

JBL

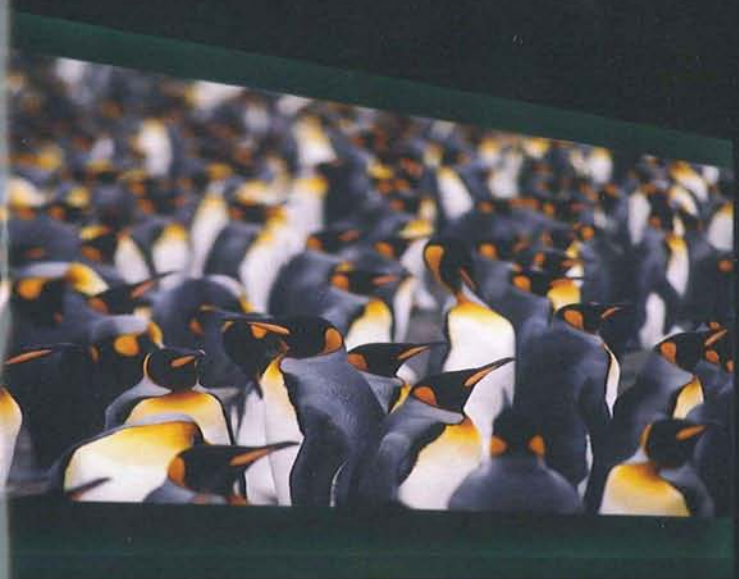
SYNTHESIS[®]



THE ONE THING THE WORLD'S PREMIER MOVIE THEATERS AND CONCERT HALLS HAVE OVER SYNTHESIS®? MORE SEATS. JBL Synthesis® home theater and

music systems are designed and custom-installed to duplicate the electrifying performance characteristics of acclaimed venues like the Samuel Goldwyn Theater and the Sydney Opera House, but on a somewhat more intimate scale. Industrial-grade technologies, materials and engineering, from the most applauded professional brand, deliver systems of uncompromised power and authority for the homes of purists and enthusiasts, as well as film and music professionals, everywhere. As Synthesis owners and audio reviewers alike will tell you, more impressive and realistic residential sound systems can't be found anywhere, at any price.

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W E L C O M E H O M E



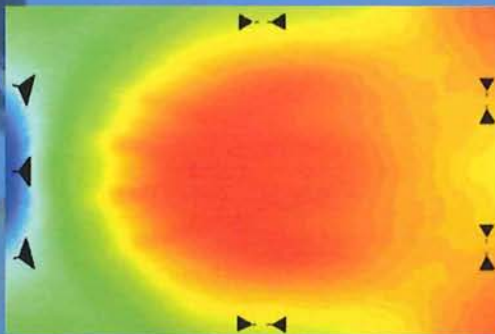
**SOPHISTICATED SYNTHESIS ELECTRONICS
PRECISELY MATCH THE PROGRAM MATERIAL
TO THE LISTENING SPACE.**

Synthesis electronic components employ the most advanced signal processors, equalizers and amplifiers to create the most realistic listening experience possible – in rooms of any size. Intelligent THX[®]-certified surround sound processors automatically configure themselves to optimize the impact of any CD, DVD or satellite signal. JBL's patented Logic 7[®] matrixing system uses proprietary digital algorithms to improve the accuracy and timing of the signals arriving at center channel and surround sound speakers, creating a larger, more nearly perfect 360-degree soundscape. SDEC digital equalization, tuned on-site by an audio expert, precisely calibrates your system's frequency response for the acoustical realities of your listening area. And high-current, ultrawide-bandwidth amplifiers ensure faithful reproduction of both explosive special effects and ethereal musical interludes.

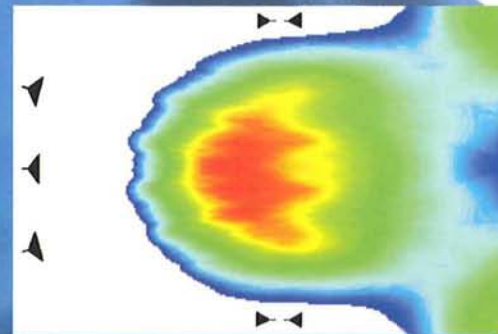


WELCOME INSIDE

HOW SWEET IT IS. Logic 7 processing dramatically improves the balance and timing of loudspeaker signals to deliver the largest "sweet spot" of any home theater system.



Logic 7's for larger sweet spot.

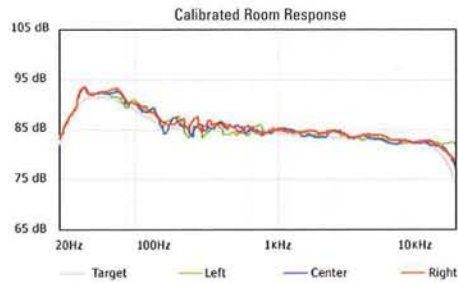


Small sweet spot without Logic 7.

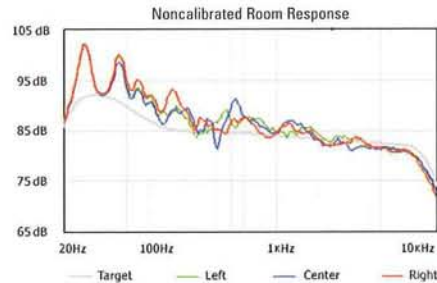
MORE REALISTIC SOUND FROM ANY SOURCE: LOGIC 7® PROCESSING.

IN ADDITION TO THE LATEST INDUSTRY-STANDARD sound processing technologies, including Dolby® Digital, DTS-ES® and THX Surround EX™, all Synthesis systems include JBL's patented Logic 7 processing, which offers two principal benefits. First, Logic 7 is capable of producing discrete 7.1- or 5.1-channel sound fields from the thousands of 2-channel sources still in widespread use today, making them sound truer to life. Second, Logic 7 produces a larger, more precise 360-degree soundscape from multichannel sources, greatly increasing a listening room's "sweet spot." With both Cinema and Music modes, Logic 7 processing ensures the fullest, most realistic sound possible, regardless of the source.

AND HOW SMOOTH. SDEC digital equalization, professionally tuned to the needs of your space, reduces unwanted room resonances to deliver far smoother frequency response.



Smooth response with SDEC digital equalization.

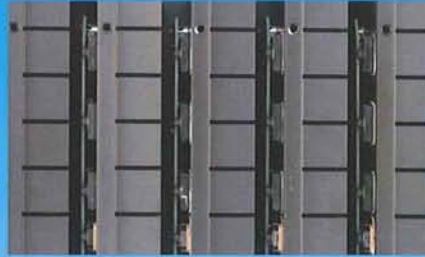


Uneven frequency response caused by room resonances.



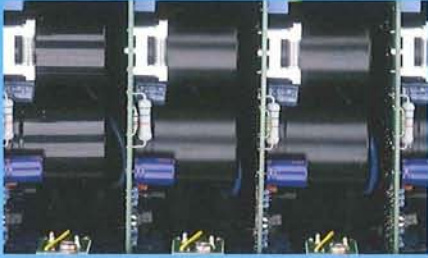
PERFORMANCE FINE-TUNED TO YOUR SPACE: SDEC DIGITAL EQUALIZATION.

EVERY ROOM HAS DIFFERENT ACOUSTICS and every room creates resonances that degrade frequency response. Synthesis systems use precise, distortion-free SDEC digital equalization to counteract unwanted resonances and improve system performance. Professionally calibrated by a JBL®-certified technician at the time of installation, SDEC actually customizes your system to your room, for far smoother, more lifelike reproduction of any program material.



COMMANDING: HIGH-CURRENT CAPABILITY.

MANY OF TODAY'S MOST POPULAR FILMS rely on hyperrealistic, multilayered soundtracks – often spiked with unexpected bursts of over-the-top sound – for much of their emotional energy. Reproducing the full experience at home places enormous demands on system electronics. JBL Synthesis systems are powerful, of course, but they're also products of an overall design philosophy that emphasizes power handling. Called High-Current Capability, it means that everything from the design of the transformers to the size of the capacitors is engineered for muscle, even during program peaks at high listening levels. So go ahead, turn up the volume. Synthesis is built to handle it, and is eager to do so.



CONSUMMATE: ULTRAWIDE BANDWIDTH.

THE HUMAN EAR IS CAPABLE of hearing sound in the range of 20Hz to 20kHz. But, of course, real-world sounds come in all frequencies, and reproducing them realistically requires systems with a far wider bandwidth. JBL Synthesis features amplifiers that operate in the ultrawide range of 10Hz to 100kHz. Bringing a new level of accuracy to both the lowest lows and the highest highs – at any listening level – Synthesis ensures that every nuance of the recorded sound reaches your ears.



ELECTRONICS

SURROUND PROCESSING, SYSTEM CONTROL
AND AMPLIFICATION



SURROUND PROCESSING



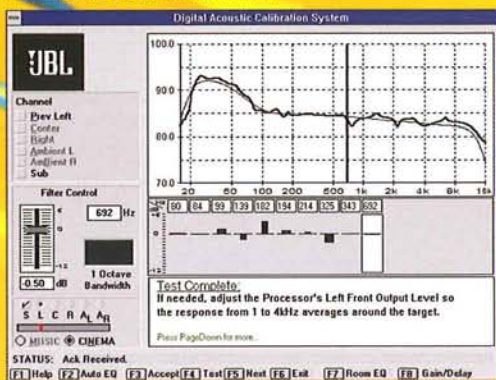


AND SYSTEM CONTROL.

SDP-40HD: POWER AND CAPABILITY, DEFINED. Designed for the largest Synthesis theater installations as well as multiroom applications, the SDP-40HD digital surround processor/system controller offers eight analog audio inputs, six digital audio inputs, one 5.1-channel analog input, six HDMI™ inputs, three component inputs, three S-video inputs and two composite video inputs with 12 balanced and 12 unbalanced audio outputs, in addition to Zone 2 and Record Audio capabilities. There's also an RS-232 port for connection to control systems, as well as future upgrades.

SDP-5: POWERFUL, FLEXIBLE, EXPANDABLE. The SDP-5 digital surround processor/system controller offers eight analog audio inputs, four coaxial and four optical digital audio inputs, five S-video, five composite and three component video inputs with eight unbalanced audio outputs, plus both analog and digital Zone 2 outputs, for uncompromised performance in any Synthesis movie or music system. As on the SDP-40HD, the RS-232 port facilitates future upgrades.

JBL technicians use computer-based analysis instruments to fine-tune your system performance.

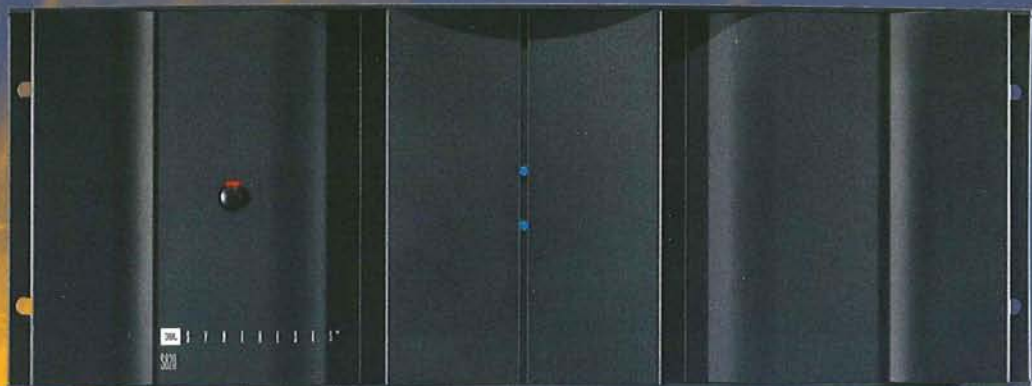


DIGITAL EQUALIZERS.

SDEC-3000: OPTIMIZED SYSTEM PERFORMANCE. Offering 8-channel input and 8-channel output with up to 120 bands of parametric EQ running at 24-bit and 96kHz, the SDEC-3000 digital equalizer custom-fits the acoustic needs of your listening space and takes the 7.1 surround sound experience of your Synthesis system to new levels of performance, turning any home theater into theater for your home.

SDEC-4000: CUSTOMIZING THE SYNTHESIS SOUND. With 4th-order electronic crossover networks for use with the bi-amplified speaker in the Synthesis One Array™ system or running full-range for the largest Everest, K2® and Atlas™ systems, the SDEC-4000 offers up to 12 channels of input and 20 channels of output with up to 120 bands of parametric EQ running at 24-bit and 96kHz, making this system better than anything you've ever heard at the cinema or theater.

Custom configurations for special needs can be created by JBL Synthesis Engineering to suit any installation you can imagine.



Synthesis components
have received the highest
THX certification.



POWER AMPLIFIERS.

S820: STRENGTH IN NUMBERS. Used in arrays of as many as 11 (capable of flooding rooms as large as 100,000 cubic feet with thundering sound), the 1 x 800-watt (mono-bridged)/2 x 200-watt (stereo) S820 power amplifier is the highest-current ultrawide-bandwidth workhorse of the Synthesis Series. Both balanced and RCA inputs allow use with any Synthesis processor.

S5165: 5TH TO NTH POWER. Let us do the math for you. Two 5 x 160-watt (at 8 ohms) S5165 power amplifiers, plus two 2 x 200-watt (at 8 ohms) S820 power amplifiers equals the breathtaking power of Synthesis One Array, designed for listening spaces of up to 25,000 cubic feet. Balanced and RCA inputs.

S7160: THE SEVEN-CHANNEL SOLUTION. Delivering 7 x 160 watts of power, the S7160 power amplifier reproduces the full 360-degree imaging critical to enjoying the full impact of today's thrilling 7.1-channel THX Surround EX, Dolby Digital and DTS-ES soundtracks. Balanced and RCA inputs.

Note: All JBL Synthesis amplifiers are designed with forced-air cooling to allow them to be "stacked" in standard 19" racks.

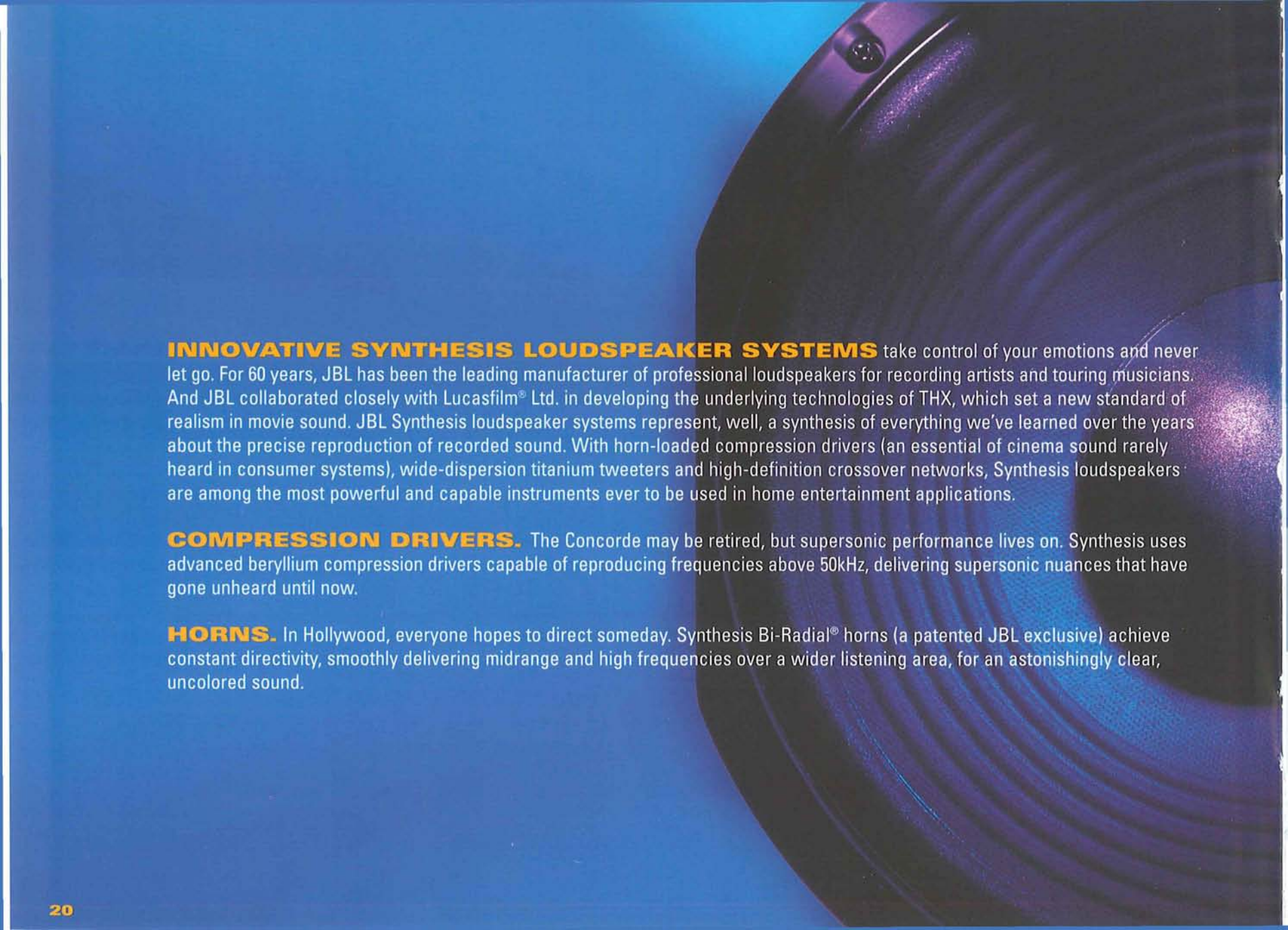




LOUDSPEAKER

TECHNOLOGY

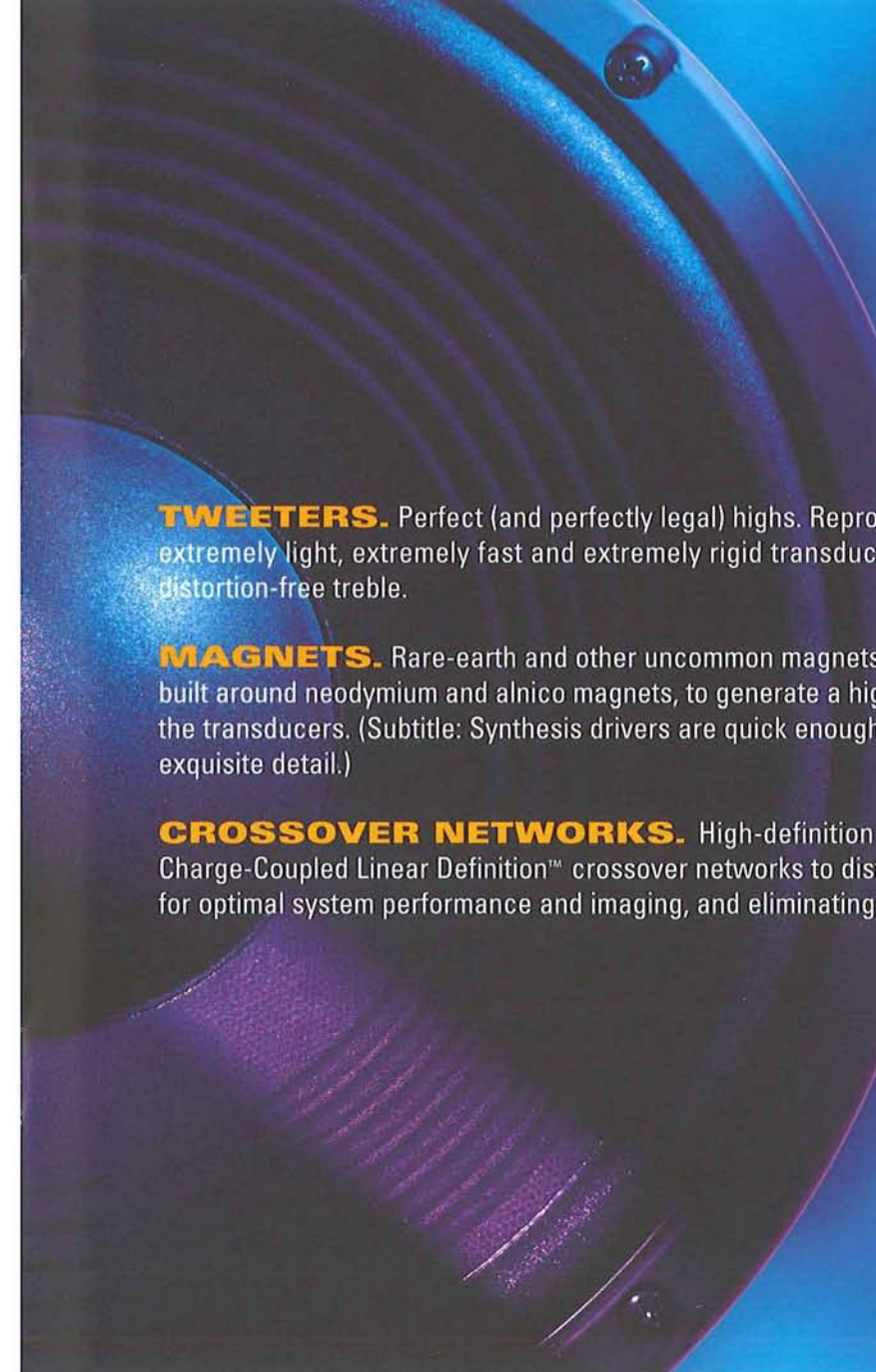
HF ()



INNOVATIVE SYNTHESIS LOUDSPEAKER SYSTEMS take control of your emotions and never let go. For 60 years, JBL has been the leading manufacturer of professional loudspeakers for recording artists and touring musicians. And JBL collaborated closely with Lucasfilm® Ltd. in developing the underlying technologies of THX, which set a new standard of realism in movie sound. JBL Synthesis loudspeaker systems represent, well, a synthesis of everything we've learned over the years about the precise reproduction of recorded sound. With horn-loaded compression drivers (an essential of cinema sound rarely heard in consumer systems), wide-dispersion titanium tweeters and high-definition crossover networks, Synthesis loudspeakers are among the most powerful and capable instruments ever to be used in home entertainment applications.

COMPRESSION DRIVERS. The Concorde may be retired, but supersonic performance lives on. Synthesis uses advanced beryllium compression drivers capable of reproducing frequencies above 50kHz, delivering supersonic nuances that have gone unheard until now.

HORNS. In Hollywood, everyone hopes to direct someday. Synthesis Bi-Radial® horns (a patented JBL exclusive) achieve constant directivity, smoothly delivering midrange and high frequencies over a wider listening area, for an astonishingly clear, uncolored sound.



Massive 18" subwoofer guarantees that soundtracks will come alive with movie theater-like impact.



Our pure-titanium tweeters produce a spacious, dramatic, concert-like sound.



JBL's horn-loaded compression drivers.



State-of-the-art crossover technology.



TWEETERS. Perfect (and perfectly legal) highs. Reproducing high frequencies accurately at high listening levels requires extremely light, extremely fast and extremely rigid transducer domes. Synthesis uses pure-titanium-dome tweeters for pure, distortion-free treble.

MAGNETS. Rare-earth and other uncommon magnets. Synthesis loudspeakers employ highly efficient magnetic circuits, built around neodymium and alnico magnets, to generate a high level of constant magnetic-flux density across the voice-coil gap of the transducers. (Subtitle: Synthesis drivers are quick enough to accurately reproduce any movie soundtrack or musical source in exquisite detail.)

CROSSOVER NETWORKS. High-definition sound. Synthesis loudspeakers use JBL's unique low-distortion Charge-Coupled Linear Definition™ crossover networks to distribute specific frequencies to each driver, minimizing phase shifts for optimal system performance and imaging, and eliminating crossover distortion.



The image features a dark blue, almost black, background. In the center, there is a vertical strip of red, textured material that resembles a stage curtain. The curtain is illuminated from below, creating a warm, reddish glow. Overlaid on this curtain is the text "THE SYSTEMS" in a bold, yellow, sans-serif font. The letters are spaced out and appear to be floating in front of the curtain.

THE SYSTEMS



PROJECT EVEREST DD66000



SK2-1000



S1S-EX

SYNTHESIS® EVEREST:

THE HIGHEST PEAK IN AUDIO REDEFINED. Of those who seek perfection in sound reproduction, only a handful have actually achieved it. It is a rare occurrence when an individual or group is able to triumph over the constraints of technological reality just once. At JBL, this has happened eight times. In each case, our engineers were told to build the speaker system they had always wanted to build. Whatever resources were required would be available. Thus began an ongoing investigation into new frontiers of sound reproduction, beginning in 1950 and continuing to the present day. The products that have resulted from this venture are now known as the JBL Project loudspeakers. Each represents the absolute peak of every technological, material and engineering innovation available at that time, combined into a single system. They are Hartsfield, Paragon, Project Everest DD55000, K2 S9500/7500, K2 S5500, K2 S9800 and K2 S5800. The newest is Project Everest DD66000. Three Project Everest DD66000 speakers in front of you, eight SK2-1000 surrounds and four 18-inch S1S-EX subwoofers, powered by no fewer than eleven S820 amplifiers, create the most realistic and inspiring system JBL Synthesis has ever designed. Hearing is believing.



SDP-40HD



SDEC-4000



S820

THE NAME IS AN UNDERSTATEMENT.



8800 WATTS
96dB
HIGH FREQUENCY
96dB
LOW FREQUENCY

**FROM 3,500
TO 100,000
CUBIC FEET
99 - 2,832
CUBIC METERS**

**JBL SYNTHESIS
EVEREST**



K2 S9800



S1S-EX



S1A

SYNTHESIS® K2®:

FRONT AND CENTER, THE INTERNATIONALLY AWARD-WINNING K2 S9800

is one of the most refined and spectacular speakers ever created by JBL. Featuring beryllium high-frequency and ultrahigh-frequency compression drivers, and a specially designed Bi-Radial horn, high frequencies are reproduced to beyond 40kHz, while a massive 15-inch woofer thunders down to below 40Hz. In short, the K2 S9800 is designed to produce extraordinary sonic accuracy. All around you, six S1A dipole ambient surround speakers, each with dual 2-inch high-frequency and dual 8-inch mid-bass drivers. And from everywhere and nowhere, gloriously rich, clean bass from four S1S-EX 18-inch, 800-watt subwoofers. In all, 13 exceptionally refined loudspeaker systems, driven by the SDP-40HD processor/controller, an SDEC-4000 digital equalizer and no fewer than ten S820 amplifiers. A no-expense-spared entertainment system for listening rooms of up to 75,000 cubic feet, Synthesis K2 delivers up to 8,000 watts of power and achieves sound-pressure levels as high as 105dBA without distortion, making it by far the highest-power, highest-performance, highest-quality system ever developed for residential use.

The S4Ai in-wall dipole/bipole ambient speaker can be used in place of the S1A for installations where an in-wall speaker is needed.





SDP-40HD



SDEC-4000



S7160



S820

NO, YOU'RE NOT DREAMING.

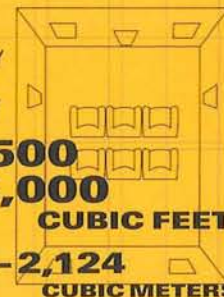


8000 WATTS

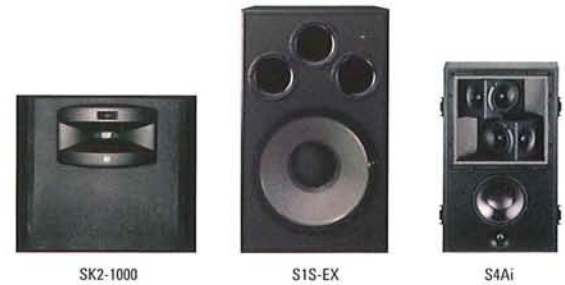
94dB
HIGH FREQUENCY

97dB
LOW FREQUENCY

FROM **2,500**
TO **75,000**
CUBIC FEET
71 - 2,124
CUBIC METERS



**JBL SYNTHESIS
IK2**



SYNTHESIS® ATLAS™:

THE FRONT SOUNDSTAGE INCLUDES three SK2-1000 four-way speaker systems with dual 10-inch woofers, featuring beryllium midrange and ultrahigh-frequency compression drivers in a specially designed Bi-Radial combination horn, incorporating JBL's most advanced professional technologies. Enveloping the listener, and invisible to the naked eye, six S4Ai multipole in-wall ambient surround speakers, each with three 1-inch titanium high-frequency tweeters, two 4-inch mid-bass drivers and one 8-inch dual-coil woofer. Powerful, rich bass emanates from two S1S-EX 18-inch 800-watt subwoofers. The electronics package includes the SDP-40HD processor/controller, SDEC-4000 digital equalizer, two S7160 (7 x 160-watt) and two S820 (1 x 800-watt) power amplifiers. Designed for listening rooms of up to 30,000 cubic feet.



SDP-40HD



SDEC-4000



S7160



S820

POWERFUL AUDIO IN A SUBTLE PACKAGE.



3840 WATTS

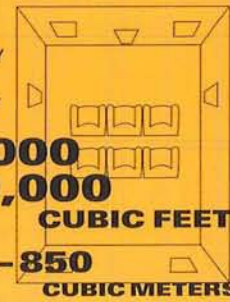
94dB
HIGH FREQUENCY

94dB
LOW FREQUENCY

FROM **2,000**
TO **30,000**
CUBIC FEET

57 - 850
CUBIC METERS

**JBL SYNTHESIS
ATLAS**





SYNTHESIS® ONE ARRAY™:

BRINGING RAREFIED POWER AND UNEQUALED REALISM to listening areas of up to 25,000 cubic feet – and surpassing the highest expectations of the world’s most demanding listeners – the Synthesis One Array system pairs the dual 8-inch SAM2LF with the 3-inch compression driver/constant directivity horn of the SAM1HF for a bi-amplified speaker system capable of frequencies from 80Hz to 40kHz from the front left, center or right, four S1A dipole ambient surrounds and two SIS-EX 18-inch, 800-watt subwoofers. With an electronics package that includes the SDP-40HD processor/controller, the SDEC-4000 active-crossover digital equalizer, two S5165 5-channel amplifiers and two S820 2-channel amplifiers, Synthesis One Array sets new standards of technological innovation and manufacturing quality, and delivers an unequalled listening experience.

SAM1HF and SAM2LF can be configured in these ways to create the perfect speaker for your room.





SDP-40HD



SDEC-4000



S5165



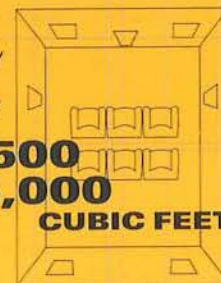
S820

OVER-THE-TOP BI-AMPED PERFORMANCE.



3200 WATTS
98dB
HIGH FREQUENCY
92dB
LOW FREQUENCY

FROM **1,500**
TO **25,000**
CUBIC FEET



**JBL SYNTHESIS
ONE ARRAY**



SYNTHESIS® TWO ARRAY™:

IN SYNTHESIS TWO ARRAY SYSTEMS, THE MAIN LEFT, RIGHT AND CENTER SAM1HF AND SAM2LF loudspeakers feature dual 8-inch mid-bass drivers and reproduce high frequencies with a 3-inch Aquaplas-treated aluminum compression driver mounted in a vertical SonoGlass® constant-directivity horn and ultrahigh frequencies with a 1-inch pure-titanium compression driver. Meanwhile, the SAM12X passive crossover manages all the power the S7160 can supply. Four S4Ai in-wall multipole ambient surround speakers, two S2S 15-inch subwoofers and electronics that include an SDP-5 processor/controller, SDEC-3000 digital equalizer, S7160 7-channel amplifier and S820 2-channel amplifier round out the Synthesis Two Array system. It delivers all the realism of today's most sophisticated digital sources. And it's all the sonic muscle 16,000-ft.³ rooms can handle.

Upgrade your system by adding a second S820 and a second pair of S2S subwoofers or move up to the ultimate in low-frequency with the Synthesis Two Array Plus, using a pair of S1S-EX subs for rooms of up to 18,500 ft.³





SDP-5



SDEC-3000



S7160



S820

PASSIVE CROSSOVER DESIGN...ACTION!



1520 WATTS
98dB
HIGH FREQUENCY
92dB
LOW FREQUENCY

FROM **1,500**
TO **16,000**
CUBIC FEET
43 - 453
CUBIC METERS

**JBL SYNTHESIS
TWO ARRAY**



SYNTHESIS® THREE ARRAY™:

SYNTHESIS THREE ARRAY IS DESIGNED to give your architect or designer maximum leeway in creating your ideal listening space. The all-important center channel speaker, for example, is available in designs optimized for either vertical (SAM3VA) or horizontal (SAM3HA) installation. The main left and right SAM3VA speakers may be cabinet-/custom-mounted, or configured as freestanding floor units with two S2S powered subwoofers. Four S4Ai in-wall multipole ambient surround speakers and electronics that include the SDP-5 processor/controller, SDEC-3000 digital equalizer, S7160 7-channel amplifier and S820 amplifier complete a package that will fill rooms of up to 10,000 cubic feet with edge-of-your-seat home entertainment.

Alternatively, you can substitute the 1,000-watt powered HTPS-400 for the S2S subwoofer and fill rooms of up to 7,500 ft.³ (The 110-volt HTPS-400 is replaced by the 14" PS1400 powered subwoofer in 230-volt markets.)



HTPS-400



PS1400 (alternate sub)



SDP-5



SDEC-3000



S7160



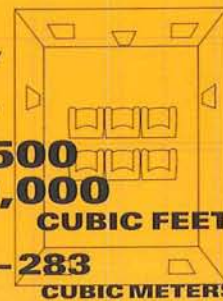
S820

SMALL PACKAGE, BIG SOUND.



1520 WATTS
87dB
HIGH FREQUENCY
87dB
LOW FREQUENCY

FROM **1,500**
TO **10,000**
CUBIC FEET
43-283
CUBIC METERS



**JBL SYNTHESIS
THREE ARRAY**



SYNTHESIS® FOUR:

SYNTHESIS FOUR SYSTEMS OFFER YOU A CHOICE of ways to fill 7,500 cubic feet of space with dramatic, full-spectrum sound from compact system components. Begin with three-way in-wall main loudspeakers (one S4HC and two S4VC's). Back them up with two S4S subwoofers and S820 amplifiers for an all-in-wall solution and four S4Ai in-wall dipole surrounds. Add the power of an SDP-5 processor/controller, SDEC-3000 digital equalizer and S7160 7-channel amplifier.

For rooms where the in-wall S4S is not used, the HTPS-400 can be substituted. (The HTPS-400 is replaced by the 14" PS1400 active subwoofer in 230-volt markets.)



HTPS-400



PS1400 (alternate sub)



SDP-5



SDEC-3000



S7160



S820

ULTIMATE IN-WALL DESIGN.



1520 WATTS
91dB
HIGH FREQUENCY
92dB
LOW FREQUENCY

FROM **1,500**
TO **7,500**
CUBIC FEET
43 - 212
CUBIC METERS



**JBL SYNTHESIS
FOUR**



SYNTHESIS® PROJECT ARRAY™:

EXPOSED VERTICAL CONSTANT-DIRECTIVITY HORNS, for improved sonic accuracy at high listening levels, have long been a staple of JBL installations in concert venues around the world. The Synthesis Project Array™ system brings the concept home for the first time, with spectacular results. Two three-way floorstanding 1400 Array loudspeakers flank a three-way 880 Array center channel speaker and are supported by two 15-inch, 1,000-watt 1500 Array powered subwoofers and four S4Ai in-wall multipole surround speakers. Electronics include the SDP-5 processor/controller, SDEC-3000 digital equalizer and S7160 7-channel amplifier. Synthesis Project Array brings true concert-quality performance to rooms of up to 16,000 cubic feet.



SDP-5



SDEC-3000



S7160

SYNTHESIS, FRONT AND CENTER.



3120 WATTS
90dB
HIGH FREQUENCY
90dB
LOW FREQUENCY

FROM **1,500**
TO **16,000**
CUBIC FEET
43 - 453
CUBIC METERS







**JBL SYNTHESIS
PROJECT ARRAY**



A vintage photograph of a Warner's Theatre marquee at night. The marquee features a large poster of a man in a suit, likely Al Jolson, and text including 'ALL ABOUT THE JAZZ SINGER WITH VITAPHONES 2:30 TWICE DAILY SUNDAY MATINEES 3:00'. The title 'WARNER'S THEATRE' is visible on the curved marquee structure.

A BRIEF HISTORY OF JBL

SPECIFICATIONS.

						
DESCRIPTION	SAM1HF Synthesis Array THX® Horn Module	SAM2LF Synthesis Array THX® Dual 8" Low-Frequency Module	S1A Dipole Ambient Surround Speaker	S1S-EX THX® 18" Subwoofer	S2A Dipole Ambient Surround Speaker	S2S THX® 15" Subwoofer
FREQUENCY RESPONSE	36Hz – 40kHz*	36Hz – 40kHz*	80Hz – 17kHz	20Hz – 200Hz	100Hz – 18kHz	35Hz – 80Hz
SPEAKER CONFIGURATION	435AL-1 3" Aquaplas-treated aluminum-dome compression drive, mounted in a vertical SonoGlass® constant-directivity horn; 045Ti 1" pure-titanium compression mounted in a SonoGlass constant-directivity horn	Dual 8" deep-anodized aluminum cone and dome material with dual-inside-neodymium magnets, shielded motor structure and 2" voice coils	HF (2) 2" compression driver/Bi-Radial® horn; LF (2) 8" mid-bass drivers	LF (1) 18" shielded transducer	HF (2) 1" compression driver/Bi-Radial® horn; MF (2) 5" full-range drivers	LF (1) 15" shielded subwoofer
POWER HANDLING	300 Watts	300 Watts	200 Watts	800 Watts	150 Watts	250 Watts
SENSITIVITY 1W @ 1m	98dB	92dB	95dB	97dB	87dB	94dB
NOMINAL IMPEDANCE	6 Ohms	6 Ohms	4 Ohms	8 Ohms	6 Ohms	8 Ohms
DIMENSIONS H x W x D	17-1/4" x 8" x 11-1/2" 438mm x 200mm x 292mm	20" x 10" x 10-3/4" 508mm x 254mm x 273mm	24-5/8" x 13-5/8" x 11-1/4" 626mm x 345mm x 286mm	34-1/2" x 21" x 22" 876mm x 533mm x 559mm	16" x 11-9/16" x 6-9/16" 406mm x 294mm x 166mm	27-1/2" x 21" x 15-13/16" 699mm x 533mm x 401mm
WEIGHT	25 lb/11kg	25 lb/11kg	70 lb/31.8kg	129 lb/58.6kg	28 lb/12.7kg	110 lb/50kg

* For the complete speaker module, SAM1HF/SAM2LF together

† Dimensions do not include mounting hardware or feet. Add 3" (75mm) depth for mounting hardware, and 1" (25mm) height for feet.

Flat-wire milling and high-speed winding of ribbon-wire voice coils developed.

1943

1944

Lansing and Hilliard redefine the state of the art for motion picture theaters with the A4, dubbed the "Voice of the Theatre."

1946

James B. Lansing Sound, Inc., is formed



Jim Lansing

JBL produces the D-130 15" loudspeaker, which was the first known use of a 4" flat-wire voice coil in a cone transducer.

1947

JBL introduces the model 375 high-frequency compression driver. This is the first commercially available 4" diaphragm driver, producing flat response to 9kHz.

JBL manufactures a family of acoustic lenses. The 075 high-efficiency, high-frequency ring radiator is developed. This incredible device is still used in JBL product lines today.

1954

1955



Hartfield

							
DESCRIPTION	SAM3VA THX® Vertical Center Channel Loudspeaker	SAM3HA THX® Horizontal Center Channel Loudspeaker	S4Ai THX® 2-Way/3-Way 8" Multipurpose Configurable-Array Flush-Mount Surround Loudspeaker – Dipole, Bipole and Direct-Radiating Modes	S4HC 3-Way Dual 6-1/2" Horizontal Flush-Mount Speaker	S4VC 3-Way 8" Vertical Flush-Mount Speaker	S4S In-Wall Flush-Mount Dual 10" THX Ultra2™-Certified Passive Subwoofer	HT4H Vertical L/C/R Speaker
FREQUENCY RESPONSE	48Hz – 40kHz	48Hz – 40kHz	80Hz – 20kHz	65Hz – 20kHz	65Hz – 20kHz	20Hz – 150kHz (–6dB) (THX®/LFE mode)	42Hz – 20kHz (–6dB)
SPEAKER CONFIGURATION	Mid-bass transducer: dual 6-1/2" cones, shielded; high-frequency transducer: 175ND-3 1-3/4" compression driver; ultrahigh-frequency transducer: 045Ti 1" compression driver	Mid-bass transducer: dual 6-1/2" cones, shielded; high-frequency transducer: 175ND-3 1-3/4" compression driver; ultrahigh-frequency transducer: 045Ti 1" compression driver	Triple 1" pure-titanium domes with rubber surrounds, shielded, with EOS waveguide; dual 4" neodymium full-range with rubber surrounds and cast-aluminum baskets; 8" dual-voice-coil, inverted dome with rubber surround and cast basket	1" Pure-titanium dome with rubber surround, shielded, with EOS waveguide; 4" titanium inverted dome with rubber surround and cast-aluminum basket, shielded; 6-1/2" titanium-alloy inverted dome with rubber surround and cast basket, shielded	1" Pure-titanium dome with rubber surround, shielded, with EOS waveguide; 4" titanium inverted dome with rubber surround and cast-aluminum basket, shielded; 8" titanium-alloy inverted dome with rubber surround and cast basket, shielded	Dual 10" polymer-coated aluminum cones with rubber surrounds	5-1/4" Low-frequency driver; 1" titanium-dome high-frequency driver with Bi-Radial® horn
POWER HANDLING	200 Watts	200 Watts	200 Watts	250 Watts	250 Watts	500 Watts per channel	150 Watts
SENSITIVITY 1W @ 1m	89dB	89dB	90dB	91dB	91dB	88dB	88dB
NOMINAL IMPEDANCE	6 Ohms	6 Ohms	6 Ohms	6 Ohms	6 Ohms	4 Ohms	8 Ohms
DIMENSIONS H x W x D	27-3/8" x 10-3/16" x 12-5/8" 695mm x 259mm x 321mm	9-5/8" x 28-5/8" x 9-1/6" 245mm x 727mm x 233mm	23-7/8" x 14" x 3-3/4" 606mm x 356mm x 95mm	14" x 23-7/8" x 5-1/2" 356mm x 606mm x 140mm	23-7/8" x 14" x 5-1/2" 606mm x 356mm x 140mm	64" x 14" x 5" 1626mm x 356mm x 130mm	20" x 6-13/16" x 12-1/2" 508mm x 173mm x 318mm
WEIGHT	28 lb/12.7kg	28 lb/12.7kg	23 lb/10.45kg	32 lb/14.5kg	26 lb/11.8kg	24 lb/10.9kg	25 lb/11.4kg

Leo Fender of musical instrument fame incorporates the D-130 into his famous guitar amplifiers, signaling JBL's entry into the music reinforcement field.

JBL Sound's Hartsfield System is called "the ultimate dream speaker" by *LIFE* magazine.

1958

The cylindrical reflecting principle is present in the Paragon stereophonic loudspeaker system.



Paragon

1962

JBL produces the first two-way studio monitor to use a high-frequency compression driver with acoustic lens.

Olympus



JBL introduces the T-circuit output, for high-output, solid-state amplification.

1965

1969

Harman International acquires JBL from William Thomas, and JBL embarks on a period of accelerated international growth through the Harman distribution companies.

JBL is the loudspeaker powering the historic Woodstock musical festival.

The L100, a consumer version of the popular 4310 studio monitor, is released. During the '70s, sales volume of this product reaches more than 125,000 pairs.

JBL unveils the first four-way studio monitor series, the 4300's.

1973

						
DESCRIPTION	HT4V THX® Vertical L/C/R Speaker	HTPS-400 12" 1kW THX® Powered Subwoofer	PC600 3-Way Center Speaker	PT800 3-Way, On-Wall, Corner-Mount or Stand-Mount Satellite Speaker (PCM800 kit sold separately)	PS1400 14" 400W Powered Subwoofer	SK2-1000 3-Way, Dual 10" Center Speaker
FREQUENCY RESPONSE	42Hz – 20kHz (–6dB)	25Hz – 250Hz (±3dB)	80Hz – 22kHz	80Hz – 22kHz	28Hz – 130Hz	60Hz – 50kHz (–6dB)
SPEAKER CONFIGURATION	5-1/4" Low-frequency driver; 1" titanium-dome high-frequency driver with Bi-Radial® horn	LF (1) 12" Aluminum cone with rubber surrounds, video-shielded	1" Pure-titanium dome with rubber surround, shielded, with EOS waveguide; 4" titanium inverted dome with rubber surround and cast-aluminum basket, shielded; dual 6" titanium-alloy inverted domes with rubber surrounds and cast-aluminum baskets, shielded	1" Pure-titanium dome with rubber surround, shielded, with EOS waveguide; 4" titanium inverted dome with rubber surround and cast-aluminum basket, shielded; 8" titanium-alloy inverted dome with rubber surround and cast-aluminum basket, shielded	LE14H-3 14" Aquaplas-cone woofer with rubber surround; 4" edge-wound copper voice coil and cast-aluminum basket	(2) 10" Neodymium Differential Drive (NDD)® Aquaplas-coated woofers (2251J-2); 3" pure-beryllium compression driver (435Be) and 1" throat Bi-Radial® horn (100" vert. x 50" horiz.); 1" pure-beryllium compression driver (045Be)
POWER HANDLING	150 Watts	1,000 Watts	250 Watts	250 Watts	400 Watts	300 Watts RMS
SENSITIVITY 1W @ 1m	88dB	91dB	91dB	91dB	91dB	94dB (2.83V/1m)
NOMINAL IMPEDANCE	8 Ohms	N/A	8 Ohms	8 Ohms	N/A	8 Ohms
DIMENSIONS H x W x D	20" x 6-13/16" x 12-1/2" 508mm x 173mm x 318mm	14-5/8" x 14-5/8" x 14-5/8" 372mm x 372mm x 372mm	11-5/8" x 26-7/16" x 7-1/4" 295mm x 672mm x 184mm	24" x 13-1/2" x 6" 610mm x 343mm x 152mm	19" x 20" x 15" 483mm x 508mm x 381mm	25" x 22" x 9" 635mm x 559mm x 229mm
WEIGHT	25 lb/11.4kg	62 lb/28kg	32 lb/15kg	37 lb/17kg	80 lb/36kg	80 lb/36.4kg



Century 100

JBL uses the first Bi-Radial horns, which are built on the concept of flat power response.

1981

4435



1982

Titanium is first used as a diaphragm material in compression drivers.

JBL 4675 direct-radiator systems, with constant directivity, set the performance standard for cinema loudspeakers.



1983

JBL is selected by Lucasfilm to develop the first commercial THX-licensed cinema speaker system.

1984

Titanium-dome tweeters are introduced into consumer products, providing superlative response to 27kHz.

The Academy of Motion Picture Arts and Sciences selects JBL components for the new sound system in the Samuel Goldwyn Theater.



Titanium-Dome Tweeter

Project Everest DD55000

The Project Everest DD55000 system is named Product of the Year by Japan's Stereo Sound.

1985

1976

JBL monitors are ranked number one in the U.S. recording industry in a survey conducted by Billboard.



DESCRIPTION	K2 S9800 3-Way, 15" Floorstanding Speaker	DD66000 3-Way, Dual 15" Floorstanding Speaker	1400 ARRAY 3-Way, 14" Floorstanding Speaker	1000 ARRAY 3-Way, 10" Floorstanding Speaker	800 ARRAY 3-Way, 8" Bookshelf Speaker	880 ARRAY 3-Way, Dual 8" Center Channel Speaker	1500 ARRAY 15" 1000-Watt Front-Firing Subwoofer
FREQUENCY RESPONSE	45Hz – 50kHz (–6dB)	45Hz – 50kHz	32Hz – 40kHz	35Hz – 40kHz	55Hz – 40kHz	70Hz – 40kHz	25Hz – 400Hz, variable
SPEAKER CONFIGURATION	15" Pulp-cone woofer (1500AL); 3" pure-beryllium compression driver (435Be) and 1"-throat Bi-Radial [®] horn; 1" pure-beryllium compression driver (045Be) and 1/2"-throat Bi-Radial horn (65" vert. x 35" horiz.)	15" Pulp-cone woofer (1501AL) x 2; 4" beryllium compression driver (476Be); 1" beryllium compression driver (045Be-1)	LE14H-3 14" Aquaplas-treated pulp-cone woofer; 435AL-1 3" Aquaplas-treated aluminum-dome compression driver, mounted in a vertical SonoGlass [®] constant-directivity horn; 045Ti 1" pure-titanium compression driver mounted in a SonoGlass constant-directivity horn	10" Polymer-treated pulp-cone driver; 175Nd-3 1-3/4" Aquaplas-treated titanium-dome compression driver mounted in a vertical SonoGlass [®] constant-directivity horn; 045Ti 1" pure-titanium compression driver mounted in a SonoGlass constant-directivity horn	8" Polymer-treated pulp-cone driver; 175Nd-3 1-3/4" Aquaplas-treated titanium-dome compression driver mounted in a vertical SonoGlass [®] constant-directivity horn; 045Ti 1" pure-titanium compression driver mounted in a SonoGlass constant-directivity horn	Dual 8" Aquaplas-treated pulp-cone woofer; 435AL-1 3" Aquaplas-treated aluminum-dome compression drive, mounted in a vertical horn; 045Ti 1" pure-titanium compression mounted in a SonoGlass [®] constant-directivity horn	W1500H 15" pulp-cone driver with rubber surround and massive ferrite motor assembly with 4" copper edge-wound voice coil, mounted in a trapezoidal enclosure
POWER HANDLING	400 Watts RMS/800 watts peak	500 Watts RMS/1,000 watts peak	300 Watts	200 Watts	200 Watts	200 Watts	N/A
SENSITIVITY 1W @ 1m	94dB (2.83V/1m)	96dB	89dB	89dB	88dB	90dB	N/A
NOMINAL IMPEDANCE	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	8 Ohms	N/A
DIMENSIONS H x W x D	51" x 20" x 14-3/4" 1295mm x 508mm x 375mm ¹	43-11/16" x 38" x 18-1/2" 1109mm x 965mm x 469mm	46-1/2" x 15-1/2" x 19" 1181mm x 394mm x 483mm	43-1/2" x 12-1/4" x 17" 1105mm x 311mm x 432mm	29-1/4" x 10-3/4" x 14" 743mm x 273mm x 356mm	12-1/4" x 28-3/4" x 11" 311mm x 730mm x 279mm	23" x 19-1/2" x 19" 584mm x 495mm x 483mm
WEIGHT	198 lb/90kg	312 lb/142kg	115 lb/52kg	70 lb/32kg	40 lb/18kg	46 lb/21kg	125 lb/57kg

¹ 21" (533mm) deep with grille



1989

The Directors Guild of America chooses JBL components for its headquarters.

1990

JBL develops Vented Gap Cooling™ for raising the thermal power limits of low-frequency transducers.



1991 JBL introduces the first Pro Audio neodymium woofer, debuting in the JBL Array Series.



S1M

1992

The K2 loudspeaker system is chosen by Japan's *Stereo Sound* as Product of the Year.

JBL Synthesis is released – the industry's first completely equalized, processed, powered THX home media system.

JBL introduces its new lower-midrange compression driver with matching horns.

1993

JBL SoundEffects™ provides CD-quality wireless solutions for home media applications. JBL develops new "rapid flare" low-distortion compression drivers and a matching family of horns.

							
DESCRIPTION	S820 Stereo/Mono THX® Power Amplifier	S5165 THX® Multichannel Power Amplifier	S7160 THX® Multichannel Power Amplifier	SDP-40HD Synthesis THX® Processor/Controller	SDP-5 Synthesis THX® Processor/Controller	SDEC-4000P/4000X Digital Crossover/Equalizer	SDEC-3000 Digital Equalizer
POWER OUTPUT	2 x 200 Watts into 8 ohms stereo, 800 watts mono into 8 ohms	5 x 160 Watts into 8 ohms stereo	7 x 160 Watts into 8 ohms	N/A	N/A	N/A	N/A
FREQUENCY RESPONSE	<10Hz – 70kHz (+0, –1dB), –0.75dB at 40kHz, reference 1kHz	<10Hz – 100kHz (+0, –1dB), –0.5dB at 40kHz, reference 1kHz	<5Hz – 100kHz (+0, –3dB)	10Hz – 20kHz (+0.1dB, –0.25dB)	10Hz – 20kHz (+0.5dB, –0.1dB)	20Hz – 20kHz (+5, –5)	20Hz – 20kHz (+5, –5)
S/N RATIO WEIGHTED AT RATED POWER	<110dBA	>116dBA	>100dBA	108dB minimum, 111dB typical, 22kHz bandwidth	108dB minimum, 22kHz bandwidth	108dB minimum, 22kHz bandwidth	108dB minimum, 22kHz bandwidth
HARMONIC/IM DISTORTION	20Hz – 20kHz, <0.02%	20Hz – 20kHz, <0.02%	20Hz – 20kHz, <0.03%	<0.008% at 1kHz, maximum output level	<0.008% at 1kHz, maximum output level	0.01%	0.01%
DIMENSIONS H x W x D	7" x 19" x 17-1/2" 178mm x 483mm x 445mm	7" x 19" x 19-1/2" 178mm x 483mm x 495mm	7" x 19" x 19-1/2" 178mm x 483mm x 495mm	6-5/8" x 17-5/16" x 14-7/8" 169mm x 440mm x 377mm	5" (w/feet) x 17-5/16" x 14-7/8" 128mm (w/feet) x 440mm x 377mm	3-1/2" x 19" x 18-1/2" 89mm x 483mm x 470mm	1-3/4" x 19" x 18-1/2" 44mm x 483mm x 470mm
WEIGHT	70 lb/31.8kg	88 lb/40kg	97 lb/44kg	45 lb/20.5kg	24 lb/10.7kg	13 lb/6kg	6.5 lb/3kg

S2600



1996

SDEC-1000

JBL's Synthesis SDEC-1000 brings digital technology to its highest level for the benefit of the consumer.



1999

JBL is the official "Sound of Woodstock." The third time is the charm.

2000

JBL announces its VerTec® Line Array System, which debuts at the Democratic National Convention.

The JBL Synthesis S7150 is the first consumer 7-channel power amplifier.

At 6,500 watts, Synthesis Ultra is the most powerful home theater system available, at any price.



K2 S9800

2001

The JBL VerTec system is used for the presidential inauguration in Washington D.C., in front of 300,000 people.

JBL releases the K2 S9800, employing the 435Be and 045Be pure-cast-beryllium compression drivers. Germany, Sweden, Great Britain and Japan bestow their top awards on this, the latest in the K2 series of advanced loudspeakers.

The Academy of Motion Picture Arts and Sciences awards JBL engineers the Scientific and Engineering Award and the Technical Achievement Award.

The JBL S2600 receives the highly coveted Golden Award and Stereo Sound COTY Award for its advanced technological execution and superior sonic performance.

JBL powers the Woodstock music festival again.



DESCRIPTION	AV1 THX Ultra2™ Surround Processor	AVA7 7 x 125-Watt Power Amplifier
POWER OUTPUT	N/A	7 x 125W @ 8 ohms, 20Hz – 20kHz, all channels driven
FREQUENCY RESPONSE	10Hz – 20kHz, +0.05dB/-0.1dB, -0.5dB at 40kHz, reference 1kHz	20Hz – 20kHz, ±0.25dB
S/N RATIO WEIGHTED AT RATED POWER	<108dB minimum, 22kHz bandwidth	>100dB at rated power
HARMONIC/IM DISTORTION	Below 0.008% at 1kHz, maximum output level	At rated output, all frequencies <0.01%
DIMENSIONS H x W x D	3-13/16" x 17-5/16" x 14-7/8" 97mm x 440mm x 377mm	5-1/2" x 17-5/16" x 16-1/4" 140mm x 440mm x 413mm
WEIGHT	17 lb/7.7kg	55 lb/25kg

2002 The VerTec system is used for major events, including the Super Bowl, the GRAMMY Awards® and the World Cup opening ceremony in Seoul.

A JBL Synthesis system reigns as the world's most powerful home theater, offering more than 8,000 watts of power and the SDP-40 digital processor.

The JBL Synthesis S4A is the world's first THX Ultra2™ in-wall, flush-mount, multiple surround loudspeaker. JBL sponsors The Who's world tour.

2003



2004

2004

JBL sponsors the Eric Clapton world tour. S4A is awarded the International CES® Innovations Award.

2005

JBL Pro receives a Technical GRAMMY® from the National Academy of Recording Arts & Sciences.

The new reference in JBL home audio performance – Project Everest.

JBL celebrates 60 years as the worldwide leader in audio reproduction.

2006



Project Everest DD66000

JBL SYNTHESIS®

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