

SONANCE

PROFESSIONAL SERIES SURFACE MOUNT SPEAKER PS-S83T MKII

PROFESSIONAL SERIES

The new standard in aesthetics and sonic performance for today's commercial audio applications.

The Sonance PS-S83T MKII is a two-way, 8" Surface-Mount loudspeaker that features a high-excursion, 8" polypropylene woofer combined with a chambered 1" soft dome tweeter, engineered to deliver best in class performance in both 8 Ohm and 70V/100V applications.

Housed in a rugged, high-impact ABS enclosure, the PS-S83T MKII features a clean, unobtrusive design that will compliment a variety of interior and exterior decors. The patented FastMount® bracket system enables the enclosure to pivot 180° on the bracket while the front mounted input connectors and transformer tap switch ensures a close deployment on any mounting surface.

This IPX4 rated enclosure boasts an extreme temperature resistant cabinet and is coupled with a corrosion-resistant, powder coated, aluminum grille for long term durability. Moreover, the PS-S83T MKII is UL1480 (UEAY) and UL2239 Listed and available in black and white (paintable) finishes.

All Professional Series in-ceiling, surface-mount, and pendent models share complementary power capabilities and consistent voicing, ensuring seamless integration across any environment.

FEATURES AND BENEFITS

PERFORMANCE

- Class-leading sensitivity and sonic performance
- Exceptional off-axis response
- Heavy-duty voice coil for longevity and reliability
- Ultra-low saturation transformer for uncompromised performance on 70V/100V lines
- Consistent voicing across product range

AESTHETICS

- Clean and minimalistic design
- Available in black or white (paintable)

INSTALLATION

- FastMount® bracket system for easy installation
- Front-located cable connector and tap selector
- Connector and tap selector cover
- Corrosion-resistant powder coated aluminum grille

APPLICATIONS

- Shopping Malls, Retail Spaces and Showrooms
- Restaurants, Bars and Lounges
- Galleries, Museums and Amusement Parks
- Casinos, Convention Centers and Hotels
- Houses of Worship and Educational Facilities
- Sporting Facilities
- Marinas, Piers and Wharfs



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TECHNICAL SPECIFICATIONS

LOUDSPEAKER

SKU	40206 (White); 40150 (Black)
Frequency Range (-10dB)	41Hz - 25kHz
Frequency Range (-3dB)	55Hz - 20kHz
Power Capacity	160 Watts Continuous Program Power 80 Watts Continuous Pink Noise
Nominal Sensitivity	90dB
Nominal Coverage Angle	90 degrees x 90 degrees coverage
Directivity Factor (Q)	7.6
Directivity (DI)	8.1dB
Rated Maximum SPL	110dB @ 1 meter (3.3 feet) average, 116dB peak
Rated Impedance	8 Ohms nominal, 6 Ohms minimum
Transformer Taps	70V: 60W, 30W, 15W and 7.5W 100V: 60W, 30W and 15W
Crossover Point	2750Hz
Overall Dimension	14.02" Height x 9.01" Width x 8.58" Depth (356mm x 229mm x 218mm)
Net Weight	14.72 lbs (6.68kg) each
Shipping Weight	42.23 lbs (19.16kg) pair
Unit of Measure	Each
Color	Black or White
Grille	Powder Coated Aluminum Friction Fit

TRANSDUCERS

LF Driver	8" (203mm) Polypropylene Cone, Butyl Rubber Surround
HF Driver	1" (25mm) Cloth Dome, Ferrofluid cooled

ENCLOSURE

Input Connectors	Front-mounted four pin, Euroblock with loop output connections
Safety Agency	UL 1480, UL 2239, NFPA 70
Mounting Bracket	U-Bracket with Sonance FastMount
Environmental & UV	Conforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IPX4 splash-proof rating

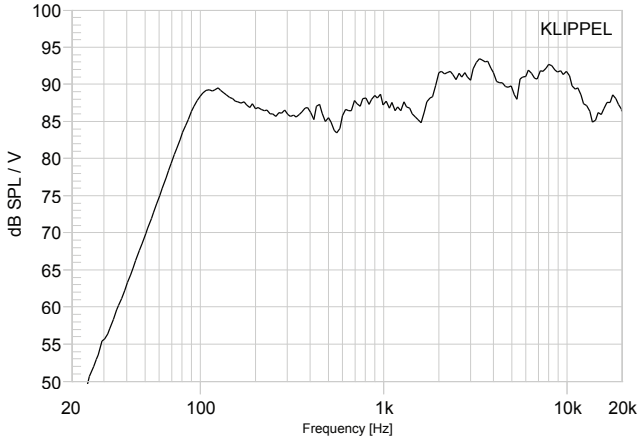
INCLUDED ACCESSORIES

2 x Euroblock Connector
2 x FastMount Bracket
2 x Terminal Cover
2 x Grille

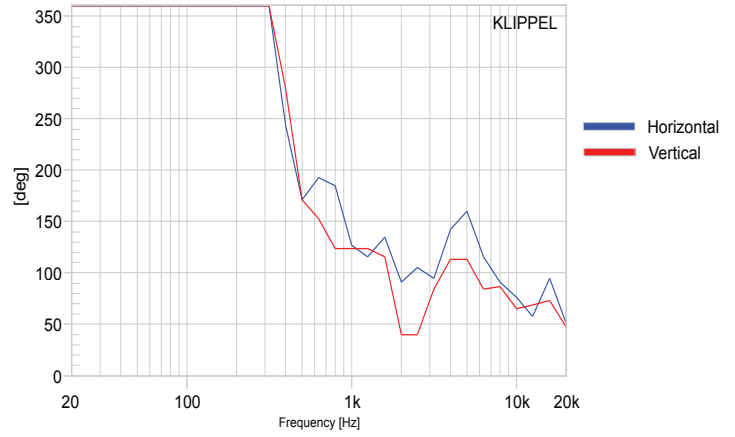
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PERFORMANCE MEASUREMENTS

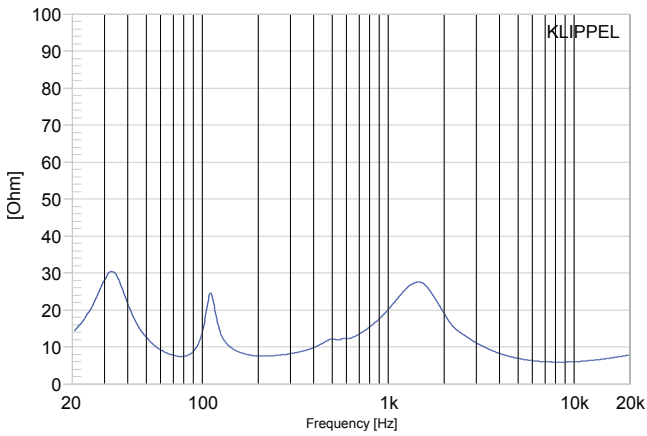
1 METER ON AXIS FREQUENCY RESPONSE



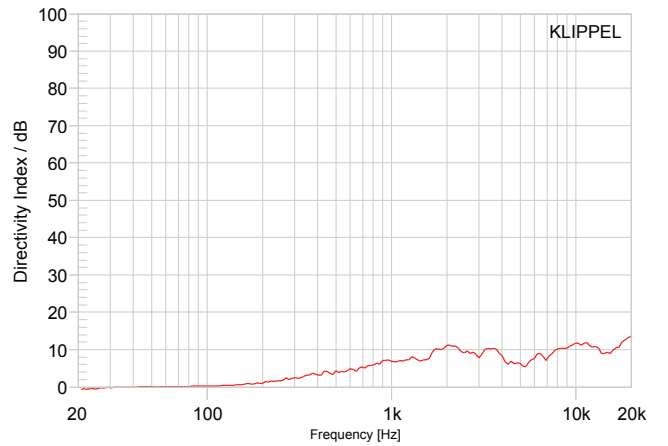
BEAMWIDTH VS FREQUENCY



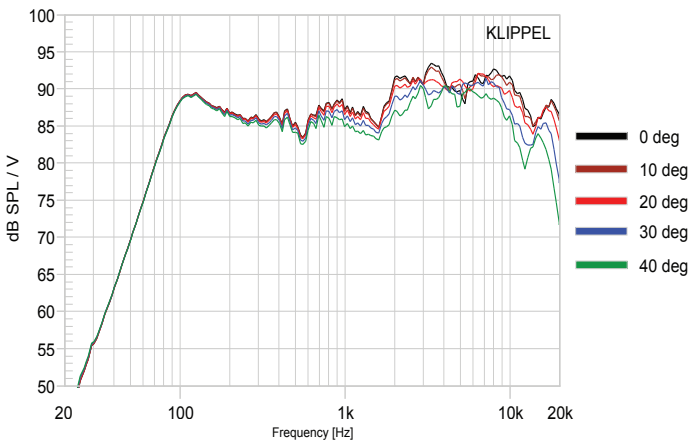
IMPEDANCE VS FREQUENCY



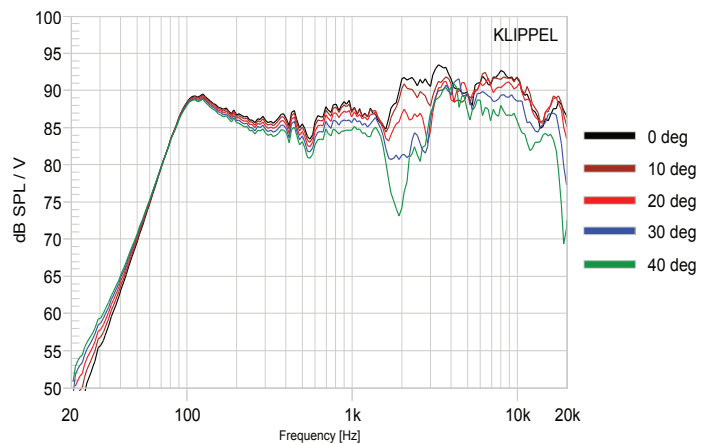
DIRECTIVITY INDEX VS FREQUENCY



1 METER HORIZONTAL FREQUENCY RESPONSE



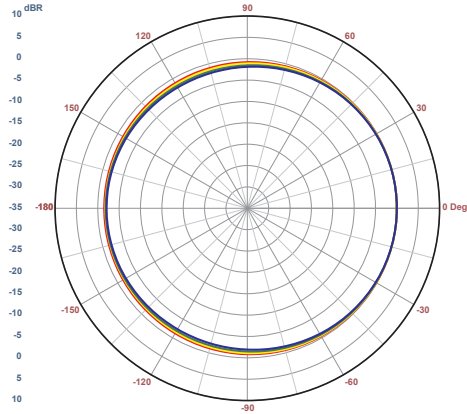
1 METER VERTICAL FREQUENCY RESPONSE



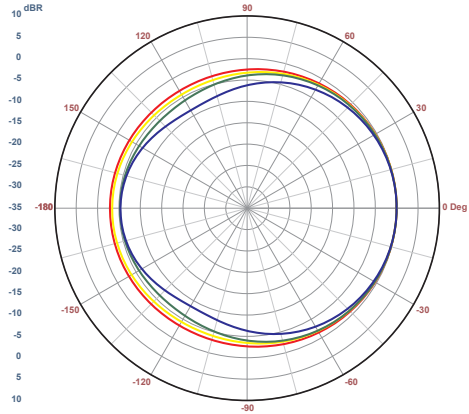
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POLAR PLOTS (1/3 OCTAVE)

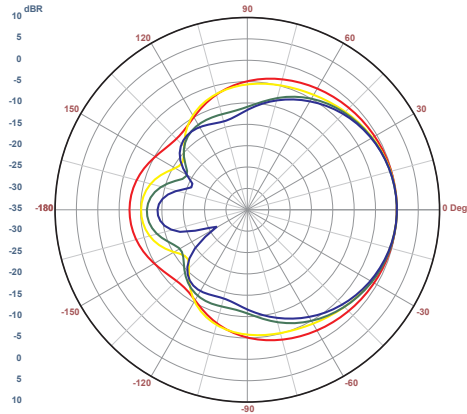
RATIO VS ANGLE



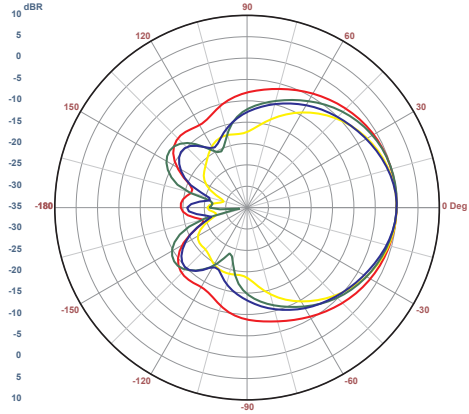
RATIO VS ANGLE



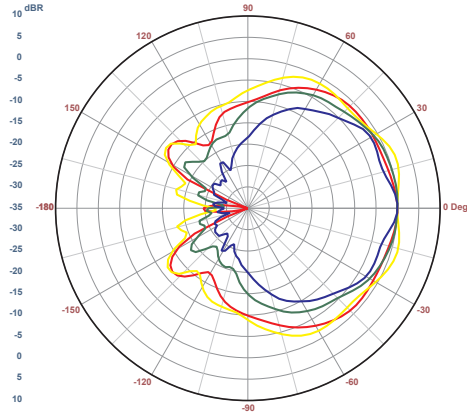
RATIO VS ANGLE



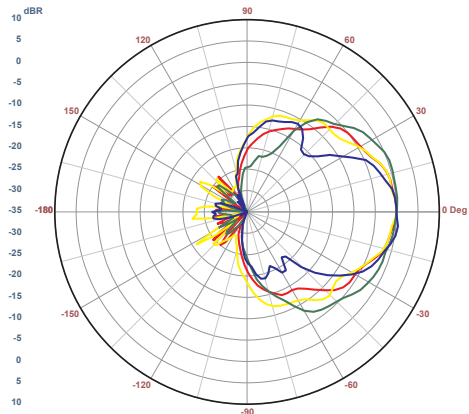
RATIO VS ANGLE



RATIO VS ANGLE



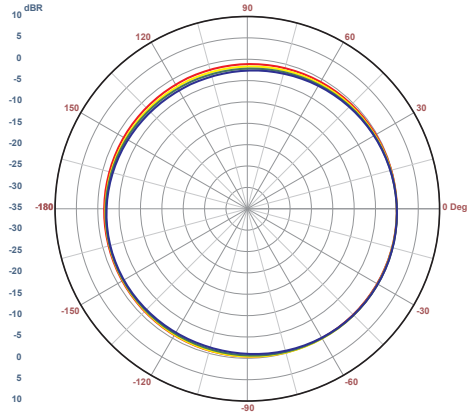
RATIO VS ANGLE



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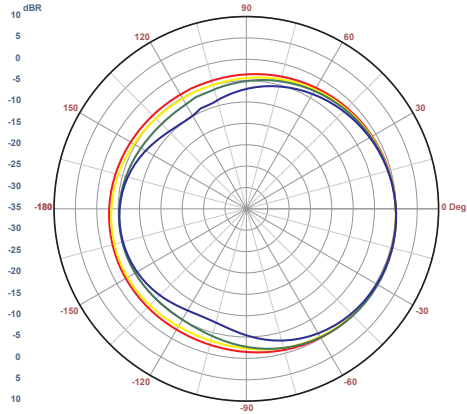
POLAR PLOTS (1/3 OCTAVE)

RATIO VS ANGLE



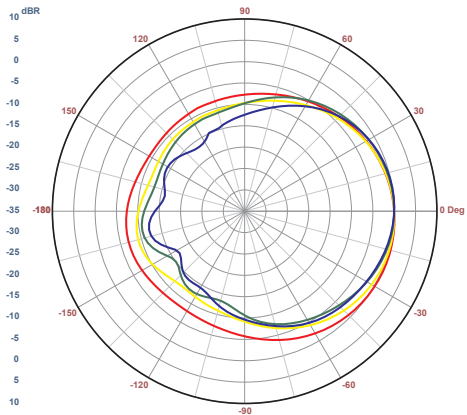
Curve	Freq	BW	Q	DI
—	100.00	360	1.0	0.0
—	125.00	360	1.0	0.0
—	160.00	360	1.0	0.0
—	200.00	360	1.0	0.0

RATIO VS ANGLE



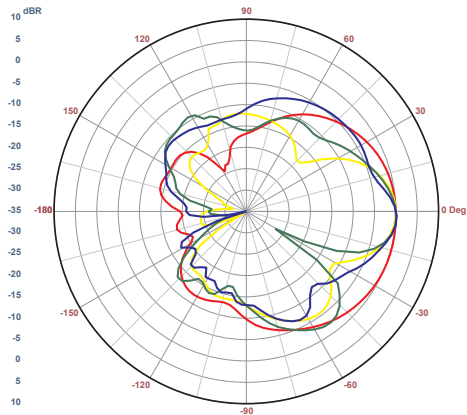
Curve	Freq	BW	Q	DI
—	250.00	360	1.0	0.0
—	315.00	360	1.0	0.0
—	400.00	280	1.3	1.1
—	500.00	171	2.1	3.2

RATIO VS ANGLE



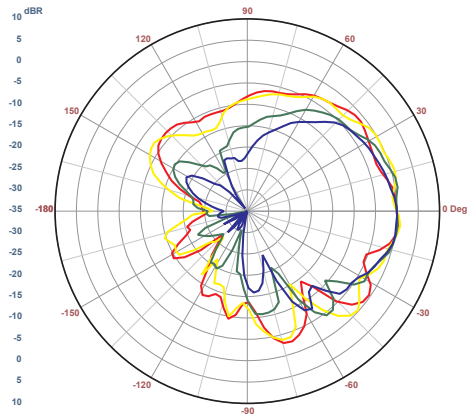
Curve	Freq	BW	Q	DI
—	630.00	153	2.4	3.7
—	800.00	124	2.9	4.6
—	1.00K	124	2.9	4.6
—	1.25K	124	2.9	4.6

RATIO VS ANGLE



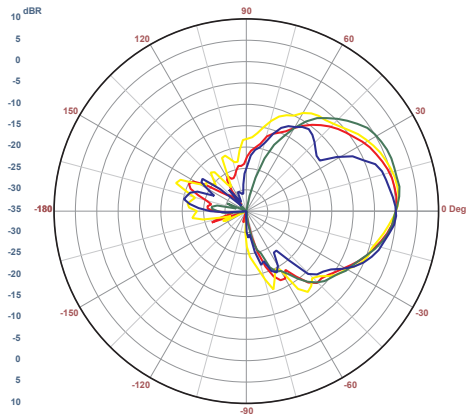
Curve	Freq	BW	Q	DI
—	1.60K	116	3.1	4.9
—	2.00K	40	9.0	9.5
—	2.50K	40	9.0	9.5
—	3.15K	84	4.3	6.3

RATIO VS ANGLE



Curve	Freq	BW	Q	DI
—	4.00K	113	3.2	5.0
—	5.00K	113	3.2	5.0
—	6.30K	84	4.3	6.3
—	8.00K	87	4.1	6.2

RATIO VS ANGLE



Curve	Freq	BW	Q	DI
—	10.00K	65	5.5	7.4
—	12.50K	69	5.2	7.2
—	16.00K	73	4.9	6.9
—	20.00K	47	7.6	8.8

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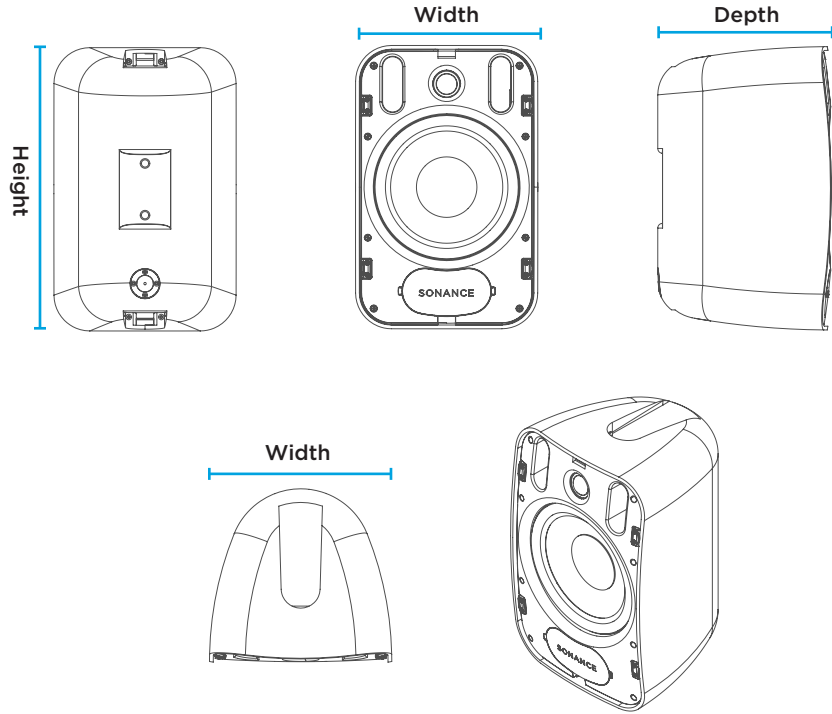
DIMENSIONAL SKETCHES SPECIFICATIONS

PS-S83T MKII Loudspeaker

Height: 14.02" (356mm)

Width: 9.01" (229mm)

Depth: 8.58" (218mm)



S8 Mounting Bracket

Height: 14.528" (369mm)

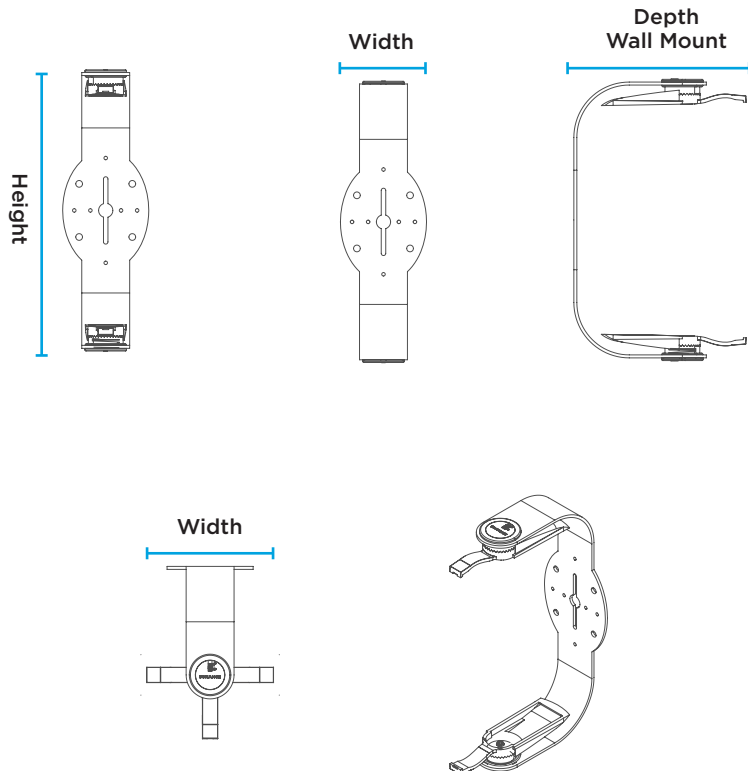
Width: 4.527" (115mm)

Depth Wall Mount:

9.37" (238mm)

Depth Ceiling Mount:

10.315" (262mm)



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ASSOCIATED PRODUCTS

IN-CEILING SPEAKERS

PS-C43RT In-Ceiling Speaker	40130
PS-C63RT In-Ceiling Speaker	40131
PS-C83RT In-Ceiling Speaker	40132
PS-C83RWT In-Ceiling Speaker	40133

PENDANT SPEAKERS

PS-P43T Pendant Speaker White	40134
PS-P63T Pendant Speaker White	40135
PS-P83T Pendant Speaker White	40136
PS-P83WT Pendant Speaker White	40137
PS-P43T Pendant Speaker Black	40138
PS-P63T Pendant Speaker Black	40139
PS-P83T Pendant Speaker Black	40140
PS-P83WT Pendant Speaker Black	40141

SURFACE MOUNT SPEAKER

PS-S43T MKII Surface Mount Speaker White	40200
PS-S53T MKII Surface Mount Speaker White	40202
PS-S63T MKII Surface Mount Speaker White	40204
PS-S43T MKII Surface Mount Speaker Black	40199
PS-S53T MKII Surface Mount Speaker Black	40201
PS-S63T MKII Surface Mount Speaker Black	40203
PS-S83WT MKII Surface Mount Speaker Black	40207

SURFACE MOUNT REPLACEMENT GRILLES

PS-S83T MKII Grille Black	40216
PS-S83T MKII Grille White	40215

DSP AMPLIFIER

Sonamp DSP 2-750 Amplifier	93095
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ARCHITECTURAL SPECIFICATIONS

The loudspeaker shall be of the two-way type comprising a single surface-mount injection-molded ABS enclosure containing one 8" (203mm) polypropylene cone, butyl rubber surround low frequency transducer and one coaxially mounted 1" (25mm) cloth dome, chambered ferrofluid cooled high frequency transducer. It shall utilize a powder coated corrosion-resistant aluminum grille with a locking clip fit. Frequency range shall be 55Hz - 20KHz (-3dB). Total power handling shall be 80 Watts continuous pink noise and 160 Watts program. Sensitivity measured with 2.83 volts input at 1 meter on axis averaged between 55Hz - 20KHz shall be 90dB. The unit shall be supplied with a line-matching transformer suitable for 100 volt or 70 volt input signal with a front-mounted control allowing user selectable power taps of 60W, 30W, 15W and 7.5W (70V) and an 8 Ohm bypass. The system shall include a FastMount bracket that allows for a full 180° of pivot while keeping the enclosure less than 1" away from the mounting surface. Wire shall be terminated on the front of the enclosure via a four-pin Euroblock connector with loop-through and fed through a Protected Access Connection Terminal. The system shall meet UL 1480 (UEAY) and UL 2239 Standards, conform to MIL-STD-810 for humidity, salt spray, temperature and UV IEC 529, and meet or exceed an IPX4 splash rating. External dimensions shall be 12.02" Height x 9.01" Width x 8.58" Depth (356mm x 229mm x 218mm). The total enclosure shall weigh 14.72 lbs. (6.68 kg) per unit. It shall share consistent voicing with other form factors and sizes within its product family so as to provide continuity of sonic signature when combined within a project. The loudspeaker shall be the Sonance Professional Series PS-S83T MKII. No other system shall be acceptable unless the above combined performance specifications are equaled or exceeded.

SONANCE

SAFETY AGENCY COMPLIANCE

Sonance Professional Series Surface Mount Speaker are compliant with:

UL 1480 (UEAY)

Standard For Safety For Speakers for Fire Alarm, Emergency, and Commercial and Professional Use.

NFPA 70

2002 National Electrical Code

ENVIRONMENTAL AND UV

Conforms to Mil Spec 810 for humidity, salt spray, temperature, IEC 529 IP-X4 splash-proof rating.



TECHNICAL ASSISTANCE AND SERVICE

The Technical Assistance Department at Sonance is available at (949) 492-7777 to answer any questions concerning the operation and installation of your speakers between the hours of 7:00 AM and 5:00 PM Pacific time, Monday through Friday, except holidays.

In the event your unit should need repair or service, you may return the unit to your authorized dealer or use the following guidelines:

PLEASE KEEP ORIGINAL PACKAGING WHEN POSSIBLE.

1. Be prepared to state the model number and / or serial number, date of purchase, and dealer's name and address when calling.
2. Contact Sonance directly at (949) 492-7777 or at www.sonance.com. **YOU MUST HAVE PRIOR AUTHORIZATION TO RETURN YOUR UNIT.**
3. If you are returning the product directly to Sonance, call us to obtain a return authorization number before shipping.
4. Ship the product via United Parcel Service, Federal Express, or other package delivery service. Please do not use the U.S. Postal Service.
5. Include the return authorization number on the shipping label.
6. Ship to:

Attn: Quality Assurance Department,
RMA#(include RMA number here)
Sonance
11016 Mulberry Ave.
Suite B
Fontana, CA 92337

SONANCE

WARRANTY, REMEDY, EXCLUSIONS AND LIMITATIONS (USA ONLY)

LIMITED WARRANTY

Sonance warrants this product to the original purchaser to be free from defects in material and workmanship, under normal use and conditions, for a period of five (5) years from the date of original purchase as shown on the invoice. The foregoing exclusive warranty gives you specific legal rights, and you may have other rights, which vary from state to state. This warranty applies exclusively to the original purchaser.

The exclusive warranty does not apply and is ineffective if:

1. The invoice fails to establish that the product was purchased from an authorized Sonance dealer or distributor;
2. The product was subjected to misuse, neglect, accident, or improper installation.
(Damage to the product was caused by accident, abuse or misuse);
3. The product was modified, altered, or repaired by unauthorized personnel; or
4. The unit was not used as described in the installation and operating instructions.

EXCLUSIVE REMEDY

Sonance agrees, at its option during the five (5) year warranty period, to repair any defect in material or workmanship or to furnish an equal product in exchange without charge to the purchaser, subject to the verification of the defect and proof of the date of purchase.

WARRANTY EXCLUSIONS AND DAMAGE LIMITATIONS

The exclusive warranty set forth above is in lieu of all other warranties, express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose, which are expressly disclaimed. In no event, and under no circumstances or legal or equitable theory, shall Sonance be liable or responsible for any direct or indirect damages, consequential damages, loss, or injury, including without limitation, personal injury, bodily injury, property damage, emotional distress, death, real property or personal property damage, business interruption, costs of delay or lost profits arising from the product, whether based upon warranty, contract, negligence, strict product liability or other theory.

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SONANCE • 991 Calle Amanecer • San Clemente, CA 92673 USA
PHONE: (949) 492-7777 • FAX: (949) 361-5151 • Technical Support: (949) 492-7777 • www.sonance.com
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