

MB QUART PAB1200.1D

Text and Photos by Garry Springgay

One of my favourite things about doing reviews for PASMAG is the amount of new product I get exposed to. I get a chance to not only see the new gear, but I really enjoy the opportunity to put it through its paces on my test bench and in the listening lab. I get to really listen to the stuff, and I often find myself comparing one product to another, or the newest piece to the old one it replaces. Well, last week, the big brown truck showed up at my door with a shipment of brand new stuff from the guys over at Maxxsonics. Over the course of the next few months, you'll see an assortment of reviews on a bunch of new gear from several of their brands.

COSMETICS

This time around, we're going to have a look at the new MB Quart "Premium Series" Class D amplifier, the PAB 1200.1D. The new amp has a clean and simple look to it, with a flat-topped heatsink finished in simple yet classy-looking black anodized brushed aluminum, with a couple of mesh vents flushed in for cosmetic appeal. The "red block" portion of the classic MB Quart logo illuminates when the amp is turned on. The heatsink is fairly large, measuring 17 inches long, by 10.4 inches wide and about 2.25 inches high. The heatsink extends past the connection and control ends of the chassis, and effectively hides all the wiring and controls. Mounting

holes in the top of the heatsink allow you to fasten the amp down without showing the screws. Two cast-aluminum end panels bolt onto the ends of the amp, and are notched on the bottom to allow the wiring to come out, or it could be totally hidden if brought up from underneath the mounting surface. Either way, you'll end up with a clean-looking install if you're halfway decent at wiring.

FEATURES

The power and speaker connections are found on the right hand end of the amp, and will take 2 gauge and 10 gauge wire, respectively. There are two >>

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sets of connections for the woofers to simplify multiple woofer connections. A pair of 60A Maxi-fuses is located here as well, although the manual indicated they should be 40A. I did all my power testing with the 60s in place with no problem, and at full power at 1 Ohm, I needed all the current they would pass. On the other end of the amp, you’ll find all the controls and input / output signal connections. The PAB 1200.1D has a full complement of control features with variable crossover, subsonic filter, bass EQ, and an adjustable phase control as well. A pair of “pass-through” RCAs (outputs that simply mimic the input signal) are also provided to drive additional amplifiers.

OWNER’S MANUAL

The manual that comes with the MB Quart amp is so big, it’s almost intimidating at first. This is a full-on 8.5- by 11-inch book, with over 80 pages! I’ve seen complete car audio magazines without as many pages as this manual! It’s not until you open it and have a look through it that you realize it’s so big because it covers all four of the PAB-series amps, and it does it in no less than six languages! For such a thick, impressive book, the information provided is quite rudimentary. It will be a good helper for a neophyte installer, but if you’ve spent much time twisting wires together, you won’t learn anything new here.

PERFORMANCE / LISTENING

When you buy a big, powerful Class D amp for your subwoofer system, most people simply expect an amp that delivers gobs of clean power, and performs reliably without going thermal. And that is precisely what you can expect from the MB Quart PAB 1200.1D. It makes good power, and in all my listening it never came close to shutting down from overheating, even when driving 2 Ohm loads at high power. The amp sounds fine, and it had no problem with any woofer load I connected. From a sonic perspective, the PAB 1200.1D is one of the better Class D amps I’ve auditioned recently, and provided deep, well-controlled bass with great dynamics. Many times, I notice some instability in the Class D amps I test when pushed to their limits during power testing. This example was rock-solid, and had no weird waveforms or oscillations when pushed well into clipping at any impedance.

The controls provided all the adjustment I needed, and I had no issues getting the amp dialed in to the various systems I used during my listening evaluations. >>

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Okay, with that said, I do have a peeve with the turn-on and turn-off characteristics. Those of you who know me, or have read a few of my reviews, know that I have almost zero tolerance for car audio amplifiers with easily-audible turn-on and turn-off noise. Despite the manual indicating something called "Soft Start Sound," my sample amp had turn-off noise in spades. Turning the amp off sends a metallic-sounding "clunk" through the woofer system, and you can actually see the offset in the output when the cones jump. Turn-on noise is much lower, but there is still a very minor audible thud in the system. Frankly, I expected better from an amp wearing the MB Quart badge. Maybe the engineers will get this corrected before the amp is in stores and hits full production. While this may not be a big deal, it's a pet peeve of mine, and drives me a little nuts when enjoying listening to an amp like this and then hearing that kind of noise when I shut it off.

On the bench, the numbers I measured reinforced the opinions I formed during listening. The big MB Quart is a powerful amplifier, and should prove to be very competitive against others in its price range. It did fall a little short of the advertised 4 Ohm power number, but it exceeded the advertised 2 Ohm and 1 Ohm numbers. The filters measured approximately

as advertised, as did the bass EQ and phase controls. While listening and playing with the various adjustments, I noticed the bass EQ boost seemed to have quite an effect on a wide band of frequencies. This was confirmed by my measurements, and the filter is indeed a "low Q" type. With a maximum of 9dB of boost at 45Hz, there is still significant boost below 30Hz and all the way out past 100Hz. An EQ control like this is less useful for subwoofer applications simply because you can easily provide excessive boost below the resonant frequency of the woofer system, which is never a good idea.

Signal to noise was average for a big Class D amp, at about -66dBA referenced to 2 volts of output. While S/N is not a critical spec for a subwoofer amp, as the vast majority of the noise in these amps is at frequencies well above the bandwidth of operation, it does give some insight into the engineering expertise that went into the amp. 205Ω. This is a good output impedance measurement. The Pierre Verany Digital Test CD revealed an error tracking ability of 1.25mm – also a little on the low side of average, but still acceptable and beyond the 'requirement' level for a CD player.

CONCLUSION

With the introduction of the MB Quart PAB1200.1D, the company entered one of the most competitive sectors of the car amplifier market. The product they brought to the party has competitive features, and very good power for the price. The design is stable and has good thermal stability, and should prove a worthy component in any quality audio system. **PAS**

MBQUART ■

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