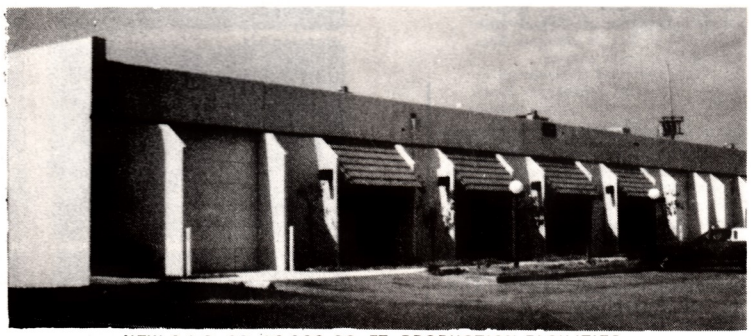
GAS GETTE
THE GREAT AMERICAN SOUND CO., INC.
20940 LASSEN ST. • CHATSWORTH, CALIF. 91311 U.S.A. • (213) 998-8100
Vol. I No. 5



NEW G.A.S. CO. 20,000-SQ. FT. PRODUCTION FACILITIES.

INTRODUCING THOEBE AND GOLIATH

In the opinion of many experts, Ampzilla has firmly established itself as one of the classic power amplifier designs of this era. Thaedra has convinced the industry that a solid-state pre-amplifier can now not only challenge, but outperform the best vacuum-tube designs. Great American Sound Company's Son of Ampzilla delivers a state-of-the-art power amplifier at affordable prices.

Realizing these achievements in less than 1½ years, Great American Sound Company now announces their latest products, the Thoebe servo-loop preamplifier and its companion pre-preamplifier, Goliath. Thoebe shares with Thaedra identical servo-loop electronic circuitry and sonic performance, but at a much lower cost. With the addition of its companion pre-preamplifier Goliath, Thoebe achieves Thaedra's unique capability to accommodate all moving-coil phono cartridges.

Thoebe is ideally suited for use with the Son of Ampzilla power amplifier and has been designed with a matching front panel for this purpose.

Matched to Thoebe's styling, Goliath is an auxiliary pre-preamplifier, a mere 2¼-in. wide to be used specifically with Thoebe to provide the additional gain and low-noise performance necessary to accommodate a moving-coil phono cartridge. A power jack on Thoebe supplies Goliath's power requirements.

THOEBE

All-complementary circuitry from input to output.

Tone controls are 21-position switch type, providing accurately reproduced, readily resettable curves without the possibility of slider-contact noise which is possible with conventional variable potentiometers.

Level control is 22-position switch type providing ± 1 dB match between channels not possible with conventional variable potentiometer.

Main output drive capability for low impedance headphones.

Features same Servo-controlled electronics as featured in Thaedra.

Tape monitoring and tape copy switching for two tape machines including front and rear duplicate jacks for one.

Four selection low frequency filter — 10 Hz, 20 Hz, 30 Hz, or off.

Muting switch reduces output level 15 dB.

Reed relay for turn on/off delay.

Two regulated power supplies, power transformer potted in drawn steel can, double shielded with high permeability nickel alloy.

Provisions to accommodate Goliath pre-preamp for use with moving-coil phono cartridges.

GOLIATH

Servo-controlled preamplifier circuitry is identical to that featured in Thaedra's head amp.

Five-position selection of gain with 3 dB steps accommodates the lowest through highest-sensitivity phono cartridges.

Steel-enclosed construction guarantees freedom from extraneous electromagnetic and electrostatic field interference.

Panel styling matched to Thoebe.

PRINTED IN U.S.A.

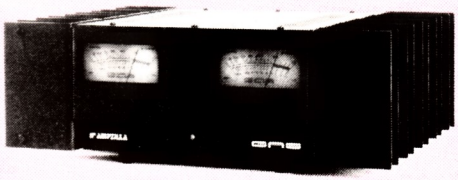
AMPZILLA'S NEW LOOK

Augmenting Ampzilla's familiar look is the addition of two headphone jacks on the front panel. One jack accommodates conventional electro-dynamic headphones; the second jack has higher-voltage output for use with electrostatic headphones.
Internally, Ampzilla's power transformer is now supported by heavy-duty steel bracing to withstand the most severe handling and shipping conditions.

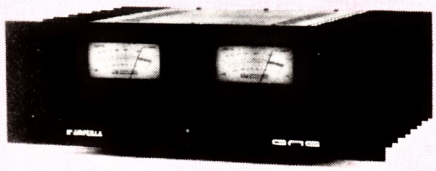
SON OF AMPZILLA

Shown here are the choices available for the Son of Ampzilla amplifier. Each day's mail brings us more glowing reports about its excellent performance with a wide variety of speaker applications including two pairs of Magnapans or two pairs of Quad electrostatic speaker systems. The resulting popularity of Son of Ampzilla has resulted in our need to expand the Great American Sound Company production area to the 20,000-square-foot facility shown on the front cover of this Gassette.

Utility
(W) $399.00
(E) $409.00



W/Blk. anodized
Front Panel
(W) $414.00
(E) $424.00



W/Blk. anodized
Rack Mtg. Panel
(W) $424.00
(E) $434.00

(E) = East of Denver (W) = Denver/West

NOW AVAILABLE

INDUSTRIALIZED AMPZILLA AND SON OF AMPZILLA

For those heavy-duty applications where long-term reliability under adverse operating conditions is more important than minimum distortion in the ultrasonic response region, both Ampzilla and Son of Ampzilla are now offered in ruggedized versions for industrial usage. Both these units have black-anodized finish and are supplied with mounting provisions for installing in a standard 19-inch commercial rack.

Reprint courtesy of

StereOpus volume 1 no. 3

StereOpus is published four times annually at P.O. Box 269, Fort Walton Beach, Florida 32548.

Rates are $9.00/year ($11.00 for First Class). Foreign rates are $12.00 ($15.00 for air mail). Canadian rates are $11.00 (First Class only).

Thaedra

Stereo Preamplifier. Manufacturer: Great American Sound Company (G.A.S. Co.), 20940 Lassen Street, Chatsworth, California 91311. Price: $899.00

My comments on Thaedra are based on an early production unit. They are an indication, but not an absolute one, of what you will find on a dealer's shelf right now. Several important modifications have been made, and I hope to be able to audition a current sample in the near future against the Mark Levinson and several other hot contenders. Based on this first sample, Thaedra has a low end second to none, a very good middle, and an excellent top. My sample trounced my SP-3a-1 at the bottom and top, and was very close to it in midrange with respect to naturalness and transparency.

I discovered that the Denon cartridge (which has a medium output and can be used with or without a head amp) *(see review of Denon this issue — Ed.)* definitely sounded better through Thaedra's head amp than it did through the standard phono input, even though the head amp would occasionally sound strained by the high output of the Denon. Modifying Thaedra's head amp for use with higher output cartridges like the Denon is a simple procedure, so if you do plan to use yours with such a pickup, then write to G.A.S. for details. *(In most cases I suspect they will want your friendly dealer to do the mod — Ed.)*

One reason the head amp sounds better than the standard phono input (using the Denon) is the more advanced circuitry of the former. In fact, the term "head amp" was used by G.A.S. to distinguish it from pre-preamp. It is not a pre-preamp at all. The signals amplified by the head amp are passed directly to the high level stages. They never go through the regular preamp circuits. Early Thaedras were reported to have rather sensitive head amps (sensitive in the sense that if you plugged a lead into them when they were on, they just might self-destruct), G.A.S. reports that Thaedra's now in production are no longer so delicate.

The advanced circuitry used in the head amp, and throughout the rest of the preamplifier (with the exception of the normal phono input stage), is servo-control. This technique, exclusive to Thaedra, absolutely controls D.C. voltages in the preamp, without resorting to excessive negative feedback or coupling capacitors. The result is to allow the preamp to be completely D.C. coupled after the input coupling capacitors in the phono stage.

A great deal of time was spent comparing Thaedra to the Luxman preamp, also reviewed in this issue. Using Dahlquist DQ-10's, Thaedra gave cleaner, tighter bass, but a slightly more metallic high end. The Lux seemed much more like a tube unit on top. It was very difficult to judge the two in terms of midrange accuracy with the DQ-10's, so I took them to a friend's house and compared them on his Dayton-Wrights (electrostatics). These speakers have to be the ultimate for equipment comparison. As I expected, the DW's made small differences in the midrange seem huge — in favor of Thaedra. Massed voices were more defined and not nearly so veiled. Top end definition was superior on Thaedra this time, but the DW's have a rolled off top and the Lux's tube-like highs weren't really as much in evidence as they were with the brighter DQ-10's. When the head amp was used, overall reaction to Thaedra by a number of experienced audiophiles was very good.

According to G.A.S., Thaedra's now in production are noticeably superior to first samples (sonically). If this is true, Thaedra may indeed be hard to beat at any price. I can't fail to mention that construction of Thaedra (inside) is really impressive, and the thing is every bit as sexy looking as the company's advertisement. A walnut case is available too.

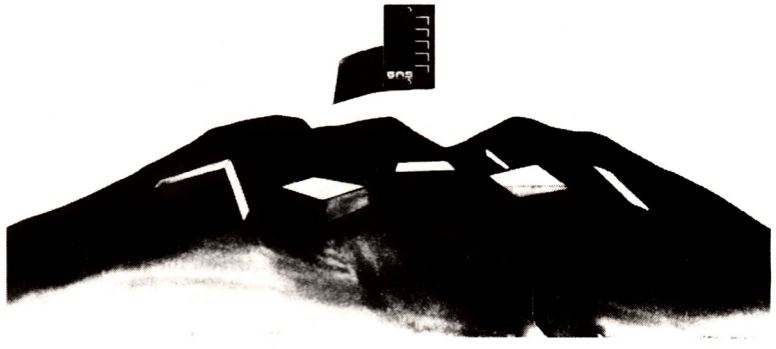
RT

While agreeing with RT on the bass and midrange of Thaedra, I initially had some reservations about the high end. The unit was returned to G.A.S. for updating to the latest specs. On return to us, the preamp unfortunately had an intermittent channel. While it was operating it indeed appeared to be a considerable improvement over the first sample. We will have to return the unit again, however, to cure the bad channel. A full update will appear in the next issue.

FOOTNOTE: The Thaedra ads are sexy only in a rather kinky way — have a banana?

TJN

MEET GOLIATH



Once upon a time, there was a moving coil born into the kingdom. This moving coil was a child of beauty, something the kingdom had awaited eagerly. However, when the child finally arrived, she was treated terribly. She was booed and cursed and threatened to become a prisoner of mishandling and misunderstanding. She was shoved through transformers and subjected to the evil deeds of medieval electricians. For years, she suffered the tortures of a thousand ages.

Finally, one day, a magic fairy named Thaedra saw the real inner beauty of the moving coil. Thaedra proclaimed to the land the glory of the moving coil and then the kingdom became aware of its new princess. As the fairy queen Thaedra nursed the moving-coil princess to adulthood, she realized that a prince must be found to complete the happiness of the moving-coil princess's life. Lo and behold, one day, a gleaming knight on a white horse arrived in the kingdom. His name was Goliath. Instantly, Goliath and the moving-coil princess fell in love and lived together happily ever after.

COMPARE THESE SPECS!

THOEBE

MAGNETIC PHONO:

Gain: 42 dB to tape output.
63 dB to main output.
Noise: 500 Nanovolts — 20 Hz to 20 KHz referred to input.
Distortion: Less than .01% at 2 Volts R.M.S. output at tape output at any freq. 20 Hz to 20 KHz.
RIAA: ±0.5 dB, 20 Hz to 20 KHz.

HIGH LEVEL:

Gain: 20 dB to main output.
Noise: 3mV, 20 Hz to 20 KHz referred to input.
Distortion (Tone controls flat): less than .01% at 2 Volts R.M.S. output at any freq. 20 Hz to 20 KHz into 600 Ohms.
Freq. Response: 1.0 to 100 KHz ±1 dB (Tone controls flat).
Low Filter: 10 Hz, 20 Hz, 30 Hz, or off.

Maximum input before clipping:
Phono: 100 mV at 1 KHz.
High Level: 1 Volt R.M.S. (level control at max.)

Maximum output before clipping — all outputs:
10 Volts R.M.S. minimum.

Power Consumption: 115-125 Volts, 50-60 Hz, 50 Watts.
Size: 17" W. x 5¼" H. x 8" D.
Shipping Weight: 30 lbs.

PRICES	BLK. PANEL	RACK MTG. PANEL
Denver/West	$499.00	$534.00
East of Denver	$509.00	$544.00

GOLIATH

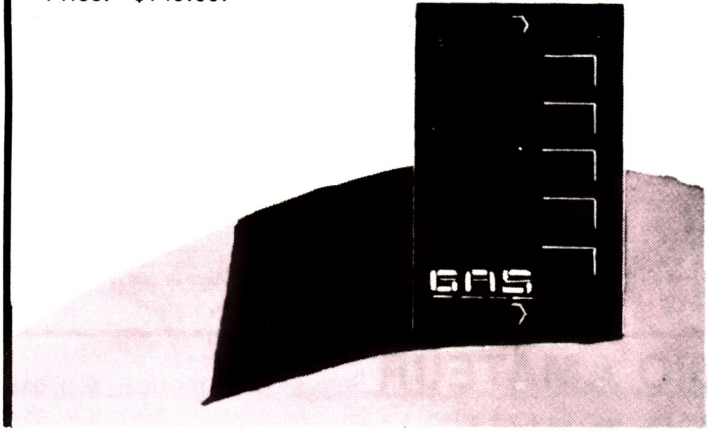
GOLIATH PRE-PREAMP

Gain: 29 dB (Also selectable 26, 23, 20, 17 dB).
Noise: 75 Nanovolts — 20 Hz to 20 KHz referred to input.
32 Nanovolts — 400 Hz to 20 KHz.
Distortion: Less than .01% at 2 Volts R.M.S. output at any freq. 20 Hz to 20 KHz.

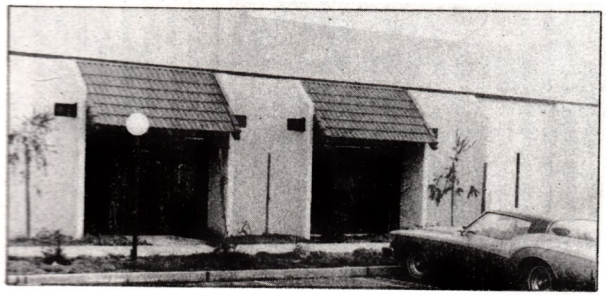
Max. **input** capability: 200mV. (at max gain).
Freq. response: 20 Hz — 20 KHz ± 0.1 dB.

Power requirements: Supplied by Thoebe.
Size: 5¼" H. x 2¼" W. x 8" D.
Shipping weight: 5 lbs.

Price: $149.00.



THE GREAT AMERICAN SOUND COMPANY, INC.
20940 Lassen Street • Chatsworth, California 91311



Vol. 1 No. 4

GASETTE

INTRODUCING SON OF AMPZILLA

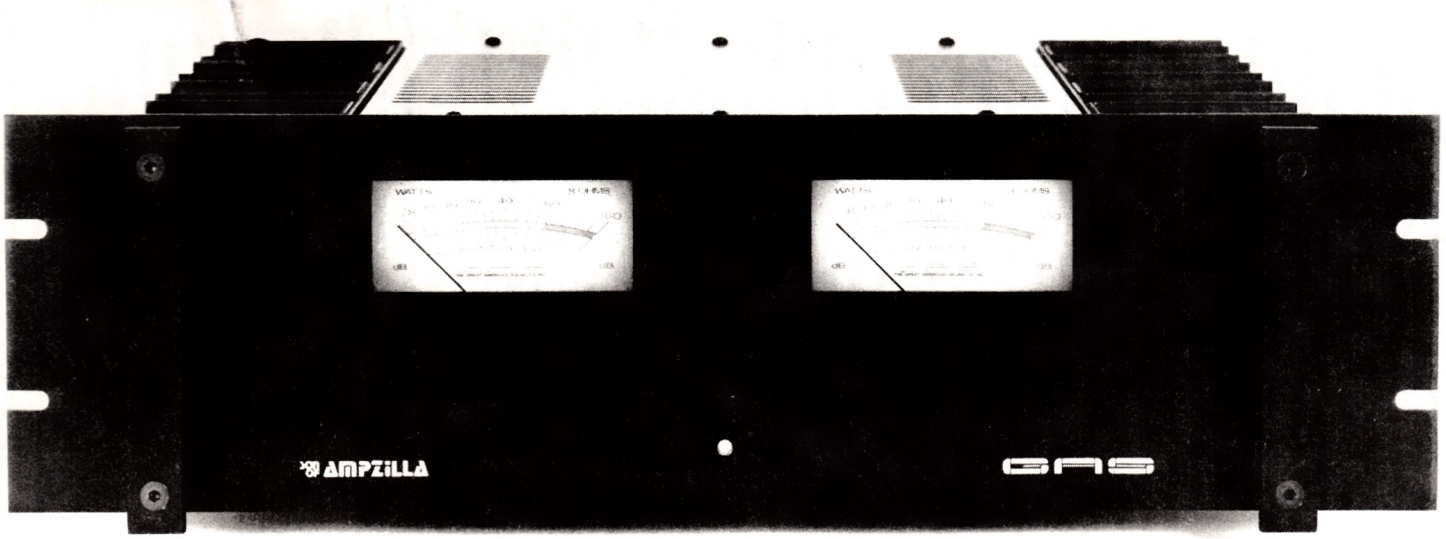
EXEMPLIFYING EVERY FACET of Ampzilla's now traditional circuitry is the new Son of Ampzilla. Included are outstanding Ampzilla circuit features such as its ALL—COMPLEMENTARY design from audio input to speaker output, modular electronic packaging to simplify servicing, extensive output-transistor heat sinks (over 1000 sq. in.) to enable continuous 4 or 8-Ohm operation, integrated-circuit bias system to provide negligible crossover notch at all signal levels as well as throughout all normal operating temperature ranges.

Other traditional Ampzilla features include epitaxial-base transistors throughout providing a high-frequency response extension five-fold that possible with conventional output transistors, and low-level class A operation of the output stage which results in minimum distortion at most-frequently used operating levels. This important operating characteristic, at levels of 1 Watt and lower, is one which often distinguishes Ampzilla and the Son of Ampzilla from many competitive amplifiers in A/B listening comparisons as well as with distortion-analyzer test comparisons.

AMPZILLA'S Baby!

Specially featured in the Son of Ampzilla is its TWO-Ohm operating capability. This feature is particularly useful for multiple (parallel) speaker installations. Capability of over 11 Amperes output current per channel (250 Watts at 2 Ohms) is provided in the Son of Ampzilla by 8 total output transistors (4 in parallel per channel). In spite of the generous usage of transistors in the Son of Ampzilla, its circuitry is uniquely elemental with just three definable stages (1 — input amplifier, 2 — driver amplifier, and 3 — compound Darlington-connected output amplifier). The resulting reduction of higher-order distortion components is readily discernible with careful listening. Circuit stability considerations are also simplified with this reduction of stages to enable unconditionally stabile performance with all reactive loads — capacitive or inductive.

Rear-lighted left and right channel power-output level meters are supplied with both output Wattage calibrations and VU level indication. Meter movements have minimized damping to follow rapid changes in program level.



Rack-mount panel style shown (19 inches wide). Also available with black front panel (17 inches wide) and standard model with top meter cover a la Ampzilla (16 3/4 inches wide).

COMPARE THESE SON OF AMPZILLA SPECS!

POWER OUTPUT

4 OHMS	Minimum 150 Watts per channel, both channels driven, 20 Hz to 20 KHz
8 OHMS	Minimum 80 Watts per channel, both channels driven, 20 Hz to 20 KHz
16 OHMS	Minimum 50 Watts per channel, both channels driven, 20 Hz to 20 KHz

(Industrial rack-panel mount version provides 250 Watts per channel at 2 Ohms)

TOTAL HARMONIC DISTORTION & I.M. DISTORTION

4, 8, & 16 OHMS — Less than .05% at any frequency or combination of frequencies, and at any power level to clipping.

INPUT SENSITIVITY — 1.0 Volts R.M.S. for 80 Watts into 8 Ohms.

INPUT IMPEDANCE — 75K Ohms

CROSSOVER NOTCH – NON EXISTENT

FREQUENCY RESPONSE (Power Bandwidth) at rated power or any level less than rated power.

8 & 16 OHMS — Better than ±0.1 dB, 20 Hz to 20 KHz
Better than ±1 dB, 1 Hz to 100 KHz

RISE TIME AT 8 OHMS — Better than 2μ seconds. AT FULL POWER AT 20 KHz. Slew rate equal to 40 Volts per μ second.

HEAT-SINK DIMENSION & DUTY CYCLE — Over 1000 sq. in. total, providing continuous operation at ambient temperatures up to 125° F.

STABILITY — 100% stable into any load angle 0° to 90°, capacitive or inductive, regardless of waveshape—sine, square, or triangular. No oscillations or modulation noise evident.

OVERLOAD PROTECTION & FUSING: Transistorized dynamic short-circuit protection. Thermal breaker also protects against overheating. 4 B+, B- power supply fuses, 1 AC slow-blow power fuse.

NOISE — Better than 100 dB below full power (unweighted, wide band). 112 dB below full power (wide band with R.F. filter).

SIZE: — 17" (W) x 5" (H) x 9" (D).

SHIPPING WEIGHT: — 35 lbs.

PRICES:	STD.	W/BLK. FRONT PANEL	W/BLK. RACK MTG. PANEL
Denver/West	$389.00	$414.00	$424.00
East of Denver	$399.00	$424.00	$434.00

Prices subject to change without notice.

Reprint courtesy of

the stereophile

Summer (2) 1975

For the High-Fidelity Stereo Perfectionist

stereophile reports

Stereophile Reports are primarily subjective reports, based on actual use of components in the home. Components for testing are taken from dealers' stock or, when not available locally, are obtained from the manufacturer, and only one sample is tested unless indications are that it is defective. If a retest is necessary, our experience with both samples will be reported. The manufacturer is sent a copy of the report prior to publication, and may if he wishes append a manufacturer's comment. He cannot, however, demand that the report be changed or that it not be published. Stereophile Reports are copyrighted, and may not be reprinted or quoted without the written permission of the publisher.

Subscription rates in the US or to US Possessions are: $7 for 4 issues, or $20 for 12 issues. (First-Class mailing is $2 extra per 4 issues.) To Canada: $8 for 4 issues or $23 for 12 issues. To other foreign countries: $9 for 4 issues.

Ampzilla vs the Dyna Stereo 400

Until (or if) the Infinity switching amplifier proves to be as good as some (including us) suspect, the two abovelisted amplifiers appear to be the sole contenders for title of Best Solid-State Amp. Here's how they compare:

Sonically, the two are obviously in the same league. Ampzilla has a very slightly sweeter high end, but both have that unmistakable solid-state crispness that some listeners hear as detail, others as a subtle hardness. The two are virtually indistinguishable through the middle range, although Ampzilla seems a hair better at reproducing depth and perspective. Neither, however, does this as well as the Audio Research Dual 76.

The Dyna has a tighter, drier low end than Ampzilla, and seems (to us) to provide more satisfying lows from most dynamic speaker systems. Ampzilla, on the other hand, produces a somewhat warmer, richer, but slightly looser low end, and the result is a somewhat woolly bottom from many large systems.

The Stereo 400 has, unquestionably, the most comprehensive and effective lineup of protective devices for both amplifier and speakers of any amplifier on the market. Both are, electrically, very quiet, but mechanical noise from Ampzilla's cooling fan is faintly (and annoyingly) audible during quiet musical passages under certain conditions related to the surface the amp rests on and its proximity to the listening area. (The same would probably be the case were you to equip the Dyna with its optional cooling fan.)

In our opinion, neither is clearly superior, and we cannot really recommend one over the other. The choice must be the buyer's, based on sound (high or low end?), safety (protection) and price. Both, remember, are available in kit form, and upcoming legislation may kill discounting prohibitions.

Ampzilla

Thank you for the review of my product(s) which, while certainly not lengthy, is relatively accurate.

I do agree that the Dyna 400 and Ampzilla are "in the same league," but that is where the similarity ends. I designed the Stereo 400 four years ago, and can state that most of the circuitry is what can be described as "old school" -- not in the sense of outmoded, but in the sense that the design embodied old tried and proven aspects plus a few new ideas.

The design concept of Ampzilla is totally new, although other manufacturers are also starting use the total push-pull (in to out) approach I developed. And I cannot agree that the *sonic* differences between the 400 and Ampzilla are as subtle as you state.

For example, your comments about the relative bass characteristics of the amplifiers sound like what I would have said a while ago, before I started hearing live music regularly again. I became instantly aware that amplifiers and speakers were moving in the direction of an *unnatural*, bigger-than-life impact having little relevance to the real thing. Their bass was becoming tighter and drier than live bass. Damping, in other words, can be overdone. It must strike an optimal balance, and I claim that Ampzilla is more accurate in maintaining *proper* control and balance in the low-frequency region.

With regard to depth and perspective in the mid range, I absolutely disagree. This love affair with tubes is most misguided. The Dual 76 is a fine amplifier (the 76A is not as good) as far as tubes go, but I think that matters should be set straight.

Because of their output transformer, tube amplifiers have inferior low- and high-frequency definition when compared with virtually *any* transistorized amplifier. However, practically all solid-state amplifiers, past and present, have sounded harsh, especially in the high frequencies, making them less than ideal. Since tube amplifiers do not have the wide power bandwidths and frequency responses that solid-state units have, the tubes have generally been preferred because they were more listenable and smoother. Since the response at the low and high ends is subdued in tube units, the mid range tends to be more apparent and to stand out, and I believe that this is where the myth regarding restricted mid range got started.* It is a fallacy, plain and simple. As a matter of fact, the control that a tube amplifier exerts on a dynamic loudspeaker is so loose that it is possible that severe coloration due to the combination might tend to make the sonic result *falsely* richer. Quite obviously, tube amplifiers are a poor choice for dynamic speakers. This is not however the case for electrostatics and/or the Magneplanars (although the Magnepans still require the kind of power only solid-state units can deliver now). Tubes will perform quite nicely under these circumstances as they are not presented with an adverse motor response characteristic, therefore they can maintain control. Virtually *no* solid-state amp can handle electrostatic tweeters with the exception of Ampzilla because the volt/amp load line is disastrous. Ampzilla and the SAE Mk III CM were designed specifically to deliver in excess of 200 V/A at high frequencies and thus need not suffer from the effects of limiters and other protection circuits.

Again it must be remembered that no tube amplifier in existence can produce the V/A velocities into an electrostatic tweeter, and for that reason, most transistor amps do get blamed for being excessively "hot"-sounding when driving ESLs. This inability to deliver high-frequency power to ESLs definitely makes tubes sound smoother (or duller, if you wish) through them.

Being a professional musician myself, I prefer accuracy, and to me, the best solid-state amplifiers are better capable of this than the best tubed models.

James Bongiorno
Great American Sound

** Who said anything about restricted mid range? (JGH)*

REVIEWER'S ADDENDUM:

The tube-vs-transistor question, like all other matters of discrimination, is not negotiable. If one cannot hear the uniquely musical attributes of the best tube equipment, there is simply no point in discussing the matter. It is tantamount to arguing subtleties of color-film accuracy with someone who is color blind. And since Mr. Bongiorno is in the business of making solid-state amplifiers, it is not surprising that he should take such a patronizing attitude towards tube equipment.

A designer of Mr. Bongiorno's experience must know that the "musicality" of reproduced bass is a function, not just of low-frequency amplifier damping, but of the amount of damping designed into the speaker system, as well as its actual low-frequency response in the listening room. Practically any loudspeaker can be located in a room so that its low end tapers off, to produce what sounds very much like the excessive tautness of excessive damping. Conversely, it is usually possible to find speaker locations which excite standing waves in the room, producing the kind of overly rich, hangover-induced fatness that bespeaks inadequate damping. It is also, of course, possible to vary the amount of damping designed into a

loudspeaker system so that it is optimally damped when fed by a relatively high source impedance (such as a tube amplifier) or by a very low source impedance (such as the Dyna Stereo 400). There is, consequently, no "correct" damping factor for an amplifier. There is only that which, in the opinion of the designer, is audibly correct for the loudspeakers he designed it for, under room-placement conditions typifying those the designer has encountered most often.

To explain the "depth and perspective" in the best tube amplifiers as a function of attenuated low and high-end response is patently nonsense. Tube amplifiers tend to underdamp many woofers, producing exaggerated rather than attenuated low end. And when driving tweeters that are known, via measurements, to have the most extended high-end response, only the better tubed amplifiers will produce that "Gee, no highs....but there's more than enough detail and sharpness" reaction that most audiophiles have when exposed, after a hiatus, to live music. All solid-state amplifiers, including both the Stereo 400 and Ampzilla, tend to produce from such tweeters the "Hey man, listen to that high end!" impression that distinguishes pseudo hi-fi from live music. And we do not limit this observation to electrostatic tweeters. The same seems to hold true with any kind of tweeter, which would seem to suggest that it is not a matter of V/A delivery. In fact, the outstanding characteristic of a good tube amplifier is that it can reproduce strings and woodwinds with the effortless softness that is observed in the live sound, yet can when required reproduce a very respectable "hard" transient from triangle, castanet or cymbals. That does not seem to suggest conditions of overload. We agree with Mr. Bongiorno, though, in that of the solid-state amps we know of, Ampzilla does as nice a job as any of driving electrostatic tweeters. We just think tubes do better.

It is of course Mr. Bongiorno's privelege to consider us misguided in this. Certainly he is not alone in feeling that solid-state amplifiers are better reproducers of music than tubes. But we think it is significant that many designers of perfectionist-type solid-state amplifiers, in describing how fine their new products are, tell us that they sound as good as or better than the Audio Research ones. Most solid-state amps are in fact better than tubes at the low end on most speaker systems, but we are still waiting for the one that can equal a good tube amp's crystalline middle range or natural top.

It is also worth noting that, every time there is a quantum leap forward in loudspeaker design, the system tends to sound better with tubes and rougher with solid-state amplifiers.

As far as we are concerned, the best attainable sound reproduction, in terms of sheer musical naturalness, still comes from tubed electronics feeding speakers that are good enough so as not to require inordinate amounts of high-end power or bass damping. The only reason we can think of for opting for transistors is when your speakers have neither the efficiency nor the refinement to be adequately driven by tubes, either in a monamped or biamplified mode.

Just as a footnote to Mr. Bongiorno's parting shot, we would suggest that those of our readers who know professional classical musicians pause for a moment to consider what those musicians listen to records on. Our personal experience has been that professionals know the sound of live music so well that their mind can re-create the full sonority of an orchestra from a reproduction that merely suggests the original sound. They are, in fact, usually less critical of reproduced fi than a typical untrained listener. Mr. Bongiorno's professionalism does not of course disqualify him as a judge, but it is not necessarily a valid qualification either.

the **stereophile** Summer (2) 1975

Recommended Components ➡

FEATURING ANOTHER STEREOPHILE FIRST: DO-IT-YOURSELF QUICKIES.

An entirely new approach to component recommendations, the listings which follow are followed by series of numbers, each corresponding to one of the numbered NOTES on the following pages. If you're only interested in knowing what is recommended, use the listings as you did our previous listings; just ignore the numbers. If you're interested enough in a component to consider buying it, take pencil and paper and jot down each of the numbered Notes pertaining to the component in question. The result will be a capsule "Quickie" report on that component.

Amplifiers

(A) Audio Research Dual 76 (80,88,91, 92,137,157,181,190)
Paoli 60M (88,92,157,163,195)

(B) Dyna Stereo 400 (77,94,125,136, 157,163,186)
Ampzilla (77,94,95,137,138,157, 163,186)
Epicure I (94,137,138,157,186)

(C) Quad 303 (95,97,137,139,161)
Harman-Kardon Citation 12 (94, 136,163,186)
Crown D-60 (80,95,138,186,195)

77. Available in kit form.

94. Best with typical dynamic tweeters.

95. Under-damps low end of many dynamic woofers.

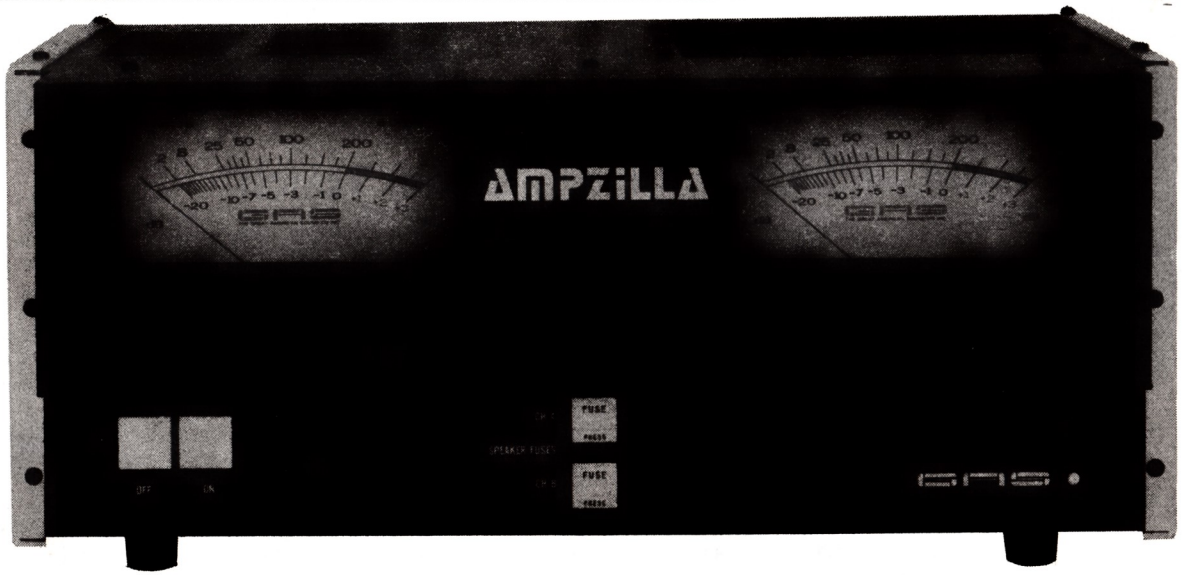
137. Rich, fat low end.

138. Very deep bass range.

157. Airy, open high end.

163. Crisp high end.

186. Slightly dry sound.



The much-acclaimed Ampzilla circuitry, recognized world wide for its outstanding performance and reliability, is now offered in a package restyled with a touch-operated power switch along with a more-traditional logo.

Reprint courtesy of

STEREOPUS volume 1 number 2

StereOpus is published four times annually at P.O. Box 269, Fort Walton Beach, Florida, 32548.

Rates are $9.00/year ($11.00 for First Class). Foreign rates are $12.00 ($15.00 for air mail). Canadian rates are $11.00 (First Class only).

G. A. S. ampzilla

200 watt per channel Stereo Power Amplifier. Manufacturer: Great American Sound Company Inc., 8780 Shoreham Drive, West Hollywood, California 90069. Price: $809 ($600 in kit form). With Meters.

This reviewer is quite familiar with Ampzilla, the latest state-of-the-art audiophile amplifier. Having built a kit and tested three factory wired units at different times I feel perfectly at home adjusting its bias and DC offset, as well as replacing chimneys—the module which contains Ampzilla's electronics and heat sinks. I've used and abused the Ampzilla—overheated it, blown its line cord fuse, and blown it up. This is one helluva well designed amplifier! I know of one at this time being used in a commercial installation to drive 4 JBL 4311 control monitors (about 3 ohms per channel) that is operated at clipping for 7 to 8 hours per day. It has not failed. It does, however, require a special high speed fan. James Bongiorno, 'Zilla's designer, sure seems to know his stuff. I mentioned 'blowing one up'. Technically this is not correct. The amplifier failed in one channel due to a pre-driver problem, not due to my abuse. More about this later.

My first Ampzilla was built from a kit. (For discussion of the kit, see *Constructor's Corner*, in this issue.)

For some reason I could not get the distortion on my kit to approach the factory wired units. (The kit ran around .03% harmonic distortion while factory wired units run .005%). Since both channels measured the same in both cases, I can't figure out what the problem was. Measurements were made at half power, around 100 watts. The first kit sounded good but a far cry from a good wired unit. I do know, however, of at least two completed kits that sound very good indeed. (Make that at least three—Ed.) So its not impossible to build your own successfully.

Ampzilla has undergone 3 changes since its introduction. These are mainly related to the bias circuitry. All three reportedly sound good but somewhat different. I will review the latest version.

In sound quality, Ampzilla is just about in a class by itself. It is extremely neutral, imparting very little sonic coloration. It has none of the dry qualities of the DC-300a and none of the metallic hardness that is sometimes evident in the Phase Linear 700B. It seems neither bright nor dull, merely neutral. Bass is less tight than a Phase 700B but more neutral with most speakers. Grain is less evident than in any other solid state amp of which I am aware, including the Marantz 500. Highs are clean and beautifully defined with less evident hardness than any of these other designs. Midrange is superb; vocalists were far more natural on switching over from the other amps. For the first time I got the feeling that 'this is the way the human voice is supposed to sound'. The Ampzilla seems to be *the* amplifier for the Dahlquists and Magnaplanar's bass and midrange panels. It is also the amp to use with Dayton Wright's electrostatics, at least within its power capabilities. (We understand that G.A.S. intended Ampzilla's big brother 'Godzilla'—at 1000 watts mono into 2 ohms—to be king of the Dayton-Wrights.)

Probably the most impressive comparison I've seen with Ampzilla involved powering of 4 (very well equalized) JBL C-50 control monitors in a high intensity discoteque sound system. A Phase Linear 700B normally runs this system but when Ampzilla was switched in for the night the difference was incredible and absolutely overwhelming! For the first time the characteristic 'JBL sound' was gone. I have never heard a disco system sound so sweet and finely detailed! I tend to believe (partly on the basis of this experience) that the better JBL speakers are quite amplifier sensitive. Certainly this incident seems to speak quite well of Ampzilla, for the latest Phase 700B's are very good sounding amplifiers. I could go on much longer about how great a unit Ampzilla is, but dealers and other reviewers are filling your ears with that. One real question of interest is: how about the Audio Research Dual 76 vs the G.A.S. product? My initial impressions are that Ampzilla is superior to the 76 in both bass and midrange on about 90% of program material; when properly adjusted, however the high end of the Dual 76 is still slightly sweeter. The problem is, of course, that 75 watts per channel is often insufficient with many of today's speakers.

There are several other points you need to know about Ampzilla. One is that it is handled only by dealers now and its $800 price tag is very carefully controlled. Another concerns the predriver problem previously mentioned. It seems one particular transistor was giving some trouble at first due to a design (transistor) or manufacturing difficulty. Motorola was reportedly correcting the problem and no Ampzillas have failed lately from this cause. In the event that one does fail, dealers are supplied with extra chimneys which can be interchanged in about 10 minutes. Since this subassembly contains essentially all the electronics except the power supply, a new chimney gives you virtually a 'new' power amplifier. Defective chimneys are then sent back to the factory for repair. This process is so quick and easy we wonder why someone didn't think of it before. No more waiting for warranty repairs!

All in all, Ampzilla is fairly well established as current king of power amps. How long it will remain that way remains to be seen. Some sources place it above a number of new designs in sound quality a factor we will hopefully confirm or deny in these pages in upcoming issues. There is a great deal of activity in the power amp field of late. But I have not yet heard a better sounding amp. Incidentally, a matching preamp—Thaedra— is coming out; it is so interesting and advanced on paper we can't wait to hear it (G.A.S. has promised one for review as soon as production is up to speed—Ed.). And yes, its just about as ugly as Ampzilla!

RT

I have to agree completely that Ampzilla is an exceptional sounding amplifier. There is a smoothness to the sound throughout the audible range that makes it without question the unit to beat in the high power sweepstakes. And if prices on high end products keep escalating the way they have been lately, in a few months an $800 power amp will be considered a bargain!

I bought my own Ampzilla and built the kit when RT proferred the information last fall that the amplifier was soon to be sold through dealers. As the direct order price of the kit was then $375 with meters, the handwriting was on the wall pricewise and I immediately ordered the kit. The bargain price was partially outweighed by the construction problems encountered with the early kit. For more on this see *Constructor's Corner,* in this issue.

A couple of clarifications are in order. First, since the final wiring on my unit was completed by the factory, it is not entirely representative of the results (sonically) that you will get from a kit. But I will so classify it and add my unit to the ranks of superbly performing kits that RT mentioned. There may have been early kits that did not quite measure up to the factory wired units, but I feel mine leaves very little to be desired. Second, my Ampzilla is not entirely without problems. One channel makes a loud crackling noise when it is run without a preamp or if said preamp is not turned on. The other channel is without this malady. When the preamp is turned on, the same channel emits a crackling, frying egg sound that is audible two to three feet from the speaker. With no program playing it can even be heard from the listening location with fairly efficient loudspeakers, a quiet room, and a keen ear. This is clearly not normal; if and when I feel I can spare the unit for two or three weeks the chimney will be returned to G.A.S. for replacement. There are, unfortunately, no friendly G.A.S. dealers in this area.

In case you are wondering about it, the high speed fan mentioned by RT is not needed in any conceivable domestic circumstances. I have seen and heard this fan and it would not feel overworked in a small vacuum cleaner! Incidentally, the standard fan, even in the low speed mode, is clearly audible if your listening position is near the amp, a factor to consider if this sort of thing bothers you.

I'm probably a minority of one but actually like the looks of Ampzilla. The stark black and white is a pleasant change from brushed gold or silver aluminum. Additionally, the location of the heat sinks in Ampzilla means there are no fins sticking out the rear of the unit—it needs no walnut case to look attractive in the open. The chassis is also nicely rounded and easy to carry around. This seems like a trivial point but believe me, if you've ever tried to maneuver a Crown DC-300a without the dress cabinet you'll appreciate it!

This amplifier has received some 'bad press' recently, for reasons which I find hard to understand. I have heard it drive Infinity loudspeakers with Walsh tweeters, ESS systems with Heil tweeters, Dahlquists, and full range electrostatics (both Dayton-Wrights and Koss' new full range). With quality program material, I could never possibly describe its sound as in any way hard, harsh, grainy, or brittle. The only possible 'criticism' I could have (and I'm not sure that is the right word) is a low end that is slightly less tight than other solid state amps I could name—such as the Crown. But have no doubt the G.A.S. Ampzilla is one exceptional amplifier!

TJN

g.a.s.

Thank you for your fine review of our Ampzilla(s). Since you've been rather thorough, I have but a few comments.

Actually, there have been only two major changes in the amplifier - *neither* involving circuitry. The first change was in mechanical layout which was done to make our production *and* the kit-builders assembly much easier. The second change did involve the bias circuitry and only involved temperature compensation. It is true that there are small sonic differences between these units but certainly not disqualifying ones.

Concerning Godzilla, it has not actually been released yet and *will not* be released in its originally intended form. It has been redesigned and is now a *stereo* amp instead of a mono amp. It has the capability of driving 2 ohm loads easily; however, since it has the same power supply as for the original mono version, it will not put out quite as much power. We will rate it at 300 watts per channel into *8* ohms; and, needless to say, it should do exceptionally well on the Dayton-Wright's as that was half of the design purpose. Its retail price will be $999.00, which is much more economical than $1600.00 for two monos.

Incidentally, we have found to our surprise that Ampzilla does very well on the new MK III Dayton Wrights. I drove to a friend's house who recently received them and spent hours driving Ampzilla with no limitation. Also, several other people who have the new MK III's have also informed me that they find no problems. A slight caveat, I still have some reservations concerning the older MK II's, etc.

Concerning the low-frequency performance of amplifiers, in general, I feel that some people are being mislead down the wrong path. A great many people *overly* react to low frequency sonic impact, and I believe that reality sometimes gets left behind. After spending 25 years of my life inside concert hall, clubs, etc., as a working musician and a listener, I can flatly state that stereo systems, in general, are terribly unreal in the area of low frequency reproduction. Explosive, powerful, bottom end is not always the true answer. Also, the room, loudspeaker, *and* amplifier are all part of the effective damping link and must not be overlooked. As a matter of fact, the size and length of wire is just as important and most people might be blown away to find out that it is *detrimental* to have zero resistance between the loudspeaker and the amplifier. I suggest that someday, when you have time to, try experimenting with cable lengths and sizes as you might be very surprised.

I think I might have a good explanation for effective damping, and it goes like this. Let's say that I had a situation involving a car travelling at a certain rate of speed. If there were suddenly a barrier in the road ahead (unsuspected), and I had to stop the car, there would be three ways to do so. Assuming the brakes were misadjusted, the car could stop *too* quickly, promptly throwing you through the windshield. (I hope you use seatbelts.) If the brakes were poor, you might *not* be able to stop; therefore, you might smash right into the barrier. Obviously, the correct braking would be between these two and would allow you to stop short of the barrier. A woofer can be compared to this situation. Too much damping will, of course, result in a floppy sound with considerable overhang. I strongly urge listeners to experiment *and* to go to more *live* music situations in order to achieve a better, more aurally rational perception of the real thing.

The only thing that I take issue at is, of course, the description of THAEDRA as being ugly. I suggest that you do not pass judgement *until* you actually receive one. A gorgeous movie star could get up on the wrong side of bed one morning, get a lousy hairdo, a rotten makeup job, and have an incompetent light man - which could make her look lousy. Such is the case with the first pictures of our preamp.

Since we didn't know about it because you didn't tell us, we would like to have your Ampzilla module for service. After all, we can't bear the thought of any of our products being neglected without repair

James Bongiorno
President
Great American Sound Company, Inc.

Reviewer's Comment: RT reports having tongue stuck in cheek concerning looks of THAEDRA!