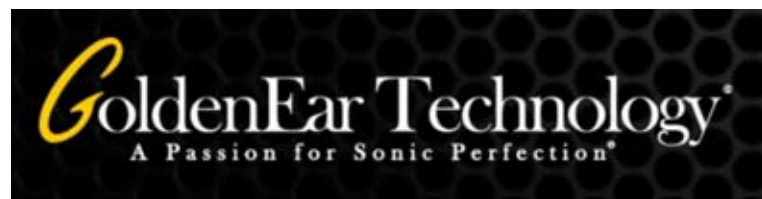




Triton Reference

Stereophile Magazine “Loudspeaker of the Year”

AGAIN



The Alterman Audio Alternative...
for Home Theater, 4K Televisions, and
Stereo Components

ALTERMAN AUDIO



for some Sound Advice

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This was Photoshopped in...

Sound Advice... a philosophy of selling, that really means teaching, educating and explaining complex technology in easy to understand plain English.

Sound Advice: On Price... Alterman Audio prices are the same as Amazon or Best Buy ... *or less!*

Sound Advice... do you drive the cheapest car on the road? Did you buy the smallest house you can afford? There is a difference in the myriad of audio equipment and numerous choices of TVs you can buy. The most expensive may not be worth the price, and the least expensive might be a total waste of money.

Sound Advice... it isn't the equipment that matters, its your enjoyment of music and movies in your home.

Sound Advice... recommendations based on personal listening and comparing of stereo (and home theater) components, analyzing magazine reviews, and owning and enjoying at home the same brands we recommend.

Sound Advice... a recommended product should last and be trouble free. Should you encounter a problem we want to help. I recently had a customer bring in a Dual turntable I sold him 40 years ago that wouldn't even spin. He left with a working, on speed, turntable... no charge!

Sound Advice... big box stores use kids to run wires and do installs, with little passion for equipment. My right hand man and main installer has been at Alterman Audio for over 30 years. You should see his system. He does it for the passion and love of music and great movies.

Sound Advice... is Tech Support. Tech Support usually isn't free, or maybe its free for 90 days. *Alterman Audio sound advice is free forever!*

Sound Advice... Alterman Audio... for some sound advice.



The new store on Causeway



My first store on Freret in 1973.



The real Muhammed Ali TV spot

In 1972, Sandy Gross started Polk Audio with Matthew Polk. His second company, Definitive Technology became one of the most successful speaker companies in the world. Sandy sold Definitive in 2004. He certainly did not need the money, but his passion and desire to "build a better mousetrap" motivated him to create a third company. The loudspeakers of Golden Ear Technology have perhaps become the most highly reviewed audio brand ever conceived.

High Fidelity. The art of high fidelity stereo sound reproduction combines physics, liquidity, dynamics, electrical engineering, mechanical engineering, and musical creation.

Thomas Edison himself inspired the concept of high fidelity, the goal to accurately record and reproduce the lifelike musical sounds of an entire orchestra. That inspiration created multiple generations of engineers and music lovers to design and manufacture equipment to allow the enjoyment of music so nothing is added or subtracted from the original sound, *Fidelity* means truth, faithfulness and accuracy.

Experience and Passion. Matthew Polk and Sandy Gross started Polk Audio in 1972. He left Polk to pursue a career in Hollywood, only to return to the speaker business creating a new company called Definitive Technology. Def Tech went on to be very successful and in 2004 he sold it to retire. But, there are those with a passion for what they do, and have that desire to make a better mouse trap.

Golden Ear Technology. So, in 2010, Sandy Gross introduced a new speaker company and called it GoldenEar Technology. All of the new GoldenEar speakers included a new kind of tweeter. Shown on the right is the first tower, the Triton Two and SuperSat 5.1 surround systems. See page 9.

The GoldenEar Technology Triton Two. This is an amazing loudspeaker. This slim tower is only 5 1/4 inches wide in the front, and 7 1/2 inches wide at the back, includes a built-in powered 1200 watt powered subwoofer. Quite frankly, the deep, powerful, fast, realistic bass that comes out of this skinny tower is outstanding.

But, the open, musical, detail... real sounds, that come from the new kind of tweeter, makes the speaker disappear and the music seem real.

HVFH Tweeter. A drummer strikes a cymbal, a piece of metal that vibrates and creates a "metallic tingle." The sound of a triangle is even more delicate. These instruments are producing sound at frequencies of ten, twenty, or even thirty thousand cycles per second or hertz. Regular tweeters don't move fast enough.

In order to move back and forth twenty thousand times per second an object must be lightweight, low in inertia and well controlled. Speaker engineers use exotic materials... aluminum, beryllium, or even diamond.

The *Real Difference* in GoldenEar speakers is in the Tweeter. The Golden Ear speakers use a special technology High Velocity Folded Horn ribbon tweeter, also called a *Heil Air Motion Transformer*. Invented by Dr. Oscar Heil, who also invented the microwave oven, this high technology tweeter uses a plastic diaphragm which is a hundred times lighter than a conventional tweeter. It has a folded pleated design and if stretched out, would radiate from the same area as an 8 inch cone. This is why music on GoldenEar speakers does not sound like it is coming out of a box. This large radiating area, is still far lighter, with less inertia, which means it can move back and forth much faster. Cymbals and triangles sound like pieces of metal vibrating where most speakers, even very expensive speakers, sound like speakers reproducing those metallic sounds

Cast Basket Woofers. If the tweeter is ultra fast, then the woofers must match up. The sound must be blended. To insure proper cone movement, Golden Ear uses cast basket frames with high Gauss magnetic assembly.

Built-in Powered 1200 watt Subwoofer. Sandy Gross made the first speaker with a built-in powered subwoofer. By using a special racetrack shaped woofer, the Triton Two is an ultra thin petite tower.

This bass reproduction is created by two 9 inch by 5 inch racetrack shaped woofers. These use a long throw design that enables them to move great distances and push a lot of air. These are coupled to 10 inch by 7 inch planar pressure bass radiators that enhance low frequencies.



These are driven by a 1200 watt Forcefield DSP power amp. It has direct connection to the built in electronics crossover or LFE (low frequency effects) RCA line input from subwoofer output of your preamp processor or receiver. There are adjustments for level, phase and crossover frequency.

Please come listen to a speaker to re-creates musical realism in your home, dramatically improving your enjoyment of music and movies.

Dimensions: Triton Two Plus Introduced 2016 \$3500 pair
 Front of tower: 5 1/4 inches.
 Rear of tower 7 1/4 inches 48 inch tall no spikes; Depth 13 inches
 Base: 11 1/2 in by 18 inches Weight: 60 pounds, Shipping 74 lb

Dimensions: Triton Three Plus Introduced 2016 \$2500 pair
 Front of Tower: 5 1/4 inches
 Rear of tower: 7 inches 44 inch tall no spikes Depth 13 inches
 Base: 11 1/2 in by 16 1/4 in Weight: 45 pounds 57 pounds shipping

Dimensions: Triton One. Loudspeaker of the Year \$5000 pair
 Front: 5 3/4 inches wide; rear of tower 8 in wide; 54 in high
 Base: 12 1/4 w 19 3/4 deep
 Three 5 x 9 racetrack sub bass drivers; Four 7 by 10 in planar infrasonic radiators
 Two 5 1/4 in high definition cast-basket MVPP mid/bass drivers; One HVFH tweeter
 Built-in electronic crossover 56 bit DSP controlled 1600 watt Class D sub-bass driver amplifier



Stereo Component System for \$599

New Stereo Receiver. SX-10. \$149. *It is built for music, not surround sound.*

People who love music, demand equipment that reproduces music, so it sounds live, loud, and clear. Demand for audiophile stereo components has pushed perfectionist products higher and higher in price.

So, it is with great pleasure we can recommend this new Pioneer stereo receiver, that sounds good, at the very reasonable price of \$149.

The Power Sticker. Stuck on the front panel for retail display is a big sticker that says 200 watts. Big box stores demand Pioneer advertise power like this, but it is against FTC power rating rules. You are not supposed to add multiple amplifier channels together. You must rate power *per channel*. So, the fine print on that sticker says 100 watts *per channel*. But... this number is achieved by allowing distortion to rise to 10.0% at 1 kHz, a middle frequency that is easy to produce resulting in a highly inflated power rating.

Audio Power: Humans hear frequencies from 20-20,000 Hz. Rated over the full audio range, the SX 10 at 8 ohms with 0.1% THD produces 45 watts per channel. The amplifier borrows circuitry from more expensive models with Direct Energy design, shorter signal path and rigid construction.

AM and FM Stereo Tuner. Listen to your favorite talk radio or sports station. Listen to your favorite music in clear, high fidelity stereo. You can preset 40 stations.

Bluetooth. Built-in Bluetooth allows you to send music from your phone, wirelessly to the SX-10. This allows the music to play via the powerful amps and the speakers you have hooked up. So, Pandora, Spotify, Tidal, any on line music you can receive on our phone can play over true stereo components and great speakers.

Headphone. Built-in dedicated headphone amplifier, cuts off other circuits when headphones are connected. It is designed for high performance listening and low noise.

Inputs. There are four stereo RCA line inputs. You can even plug in a turntable through Aux line input on the back. (Turntable needs to have a built-in pre-amp). Plug in the RCA line out of your cable or sat box and hear your movies in great stereo sound. Hook up a video game!

New Pioneer CD Player. PD-10. \$199. Everybody has a favorite CD. Stick it in and play. Music sounds better on CD than streamed from the internet.

This is a full size CD with disc transport designed to play music CDs, not data discs. To get *data* from a disc, speed is not critical. The PD-10 uses a center mounted drive to create a rigid platform with less vibration. The chassis is made with torsion resistant sheet steel. Build quality like this is usually found on far more expensive CD players. Key to good sound is a quality power supply to drive the converter board and the PD-10 has a large EL transformer driving AKM DAC 4428VT chips with a precision clock. Maximum deviation from normal is 310 ppm.

Other key specs include 192k 24 bit DAC (Digital Audio Converter), 25 track memory playback, random repeat, and it plays MP3 discs too.

Precision is critical for digital sound to reproduce music realistically.

The Speakers: ELAC Debut 5.2. \$249: Back in the hey day of Hi-Fi Elac was known for turntables, but ELAC is a 90 year old German Hi-Fi company. Over the last few decades they have been making fairly expensive speakers. They were not well known in the USA. So, they got together with well-known speaker engineer and designer, Andrew Jones. He designed some extraordinary great sounding speakers that sell for dirt cheap: \$249 pair. They have received rave reviews from the pundits that normally review speakers for \$10,000 or even \$50,000 a pair.

The Woofer: A 5 1/4 in driver makes the bass. It uses Aramid fibers that create a rigid, yet very lightweight cone, so the woofer can move quickly in response to the amplifier signal. The cabinet is well braced and heavy.

The Tweeter: A cloth tweeter with a deep spheroid design with a 7 element crossover creates a very smooth blend from woofer to tweeter. Highs are clear and detailed.



Step Ups: Debut DB6.2 bookshelf speaker with 6 1/2 inch woofer \$299 pair
Debut DF5.2 floor standing tower \$600 pair DF6.2 \$800 pair
Pioneer ELITE SXS-30 Receiver: \$450 80 watts/ch, network, with dedicated phono input

The High Resolution Audio Revolution

The HAP-Z1ES Music Server

Sony introduced the world's first Compact Disc player on October 1, 1982. 36 years ago, and since then Digital has come a long way.

Recording engineers knew neither CDs nor the best vinyl records reproduced sound as good as the original master tapes. There were hundreds of thousands of master tapes that were aging and decaying. A technology was needed to preserve this heritage and music, a technology that captured every nuance of the musical sounds from the master tapes.

The CD. A technology called PCM (Pulse Code Modulation) makes digital audio possible. Music is chopped up (sampled) 44,100 times and given a 16 bit digital word. This is a locked in standard so all the billions of CD players in the world will play everyone of the mega billions of CDs.

Less Than CD. In order to stream music over the internet, or put it on an iPod, this digital data that represents the music has to be compressed. As much as 90% of the digital code on a CD is left out of streaming over the internet. When you buy a song from iTunes, *it is not CD quality.* Yes, songs purchased at iTunes offer less quality than a music format introduced 36 years ago!

192K HiRes. Digital technology has advanced. Music recording engineers and sound recording for movies use higher sampling rates than the CD standard of 44.1.

Sampling rates of 88.2, 96 or even 192,000 samples with 24 bit words for higher and higher sound quality are used today. There are on-line music stores that sell albums with these high sampling rates. You download the album to your computer hard drive, but the digital decoding chips in your computer probably won't play them. You need an external HiRes DAC (Digital Analog Converter) to feed your amp or receiver. HiRes sounds better.

The Super Audio CD. In 1999 Sony and Philips introduced the Super Audio CD. It used a different digital audio system called *Direct Stream Digital*. It eliminated many of the processing steps necessary to make PCM work, and increased the sampling rate to 2,822 million. It was developed to archive all those aging analog tapes. But, Sony decided to introduce a better sounding CD called the SACD.

To make the record companies happy, Sony's SACD discs were copy protected and could not be put on the internet. Audiophiles didn't like that, so that limited demand.

Around the same time Napster free file sharing appeared on line, and the record companies, instead of pushing this new format, focused on fighting a threat to their very existence. But the SACD did not go away, and over the years thousands of titles have been released. You may already own SACD's since many were hybrid dual layer CD-SACD's that



play in regular CD players. Single-layer SACD's only play in SACD players.

The Re-incarnation. As more and more audiophiles were buying High resolution music files and the DACs to decode them, new chipsets were developed. It turns out with a little modification they could also decode Super Audio CD files. (DSD).

As the patents were expiring Sony re-incarnated the SACD as a digital download. Sony Music, Warner and Universal Music all announced music would be available to buy as a download in ultra high resolution DSD. There are hundreds of titles available.

The Sony HAP-Z1ES. The HAP-Z1ES is an ultra high quality high resolution, DSD music server. You buy an album on line, the file is stored on your computer hard drive. The HAPZ1 sees you added an album and transfers it to its own internal hard drive. Plug a CD drive in the back, and you can make a perfect transfer of a CD to the HAPZ1. You can add a bigger hard drive for additional music storage. And all the music can be seen on your local network and played in high resolution and DSD via Wi-Fi anywhere in your house. You can search by song, artist, album, genre, and creates playlists.

The Sony HAPZ1ES \$2000

Rated "Class A" Sound Quality by *Stereophile* magazine
"Product of the Year" *Absolute Sound*
Reference Class hard drive music player and DSD DAC
Plays almost all music files
Plays PCM up to 192k 24 bit
Plays Direct Stream Digital the Super Audio CD format with 2,822,000 samples per second
Color screen shows album artwork and album and song info
Five year Sony ES warranty
Built-in 1 TB hard drive
Can add external hard drive
Automatically transfers music files from computer to hard drive
Connect CD drive and you can copy CDs to internal hard drive without computer
Free App for remote operation shows album cover and info
XLR and RCA stereo outputs
Acts as a music server sending High resolution music over Wi-Fi through your local area network
Many home theater receivers can decode via Wi-Fi Hi-resolution music from the HAPZ1ES

Sony Classic MDR-V6 \$99



Studio Monitor used for pro audio and musicians for decades
Circum-aura closed back design
40 mm dynamic driver
Frequency response: 5 to 30,000 Hz
"They may be 30 years old but the comfortable fitting MDR-V6 are arguably the best sounding headphones for \$100" cNET
Over 900 5 star reviews on Amazon
Folding design, 10 ft coiled cord



Sony NW-A45 Hi Res Walkman \$299

New Sony Walkman that plays Hi Resolution files
Plays PCM up to 192k 24 bit files plus DSD files
Designed for high quality music playback
Extra long battery life up to 30 hours
Ultra slim design
Easy operation
Color LCD screen shows album artwork
Special USB output connector to computer
S-Master HX for extended frequency response
Uses digital noise shaping for reduced noise
Built-in memory expanded with micro SD card
AptX low latency wireless Bluetooth



Sony Hi Res Headphones MDR-A1 \$299

Designed for the ultimate in music reproduction
Frequency response extends out to 100 kHz
Large, over the ear design with 40 mm drivers
Liquid Crystal Polymer diaphragms
Enfolding design with 3D ear pads keep sound in and noise out
Easy to drive with 105 db/mw
Pressure relieving ear pads for extended listening
Can be used with balanced design amps
Metal headband with plush leather ear pads
Aluminum coated Liquid crystal polymer drivers
Built-in mic lets you hear outside when you want
Neodymium magnet rated 48 ohms



Sony New Bluetooth Noise Canceling \$349

"Sony's WH-1000M3 has taken over as the top selling noise canceling on our list." CNET Aug 2018
Advanced noise canceling with Adaptive Sound Control adjusts for your activity: walking, running, traveling
Quick Attention allows you to place hands over headphone and lower volume to have a conversation
HD noise cancelling processor QN1. While most noise canceling 'phones can handle plane or car noise, Sony's advanced noise canceling senses, and cancels common ambient noise
Unique Atmospheric Pressure Optimizing for airplanes
Sony LDAC 990 kbps Bluetooth for much higher quality sound
Close fitting ear pads
Large, 1.57 inch with Liquid Crystal Polymer diaphragms

**Full HD 1080p:
1920x1080=2,073,600**

**4K Ultra HD:
3840x2160=8,294,400**

SONY Was First with 4K... back in 2004
SONY Makes Movies Using 4K
SONY Makes the 4K Cameras that Shoot 4K
SONY Makes the Projectors that Show 4K
SONY Makes Color that Look Real
SONY High Dynamic Range
SONY Build Quality Makes TVs Last

What is 4K? It is a TV with far more pixels, for an even sharper and more detailed picture. 4K or Ultra High Definition TV also has a wider range of color and in some models, and wider dynamic range from black to white.

Most existing flat panel TVs (except some 32 inch models) are 1080p. If you were to count tiny pixels that create the picture, across the picture in one row, left to right there are 1920 pixels. Top to bottom there are 1080 rows. Each video frame of a Full HD 1080p TV has 2,073,600 pixels.

A new 4K, or Ultra High Definition TV has twice as many pixels on each row, or 3840 and there are 2160 rows, twice as many rows.

Each video frame on a 4K TV has 8,294,400 pixels.

Two million vs. eight million.

That's a lot more pixels to reproduce significantly finer detail. The pictures are stunning. The texture of clothing, the blades of grass on a football field, the range of colors all add up to a far better picture for only a few dollars more.

Why Sony?

Sony started the whole idea. Not in the last few years, but well over a decade ago. Sony introduced the first native 4K commercially and for home use.

Sony was a key developer of the DCI, Digital Cinema Initiative. Standards and goals were set to move the motion picture industry away from photographic film to all video. In 2003 Sony introduced a front projection television for home use, which was the first with Full HD 1080 resolution. It used a Sony chip called SXRD (Silicon Crystal Reflective Display). By doubling the size of the SXRD chip, Sony created a professional movie theater projector with 4K resolution. Since there were no 4K movies, Sony had to develop upsampling circuitry. Today there are over 17,000 movie theaters that use these professional 4K SXRD Sony projectors. It wasn't until 2013 that any other commercial movie theater projector had native 4K capability. But, in 2012, Sony introduced a home-use version of the 4K commercial movie projector. This was the first home-use 4K product.

SONY MADE THE FIRST LED TV. Sony introduced the first flat panel with Full HD 1080p resolution. This TV was also the first TV with LEDs. It used separate red, separate green and blue LEDs to reproduce the full range of light. Later, Sony introduced a more affordable LED set that used white LEDs along the perimeter (instead of behind the screen) to decrease the depth of the flat panel. Virtually all LED TVs use white LEDs along the perimeter.

TRILUMINOUS. The new 4K Ultra TVs from Sony not only have over 8 million pixels, but actually are the first commercially available product of any kind to use quantum dot technology. Blue, not white, LEDs illuminate quantum dots which then create very accurate red, green or blue, the primary colors of light, which results in the ability to reproduce the full color spectrum that heretofore



**More Than
Ever... Buy a
Sony!**

televisions with white LEDs are not able to reproduce. Triluminous is especially noticeable when you compare red color reproduction on a Sony to other brands. Triluminous TV is not just a fancy name, but an advanced and different technology. Like many Sony innovations, other brands have now copied Sony's use of Quantum dots, but Sony has now more advanced proprietary technology to insure the most accurate, and widest range of color reproduction.

Camera, Projectors and Now Flat Screens.

From the actual pick up chips inside the 4K cameras, the digital recording and storage technology to the LCOS chips used in the SXRD projectors, Sony technology is involved at all levels in creating and reproducing 4K television. Sony cameras are used to "film" blockbuster motion pictures in native 4K. We put "film" in quotes because these cameras do not use film. Now all TV makers have introduced 4K, Ultra HD TVs,

SONY RELIABILITY. Alterman Audio has many customers with Sony Trinitron picture TVs who are still working perfectly fine. Sets like these are often 30 years old. We know people who after Katrina, plugged in their Sony TVs, just for the hell of it, even though they were flooded, and those TV worked! Inside data shows Sony continues to be the most reliable TV you can buy. Yet, Sonys these days are very competitively priced.

Smart TV. Sony was also the first TV brand to allow the TV to connect to the internet. Today's Sony smart TV feature is included in all models. They use Googlecast and an Android operating system. Apps appear on the screen and all Sony TV models have built-in Wi-Fi for wireless connection to the internet. Sony 4K TVs have the latest high speed codec for Netflix and on-line 4K material. You navigate to Youtube, Netflix with a button on your remote. Hulu, Pandora, Spotify and new Apps are added all the time. You can add your own. You can play movies and photos from a USB drive, or wirelessly from an NAS drive or from your computer. You can even talk to your TV using Alexa and Google. Cast content, change the volume, even adjust your air conditioner. Find movies on Netflix or Amazon Prime. Play music from Pandora, Spotify and other Apps. You can use your phone to control your TV too.

Which Model to Get? Alterman Audio can order you any Sony TV, and we totally recommend Sony! The Sony model lineup ranges from smaller, low price 1080p models, to the 800 series with Triluminous real life color, to 900 models with Full Array Backlights and very high contrast. The top of the line Master Series includes the Z Series mega LED models and A series that use Organic Light Emitting Diode technology. Alterman Audio is the place to come to learn the differences in these technologies and the pros and cons so you can make an intelligent buying choice. We run the wires and install it all too.



Our Best Selling SONY XBR. Most TVs use edge-lit technology where a row of LEDs are on the right and left side of the TV. Light guides spread this light behind the LCD panel, then each pixel allows light through creating white. Each pixel stops all the light resulting in black or any mixture thereof to produce all the colors.

The Sony XBR900F is different. All the LEDs, and there a lot more of them, are *BEHIND* the LCD panel itself. The LEDs behind a bright object on the screen put out more light, and those behind dark areas produce less light. This is called LOCAL DIMMING. This is all controlled by Sony X-1 Extreme processing chip.

The Sony X-1 Extreme chip processes the incoming video signal. Since most programming is not 4K, the processing chip must create pixels to fill the screen. Sony does this object by object and uses Dual Super Bit mapping to compare embedded video images to create 4K out of 2K. The X-1 also does HDR object by object. The X-1 Extreme processing and full array backlighting result in outstanding, high contrast pictures.

49 in \$999; 55 in \$1199; 65 in \$1499; 75 in \$2499; 85 in \$3799
Please check store for latest prices. We match all authorized competitive prices!
The 900F continues this full year
For information of new upscale models 950G and Z series go to altermanaudio.com



SONY XBR OLED. Sony was the first to manufacture a OLED TV, Organic Light Emitting Diode back in 2007. With LED TVs each of the tiny pixels stops the light. OLED TVs work just the opposite. Each pixel *creates* light. So each pixel is controlled independently, so each pixel is its own zone. Each pixel can be turned completely off, so it can produce absolute black. While this technology creates a vivid, ultra high contrast picture, maximum brightness is limited. So, OLED is a technology that looks best, and works best in a relatively dark room. OLED TVs can be viewed from any angle without any loss in brightness or color. The panels can be made extremely thin. But OLED panels are far more expensive to make. One reason is they use the element Iridium, which is very rare. It is believed Iridium came to Earth on a meteorite... the one that killed the dinosaurs 75 million years ago.

NEW! XBR55A8G \$1999 65A8G \$2999 MASTER SERIES 55A9G \$2799 65A9G \$3799 77A9G \$6999 \$8000



ALL SONY 4K TVs Shown above ...
4K UHD 3840 BY 2160 8.3 million pixels
HDR High Dynamic Range Dolby Vision, HLG HDR10
Sony X1 Extreme processing engine enhances picture object by object
X-Reality PRO upscales images at pixel level for ultra sharp low noise
HDR Remaster improves standard dynamic range pictures
TRILUMINOUS produces a far wider and more accurate color rendition
10 bit panel displays over 1 billion colors
MotionFlow XR reduces blur and judder now with various adjustments
Built-in Bluetooth and advanced Wi-Fi
Built-in Google Home Assistant and voice control and works with Alexa

SONY SXR. In 2005, Sony introduced the first home-use TV to offer Full HD. Each of its 3 chips had 1920 pixels on each horizontal row and 1080 rows for a total of 2,073,000 pixels x 3 for over 6 million pixels.

Conventional LCD chips had spacing between each pixel. When the image was projected and magnified, that spacing between pixels could become visible. It is called the "screen door" effect. Sony's micro manufacturing and in-house IC chip manufacturing enabled Sony engineers to come up with a new chip with only 9 nanometers spacing. This is 1/10 the thickness of a human hair.

SONY SXR... The First Native 4K TV. Way back in 2004, SXR chips were developed for commercial movie theater projectors with 4K chips. There are over 18,000 movie theaters that use Sony 4K SXR video projectors.

Speed. It has been said that LCD chips have a lag which sometimes caused picture blur. The SXR chips are very conservatively rated to have a 2.5 millisecond rise time.

Brightness. A video projector, like a old slide projector or a film movie projector, needs to be used in a relatively dark room. New screens have been devel-

oped, and some brands claim they can be watched in a well-lit room, but after more than 100 years, movie theaters remain dark. There is no standard for measuring a video projector's brightness. In side by side comparisons, people said Sony projectors were brighter, even though the ANSI Lumen ratings on other brands were twice as high. Sony SXR projectors with HDR offer a very high contrast ratio and create a true Cinema-like quality in your home.

Calibration. Based on the technology found on Sony professional SXR projectors, this projector has many professional adjustments normally only found on those sets in commercial movie theaters.

Spinning Wheels and eShift. There are less expensive video projectors that claim 4K. Some use 1080 chips and shift the chip really fast to simulate a 4K image. The Sony SXR chips are true native 4K with 8.3 million pixels each. Another technology is DLP which now has a native 4K chip, but uses a motorized spinning wheel to use the same chip for 3 colors... a system of color TV used in the 1950s. Each color is shown sequentially and this can effect the picture, especially as you turn your head. SXR projectors are true 3 color 4K.

Our \$5700 Audio Perfectionist Component System Sounds Like a Million Dollar Stereo!

DENON

GoldenEar Technology
A Passion for Sonic Perfection™

We mean it! Could you really spend a million dollars on a stereo system? Yes, you can. A million bucks for stereo for a home, not commercial system, but for a living room. We have critically listened to many extremely expensive systems, and while the speakers might sound perfect, you know you are hearing music from a speaker.

The GoldenEar speakers we highly recommend, and sell lots and lots of, let you close your eyes and think the band, or the symphony is there in your living room. The music does not sound like its coming out of a box.

The GoldenEar Technology Triton Two. \$3500.

HVFH Tweeter. At Alterman Audio we talk a lot about tweeters. Please check out page 3, where we explain why GoldenEar's High Velocity Folded Horn Tweeter, (Heil tweeter) makes these speakers so much more musical. The music doesn't sound like its coming out of a box.

Cast Basket Woofers. If the tweeter is ultra fast, then the woofers must match up. The sound must be blended. To insure proper cone movement, Golden Ear uses real phase plugs and cast basket frames with high Gauss magnetic assembly.

The Triton Two has two 4.5 inch mid woofers.

Built-in Powered 1200 watt

Subwoofer. Sandy Gross made the first speaker with a built-in powered subwoofer. By using a special racetrack shaped woofer, the Triton Two is an ultra thin petite tower.

This bass reproduction is created by two 9 inch by 5 inch racetrack shaped woofers. These use a long throw design that enables them to move great distances and push a lot of air. These are coupled to 10 inch by 7 inch planar pressure bass radiators.

The woofers are driven by a 1200 watt Forcefield DSP power amp. It has direct connection to the built in electronic crossover or LFE (low frequency effects) RCA line input from subwoofer output of your preamp processor or receiver. There are adjustments for level, phase and crossover frequency.

"My experience of listening with them paralleled previous encounters with no-holds-barred speakers---ones priced upwards of \$50,000," so commented Al Griffith of *Home Theater Magazine*. See page 3.

The NEW Denon PMA-1600 MOSFET Amp. \$1600.

The transistors used in 99% of all amplifiers are called bipolar transistors. Imagine an old-time bucket brigade, where people are trying to put out a fire. They are passing buckets full of water in one direction and at the same time, passing empty buckets back. Water is the current, and the current flows in two directions simultaneously in regular bipolar transistors.

MOSFETs are Metal Oxide Semiconductor Field Effect Transistors. They have a source, a gate, and a drain, and like a toilet, when you flush, lots and lots of water (current) goes down the drain... to instantaneously drive and tightly control your speakers. Denon calls these UHC for Ultra High Current.

When an amplifier runs out of power, it is called clipping. Bipolar transistors distort badly and suddenly when they run out of power. MOSFET transistors have soft clipping, and begin to distort mildly and gradually run out of power. The distortion produced by conventional transistors is called odd-order and human ears find this very objectionable. MOSFETs produce even-order distortion, which is far less objectionable to the human ear.

Rated power is 80 watts per channel at 8 ohms, 20 to 20 kHz, but 140 watts into 4 ohms. This shows the huge energy reserve ability of the PMA1600

power supply. The circuit is true push-pull complementary, with minimum circuit elements, all designed for the highest musical fidelity.

Like tubes, MOSFET amps sound like they are far more powerful than their ratings would indicate.

High Quality DAC. Two digital inputs, coax and optical, plus a dedicated USB input offers the highest quality digital decoding. This includes resolutions up to 384 kHz at 32 bit and 11.2 MHz DSD, the format found on Super Audio CDs. Denon's AL32 processing circuitry insures the highest quality playback. To take advantage of these ultra high resolution formats, frequency response extends to 100kHz.

Rigid Construction. A 1 mm thick steel plate with anti resonance resins insures extreme rigidity for improved sound quality. Build quality *does* matter.

Dedicated Phono Input. People are listening to vinyl records again. A high quality phono preamp and equalizer stage is included in the PMA1600. This includes a pre-amp for moving coil phono cartridges, which are considered by many to be the best kind. MC cartridges put out far less voltage, so they need a pre-booster. It's built-in.



The NEW Denon DCD-800 \$500.

Denon has been a leader in digital audio since its inception, and made one of the first digital audio prototypes. That long heritage is now represented in this very reasonably priced, high quality CD player.

Advanced AL Processing Plus. This advanced algorithms add to the points that should exist in a waveform, increasing musical accuracy. A USB input allows playback of high resolution music with increased accuracy compensating for digital losses and allowing playback via USB of better than CD quality music.

DAC Master Clock. Timing is everything for careful and accurately converting the digital code back into analog music. The master clock synchronizes the D to A converter which is mounted next to the precision clock circuitry, which reduces jitter and increases accuracy.

Vibration Resistant. The Beach Boys sing about good vibrations, but music in the air causes unwanted vibrations which effect the electrical performance of electronics. The power transformer, which tends to vibrate, is mounted on special insulators, and away from critical circuit components. The entire design is accomplished with better sound quality in mind.

Triton Two Plus: \$3500 pair

Two 5 x 9 long throw subwoofers coupled to two 7 x 10 planar infrasonic radiator
Two 4 1/2 in cast basket MVPP mid bass drives; One HVFR (Heil) tweeter
Front of tower: 5 1/4 inches. Rear of tower 7 1/4 inches
48 inches tall without spikes; Depth 13 inches
Base: 11-1/2 in by 18 inches Weight: 60 pounds, Shipping 74 lb

All components available separately
New PMA-800 Denon \$599 New GoldenEar Reference... see page 12





Our SONY ES and GOLDEN EAR 5.1 System Offers Fantastic Music Quality and Outstanding Home Theater Sound at a Very Reasonable Price!



This is our best selling surround sound system. The reasons are...

We include GoldenEar speakers. They are small, but their sound is BIG! They have a different kind of tweeter that gives them that big sound and makes them sound more like live music.

We include a Sony ES... Elevated Standard receiver. Sony ES has a FIVE YEAR WARRANTY. No other brand at any price has this long a warranty. ES receivers sound better!

The GoldenEar SuperSat 3. \$250 each. It is only 12 inches tall and 4 1/2 inches wide only 2.7 inches deep. So it can hang on the wall with a simple screw. It can mount on pivoting wall bracket with a screw on attachment. It can be placed on a shelf or table vertically or horizontally, or on matching floor stands. It allows easy placement on the side of your TV. And the center version sits horizontally above or below your TV. The rears are easily mountable, or you can use the in-ceiling counterparts.

The Heil Tweeter: A tweeter has to move the air, back and forth, twenty thousand times a second. It must be lightweight, low in inertia, to push the air to replicate the sound accurately.

GoldenEar speakers use a different kind of tweeter called a High Velocity Folded Horn, or Heil tweeter.

When a regular round tweeter cone is made of aluminum, cloth, or some other exotic material, that cone, and the attached voice coil are 100 times heavier than the plastic diaphragm of the Heil tweeter. Because of the folded plastic design it radiates sound over 10 times the area of a typical one inch dome tweeter.

The SuperSat3 is made of a rigid anti-vibration cabinet. The front baffle has indentations to minimize diffraction. It has two 4.5 inch cast basket woofers. A multi vaned phase plug and computer designed cone technology prevent interference from one side of the cone with the other. Other well engineered speakers have this, often for \$3000!

GoldenEar ForceField 3. \$500. This is an amazing powered subwoofer. With 1000 watts of digital power, the special 8 inch woofer produces powerful, dynamic, lifelike bass. Attention to detail includes the 2 inch thick rubberized feet to reduce vibration.

Homogenized Sound. Another important design aspect of the Golden Ear sound is the blending of the drivers. There is a seamless transition from tweeter to woofer and even to the pow-

ered subwoofer.

The SONY ES STR-ZA810ES. \$700. Sony ES (Elevated Standard) is built better to sound better. ES is designed for high quality sound. The STR-ZA810ES has built-in Bluetooth, built-in Wi-Fi and Google Chromecast. It has 100 watts x 7. It is a two zone receiver which will let you watch a movie in 5.1 surround sound in your den, and simultaneously listen to the FM (there is no AM) radio, or other source on wired speakers on your patio or bedroom.

USB Music. Trending now is high resolution music. When you buy an album on iTunes, it is not CD quality. And yet, the CD is 33 year old technology. Other on-line music stores sell music in higher than CD quality. The CD has a sampling rate of 44,100 samples per second. High resolution music has higher than 44.1k... 88.2k, 96k or 192k. There is another format called DSD or Direct Stream Digital. This is the format used on the Super Audio Compact Disc (SACD). It has a sample rate of 8,822,000 ... and you can download music in this ultra high resolution file and put it on a hard drive or thumb drive and plug it into the Sony receiver and it will play it!

SONY UBP-X800 \$300. There is a new video format. It's called 4K Blu-ray and it provides the absolute best picture and sound for your new 4K TV!. 4K Blu-ray movies do not play in regular Blu-ray players. This is a true universal disc player. It doesn't just play Blu-ray movie discs, but plays standard DVDs, regular music CD's, High resolution DVD-A discs and Super Audio CD's.

This is a high quality machine with frame and beam construction. It has built-in Wi-Fi and Bluetooth. You can plug a hard drive or thumb drive in and it will play files. It plays all types of high resolution music files up to 192k 24 bit and DSD, Direct Stream Digital from the SACD format.

Many folks these day stream their movies from Netflix or Amazon Prime and ask why get a disc player. Because you can rent or buy far more great movies on disc than stream. And movies and music on disc sound better and look better!

Total list price of components: \$2750

Prices shown are MSRP. We match all manufacturer's promotions. Please check in store for Alterman Audio System price and laginappe



Denon DP300F Full Automatic Turntable with Preamp \$329

Precision belt drive DC driven with servo speed control
 Heavy plinth and high quality feet to prevent acoustic feedback
 Full automatic operation with Start and Stop buttons on front panel
 Damped cueing to gently lower tonearm on record
 Heavy rubber mat
 Detachable headshell with installed moving magnet cartridge, easily upgradeable
 Counter balanced, low friction tonearm with anti-skating adjustment
 Built-in phono preamp with RIAA equalization for hookup to line level



Pro-Ject The Classic SB \$1499

While Pro-Ject is famous for making precision, "affordable" turntables, when price is less restricted, precision, quality, and sound quality significant advances. Using suspension designs of the 1960's The Classic SB uses MDF and metal in a suspended chassis which isolates air born vibrations from the table. A nine inch carbon fiber tube tonearm is low mass with precision Zircon pin-point cardan ball bearings. Pre-mounted is Sumiko Blue Point No 2 high output moving coil phono cartridge. TPE dampened machine metal platter with leathette mat. Height adjustment leveling feet. AC synchronous motor with DC generator for speed stability. Includes weight clamp. Wood base.

Vinyl Is Back!

Top Rated for Sound Quality Precision Turntables

When they introduce the band on late night talk shows, they hold up the 12 inch vinyl record, not a CD. Teenagers request turntables for Christmas presents. And old audiophiles and music lovers are dragging their turntables out of their attics and reconnecting with vinyl.

Whether it's the effort to put on a record... the ritual, or the fact that all the music is in the analog grooves unlike digital, which is just sampling, people young and old are going back to vinyl.

Your records are precious. Some are old and have music you loved that never came out

on CD. Or, new albums, made with 180 gram vinyl and precision manufactured are expensive... you don't want to play your records... your music... on a \$99 record "grinder."

The tiny needle has to drag the tonearm across the record. The tonearm needs to be free as possible to move, not to interfere with the tracking of the needle. That means light weight, low in mass, low friction. It requires precision bearings to allow the free movement.

The motor must rotate the record at precise 33-1/3 revolutions per minute. The speed can't vary, causing a war-

bling sound called wow and flutter. The motor must not create vibrations ("rumble") loud enough to be picked up by the needle.

The quality of the needle itself effects the sound. The needle moves back and forth in the grooves creating a voltage. This must exactly replicate the modulated grooves. The needle fits in the cartridge and can cost as little as \$50 or as much as \$10,000!

The cartridge-needle must match the characteristics of the tonearm.

On this page are a variety of quality affordable turnta-



Audio-Technica ATLPX120 Direct Drive. \$249.

Old school, heavy base Direct Drive turntable with strobe Pitch control for effects and getting playback perfect Plays 78s

Low friction, S shaped tonearm
 AT95E Elliptical Moving magnet phono cartridge pre-installed on detachable headshell
 Switchable built-in phono preamp with RIAA equalization



Pro-Ject Debut Carbon. \$399

Affordable and top rated by audio magazines around the world
 Carbon Fiber lightweight, low inertia, low friction tonearm
 Sub platter design with aluminum main platter
 Pre-installed high quality Ortofon 2M Red moving magnet cartridge
 DC controlled synchronous motor for constant speed
 Heavy anti vibration plinth
 Counter balanced arm with anti-skating
 A true Audiophile Best Buy



Audio-technica ATLP3 Auto Turntable. \$199.

One of only a few quality turntables with automatic start and stop.
 Front panel start and stop, speed selection
 Detachable headshell for easy cartridge upgrade
 Includes AT95E Elliptical cartridge pre-mounted
 Counter balanced tonearm
 Built-in phono preamp for MM or Moving coil
 Bypass switch for phono preamp
 Available in white or black



SONY HiRes Turntable. \$399

High quality belt drive turntable intended for digitally archiving vinyl
 Uses Sony's ultra high resolution DSD format
 Also creates CD quality, 96k or 192k 24bit files
 Low friction counter balanced tonearm
 Heavy plinth to reduce acoustic feedback
 Heavy thick rubber mat
 Aluminum platter
 Rated Class B by *Stereophile* magazine

Pioneer and SVS Affordable Dolby Atmos 9 Speaker Surround Sound

120 watts Real Audio Power x NINE
Power 3 zones separately
Built-in Bluetooth and Wi-Fi
Plug in a turntable with real phono input
Control it all by an App on your phone
Top Rated SVS speakers
Plays High Resolution Music files
4K ready



Dolby Atmos is a new technology for Surround Sound. It is called an Object-Oriented system as opposed to conventional Dolby surround sound which is channel-based.

With conventional Dolby, sound engineers mix surround audio to place sound between pairs of speakers. But Dolby Atmos uses more speakers and computer mixing techniques, yielding virtual objects that can be more accurately placed and moved around the three dimensional space of the room, creating an even more realistic "you are there" experience when enjoying a motion picture.

Dolby Atmos requires speakers in the ceiling (or speakers aimed at the ceiling).

It can be configured with various numbers of speakers and placement of speakers.

Our system shown here is configured as a 5.1.4 system. The first number denotes the ear level speakers, the second the subwoofer, the third, height or ceiling speakers. Since the subwoofer has its own amplifier, this system requires nine amplifiers: Left and right front (or main), a center; left and right rear, and a pair of front ceiling speakers and a pair of rear ceiling speakers.

The Pioneer Elite VSX-LX504 \$1000.

Pioneer's Elite line is designed for higher quality, like a Lexus is a step-up from a Toyota Camry. The new LX504 has NINE built-in amplifiers so all the speakers of this Dolby Atmos system can be powered by this one receiver, without adding extra amplifiers.

Each of the NINE amplifiers is rated 120 watts! That's 120 x 9 real audio power with .08% distortion. Full audio range 20 to 20kHz.

Alternatively, instead of powering a 9-channel home theater, the VSX-LX504 can be configured as a *three* zone receiver, allowing a 5.1 theater in your den, allowing (for example) a pair of speakers outside on your patio AND simultaneously a pair of speakers in your bedroom... ALL PLAYING DIFFERENT MUSIC. THREE POWERED ZONES.

Even much more expensive receivers that have 9 amps built-in, will not power 3 zones without an additional external amp.

4K Ready. Plug an HDMI line in from a satellite receiver or 4K Blu-ray player, and next generation 4K, including HDR and Dolby Vision are all passed to your 4K TV.

Built-in Phono Preamp. Turntables are back and a special preamp is needed to boost and equalize the small signal that comes from the phono cartridge. The VSX-LX504 has it.

USB Music. Trending now is high resolution

music. The CD is 36 years old. You can buy music with higher resolution than the old CD, from on-line special music stores. Copy those music files to a thumb drive or hard drive and this receiver will play High Resolution music.

Built-in Bluetooth and Wi-Fi. While better AV receivers now connect to your internet, this Pioneer allows wireless connection to listen to music from your computer, Apple Airplay, internet vTuner, Pandora, Spotify and even Netflix, Tidal and Deezer. It has built-in Chromecast, so you cast music from your phone to the receiver and play it through the great sounding speakers. You can even use voice commands for the Google Home Assistant. It has PlayFi and Sonos connect that allows operation via Sonos speakers you may already have in different rooms, from any room.

SVS Prime Bookshelf. \$500 pair. Who says a speaker has to cost thousands (and many do) to sound good? Accurate frequency response, true dynamics, and transparency, at very affordable prices are the hallmarks of SVS. But packed into a bookshelf sized box is an unusually high quality of component parts and precise speaker engineering. For example, found on very expensive speakers are air core inductors, but they're used in the crossover of the SVS Prime Bookshelf. This helps the crossover (which separates frequencies to the woofer and tweeter) maintain excellent phase response and time domain behavior.

FEA optimized design reduces diffraction of the speaker grilles and was used in bracing the cabinet. The 6.5 inch woofer is a high quality unit. It is mounted flush with the chamfered front panel to reduce diffraction and improve dispersion.

The 6.5 inch woofer uses a polypropylene cone for excellent stiffness to mass ratio. This improves transient detail of the woofer, as opposed to boomy bass. Cast ABS fiberglass basket insures critical component alignment.

Rated impedance is 8 ohms. Sensitivity 85 db. Rated power 120 to 150 watts.

Prime Center: \$350. Most of the dialog you hear from movies comes from the center speaker. And accurate voice reproduction is critical. The SVS Prime Center is a true 3-way design, unheard of at this price.

Surrounds: Prime Elevation. \$400 pair. Designed to be mounted higher on the rear wall, this 4.5 inch two way speaker includes wall mounting hardware.

SVS SB-3000 Subwoofer. \$999.99
SVS originally came into fame with its subwoofers. This is a 12-inch sealed box design.

Sealed boxes have a smoother rolloff and better transient response. Power is 500 watts RMS or 1100 peak watts Class D. Adjustable low pass filter. Adjustable level control. Very rigid solid cabinet for excellent bass performance.

Atmos Ceiling and Rear Surround: SVS Prime Elevation. 3 pair. \$400 pair. So, for Dolby Atmos configured in a 5.1.4 for Atmos we include one of the most versatile



speakers, the SVS Elevation. This can be used for various positions in your room. Here we are using them for Dolby Atmos height speakers. This compact 2-way uses the same aluminum tweeter and 4.5 inch woofer as the rest of the line, timbre-matched with all other SVS speakers. A patent pending unique speaker mount is included. Prime Elevation are used for the regular surround speakers mounted on the wall high, or even the ceiling



for Atmos speakers (in-ceiling speakers can also work). In fact, all components are sold separately and various choices might be recommended based on your room, your zones and your budget.

Pioneer Elite VSX-LX504	\$1000
SVS Prime Sat Front 1 pair	\$ 500
SVS Prime Center	\$ 350
SVS SB-3000 Subwoofer	\$1000
SVS Prime Elevation Rear 1 pair	\$ 400
SVS Prime Elevation Atmos x 2pr	\$ 800
TOTAL SYSTEM PRICE	\$4050

Announcing ... The Triton Reference \$9000

People wondered why Sandy Gross, President of Golden Ear Technology, would name his top of the line speaker the Triton Two. Well, in 2014 the answer came when the GoldenEar Triton One was introduced for \$5000 a pair. It quickly collected industry awards... "Loudspeaker of the Year", and "Product of the Year" in audio publications around the world.

Affordable High End. While many would consider \$5000 very expensive, if you peruse the pages of high end audio magazines, such as *Stereophile* or the *Absolute Sound*, or their equivalents from around the world, therein you will find speakers for... not just \$10,000 or \$20,000, but speakers that sell for over \$100,000! These speakers are not for commercial recording studios, or live sound systems, but people's (very rich people's) living rooms.

Yet, reviewers compared the GoldenEar Triton One at \$5000 with many of these ultra high end speakers. The magazine reviewers, the stores that sold them, and the customers that owned them all praised the GoldenEar Triton One. It was a fabulous success!

Yet, in the world of high end audio it was downright quite affordable.

With GoldenEar's success, basic research and experimentation to engineer an even better loudspeaker was implemented. A new flagship, with fewer constraints on cost, would be bigger, better, and prettier than the Triton One.

Enter the Triton Reference. \$9000. The Triton Reference arrived mid 2017. It is not revolutionary, but evolutionary, except for one thing. Gone is the cost saving black sock. Instead, a gorgeous hand-rubbed, piano gloss, black lacquer wood monocoque cabinet oozes quality.

All the components inside have been re-designed, increased in size... all to increase sonic musical integrity.

Heil HVFR. A key component to GoldenEar's

musical realism is the Heil Air Motion Transformer tweeter. It was re-engineered for the Triton Reference. It has 50% more neodymium magnet material for increased control, lower distortion and higher efficiency.

The Woofs. The Reference uses new technology mid-woofers which are 6 inch instead of the One's 5 1/4 inch. New manufacturing techniques are utilized along with a phase plug to prevent sound from one side of the woofer interfering with the other. The mid-woofs are isolated in a separate chamber from the main woofers.

The Powered Subwoofer System. The race-track low frequency drivers are 6 inches by 10 inches. They are coupled to four inertially balanced Quadratic infrasonic radiators. All this is powered by an 1800 watt amp (remember, this is in each tower) with a 56 bit DSP control unit. This is a significant advancement over the Triton One.

More... New internal wiring with a specially developed fully balanced crossover with film capacitors. A proprietary mix of long fiber lamb's wool and Dacron improve internal dampening. Extensive cabinet testing with bracing along with a 3/32 inch thick steel plate increase cabinet rigidity.

And Now ... The Triton 1.R One Reference \$6000

The Big Surprise. On December 1, 2018, Sandy Gross announced a new speaker. Usually new models are introduced at the CES show in early January and usually those new models don't come for months. The Triton One.R was ready to ship and the price... \$6000.

All the refinements, re-engineered drivers, cabinet improvements, even the hand rubbed piano gloss design of the Reference are now in a slightly smaller



GoldenEar Triton Reference. \$9000 pair
Front: 5 3/4 inches wide; rear of tower 8 in wide; 58 in high
Base: 12 1/4 w 19 3/4 deep
Three 6 x 10 racetrack sub bass drivers;
Four 9.5 by 10.5 in planar infrasonic radiators
Two 6 in high definition cast-basket MVPP mid/bass drivers;
One Reference HVFH AMT tweeter
Built-in electronic crossover 56 bit DSP controlled
1800 watt Class D sub-bass driver amplifier

GoldenEar Triton One.R. \$6000 pair
Front: 5 3/4 inches wide; rear of tower 8 in wide; 54 in high
Base: 12 1/4 w 19 3/4 deep
Three 5 x 9 racetrack sub bass drivers;
Four 7 by 10 in planar infrasonic radiators
Two 5 1/4 in high definition cast-basket MVPP mid/bass drivers;
One Reference HVFH AMT tweeter
Built-in electronic crossover 56 bit DSP controlled
1600 watt Class D sub-bass driver amplifier

Loudspeaker of the Year: GoldenEar Technology Triton One
Runner Up: Product of the Year: GoldenEar Technology Triton One

Stereophile Magazine November 2015

"It provides extraordinary sonic quality and value for the money. It does not fall short in a single area of performance. It is intensely musical and sells for a semi-affordable \$5000 pair. ...but their real merit is that they provide sensational musical pleasure with exceptional realism. Highly recommended." Triton One
Absolute Sound Anthony Cordesman October 2014

"This is the Holy Grail of Audio we all seek." Triton Two
Stereophile Magazine Robert Deutsch

"GoldenEar Tech's scaled down version of its Triton Reference loudspeakers manages to deliver a sizeable percentage of that flagship model's performance (also awarded Top Pick of the Year, in 2016) at an equally scaled-down price. Not just a top Pick but an exceptional value." Triton One.R. Top Pick 2018

Sound & Vision January 2019

"What makes GoldenEar speakers so beloved is that they

combine stunning detail with staggering dynamics. That folded motion tweeter, combined with the powered bass section, results in equal authority across the entire audible frequency range." Triton Reference
Home Theater Review.com December 2017

"GoldenEar's Mind-Boggling New Triton One.R Delivers Superb Reference Performance!"
Stereophile Magazine Robert Deutsch

Loudspeakers \$500-\$1000: Aon 3
Loudspeakers \$1000-\$1500: Triton Seven
Loudspeakers \$1500-\$2000: Triton Five
Loudspeakers \$3000-\$5000: Triton Two+
Loudspeakers \$3000-\$5000: Triton One
Loudspeakers \$5000-\$10,000: Triton Reference
Subwoofers: SuperSub X, SuperSub XXL
Absolute Sound Editor's Choice Awards 2019 March 2019

"GoldenEar Technology has been knocking it out of the park for years now with the products they have been designing and manufacturing, and has been known as a value leader in the high end community. When you look at the all-star system we have assembled, it still carries a price of \$16,700, which is a lot, but when compared to

many other manufacturers' gear at the high end level, it is an absolute bargain. Highly recommended!"

Secrets of Home Theater. te Sound December 2018

Loudspeaker of the Year: GoldenEar Triton Reference
Sound + Image Awards November 2018 Australia

"In terms of getting the highest possible audio quality at non-car prices, there is perhaps no better speaker company on earth than GoldenEar Technology..." Triton Five
Digital Trends March 2019

"Revelatory Cosmically Orgasmic ... a Magnificent Magnum Ous... These Speakers Absolutely Embalm the Competition. With the Triton Ones, GoldenEar Technology has fully ushered in the Golden Age of the Loudspeaker." T
Sound and Vision Darryl Wilkinson

"Buble sounded so fabulous through the One.R's that I listened to all 34 minutes of it more than 20 times during the review cycle, and each time liked it more... Man oh man, did Buble's voice ever have presence and palpability -- a reach-out-and-touch-it sound... *Soundstage Network*
Doug Schneider



Parasound is Class A

Parasound is a company whose Halo products have received the coveted "Class A" rating by *Stereophile* Magazine. The *Absolute Sound's* Editor's Choice Awards includes five Parasounds in its brand new listings. On line critics and pundits, audio magazines around the world, all rave about the quality and musical realism of Parasound preamps, phono stages and outstanding power amps.

Parasound's founder, Richard Schram started in audio at Pacific Stereo, while in college. He stayed with Pacific, which grew into a large California chain of stores and moved up to store manager. The stereo hi-fi business was so big, in 1973, CBS bought the retail stereo store chain. Richard Schram was given the task of developing a line of stereo components made and only sold by Pacific Stereo. He made many trips to Japan, developed relationships with "contract manufacturers" that build parts and finished products for other companies. He learned the ins and outs of audio engineering and dealing with manufacturers. He had the money and backing of CBS, CBS/Sony music, and the CBS Technology Center in Connecticut. In 1980 he left Pacific Stereo and by the end of 1981 had introduced the first Parasound model.

While the first Parasound products were sourced in Japan, as the Japanese Yen soared in value, many of the small companies he did business with, could not compete. Richard Schram knew small manufacturers, owned by audio people in Taiwan, and using his

expertise and design and manufacturing know-of switched production to companies in Taiwan. Some of these manufacturers he has been working with for many decades.

At first, Parasound made OEM products for other companies and big stereo store chains, including CD changers for bookstores, amps for subwoofers, even tuners, but as that business diminished, Parasound shifted to preamps and amps. In 1988 John Curl joined the team helping with amplifier design. Parasound's quality and reliability attracted other manufacturer's attention. Parasound made OEM products for Krell, Aragon, and Classe.

John Curl is one of the most respected audio engineers. He designed tape recorders at Ampex, preamps at Mark Levinson, phono stages for SOTA, sounds systems for the Grateful Dead, he worked with Saul Marantz and the list goes on. John Curl's influence on Parasound includes using JFET and FET driver transistors, which improves ability to handle changing impedance loads. His designs use multiple, high current, reliable output transistors. True balanced preamp and amp operation reduces noise and distortion.

In all, the highest audio fidelity is achieved in Parasound with ultra low noise, and high current to really power your speakers, and total reliability because top parts selection and conservative design. All, at what would have to be considered affordable prices, comparing the ultra high price tags found on many audio preamps and amps. All models now available in black



Parasound Halo A-21+ Power Amp \$3195 New
 AUDIO POWER increased from 250 to 300w 8 ohms
 AUDIO POWER increased from 400 to 500w 4 ohms
 AUDIO POWER increased from 750 to 1000w bridge
 60 amperes of current; staple with 2 ohm loads
 Balanced inputs; JFET input and MOSFET drivers
 16 beta matched 60 MHz 15 amp bipolar outputs
 Multiple power supplies, full power down to 5Hz



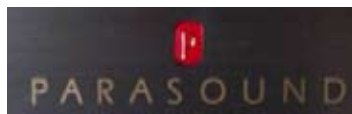
Parasound Halo P6 Preamp \$1499 New!
 Adjustable phono input for Mov Coil and MM cartridge
 ESS Reference asynchronous USB DAC 192k 24 bit
 Native DSD64, 128 up to DSD 256
 Home theater by pass
 XLR balanced input and XLR balanced outputs
 Dedicated high current headphone amp
 Analog high and low pass subwoofer adjust filters



Parasound Halo HINT6 Amp \$2999 New
 Combines P6 Preamp with high power amp
 AUDIO POWER 160 watts x 2 8 ohms; 240 w at 4 ohms
 45 amperes of current; staple with 2 ohm loads
 Balanced inputs; JFET input and MOSFET drivers
 12 beta matched 60 MHz 15 amp bipolar outputs
 Multiple power supplies, full power down to 5Hz



New Parasound JC-5 Power Amp \$5997
 AUDIO POWER 400 watts 8 ohms; 12 watts Class A
 AUDIO POWER 600 watts 4 ohms
 AUDIO POWER 1200 watts bridged @ 8 ohms
 90 amperes of current; staple with 2 ohm loads
 Rubycon filter caps 132,000 uF
 24 beta matched 15 amp 60 MHz bipolar outputs
 Custom CHK speakers connections handle 7 gauge
 JFET inputs, MOSFET pre drivers
 Vampire gold plated RCA
 Balanced XLR inputs and outputs
 Independent left right power supplies
 Weight: 73 pounds



NEW! Coming Soon. New classic 200 Int Amp \$1195
 Moving magnet or moving coil phono input preamp
 110 watts RMS x 2 20-20kHz @ 8 ohms
 Built-in 192k 24 bit high resolution DAC; opt, coax and usb
 Home theater by pass mode
 Adjustable high pass low pass subwoofer dual sub outs
 Two RCA line level inputs



Parasound Zphono preamp \$200
 Moving magnet or moving coil switchable gain
 Allows hookup of turntable to line level input
 Properly does phono RIAA curve accurate to .25 db
 Ultra low distortion, audiophile grade
 Very low noise high speed op amps
 Parasound offers 3 higher grade phono stages

Amazing Affordable Name-Brand True 5.1 Home Theater Surround Sound System



Surround Sound done right includes a speaker to the right of your TV screen, one to the left, a right and left rear (surround), a subwoofer to make the bass, and a center where most of the voices come from. That's called 5.1.

It's all you need for a great home theater experience in your home.

To control everything and power the five speakers you need an audio video receiver.

To get the best picture and sound we recommend to include a Blu-ray player. Most people don't know their Blu-ray player also will play their music CDs. And the little Sony included here adds Wi-Fi and internet connection that the receiver does not have. It's price is only \$79!

The Receiver: Pioneer VSX-534. \$279. A The receiver consists of three parts.... the radio, the hookups and the power amps.

AUDIO POWER: 80 watts x 5. There are five separate amps in this receiver to power the five speakers. We called it Audio Power, because the 75 watts PER CHANNEL is rated over the full audio range that humans hear: 20 to 20 kHz for 0.08% THD at 6 ohms. At big box stores they allow ratings that yield far more distortion and only middle frequencies, so with less stringent parameters allow for far bigger ratings. At big box stores this receiver is rated 150 watts per channel, (for 10.0% distortion) and might be listed at 750 watts by adding all the amps together. This is against FTC advertising rules.

CONNECTIONS... The receiver is the control center. You plug things into it. If you have cable or satellite, you connect the HDMI cable out of the cable box to the receiver's HDMI in. If you have an X-Box or Playstation, it hooks up HDMI. You plug

your Blu-ray in with HDMI. The VSX-534 has four HDMI inputs that pass 4K to a 4K TV via the HDMI output.

Additionally there are two composite, yellow standard video inputs with 2 pairs of left/right audio to plug in other stereo equipment, such as a turntable (with built-in preamp), plus another audio only input. There's a USB front panel connection that allows you to play music from a hard drive or flash drive. One coaxial and two optical digital inputs are also provided.

RADIO: VSX-534 has AM and FM stereo radio. The receiver allows for 30 presets. It does not get internet radio or on line Apps, but our low price Sony Blu-ray player does.

MCACC: Pioneer was the very first company offer a mic and built-in computer to measure and then adjust for room acoustics. Pioneer calls it MultiChannel ACoustic Calibration.

Warranty: One years parts and labor

SONY BLU-RAY. Why would you want a Blu-ray DISC player when you can stream all the movies you want from the internet? BECAUSE YOU CAN'T! Netflix has hundreds, even thousands of movies available anytime on line. But, they have many many more, ON DISC you can rent and unlike those on line, you probably heard of them. Of course there are pay per view movies, and other services. But this high quality Blu-ray offers so much more for just \$79!!!!

Built-In Wi-Fi. The Pioneer low price receiver does not have Wi-Fi. More expensive Pioneers have Wi-Fi, but add the \$79 Blu-ray and you now have Wi-Fi in your system to get Apps like Pandora, Spotify, iHeart Radio, Netflix etc., etc. It has

Bluetooth too.

PLAYS CD's. Sure you can stream all kinds of music, but streaming MP-3's does not sound as good as CD's. And there's lots of music you can't find on line.

PLAYS DVD's. Like maybe your kids Disney movie which are not on Netflix.

PLAYS MUSIC FILES. You can now buy music files as digital downloads that offer higher resolution. CD offers a 44.1kHz sampling rate. Transfer high res music, 96k 24 bit or 192k 24 bit to a hard drive or thumb drive, plug it into the front panel and this Blu-ray plays great Hi Res music.

THE SPEAKERS: SVS PRIME SATELLITE. \$135 each. The new Prime Bookshelf is a fantastic, well-made, great-sounding audiophile grade loudspeaker. It is used in this system for front, rear and center. It is a two-way design with an aluminum dome tweeter and polypropylene 4.5 inch woofer.

Rarely is a speaker so well made, built-so well, so compact, yet sounds so great. The cabinet is braced and has been FEA optimized. It easily mounts to the wall with a built-in keyhole slot.

SUBWOOFER SB-1000. \$499. At \$500 there are few powered subwoofers that use a 12 inch driver to effortlessly produce low frequencies with high output power. For more accurate sound, the woofer is a front firing design. It offers excellent transient response. Power is 300 watts RMS and 700 watts peak. Even with it's 12 inch woofer, the cabinet is only 13 by 13 by 14 inches.



Prime Wireless Speaker System. \$599

High Quality with four part 200 watt amplifier
Wi-Fi Bluetooth, Play-Fi for full control from your phone
Built-in Wireless music Apps,
192k 24 bit DAD for high resolution music ability
Additional analog and optical inputs, sub output



SVS Prime Wireless Soundbase \$499

150 watt/ch amp to drive most speakers... real power
Add 2nd zone to a receiver using Wi-Fi or Bluetooth
Analog inputs optical inputs subwoofer output
All controllable by your phone
192 k 24 bit DAC for high resolution audio
RCA audio out to add wireless to legacy components



SVS Soundpath

Wireless Audio Adaptor. \$119.

High quality 2.4 GHz wireless transmitter and receiver
Connect subwoofer wireless with no loss
Connect rear surround speakers
Add music outside on the patio
CD quality with low latency 25.5 milliseconds
Includes connection cables
Receiver must be connected to separate amplifier

OLD IS NEW! REINCARINATION OF KLH

Before the introduction of the first stereo record in 1957, a new speaker company was created. It was called KLH, based on the names of the three founders, Henry Kloss, Malcom S. Low and Joseph Hofmann. KLH Research and Development Corporation went on to become the largest speaker company in the world. It employed over 500 employees and sold 30,000 speakers a year. KLH, led by Henry Kloss, introduced so many new ideas to the stereo industry they can't be all listed here. But, Henry Kloss got Ray Dolby to create Dolby B noise reduction for home use and introduced the first non professional reel to reel, and later cassette with Dolby noise reduction. One of the first speakers KLH introduced was a full range electrostatic speaker, the KLH Model Nine, considered by many to be one of the most musically accurate speakers ever made... the very speaker that inspired Sandy Gross of Golden Ear Technology to get into hifi. The Model Eleven was a high quality stereo system in a suitcase, with a turntable on top of a receiver. KLH continued to grow and grow and as a big successful company got sold to Singer, (yes, the sewing

machine company.) KLH became a step child and was sold again and again, but in January 2017 David Kelley, a long time speaker industry veteran, bought all the rights, patents, and is dedicated to bringing this great speaker name back, including a re-introduction of the KLH Nine electrostatic. Available now is a line of very affordable speakers. The Albany is an acoustic suspension type, the technology invented by Henry Kloss and Edgar Villechur of AR. It's a two-way system with cones of woven Kelvar, the lightweight, yet rigid material found in bullet-proof vests, as well as some rather expensive speakers. **KLH Albany** are \$478 pair have a real wood walnut veneer cabinet. A genuine wood finish is really rare in speakers these days. They are highly efficient, producing 94 db for a watt of input. They have biamp connectors and come with a ten year warranty. Also available is the **Ames**, which is a smaller bookshelf. The **Kendal** floor standing 3-way top-of-the-line tower is \$1299. The **Quincy** is a 3-way tower with one 6.5 inch woofer at \$999 pair. At only \$799 pair, the **Cambridge** is a floor standing dual 6.5 inch two-way with aluminum tweeter. In wall and ceiling speakers are coming soon along with some really innovative products, plus four powered subwoofers.



Denon All-in-One Stereo System Makes a Great Substitute for a Soundbar AM-FM Receiver-CD Player-- Bluetooth-WiFi Denon CEOL-N10 \$499

Once upon a time, audio receivers were made for listening to music. They had left and right channel amplifiers for stereo speakers. But, for decades, Home Theater has driven the receiver market, and today there are only a few receivers made... just for stereo.

There are lots of preamps and power amps for audio perfectionists at very expensive prices, for example, you can choose between dozens of CD players that sell for well over a thousand dollars. And, people still listen to their CDs.

So, this new Denon combo unit with a built-in CD player and stereo only-- not surround sound, is a great, affordable music lover's dream.

But, you can also mount this unit by your TV and use it as a stereo sound bar. It sounds much, much better than most sound bars. And sound bars don't play CDs... or get radio stations. You can plug in a turntable, too.

Learning TV

Remote. The remote can learn the commands from your TV remote and control your TV. Plus there's an App that you can control it from your phone. Plus, built-in Alexa voice commands.

Compact Component

It fits on a desk, or on bookshelf. Great for the office, bedroom or kitchen or as a great main stereo system. The main unit is only 10.9 in wide, 7.8 in deep, and 2.8 in tall. The speakers we include are compact, yet produce a full bodied bass, clear midrange and highs and sound great. You can even add a powered subwoofer.

It includes an AM/FM stereo tuner, 65 watt amps, built-in Wi-Fi, built-in Bluetooth, Internet radio, Pandora, Spotify, and Sirius XM. It plays music from USB hard drives and NAS drives. It decodes HiRes

music up to 192k 24bit and DSD and double DSD. And it all can be controlled by an App on your phone! It has a built-in CD player. It plays music from your phone or iPod... or from your computer. It can wake you to music or let you fall asleep to music.

Real Hi-Fi Power. Most all-in-one units have lackluster sound quality. We got one of these in and were blown away at how great the sound was...and all the things this stereo system did for just \$499.

Hi Resolution Music. Today you can go to many on-line music stores and buy music albums that have higher resolution than the 36 year-old CD. CD's sample music at 44,100/sec. Hi-Res can be FLAC, AIFF, and WAV files containing up to 192k/24 bit samples. This Pioneer also plays DSD... Direct Stream Digital files found on Super Audio CD's, (it does not play SACD discs) which you can now buy as an on-line download.

The DSD format contains 2,822,000 sample-per-second files.

Network Receiver

These music files can be on your Mac or PC computer because the Denon has Apple Airplay and is DNLA compliant. The files can be on a thumb or hard drive plugged directly into a USB port on the front panel. Or... they can be on a NAS "network attached drive" and controlled from



an App on your phone.

HEOS Built-in speakers It also has Denon's whole house wireless music system. Add HEOS speakers and music from the CD, or your TV will play about the house.

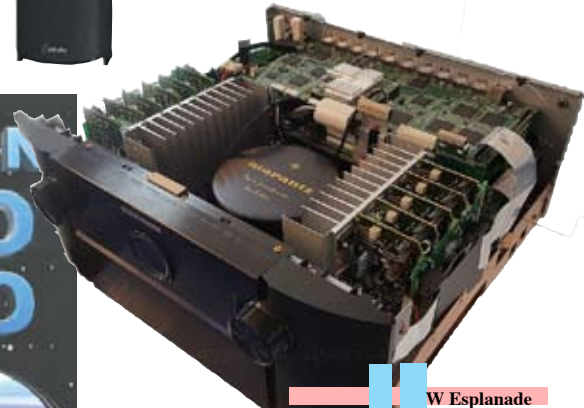
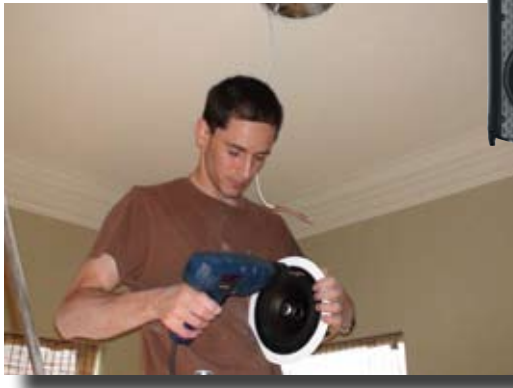
The Speakers. The speakers included here are small 2-way bookshelf type.

ALTERMAN AUDIO

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