

For all measurements the Audio Precision setup is as follows.

Filter un-wtd <10Hz - S/R/2, Zin high, Ref: meas, Inp 24 bit, Out frame, Measured in Dlevel DBfs

GAIN & AMPL. V. FREQ. (BAL.)

AD-TEST no. 1			A – GEN. (Bal.)			M5 - SET	
Test Name	Test Ch.	Mode	Freq. Hz	Level dBu	RG ohm	Sensitivity dBu	FS kHz
GAIN-06	L, R	A – D	1k	3	50 Bal	6	48
AMPL.-06/SW			20-20k				
GAIN-12			1k	9		12	
GAIN-18			1k	15		18	
GAIN-24			1k	21		24	
AMPL.-24/SW			20-20k				
GAIN-30			1k	27		30	

GAIN & AMPL. V. FREQ. (UNBAL.)

AD-TEST no. 2			A – GEN. (Unbal.)			M5 - SET	
Test Name	Test Ch.	Mode	Freq. Hz	Level dBu	RG ohm	Sensitivity dBu	FS kHz
Gain U-06	L, R	A - D	1k	3	20	6	48

Gain mismatch (Sensitivity: 6, 12, 18, 24, 30) = A1 - A1 calculated nom. value, A2 – A2 calculated nom. value,

THD (BAL.) –1dBFS

AD-TEST no. 3			A - GEN. (Bal.)			M5 - SET	
Test Name	Test Ch.	Mode	Freq. Hz	Level dBu	RG ohm	Sensitivity dBu	FS kHz
THD-06/1k	L, R	A-D	1k	5	50 Bal	6	48
THD-24/1k			1k	23		24	
THD-30/1k			1k	29		30	

THD (UNBAL.) –1dBFS

AD-TEST no. 4			A - GEN. (Unbal.)			APPARAT - SET	
Test Name	Test Ch.	Mode	Freq. kHz	Level dBu	RG ohm	Sensitivity dBu	FS kHz
THD-06/1k	L, R	A-D	1k	5	50 Bal	6	48
THD-24/1k			1k	23		24	
THD-30/1k			1k	29		30	

NOISE RS40 Measured as level measurement

AD-TEST no. 5			A - GEN. (Off)		APPARAT - SET		
Test Name	Test Ch.	Mode		RS (BAL) ohm	Sensitivity dBu	FS kHz	
N-06	L, R	A - D		50	6	48	
N-30				Bal	30		

CMRR @ 50Hz, 1kHz, 20kHz Test made with TC testbox.

AD-TEST no. 6			A – GEN. (Unbal.)			M5 - SET		
Test Name	Test Ch.	Mode	Freq. Hz	Level dBu	RG ohm	Sensitivity dBu	FS kHz	
CMMR-24/50			50	24		24		
CMMR-24/1K			1k					
CMMR-24/20k			20k					

CMRR @ 50hz > 60, CMRR @ 1Khz > 70

Measurement does not work reason not known, when gain is at 24dBFS therefore the test is made with input signal set to 30dB.

CROSSTALK, L -> R Measured in XTALK

AD-TEST no. 7			A – GEN. (Bal.) Only L – Channel			M5 - SET		
Test Name	Receive Channel	Mode	Freq. Hz	Level dBu	RG ohm	Input Sensitivity dBuFS	Output Level dBu	FS kHz
CTLR-18/20k	R, RS, R-Ch = 40 ohm	A-D	20k	17	50	18	24	
CTLR-30/20k		A-A	20k	29		30		

CROSSTALK, R -> L Measured in XTALK

AD-TEST no. 7			A – GEN. (Bal.) Only R – Channel			M5 - SET		
Test Name	Receive Channel	Mode	Freq. Hz	Level dBu	RG ohm	Input Sensitivity dBuFS	Output Level dBu	FS kHz
CTRL-18/20k	L, RS, R-Ch = 40 ohm	A-D	20k	17	50	18	24	
CTRL-30/20k		A-A	20k	29		30		

Note that when testing the DA conversion there is a change for left and right to switch that is left to right and vice versa.

For all measurements the Audio Precision setup is as follows:
 Filter un-wtd 22Hz – 22kHz, Zin low, Ref: meas, Inp 24 bit, Out frame,

GAIN & AMPL. V. FREQ. Measured in Dlevel DBfs
BAL.-OUT / 600

DA-TEST no. 1			D – GEN.		M5 - SET			
Test Name	Test Ch.	Mode	Freq. Hz	Level dBFS	Level Out dBu	RL ohm	FS kHz	
GAIN-O-06/1k	L, R	D - A	1k	-1	6	600	48	
AMPL-O-06/SW			20-20k					
GAIN-O-12/1k			1k		12			
GAIN-O-18/1k			1k		18			
GAIN-O-24/1k			1k		24			
AMPL-O-24/SW			20-20k					

Gain mismatch (Level Set: 0, 6, 12, 18) = A1 - A1 calculated nom. value, A2 – A2 calculated nom. value,

GAIN & AMPL. V. FREQ.

DA2-test no. 2 is a relay test for bal/unbal test.

THD
BAL.-OUT / 600

DA-TEST no. 3			D – GEN.		M5 - SET			
Test Name	Test Ch.	Mode	Freq. Hz	Level dBFS	Level Out dBu	RL ohm	FS kHz	
THD-O-06/1k	L, R	D-A	1k	-1	6	600	48	
THD-O-24/1k			1k		24			

NOISE RS40 Measured in Level, dBr, så dBzero, derefter THD dBr måling

DA-TEST no. 4			D – GEN. (Off)		M5 - SET			
Test Name	Test Ch.	Mode			Level Out dBuFS	RL ohm	FS kHz	
N-O-06	L, R	D - A			6	600	48	
N-O-24					24			

0dBr = FS Level Out

CROSSTALK, L -> R Measured in XTalk

DA-TEST no. 5			D – GEN. Only L – Channel ON			M5 - SET			
Test Name	Receive Ch.	Mode	Freq. Hz	Level dBFS		Level-Out dBu	RL ohm	FS kHz	
CTLR-O-06/20k	R	D-A	20k	0		6	600	48	
CTLR-O-12/20k			20k			12			
CTLR-O-18/20k			20k			18			
CTLR-O-24/20k			20k			24			

0dB_r = FS Level Out

CROSSTALK, R -> L Measured in XTalk

DA-TEST no. 6			D – GEN. Only R – Channel ON			M5 - SET			
Test Name	Receive Ch.	Mode	Freq. Hz	Level dBFS		Level-Out dBu	RL ohm	FS kHz	
CTRL-O-06/20k	L	D-A	20k	0		6	600	48	
CTRL-O-12/20k			20k			12			
CTRL-O-18/20k			20k			18			
CTRL-O-24/20k			20k			24			

0dB_r = FS Level Out

GAIN & AMPL. V. FREQ. (BAL.)

AA-TEST no. 1			A – GEN. (Bal.)			M5 - SET			
Test Name	Test Ch.	Mode	Freq. Hz	Level dBu	RG ohm	Sensitivity dBu	FS kHz	Level-Out dBFS	RL ohm
GAIN-X-24	L, R	A - A	1k	21	50	24	48	24	600
AMPL-X-24/SW			20-20k						