Professional Series



Westlake Audio

MANUFACTURING GROUP

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Westlake Audio

What Makes a Monitor a “Westlake”

At Westlake Audio our primary goal is to build the world’s most accurate loudspeaker systems!

For over 30 years we have applied our expertise in acoustics and recording technology to acheive this goal. Our speaker systems are designed and manufactured to deliver ultra high resolution with low distortion that elevate their sonic performance into a class unto themselves. The revealing nature of a Westlake Monitor has led many to dub them the “Audio Microscope”.

Westlake has long believed that in order to create the ultimate recording you must be able to hear every detail. To that end, the ultimate monitor must be able to present the source material accurately and faithfully, exposing the entire sonic spectrum. This accuracy provides the engineer with an invaluable reference of both the good and the bad in a performance.

To bring these ideals to life we incorporate a “no compromise” manufacturing process that is used for all of our products. Every speaker is hand built by experienced craftsmen using over 100 special manufacturing procedures that uniquely identify a ‘Westlake Monitor’. From the rock-solid cabinet that has undergone an extensive dampening process, to the hand-wound coils used in the crossovers, to the final testing and certification process that each finished speaker undergoes, the attention to detail ensures that every Westlake Monitor is a work of art.

Experience audio monitoring the Westlake Way, and join the hundreds of recording studios, broadcast facilities and independent professionals worldwide that depend on the performance and reliability that their Westlake Monitors provide, day in and day out.

Great sound. It’s not just our business, it’s our passion.

CONTENTS

Index 2
The Westlake Story 2
Lc Series 3,4
BBSM Series 5,6
Reference Series 7,8
Crossovers, Accessories 9
Specifications 10

Lc Series

Lc5.75 — 5" LF & 3/4" HF

The Lc 5.75 is a 2-way 'mini' monitor that offers precise imaging and impressive low frequency response from a small enclosure. An ideal monitor for space sensitive environments. Applications include home studios, mobile recording studios, broadcast, post production and quality control rooms.



Lc6.75 — 6 1/2" LF & 3/4" HF



The Lc 6.75 is a compact 2-way monitor that is ideal for applications with limited space. It provides super transient response with very good bass for its size. The aligned cabinet design helps smooth frequency response, and dual front mounted ports extend the bass response. The Lc 6.75 is also available in a shielded version for use near video monitors.

Lc8.1SW — Dual 10" LF

The Lc 8.1SW is a dedicated stereo subwoofer system for use with Westlake Lc 8.1 monitors. The system is comprised of two enclosures each housing dual 10" woofers. The cabinets also house an extensive crossover network that is tuned specifically for use with the Lc 8.1s. The system is optimized for bi-amp operation but can be powered by a single stereo amplifier. The subwoofer enclosures are also designed to act as pedestal stands for the Lc 8.1 satellite speakers.

Lc8.1 — 8" LF & 1" HF



The Lc 8.1 is a 2-way system that offers the kind of response normally only associated with 3-way systems. The cabinet incorporates a design that improves the time/phase alignment along with dual front mounted ports for extended low frequency response. Excellent value and high performance make this an excellent choice for recording, broadcast and surround studios.



Mixer/Engineer - Dave Rideau (George Benson, New Edition, Juan Gabriel, Janet Jackson) with his Lc 8.1s plus Muffs

"The stereo sound stage of the Lc 8.1s is extremely accurate."

The Westlake Lc Series offers the user a unique integration of crossover, cabinet and drivers that produce a reliable, attractive and cost effective unit while maintaining the sound characteristic so identified as the Westlake Sound. Applications for Lc Series monitors include small control rooms, project studios, editing suites, mobile recording and quality control stations.

Lc265.1 — Dual 6 1/2" LF, 5" MF, 1" HF



A unique design incorporating dual 6 1/2" woofers with a 5" midrange and a coaxially mounted 1" tweeter. Intended for use as a dedicated center channel, the Lc 265.1 can also be used in L/C/R and 5 channel configurations. It offers exceptional off axis performance, wide bandwidth and is magnetically shielded. The passive crossover allows the user the option for either bi-amplification or bi-wiring.

Lc3w10 — 10" LF, 5" MF, 3/4" HF



The Lc 3w10 is a 3-way system that offers the user exceptionally wide bandwidth and high output in a relatively compact enclosure. The mirror-imaged cabinet configuration allows for flexibility in placement and the high level crossover network provides the user the option of either bi-amping or bi-wiring their system. Applications include small to mid-sized recording studios, broadcast control rooms, mastering suites and larger project studios. Also available in a vertical configuration.

Lc3w12 — 12" LF, 6 1/2" MF, 1" HF



The Lc 3w12 is a 3-way system that raises the level of performance previously available in a large bookshelf-sized monitor. Its ability to produce low frequency impact along with a highly defined midrange and a smooth top end make this the perfect main monitoring system for medium sized control rooms. A mirror-imaged array and the ability for bi-amp and bi-wire operation further compliment its performance.

BBSM Series

BBSM-4 Dual 4” LF, 3/4” HF



The BBSM-4 is a high accuracy portable reference monitor that produces a coherent soundfield, even as close as 18”. It’s reputation for extremely flat response and low distortion have made it a favorite with engineers the world over. Recommended applications include use as an alternative to permanently installed studio monitors, project studios, mobile recording, editing suites and broadcast on-air or production work.

BBSM-5 Dual 5” LF, 1” HF



The BBSM-5 is a 2-way, medium power, phase coincident low distortion monitor with internal high level crossover. Its completely symmetrical design, compact size and wide bandwidth make it an excellent choice for multi-channel applications. Additional applications are: an alternate reference to permanently installed studio monitors, monitors for small control rooms, mobile recording, editing suites and quality control stations.

BBSM-6 Dual 6 1/2” LF, 3 1/2” MF, 1” HF



The BBSM-6 is a 3-way, medium power, phase correlated monitor with an internal high level crossover. Its ability to deliver high SPL, low distortion and excellent imaging has made it the monitor of choice with engineers the world over for more than a decade. Recommended applications include main monitors for smaller control rooms, post production suites, editing suites and broadcast main monitors.

BBSM-8 Dual 8” LF, 3 1/2” MF, 1” HF



The BBSM-8 is a 3-way, medium power, phase correlated monitor with an internal high level crossover. Its dual 8” woofers produce enough bass to fill medium to medium/large control rooms. Great detail combined with low distortion make this the perfect choice for extended sessions. Users rate the BBSM-8 as one of the best monitors when it comes to avoiding listener fatigue.

BB8-SWP 15” LF

The BB8-SWP is a 2 channel (stereo) subwoofer system that is designed for use with the BBSM-8 monitors. The subwoofers are specifically designed for operation with the BBSM-8 monitors and require no user adjustments or modifications. The subwoofer houses a 55-pound passive high level network with 68Hz high/low pass filters that produce a seamless transition from sub to mains. Once the system has been connected to appropriate amplification the user has a totally tuned and tweaked 4-way speaker system. The subwoofer enclosure is intended for use as a pedestal base for the mains. The BBSM-8 system with subwoofer can be single or biwred at its input or alternately single, bi or triamplified using the provided high level networks (no active crossover required). Also use for BB-10SWP.



Network Live Control Room
FOX Digital, Los Angeles, CA

The Westlake BBSM Series offers the user a high accuracy and high sensitivity reference monitor that provides wide bandwidth, low I.M. distortion, good power handling, pinpoint imaging and coincident driver outputs at close range (18 - 36”, varies with model).

The BBSM Series incorporate steep slope (2-14 pole, varies with model) crossovers using extensive electromechanical dampening and point to point wiring. Prior to assembly all speaker and crossover components are individually tested and matched to assure balanced output and response. Additionally, every BBSM series product undergoes extensive testing in order to assure that each unit matches the level of performance required by the design criteria.

To further enhance performance the user is given the option of bi-wiring or passive bi-amplification through the speaker’s internal crossover network. The totally symmetrical design of the BBSM series eliminates the need for separate right and left units as well as making it an ideal choice for multi-channel set-ups. BBSM Series applications include studio monitoring, mobile recording, post-production, editing suites, mastering suites and quality control stations.

BBSM-10 Dual 10” LF, 6 1/2” MF, 1 1/4” HF



The BBSM-10 is a 3-way, medium power, phase coherent monitor with an internal high level crossover. Great detail combined with low distortion makes this the perfect choice for extended sessions at moderate SPL in medium sized rooms.

BB10-SWP 18” LF

The BB10-SWP is a 2 channel (stereo) subwoofer system designed for use with the BBSM-10 monitors. The subwoofers are specifically designed for operation with the BBSM-10 monitors and require no user adjustments or modifications. The subwoofer houses a 55-pound passive crossover network with a 55Hz low pass filter that produces a seamless transition from sub to mains. Once the system has been connected to appropriate amplification the user has a totally tuned and tweaked 4-way speaker system. The subwoofer enclosure is intended for use as a pedestal base for the mains.

BBSM-12 Dual 12” LF, 6 1/2” MF, 1 1/4” HF

The BBSM-12 is a 3-way, medium/high power, phase coherent monitor with an internal high level crossover. Its ability to deliver clear, accurate sound reproduction at high energy levels is one reason this monitor has been the right choice for so many facilities. Recommended for soffit mount installations the BBSM-12 will make an excellent main monitor system for recording, editing, mixing and mastering.



BBSM-15 Dual 15” LF, 10” MF, 1” HF

The BBSM-15 is a 3-way, medium power, phase coherent monitor with an internal high level crossover. It incorporates a horn loaded high frequency driver, which is capable of reproducing high SPL’s while maintaining linear resolution, and low I.M. distortion for which the smaller BBSM series has long been recognized. Designed for soffit mounting the BBSM-15 can also be used in a freestanding application with optional pedestal stands. Other options include an enhanced performance woofer package and removable grilles.



Reference Series

TM-3

Dual 15” LF, 2” MF, 1” HF



The TM-3 is a 3-way, high power reference monitor. The system offers the user the option of single amp operation with the standard HLX-800 passive high level crossover or biamplification with the optional MRX-2 active 2-way crossover. Wide bandwidth, high power and broad dispersion make this model the perfect choice for large control rooms seeking high SPL’s, reference accuracy and solid reliability. The visually stunning hardwood horns enhance the systems aesthetic value, making this system as pleasing to the eye as it is to the ear. An optional tri-amp configuration (custom), enhanced performance woofer option and HLX-800 mono amp configurations allow this system to be configured to the user’s specific application.



FLYTETYME STUDIOS
Minneapolis, Mn

The Westlake Reference Series offers the user the ultimate in high power monitoring. The Reference Series is one of the few monitoring systems capable of reproducing the dynamics of today’s digital recordings. Careful selections of drivers, combined with a unique mechanical configuration and phase aligned crossovers, provide an acoustic depth of field unattainable with conventional designs. To further complement these systems the user is given the choice of employing Westlake’s proprietary two-way MRX-2 or four-way HRX active electronic crossovers for use in BI, Tri, Quad and Penta amp power configurations.



Bruce Swedien:
5-time Grammy Award Winning Recording Engineer
“I’ve never heard anything like the accuracy of the SM-1’s, you can trust them to tell the truth”.

SM-1

Dual 18” LF, 12” MB, 2” MF, 1” HF, 1/2” SHF

The SM-1 is a 5-way, high power, phase coincident monitor. Designed as the ultimate in high power monitoring, the SM-1 offers 6 dB more headroom at low frequencies than most studio monitors. While its physical dimensions and weight may preclude its use in many existing facilities, any substantial investment in updated facilities or new room designs should include serious consideration of this monitor. Careful selection of drivers, combined with a unique mechanical configuration and phase aligned crossovers, provide an acoustic depth of field unattainable with conventional designs. The SM-1 offers the user a choice of powering their system in a bi-amp or passive tri or quad amp set-up with the MRX-2, 2-way active crossover, a quad-amp or passive pent or sext amp set-up with the SM-1X, 4-way active crossover or fully active pent-amp set-up with both the SM-1X and MRX-2 being used. All this and more make the SM-1 the world’s most powerful production reference monitor system.

HR-1

Dual 15” LF, 10” MB, 2” MF, 1” HF



The HR-1 is a high resolution, 4-way, high power reference monitor. The system offers the user the option of either biamplification or passive tri or quadamp with the MRX-2, 2-way active crossover or quadamplification with the HR-X 4-way crossover. For the quality conscious user seeking a main monitoring system that delivers high resolution, broad bandwidth, high power, low distortion and excellent dispersion, the HR-1 will satisfy all of these requirements. Optional speaker cable sets, enhanced performance woofers and custom pedestals for free standing applications allow this system to be configured to the user’s specific application.



Accessories

MRX-2 Crossover



The MRX-2 is a two-channel, two-way, active crossover system consisting of a 1.75 x 19.00 inch rack mount frame containing three circuit boards. There are two identical signal boards with on/off and level adjust for each of two bands as well as overall level adjust and a fail safe power supply board with red LED indicators for each supply voltage. While designed for application with Westlake Audio Bi-amplified Studio monitor systems, the MRX-2 can be used to improve the performance of other multi-amplified systems, depending on system configuration.

HR-X Crossover



The HR-X is a 2-channel, 4-way, active crossover system consisting of a 1.75 x 19.00 inch rack mount frame containing three front removable circuit boards. There are two identical signal boards with on/off and level adjust for each of four bands and one dual power supply board with separate on/off switching and red LED indicators for each supply. The system employs integral mumetal shielding with high permeability, which provides the maximum isolation from stray magnetic fields. While designed for use with Westlake Monitor Systems, the HR-X may be successfully used with other four or five way quad amplified systems, depending on the system configuration.
Shown in optional walnut cabinet.

Speaker Cables



Westlake Audio speaker cables are designed to carry a signal with the least amount of loss and audible distortion. Westlake cables will improve the performance of any loudspeaker by providing a signal path that is high in conductivity, low in resistance. The Westlake bi-wire cable assemblies will further reduce signal resistance and intermodulation distortion that would occur if the whole audio signal were carried in the same cable. High strand count, high temperature silicone insulation and quality heavy duty terminations assure flexibility and long and trouble free service life. All Westlake speaker cables are individually built and tested, are available in three different wire gauges (4, 7 and 10), and can be terminated with either gold spade lugs or gold banana plugs.

Speaker Muffs



The Westlake Audio speaker muff is a proprietary design that further enhances the performance of the Lc and BBSM Series of monitors. The speaker muff is a foam, chamfered edge, baffle extension that increases the area of the front baffle. As the size of the baffle increases, it takes longer for the sound/energy to reach the cabinet edge, and as a result decreases the amplitude of the edge reflections. This reduction in edge reflections and related distortions allow the listener to hear more of the direct sound from the speaker. The benefits experienced by the listener are a smoothing effect on the frequency response, improved imaging, and perceived increase in bass response. Speaker muffs are precision cut to match each individual loudspeaker and require no adhesives or modifications for attachment to the monitor.

Specifications

Lc Series

Model	System Type	Woofer	Midrange	Tweeter	Freqency Response +/- 3dB	Sensitivity @1m/2.83V	Crossover Frequency	Impedance Nom & Min	Inputs (Dual Banana)	Power IEC Long/Short	Dimensions H x W x D in. H x W x D cm.	Weight lb. kg.
Lc5.75	2 Way BR	1 x 5"		1 x 3/4"	60-18kHz	86dB	4.5kHz	7 & 4	SA	80/200W	14 x 6.5 x 9 35.6 x 16.5 x 22.9	18 8.2
Lc6.75	2 Way BR	1 x 6 1/2"		1 x 3/4"	60-18kHz	88dB	4kHz	7 & 5	SA	80/200W	16 x 8 x 10.4 40.6 x 20.3 x 25.4	22 10
Lc8.1	2 Way BR	1 x 8"		1 x 1"	55-18kHz	90.5dB	3.6kHz	7 & 5	SA	85/225W	18 x 10 x 11.6 45.7 x 25.4 x 29.5	31 14
Lc3w10	3 Way BR	1 x 10"	1 x 5"	1 x 3/4"	42-20kHz	88dB	150/4.5kHz	5 & 3	BA/BW	100/300W	12 x 21 x 13 30.5 x 53.3 x 33.0	69 31.3
Lc3w12	3 Way BR	1 x 12"	1 x 6 1/2"	1 x 1"	40-18kHz	91dB	160/4.5kHz	5 & 3	BA/BW	110/300W	15 x 25 x 15 38.1 x 63.5 x 38.1	105 47.6
Lc265.1	3 Way BR	2 x 6 1/2"	1 x 5"	1 x 1"	48-18kHz	91dB	180/4kHz	5 & 3	BA/BW	125/400W	8 x 22 x 11 20.3 x 55.9 x 27.9	42 19

BBSM Series

Model	System Type	Woofer	Midrange	Tweeter	Frequency Response +/- 3dB	Sensitivity @1m/2.83V	Crossover Frequency	Impedance Nom & Min	Inputs (Barrier Strip)	Power IEC Long/Short	Dimensions H x W x D in. H x W x D cm.	Weight lb. kg.
BBSM-4	2 Way BR	2 x 4"		1 x 3/4"	65-20kHz	89dB	1.5kHz	4 & 2	BA/BW	80/200W	8 x 15 x 10 20.3 x 38.1 x 25.4	25 11.3
BBSM-5	2 Way BR	2 x 5"		1 x 1"	65-20kHz	90dB	1.2kHz	4 & 2	BA/BW	80/200W	10 x 18 x 11.75 25.4 x 45.7 x 29.8	42 19
BBSM-6	3 Way BR	2 x 6"	1 x 3 1/2"	1 x 1"	60-20kHz	91dB	600/6kHz	4 & 2	BA/BW	100/265W	10.5 x 22 x 13 26.7 x 55.9 x 33	67 30.4
BBSM-8	3 Way BR	2 x 8"	1 x 3 1/2"	1 x 1"	65-18kHz	92dB	600/5kHz	4 & 2	BA/BW	100/300W	13 x 26 x 16.5 33 x 66 x 41.9	105 47.6
BBSM-10	3 Way BR	2 x 10"	1 x 6 1/2"	1 x 1 1/4"	45-18kHz	94dB	600/4kHz	4 & 2	BA/BW	115/360W	16 x 30 x 21.5 40.6 x 76.2 x 54.6	150 68
BBSM-12	3 Way BR	2 x 12"	1 x 6 1/2"	1 x 1 1/4"	45-18kHz	96dB	500/4kHz	4 & 2	BA/BW	145/365W	19 x 34 x 23 48.3 x 86.4 x 58.4	220 100
BBSM-15	3 Way BR	2 x 15"	1 x 10"	1 x 1"	38-17kHz	98dB	350/1.6kHz	4 & 2	BA/BW	200/600W*	27.25 x 41 x 25 69.2 x 104 x 63.5	375 156.5

*w/Enhanced Woofer Option

Reference Series

Model	System Type	Woofer	Midrange Horn Loaded Compression Driver	Tweeter	Frequency Response +/- 3dB	Sensitivity @1M/2.83V	Crossover Frequency	Impedance Nom & Min	Inputs (Barrier Strip)	PowerIEC Long/Short	Dimensions H x W x D in. H x W x D cm.	Weight lb. kg.
TM-3	3 Way BR	2 x 15"	1 x 2"	1 x 1"	34-18kHz	99dB	800/4.5kHz	4 & 2	BA/BW	300/80/30	30 x 44 x 20 76.2 x 111.7 x 50.8	389 158.8
HR-1	4 Way BR	2 x 15"	1 x 10" MB 1 x 2" MF	1 x 1"	34-18kHz	99dB	1kHz 4.5kHz	4 & 2	BA/QA	300/150 50/30	30 x 44 x 20 76.2 x 111.7 x 50.8	415 170.1
SM-1	5 Way BR	2 x 18"	1 x 12" MB 1 x 2" MF	1 x 1" 1 x 1/2ST	20-20kHz	101dB	200/800 3.2kHz/10kHz	4/8/16/8	BA/QA	600/150 35/25/20	39 x 49 x 32 99 x 124.5 x 81.3	550 204.1

Subwoofers

Model	System Type	Woofers	Frequency Response +/- 3dB	Sensitivity	Internal Crossover	Impedance Nom & Min	Inputs	Power IEC Long/Short	Dimensions H x W x D in. H x W x D cm.	Weight lb. kg.
Lc8.1SW	Passive Subwoofer	2 x 10"	34-18kHz w/Lc8.1	90.5dB	68Hz	5 & 2.5	BA/BW Dual Banana	160/600	26.8 x 13.7 x 14.7 68.1 x 38.8 x 37.3	100 45.4
BB8SWP	Passive Subwoofer	1 x 15"	34-18kHz w/BBSM-8	96dB	68Hz	3 & 2	BA/BW Barrier Strip	200/500	28 x 26 x 28 71.1 x 66 x 71.1	215 97.5
BB10SWP	Passive Subwoofer	1 x 18"	26-18kHz w/BBSM-10	96.5dB	55Hz	3 & 2	BA/BW Barrier Strip	200/800	30 x 28.6 x 23.3 76.2 x 72.6 x 58.2	275 124.7

Crossovers

Model	Type	Input	Distortion (THD)	Max. Output	Power* (50/60 Hz)	Audio Connector	Dimensions H x W x D in. H x W x D cm.	Weight w/hdwd cabinet
HR-X	Two Channel Four Way	Active Balanced 10k ohm, -10 to +4 dBv nominal	Less than .01% @+4dBv out	+22dBv @ 600ohm	105 - 130 VAC or 210 - 240 VAC 40 watts	XLR	2.7 x 21 x 14.5 68 x 53 x 36.8 1RU w/o cabinet	15lb. 6.8kg.
MRX-2	Two Channel Two Way	Active Balanced 10k ohm, -10 to +4 dBv	Less than .01% @+4dBv out	+19dBv @ 1 Kohm	105 - 130 VAC or 210 -240 VAC 13 watts	XLR	2.6 x 20 x 8 66 x 513 x 20.3 1RU w/o cabinet	7.5lb. 3.5kg.

(*other voltages by special order)

KEY: BR=Bass Reflex, SA=Single Amp, BA=Bi-Amp, BW=Bi-Wire, QA=QuadAmp, MB=MidBass, MF=MidFrequency, ST=SuperTweeter, RU=Rack Unit.
Finish: matte black; optional hardwood veneer. Horns are hardwood, walnut unless specified. Lc and Reference Series include black grilles; BBSM Series grilles are optional.