

Test PA RZ4-2000D 4-channel (4x130W @ 2ohm)

Date: January 2015

Used test Equipment

Velleman HPS140 Oscilloscope; 4 100W 80hm Power Resistors on Home Made Heat Sink

2013 Street Glide – All testing has been done using the bike (while running!)

1KHz 0dB test tone (WAV file), Speakers used during audio test: Rear JBL P963 (2ohm)

Pioneer DEH-X9500BHS2013 Street Glide (4V pre-outs) - Stock Harley Antenna – NOT on the bike but clamped on a stand

Impressions

Dimensions: 1 3/4 Inch high, 11 7/16 inch wide, 4 3/4 inch deep.

Class D amp. Keep in mind this amp is basically the same as the SoundStream PN 4.520! Published specs on this PA version are completely B.S. The PN 4.520 specs are better and actually underrated (130W@2 ohm versus my measured 140W@2ohm)

Power line and speaker connections the screw terminal ones and they are large so no issues with 10AWG power line.

Amp does support HP/LP/AP options. Amp is 2 ohm stable.

To fit this amp in the fairing (referring to Batwing), you need to remove the caps at the end (4 screws!)

Amp runs warm/"hot" but not to a point of "melting down" (ran hotter than the other amps I tested this month). I have played it on long trips thru 100F weather with no issues.

Results

Input Voltage:13.90V (14.0V) DC (Motorcycle power while running IDLE; 10AWG power line, both + and Ground connected to the battery). Revving the engine a bit brought up the input voltage to ~14.0V.

1 channel (FR) tested. Results below as shown on the oscilloscope during the test.

Load	RMS Power (Clean sinus wave)	Vac signal (Clean Sinus wave)
2 Ohm	~140Watt	~16.7V
4 Ohm	~91Watt	~19.1V

During Audio sound test (2 channels and 4 channels), the sound was neutral, perhaps a bit "underpowered" for the really low frequencies (this has been noticed on other Class D amps as well). It goes loud for sure... as loud as BT series or PPI/TN 4.900 tested? No but pretty close and in my opinion loud enough as I can hear music loud and clear at 80MPH.

FM reception

Most Class D design amps have (potential) issues with FM reception interference. The tested unit (my own), only lost 3 stations (94.1, 100.5 and 104.3) compared to a test with the BT2180 on the same day and bike in the same position.

Whether or not you will lose FM with this amp, is tossing a coin...

Conclusion

This amp sits at a price point (Jan 2015 @ ~100-110 USD) it really cannot be beaten when it comes to performance versus price. Are there better, more powerful amps out there? Yes, but they come at a different price. For a 4 speaker setup, this would be my go to amp (I do not care about FM). More than 4 speakers, I would potentially consider another amp (or run 2 of these). Also, running (good) 2 ohm speakers will help with the "loudness"...

Disclaimer: The above test is done as objective as possible but audio perception is subjective to a human beings hearing.