# **Modesty** Series

# Sure A2050 2 x 50 Watt 4 Ohm Class D Audio Amplifier (AA-AS32171)

# O % SURE

# **Key Features:**

- Multiple Audio Input Source
- Rotary Encoder Switch Control
- Overcurrent Protection
- Overtemperature Protection
- · Low Power Consumption
- Stereo Headphone Amplifier
- Aluminum Anodizing Housing
- · Weight: 590g/1.30 lbs. (±10%)
- Size: 6.40 x 2.90 x 1.90 inches

## **Distributors:**













All these boards are pre-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 1000 pieces per order.

### Ready for:



### **Contact info**

• Email: info@sure-electronics.com



## **Electrical Specifications**

Specifications typical @ +25°C, powered by 19V DC, unless otherwise noted. Specifications subject to change without notice.

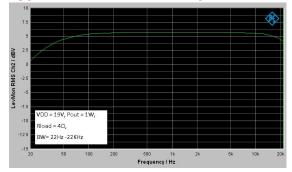
Parameter	Conditions	Min.	Тур.	Max.	Units
Power Supply	-	12	19	20	VDC
Idle Power	SD Floating	-	0.48	2	W
Maximum Current	100W @ 4Ohm	-	6.2	-	Α
Efficiency	50W @ 4 Ohm	83	-	88	%
Minimum Load Impedance	-	-	6	-	Ω
Switching Frequency	SD Floating	-	315	-	KHz

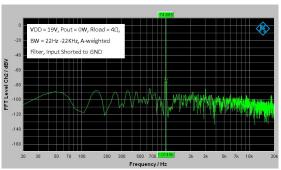
## **Audio Performance**

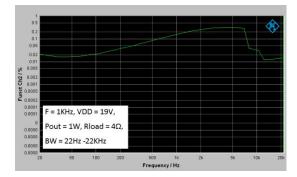
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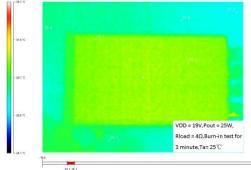
Parameter	Conditions	Min.	Тур.	Max.	Units
Gain	Max Volume Level	18	20	22	dB
Input Consitivity/PMC)	@ 4 Ohm, 50W, 1KHz, 3.5mm	-	1.5		V
Input Sensitivity(RMS)	@ 4 Ohm, 50W, 1KHz, RCA	-	1.5		V
Input Impedance	RCA/3.5mm	-	60	-	ΚΩ
Outroit Davis	@ 4 Ohm, THD+N 1%	-	40	-	W
Output Power	@ 4 Ohm, THD+N 10%	-	50	-	W
Supports Sampling Rate	- 32, 44		1, 48, 88.2	KHz	
Maximum Sampling Word Length	-	24			Bit
Bandwidth @ ±3dB	@ 4 Ohm	20	-	20K	Hz
TUD	@ 4 Ohm, 1W, 1KHz, 3.5mm	-	0.049	-	%
THD	@ 4 Ohm, 1W, 1KHz, RCA	-	0.056	-	%
Output Noise Level	A-weighting, Input Connected to GND	-	236	-	uV
SNR	40W @ 4 Ohm, THD+N 1%, RCA Input	-	82	-	dB

# **Typical Performance Graphs**









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)

#### **Model Selection Guide**

Model Number	Output Power	Power Supply Range	3.5mm	RCA	вт	Toslink/ Coaxial
AA-AS32157	2 X 15Watt	DC 9-14V	×	√	×	×
AA-AS32171	2 X 50Watt	DC 12-20V	√	√	×	×
AA-AS32186	2 X 100Watt	DC 12-36V	√	<b>√</b>	×	×
AA-AS32971	2 X 100Watt	DC 12-36V	√	√	1	√

#### Suggested power supply solution:

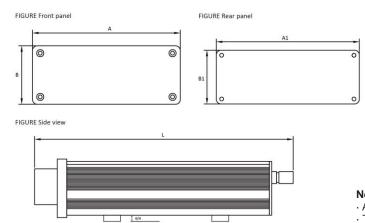
HuntKey 19V 3.42A 65W AC/DC Power Adapter (PS-SP11505)

If you have other power supply requirements, please feel free to contact us.

#### Notes:

- 1. The output power is rated at the condition THD+N 10%,1kHz sine wave.
- 2. None typical load may cause rating power reduction.
- 3. Dimensions mean length and width of aluminium case only, excluding excessive part out of the aluminium case outline.
- 4. All parameters were tested with Rohde & Schwarz UPV audio analyzer (AES17 filter enabled) and AP AUX0025 filter. Linear Power Supply units were used for testing.
- 5. Sure Electronics promises all standard products life cycle more than 5 years. Sure Electronics reserves the right to update the version without notice. All the products sent to retail customers are the latest version. We will provide back-to-order service (100 Pieces MOQ needed) for our distributors in 5 years.

#### **Mechanical Dimensions**

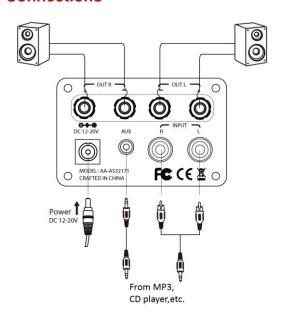


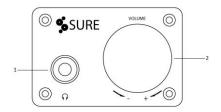
## Notes:

- · All dimensions are typical in inches/mm
- Tolerance x.xx =  $\pm 0.02(\pm 0.50)$

Dimensions	A (inch/mm)	A1 (inch/mm)	B (inch/mm)	B1 (inch/mm)	L (inch/mm)	H (inch/mm)
#1	2.94/74.60	2.78/70.60	1.93/49.00	1.77/54.00	6.41/162.70	0.16/4.00
#2	4.88/124.00	4.72/120.00	1.93/49.00	1.77/54.00	8.36/212.40	0.16/4.00

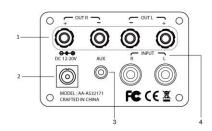
#### **Connections**





1—Power switch

2—Volume knob



1—Speaker Output

2-Power Input

3—Audio Input Connector

4—Audio Signal Input(RCA)



# Sure Electronics

Make Your Audio Application Simple!

NO.9, Weidi Road, Xianlin University City, Qixia District, Nanjing, Jiangsu Province, P.R.C

# www.sure-electronics.com www.wondom.com

Mail: store@sure-electronics.com Skype: surewebstore