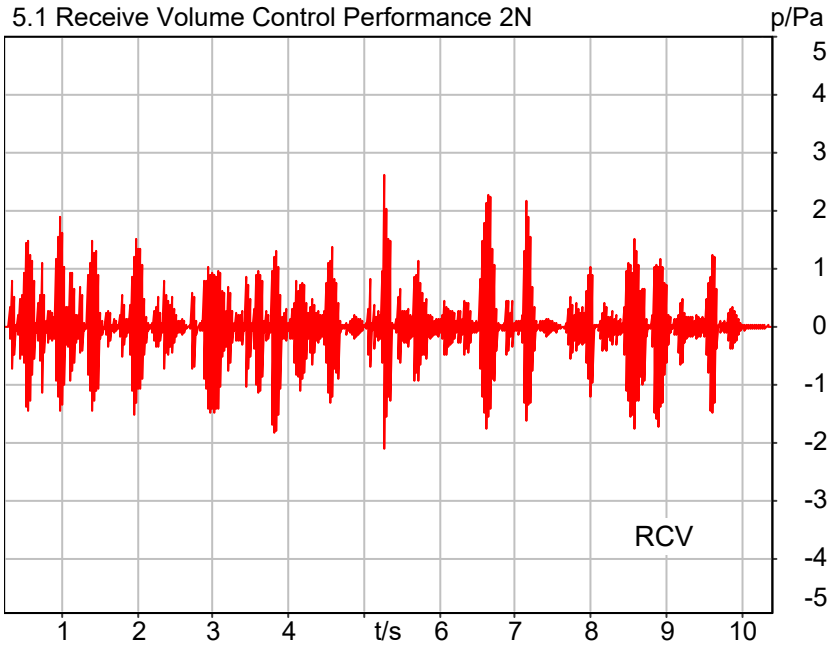
Limits

	lower
Run 1	6.00 dB

5.1 Receive Volume Control Performance 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ WB

6.6kbps



Speech Level RCV: 80.62 dB[SPL], Act.: 92.92%

2023/12/17 12:51 ACQUA 5.1.200

Meas. Setting STD:DRP/ERP OFF

Source: ieee_male_dual_wb.dat

Level adj. Ch1	-90.0 dB	Level adj. Ch2	-4.0 dB

Calibration

Input ch.2: 1.37 dB 2023/11/29 (HATS 3 (HMS II.3))
Output ch.2: 0.00 dB (Radio Tester 1 (CMW500))

Output Equalization/Filter

Mouth Eq. Ch.1: HATS 3 (HMS II.3)

Analysis

Direction	Out 2 -> In 2		
Range start	250.00 ms	Range length	10200.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Special Features

Compensate delay	196.6000 ms (D_RCV_WB, Delay (Cross))
Store to variable	rcv_vol_wb

Hardware Config Settings

Used Setting STD:Mobile test both channels

labCORE Settings

labCORE Serial	77000136	Nickname	
Firmware	3.2.46	Sync Source	Internal
Clock Pitch	0.00 ppm		

---

labCORE Routing

Out Channel 1 ->	Power Amp. 1/2 1 -> HATS 3 (HMS II.3) Speaker
Out Channel 2 ->	Analog Out 1/2 1 -> Radio Tester 1 (CMW500) In
In Channel 1 <-	BEQ Filter 1 L <- Mic Amp. 1..4 In 1 <- HATS 3 (HMS II.3) Mic. Left
In Channel 2 <-	BEQ Filter 1 R <- Mic Amp. 1..4 In 2 <- HATS 3 (HMS II.3) Mic. Right

---

Analog In Mainboard Settings (Analog In 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Analog Out Mainboard Settings (Analog Out 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Microphone Settings (Mic Amp. 1..4)

Channel In 1 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 2 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 3 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

Channel In 4 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

BEQ Settings (BEQ Filter 1)

Block mode	Bypass

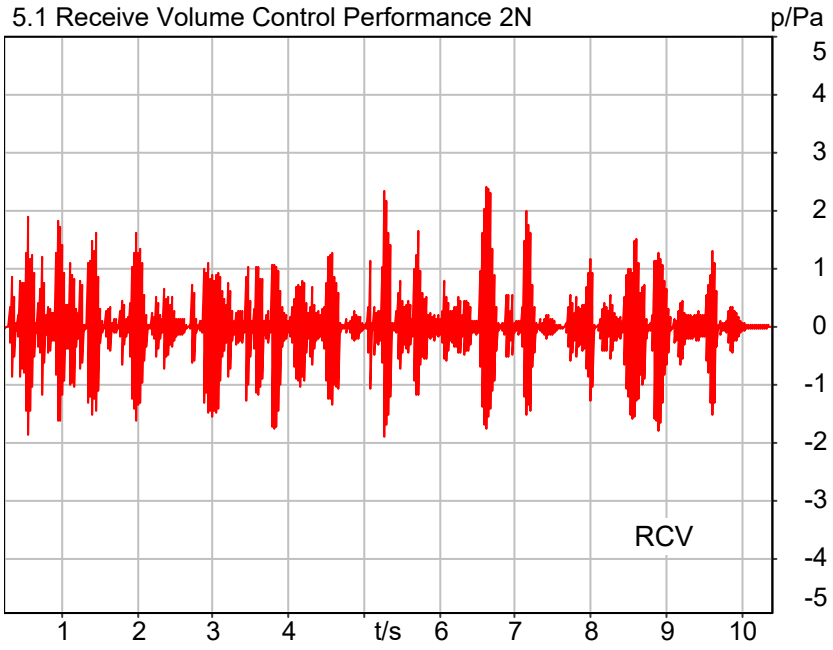
Artificial Head Settings (HATS 3 (HMS II.3))

Ser. Nr.	12306194	Pinna Type	Type 3.3

5.1 Receive Volume Control Performance 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ WB

12.65kbps



Speech Level RCV: 81.14 dB[SPL], Act.: 93.94%

2023/12/17 12:52 ACQUA 5.1.200

Meas. Setting STD:DRP/ERP OFF

Source: ieee_male_dual_wb.dat

Level adj. Ch1	-90.0 dB	Level adj. Ch2	-4.0 dB

Calibration

Input ch.2: 1.37 dB 2023/11/29 (HATS 3 (HMS II.3))
Output ch.2: 0.00 dB (Radio Tester 1 (CMW500))

Output Equalization/Filter

Mouth Eq. Ch.1: HATS 3 (HMS II.3)

Analysis

Direction	Out 2 -> In 2		
Range start	250.00 ms	Range length	10200.00 ms
Bandpass filter	Super Wideband	Margin (15.9dB nom)	15.90 dB

Special Features

Compensate delay	196.6000 ms (D_RCV_WB, Delay (Cross))
Store to variable	rcv_vol_wb

Hardware Config Settings

Used Setting STD:Mobile test both channels

labCORE Settings

labCORE Serial	77000136	Nickname	
Firmware	3.2.46	Sync Source	Internal
Clock Pitch	0.00 ppm		

---

labCORE Routing

Out Channel 1 ->	Power Amp. 1/2 1 -> HATS 3 (HMS II.3) Speaker
Out Channel 2 ->	Analog Out 1/2 1 -> Radio Tester 1 (CMW500) In
In Channel 1 <-	BEQ Filter 1 L <- Mic Amp. 1..4 In 1 <- HATS 3 (HMS II.3) Mic. Left
In Channel 2 <-	BEQ Filter 1 R <- Mic Amp. 1..4 In 2 <- HATS 3 (HMS II.3) Mic. Right

---

Analog In Mainboard Settings (Analog In 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Analog Out Mainboard Settings (Analog Out 1/2)

Range Ch. 1	0.00 dB	Range Ch. 2	0.00 dB

Microphone Settings (Mic Amp. 1..4)

Channel In 1 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 2 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	200V	Supply Voltage	±60V

Channel In 3 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

Channel In 4 Settings

Range	114 dB[SPL] @ 12.5 mV/Pa	Highpass	20Hz
Polarisation Voltage	Off	Supply Voltage	±60V

BEQ Settings (BEQ Filter 1)

Block mode	Bypass

Artificial Head Settings (HATS 3 (HMS II.3))

Ser. Nr.	12306194	Pinna Type	Type 3.3

5.1.1 -1 Conversation Gain 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ WB
6.6kbps

Correction

rcv_vol_wb	80.620 dB[SPL]	2023/12/17	Measured	5.1 Receive Volume Control Performance 2N

rcv_vol_wb-70

Calculated Value: 10.62 dB Ok

Ok

2023/12/17 12:51 ACQUA 5.1.200

Limits

	lower
Run 1	6.00 dB

5.1.1 -1 Conversation Gain 2N

ANSI/TIA 5050-2018 \ 2N HAC ON \ WB
12.65kbps

Correction

rcv_vol_wb	81.140 dB[SPL]	2023/12/17	Measured	5.1 Receive Volume Control Performance 2N

rcv_vol_wb-70

Calculated Value: 11.14 dB Ok

Ok

2023/12/17 12:52 ACQUA 5.1.200

Limits

	lower
Run 1	6.00 dB