

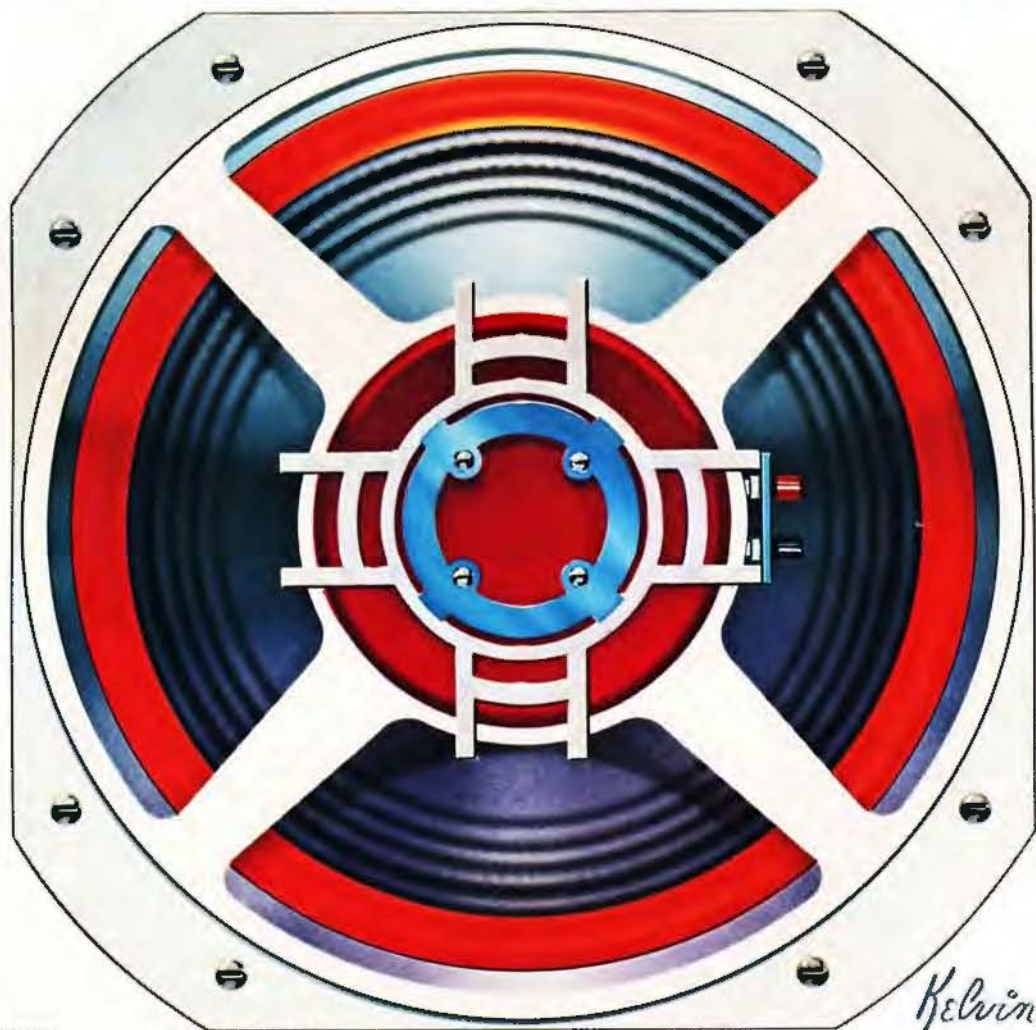
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JUNE 1978/\$1

Compressor Guard Protects Air Conditioners
A "Fuzz Box" For Electric Guitar
Experiments With Programmable Logic Arrays

Special Focus On Hi-Fi Speaker Systems
MODEL-BY-MODEL COMPARISONS & HOW-TO-AUDITION GUIDE



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**Tested
In This
Issue**

Shure V15 Type IV Stereo Phono Cartridge
Nikko Gamma I Stereo FM Tuner
Fisher CR4025 Stereo Cassette Deck

Focus On Speaker Systems

BY IVAN BERGER, Senior Editor

*A buying guide to loudspeaker systems,
including model comparisons.*

I. UNDERSTANDING THE SPECIFICATIONS

THE SPECIFICATIONS on the following pages cover the vast majority of high-quality speaker systems available in the U.S. and though specs alone can't tell you what a speaker sounds like, they can serve as a preliminary screening guide to help you narrow down your list of speakers to the few most likely to suit your requirements. Since there are probably more manufacturers of speakers than of any other high-fidelity component, that can save you a lot of time.

Nationally Advertised Value.

The prices listed in our guide are those that are nationally advertised by the manufacturers. But dealers in your area may offer lower ones—check before buying. The fact that discounts are available on some models means that you needn't restrict your list of possibilities to those whose nominal price is within your budget—models listed at up to one-third more than your budget figure may actually be available in your price range. On the other hand, don't be too surprised if some of the prices listed here have risen by the time you get to an audio dealer. Speaker manufacturers' costs go up, too, and fluctuations in foreign-exchange rates can play havoc with the cost of imports.

When setting your speaker budget, don't stint. Speakers have a greater effect on your system's overall sound than any other component, so it pays to invest substantially in them. But if two speakers sound absolutely *equal* to you (they'll rarely sound absolutely *alike*), feel free to buy the less expensive ones if all else meets your needs.

Enclosure Types. Like most technical specifications, this one is sometimes over-emphasized in sales literature. In most cases today, it's possible to build equally good-sounding—and even similar-sounding—systems with any enclosure type. But every speaker must have some sort of baffle or enclosure to keep the waves that radiate from the back of the speaker from mixing uncontrollably with the front waves. Since the front and rear waves are out of phase, uncontrolled mixing would allow them to neutralize each other, cancelling the sound. In practice, this only occurs at the low frequencies, where the wave lengths are longer than the distance around the baffle. For this reason, enclosure design has most effect on the bass frequencies.

Acoustic-suspension or "air-suspension" enclosures are small, sealed boxes whose trapped air serves as the spring for otherwise floppy speakers. Acoustic-suspension speakers have been most popular for years because they can deliver clean, deep bass from comparatively small enclosures. The drawback of acoustic-suspension systems has been their low efficiency: all else being equal, it takes more power to drive an acoustic-suspension speaker to a given output level than it takes to drive most other systems.

The bass-reflex system, unlike the air-suspension type, has an opening or "port" through which the low-frequency driver's back wave can escape to the front. With careful design, this wave can be made to emerge in-phase with the woofer's front wave, just at the frequencies where the woofer needs

help most. You'll find more and more bass-reflex systems among the newer models, since the characteristics of such systems can now be more precisely formulated than a decade ago. This allows designers to eliminate boomy resonances that formerly characterized some reflex systems. And since the back wave is used, not wasted, reflex speakers tend to have higher efficiency than air-suspension types.

Passive radiators (also known as "drone cones" or "auxiliary bass radiators") are sometimes used in place of ordinary open vents. At least one manufacturer therefore calls them "vent substitutes."

Several of the formulas for vented-speaker designs involve the deliberate acceptance of small response irregularities, which can easily be corrected with external equalizers, in exchange for better performance in areas where equalizers cannot help. The equalizer must be carefully matched to the speaker in such cases, and several speakers which come with such external equalizers are listed here. Not all reflex systems offer high efficiency, though. The formulas that now govern reflex system design allow a trade-off between efficiency, deep bass, and enclosure size. Designers may choose to give you more of one in return for less of another.

"Transmission-line" or "acoustic-labyrinth" designs are basically long, padded tubes, folded back and forth to fit into a box of a convenient-size. This is a very clean way to absorb the back wave of the speaker, but its absorption means it cannot contribute to efficien-

cy. Some labyrinths (only the closed type are true transmission lines) therefore are open-ended, tuned so that the back wave emerges in phase at a low frequency where its contribution will be useful.

Horn speakers, today a rarity among woofer enclosures (though horn tweeters are still common) have the highest efficiency of any speaker, and gain low distortion by keeping cone movement small. But their mouths must be immense for good bass output, so the most common type is the "corner horn," which uses the walls of a room corner as part of the horn. Such speakers are, however, expensive—the horn must be folded in upon itself like the labyrinth, making the enclosure complicated to build—and still large. And they can only be used in rooms having suitable corners. (Not all corner speakers are horns, though—and placing any speaker in a corner will reinforce bass response.)

Open baffles also work, but they must be large in order to control bass cancellation. The Transar and many full-range electrostatic and planar speakers use such baffles.

Woofer Size and Type. It's generally believed that the bigger the woofer, the lower the bass. But that's only true if the enclosure is made larger, too. Larger woofers do have lower resonant frequencies when measured in free air. But once mounted in an enclosure, a larger woofer will (all else being equal) exhibit a higher resonant frequency than a smaller one mounted in the same box! The larger cone moves more air for the same degree of cone excursion. Moving more air into a box of a given size raises the air pressure in the box, stiffening the "air spring" the driver is pushing against. Since the resonant frequency depends on both the mass (of cone and air) and the compliance, or springiness, of the air and the driver suspension, the reduction in air compliance raises the system's resonance more than the increased driver mass lowers it.

Within a given enclosure, then, a larger woofer (which moves more air for a given cone excursion) will produce bass more efficiently—but a

smaller woofer will produce deeper bass frequencies, though weaker in output. Enlarging the enclosure lets the larger woofer deliver deep bass, too, and more efficiently. But the system then takes up more space and costs more. In short, don't expect woofer size alone to make one system deliver deeper bass than another.

Most woofers are standard cone drivers, regardless of enclosure type. Even here, however, there are some variations. Many makers now use woofers covered or impregnated with plastics (commonly Bextrene) or carbon fibres, to stiffen the woofer and increase its internal damping, both of which reduce cone breakup distortion.

Some manufacturers use very shallow woofers, to minimize the phase differences between woofer and tweeter. Others stagger their drivers, so that the tweeter's mouth is far behind the woofer's. Both techniques put the woofer and tweeter voice coils in the same plane, allowing the output from both drivers to reach the listener at precisely the same time, not a tiny fraction of a second apart (provided the crossover networks dividing the sound between woofer and tweeter do not add time delay problems of their own). Opinions are divided as to whether or not phase-coherent design audibly improves the sound, but there's no question that phase-coherence can't degrade it.

Planar woofers, such as the various electrostatics and the "flat-panel" speakers driven by regular or distributed voice coils, are usually in open baffles. Either the baffles or the speaker driving elements (preferably the latter) must be large to deliver sound power at low frequencies. In practice, this means that such speakers often require additional subwoofers for the very low bass—note the rated frequency-response figures in our chart.

Other Driver Sizes and Types. Most speaker systems use at least two separate drivers—a massive woofer for the lows and a small tweeter for the highs—and many use 3 or more driver sizes. This is because each end of the frequency spectrum imposes opposite requirements on a driver. Bass response requires a large driver that can

move a lot of air and handle a great deal of power. Treble response requires as light a driver as possible (which also improves transient response). In addition, it requires a small driver, for broad, even dispersion. (Dispersion is a function of the ratio between driver size and sound wavelength.) Midrange dispersion is rarely a problem, especially in speakers with separate midrange drivers. So high-frequency dispersion—as evidenced by tweeter size—is probably the most important specification in this column.

Dome tweeters have no better (or worse) dispersion than cone types of equal size. However, dome tweeters have larger voice coils, which allows more power-handling capacity—and also increases the size and cost of the magnet that must be used with them.

Electrostatic tweeters tend to have limited excursion, which makes it easier to give them good transient response, but also means they must be larger than cone types, which limits their dispersion. For that reason, most electrostatic tweeters use several tweeter elements, angled apart to cover a wider sound field. (Some nonelectrostatic tweeters do this, too.)

Horn tweeters allow a small, light diaphragm with good transient response to radiate appreciable power efficiently without breaking up. The driving diaphragm is usually a dome or flat diaphragm with a conventional voice coil, but more and more horn tweeters use piezoelectric drivers, solid-state devices that produce sounds by flexing in response to signal voltages. But designing horns for good high-frequency dispersion is hard. The approaches taken include the use of multi-cellular horns, and of "acoustically" louvers at the horn mouth.

Crossover Point. Dividing the frequency range between several different drivers requires that each driver handle only that part of the range that it's designed for. Electrical "crossover networks" ensure that each driver get only its proper range, and that response slopes off at those frequencies that another driver should handle. In practice, the frequency ranges of ad-

Focus On Speaker Systems Continued

joining drivers overlap, and there is a point—the crossover frequency—where each is contributing half the total radiated sound. The more divisions, the more such frequencies: a two-way (woofer-tweeter) system has just one crossover point, a three-way (woofer-midrange-tweeter) system has two crossovers, and so on.

Impedance. A speaker's impedance changes with frequency. Its rated impedance is usually the lowest impedance it will reach at any point within its frequency range (generally, the mid-bass region). Usually given as 4, 8 or 16 ohms, impedance is mainly important when you intend to connect more than one pair of speakers to the same amplifier. Many amplifier circuits can be damaged by the 2-ohm impedance which results from operating two 4-ohm speakers in parallel. Unless you know your amplifier can handle it, buy higher-impedance speaker systems for multiple-speaker installations.

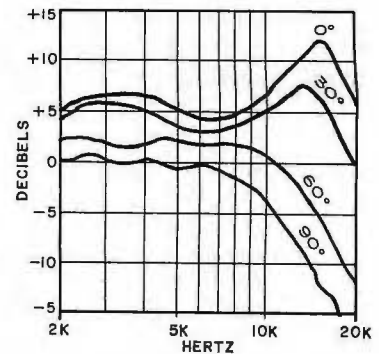
Frequency Response. This specification is useful, but only as a rough guide: measurement standards vary, and a speaker's measured response will vary with the microphone position and the space surrounding the speaker when it's tested. The specified response might be the on-axis response in an anechoic chamber, the on-axis response in a reverberant chamber (which would show more bass—how much more depending on the chamber

size and shape), or a total-radiated-power response taken in a reverberant room but including both on-axis and off-axis measurements.

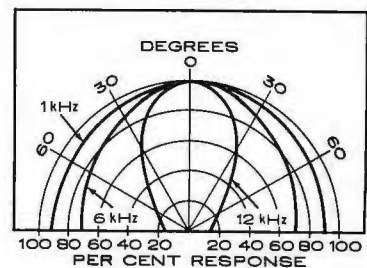
Frequency response figures which specify how many decibels (dB) the sound varies over the indicated range are more meaningful than those which simply state the frequencies spanned. You know that a speaker that is within ± 6 dB from 30 to 18,000 Hz has fairly substantial bass response, but a speaker whose response is stated only as an unqualified "30 to 18,000" could be considerably more than 6 dB down at 30 Hz (though it could be less than 6 dB down, too). Without the qualification in dB, you just can't tell.

Sensitivity and Minimum Recommended Power. These useful specifications help determine how much amplifier power you need to drive the speaker system satisfactorily. (Remember that, when driving two speakers, each gets about half the amplifier power, so a "20-watt" minimum means 20 watts per channel.)

Sensitivity (which is a measure of efficiency) is usually stated in terms of sound output from a 1-watt signal measured at a 1-meter distance. For example, a signal that delivers 92 dB SPL (sound pressure level) from a 1-watt signal will require 3 dB less power for a given output than one which delivers 89 dB from the same watt. Thus, the more sensitive (more efficient) speaker can be used with an amplifier half as



Dispersion can be shown by superimposing frequency-response graphs taken at several angles (above) or as polar plots for several frequencies (below).



powerful as the 89-dB speaker would require. The catch, though, is that the rating varies according to the frequency components of the test signal used. Therefore, the manufacturer's minimum power recommendation should be given at least as much weight as the sensitivity figure.

E-V Interface: B has matching equalizer, passive radiator.



Technics SB 6000A has stepped-back drivers for phase correction and ducted port.

AR-15 air suspension system with dome tweeter.



Power-handling Capacity. This tells you both how much power the speaker can safely accept. Since this specification is not rigidly defined, you should use it only as a rough guideline.

We've distinguished, where possible, between those power-handling ratings that specify momentary peak input power and those that specify continuous power capacity. However, that still leaves open the question of how long a signal of that power is safe in either case, and what the frequency components of the test signals were. In general, it's safe to use an amplifier whose continuous-power rating is the same as or a little larger than the speaker's, or one-half the speaker's peak power rating. But you can use amplifiers with higher power if you're careful not to drop the tonearm onto the groove with the volume control well up, or to plug and unplug signal sources while the amplifier is on, either of which can create speaker-blowing transients on almost any system. You can also use a high-power amplifier if you don't play your system so loud it goes into audible distortion.

If you combine the maximum power figure with the sensitivity rating, you can tell how loud the speaker can be safely played. Since 20 watts is 13 dB above one watt, a speaker with a power-handling capacity of 30 watts and a sensitivity figure of 93 dB for 1 watt input can play at levels of up to 106 dB (93 + 13 dB) with some presumption of speaker safety. That is probably loud enough for most classical listeners, but not for the truly dedicated rock listener, who would probably prefer a limit of 110-115 dB.

Still, check the speaker at your preferred listening level before buying it. The figures tell you only how loud the speaker can play without damage—not how loud it can play without audible distortion.

Level Controls. The sound of most speakers can be altered somewhat to account for listener preferences as well as the acoustics of the listening room and the speakers' location therein by altering the high-to-low-frequency balance. This usually requires at least a tweeter level control, and may also

involve additional controls for the mid-range and other drivers. (Woofer controls are almost unheard-of.)

The more such controls there are, and the more continuous their adjustment (as opposed to simple two- or three-position switches), the more precisely the speakers' frequency balance can be adjusted. But the more adjustments there are, the harder you'll have to work to get it just the way you want. Incidentally, tweeter-level settings labelled "flat" or "normal" are just recommendations—alter them if you feel that it makes an improvement.

Dimensions and Weight. These have little to do with the sound of a speaker (save that, all else being equal—which rarely occurs—bigger cabinets permit lower bass with fewer trade-offs). But they do help determine how well a speaker will fit into your home. Dimensions are most important, of course, if you plan to locate your speaker systems on bookshelves. And for shelf mounting, weight is important, too. Make sure your shelf can handle any speaker you plan to put on it. ◇

II. UNDERSTANDING WHAT YOU HEAR

THE SPECIFICATION sheet for a speaker system tells the buyer less about the system's sound than do the similar sheets for other audio components. Thus, the speaker buyer is

forced to rely heavily on the judgment of his own ears—superbly sensitive instruments, but not very precisely calibrated ones.

The art of buying a good speaker

must therefore begin with training our ears and minds to appreciate and understand what we are hearing. Untrained, it is too easy to fall under the seductive spell of a speaker that

Powered Advent has amplifier inside rear panel.



JBL L212 has mid/high-frequency "satellites" and common bass module.



Klipschorn folded-horn system.



Focus On Speaker Systems Continued

makes one type of program material sound startlingly real only to find its sound inadequate for those types of music you listen to most often. The sound you hear in one acoustic environment is likely to be very different in another listening room, too. There are no perfect speakers. But to the knowledgeable ears, the least imperfect speaker is the one which reproduces recorded sound most realistically, imposing the least possible coloration on that sound.

Assessing realism is, however, difficult. If you attend live concerts of acoustical—not electrical—instruments, you can use them to sharpen your listening judgements. Before shopping for a speaker, attend a concert or two. Close your eyes and analyze the sound you hear, attempting to sum up verbally the differences between this sound and the sound of the same music played at home. The verbal summation is important—words are easier to remember precisely than are subtle differences in sound.

Rock concerts are less useful training for the ear, because rock records rarely attempt to reproduce the concert sound. Instead, rock performances strive to reproduce on stage the sonic experiences that are so easily achieved in the recording studio. Besides, the sound you hear from electrically amplified performances is the sound of the amplifiers and speakers used. Recordings are usually made by direct pickup from the instruments

themselves, rather than by microphones aimed at the speakers you'd hear at a concert.

Your Own Tests. In an audio dealer's store, intelligent listening can quickly screen out the most blatantly colored or limited speaker systems. Listen to as many types of program material as you can, but with special emphasis on the kinds of music you will listen to at home. Any speaker which seems to lack highs or lows on all recordings should be rejected. The ear is easily fooled, however, since many colorations sound quite pleasing—on some material. For instance, listen to whether the bass seems rich and full and whether it is rich and full on many different notes. Or does it lend all such notes the same pitch, which is a sign of uncontrolled bass resonance? (Note, too, that below the resonant frequency, speaker output drops off dramatically.) Make sure the musical notes you hear are the ones being played, as well. On a descending passage of bass notes, for example, the fundamental tone should keep descending, not reach a plateau and stop. Some speakers falsify bass by "doubling," delivering a distorted overtone of notes below a real low-frequency limit. In this case, a distorted 60-Hz note, may be heard when a clean 30 Hz is called for. If you could play a sweep-frequency record through such loudspeakers, you would hear the sound fade cleanly as the frequency

lowered, then come back at higher volume with higher pitch. A good speaker will simply fade out below its low-frequency cutoff. It's always better to miss a few rarely recorded bass tones that are there than to muddy the sound output with tones that weren't recorded to begin with.

Test reports are a help, of course—even reports on speakers you do not intend to buy. Listen to speakers about which you have read reports, and try to correlate what you hear with what the tester heard and measured. Do this for several speakers. This will help you differentiate various speaker deficiencies and virtues.

While frequency-response specifications tell you comparatively little about a speaker, frequency-response graphs—whether in specification sheets or test reports—tell you a great deal. Minor squiggles can be ignored since all speakers have them (though some speaker specification sheets smooth out curves for public consumption). In your mind, however, shade in the spaces between the response curve and the reference-level chart line. The audibility of response deviations is roughly proportional to this mentally shaded area. Broad, shallow bulges and dips will be plainly audible. So will sharp but high-amplitude resonances. However, resonant peaks and dips that are both sharp *and* short will not greatly affect the speaker's sound.

Observe, too, at what frequency extremes response begins to drop off,

B.E.S. Geostatic's dipole planar drivers radiate from both sides.



H.H. Scott Pro-100 also reflects sound from ceiling.



Heil AMT tweeter squeezes air instead of pushing it.



and how fast it drops. At the bass end, look for a speaker that rolls off smoothly, rather than one which exhibits an exaggerated response hump just above the roll-off point.

Teach yourself also to recognize the effects of room acoustics on speaker demonstrations. Bear in mind that if the room you'll listen in at home has a greater percentage of hard surfaces than the store's listening room, you'll hear more highs at home. If your room

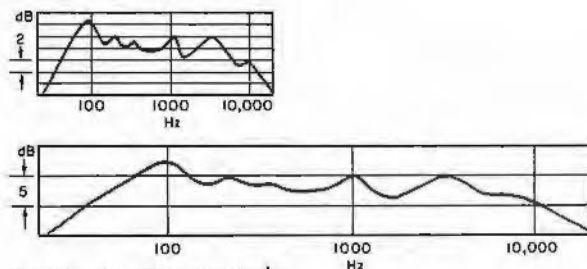
A heavily upholstered room or a turned-down tweeter control can help correct for a speaker whose high-frequency response is exaggerated, but still smooth. It cannot correct, however, for shrillness caused by peaks within the treble region. One can only eliminate these by turning down the treble enough to lose the desired highs as well. Sometimes, though, an equalizer can help here. Similarly, one cannot count on a room that is more "live"

corner on one side of the room will be farthest from it at the other. This gives each pair of speaker systems demonstrated a roughly equal chance.

Long listening sessions lead to listener fatigue, and consequent errors of judgement. So do not assume that you'll be able to pick the perfect speaker (for you) in one visit to a dealer. Take your time; limit your listening experience. You're making a substantial investment to last for many years.

Be sure not to try to compare three or more systems at once. Your sound "memory" won't be good enough. To truly discern the difference between speakers, you must compare two pairs at a time. When you have chosen the better pair, you then may compare them to a third set.

The speakers you're comparing must be *precisely* matched in level. If one speaker is grossly louder than the other, you will hear this mainly as a difference in sound level. But if they differ by only a fraction of a decibel, you are likely to judge the louder one as being clearer, and not attribute the difference to volume at all. Dealers today frequently provide for such level matching in their speaker switchers (the level-match attenuators used should be between the system amplifier and preamp, not between amplifier and speaker). But this match should be rechecked frequently. Of two speakers balanced on, say, pink noise, one might be slightly louder when playing music with a good deal of bass con-



A response curve can be made to look smoother by stretching the horizontal axis.

is full of soft, absorbent surfaces, highs will be weaker. To some extent, the speaker's tweeter and midrange level controls can help compensate for this when you get it home. But, if the dealer's listening room is more absorbent than your own, and you have to turn the tweeter down to make it sound best in the store, then try another speaker—you may not have enough adjustment range left to compensate for the acoustics in your home.

compensating fully for a system with deficient treble response.

Note, too, how speaker placement in a room affects bass response. Resting a speaker on a floor accentuates its bass; placing it on the floor in a corner accentuates it further. Raising it above the floor on a stand (or bookshelf) will reduce bass. Conscientious dealers often try to equalize for these effects by setting up the speakers asymmetrically, so that the speaker nearest the

Pioneer horn tweeter is segmented for dispersion.



Sansui 3-way system.

Note horn tweeter with acoustic lens.

Bose 901 reflects most of its sound from room wall.



Focus On Speaker Systems Continued

tent, and the other slightly louder when playing music strong in treble tones.

As you compare two sets of speakers, spend some time switching quickly between them (preferably in midpassage, not just as the music changes) to hear how each handles essentially the same sounds. Also spend some time listening to each at length.

Listen to as many types of sound as possible. Bring records you're familiar with (fresh copies, if your old ones are worn or dirty), covering as many types of music as possible. Listen also to the noise heard between stations on an FM tuner or receiver.

Why noise, when the emphasis thus far has been on reproducing music naturally? Simply because FM noise contains a balance of all the frequencies over a range of about 50 to 15,000 Hz. Peaks and dips in a speaker's response will often show up quickly on white noise, when you might otherwise have to wait a long time for music to hit a note that would expose them clearly. The sound should be a smooth rushing noise, with both bass and treble clearly present. Grittiness or roughness is one sign of coloration. So is a milky smoothness, usually the sign of insufficient treble. If all you hear is hiss, on the other hand, there's probably too little bass response. The sound should seem high-pitched with no specific pitch attributable to it. Any distinct pitch you can hear is because a resonance overemphasizes a single frequency or narrow frequency band.

Here's an interesting test one can make to check for the nasality or honkiness that afflicts speakers with over-emphasized midrange response. With your hands cupped over your mouth, say "Shhhhh"; then listen to the same sound made with your hands removed. White noise should have the same smooth, rushing quality as in the second example. If the speaker sounds as though its hands were over its mouth, it will add nasal coloration to the music.

Noise is also a good test for high-frequency dispersion. Starting from a point on the speaker's axis, walk to either side until the high-frequency sound quality changes noticeably. Then continue walking slowly until the hissiness disappears from the sound.

The farther from the speaker's axis you must go to reach these points, the broader and more even the speaker's high frequency dispersion. If, with your eyes closed, you can reliably tell just when you're directly on the speaker's axis, its dispersion is deficient.

While you're tuned to FM, listen to some deep-voiced male announcers. They should sound natural, as if they were in the room with you, not as if they were in a rain-barrel or tub. This boominess or chestiness is a sign of a speaker-response peak at about 100 to 200 Hz. (Check several announcers, though, to be certain that the problem doesn't rest with the broadcast studio or your reception area.)

The ultimate speaker test is on music, of course. That, after all, is what you're buying speakers to hear. Each type of music has different information to impart about the speakers you're auditioning.

Try rock music, where it's easy to listen for bass definition. Transient thumps should be sharp and powerful, not softened into a mushy drone. You should be able to play the speaker as loud as you like, using an amplifier of the wattage you intend to use at home without breakup or distortion from speaker or amplifier. (If the amplifier distorts, then you need a more efficient speaker or you must revise your amplifier selection.)

Rock piano should be clear, transparent, almost bell-like. If it's jangly or annoying, that's usually a sign of high-frequency peakiness or distortion; if too soft, and sweet, the speaker system probably lacks satisfactory treble.

Now listen to massed orchestras or—still better—choruses. You should be able to hear them as groups of individual instruments or voices, not a puree of sound. This is one of the best possible tests for speaker clarity.

String instruments are rich in harmonics and, therefore, a good test of distortion and high-frequency response. Solo and chamber recordings should let you hear the bite of bow on string but without rasping. Cellos should sound full, not thin or ponderous. Massed violins should have a silky sheen, not shrill or dull. Animated

passages will reveal more than slow, legato ones.

Organ pedal notes do demonstrate low-bass capability, but they take a long time to build up, so they are not as exacting a test as a good swift thump of bass drum or tympani.

There isn't time in the audio showroom to play every selection on every record you bring as demonstration material. So carefully note what you want to play before you reach the store. If some of your records aren't conveniently divided into bands, you can make a cardboard index that can fit against the spindle as a guide to where to put down the tonearm.

Listen carefully at both the highest levels you're likely to listen to at home and at the lowest. The speaker's sound should not change radically (other than your ears' fading out on bass as it gets lower and a slight loss of treble) as the level diminishes.

Check also for instrument positions. You should be able to differentiate clearly the positions of the various instruments and voices within the stereo fields (easier on some records than others). Be skeptical of speakers with strong, immediate appeal. The speakers that instantly excite you often do so because they sound greatly different from those faithfully reproducing recordings. Perfect speakers, if they existed, would all sound alike. Among high-quality systems a speaker's superiority is likely to be fairly subtle.

Note that every speaker system does not aim all its sound directly forward. Some have drivers facing to the sides, the top, or even to the rear. (And dipoles, of course, project sound equally to both the front and the rear.)

In most cases, this involves midrange and treble drivers whose indirect output, reaching the listener by reflection, may overcome some room acoustic problems, enlarge the apparent sonic space, or simply make the sound richer. Some critics, however, feel that it also diffuses the stereo image or makes solo instruments sound unnaturally large. Here again, the listener should make up his or her own mind. Side-firing woofers, however are there to eliminate an upper-bass dip caused by wall reflections. ◇

SPEAKER SPECIFICATION GUIDE

Manufacturer and model	Price (\$)	(p=per pair)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz dB)	Sensitivity (SPL in dB at 1 meter, w/ 1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level control (number/type, C=cont., V=variable, S=switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
AAL Studio 6	430	air susp.	10 4x10	-	horn	4	1000	18-25k ±3	94	8	20	200C 400P	2C	38x24x16	90	Fused; pedestal base.
					piezo	1	7000									
Studio 4	300	air susp.	15 4x10	-	horn	1	1000	20-25k ±3	93	8	10	150C 300P	2/C	31x24x16	80	Fused; pedestal base.
					piezo	1	7000									
Studio 2001	220	reflex	10	-	-	1	600	25-25k ±3	88	8	10	80C 160P	1/C	37x13x11	50	
					-	1	2000									
					piezo	1	7000									
Studio 3"	200	air susp.	12 4x10	-	-	1	1000	25-25k ±3	93	8	10	100C 200P	2/C	26x15x13	48	Fused.
					horn	1	7000									
Studio 2	150	air susp.	10	-	piezo	1	4000	27-25k ±3	92	8	10	50C 100P		25x14x11	32	Fused.
					ring	1	7000									
Apollo 2915	140	reflex	15	-	-	1	1000	20-22k ±3	91	8	5	50C 100P		30x18x11	44	
					cone	2	2500									
Apollo 8853	130	reflex	8	-	-	2	1000	25-22k ±3	92	8	5	60C 120P		37x13x11	50	
					cone	1	5000									
Apollo 2712	95	reflex	12	-	-	1	1000	25-22k ±3	92	8	5	50C 100P		27x16x11	36	
					cone	1	5000									
Studio 1	90	air susp.	8	-	-	1	4000	35-20k ±3	91	8	5	30C 60P		22x11x10	24	
					-	1										
Acoustat XM	p2600	dipole	2.8 ft ²	elect.		3	-	30-20k ±3	-	50k	-	-	2/C	60x37x2	100	Built-in servo amplifier.
X	p1995	dipole	-	elect.		-	-	30-20k ±3	-	50k	-	-	2/C	48x28x19	105	
Acoustical Engineering Mach IV	1595	horn	15	-	-	1	400	16-20k ±5	-	8	10	100		41x42x30	175	
					horn	2	2500									
Saratoga	995	horn	12	-	-	1	500	20-20k ±5	-	8	10	80		30x28x22	150	
					horn	1	3000									
Model 5A	895	horn	12	-	-	1	500	20-20k ±5	-	8	10	80		30x29x21	125	
					horn	1	3000									
Mini-Corner Horn	595	horn	8	-	-	1	800	32-18k ±5	-	8	10	60		24x18x12	85	
					horn	1	5000									
Acoustic Research AR9	650	air susp.	12	-	-	2	200	28-25k -3	87	4	40	400	3/S	53x15x16	138	Side-firing woofers; extension circuitry.
					8	1	1200									
AR10"	450	air susp.	12	-	dome	1	525	35-25k -3	86	4-8	25	150	3/S	25x14x11	55	Woofer en- vironmental control.
					dome	1	5000									
AR11	350	air susp.	12	-	dome	1	525	35-25k -3	86	4	25	150	2/S	25x14x11	50	
					dome	1	5000									
AR12	250	air susp.	10	-	-	1	700	43-25k -3	86	8	25	150	2/S	25x14x11	38	
					2	1	4000									
AR14	180	air susp.	10	-	-	1	1300	43-24k -3	86	8	15	100	1/S	25x14x11	35	
					1	1										
AR15	130	air susp.	8	-	-	1	1700	48-24k -3	85	8	15	100	1/S	22x12x8	24	
					1	1										
AR17	p190	air susp.	8	-	press.	1	2000	48-21k -3	86	8	15	100	1/S	19x10x9	17	Pairs only.
					1	1										
AR18	p130	air susp.	8	-	press.	1	2000	58-21k -3	86	8	15	100	1/S	17x10x6	14	Pairs only.
					1	1										
Acousti-phase Phase III+	300	reflex	12	-	-	1	900	32-20k ±3	-	4-8	10	100C	1	25x15x14	50	
					5	1	5000									
Tower	260	reflex	10	-	-	1	1000	40-20k ±3	-	8	8	70C	2	37x13x13	59	
					3 1/2	1	5000									
Phase II	220	reflex	10	-	-	1	1200	35-20k ±3	-	4-8	10	70C	1	25x14x13	48	
					5	1	1500									
Monitor	180	reflex	12	-	-	1	1500	35-20k ±4	-	4-8	10	70C	1	25x14x14	48	
					1	1										
Phase I	130	reflex	8	-	-	1	1600	40-20k ±4	-	8	5	50C	1	22x13x11	29	
					1	1										
Microphase	90	reflex	6 1/2	-	-	1	1600	48-20k ±4	-	8	3	30C		18x11x8	38	
					1	1										

ABOUT PRICES . . . With repeal of Fair Trade Laws, manufacturers are now providing "Suggested Retail" figures for the guidance of their dealers and customers. Prices stated in the speaker charts are those provided by manufacturers under these conditions. They are, of course, subject to change without notice and some products may be purchased in your trading area at a price that differs from that given here.

Manufacturer and model	Price (\$)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz : dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type; C=cont, V=variable, S=switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Acoustique 3a SB1200	999	—	11	long coil	4	100 25-0.12k ±3	84-96 20k	—	—	1	14x36x30	170	Subwoofer with feedback to built-in 150W amp.		
Atom 3	n.a.	labyrinth	6	cone	1	600 120-30k ±3	94 8	15	120C	—	10x9x4	50	Satellite for use with above; "Time-aligned." System with 1 SB1200 & 2 Atom 3. 120W feedback amp.		
Triphonic	1299	—	—	—	—	—	—	—	—	—	—	—	—	—	
Andante Master Control	829	—	10 2 2 1/8x7/8	— dome planar	1 1 1	400 25-40k ±3	94 8/100	5	80C	1	18x12x8	42	120W feedback amp.		
Arioso Monitor	569	reflex	15 5%	— cone	1 1	300 45-20k ±3	94 8	50	120C	2	27x18x15	90	120W feedback amp.		
Andante Linear	555	—	11 2 3/4	— dome dome	1 1 1	400 30-30k ±3	94 8/100	5	80C	1	18x12x8	40	120W feedback amp.		
Adagio	435	trans. line	11 2 3/4	— dome dome	1 1 1	500 35-30k ±3	91 8	25	80C	1	31x12x12	67	Built-in 100-Hz filter.		
Apogee Monitor	359	labyrinth	11 1 3/8 3/4	— dome dome	1 1 1	700 45-30k ±3	92 8	10	70C	—	29x13x13	45	"Time-aligned."		
Allegreto	319	reflex	10 4x8	— horn horn	1 1 1	200 55-30k ±3	94 8	5	60C	1	25x12x10	35	"Rock speaker."		
Apogee	209	reflex	10 3/4	— dome	1 1	4500 55-30k ±3	94 8	5	50C	—	25x12x10	32	"Time-aligned."		
Alphase	156	labyrinth	8 3/4	— dome	1 1	5000 55-30k ±3	92 8	5	40C	—	10x10x20	21	"Time-aligned."		
ADS															
910	600	air susp.	10 2 1	cone dome dome	2 1 1	500 18-25k ±5	93 4	15	150C 300P	2/S	34x19x15	100	Swivel stand; bi- and tri-ampable.		
810	350	air susp.	8 2 1	cone dome dome	2 1 1	550 20-22k ±5	93 4	20	75C 150P	—	26x14x12	47			
710	265	air susp.	7 2 1	cone dome dome	2 1 1	550 25-22k ±5	93 4	15	65C 130P	—	22x12x11	35			
2002	225	air susp.	4 1	cone dome	1 1	2500 55-22k ±5	—	50k	—	1	7x4x5	5	Built-in biamp; 12V dc or opt. 110V ac.		
700	180	air susp.	7 1	cone dome	2 1	1500 30-22k ±5	92 4	15	50C 100P	—	22x12x11	33			
500	145	air susp.	8 1	cone dome	1 1	1500 30-22k ±5	91 4	15	40C 80P	—	20x12x10	25			
300	140	air susp.	5 1	cone dome	1 1	2500 68-22k ±5	90 4	10	50C 100P	—	9x6x6	8	Metal cabinet.		
400	109	air susp.	7 1	cone dome	1 1	1500 33-22k ±5	91 4	10	50C 100P	—	18x10x9	19			
200	105	air susp.	4 1	cone dome	1 1	2500 55-22k ±5	90 4	5	30C 60P	—	7x4x5	5	Metal cab.; avail. with bracket for car.		
Advent															
Powered Advent Loudspeaker	449	air susp.	12 1 3/8	— cone	1 1	1500 —	—	—	—	2	28x14x13	70	Built-in biamp.		
New Advent Loudspeaker	159	air susp.	12 1 3/8	— cone	1 1	1500 —	89 8	15	—	1/S	26x14x12	47			
Advent/1	120	air susp.	12 1 3/8	— cone	1 1	1500 —	89 8	15	—	—	22x13x9	27			
Advent/2	79	air susp.	10 1 5/8	— cone	1 2	1500 —	80 8	10	—	—	19x11x8	19			
AEI															
Evolution 1	160	—	10 1	— dome	1 1	1500 35-17k ±2	88 4 or 8	15	75C 150P	1/S	25x16x10	43	Switchable impedance.		
Evolution 2	110	—	8 1	— dome	1 1	1500 38-17k ±2	88 4 or 8	15	50C 100P	1/S	21x13x9	30	Switchable impedance.		
Akai															
SW-177	275	closed	15 5 1/4 1 1/4	— — —	1 1 2	700 25-20k ±3	94 8	100	40C 100P	2	27x17x12	47			
SW-157	210	reflex	12 5 1 1/4	— — —	1 1 1	1200 30-20k ±3	92 8	60	30C 60P	2	27x16x12	36			
SW-137	140	reflex	10 5 1 1/4	— — —	1 1 1	1200 40-20k ±3	92 8	40	20C 40P	1	23x14x12	26			
SW-127	95	reflex	8 1 1/4	— —	1 1	4000 40-20k ±3	92 8	30	15C 30P	—	20x12x9	16			
Allison Acoustics															
Allison: One	395	air susp.	10 3 1/2 1	— — —	2 2 2	350 — 3750 —	86 8	30	40C 400P	2/S	40x19x11	67	Side-firing woofers.		
Allison: Two	325	air susp.	8 3 1/2 1	— — —	2 2 2	350 — 3750 —	86 8	30	40C 400P	2/S	36x16x9	57	"		
Allison: Three	275	air susp.	10 3 1/2 1	— — —	1 1 1	350 — 3750 —	86 4	30	20C 200P	2/S	40x15x10	45	"		
Allison: Four	185	air susp.	8 1	— —	1 2	2000 —	86 8	30	20C 200P	2/C, S	11x19x10	24	"		
Altac Lansing Model 19	749	vented	15	— horn	1 1	1200 30-20k	102 8	10	65C 350P	—	39x30x21	143	Radial phase plug; sectoral horn.		

Manufacturer and model	Price (\$ (p=per pair))	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz/Hz · dB)	Sensitivity (SPL in dB at 1 meter w/1W input)		Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type): C=cont. variable; S=switched	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
								Min.	Max.							
Model 17	699	vented	15	—	1	1500	30-20k	100	8	10	65C	—	40x26x18	138	Coax; sectoral horn.	
Model 15	479	vented	12	—	1	1700	30-20k	94	8	12	60C	—	27x22x16	84	Radial phase plug.	
Stonehenge II	359	vented	12	—	1	500	35-20k	86	8	20	250P	—	38x16x15	76		
			5½	cone	1	5000					50C	—				
			5	cone	1						250P	—				
Model 9 Series II	329	vented	12	—	1	800	40-20k	93	8	12	60C	—	27x18x15	64		
			6½	cone	1	7000					250P	—				
			5	cone	1							—				
Santana II	279	vented	12	—	1	2500	40-20k	91	8	12	45C	—	26x19x16	67		
			5	cone	1						150P	—				
Model 7 Series II	259	vented	12	—	1	850	45-20k	90	8	15	50C	—	25x16x14	49		
			6½	cone	1	8000					200P	—				
			4	cone	1							—				
Model 5 Series II	189	vented	12	—	1	1500	45-20k	92	8	12	45C	—	26x15x12	38		
			4	cone	2						150P	—				
Model 3 Series II	149	vented	10	—	1	1500	50-20k	91	8	10	35C	—	24x13x12	33		
			4	cone	1						100P	—				
Model 1 Series II	129	sealed	8	—	1	3500	50-20k	89	8	10	30C	—	23x12x11	60		
			4	cone	1						75P	—				
Analogue Systems																
AL-5	430	air susp.	10	cone	2	400	19-21k	—	8	7	125P	2/C	35x14x12	70	Two-piece unit.	
		horn	8	cone	1	1500							13x14x13			
		horn	5	cone	1	5500										
		horn	4½	dome	1											
AL-4	300	horn	12	cone	1	1500	20-20k	—	7.5	7	100P	2/C	27x16x13	48		
			5	cone	1	4000										
			4½	dome	1	6500										
			3½	dome	1											
A-550	190	air susp.	10	cone	2	1200	28-20k	—	8	3	70C	C	35x14x12	35		
			4½	cone	1	3500										
			3	cone	1											
AL-3	180	horn	10	cone	1	1500	25-19k	—	7.5	7	90P	2/C	24x14x12	42		
			4½	cone	1	4500										
			3½	dome	1											
A-450	170	air susp.	12	cone	1	1200	35-20k	—	8	3	60C	C	26x16x12	32		
			4½	cone	1	3500										
			3	—	1											
A-300	100	air susp.	10	cone	1	1200	35-20k	—	8	3	50C	—	22x12x11	24		
			4½	cone	1	3500										
			3	cone	1											
AL-2	100	reflex	10	cone	1	3500	32-19k	—	8	5	70P	2/C	20x12x11	23		
			3½	dome	1											
Armstrong Audio																
602	275	vented	8	—	1	2300	55-20k ±2	—	8	25	50C	—	24x11x11	25		
			1½	dome	1	7500					100P	—				
			1	dome	1											
Audioanalyst																
Anthem Array	599	sealed	10	—	2	120	28-25k ±3	86	4-8	15	70C	3/S, C	44x15x15	90	Polymer-treated cone; "time-aligned" staggered mounting.	
		open	4½	—	1	500					300P	—				
		open	1	dome	1	3000										
		open	—	piezo horn	1	12,000										
M8	359	air susp.	12	long throw	1	600	27-25k ±3	86	8	15	80C	2/S	28x16x12	57	Polymer-treated cone.	
			4½	cone	—	2000					250P	—				
			1	dome	1	15,000										
			½	—	—											
M6	269	air susp.	10	long throw	1	700	30-20k ±3	86	8	15	55C	2/S	24x14x12	47	"	
			4½	cone	1	2000					150P	—				
			1	dome	1											
M4	189	air susp.	10	long throw	1	2000	38-20k ±4	88	8	10	40C	—	21x12x11	33	"	
			1	dome	1						100P	—				
A-100X	169	air susp.	10	long throw	1	2000	33-20k ±4	89	8	10	50C	2/S	23x14x12	37		
			4½	cone	1	8000					135P	—				
			2	—	—											
M2	149	air susp.	5	long throw	1	2000	55-20k ±4	—	4	7	30C	—	10x6x7	7	Polymer-treated cone.	
			1	dome	1						60P	—				
Audioatics of Oregon																
LO-2	2500	vented	10	—	4	125	20-26k ±1	90	6	70	100C	C	—	200	Spherical satellites; separate woofers; bi-amp crossover.	
			5	—	1	1000					400P	—				
			1½	dome	1	4000										
			1	dome	1											
T-52	365	vented	10	cone	1	350	32-22k ±2.5	92	4	30	60C	C	48x12x16	90		
			4½	—	1	2500					240P	—				
			1	dome	1											
Audio Phase																
FW154	390	reflex	15	—	1	800	20-25k ±6	—	8	5	100C	2/C	28x18x16	60	Fused.	
			4x10	horn	1	2500					200P	—				
			3x7	horn	1	6500										
			3	—	1											
FW124	320	reflex	12	—	1	800	20-25k ±6	—	8	5	100C	2/C	26x16x12	45		
			4x10	horn	1	2500					200P	—				
			3x7	horn	1	6500										
			3	—	1											
SV 123	200	reflex	12	—	1	800	30-19k ±6	—	8	5	50C	2/C	26x16x12	40	Fused.	
			4x10	horn	1	1500					100P	—				
			3	—	1											
LV123	170	reflex	12	—	1	800	35-19k ±6	—	8	5	40C	—	26x16x12	35	Fused.	
			5	cone	1	1500					80P	—				
			3	—	1											

Manufacturer and model		Price (\$/lp-per pair)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz · dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type): C=cont.; V=variable; S=switched	Dimensions (W x H x D) (in.)	Weight (pounds)	Remarks	
Avid	300	350	sealed	12	-	1	500	35-20k ±3	88	8	15	250C	2/S	30x17x10	60	Self-resetting protect circuit.	
						1	6000										
200	225	sealed	10	-	1	475	42-20k ±3	88	8	15	150C	2/S	25x15x10	40	Fused.		
					1	4000											
					1												
101	175	vented	8	cone	1	2500	30-18k ±3	85	8	15	70C	-	29x13x13	40			
					2												
102	150	-	10	cone	1	2200	44-18k ±3	85	8	15	100C	1/S	25x15x10	36	Fused.		
					1												
100	110	air susp.	8	cone	1	2500	48-18k ±3	85	8	15	75C	1/S	23x14x10	28			
					1												
80	85	air susp.	8	cone	1	3000	66-17k ±3	88	8	8	60C	-	20x12x9	17			
					1												
Bang & Olufsen	Beovox M-100	490	vented	12	cone	1	50	35-22k ±4	-	4	25	100C	-	30x16x12	61	Frequency-dependent circuit breaker; Phase-Link "linear phase" system; with stands.	
						4	2500										
						1	8000										
						1											
Beovox M-70	395	air susp.	10	cone	1	500	38-20k ±4	-	4	15	70C	-	26x14x11	37	Phase-Link system as above; w/stands.		
					1	4500											
					1												
Beovox S-75	249	air susp.	10	cone	1	700	42-20k ±4	-	4	12	75C	-	23x13x10	24	Phase-Link; opt. stands or wall brkt.		
					1	4000											
					1												
Beovox P-45	175	air susp.	5	cone	2	2000	55-20k ±4	-	4	10	45C	-	26x14x6	18	Wall mounting; Phase-Link.		
					1												
					1												
Beovox S-45-2	149	air susp.	8	cone	1	2000	49-20k ±4	-	4	10	45C	-	19x10x8	15	Phase-Link; opt. floor stand or wall brkt.		
					1												
					1												
Beovox P-30	125	air susp.	6½	cone	1	3000	58-20k ±4	-	4	10	30C	-	22x12x4	11	"Linear phase"; wall-mounting panel.		
					1												
Beovox S-35	119	air susp.	8	cone	1	3000	58-20k ±4	-	4	7	35C	-	19x10x8	9	"Linear phase."		
					1												
Beovox S-25	95	air susp.	6½	cone	1	3000	80-16k ±4	-	4	5	25C	-	16x9x6	9	"Linear phase."		
					1												
Bedini/Strelhoff	TS-1	p1995	infinite	10	cone	2	500	40-18k ±4	-	8	20	300C	3	57x36x18	-	"Phase-aligned."	
						4	5000										
						4											
BES	D-120W	599	open	1700 in. ²	diaphragm	-	1200	35-20k ±3	89	4	30	110C	-	53x20x4	55	Dual planar diaphragms; upper has separate drivers for midbass, midrange & highs.	
						3	10,000										
						1											
						4											
	D-75W	449	open	850 in. ²	diaphragm	-	1000	38-20k ±3	91	4	25	60C	-	32x22x4	35		
D-60W	299	open	850 in. ²	diaphragm	-	800	40-20k ±3	88	8	25	150C	-	28x20x4	25	Planar diaphragm with 3 drivers for diff. freq. ranges.		
U60	199	open	-	-	-	800	42-18k ±3	88	8	20	-	-	26x18x4	20	As above, with 2 drive coils.		
U50	139	open	-	-	-	3000	50-20k ±3	88.5	4	15	-	-	22x14x4	15			
Beta Sound	1001B	650	horn/vented	15	-	1	400	30-18.5k ±3	100	8	30	100C	1/S	41x22x26	130		
						1	4500										
	075	500	horn/vented	12	-	1	600	30-18.5k ±3	97	8	15	75C	1/S	38x21x17	100		
						1	4500										
	050	430	vented	12	-	1	600	30-18.5k ±4	97	8	15	75C	1/S	40x17x18	80		
1						4500											
045	370	vented	12	-	1	6000	35-18.5k ±4	97	8	15	75C	1/S	25x17x15	70			
					1	4500											
Harold Beverage	System 3	10,000	line source	-	elect.	1	-	25-20k ±2	-	-	-	-	C	200	Vertical line source acoustic lens; built-in 1500-VA		
						2	70										
	System 2S	1800	line source	-	-	elect.	1	-	50-18k ±2	-	-	-	-	C	78x24x15	150	As above, w/subwoofer.
							2	125									
System 2 Beverage Jr.	1500	line source	-	-	elect.	1	-	35-18k ±2	80	4	50	100C	C	72x16x16	75	As above, w/o subwoofer.	
						1											
B.I.C.	2001 Sound Odyssey	549	planar column	8	ABR	3	1500	35-20k ±3	94	6	25	80C	-	64x24x6	90		
						1	5000										
						2											
1001 Sound Window	349	planar column	8	ABR	1	1500	48-20k ±3	92	5.2	20	70C	-	32x22x5	40			
					1	5000											

Data not available for new models.

Manufacturer and model	Price (\$)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz - dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type): C-cont., variable, S-switched	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Bolivar Speaker Works															
64	190	vented	10	—	1	800	—	89	4	10	50C 100P	C	27x14x12	44	
			5	—	1	3000	—								
			2	—	1	—	—								
18	145	vented	8	—	1	1000	—	86	4	10	45C 90P	C	23x13x11	34	
			5	—	1	3000	—								
			2	—	1	—	—								
125	115	vented	8	—	1	2000	—	86	4	10	35C 70P	—	23x13x11	31	
			2	—	1	—	—								
Bose															
901	765	vented special	4 1/2	cone	9	—	—	—	8	10	—	2	21x13x12	35	1 direct, 8 reflecting drivers; w/ active equalizer.
601	279	vented	8	—	2	2000	—	—	8	15	150C	—	25x15x13	36	Top and front radiating.
			3	—	4	—	—								
501	199	air susp.	10	—	1	1500	—	—	4	20	150C	—	24x15x14	42	Tweeters reflect off walls.
			3 1/2	—	—	3000	—								
301	108	vented	8	—	1	1200	—	—	8	10	60C	—	11x15x10	18	Aimable tweeters reflect off side wall.
			3	—	1	3000	—								
Bozak															
Concert Grand	1365	infinite	12	—	4	400	28-20k	—	8	—	—	—	52x36x19	225	
			6	cone	2	2500	—								
			2 1/2	cone	8	—	—								
CS 4000 Symphony	870	infinite	12	—	2	400	35-20k	—	8	—	—	—	44x27x16 or 30x39x16	190	Avail. in vert. or horiz. cab.
			6	cone	1	2500	—								
			2 1/2	cone	8	—	—								
CS-501 Concerto	450	infinite	12	—	1	400	40-20k	—	8	—	—	S	32x20x16	90	
			6	cone	1	2500	—								
			2 1/2	cone	3	—	—								
LS 400	300	infinite	12	—	1	800	40-20k	—	—	20	—	S	25x18x14	65	
			6	cone	1	2500	—								
			2 1/2	cone	2	—	—								
LS 300	250	vented	—	—	—	—	—	—	—	20	—	—	—	—	
LS 250	190	infinite	12	—	1	800	45-20k	—	—	20	—	S	23x15x12	48	
			4	—	1	2500	—								
			2 1/2	—	1	—	—								
LS 200	115	vented	8	—	1	2000	45-20k	—	—	20	—	—	20x12x11	34	
			2 1/2	—	1	—	—								
Braun															
L-1030	840	infinite	10	—	1	500	—	—	4.8	25	100C 140P	—	28x12x10	40	
			2	dome	1	3000	—								
			1/2	dome	1	—	—								
L-300	400	infinite	5	—	1	600	—	—	4	12	40C 50P	—	10x6x7	14	
			1	dome	1	3000	—								
			3/4	dome	1	—	—								
L-200	270	infinite	5	—	1	1500	—	—	4	12	40C 50P	—	10x6x6	11	
			1	dome	1	—	—								
LVP-100	260	infinite	2 1/4	—	1	1500	—	—	4	12	35C 50P	—	7x4x4	7	Swivel mtg. brkt.
			1	dome	1	—	—								
Output C	230	infinite	2 1/4	—	1	1500	—	—	4	12	35C 50P	—	7x4x4	6	
			1	dome	1	—	—								
Burhoe Acoustics															
Silver	450	vented	10	—	1	1000	24-26k ±2	97	6	50	100C 200P	1/C	—	58	Angled, side-firing tweeters.
			1 1/8	inv. dome	1	2000	—								
			1 1/8	inv. dome	3	3000	—								
Blue	225	vented	10	—	1	1000	30-16k ±2	96	5	25	75C 175P	2/C	14x24x11	36	
			1 1/2	inv. dome	1	2000	—								
			1 1/8	inv. dome	1	—	—								
Light Blue	150	vented	10	—	1	1500	30-16k ±2	98	5	15	60C 175P	1/C	14x24x10	35	
			1 1/2	inv. dome	1	—	—								
White	140	vented	8	—	1	1800	35-26k ±2	94	5	20	50C 150P	1/C	22x14x10	29	
			1	inv. dome	1	—	—								
Green	110	vented	8	—	1	2000	40-16k ±2	97	5	8	35C 100P	1/S	18x11x10	22	
			1 1/2	inv. dome	1	—	—								
B&W															
DM6	655	sealed	8 7/8	cone	1	500	50-20k ±3	86	8	25	350C	2	37x16x15		"Linear-phase" staggered cab.; system & tweeter fused.
			5 1/8	cone	1	5000	—								
			3/4	dome	1	—	—								
DM7	545	pass. rad.	—	cone	1	—	70-20k ±2	—	8	50	200C	1	36x11x15		"Linear-phase" staggered; fused.
			—	dome	1	—	—								
DM4	258	vented	6 1/2	cone	1	2500	80-20k ±5	88	8	10	30C	—	21x10x10		Fused.
			1 3/8	cone	1	14,000	—								
			3/4	dome	1	—	—								
DM5	159	sealed	5 1/2	cone	1	4500	100-20k ±5	87	8	10	25C	—	18x9x10		Fused.
			3/4	dome	1	—	—								
Calibration Standard Instruments															
MDM-4	230	vented	6 1/2	—	2	1500	70-17k ±3	89	8	10	40C 100P	none	13x19x10	23	For "near-field" monitoring; fused.
			3 1/2	—	1	—	—								
Cambridge/Cybervox															
TL 200	599	trans. line	13x8	—	1	400	—	—	8	20	50C 90P	—	42x18x13	98	
			—	—	1	3000	—								
			—	—	1	10,000	—								
			—	—	1	—	—								
TL 100	499	trans. line	13x8	—	1	400	—	—	8	20	40C 70P	—	31x13x13	52	
			—	—	1	3000	—								
			—	—	1	—	—								
Cannon TLS															
1230-T	399	pass. rad.	12	—	1	400	—	—	8	18	185P	3/S, C	14x14x39	61	
			5 1/2	—	1	3500	—								
			2x5	horn	1	—	—								
			—	piezo	1	—	—								

Manufacturer and model

Manufacturer and model	Price (\$)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz -dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type, C=cont, P=peak)	Dimensions (H x W x D in.)	Weight (pounds)	Remarks
1230	299	pass. rad.	12	—	1	400	—	8	15	170P	3	14x14x25	41		
			5½	—	1	3500									
			2x5	horn	1										
1030	249	pass. rad.	10	—	1	400	—	8	12	150P	3/S, C	14x14x25	39		
			5½	—	1	3500									
			2x5	horn	1										
1020	179	pass. rad.	10	—	1	3500	—	8	10	90P	2/S, C	12x14x22	31		
			2x5	horn	1										
			—	piezo	1										
Canton LE-900	758	infinite	11	—	1	700	—	4-8	40	90C	—	23x13x11	32	Floor stand opt.	
			2	dome	1	2100									
Gamma 800L	558	infinite	8	—	1	750	—	4-8	25	80C	—	11x11x11	22		
			1 1/8	dome	1	2200									
LE-600	558	infinite	¾	—	1	680	—	4-8	30	70C	—	20x11x10	24		
			7	dome	1	2700									
LE-400	370	infinite	1½	—	1	750	—	4-8	20	20C	—	15x9x8	14		
			6	dome	1	2600									
LX-300	240	infinite	1½	—	1	1600	—	4-8	10	30C	—	10x6x5	6		
			1	dome	1										
HC-100	180	infinite	4	—	1	1700	—	4-8	10	15C	—	5x8x6	4		
			1	dome	1										
Celestion Industries Ditton 66	530	pass. rad.	12	—	1	500	40-25k ±4	83	8	10	160P	—	40x15x12	66	
			12	pass. rad.	1	5000									
Ditton 25	350	pass. rad.	12	—	1	2000	45-25k ±4	85	8	10	120P	—	32x14x11	42	
			12	pass. rad.	1	9000									
Ditton 44	310	air susp.	12	—	1	500	50-25k ±4	84	8	10	100P	—	30x15x10	45	
			6	cone	1	5000									
Ditton 33	260	air susp.	12	—	1	500	50-20k ±4	83.5	8	10	80P	—	24x14x11	34	
			5	cone	1	5000									
UL6	180	pass. rad.	6	—	1	2500	70-20k ±4	79	8	20	80P	—	12x16x9	17	
			6	pass. rad.	1										
Ditton 15	160	pass. rad.	8	—	1	2500	60-20k ±4	84	8	10	60P	—	21x10x9	17	
			8	pass. rad.	1										
Corwin-Vega 417R	400	reflex	15	—	1	300	30-19k ±4	103	4-8	0.5	200C	2/C	29x18x18	82	Min. power input is for 100 dB SPL; hi-freq. circuit breaker.
			6	—	1	3500									
S1	350	reflex	12	—	1	300	28-20k ±4	98	4-8	2	200C	1/C	25x15x14	55	As above, but with Thermo-Vapor suspension, base equalizer.
			6	—	1	4000									
12TR	350	reflex	12	Dhorm	1	250	35-20k ±3	100	4-8	1	100C	3/C	40x14x14	88	As for 417R, but fuse-protected.
			6	—	1	4000									
312	300	reflex	12	—	1	300	30-17k ±4	100	4-8	1	150C	2/C	26x16x16	63	As for 417R above.
			6	—	1	3500									
R-123	280	reflex	12	—	1	500	38-20k ±4	97	4-8	2	50C	2/C	25x15x12	50	"
			6	—	1	5000									
212	250	reflex	12	—	1	2000	35-17k ±4	100	4-8	1	100C	1/C	26x16x16	58	"
			—	Dhorm	1										
36R	220	reflex	12	—	1	500	38-20k ±4	96	4-8	2	75C	2/C	25x15x12	40	"
			5	—	1	2500									
R12	200	reflex	2½	—	1	2000	38-20k ±4	97	4-8	2	50C	1/C	25x15x12	43	"
			12	—	1										
25	180	reflex	12	—	1	2500	38-20k ±4	94	4-8	4	40C	1/C	25x15x12	39	"
			2½	—	1										
R-10	160	reflex	10	—	1	1200	38-20k ±4	92	4-8	6	40C	1/C	24x13x12	39	"
			1	dome	1										
311R	150	reflex	12	—	1	1500	32-20k ±4	100	4-8	4	40C	1/C	20x16x15	57	"
			5	horn	1	3000									
Chartwell PM 450 Electronic	3000	reflex	12	cone	1	1800	45-20k ±2	—	20k	—	—	1, amp	30x18x16	70	Adj. sensitivity; switchable impedance; w/amp.
			1	dome	1										
PM 450 Passive	2100	reflex	12	cone	1	1800	45-20k ±3	92	8	—	350P	—	30x18x16	70	
			1	dome	1										
PM 400	1650	reflex	12	cone	1	500	45-22k ±3	87	8	—	100C	—	34x15x13	30	
			5	cone	1	3500									
PM 200	400	reflex	1	dome	1	3500	45-22k ±3	86	8	—	50C	—	26x11x14	33	
			8	cone	1										
			1	dome	1										

Manufacturer and model

Manufacturer and model	Price (\$)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz dB)	Sensitivity (SPL in dB at 1 meter, w/1W input)		Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type)	C-cont. variable (S-switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
PM 100	250	reflex	6 1/2	cone	1	3000	50-20k ±3	84	8	—	40C	—	—	18x9x8	16		
LS3/5A	225	air susp.	4 1/2	dome	1	3000	80-20k ±3	82	8	15	100P	—	—	12x8x6	12		
Cizek "Woofers"	275	—	10	—	2	200	27-200 ±2	—	4	—	—	—	—	—	—	Subwoofer w/crossover.	
	198	air susp.	10	—	1	1500	36-17k ±2	—	4 or 8	15	150P	2	—	25x16x10	49	Switchable impedance.	
	1	—	1	dome	1	—	—	—	—	—	—	—	—	—	—		
2	134	air susp.	8	—	1	1500	38-17k ±2	—	4 or 8	15	150P	1	—	21x13x9	37	Switchable impedance.	
3	97	—	8	dome	1	—	—	—	4 or 8	15	100P	1	—	19x12x8	25	Switchable impedance.	
Concept CE-M	595	pass. rad.	12	alum. cone	1	1300	25-23k ±3	91	6	25	300P	3/S, C	—	45x18x16	102	LED power mon.	
CE-1	445	pass. rad.	10	pass. rad.	1	—	—	—	—	—	—	—	—	—	—	—	
CE-2	345	pass. rad.	10	alum. cone	1	1500	30-23k ±3	91	6	20	280P	2/C	—	40x16x15	91	As above.	
CM Labs Div., Audio Int'l. CM158	599	infinite	15	alum. cone	1	1500	36-23k ±3	91	6	20	280P	2/C	—	25x14x14	54	As above.	
			6	Heil AMT	1	—	—	—	—	—	—	—	—	—	—	—	
			3	Heil AMT	1	—	—	—	—	—	—	—	—	—	—	—	
CM10a	349	infinite	10	alum. cone	1	500	30-19k ±2.5	86	6	40	50C	none	—	22x12x12	40	As above.	
Contrara Research Vector 5	440	pass. rad.	12	alum. cone	1	300	—	91	8	30	250P	3/C	—	34x18x14	60	"Linear phase."	
			12	pass. rad.	1	1500	—	—	—	—	—	—	—	—	—	—	
			5	—	1	5000	—	—	—	—	—	—	—	—	—	—	
Elan	380	—	8	—	2	1000	—	87	8	35	150P	2/C	—	40x12x12	65	As above; swivel base.	
			1 1/2	—	1	5000	—	—	—	—	—	—	—	—	—	—	
			1	—	1	—	—	—	—	—	—	—	—	—	—	—	
Vector 4	300	pass. rad.	10	—	1	300	—	89	8	15	150P	2/C	—	28x16x12	45	"Linear phase."	
			10	pass. rad.	1	4000	—	—	—	—	—	—	—	—	—	—	
			5	—	1	—	—	—	—	—	—	—	—	—	—	—	
Vector Two	260	pass. rad.	10	—	1	1000	—	89	8	15	150P	2/C	—	25x15x10	45	As above.	
			10	pass. rad.	1	5000	—	—	—	—	—	—	—	—	—	—	
			1 1/2	dome	1	—	—	—	—	—	—	—	—	—	—	—	
Pedestal	250	—	8	dome	1	2000	—	91	8	15	100P	—	—	31x12x12	45	Swivel base.	
Vector One A	230	pass. rad.	8	—	1	1000	—	89	8	15	150P	2/C	—	23x14x10	38	"Linear phase."	
			8	pass. rad.	1	5000	—	—	—	—	—	—	—	—	—	—	
			1 1/2	dome	1	—	—	—	—	—	—	—	—	—	—	—	
Vector Two B	210	pass. rad.	10	—	1	2000	—	89	8	15	150P	1/S	—	25x15x10	40	As above.	
			10	pass. rad.	1	—	—	—	—	—	—	—	—	—	—	—	
			1	dome	1	—	—	—	—	—	—	—	—	—	—	—	
Tower	200	—	10	—	1	2000	—	89	8	15	150P	1/S	—	28x12x12	40		
Vector One	180	pass. rad.	8	—	1	2000	—	89	8	15	100P	1/S	—	23x14x10	35	"Linear phase."	
			8	pass. rad.	1	—	—	—	—	—	—	—	—	—	—	—	
			1	dome	1	—	—	—	—	—	—	—	—	—	—	—	
Piccola 3	145	—	6 1/2	—	1	1500	—	91	8	10	150P	2/C	—	14x11x6	18		
			1 1/2	—	1	5000	—	—	—	—	—	—	—	—	—	—	
			1	—	1	—	—	—	—	—	—	—	—	—	—	—	
Rectangle	135	pass. rad.	8	—	1	2000	—	89	8	15	25P	—	—	15x18x9	30		
Piccola 2	100	—	6 1/2	—	1	2000	—	90	8	15	100P	—	—	14x9x6	15		
			1	—	1	—	—	—	—	—	—	—	—	—	—	—	
			1	—	1	—	—	—	—	—	—	—	—	—	—	—	
Craig 5706	170	vented	12	—	1	800	40-20k ±5	94	8	20	50P	2/C	—	27x19x15	46		
			4 1/2	—	1	5000	—	—	—	—	—	—	—	—	—	—	
			2	—	1	—	—	—	—	—	—	—	—	—	—	—	
5705	120	vented	10	—	1	2500	45-17k ±5	94	8	15	35P	1/C	—	24x17x14	37		
5704	100	air susp.	8	—	2	1200	—	92	8	15	50P	—	—	22x13x12	25		
			8	—	1	—	—	—	—	—	—	—	—	—	—	—	
			3	—	1	—	—	—	—	—	—	—	—	—	—	—	
Dahlquist DQ-10	425	—	10	—	1	400	37-27k ±3	—	8	60	200P	1/C	—	32x31x9	55	"Low-diffraction phased array."	
			5	—	1	1000	—	—	—	—	—	—	—	—	—	—	
			2	dome	1	6000	—	—	—	—	—	—	—	—	—	—	
			1/4	dome	1	12,500	—	—	—	—	—	—	—	—	—	—	
OQ-1W	275	air susp.	13	piezo	1	—	—	—	—	60	200P	—	—	26x19x15	70	Subwoofer.	
Dayton Wright XG-8 Mk3 Series 3	2995	dipole	—	elect.	1	16,000	32-25k ±4	86	4	50	250C 2000P	1/S	—	42x39x10	95		
			1 1/2	piezo	1	—	—	—	—	—	—	—	—	—	—	—	
Design Acoustics D-8	485	pass. rad.	10	—	2	600	30-17k ±2	92	8	15	40C 150P	3/S	—	112x42x32	70	Pass. rad. may be driven as second woofer.	
			5	cone	1	1500	—	—	—	—	—	—	—	—	—	—	
			—	cone	3	—	—	—	—	—	—	—	—	—	—	—	
			—	dome	1	—	—	—	—	—	—	—	—	—	—	—	

Manufacturer and model

Manufacturer and model	Price (\$)	(p-type part)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz - dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type; C=cont., P=peak)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
D-6	318	vented	10 5 2 1/2	— cone cone	1 1 5	800 2000	30-15k ±2	92 8	20	30C 100P	2	25x17x14	50	Rear-mounted woofer; spec'd, angled tweeters.		
D-4	239	air susp.	10 5 2 1/2	— cone cone	1 1 3	800 2000	40-15k ±3	90.5 8	25	25C 75P	2	38x18x10	60	Dispersion angle 180° hor., 90° vert.		
D-2	179	vented	10 1	— dome	1 1	1500	40-18k ±3.5	88 8	20	20C 50P	1	34x13x12	35	Tweeter main axis 30° from vertical.		
D-1W	119	vented	8 1 1/2	— cone	1 1	1500	50-15k ±3.5	87.5 6	15	15C 30P	—	54x31x20	19	Tweeter fires into double-reflecting dispersion system.		
D-1A	109	vented	8 1 1/2	— cone	1 1	1500	50-15k ±3.5	87.5 6	15	15C 30P	—	51x18x20	12	As above.		
Dyneco Phase 3 Model 80	399	infinite	13 4 1/4 1	cone cone dome	1 1 1	800 4000	—	90 8	100D 150P	2/S	43x15x12	68	"Phase-coherent."			
Phase 3 Model 60	299	infinite	10 4 1/4 1	cone cone dome	1 1 1	1000 5000	—	89 8	—	60D 100P	2/S	36x13x9	44	As above.		
A-30XL	149	sealed	10 5 1	cone cone dome	1 1 1	1000 5000	—	88 8	—	80P	2/C	23x13x10	38	In-line drivers.		
A-25 II	119	vented	10 1	cone dome	1 1	1500	—	88 8	50D 80P	1/C	20x12x10	29	As above.			
D-20XL	74	vented	8 2	cone cone	1 1	2000	—	88 8	—	35P	—	18x11x9	20			
Electro-Voice Interface: D	p1500	vented	12 6 1/2 —	— cone horn	1 1 1	40 350 3000	28-18k ±3	97 8	1.5	50C 500P	1/S	32x22x16	114	Equalized tweeter-protect circ.		
Interface: C	p900	vented	10 —	— horn	1 1	42 2000	30-18k ±3	96 6	2.8	20C 200P	1/S	30x22x12	60	As above.		
Interface: B II	p675	vented	12 8 2 1/2	— radiator —	1 1 2	42 1500 8000	30-18k ±3	92 8	3.6	20C 200P	1/S	29x16x11	42	As above.		
Interface: A II	p500	vented	12 8 2 1/2	— radiator —	1 1 2	49 1500 8000	35-18k ±3	92 8	3.6	20C 200P	1/S	23x14x8	30	As above.		
Interface: 3	170	vented	12 8 2 1/2	— radiator —	1 1 1	57 1500	40-18k ±4	92 8	3.6	20C 200P	—	27x15x13	33			
Interface: 2	140	vented	10 8 2 1/2	— radiator —	1 1 1	66 1500	47-18k ±4	92 8	3.6	20C 200P	—	25x14x11	25			
Interface: 1	100	vented	8 2 1/2	— —	1 1	76 1500	54-18k ±4	92 8	3.6	20C 200P	—	21x12x11	23			
Ezekiel FRL II	425	infinite	10 4 2 1/2	cone — dome	1 1 1	400 3500	27-19k +2, -3	87 7	50	200C 300P	1/C	44x16x10	60			
MTM	225	infinite	8 2 1/2	cone dome	1 1	2200	36-19k ±4	89 6	25	90C 140P	1/C	40x15x8	45			
WRL	149	infinite	8 2 1/2	cone dome	1 1	2200	38-19k ±4	89 6	20	90C 140P	1/C	25x15x13	38			
EPJ 350	400	air susp.	8 3	— air spring	3 1	1800	36-20k ±3	87 8	38	125C	1/S	37x15x13	83			
250	250	air susp.	8 1	— air spring	2 2	1800	38-20k ±3	87 8	20	100C	1/S	25x15x15	40			
2008	225	pass. rad.	12 8 1	— pass. rad. air spring	1 1 1	1800	34-20k ±3	90 8	15	100C 150P	1/S	31x17x11	58			
1208	140	air susp.	10 1	— air spring	1 1	1800	38-20k ±3	88 8	25	80C	1/S	25x15x11	46			
100W	115	air susp.	8 1	— air spring	1 1	1800	48-20k ±3	87 8	12	75C	—	21x11x9	25			
100V	99	air susp.	8 1	— air spring	1 1	1800	48-20k ±3	87 8	12	75C	—	21x11x9	25			
70	75	air susp.	6 1	— air spring	1 1	1800	60-20k ±3	86.5 8	10	80C	—	16x11x7	17			
Epicure 1000	1000	air susp.	8 1	— air spring	4 4	1800	23-30k ±3	87 8	60	150C 250P	1/S	75x18x18	180			
400+	400	air susp.	6 1	— air spring	4 4	1800	27-20k ±3	85 8	30	150C 250P	1/S	38x14x14	90			
20+	275	air susp.	8 1	— air spring	2 2	1800	35-20k ±3	86 8	20	100C	1/S	29x19x12	64			
14	199	pass. rad.	8 6 1	— pass. rad. air spring	1 1 1	1800	28-20k ±3	84 8	15	80C	1/S	24x14x9	39			
11	149	vented	6 1	— air spring	1 1	1800	36-20k ±3	84 8	15	80C	1/S	23x14x10	36			
10	125	air susp.	8 1	— air spring	1 1	1800	43-20k ±3	86 8	12	75C	1/S	22x12x10	33			
5	80	air susp.	6 1	— air spring	1 1	1800	50-20k ±3	84 8	15	80C	—	15x11x8	16			
ESS Transatd	p3500	infinite	32 21.5 in ²	Heil AMT (bass drive) Heil AMT	1 1	1000	30-22k ±3	—	4	—	C	40x50x6	—	Inc. current-source woofer amp.		

Manufacturer and model

Manufacturer and model	Price (\$)	Type	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz -dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type)	C-cont. variable (S-switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
AMT Monitor	608	pass. rad.	12	—	—	1	1000	35-23k ±3	90	6	—	375P	C	39x16x16	104		
			12	pass. rad.	Heil AMT	1											
AMT 1B	488	pass. rad.	12	21.5 in. ²	—	1	1000	30-23k ±3	90	6	—	375P	C	35x16x16	85		
			12	pass. rad.	Heil AMT	1											
AMT 1B Bookshelf	416	pass. rad.	12	21.5 in. ²	—	1	1000	40-23k ±3	90	6	—	375P	C	24x14x14	65		
			12	pass. rad.	Heil AMT	1											
Tempest LS-4	348	pass. rad.	10	21.5 in. ²	—	1	2400	35-24k ±3	96	6	—	160P	C	35x13x12	48		
			10	pass. rad.	Heil AMT	1											
AMT 10B	334	pass. rad.	10	—	—	1	1400	40-22k ±3	90	6	—	275P	C	24x14x14	55		
			12	pass. rad.	Heil AMT	1											
Performance PS-4	322	pass. rad.	10	20.25 in. ²	—	1	2400	35-24k ±3	96	6	—	160P	—	35x13x12	48		
			10	pass. rad.	Heil AMT	1											
Tempest LS-5	241	pass. rad.	10	10.4 in. ²	—	1	2400	40-20k ±3	95	6	—	140P	—	24x14x14	36		
			10	pass. rad.	Heil AMT	1											
Performance PS-5	234	pass. rad.	10	—	—	1	2400	40-20k ±3	95	6	—	140P	—	24x14x14	36		
			10	pass. rad.	Heil AMT	1											
Tempest LS-8	179	pass. rad.	8	10.4 in. ²	—	1	2400	50-20k ±3	94	6	—	100P	C	22x13x11	30		
			10	pass. rad.	Heil AMT	1											
Performance PS-8	172	pass. rad.	8	—	—	1	2400	50-20k ±3	94	6	—	100P	—	22x12x11	30		
			10	pass. rad.	Heil AMT	1											
			10.4 in. ²	pass. rad.	Heil AMT	1											
Fisher																	
ST 461	350	reflex	15	—	—	1	1000	40-20k ±10	92	8	25	130C	2/S	29x18x15	53	Circ. breaker.	
			5	cone	—	2	500										
			3	horn	—	1											
ST 661A	330	pass. rad.	12	—	—	1	700	39-22k ±5	94	8	40	125C	2/S	29x18x13	45	Circ. breaker.	
			2	dome	—	1	7000										
			1	dome	—	1											
ST 451	290	reflex	12	—	—	1	1000	45-20k ±10	91	8	20	100C	S	27x17x14	44	Circ. breaker.	
			5	cone	—	2	5000										
			3	dome	—	1											
ST 641A	280	pass. rad.	10	—	—	1	700	40-20k ±5	92	8	30	90C	2/S	27x17x12	37	Circ. breaker.	
			2	dome	—	1	7000										
			3	dome	—	2											
XP 95B	250	air susp.	15	—	—	1	—	—	—	8	75	—	—	28x18x13	44		
			5	—	—	2											
			3	dome	—	1											
ST 441	240	reflex	12	—	—	1	1000	45-18k ±10	90	8	12	75C	1/S	26x16x13	36	Circ. breaker.	
			5	cone	—	1	5000										
			3	dome	—	1											
ST 430	180	air susp.	10	—	—	1	1000	50-17k ±10	90	8	6.5	50C	—	26x16x13	34		
			5	cone	—	1	5000										
			3	cone	—	1											
XP 335	180	vented	12	—	—	1	1500	—	—	8	20	70C	—	24x15x11	30		
			5	—	—	1	5000										
			3	—	—	1											
XP 330	160	air susp.	12	—	—	1	1500	—	—	8	17	50C	—	23x15x11	27		
			5	—	—	1	5000										
			3	—	—	1											
XP 325	130	air susp.	10	—	—	1	1500	—	—	8	12	35C	—	22x14x9	19		
			5	—	—	1	5000										
			3	—	—	1											
ST 420	120	pass. rad.	8	—	—	1	5000	50-16k ±10	90	8	3.5	35C	—	22x14x10	19		
			3	cone	—	1											
MS 135A	100	pass. rad.	8	—	—	1	6000	70-16k ±10	91	8	5	35C	—	24x15x11	19		
			3	cone	—	1	8000										
			2	cone	—	1											
MS 125A	90	pass. rad.	8	—	—	1	6000	70-14k ±10	91	8	4	30C	—	22x14x9	15		
			2	cone	—	1											
MS 115A	80	pass. rad.	6½	—	—	1	8000	80-12k ±10	90	8	3	22C	—	22x14x9	14		
XP 320	80	vented	8	—	—	1	5000	—	—	8	8.5	25C	—	19x11x9	12		
			3	—	—	1											
Frankmann Research																	
Frankmann	1295	infinite	12	—	—	8	200	20-22k ±4	98	8	10	200P	2/S	bass: 31x52x24	240	3-pc. syst.; satellites	
			8	—	—	8	4000							satellites:	fit stands (incl.) or		
			—	—	—	2	10,000							38x10x6	wall.		
			—	—	—	2								29x30x20			
Mini-Frank	895	air susp.	12	—	—	4	200	30-22k ±4	92	6	10	125P	2/S	bass: 22x10x6	105		
			8	—	—	4	4000							satellites:			
			—	—	—	2	10,000							22x10x6			
			—	—	—	2											
Frazier																	
Frazier Eleven	1300	vented	15	—	—	1	400	15-25k ±5	103	4	1	100C	2/S	55x30x18	250		
			12	—	—	1	4000					150P					
			4	cone	—	4											
			—	piezo	—	2											
Frazier's Thing	1000	vented	12	—	—	1	800	20-25k ±5	99	4	1	60C	2/C	48x24x18	146		
			10	—	—	1	4000					90P					
			3x14	—	—	1											
			—	horn	—	1											
			—	piezo	—	2											

Manufacturer and model	Price (\$/pair)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz -dB)	Sensitivity (SP) in dB at 1 meter w/1W input	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (C=cont., P=peak)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Seven	470	vented	12 4	— cone piezo	1 2 2	400 4000	25-25k ±5	99 8	1	50C 75P	2/C	29x19x16	98		
Mark V	350	vented	12 4	— cone piezo	1 2 1	500 4000	30-25k ±5	96 8	1	50C 75P	2/C	26x14x12	55		
Concerto	290	vented	10 3x7	— horn piezo	1 1 1	2000 4000	35-25k ±5	93 8	1	30C 45P	1/C	22x16x16	56	End table ht.	
Mark IV-A	210	vented	10 3x7	— horn	1 1	2000	40-16k ±5	93 8	1	30C 45P	1/C	24x14x12	44		
Monte Carlo	150	vented	8 3	— — piezo	1 1 1	3800	50-25k ±5	95 8	1	30C 45P	—	19x11x12	31		
CAD-1	100	vented	8 3 1/4	— — —	1 1 1	3000	50-15k ±5	96 8	1	15C 30P	—	19x11x11	21		
Fried Products H/II	1900 (syst.)	trans. line	10 5	cone cone dome	2 1 1	75 3500	20-20k ±3	87 8	25	70C 500P	—	24x45x24	200	Subwoofer + satellite; kit, \$800.	
T Subwoofer	1400	trans. line	10	cone	2	75	20-20k ±3	91 8	25	70C 500P	—	24x45x24	170	2-ch. subwoofer of above; also available as kit.	
M/II	850	trans. line	8 5 1	cone cone dome	1 1 1	125 3500	20-20k ±3	90 8	25	70C 500P	—	43x22x12	90		
R/III	400	line tunnel	10 5	cone cone dome	1 1 1	350 3000	30-20k ±3	89 8	25	50C 250P	S	28x16x14	60		
W	260	line tunnel	8 3	cone — dome	1 1 1	800 3000	40-20k ±2	89 8	25	35C 250P	S	25x14x10	45		
B/2	250	infinite	5 1	— dome	1 1	3200	60-20k ±3	87 8	25	35C 500P	—	12x8x6	14		
A	195	line tunnel	8 1	— dome	1 1	2500	45-20k ±2	88 8	25	35C 250P	S	20x12x10	30		
Q	140	line tunnel	8 1	— dome	1 1	2500	45-18k ±2	88 8	25	35C 200P	S	20x12x10	30		
Gale Electronics GS 401A	500	air susp.	7 7/8 4 3/4	— — dome	2 1 1	475 5000	35-20k ±5	— 4-8	50	100C 200P	C	13x24x11	48	"Sealed midrange."	
GC Electronics Audio Trek IV	101	air susp.	12 4 1/4 1 1/4	cone cone ring	1 1 1	—	35-22k	— 8	10	45C	—	24x15x10	35		
Audio Trek III	72	air susp.	10 3	cone cone	1 1	—	35-22k	— 8	5	35C	—	20x12x10	20		
Genesis Physics Genesis 3	299	pass. rad.	10 8 4	pass. rad. — —	1 1 1	45 800 3000	32-20k ±4	87 8	20	40C 100P	2/S	38x15x12	52		
Genesis II+	219	pass. rad.	10 8	pass. rad. —	1 1	45 1800	32-20k ±4	88.5 8	15	40C 80P	1/S	33x15x11	44		
Genesis II	155	pass. rad.	10 8	pass. rad. —	1 1	45 1800	32-20k ±4	88 8	12	40C 80P	1/S	27x15x12	37		
Genesis I	99	air susp.	8 1	— inv. dome	1 1	1800	45-20k ±4	88 8	12	40C 60P	—	21x12x9	24		
Genesis 6	75	air susp.	6 1/2 1	— inv. dome	1 1	1800	60-20k ±5	88 8	12	40C 60P	—	18x10x7	17		
GLI Model 4	1700	horn	15 15	— pass. rad.	2 2	750 7000	30-20k ±4	103 8	50	260C 1100P	—	80x36x30	195		
Model 3	898	horn	15 20x15	— horn	2 1	850 7000	30-20k ±5	101 8	50	200C 900P	—	50x36x30	150		
Model 2	696	reflex	15 5	— cone	2 8	350 7000	35-20k ±5	98 8	50	200C 600P	—	36x22x21	130		
Model 1	548	reflex	15 14x3	— horn	2 1	975 7000	35-20k ±5	98 8	25	175C 500P	—	36x22x21	90		
Mono	448	pass. rad.	15 15	— pass. rad.	1 1	875 7000	35-20k ±5	96 8	25	100C 300P	—	36x22x14	75		
FRA-1	388	pass. rad.	15 5 1/4	— pass. rad. — piezo	1 8 4	7000	48-20k ±3.5	93 4	50	100C 300P	—	24x24x10	36		
Grafyx Audio Products Grafyx SP-Ten	149	vented	10 1	— dome	1 1	2000	35-18k ±3	88 8	10	75C	—	27x15x14	48		
Grafyx SP-Eight	125	vented	8 1	— dome	1 1	2000	39-18k ±3	87 8	10	75C	—	25x14x10	39		

Manufacturer and model

Manufacturer and model	Price (\$/lp-per pair)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz dB)	Sensitivity (SPL in dB at 1 meter w/1W input)		Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type): E-cont. variable, S-switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Grafyx SP-Seven	99	air susp.	8 1	— dome	1 1	2000	43-19k ±3	86	8	10	50C	—	23x13x9	32		
Hartley Products Reference	1525	infinite	24 10 7 1 1	— cone cone dome	1 1 1 1 1	250 3000 7000	16-25k	93.5	5-8	25	300C 400P	—	50x36x24	300		
Concertmaster	1225	infinite	18 10 7 1 1	— cone cone dome	1 1 1 1 1	250 3000 7000	16-25k	93	5-8	25	300C 400P	—	42x29x18	150		
Holton Tower	450	infinite	10 1	— dome	2 1	3000	20-25k	92	4	15	150C 200P	—	50x20x14	105		
Zodiac 300A	250	infinite	10 1	— dome	2 1	2000	30-25k	94	4	5	100C 150P	—	25x14x12	65		
Zodiac '77	175	infinite	10 1	— dome	1 1	2000	35-25k	92.5	8	5	100C 150P	—	30x15x12	50		
Zodiac 1A	135	infinite	10 1	— dome	1 1	2000	40-25k	92.5	8	5	100C 150P	—	22x15x9	35		
Zodiac Jr.	90	infinite	8 2	— cone	1 1	2500	50-18k	90.5	8	5	50C 75P	—	19x12x8	25		
Heath AS-1348	290 p540	air susp.	15 4½ 1	— — dome	1 2 3	500 3000	28-20k ±3	—	8	8	250C	S	38x24x15	110	Kit; ea. driver fused; rear-mounted woofer.	
AS-1373	160 p300	—	10 4½ 1	— — dome	1 1 1	500 3000	40-20k ±3	—	8	11	200C	2	26x15x12	68		
AS-1344	130	—	8½ 1	— dome	2 2	4000	55-20k ±3	—	4	6	100C	1/S	40x11x11	—	As above; radiates from 2 adj. sides.	
AS-1352	100 p180	—	10 1	— dome	1 1	2800	45-18k ±3	—	8	6	100C	1/S	24x14x11	55	Kit.	
AS-1363	100 p190	—	10 4½ 1	— — dome	1 1 1	750 4000	45-18k ±3	—	8	5	130C	2/S	25x14x11	—	Kit.	
HED H-15	250	reflex	15 —	— horn	1 2	2000	32-16k ±4	103	4-8	0.5	100C	1/C	29x18x18	63		
W-12	160	reflex	12 —	horn Dhorn	1 1	2000	38-20k ±4	97	4-8	2	50C	1/C	25x15x12	42		
W-10	150	reflex	10 —	— Dhorn	1 1	2000	38-20k ±4	92	4-8	6	40C	1/C	25x15x12	39		
H-12	130	reflex	12 —	— Dhorn	1 1	2000	38-20k ±4	97	4-8	2	50C	1/C	25x15x12	33		
H-10	120	reflex	10 —	— Dhorn	1 1	2000	38-20k ±4	92	4-8	6	40C	1/C	25x15x12	31		
Hitachi HS-530	350	air susp.	10 2 1/8 1	cone cone dome	1 1 1	900 3000	30-17k ±5	—	6	—	—	—	25x14x11	38	Metal cones.	
HS-330	250	air susp.	10 2½ 1½	cone cone cone	1 1 1	900 4000	40-18k ±4	—	6	—	—	—	23x12x12	32		
HS-371	200	air susp.	12 6 1	— cone dome	1 1 1	1500 6000	—	—	8	—	—	—	24x15x13	35		
HS-323R	140	air susp.	10 1	— dome	1 1	3000	—	90	8	—	—	—	22x12x12	24		
IMF Electronics RSPM Mark IV	1250	trans. line	11¾x8¾ 6 1¾ ¾	flat cone — dome	1 1 1 1	350 3000 13,000	17-ultrasonic	—	—	50	150C	3	40x20x17	119		
Monitor TSL 80 II	925	trans. line	11¾x8¾ 6 1¾ ¾	flat cone — dome	1 1 1 1	350 3000 13,000	20-ultrasonic	—	—	40	100C	1	39x18x16	97		
Studio TSL 50 II	550	trans. line	8 4 — —	cone cone dome dome	1 1 1 1	375 3000 15,000	23-ultrasonic	—	4-8	30	70C	1	36x15x14	60		
Studio ALS 40 II	425	active line	8 8 4 —	cone cone cone dome	1 1 1 1	150 375 3000	28-20k	—	4-8	25	60C	1	27x14x14	40	Trans. line terminated by 2nd woofer w. different resonant freq.	
Super Compact	245	reflex	8 4 —	cone cone dome	1 1 1	375 3000	30-20k	—	4-8	20	50C	—	18x12x11	20		
Compact II	160	reflex	6½ —	cone dome	1 1	4000	35-20k	—	4-8	15	40C	—	15x10x9	13		
Infinity Quantum Reference Standard	p6500	dipole	15 — 18	cone EMIT line source	1 20 3	variable	18-32k ±2	—	4	150 bass 100 h-f	350 bass 350 h-f	3/C, 3/S	80x48x24	300	"Watkins dual-drive woofers"; el. crossover.	
Quantum Line Source	1200	air susp.	12 — —	cone dome line source coupler	1 6 8 1	200 600 4000	18-32k ±2	—	4	100	500C	3/C	66x18x15	190	"Watkins woofer."	

Manufacturer and model	Price (\$)	Price (\$/pair)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz - dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type: C=cont. variable; S=switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Quantum II	750	air susp.	12	—	1	200	24-32k ±3	— 4	45	350C	3/C	49x13x18	138	"		
				—	3	600										
				—	2	4000										
Quantum III	525	air susp.	12	—	1	200	28-32k ±3	— 4	35	250C	3/C	40x13x18	110	"		
				—	2	600										
				—	1	4000										
Quantum 4	425	air susp.	12	—	1	600	35-32k ±3	— 4	30	250C	2/C	36x15x12	90	"		
			1½	—	1	4000										
Column II	329	vented	10	—	2	750	35-20k ±3½	— 8	15	250C	—	40x14x13	—			
			4½	—	1	5000										
Quantum 5	340	air susp.	12	—	1	600	38-32k ±3	— 4	30	250C	2/C	27x15x12	55	"Watkins woofer";		pedestal opt.
			1½	—	1	4000										
Quantum Jr.	275	air susp.	12	—	1	600	40-32k ±3	— 4	25	200C	2/C	25x15x12	50	—		Pedestal opt.
			1½	—	1	4000										
3000B	210	—	12	—	1	500	35-20k ±4½	— 8	10	125C	—	25x15x12	—			
			4½	—	1	5000										
			2½	—	1											
Qb	192	air susp.	10	—	1	600	42-32k ±3	— 4	15	150C	2/C	25x14x12	43	"		
			4	—	1	4000										
Qa	139	air susp.	10	—	1	2500	42-32k ±3	— 4	15	150C	1/C	25x14x12	40	"		
			—	—	1											
Qe	105	—	—	—	1	—	—	—	10	100	—	18x12x10	—	—		Tweeter rotates for hor. or vert.
			—	—	1											
Innotech D24	395	trans. line	5½	—	2	3500	30-24k ±3	86 5	35	50C	—	37x11x16	55			
			1½	—	1	11,000										
			¾	—	1											
Isophon Prominent 2002	785	reflex	11 7/8	—	1	—	25-20k ±1.5	— 8	2.2	70C	S	20x16x17	80	—		Floor-stand; controls on top.
			8	—	1											
			—	—	1											
			—	dome	1											
			—	dome	1											
TS 8002	361	—	—	—	1	800	35-20k ±1.5	— 8	3.5	60C	C	20x11x9	26			
					1	3000										
TS 5007A	232	—	—	—	1	800	48-20k ±1.5	— 8	5.6	30C	C	17x9x8	19			
					1	6000										
DIA 2000	123	—	—	—	1	3000	65-20k ±2.5	— 4	1	50C	C	8x5x4	6	—		Heat sink.
					1	70P										
Janis Audio Janis W1	650	slot	15	—	1	100	30-100 ±1	87	—	60	150P	—	18x22x22	90	—	Subwoofer.
Janis W2	450	slot	15	—	1	100	32-100 ±1.5	85	—	60	150P	—	18x22x22	85	—	"
Janszen Z-50	750	trans. line	8x12	—	1	800	25-20k ±3	— 4	20	100C	2/C	55x18x17	125	—		Carbon fiber woofer; dipole mid & high.
			64 in. ²	—	2	4000										
Z-40	470	pass. rad.	10	—	1	800	33-20k ±3	— 4	20	100C	2/C	50x13x13	64	—		Dipole mid & high.
			64 in. ²	—	2	4000										
Z-30	340	air susp.	10	—	1	800	45-20k ±3	— 4	15	100C	2/C	37x13x13	49	—		"
			64 in. ²	—	1											
Z-20	300	air susp.	12	—	1	800	30-20k ±3	— 4	20	100C	1/C	27x15x12	48	—		
			32 in. ²	—	1											
Z-20X	275	air susp.	12	—	1	1800	33-20k ±3	— 4	20	100C	1/C	27x15x12	44	—		
			32 in. ²	—	1											
Z-10	250	air susp.	10	—	1	800	35-20k ±3	— 4	20	75C	1/C	24x13x11	41	—		
			32 in. ²	—	1											
Z-10X	234	air susp.	10	—	1	1800	35-20k ±3	— 4	20	75C	1/C	24x13x11	41	—		
			32 in. ²	—	1											
Z-210A	150	air susp.	10	—	1	1800	45-20k	— 4	20	75C	1/C	18x13x11	25	—		
			32 in. ²	—	1											
JBL D44000 Paragon	3510	horn	15	—	2	500	—	96 8	10	125C	2/S, C	36x104x24	695	—		Single-cabinet stereo.
			—	—	2	7000										
L212	1740	sealed	12	—	1	70	—	91 8	10	75C	3/C	bass: 19x19x19	225	—		3-pc. syst.; self-amplified bass.
		(set)	8	—	1	800						sides: 39x17x13				
			5	—	1	3000						32x23x23				
			1	—	1											
L300	960	vented	15	—	1	800	—	93 8	10	150C	2/C	32x23x23	145	—		Acoustic lens on midr.
			1½	—	1	8500										
			1¼	—	1											
L65	489	vented	12	—	1	1000	—	89 8	10	75C	2/C	25x18x13	67	—		
			5	—	1	6500										
			1¼	—	1											
L166	426	vented	12	—	1	1000	—	89 8	10	75C	2/C	24x14x13	55	—		
			5	—	1	6000										
			1	—	1											
L110	348	vented	10	—	1	1000	—	89 8	10	75C	2/C	24x14x11	50	—		
			5	—	1	4000										
			1	—	1											
L50	276	vented	10	—	1	800	—	88 8	10	35C	2/C	25x14x13	47	—		
			5	—	1	3000										
			1½	—	1											
L40	207	vented	10	—	1	1800	—	88 8	10	35C	1/C	23x15x12	44	—		
			1	—	1											

Manufacturer's model

Manufacturer's model	Price (\$)	Envelope type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz -dB)	Sensitivity (SPL in dB at 1 meter w/ 1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type): C-cont. variable S-switched	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
L19	150	vented	8 1 1/2	cone cone	1 1	2500	-	87 8	10	35C	1/C	21x13x10	29		
Jensen Sound Labs 550	300	air susp.	15 3 1/2 1 1/2	- cone dome	1 2 1	1000 4000	45-20k ±3	96 8	10	90C 180P	2/C	31x20x16	70		
LS-6	290	air susp.	15 3 1/2 1 1/2	- dome -	1 2 1	1000 4000	45-20k ±3	96 8	10	90C 180P	2/C	31x19x16	70		
540	240	air susp.	12 3 1/2 1 1/2	- dome -	1 2 1	1000 4000	50-20k ±3	95 8	10	75C 150P	2/C	27x16x14	50		
LS-5	220	air susp.	12 3 1/2 1 1/2	- dome -	1 2 1	1000 4000	50-20k ±3	95 8	10	75C 150P	2/C	26x16x14	50		
530	190	air susp.	10 3 1/2 1 1/2	- dome -	1 1 1	1000 4000	55-20k ±3	93 8	10	60C 120P	2/C	25x14x12	42		
LS-4	170	air susp.	10 3 1/2 2	- dome -	1 1 1	1000 4000	55-18k ±3	93 8	10	60C 120P	C	25x14x12	40		
520	130	air susp.	10 2 2	- -	1 1 1	3500	60-18k ±3	92 8	10	45C 90P	1/C	23x12x11	30		
LS-3	120	air susp.	10 2 2	- -	1 1 1	3500	60-18k ±3	92 8	10	45C 90P	1/C	23x13x10	28		
LS-2	80	air susp.	8 2 2	- -	1 1 1	4000	65-18k ±3	91 8	10	40C 80P	-	19x11x10	18		
JR Loudspeakers JR 149	p475	sealed	5 1/8 3/4	- -	1 1	3000	25-20k ±4	77 15	20	60C 200P	-	15x9 diam.	12	Cylindr. alum. encl.; opt. wall brkt.	
JVC SK-1000S	260	reflex	12 5 1	- cone dome	1 1 1	1000 10,000	-	93 8	10	85C 170P	2/C	26x16x13	53		
SK-700S	160	reflex	10 5 1	- cone dome	1 1 1	1000 10,000	-	92 8	10	60C 120P	2/C	22x14x12	38		
SK-500S	p200	reflex	10 2 1/2	- cone	1 1	2000	-	91 8	10	35C 70P	-	20x13x11	23		
S-M3	p160	reflex	4 1	- dome	1 1	2500	-	85 8	12	50P	-	8x5x5	5	Metal cab.	
K&H 092	3000	-	10 5 1	- -	2 1 1	500 4000	50-16k ±1.5	- 6.8k	-	-	2/S	31x17x12	66	120+60+60W tri-amplifier.	
OY	1015	-	10 3 -	- -	1 1 1	500 8000	100-20k ±2	- 6.8k	-	-	2/S	19x12x9	44	2x30W bi-amplifier.	
KEF Electronics Model 105	800	-	12 5 1 1/2	- -	1 1 1	400 2500	30-25k ±2	87 8	40	200C	2/S	38x16x18	80	Peak lev. ind.; fused; on-axis ind.; stepped cabinet. Fused.	
Contata	495	-	13x9 5 1 1/2	- -	1 1 1	250 3000	35-20k ±3	87 8	15	150C	2/S	32x13x15	70		
Model 104aB	350	pass. rad.	8 3/4	- dome	1 1	45 3000	50-20k ±2	85 8	15	100C	1/S	25x13x10	36		
Calinda	295	pass. rad.	8 3/4	- dome	1 1	45 3500	40-30k ±3	85 8	15	100C	-	27x11x14	42		
Corelli	185	-	8 3/4	- dome	1 1	3500	-	83 8	25	50C	-	19x11x9	20		
Kenwood LS-890	350	vented	13 4 1/2 1 1/2	- -	1 1 1	1300 5000	-	- 8	20	160	2	26x15x13	48		
LS-4088	250	vented	12 4 3/8 1 1/2	- -	1 1 1	1500 4000	-	- 8	20	160	2	26x15x13	40		
LS-4078	180	vented	10 4 3/8 1 1/2	- -	1 1 1	1500 4000	-	- 8	20	120	2	26x15x13	39		
LS-405B	130	vented	10 1 1/2	- -	1 1	2500	-	- 8	10	100	-	23x13x11	30		
LS-403B	p180	vented	8 1 1/2	- -	1 1	2500	-	- 8	10	80	-	18x12x9	21		
KLH Baron 355	399	vented	11 1 1/2	cone dome	1 1	1200 5000	-	91 8	20	120C	1/C	36x14x13	80		
Magnum CT44	349	-	10 2 1/2 1	cone cone dome	2 2 1	-	45-22k	92 4	15	100C	-	41x12x12	-		
Classic Five	299	air susp.	12 1 1/2	cone dome	1 1	900 3000	-	- 8	20	120C	C	26x14x13	65		
Little Baron 345	299	vented	11 1	cone dome	1 1	1900	-	90.5 8	20	70C	1/C	29x13x12	50		
Baroness 335	249	vented	10 1	cone dome	1 1	-	-	91 8	15	60C	C	23x12x11	-		

Manufacturer and model

Manufacturer and model	Price (\$)	Price (\$ per pair)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz -dB)	Sensitivity (SPL in dB at 1 meter w/ 1W input)	Impedance (ohms)		Level control (number/type)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks	
										Min. input	Max. input					
319	230		vented	12 5 1/2 2 1/2	cone cone dome	1 1 1	1200 3000	-	8	10	100C	-	25x15x12	40	One rear-fire tweeter.	
CL-4	225		vented	10 4 1/2 1	cone cone dome	1 1 1	500 5000	30-22k ±3	8	25	200C	2/S	27x14x13	59		
Pistol CT 38	209			8 1/2 2 1/2	cone -	2 2	-	-	4	10	75C	-	41x11x11	-		
Classic One	199		air susp.	10 1	cone dome	1 1	1900	-	8	15	60C	C	24x12x12	-		
318	190		vented	12 2 1/2	cone cone	1 1	-	56-18k	95	8	75C	1/C	23x14x11	-		
CL-3	170		vented	10 2 1/2 2	cone cone cone	1 1 1	1500 10,000	35-20k ±3.5	8	20	100C	-	26x14x12	53		
CB-10	135		vented	10 2 1/2	cone cone	1 1	-	40-18k ±4	8	10	100C	1/S	20x15x7	35		
317A	130		vented	10 2 1/2	cone cone	1 1	-	45-18k	8	10	50C	1/C	23x12x10	-		
CB-8	115		vented	8 2 1/2	cone cone	1 1	-	47-18k ±4	8	8	100C	1/C	20x11x7	27		
331A	99		vented	8 1/2 2 1/2	cone cone	1 1	50-18k	-	8	8	50C	-	21x12x9	-		
Klipsch																
Klipschorn	1651		horn	15	-	1	400	35-17k ±5	104	8	-	105C	-	52x31x29	200	
					horn	1	6000		at 4 ft							
Belle Klipsch	1374		horn	15	-	1	400	45-17k ±5	104	8	-	105C	-	36x30x19	125	
					horn	1	6000		at 4 ft							
Cornwall	746		vented	15	-	1	600	38-17 ±5	98.5	8	-	105C	-	36x26x16	108	
					horn	1	6000		at 4 ft							
La Scala	618-671		horn	15	-	1	400	45-17k ±5	104	8	-	105C	-	35x24x25	110	
					horn	1	6000		at 4 ft							
Heresy	436		inf. baffle	12	-	1	700	50-17k ±5	96	8	-	105C	-	21x16x13	55	
					horn	1	6000		at 4 ft							
Koss																
Model One A	1500		dipole	1845 in. ² 461 in. ² 108 in. ²	elect. elect. elect.	1 1 1	250 1600 6500	32-20k -3	83	4	75	300P	-	49x32x10	150	
				14 in. ² 615 in. ² 165 in. ²	elect. elect. elect.	1 1 1	250 2500	37-19k ±3	4	75	300P	1/C	41x24x12	82		
Model Two	750		dipole													
CM/1030A	425		reflex	10 5 1	cone cone dome	1 2 1	400 2500 6000	29-19k -3	96	4	15	200P	3/S	39x17x15	74	
CM/1020A	325		reflex	10 5 1	cone cone dome	1 1 1	450 3000	31-18.5k -3	95	4	15	150P	2/S	33x16x14	60	
CM/1010A	225		reflex	10 8 1	pass. rad. cone dome	1 1 1	2500	35-17.5k -3	92	4	15	100P	1/S	28x16x11	44	Adj. bass with removable woofer mass.
CM/530	150		reflex	8 8 1	cone pass. rad. dome	1 1 1	2800	36-17k -3	89	4	15	75P	1/C	24x14x12	35	
Kustom Acoustics																
Titan Labyrinth	1499		trans. line	12 5 1 1/4 1	cone cone dome dome	2 2 1 1	350 2500 7500	24-22k ±2.5	96	4	15	150C 500P	4/C	48x30x18	325	Opt. tilt & straight bases; fused.
AEI-Amp Eater	1399		trans. line	12 5 1 1/4 1	cone cone dome dome	4 2 2 2	350 2500 7500	28-22k ±3	99	2-8	15	200C 800P	C	48x30x18	340	
TAS-Challenger	799		trans. line	12 5 1 1/4 1	cone cone dome dome	2 1 1 1	350 2500 7500	28-22k ±3	96	4	15	150C 500P	C	36x24x16	185	
Labyrinth	749		trans. line	12 5 1 1/4 1	cone cone dome dome	1 1 1 1	350 2500 7500	19-22k ±2.5	91	8	15	100C 300P	3/C	48x16x18	130	
Trapezoid	499		trans. line	12 5 1 1/4 1	cone cone dome dome	1 1 1 1	350 2500 7500	29-22k ±3	93	8	15	100C 300P	C	40x16x13	100	
Regency	349		trans. line	12 5 1 1/4 1	cone cone dome dome	1 1 1 1	350 2500	30-22k ±3	92	8	15	100C 300P	C	26x16x13	76	
Signet	259		trans. line	12 5 1 1	cone cone dome dome	1 1 1 1	700 2500	34-22k ±3	95	8	15	100C 300P	C	26x16x13	70	
Impulse	199		trans. line	12 5 1	cone cone dome	1 1 1	700 2500	39-21k ±3	92	8	15	100C 300P	C	24x14x9	48	

Manufacturers and models

Manufacturers and models		Price (\$/yr per part)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-dB)	Sensitivity (SPL in dB at 1 meter w/ 1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (C=cont.; P=peak)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Lafayette Radio Electronics	Criterion 3003	300	air susp., pass. rad.	12	cone	1	2000	30-25k ±3	91	6	20	180C	1/C	39x15x15	65	
	Criterion 3002	240	air susp., pass. rad.	10	Heil AMT cone	1	2000	35-25k ±3	90	6	20	160C	1/C	39x12x14	55	
	Criterion 3001	200	vented	10	Heil AMT cone	1	2000	40-25k ±3	89	6	15	150C	1/C	25x15x15	45	
	Criterion 2003A	200	reflex	15	Heil AMT cone	1	900	20-20k	95	8	15	120C 200P	2/C	29x18x13	60	
	Criterion 2002A	160	reflex	12	horn ring cone	1	2000	20-20k	96	8	10	90C 180P	2/C	26x16x14	50	
	Criterion 2001A	120	reflex	10	horn ring cone	1	2000	30-20k	96	8	10	70C 140P	2/C	25x15x14	42	
Lancer Electronics	BB-3	550	vented	12	cone	1	100	18-22k ±3	-	8	20	100C 160P	2/C	woofer: 18x21x21 satellites: 12x8x7	118	3-unit system.
	PA-20	450	vented	12	cone	1	1000	20-22k ±4.5	-	8	20	75C 120P	2/C	39x18x13	78	"Phase-aligned."
	SC-8	360	vented	12	dome	2	500	20-22k	-	8	10	75C 120P	2/C	28x18x13	65	
	SC-7A	280	air susp.	12	dome	1	500	20-20k	-	8	10	75C 120P	2/C	26x15x12	59	
	SC-9T	250	air susp.	10	dome	1	500	20-22k	-	8	10	50C 90P	2/C	38x12x12	62	Omnidirectional.
	SC-4A	200	air susp.	12	dome	1	500	20-20k	-	8	10	50C 90P	2/C	24x15x13	53	
	SC-10A	130	air susp.	10	dome	1	2500	20-20k	-	8	10	50C 90P	1/C	20x13x10	33	
	9535-2	100	air susp.	12	dome	1	3000	30-20k	-	8	5	35C 50P	-	25x14x12	33	
Leak	3090	870	trans. line	15	cone	1	350	35-26k ±3	88	6	-	100C 160P	2	47x20x15	112	2-pc. encl. w/ swivelling top; casters.
	3080	550	air susp.	10	cone	1	450	38-22k ±3	85	8	12	80C	-	33x14x17	72	"Phase-compensated."
	3050	355	air susp.	6 3/4	dome	2	3500	48-22k ±3	85	8	12	50C	-	25x12x13	42	
	3030	230	air susp.	5 3/4	dome	2	4000	60-22k ±3	85	8	12	35C	-	21x10x11	24	
	3020	175	reflex	5 3/4	dome	1	3000	62-22k ±3	85	8	12	25C	-	17x8x11	16	As above, stepped cab.
Lentek	S-4	640	air susp.	6	dome	1	2500	60-18k ±3	78	8	25	75C 100P	-	20x10x10	25	
Linn Products	DMS Isobarik	p1920	Isobarik	12x9	cone	1	375	20-20k ±3	-	4	50	-	-	30x15x16	105	Top-fire midrange & tweeter.
LTC	TX-5	550	air susp.	10	cone	1	2600	36-24k ±3	94	8	25	100C 150P	1/C	30x28x10	80	Circ. breaker; tweeter plot. circ.; swivel stand.
	100	340	air susp.	10	cone	1	2600	36-22k ±3	94	8	25	80C 100P	1/C	39x13x12	61	
	50	240	air susp.	10	dome	4	2600	36-20k ±4	94	8	25	80C 100P	1/C	27x15x12	47	
	25	180	air susp.	10	dome	2	2600	40-18k ±4	94	8	25	60C 80P	1/C	24x14x12	40	
LTL Electronics	TP 6953	150	-	6x9	cone	1	800	30-20k	-	8	5	80C 160P	-	-	14	
	CP 693	150	-	3	cone	1	1500	30-20k	-	8	5	80C 160P	-	-	11	
	TP 653	120	-	6x9	cone	1	2500	30-20k	-	8	5	80C 160P	-	-	13	
	CP 63	120	-	3	cone	1	800	40-20k	-	8	5	80C 160P	-	-	10	
Magnepan	MG-1	495	dipole	354 in. ² 67 in. ²	planar	1	2400	50-17k ±4	82	5	35	200P	-	60x22x2	30	Other sizes avail.
Marantz	DS-940	400	infinite, vented	12	cone	1	750	30-22k ±3	90	8	15	150C	2/C	15x45x12	80	Choice of inf. baffle or vented operation via removable plug.

Manufacturer and model

Manufacturer and model	Price (\$)	SPL (1/2" pap)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-kHz)	Sensitivity	Impedance	Min. input	Max. input	Level controls	Dimensions	Weight	Remarks
									(SPL in dB at 1 meter w/1W input)	(ohms)	(watts)	(C-cont; P-peak; C-cont; variable; S-switched)	(H x W x D) (in.)	(lb.)		
DS-930	340	infinite, vented	12	cone	1	750	33-22k ±3	90 8	15	125C	2/C	28x15x12	58	"		
						2300										
						5000										
DS-920	340	infinite, vented	12	cone	1	750	33-20k ±3	90 8	15	125C	2/C	38x15x12	65	"		
						2500										
						5000										
HD-880	320	infinite, vented	12	cone	1	750	30-22k ±3	90 8	-	150C	2/C	40x16x12	79	"		
						2300										
						5000										
DS-900	280	infinite, vented	10	cone	1	750	35-20k ±3	88 8	15	100C	2/C	28x15x12	55	"		
						2500										
						5000										
HD-770	260	infinite, vented	12	cone	1	750	33-22k ±3	90 8	-	125C	2/C	27x15x12	57	"		
						2300										
						5000										
HD-660	200	infinite, vented	10	cone	1	750	33-20k ±3	88 8	-	100C	2/C	24x15x12	45	"		
						2500										
						5000										
7 MK II	160	infinite	12	cone	1	800	35-20k ±3	88 8	15	200C	2/C	26x14x12	49	"		
						2500										
						5000										
HD-550	150	infinite, vented	8	cone	1	800	40-20k ±3	88 8	-	75C	2/C	23x13x10	33	As per DS-940.		
						3000										
						5000										
6 MK II	120	vented	10	cone	1	2500	35-20k ±3	88 8	15	125C	1/C	26x15x12	46	"		
						5000										
						5000										
5MK II	100	infinite	8	cone	1	2500	40-18k ±3	88 8	10	60C	1/C	23x12x10	32	"		
						5000										
						5000										
HD-440	90	infinite	8	cone	1	2000	40-18k ±3	87 8	-	50C	-	19x11x19	25	"		
						8000										
						8000										
Martin Speakers Div. Eastern Sound Sound Tower	449	air susp.	8	cone	4	1000	38-18k ±5	95 8	50	100P	2/C	52x16x10	90	"		
						5000										
						5000										
Magnificat	429	air susp.	12	dome	2	5000	26-22k ±5	93 4	50	100P	2/C	38x18x14	90	"		
						4000										
						4000										
Gamma 1500	379	air susp.	15	cone	1	500	26-20k ±4	92 8	25	60P	2/C	71x43x38	59	"		
						4400										
						4400										
Gamma 1200M	339	air susp.	12	cone	1	600	25-20k ±3	91 8	25	60P	2/C	71x38x31	53	"		
						5000										
						5000										
Gamma 412	269	air susp.	12	cone	1	750	30-18k ±3	92 8	20	55P	2/C	64x36x30	48	"		
						4400										
						4400										
Gamma 310	179	air susp.	10	cone	1	1000	35-18k ±3	93 8	15	50P	2/C	54x31x25	33	"		
						4500										
						4500										
Gamma 308	119	air susp.	8	cone	1	1000	40-18k ±4	92 8	15	45P	2/C	54x31x18	26	"		
						5000										
						5000										
Gamma 208	99	air susp.	8	cone	1	1500	40-18k ±5	92 8	15	40P	1/C	45x26x24	22	"		
						5000										
						5000										
Matrecs Industries MA-254	255	air susp.	15	pass. rad.	1	1000	25-24k	-	8	20	65C	-	-	65	"	
						6000										
						6000										
MA-224	212	air susp.	12	cone	1	1000	30-24k	-	8	10	50C	-	50	"		
						6000										
						6000										
MA-203	166	air susp.	10	cone	1	1000	30-22k	-	8	5	40C	-	26x15x11	32	"	
						6000										
						6000										
MA-123	90	air susp.	12	cone	1	1000	35-22k	98 8	8	45C	-	24x15x10	29	"		
						6000										
						6000										
Mc Intosh Laboratory XR7	999	air susp.	12	cone	2	250	20-20k *	90 8	30	200P	-	40x20x15	125	* Response with Mc Intosh equalizer; fused.		
						1400										
						7000										
ML-2	799	air susp.	12	dome	2	250	20-20k *	90 8	30	100P	-	29x28x21	144	"		
						1500										
						3000										
XR6	750	air susp.	12	cone	1	250	20-20k *	89 8	30	200P	-	36x18x13	81	"		
						1400										
						7000										
XR5	499	air susp.	12	dome	1	250	20-20k *	89 8	30	200P	-	30x15x12	76	"		
						1400										
						7000										

Manufacturer and model	Price (\$)	(P-pair pair)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz dB)	Sensitivity (SPL in dB at 1 meter w/ 1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type)	C-cont. variable (S-sawtooth)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
XR3	425	air susp.	10	cone	1	700	20-20k *	89	8	30	200P	-	27x13x12	60	"		
						1400											
						7000											
ML-10C	319	air susp.	10	cone	1	1000	20-20k *	89	8	30	100P	-	25x13x13	58	"		
						2000											
						7000											
Mesa Electronics Sales 120	259	vented, pass. rad.	12	pass. rad.	1	65	38-19k	93	8	15	120C 160P	2/S	28x16x13	55	Circ. breaker.		
						600											
						4000											
80	209	vented, pass. rad.	10	pass. rad.	1	65	42-19k	93	8	15	80C 120P	2/S	25x14x12	45	"		
						600											
						4000											
60	159	vented, pass. rad.	12	pass. rad.	1	80	45-19k	92	8	15	60C 100P	1/S	23x13x11	32	"		
						2500											
						2500											
40	109	vented, pass. rad.	6 1/2	cone	1	85	50-19k	95	8	15	90C 75P	1/S	21x12x10	23	"		
						3000											
						3000											
30	109	air susp.	4	foam susp.	1	3500	60-25k	-	4	10	30C 50P	1/C	7x5x4	4	"		
						1											
						1											
Micro-Acoustics FRM-1A	200	air susp.	10	cone	1	1700	32-18k ±4	-	8	18	100C 200P	2/C	26x15x13	40	Angled tweeter array.		
						1 1/8											
						1 1/8											
FRM-2A	159	air susp.	10	cone	1	1750	40-16k ±4	-	8	10	75C 150P	1/C	26x15x12	34	"		
						1 1/8											
						1 1/8											
FRM-3	124	twin vented	8	cone	1	2500	45-15k ±4	-	8	7	50C 100P	1/C	22x13x10	26	"		
						1 1/2											
						1 1/2											
Mirsch OM3-29	375	air susp.	8 1/2	cone	1	700	35-20k	-	8	20	50C 100P	1/C	32x55x31	37	Side firing ambience driver.		
						4000											
						4000											
OM3-38	330	air susp.	10	cone	1	500	30-20k	-	8	20	70C 150P	-	31x56x32	37	"		
						4500											
						4500											
OM3-100	300	air susp.	10	cone	1	700	30-20k	-	8	15	100C	1/C	38x56x26	35	"		
						5000											
						5000											
OM3-28	240	air susp.	8 1/2	cone	1	700	35-20k	-	8	20	50C 100P	-	25x51x32	27	"		
						4000											
						4000											
OM2-20	120	air susp.	8	cone	1	5000	45-20k	-	8	10	60C	-	27x47x21	15	"		
						5000											
						5000											
OM2-21	120	air susp.	8 1/2	cone	1	3500	40-20k	-	8	10	60C	-	25x46x29	22	"		
						3500											
						3500											
OM3-30	120	air susp.	8 1/2	cone	1	700	35-20k	-	8	15	100C	-	34x50x23	27	"		
						4000											
						4000											
Mitsubishi DS50C5	460	reflex	12	cone	1	600	25-20k	92	6	30	80P	S	35x17x16	77	Front controls.		
						5000											
						5000											
DS40CS	360	reflex	12	cone	1	1500	30-20k	92	8	25	80P	S	33x16x16	70	"		
						1500											
						1500											
DS358	280	air susp.	12	cone	1	800	35-20k	91	6	25	80P	S	26x14x13	46	"		
						5000											
						5000											
DS28B	200	air susp.	10	cone	1	800	40-20k	91	6	25	80P	S	23x14x11	33	"		
						5000											
						5000											
DS25B	150	air susp.	10	cone	1	1500	45-20k	90	6	20	60P	S	23x13x12	30	"		
						1500											
						1500											
Monitor Audio MA3 Series II	549	reflex	14x9	-	-	400	40-19k ±2.5	86	8	60	120C 200P	-	28x14x13	60	Fused.		
						3500											
						3500											
MA1 Series II	429	reflex	13x9	-	-	375	45-19k ±3.5	85	8	40	100C 120P	-	30x14x15	60	Fused.		
						3000											
						3000											
MA4	309	reflex	8	-	1	3200	45-18k ±2.5	85	8	15	75C 100P	-	24x13x11	36	"		
						3200											
						3200											
MA5 Series II	288	air susp.	8	cone	1	3300	50-19k ±3	84	8	20	50C 100P	-	22x12x10	26	"		
						3300											
						3300											
MA8	180	air susp.	6	cone	1	3400	45-20k ±3	84	8	15	40C 80P	-	16x9x8	18	"		
						3400											
						3400											
MA7	150	reflex	6	cone	1	3500	55-20k ±4	86	8	10	30C 10P	-	16x9x8	15	"		
						3500											
						3500											
Mordaunt-Short Pageant	479	reflex	8	cone	1	350	65-20k ±3	89	8	15	50C 100P	2/C	21x13x9	21	"		
						350											
						350											
Festival	339	infinite	8	cone	1	3500	75-20k ±3	89	8	10	45C 90P	-	18x11x7	14	"		
						3500											
						3500											
Carnival	269	infinite	8	cone	1	3500	85-17k ±3	88	8	10	40C 80P	-	16x10x6	12	"		
						3500											
						3500											
Nakamichi Research Slimline Reference Monitor	480	reflex	8	cone	1	2000	50-16k ±5	94	16	20	20C 60P	-	37x16x14	62	Fused.		
						2000											
						2000											

Manufacturer and model	Price (\$)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz · dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type): C-cont. variable; S-switched	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Norman Laboratories															
Nine	440	air susp.	10	cone	3	1500	35-20k ±3	- 4	-	70C	2/S	40x16x15	75		
Ten	290	air susp.	10	dome	3	1500	40-20k ±3	- 4	-	70C	1/S	38x15x13	60		
Seven	200	air susp.	12	cone	2	1500	40-20k ±3	- 8	-	50C	1/S	24x16x13	40		
Eight	130	air susp.	10	dome	1	1500	45-20k ±4	8	-	35C	-	23x12x10	28		
Normende-Sterling Hi-Fidelity															
804	180	8½ 4½	cone	2	1000	30-20k	91	4-8	10	90C	-	26x14x9	29		
803	130	8½ 3½	cone	1	10,000	30-20k	92	4-8	7.5	50C	-	17x11x9	18		
802	100	8½ 1½	dome	1	7500	40-20k	92	4-8	5	35C	-	17x11x7	15		
Ohm Acoustics															
OHM F	600	air susp.	12	cone	1	-	37-19k ±4	82	3.7	75	-	44x18x18	75	Single omnidirectional Walsh driver.	
OHM H	325	vented, pass. rad.	8	cone	1	1700	32-20k ±4	86	4-8	10	-	1/S	27x15x11	54	
OHM C2	250	vented	10	ring	1	1700	37-20k ±4	86	6-8	10	-	1/S	25x14x10	43	
OHM D2	200	vented	10	dome	1	1700	37-19k ±4	86	6-8	10	-	1/S	25x14x10	42	
OHM L	160	vented	8	cone	1	1700	42-20k ±4	87	4-8	8	-	1/S	20x12x10	35	
OHM E	100	sealed	8	ring	1	1700	65-19k ±4	86	8-6	7	-	1/S	22x12x7	20	
Optonica															
CP-5151	400	-	12	cone	1	500	40-50k	- 8	20	90C	2/C	27x16x14	62	Triampable; 30-kHz filter.	
CP-2121	170	-	10	ribbon	1	1200	40-20k	- 8	10	35C	-	29x15x12	33		
Onkyo USA															
240	250	air susp.	15	cone	1	700	45-20k ±5	93	8	20	100C	2/C	27x17x13	45	Carbon fiber midr. cone.
160	165	air susp.	12	cone	1	2000	50-20k ±5	91	8	15	80C	1/C	22x14x13	30	
Panasonic															
SB1800	380	pass. rad.	10	cone	1	3500	-	- 8	5	60P	-	30x18x12	50		
SB1600	200	pass. rad.	10	pass. rad.	1	3000	-	- 8	5	40P	-	25x15x11	30		
SB1100	170	pass. rad.	8	horn	1	5000	-	- 8	5	30P	-	22x13x8	25		
SB350	100	pass. rad.	5½	cone	2	5000	-	- 8	5	30P	-	22x13x8	25		
Parthenian															
3600M	1899 (set)	-	15	cone	1	20-80	-	- 6	-	250C	-	-	-	3-unit system; 150W bass servo amplifier.	
2400M	899	infinite	12	dome	4	500-800	-	- 8	30	150C	2/C	41x13x19	135		
1200M	400	-	12	planar	4	3000-7000	30-22k ±3	- 8	30	150C	2/C	41x13x19	135		
DBM100	299	air susp.	10	cone	2	150-750	17-27k	- 8	10	100C	3/C	44x15x13	84		
DBM-50	179	air susp.	12	cone	2	750-5000	22-27k	- 8	6	80C	2/C	24x14x12	47		
DB-40	110	air susp.	12	radiator	2	5000+	28-19.5k	- 8	5	80C	2/C	24x14x12	32		

Manufacturer and model

Manufacturer and model	Price (\$)	(p-pair pair)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz - dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts) (C-cont; P-peak)	Level controls (number/type; C-cont; variable; S-switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Phase Linear III	1350	vented dipole	12	cone	2	100	24-22k ±3	80	6	100	350C	3/C	63x24x5	223	4-way, 4-piece—two panels; subwoofer; variable equalizer.	
	400	vented	12	cone	2	100	24-100 ±3	—	6	100	350C	—	19x22x22	100	Subwoofer.	
Philips	RH545	mot. fdback.	12	cone	1	500	20-20k	—	4/8	—	—	4	26x17x13	67	Triamplifier, 50W servo+35W+15W.	
			2	dome	1	3000										
	RH567	mot. fdback.	10	cone	1	500	27-20k	—	4/8	—	—	—	21x13x11	—	Bi-amplifier: 40W servo+20W.	
			2	dome	1	3500										
	RH544	mot. fdback.	8	cone	1	500	35-20k	—	4/8	—	—	—	15x11x9	26	"	
			2	dome	1	4000										
	AH477	300	air susp.	12	cone	1	1500	32-20k	—	8	20	80C	2/S	28x15x15	54	
	AH476	air susp.	10	dome	1	1500	35-20k	—	8	20	60C	—	—	26x14x11	42	
			2	dome	1	5500										
	RH541	200	mot. fdback.	7	cone	1	1400	35-20k	—	4	—	—	—	9x12x7	20	25W servo-amp.
	AH475	air susp.	8	dome	1	3500	40-20k	—	8	10	40C	—	—	24x14x11	38	
			1	dome	1	—										
SJ2931	p200	vented	10	cone	1	2500	45-17.5k	—	8	—	35	—	27x15x13	39		
			4	cone	1	8000										
U.S. Pioneer Electronics	HPM-200	air susp.	10	cone	2	100	25-25k	89	6	50	100C	3/S	32x29x19		Polymer film tweeter & super tweeter; carbon fiber cone woofer.	
			2½	dome	1	700										
			—	HPM	1	2000										
	HPM-150	reflex	15½	cone	1	750	25-40k	92.5	6.3	50	125C	2/C	39x18x18	82	Polymer film omnidirectional super tweeter, carbon-fiber cone woofer.	
			4	cone	1	2600										
			1½	cone	1	8500										
	HPM-100	reflex	12	cone	1	1200	30-25k	92.5	8	50	50C	2/C	26x15x16	59	Polymer film super tweeter; carbon fiber cone woofer.	
			4	cone	1	4000										
			1½	cone	1	12,000										
	CS-99A	infinite	15	HPM	1	800	25-22k	97	8	10	100P	2/S	25x17x11	52		
			5	cone	1	2000										
			4	cone	1	5000										
HPM-60	reflex	10	HPM	1	1200	35-25k	92.5	8	30	30C	2/C	24x14x13	39	As per HPM-100.		
		4	cone	1	4000											
		1½	cone	1	12,000											
HPM-40	reflex	10	HPM	1	4000	35-25k	91	8	20	20C	1/C	23x13x13	29	"		
		1½	cone	1	10,000											
Project 100A	reflex	10	HPM	1	700	40-20k	91.5	8	10	30C	—	—	23x13x11	30		
		2	cone	1	6000											
Plasmatronics Hill type 1	p5990	—	12	—	1	100	—	—	—	—	—	—	58x25x19	150	Ionized gas discharge (plasma) & Class A tube amp for HF; requires 1 tank helium ea. 300-500 hrs. play; "low tank" light.	
			5	—	1	700-										
Point 3 Systems Point 3 System	400 (set)	air susp.	10	cone	2	125	20-20k ±3	90	8	15	100C	—	15x24x14		3-pc system—2 satellites & subwoofer; "time-aligned" midrange & tweeter.	
			5	cone	2	5000										
Polk Audio Model 10	210	fluid coup.	10	cone	1	60	30-20.5k ±2	96	6	10	100C	—	28x6x12	50		
			6½	cone	2	3000										
Model 7	150	fluid coup.	8	dome	1	60	33-20.5k ±2	94	8	10	60C	—	24x14x9	36		
			6½	cone	1	3000										
Model 5	110	fluid coup.	8	dome	1	60	40-21k ±3	92	8	10	60C	—	22x7x9	29		
			6½	cone	1	3000										
Mini Monitor	100	fluid coup.	4½	dome	2	100	60-20.5k ±2	92	6	5	30C	—	—	20		
			1	dome	1	3000										
Power Research Products System III-E	840	ventless duct	12	cone	1	55	26-22k ±4	85	4	60	350C	1/C	45x16x16	110	Bidirectional.	
			6	cone	4	275										
			3	—	8	3000										
			1	piezo	1	—										

Manufactures and model

Manufactures and model	Price (\$)	Imp-pan (pan)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz - dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type, C=cont., V=variable, S=switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks								
System IV	435	ventless duct	10	cone	1	75	26-22k±4	83	8	60	120C	-	39x19x12	70	"									
			6	cone	1	400																		
			3	-	1	4500																		
Rovner 5	310	ventless duct	10	piezo	1	85	32-18k ±4	85	8	40	80C	-	34x14x12	45	"									
			5	cone	1	800																		
			1½	dome	1	-																		
Rövner 6	170	ventless duct	8	cone	1	900	40-16k ±4	84	8	25	40C	-	32x12x9	25	"									
			1½	cone	1	-																		
			1½	dome	1	-																		
PSB Speakers Beta II	495	reflex	8	cone	1	1500	30-20k ±2.5	84	4	50	85C	2/S	23x12x11	35	Motional feedback w/any amp.									
			1	dome	1	-																		
			1	cone	1	-																		
Passif II	280	pass. rad.	8	pass. rad.	1	2000	70-20k±2	-	8	20	60C	-	30x14x13	40	"									
			10	pass. rad.	1	-																		
			1	dome	1	-																		
Passif I	200	pass. rad.	7	cone	1	2000	70-20k ±2	-	8	15	50C	-	26x12x10	30	"									
			8	pass. rad.	1	-																		
			1	dome	1	-																		
Avante II	170	reflex	8	cone	1	1500	70-20k ±3	-	8	12	40C	-	20x11x10	25	"									
			1	dome	1	-																		
			1	cone	1	-																		
Avantini II	100	reflex	7	cone	1	1500	85-20k ±3	-	8	10	30C	-	15x9x8	15	"									
			1	dome	1	-																		
			1	dome	1	-																		
Pyramid Metronome 2+2W	p3000	air susp.	14	-	1	70	29-90k ±3	88	8	150	-	-	25x28x17	110	1 subwoofer + 1									
			8	air susp.	1	700										55-22k ±3	88	8	150	-	1/S	18x13x8	27	full-range each channel; cross-over freqs. overlap.
			4½	-	1	2500																		
2	-	1	5000																					
Metronome T1	p1000	-	¾	ribbon	1	-	4k-60K ±3	92	4	10	10C	-	5x3x8	15	Tweeter only.									
			3¾	-	1	-																		
			-	-	1	-																		
Quadraflex ST 21	300	air susp., trans. line	15	-	1	250	28-22.5k ±4	-	8	10	-	2/C	40x13x19	90	Fused.									
			6	-	1	3000																		
			-	dome	1	-																		
ST 19	230	air susp., trans. line	12	-	1	500	32-22.5k ±4	-	8	10	-	2/C	26x13x15	60	Fused.									
			6½	-	1	3000																		
			-	dome	1	-																		
ST 17	170	-	10	-	1	600	38-20k ±4	-	8	10	-	2/C	25x12x14	52	Fused.									
			6½	-	1	3000																		
			-	-	1	-																		
ST 15	130	air susp.	10	-	1	1500	45-20k ±4	-	8	10	-	none	23x11x13	30	Fused.									
			2½	-	1	-																		
			2½	-	1	-																		
ST 11	99	air susp.	8	-	1	1500	55-20k ±4	-	8	10	-	none	21x10x12	37	Fused.									
			-	-	1	-																		
			-	-	1	-																		
Dysonic Research Dysonic Array	425	-	8	cone	2	800	28-22k +2, -5	92	6	30	50C	3/C	48x13x10	65	Takes less than 1 ft².									
			4½	-	1	3000																		
			2	cone	1	8000																		
Dysonic Laug	199	-	8	cone	2	90	28-100 +2, -5	-	6	30	100	none	34x12x10	50	Center-channel bass unit for use with TAD or Micro. Separate channel drivers.									
			1	cone	1	-																		
			1	dome	1	-																		
Dysonic TAD	179	-	4	cone	2	2000	40-20k	89	15	-	30C	1/C	25x8x7	23	"									
			2	cone	1	8000																		
			1	dome	1	-																		
Dysonic Micro	89	-	3	-	2	3000	80-18k +2, -5	80	6	8	20C	none	11x5x4	15	"									
			1	cone	1	-																		
			1	cone	1	-																		
Realistic March 1	200	air susp.	15	-	1	900	20-25k	88	8	-	100	2/S	28x18x12	50	"									
			-	4-cell horn	1	5000																		
			-	horn	1	-																		
Optimus T-100	150	air susp.	8	-	2	3500	55-18k ±3	90	8	-	75	2/S	35x13x12	38	"									
			3	cone	1	-																		
			8	-	1	3000																		
Optimus-10	140	pass. rad.	8	pass. rad.	1	3000	42-20k ±3	88	8	-	75	1/S	25x15x10	-	"									
			10	pass. rad.	1	-																		
			3¾	dome	1	-																		
Optimus-25	130	air susp.	12	-	1	1300	45-20k	-	8	-	60	2/S	25x14x12	-	"									
			4	cone	1	6000																		
			2½	dome	1	-																		
Optimus-5B	120	air susp.	12	-	1	1500	40-20k	87	8	-	75	2/S	25x14x11	37	"									
			3	-	2	8000																		
			3	-	1	-																		
Nova-7B	170	air susp.	10	-	1	2000	45-20k	87	8	-	55	1/S	22x12x11	30	"									
			3	-	2	-																		
			3	-	1	-																		
Optimus-21	100	air susp.	10	-	1	1200	58-18k	88	8	-	70	1/S	22x12x11	23	"									
			-	-	1	-																		
			-	-	1	-																		
RH Labs SB-1W	350	air susp.	12	cone	1	-	-	-	-	-	100	-	21x37x21	118	Subwoofer.									
			-	-	1	-																		
			-	-	1	-																		
Rogersound RSL 6800	400	reflex	12	cone	2	800	25-20k	-	4	10	200C	2 C	46x18x11	90	"Twin sub-enclosure", fused.									
			5	cone	2	5000																		
			-	horn	1	-																		
RSL Max	300	reflex	12	cone	1	800	30-20k	-	8	12	125C	2 C	32x18x12	60	Fused.									
			5	cone	1	4000																		
			1	dome	1	-																		

Manufacturer and model

Manufacturer and model	Price (\$)	Driver type	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type)	Level controls (number/type)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
RSL 3300	250	reflex	12	cone	1	800	40-20k	- 8	10	100C	2 C	25x15x12	49	Fused.			
			5	cone	1	5000											
			1	dome	1												
RSL Ranger	200	reflex	10	cone	1	800	42-20k	- 8	15	80C	2 C	25x15x12	39	Fused			
RTR																	
DR-1 Dymstatic	1290	see "remarks"	12	cone	1		30-20k ±3	- -	75	125C	-	-	-	Subwoofer section of 2-piece system "negative environment enclosure."			
			10	cone	2	375				250C							
				elect	27	375							49x17x17	Circular tweeter array powered by special amp. in woofer cabinet. Circuit breaker.			
HPR-12 Magnum	335	pass rad.	12	pass rad.	1	500	30-25k	- 8	15	100	2 C	36x15x13	-				
			12	cone	1												
			5	-	1	7500											
			2 1/2	-	2												
			3	piezo	1												
600-D	450		12	cone	2	950	27-35k	- 4	25	120	2 C	48x17x17	-	Circuit breaker.			
			1 1/2	dome	2	10 000											
300-D	320		10	piezo	1			- 4	25	100	2 C	42x15x13	-	Circuit breaker.			
			1 1/2	dome	1	10,000	28-35k										
100-D	280		12	piezo	1			- 6	25	80	2 C	27x15x14	-	Circuit breaker.			
			1 1/2	dome	1	1250	30-35k										
				piezo	1												
EXP-12M	215		12	cone	1	1400	32-20k	- 8	20	80	1/C	26x14x12	-	Circuit breaker.			
			1 1/2	-	1	7500											
EXP-12V	150		12	cone	1	1400	32-20k	- 8	20	80	1 C	26x14x12	-	Circuit breaker.			
				-	1	7500											
ESR-15	350			elect	15	1200	1.2k-30k	- -	15	100	1 C	20x17x17	-	Add-on tweeter arrays with built-in cross-over, circuit breaker.			
RSN-G	220			elect.	6	1500	1.5k-30k	- -	15	60	1 C	15x15x12	-				
Sansui																	
SP-L800	900	reflex	12	cone	2	1500	30-20k	95	8	-	300P	1/C	36x18x16	94	Casters; bi-amp capability.		
			2 1/2	horn	1												
SP-L700	650	reflex	10	cone	2	2000	30-25k	93	8	-	200P	1/C	33x17x15	82			
			2 1/2	horn	1												
SP-X9000	350	reflex	16	cone	1	1000	25-23k	100	8	-	220P	1/S	26x18x11	47			
			8	cone	1	6000											
			2x6	horn	2	10,000											
SP-X8000	300	reflex	16	cone	1	1000	25-23k	98	8	-	160P	1/S	27x18x11	45			
			1 1/2	cone	2	6000											
			5 1/8	cone	2	6000											
			2x6	horn	1	10,000											
			1 1/2	horn	2												
SP-X7000	260	reflex	12	cone	1	1500	30-23k	97	8	-	130P	1/S	21x15x11	38			
			5 1/8	cone	1	5000											
			2x6	horn	1	10,000											
			1 1/2	horn	2												
SP-X6000	210	reflex	10	cone	1	1500	30-23k	95	8	-	100P	1/S	21x15x11	34			
			5 1/8	cone	1	6000											
			2 3/8	horn	1												
H.H. Scott																	
Pro-100	440	air susp.	15	cone	1	700	35-20k ±4	- 4	20	125C	3 S	29x19x15	65	Upward- and forward-firing mid-range and tweeter; controls behind hinged panel; fused.			
			4 1/2	cone	2	3500				300P							
			1	dome	2												
SST-2	440	air susp.	12	cone	1	-	35-20k ±4	- 6.8	15	125C	2/S	37x15x12	-				
			4 1/2	cone	1												
			1	dome	1												
Pr-70	330	air susp.	12	cone	1	800	35-20k ±4	- 6.8	15	125C	2/S	17x16x13	50	Controls behind hinged front panel.			
			4 1/2	cone	1	4000				300P							
			1	dome	2												
S-197	250	air susp.	15	cone	1	750	40-20k ±4	- 6.8	15	90C	2/S	28x17x13	53				
			4 1/2	cone	1	3500				125P							
			1	dome	1												
S-196	200	air susp.	12	cone	1	800	40-20k ±4	- 6.8	15	75C	2/S	25x13x11	40	Front-panel controls.			
			4 1/2	cone	1	4000				100P							
			1	dome	1												
SST-1	200	air susp.	10	cone	1	-	40-20k ±4	- 6.8	10	85C	2 S	24x12x11	-				
			4 1/2	cone	1												
			1	dome	1												
S-186	170	air susp.	10	cone	1	800	40-20k ±4	- 6.8	10	60C	2 S	13x13x11	26	Front-panel controls.			
			4 1/2	cone	1	4000				80P							
			1	dome	1												
S-177	120	air susp.	8	cone	1	1200	45-18k ±4	- 6.8	7	45C	-	18x11x9	21				
			5	cone	1	3500				65P							
			1 1/2	-	1												
S-176	90	reflex	8	cone	1	3500	60-18k ±4	- 6.8	5	30C	-	18x11x9	17				
			1 1/2	-	1					50P							
Shahinian																	
Obelisk	350	trans. line	10	pass. rad.	1	2000	-	90	6	30	150C	none	26x14x12	48			
			8	cone	1					350P							
			1	dome	3												

Manufacture and model

Manufacture and model	Price (\$)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz - dB)	Sensitivity (SPL in dB at 1 meter w/1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type): C=cont.; P=peak	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
Sonab															
OA 2212	840	reflex	6% 6% 1 3/8	cone cone -	2 2 12	450 2000	30-15k ±3	- 8	15	100C	yes	30x12x21	72	Multi-directional; sold in matched pairs only; tweeter level controlled ±1.5 dB by jumper.	
OA 116	520	reflex	6% 6% 1 3/8	cone cone -	1 1 6	500 1800	28-15k ±3	- 8	15	100C	yes	16x11x18	47	"	
OA 14	315	reflex	6% 1 3/8	cone -	1 4	1800	29-15k ±3	- 8	15	80C	yes	12x9x17	25	"	
OA 12	240	reflex	6% 1 3/8	cone -	1 2	1800	42-15k ±3	- 8	15	70C	yes	18x8x13	15	"	
OD 11	180	reflex	6%	cone	1	1800	52-15k ±4	- 8	15	60C	yes	10x10x10	12	As above, but for floor or bookshelf mounting.	
Sonic Energy Systems															
TA-12P	400	vented	12 4 1/2 1	cone cone dome	1 1 1	600 6000	38-18k ±3	86 8	8	40C 400P	1/C	44x22x12	85	"Time aligned."	
TA-10P	340	vented	10 4 1/2 1	cone cone dome	1 1 1	800 6000	43-18k ±3	86 8	8	25C 250P	1/C	40x20x12	75	"	
TA-10F	250	pass. rad.	10 10 1 1/2	cone pass. rad. dome	1 1 1	600 1800	40-17k ±3	87 8	10	25C 250P	1/C	39x15x12	70	"	
TA-10	160	vented	10 1 1/2	cone dome	1 1	1800	70-17k ±3	87 8	10	25C 250P	1/C	24x13x12	47	"	
Sonic Systems															
Monolith	p2995	reflex	15 -	- compression	2 4	1200	33-18k ±4	97 4	5	300C 600P	C	46x27x24	200	Bi-amplable.	
Monitor	p1195	reflex	12 -	- compression	1 1	1200	45-18k ±4	92 8	10	100C 250P	C	31x17x15	70	"	
Sony															
SS-G7	1000	reflex	15 4 1 1/2	cone cone -	1 1 1	550 4500	30-20k	94 8		180C 200P	2/C	20x37x18	106	In-line drivers; non-reflecting front panel.	
SSU-4000	400	pass. rad., reflex	10 9 3 1/2 1	cone pass. rad. -	1 1 1	500 5500	30-20k	91 8	20	100C	2/C	47x14x15	71	"	
SSU-3000	300	vented	10 3 1/2 1	cone cone dome	1 1 1	600 5500	35-20k	91 8	10	75C	2/C	34x14x15	60	"	
SSU-2000	150	air susp.	10 2 1/2	cone cone	1 1	2500	35-20k	90 8	20	50C	1/C	4x13x14	38	"	
SSU-1250	100	pass. rad., reflex	8 8 2 1/2	cone pass. rad. cone	1 1 1	4000	45-20k	90 8	10	30C	-	25x14x12	24	"	
Speaker Kit															
Eleven	400	vented	15 -	cone horn	1 1	800 4000	34-15k ±3	103 8	5	50C 500P	2/C	48x25x16	130	Kit; also avail. w/o encl.	
Ten	340	vented	12 -	cone horn	1 1	800 4000	37-15k ±3	100 8	5	25C 250P	2/C	48x20x16	117	"	
Six	255	air susp.	15 7 2 1	cone cone dome dome	1 1 1 1	200 1600 5500	28-22k ±3	94 8	25	100C 200P	2/C	48x20x16	114	"	
Five	170	air susp.	12 2 1	cone dome dome	1 1 1	800 4000	32-22k ±3	93 8	15	80C 175P	2/C	28x16x14	69	"	
Four	130	air susp.	12 5 1	cone cone dome	1 1 1	500 4000	35-22k ±3	91 8	15	60C 150P	2/C	24x16x12	50	"	
Three	113	air susp.	10 5 1	cone cone dome	1 1 1	500 4000	38-22k ±3	91 8	10	50C 100P	2/C	24x16x10	46	"	
Speakerlab															
K	630	horn	15 -	cone horn	1 2	400 5000	-	- 4/8	10	150C	2/C	50x32x28	220	Bass only.	
Super Seven	470	air susp.	12 10 -	cone cone horn	1 1 2	1200 6000	-	- 4	15	150C	2/C	29x18x15	86	Kit \$307; components \$261.	
Seven	400	air susp.	12 10 -	cone cone horn	1 1 2	1200 6000	-	- 4	15	150C	2/C	29x18x15	85	Kit \$243; comps. \$199.	
Six	300	air susp.	12 -	cone horn	1 2	1200 6000	-	- 8	15	100C	2/C	28x16x12	65	Kit \$191; comps. \$167.	
Four	270	air susp.	12 6 -	cone cone horn	1 1 1	400 4000	-	- 8	15	100C	2/S	28x16x12	65	Kit \$165; comps. \$140.	
Three	240	air susp.	12 6 1	cone cone dome	1 1 1	400 4000	-	- 8	15	100C	2/S	28x16x12	65	Kit \$141; comps. \$115.	
Two-and-a-Half	185	air susp.	10 6 1	cone cone dome	1 1 1	500 3000	-	- 4	10	50C	2/S	24x15x12	52	Kit \$109; comps. \$83.	
Two	145	air susp.	10 1 1 1/2	cone cone dome	1 1 1	1000	-	- 4	10	50C	1/C	24x16x12	49	Kit \$84; comps. \$58.	

Manufacturer and model	Price (\$)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz)	Sensitivity (SPL in dB at 1 meter w/W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
One	98	air susp.	8	cone	1	3000	—	4/8	5	40C	1/C	18x11x10	30	Kit \$54; comps. \$41.	
Point One	89	air susp.	6	dome	1	2500	—	4/8	10	40C	1/C	10x7x5	7	Kit \$54; comps. \$46.	
Spendor															
8C3	770	reflex	12	cone	1	700	50-18k ±3	8	50	75P	—	32x16x16	75		
			8	cone	1	3000									
			1 1/4	dome	1	13,000									
			3/4	dome	1										
8C-1	320	reflex	8	cone	1	3000	50-18k ±3	8	20	50P	—	25x12x12	31		
			1 1/4	dome	1	13,000									
			3/4	dome	1										
SA-1	200	infinite	6	cone	1	3000	65-18k ±3	8	20	40P	—	12x9x9	16		
			1	dome	1										
Synergistics															
S72A	600	air susp.	10	cone	2	1000	26-24k	4	6	200P	2/C	42x27x11	103	Angled tweeter array; circ. bkr.	
			4 1/2	cone	2	7500									
			2 1/2	—	3	12,500									
			—	piezo	1										
S62A	400	air susp.	12	cone	1	1000	26-24k	8	8	150P	2/C	36x18x11	67	Circ. bkr.	
			4 1/2	cone	1	7500									
			2 1/2	—	3	12,500									
			—	piezo	1										
S52A	325	air susp.	8	cone	2	3200	30-20k	4	8	150P	1/C	32x15x13	55	"	
			4 1/2	cone	1										
S51A	325	air susp.	12	cone	1	1000	30-24k	8	8	150P	2/C	26x14x12	42	"	
			4 1/2	cone	1	7500									
			2 1/2	—	1	12,500									
			—	piezo	1										
S42A	230	air susp.	10	cone	1	1500	28-20k	8	10	100P	2/C	26x14x12	40	"	
			4 1/2	cone	1	7500									
			2 1/2	—	1										
S32A	170	air susp.	10	cone	1	2500	28-20k	8	10	80P	—	26x14x12	38	"	
			2 1/2	—	1										
S22A	130	air susp.	8	cone	1	3200	33-20k	8	6	60P	—	23x12x10	29		
			2 1/2	—	1										
S12A	100	air susp.	8	cone	1	3200	40-20k	8	6	60P	—	18x10x9	17		
			2 1/2	—	1										
Tamon															
TS707	380	infinite	15	cone	1	600	30-35k ±3	96	8	15	110C	S	27x17x12	55	
			—	cone	2	2500					200P				
			—	dome	2	15,000									
CR050	360	infinite	12	cone	1	800	32-22k ±3	93	8	15	45C	2/C	25x15x13	39	
			—	cone	1	3000					80P				
			—	dome	2										
TS505	270	infinite	12	cone	1	700	32-35k ±3	93	8	15	80C	2/S	24x15x13	38	
			—	cone	1	2500					150P				
			—	dome	1										
CR040	250	infinite	10	cone	1	—	38-22k ±3	92	8	15	35C	1/C	23x13x13	28	
			—	cone	1						60P				
			—	dome	1										
TS404	230	infinite	10	cone	1	800	38-35k ±3	92	8	10	100P	1 S	22x12x13	28	
			—	cone	1	2500									
			—	dome	1										
CR030	140	infinite	8	cone	1	3000	45-22k ±3	90.5	8	15	25C	—	18x10x11	16	
			—	cone	1						40P				
			—	dome	1										
TS303	140	infinite	8	cone	1	3000	45-22k ±3	92	8	10	40C	—	18x11x10	20	
			—	cone	1						70P				
			—	dome	1										
Tannoy-Ortofon															
Buckingham	2500	reflex	12	—	2	350	20-20k	95	8	10	200C	4 S	46x24x18	250	Coax. midrange tweeter.
			10	—	1	3500					1000P				
			2	horn	1										
Windsor	1450	reflex	12	—	1	350	40-20k ±3	92	8	10	120C	4 S	32x22x16	125	"
			10	—	1	3500					500P				
			2	horn	1										
Arden	588	reflex	15	cone	1	1000	30-20k ±4	8	10	85C	2 S	39x26x15	124	Coaxial.	
			2	—	1										
Berkeley	495	reflex	15	cone	1	1000	30-20k ±4	8	10	85C	2 S	33x21x12	90	"	
			2	—	1										
Cheviot	395	reflex	12	cone	1	1000	40-20k ±4	8	10	60C	2 S	33x18x10	66	"	
			2	—	1										
Devon	348	reflex	12	cone	1	1000	45-20k ±4	8	10	60C	2 S	23x16x10	46	"	
			2	—	1										
Eaton	295	reflex	10	cone	1	1000	50-20k ±4	8	10	50C	2 S	21x14x10	40	"	
			2	—	1										
Technics by Panasonic															
SB-7000A	420	vented	13 1/2	cone	1	700	37-22k	90.5	6	—	150P	2 S	33x19x16	73	"
			4 1/2	cone	1	6000									
			1 1/2	dome	1										
SB-6000A	320	vented	12	cone	1	1800	39-22k	91	6	—	100P	1 C	33x17x13	55	"
			1 1/2	dome	1										
SB-X50	p460	vented	10	cone	1	700	—	93	6	—	50C	2 C	24x13x11	35	"Linear-phase"; stepped cab.; circ. brks.
			3 1/2	cone	1	4500									
			1 1/2	dome	1										
SB-5000A	170	vented	10	cone	1	1500	40-20k	92	8	—	75P	—	26x14x13	35	"
			2 3 8	cone	1										
			8	cone	1	700	—	93	6	—	40C	2 C	21x11x9	23	"
SB-X30	p340	vented	3 1/2	cone	1	4500	—								
			1 1/2	dome	1										

Manufacturer and model

Manufacturer and model	Price (\$)	Enclosure type	Driver size (in.)	Driver type	Number	Crossover frequency (Hz)	Frequency response (Hz-Hz -dB)	Sensitivity (SPL in dB at 1 meter w/ 1W input)	Impedance (ohms)	Min. input (watts)	Max. input (watts)	Level controls (number/type, C=cont. variable; S=switched)	Dimensions (H x W x D) (in.)	Weight (pounds)	Remarks
SB-4500	p300	vented	10	cone	1	2000	40-20k	92.5	6	—	50C 75P	—	25x14x13	32	"
SB-X10	p200	vented	2 3/8 8 1 1/2	cone cone dome	1 1 1	1500	—	90.5	6	—	30C	—	18x10x8	16	"
TransAudio 1012B	160	air susp.	12 5 1/2 2 1/2	cone cone —	1 1 1	600 2000	38-18k ±4	—	8	5	—	—	26x10x17	42	"
1011B	105	air susp.	12 2 1/2	cone —	1 1	1800	40-18k ±4	—	8	5	—	—	26x10x16	36	"
Videoton D-258a	230	air susp.	10 5 1 1/2	— — dome	1 1 1	600 2000 7000	30-20k ±3	—	8	15	60C 120P	2/C	27x15x11	—	"
D-402a	200	air susp.	8 4 1	— — dome	2 2 2	3500	35-20k ±3	—	8	15	50C 100P	—	28x15x11	—	"
D-257a	150	air susp.	10 5 1	— — dome	1 1 1	1000 4000	40-20k ±3	—	8	15	25C 50P	1/C	24x12x12	—	"
D-255	130	air susp.	10 1	— dome	1 1	4500	43-20k	—	8	15	55C 100P	—	24x12x12	33	"
DP-202	80	air susp.	8 4	— cone	1 1	3500	40-20k	—	8	10	50C 100P	—	16x10x9	17	"
Visonik of America SU61/D502	590	—	12 4 3/4	cone cone dome	1 1 1	160 1400	16-30k +4, -8	—	6	50	300C	—	24x17x14	79	Subwoofer + 2 D502's (see below).
D803	250	—	8 1 1/2 3/4	cone dome dome	1 1 1	1100 4500	16-30k +4, -8	—	4	20	120C	—	13x8x8	17	LED overload lite.
D702	200	—	7 1	cone dome	1 1	2100	30-25k +4, -8	—	4	20	90C	—	—	14	"
Euro 5	170	—	8 1	cone dome	1 1	1300	45-17k ±3	—	4	10	60C	—	19x11x10	24	"
D602	160	—	5 1	cone dome	1 1	1400	38-25k +4, -8	—	4	20	80C	—	9x6x6	9	"
D502	127	—	4 3/4	cone dome	1 1	1400	45-30k +4, -8	—	4	20	70C	—	7x4x4	6	"
D50BL	110	—	3 3/4	cone	1	1800	48-25k	—	4	12	50C	—	7x4x4	5	"
D302MO	92	—	4 2	cone cone	1 1	2000	50-22k +4, -8	—	4	10	50C	—	7x4x4	5	"
Watson Laboratories 10	p1800	—	10 8 5 1 1/4	cone cone cone dome	2 1 2 1	250 800 6000	17-22k ±5	93	4	50	—	S	47x24x22	85	"
7	p1300	—	10 8 5 1 1/4 1	piezo cone cone cone dome dome	1 1 1 1 1 1	250 800 6000	20-20k ±5	91	8	50	—	S	33x20x15	62	"
Wharfedale E-70	475	reflex	10 4 1	cone cone horn	1 2 1	800 7000	50-18k ±3	94	8	3	100C	2/S	32x14x14	70	"
E-50	390	reflex	10 4 1	cone cone horn	1 2 1	800 7000	55-18k ±3	94	8	3	70C	2/S	26x14x14	42	"
Dovedale SP2	355	reflex	8 3/4 4 2x1	cone cone planar	2 1 1	800 5000	35-26k ±3	88	6	—	60C 120P	—	25x16x12	55	"
Teesdale SP2	270	reflex	8 4 2x1	cone cone planar	1 1 1	800 5000	40-26k ±3	87	6	—	40C 80P	—	23x14x11	31	"
Yamaha NS1000	725	air susp.	12 3 3/4 1 1/8	cone dome dome	1 1 1	500 6000	40-20k	90	8	20	50C 100P	2/C	28x16x15	85	Beryllium-dome tweeters.
NS1000M	525	air susp.	12 3 3/4 1 1/8	cone dome dome	1 1 1	500 6000	40-20k	90	8	20	50C 100P	2/C	27x15x14	68	"
NS690 II	310	air susp.	12 3 1 1/8	cone dome dome	1 1 1	800 6000	35-20k	90	8	20	80P	2/C	25x14x12	59	"
NS500	260	reflex	10 1 1/8	cone dome	1 1	1800	40-20k	91	8	20	30C 60P	1/C	24x13x13	42	Beryllium dome.
NS325	220	reflex	10 4 3/4 2	cone cone dome	1 1 1	600 5000	40-20k	92	8	10	70P	2/C	24x14x12	34	"
NS225	170	reflex	10 2	cone cone	1 1	800	40-20k	92.5	8	10	60P	1/C	22x13x13	29	"
NS5	100	air susp.	10 1	cone dome	1 1	1500	55-20k ±3.5	88	8	10	50P	—	21x12x11	25	"