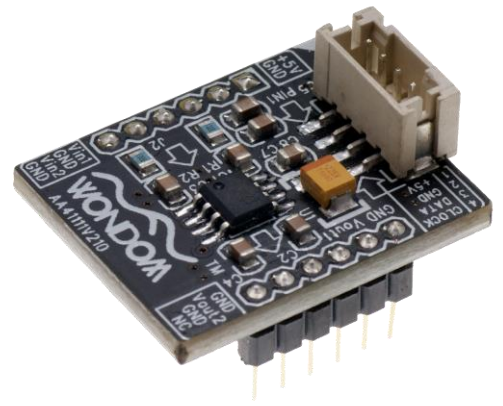


Audio Receiver Series

Electric Digital Volume Control Kit Hi-Fi DIY (AA-AA11117)



Key Features:

- Specially Designed for Audio Amplifier Board
- 20cm Cable, Flexible Connection and Easy Installation
- Single-end Audio Signal Input and Output
- LED Status Indicator
- DIP alike module for plug in play
- Size:

Volume Control Board: 1.10 x 0.90 inches
Decode Board: 2.00 x 1.50 x 1.70 inches

Electrical Performance

Specifications typical @ +25°C, Powered by 12V DC, unless otherwise noted. Specifications subject to change without notice.

Parameter	Conditions	Min.	Typ.	Max.	Units
Number of Channels	-	-	2	-	-
Load Impedance	-	-	10	-	kΩ
Power Supply	@10kOhm, 1000Hz	-	5	-	V
Quiescent Current	@5V, 10kOhm	-	10	-	mA

Audio Performance

Specifications typical @ +25°C, Powered by 12V DC, unless otherwise noted. Specifications subject to change without notice.

Parameter	Conditions	Min.	Typ.	Max.	Units
Control Number	@10kOhm, 1000Hz	-89	-	-1	dB
Accuracy	-	-	1	-	dB/Step
Maximum Input Voltage	@10kOhm, 1000Hz, A _{TT} = -6dB, THD+N = 1%	-	2.1	-	V _{rms}
Maximum Output Voltage	@10kOhm, 1000Hz, THD+N = 1%	-	1.6	-	V _{rms}
SNR	@10kOhm, 1000Hz, THD+N = 1%, A _{TT} = -1dB, A-Weighting	-	114	-	dB
THD+N	@10kOhm, 1000Hz, A _{TT} = -1dB	-	0.005	-	%
Output Noise Voltage	A-weighting, Input Connected to GND, A _{TT} = -1dB	-	3	-	uV
Crosstalk Separation	@10kOhm, 1000Hz	-	-100	-	dB

Distributors:



All these boards are per-tested with our power supply solution to comply with FCC and CE. For all customers who need those information, please contact our distributor or Sure Electronics. RoHS compliant will need an MOQ of 1000pcs per order.

Ready for:



Contact info

- Email: info@sure-electronics.com



Model Selection Guide

Model Number	Control Range	Accuracy	Output Noise	THD+N	SNR	PCB Size of Volume Control Board ⁴
AA-AA11117	-83dB - 0dB	1dB/step	9.6μV	0.028%	93.2dB	1.10" x 0.90" ^{#1}
AA-AB41134	-83dB - 0dB	1dB/step	9.6μV	0.028%	93.2dB	3.00" x 2.00" ^{#2}
AA-AB41116	-79dB - 0dB	1dB/step	10μV	0.02%	100dB	3.00" x 2.00"
AA-AB41147	-107.5dB - 10dB ^{*1}	1dB/step	15.89μV	0.0327%	92.2dB	3.60" x 2.70" ^{#3}
AA-AB41148	-95.5dB to 10dB ^{*2}	1.5dB/step ^{*3}	8.8μV	0.0006%	108dB	4.80" x 3.60" ^{#4}

Notes:

*1 The maximum gain of AA-AB41147 is limited to 10dB by software. The maximum gain could be 20dB. For OEM customers who need more gain in their project, please send an e-mail to store@sure-electronics.com. Not available for retail customers.

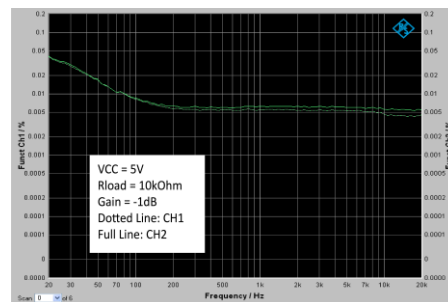
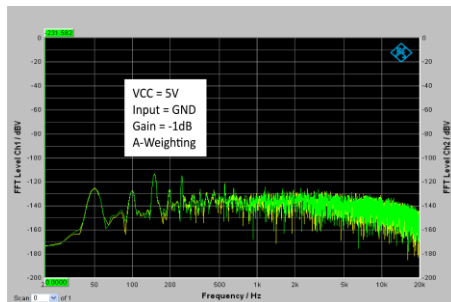
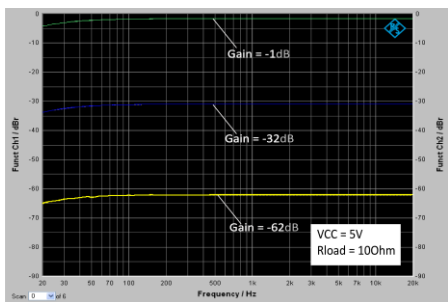
*2 The maximum gain of AA-AB41148 is limited to 10dB by software. The maximum gain could be 31.5dB. For OEM customers who need more gain in their project, please send an e-mail to support@sure-electronics.com. Not available for retail customers.

*3 The accuracy of AA-AB41148 can be set as 0.5dB/step. Please send an email to store@sure-electronics.com if you have requirements. Not available for retail customers

*4 PCB size of the Decode Board is 2.00 x 1.50 x 1.70 inches.

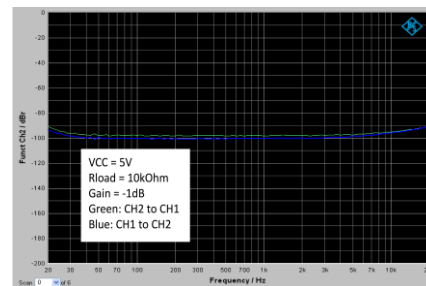
All parameters were tested with Rohde & Schwarz UPV audio analyzer (AES17 filter enabled) and Audio Precision AUX0025 filter. For authorized distributors and OEM customers who need more detailed performance graphs and parameter settings, please send an inquiry e-mail to us. (Not available for retail customers)

Typical Performance Graphs

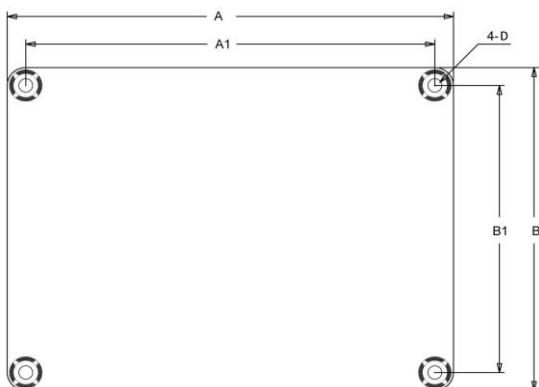


Applicative Amplifier Boards

Model Number	Rating Output Power	Model Number	Rating Output Power	Model Number	Rating Output Power
AA-AB32971	2 X 100Watt	AA-AB32196	2 X 300Watt	AA-AB31315	1 X 400Watt
AA-AB32281	2 X 200Watt	AA-AB32314	2 X 400Watt	AA-AB31511	1 X 500Watt
AA-AB32195	2 X 300Watt	AA-AB32514	2 X 500Watt	AA-AB31243	1 X 600Watt
AA-AB32313	2 X 400Watt	AA-AB31282	1 X 200Watt	AA-AB31316	1 X 400Watt
AA-AB32512	2 X 500Watt	AA-AB31194	1 X 300Watt	AA-AB31513	1 X 500Watt
AA-AB31242	1 X 600Watt	AA-AB31321	1 X 800Watt	AA-AB31241	1 X 600Watt



Mechanical Dimensions

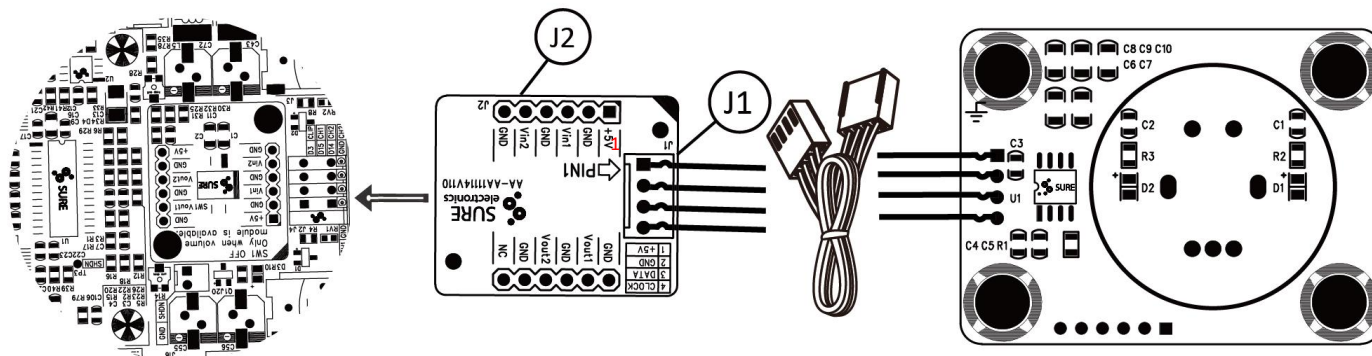


Dimension	A (inch/mm)	A1 (inch/mm)	B (inch/mm)	B1 (inch/mm)	D (inch/mm)
Decode Board	2/50.8	1.6/40.64	1.5/38.1	1.1/27.94	0.14/3.6
#1	1.1/27.9	-	0.9/22.9	-	-
#2	3.0/76.2	2.7/68.6	2.0/50.8	1.7/43.2	0.14/3.6
#3	3.6/100.3	3.3/83.8	2.7/68.6	2.4/61.0	0.14/3.6
#4					

Notes:

- All dimensions are typical in inch(mm)
- Tolerance x.xx=±0.02(±0.50)

Connections



Rotary Encoder Connector:

- J1 4Pin 2510 Connector

Pin	Function	Pin	Function
1	+5V	3	DATA
2	GND	4	CLOCK

Pin	Function	Pin	Function
1,12	+5V,NC	3,5	Vin1,Vin2
2,4,6,7,9,11	GND	8,10	Vout1,Vout2

Electronics

Make Your Audio Application Simple!