# SONANCE

PROFESSIONAL SERIES SURFACE MOUNT MKII SPEAKERS: PS-S43T MKII | PS-S53T MKII | PS-S63T MKII | PS-S83T MKII WOOFER: PS-S83WT MKII

MANUAL

### PROFESSIONAL SERIES SURFACE MOUNT

PS-S43T MKII | PS-S53T MKII | PS-S63T MKII | PS-S83T MKII | PS-S83WT MKII



# TABLE OF CONTENTS

- 2 Product Description
- 2 Box and Contents
- 3 Product Features
- 4 Product Preparation
- 4 Amplifier Selection
- 4 Wire Selection
- 4 70V/100V System
- 4 8 ohm System
- 4 Speaker Placement
- 4 Pivoting the Speaker
- 5 Grille and Speaker Shell Painting
- 6 Installation
- 8 Technical Specifications
- 8 PS-S43T MKII
- 9 PS-S53T MKII
- 10 PS-S63T MKII
- 10 PS-S83T MKII
- 11 PS-S83WT MKII
- 12 Certifications and Safety Agency
- 12 Technical Assistance and Service
- 13 Warranty

### **BOX CONTENTS**

### SURFACE MOUNT Speaker OR WOOFER

(1) PS-S43T MKII, PS-S53T MKII, PS-S63T MKII,

PS-S83T MKII, or PS-S83WT MKII

- (1) Speaker Grille
- (1) FastMount Bracket
- (1) Wiring Terminal Cover
- (1) Speaker Connectors

### IMPORTANT SAFETY INSTRUCTIONS

This product is intended to be installed by professional AV integrators and installers only. This product manual is intended to serve as a general guideline for most applications. It is the installer's responsibility to ensure this product is installed in accordance with local building codes and regulations. Consult a local authority for specific requirements, regulations, and building codes of the jurisdiction in which this product is to be installed.

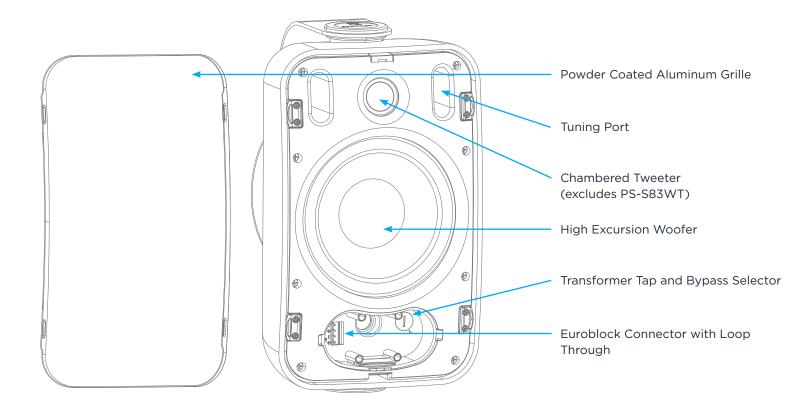
### READ THIS DOCUMENT IN ITS ENTIRETY BEFORE ATTEMPTING USE.

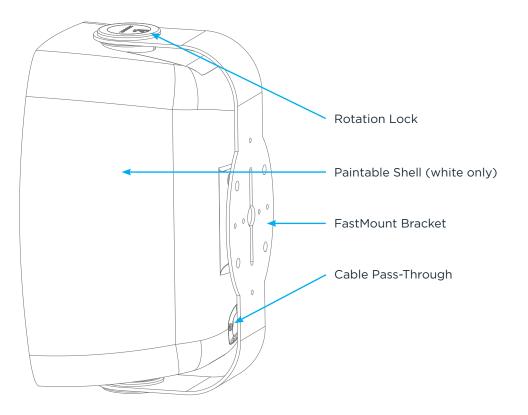
- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Clean only with a dry cloth.
- 6. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
- 7. Do not install near a heat source such as radiators, heat registers, stoves, fireplaces, or other apparatus (including amplifiers) that produce heat.
- 8. Only use attachments/accessories specified by Sonance.
- 9. This product is IP45 rated, suitable for installation in outdoor environments.
- 10. Refer all servicing to qualified service personnel.



Scan QR code for additional information and resources. For technical support call (949) 492-7777 or visit www.sonance.com/ professionalseries

### **PRODUCT FEATURES**





### **PRODUCT DESCRIPTION**

Sonance Professional Series includes a range of In-Ceiling, Pendant and Surface Mount Speakers that deliver true full range fidelity, extremely low distortion, wide dispersion and a smooth power response. The range also shares consistent voicing, ensuring seamless sonic integration when used together throughout a space. Surface Mount MKII Speakers feature Sonance's FastMount® bracket and front cable connection to speed up the installation process and provide a clean appearance. Available in 4", 5.25", 6.5" and 8" 2-Way and 8" Woofer in either black or white.

### AMPLIFIER SELECTION

When choosing an amplifier the maximum number of speakers and the output level of each speaker must be known. The sum of the tap settings should never exceed 80% of the amplifier's rated output. For example, if there are 5 speakers and the taps are set at 15 watts, the load would be 75 watts (5 x 15 watts = 75 watts). To arrive at the needed power for this number of speakers, simply divide the total load by 0.8. In this case, 75/0.8 = 93.75watts. A standard 100 watt amp would safely drive this load. To calculate the amount of usable power an amp offers, simply multiply the rated output by 0.8, i.e., 100 watts x 0.8= 80 watts.

### WIRE GAUGE - 70V/100V SYSTEM

The most common wire used on commercial 70 volt systems is 18 gauge, 2 conductor, stranded, and jacketed without a shield. The wire starts at the amplifier location and is paralleled at each speaker location. Wire length using 18 gauge is appropriate up to 700 feet with a 100 watt load. If you double the load (sum of your tap settings), you will reduce the footage by half, to 350 feet. Conversely, if you halve the load, you may double the acceptable wire length, i.e., a 50 watt load is safe over 1400 feet of 18 gauge. Stepping up to 16 gauge wire extends the allowable run length by approximately 35%. For example, a 100 watt load can go 700 feet on 18 gauge; the same load may be placed on 1,100 feet of 16 gauge.

### WIRE GAUGE - 8 OHM SYSTEM

The total wire resistance should be less than 10% of the speaker impedance in an 8 ohm system. The speakers are nominally 8 ohms impedance, so your total wire resistance should be no more than 8 ohms. The extra resistance from the wire will have a very negative affect on the sound quality of the speaker. The sound can be less dynamic, definition of bass frequencies can be reduced, and in extreme cases, the high frequencies can be attenuated. Amplifier power is also wasted in the wire, reducing the maximum output level of the system. Please refer to the following chart (see Figure 1) when deciding on the appropriate wire gauge for your installation.

### SPEAKER PLACEMENT

The FastMount mounting system makes it easy to mount the speakers in a variety of positions and locations (see Figure 2).

Wire Resistan	ce in O	hms vs.	Lengt	h of Ca	ble Ru	n
Distance in Feet	50'	100'	150'	200'	250'	300'
20 Gauge	0.86	1.73	2.59	3.45	4.32	5.18
18 Gauge	0.65	1.30	1.94	2.59	3.24	3.89
16 Gauge	0.43	0.85	1.28	1.71	2.14	2.56
14 Gauge	0.27	0.54	0.81	1.08	1.35	1.62
12 Gauge	0.17	0.34	0.51	0.68	0.85	1.02
Figure 1: WIRE RESISTANCE						

### WALL/CEILING MOUNTING

It is important that the bracket is securely mounted onto a structurally sound surface, capable of withstanding the weight of the product and any vibration created by the operation of the speaker. Four screws points must be used at all times. A screw size of #14 to #20 diameter x 2" length or M6 to M8 diameter x 50mm length is recommended. When mounting onto drywall or plasterboard, the bracket should be affixed to a joist or stud. When mounting onto brick or concrete, wall plugs or concrete anchors should be used. Install a safety cable from one of the 1/4-20 UNC threaded holes on the back of the speaker to a secure location on the adjoining mounting surface (hardware not included). Optional compatible third party mounts: OmniMount 15.0C and OmniMount 15.0W.

### POLE MOUNTING

To mount the speaker on a pole, two U-bolts and nuts should be used to clamp around the pole and bolt through the four holes on the back of the FastMount bracket. Spring washers or blue thread lock are recommended to ensure the nuts do not work loose through the vibration of the speaker.



Figure 2: Mounting

### **PIVOTING THE SPEAKERS**

You can rotate the speaker in the bracket to direct the sound towards the listeners.

- Unlock the slide locks on the speaker pivots by 1. moving them towards the rear of the speaker.
- 2. Rotate the speakers to the desired position.
- 3. Lock the slide locks by moving them towards the front of the speaker.

### PAINTING THE GRILLES AND SPEAKER

Sonance Professional Series Surface Mount MKII speakers feature a tough polypropylene enclosure that can be painted. Sonance recommends using a weather-resistant outdoor paint and a spray gun.

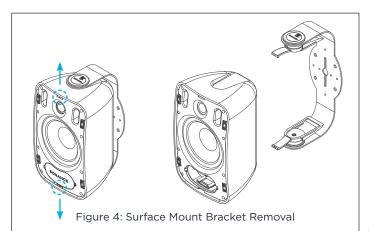
- 1. If they have already been installed, remove the grilles from the speakers.
- 2. To protect the speaker driver units during painting, place the grilles on a piece of cardboard and trace around their outlines. Then cut the cardboard just inside of the trace line and fit these "paint plugs" into the speakers' baffles. Be careful not to damage the driver components while fitting the paint plugs.
- 3. Paint the speakers the desired color according to the paint manufacturer's instructions. Remove the paint plugs after the paint has thoroughly dried.
- 4. Paint the grille separately from the speaker using very thin paint (5:1 ratio). Avoid plugging the grille holes with excess paint.

### INSTALLING THE SPEAKERS

The best performance is obtained by placing the left and right speakers at ear level, 6-10ft apart. The speakers should be facing the listening area. If you are mounting the speakers above or below ear level, pivot them up or down to direct the sound towards the listeners.

Bracket Carrying Capacity			
MODEL	KGS	POUNDS	
PS-S43T	2.81	6.19	
PS-S53T	3.63	8.00	
PS-S63T	4.88	10.76	
PS-S83T / PS-S83WT	7.02	15.48	
Figure 3: Bracket Carrying Capacity			

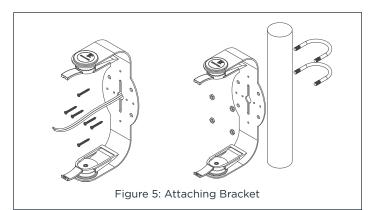
1. Remove the speakers from the mounting brackets by pulling the tabs on the front panels outward and away from each other (see Figure 4).



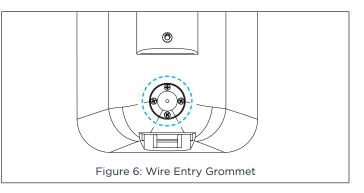
2. Run the speaker wires from the amplifier to the speaker locations and through the holes in the mounting brackets.

### NOTE: BE SURE TO LEAVE ENOUGH WIRE AT THE SPEAKER LOCATION TO FEED THROUGH THE TUNNEL IN THE SPEAKER ENCLOSURE AND WIRE TO THE EUROBLOCK CONNECTOR ON THE FRONT.

3. Attach the mounting bracket to the mounting surface using hardware (not included) that is appropriate for the type of surface. Stainless hardware is recommended.



- 4. If the installation requires that the speakers be mounted on poles you can attach the bracket to poles using 2.5" U-bolts (not included, see figure 5).
- 5. Feed the speaker wires from the brackets into the wire entry grommets on the backs of the speakers, through the wire tunnels and out the openings on the speakers' front panels (see Figure 6 and 7).
- The grommet forms a water-resistant seal around the speaker wire.
- Make sure there is enough slack in the wire to allow the speaker to pivot on the bracket.

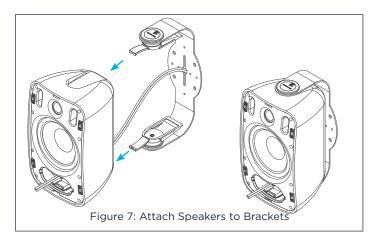


6. Slide the speakers onto the brackets until the locks snap into place (see Figure 7).

NOTE: BE SURE THAT THE BRACKET CLIPS SNAP COMPLETELY INTO PLACE TO PREVENT ANY BLOCKAGE WITHIN THE SPEAKER PERIMETER WHERE

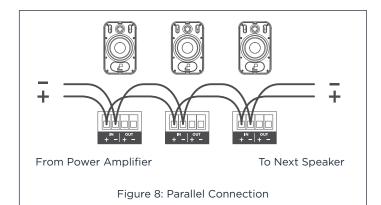
### THE GRILLE IS TO BE INSERTED. PULL ON THE FRONT OF THE CABINET TO ENSURE THE CLIPS ARE FULLY SEATED AND THAT THE BRACKET IS SECURE.

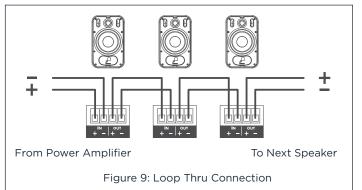
Pull enough wire through the front of the speaker to allow connection to the terminals.



- 7. Connect the wires from your amplifier to the input connector.
- 8. Strip approximately 0.1875" (5mm) of the insulation off each wire. Insert the wire into the correct square opening on the connector. Use a small flat head screwdriver to tighten the corresponding screw to secure the wire.

When using multiple speakers you can connect the speakers either in parallel or in the loop through method as shown (see Figure 8 and 9).





 Determine the proper wattage setting for each speaker in the installation and set each speaker's transformer tap selector (see Figure 10).

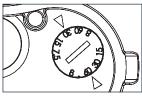


Figure 10: Transformer Tap

### SETTING TRANSFORMER TAP SWITCH

Sonance Professional Series Surface Mount MKII speakers are factory set for maximum output when used with a Sonamp DSP 2-750 MKII or another 70V/100V amplifier. No additional work is necessary if the speakers are operating in 70V or 100V and can run at their full volume capacity. Applications for changing the tap switch from factory default:

- Speakers are to be installed in sensitive areas and need to be "tapped down" for lower volume
- More speakers are needed to be added to a 70V/100V amplifier already operating at full capacity
- A small zone is to be driven by an 8 Ohm amplifier

### **8 OHM TAP SETTINGS**

Aligning the values on the dial with the arrow indicators on either side to the "8 ohm" setting is effective for 8 Ohm amplifier connections.

### **70V TAP SETTINGS**

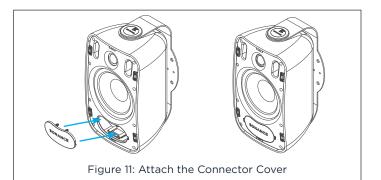
Align the arrow positioned with the 70V values to the desired wattage setting. Turning the dial one click stop in either direction increases or decreases the speaker's input power.

### **100V TAP SETTINGS**

Align the arrow positioned with the 100V values to the desired wattage setting. Turning the dial one click stop in either direction increases or decreases the speaker's input power.

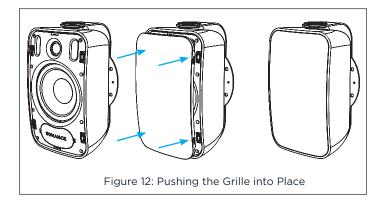
### FITTING THE TERMINAL COVER

Fit the wiring terminal covers into the recesses in the speakers' front panels (see Figure 11). The covers should fit tightly, but can be removed and replaced if the speakers need to be disconnected.

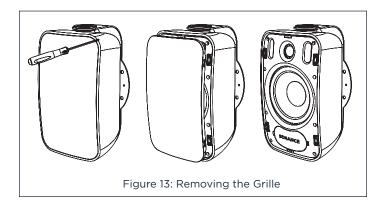


### FITTING AND REMOVING THE GRILLE

- 1. When installing the grille, align the grille trim skirt with the groove in the enclosure.
- 2. To lock the grille in place apply pressure at the locations of the four grille retention clips. An audible click should be heard as the grille locks into place.



NOTE: To remove the grille, we suggest starting in any one of the four corners using a grille pulling tool (not included). Once the grille is pulled out past the retention clip in one corner, the remainder of the grille can be removed by working your hand around and lightly pulling outward, being careful not to bend the grille skirt. If the grille skirt does become bent during removal, it can be straightened by carefully bending it back into its original shape.



# **PS-S43T MKII TECHNICAL SPECIFICATIONS**

Black Part #	40199 (EA)
White Part #	40200 (EA)
Frequency Range (-10dB)	57Hz-25kHz
Frequency Range (-3dB)	75Hz-20kHz
Power Capacity	60 Watts Continuous Program Power, 30 Watts Continuous Pink Noise
Nominal Sensitivity	87dB
Nominal Coverage Angle	90° x 90° coverage
Directivity Factor (Q)	7.6
Directivity (DI)	8.1dB
Rated Maximum SPL	105dB @ 1 meter (3.3 feet) average, 110dB peak
Rated Impedance	8 ohms nominal, 6 ohms minimum
Transformer Taps	70V: 30W, 15W, 7.5W and 3.8W; 100V: 30W, 15W and 7.5W
Crossover Point	3000Hz
Overall Dimensions (WxHxD)	5.47" x 9.25" x 4.8" (139mm x 235mm x 122mm)
Product Weight	6.79 lbs (3.08kg) each
Shipping Weight	19 lbs (8.62kg) 2x each
Unit of Measure	Each
LF Driver	4" (100mm) Polypropylene Cone, Butyl Rubber Surround
HF Driver	1" (25mm) Cloth Dome, Ferrofluid cooled
Color	Black or White
Grille	Powder Coated Aluminum, Friction Fit
Input Connectors	Front-mounted four pin, Euroblock with loop output connections
Mounting Bracket	Aluminum U-Bracket with Sonance FastMount
Environmental and UV	Conforms to MIL-STD-810 for humidity, salt spray, temperature,
	IEC 529 IP45 splash-proof rating
Safety Agency	UL-1480A, CSA-C22.2 No.205, NFPA-70, and NFPA-90A

# INCLUDED ACCESSORIES

- Euroblock Connector
- FastMount Bracket
- Terminal Cover
- Grille

- PS-S43T MKII Replacement Grille White (PR) | 40209
- PS-S43T MKII Replacement Grille Black (PR) | 40210

### **PS-S53T MKII TECHNICAL SPECIFICATIONS**

Black Part #	40201 (EA)
White Part #	40202 (EA)
Frequency Range (-10dB)	43Hz-25kHz
Frequency Range (-3dB)	70Hz-20kHz
Power Capacity	90 Watts Continuous Program Power, 45 Watts Continuous Pink Noise
Nominal Sensitivity	88dB
Nominal Coverage Angle	90° x 90° coverage
Directivity Factor (Q)	7
Directivity (DI)	8dB
Rated Maximum SPL	106dB @ 1 meter (3.3 feet) average, 113dB peak
Rated Impedance	8 ohms nominal, 6 ohms minimum
Transformer Taps	70V: 30W, 15W, 7.5W and 3.8W; 100V: 30W, 15W and 7.5W
Crossover Point	2750Hz
Overall Dimensions (WxHxD)	6.36" x 10.08" x 5.68" (162mm x 256mm x 144mm)
Product Weight	8.68 lbs (3.94kg) each
Shipping Weight	23.93 lbs (10.85kg) 2x each
Unit of Measure	Each
LF Driver	5.25" (130mm) Polypropylene Cone, Butyl Rubber Surround
HF Driver	1" (25mm) Cloth Dome, Ferrofluid cooled
Color	Black or White
Grille	Powder Coated Aluminum, Friction Fit
Input Connectors	Front-mounted four pin, Euroblock with loop output connections
Mounting Bracket	Aluminum U-Bracket with Sonance FastMount
Environmental and UV	Conforms to MIL-STD-810 for humidity, salt spray, temperature,
	IEC 529 IP45 splash-proof rating

### **INCLUDED ACCESSORIES**

- Euroblock Connector
- FastMount Bracket
- Terminal Cover
- Grille

- PS-S53T MKII Replacement Grille White (PR) | 40211
- PS-S53T MKII Replacement Grille Black (PR) | 40212

### **PS-S63T MKII TECHNICAL SPECIFICATIONS**

Black Part #	40203 (EA)
White Part #	40204 (EA)
Frequency Range (-10dB)	49Hz-25kHz
Frequency Range (-3dB)	65Hz-20kHz
Power Capacity	120 Watts Continuous Program Power, 60 Watts Continuous Pink Noise
Nominal Sensitivity	88dB
Nominal Coverage Angle	90° x 90° coverage
Directivity Factor (Q)	6.5
Directivity (DI)	7.9dB
Rated Maximum SPL	108dB @ 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 Dimensions (WxHxD)	7.51" x 12.14" x 6.86" (191mm x 308mm x 174mm)
Product Weight	11.43 lbs (5.18kg) each
Shipping Weight	31.26 lbs (14.18kg) 2x each
Unit of Measure	Each
LF Driver	6.5" (165mm) Polypropylene Cone, Butyl Rubber Surround
HF Driver	1" (25mm) Cloth Dome, Ferrofluid cooled
Color	Black or White
Grille	Powder Coated Aluminum, Friction Fit
Input Connectors	Front-mounted four pin, Euroblock with loop output connections
Mounting Bracket	Aluminum U-Bracket with Sonance FastMount
Environmental and UV	Conforms to MIL-STD-810 for humidity, salt spray, temperature,
	IEC 529 IP45 splash-proof rating
Safety Agency	UL-1480A, CSA-C22.2 No.205, NFPA-70, and NFPA-90A

# INCLUDED ACCESSORIES

- Euroblock Connector
- FastMount Bracket
- Terminal Cover
- Grille

- PS-S63T MKII Replacement Grille White (PR) | 40213
- PS-S63T MKII Replacement Grille Black (PR) | 40214

### **PS-S83T MKII TECHNICAL SPECIFICATIONS**

Black Part #40205 (EA)White Part #40206 (EA)Frequency Range (-10dB)41Hz-25kHzFrequency Range (-3dB)55Hz-20kHzPower Capacity160 Watts Continuous Program Power, 80 Watts Continuous Pink NoiseNominal Sensitivity90dBNominal Coverage Angle90° x 90° coverageDirectivity Factor (Q)7.6Directivity Factor (Q)7.6Directivity (DI)8.1dBRated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, sait spray, temperature, IEC 529 IP45 splash-proof ratingSafety AgencyUL-1480A, CSA-C22.2 No.205, NFPA-70, and NFPA-90A		
Frequency Range (-10dB)41Hz-25kHzFrequency Range (-3dB)55Hz-20kHzPower Capacity160 Watts Continuous Program Power, 80 Watts Continuous Pink NoiseNominal Sensitivity90dBNominal Coverage Angle90° x 90° coverageDirectivity Factor (Q)7.6Directivity Factor (Q)7.6Directivity (D)8.1dBRated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Black Part #	40205 (EA)
Frequency Range (-3dB)55Hz-20kHzPower Capacity160 Watts Continuous Program Power, 80 Watts Continuous Pink NoiseNominal Sensitivity90dBNominal Coverage Angle90° x 90° coverageDirectivity Factor (Q)7.6Directivity (DI)8.1dBRated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	White Part #	40206 (EA)
Power Capacity160 Watts Continuous Program Power, 80 Watts Continuous Pink NoiseNominal Sensitivity90dBNominal Coverage Angle90° x 90° coverageDirectivity Factor (Q)7.6Directivity (DI)8.1dBRated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Frequency Range (-10dB)	41Hz-25kHz
Nominal Sensitivity90dBNominal Coverage Angle90° x 90° coverageDirectivity Factor (Q)7.6Directivity (DI)8.1dBRated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Frequency Range (-3dB)	55Hz-20kHz
Nominal Coverage Angle90° x 90° coverageDirectivity Factor (Q)7.6Directivity (DI)8.1dBRated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Power Capacity	160 Watts Continuous Program Power, 80 Watts Continuous Pink Noise
Directivity Factor (Q)7.6Directivity (DI)8.1dBRated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Nominal Sensitivity	90dB
Directivity (DI)8.1dBRated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Nominal Coverage Angle	90° x 90° coverage
Rated Maximum SPL110dB @ 1 meter (3.3 feet) average, 116dB peakRated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Directivity Factor (Q)	7.6
Rated Impedance8 ohms nominal, 6 ohms minimumTransformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Directivity (DI)	8.1dB
Transformer Taps70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15WCrossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Rated Maximum SPL	110dB @ 1 meter (3.3 feet) average, 116dB peak
Crossover Point2750HzOverall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Rated Impedance	8 ohms nominal, 6 ohms minimum
Overall Dimensions (WxHxD)9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Transformer Taps	70V: 60W, 30W, 15W and 7.5W; 100V: 60W, 30W and 15W
Product Weight14.72 lbs (6.68kg) eachShipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Crossover Point	2750Hz
Shipping Weight42.23 lbs (19.16kg) 2x eachUnit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Overall Dimensions (WxHxD)	9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)
Unit of MeasureEachLF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Product Weight	14.72 lbs (6.68kg) each
LF Driver8" (203mm) Polypropylene Cone, Butyl Rubber SurroundHF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Shipping Weight	42.23 lbs (19.16kg) 2x each
HF Driver1" (25mm) Cloth Dome, Ferrofluid cooledColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Unit of Measure	Each
ColorBlack or WhiteGrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	LF Driver	8" (203mm) Polypropylene Cone, Butyl Rubber Surround
GrillePowder Coated Aluminum, Friction FitInput ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	HF Driver	1" (25mm) Cloth Dome, Ferrofluid cooled
Input ConnectorsFront-mounted four pin, Euroblock with loop output connectionsMounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Color	Black or White
Mounting BracketAluminum U-Bracket with Sonance FastMountEnvironmental and UVConforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Grille	Powder Coated Aluminum, Friction Fit
Environmental and UV Conforms to MIL-STD-810 for humidity, salt spray, temperature, IEC 529 IP45 splash-proof rating	Input Connectors	Front-mounted four pin, Euroblock with loop output connections
IEC 529 IP45 splash-proof rating	Mounting Bracket	Aluminum U-Bracket with Sonance FastMount
	Environmental and UV	Conforms to MIL-STD-810 for humidity, salt spray, temperature,
Safety Agency UL-1480A, CSA-C22.2 No.205, NFPA-70, and NFPA-90A		IEC 529 IP45 splash-proof rating
	Safety Agency	UL-1480A, CSA-C22.2 No.205, NFPA-70, and NFPA-90A

# **INCLUDED ACCESSORIES**

- Euroblock Connector
- FastMount Bracket
- Terminal Cover
- Grille

- PS-S83T MKII Replacement Grille White (PR) | 40215
- PS-S83T MKII Replacement Grille Black (PR) | 40216

# **PS-S83WT MKII TECHNICAL SPECIFICATIONS**

Black Part #	40207 (EA)
White Part #	40208 (EA)
Frequency Range (-10dB)	32Hz-300kHz
Frequency Range (-3dB)	50Hz-150kHz
Power Capacity	200 Watts Continuous Program Power, 125 Watts Continuous Pink Noise
Nominal Sensitivity	89dB
Nominal Coverage Angle	90° x 90° coverage
Rated Maximum SPL	110dB @ 1 meter (3.3 feet) average, 116dB peak
Rated Impedance	8 ohms nominal, 6 ohms minimum
Transformer Taps	70V: 120W, 60W, 30W and 15W; 100V: 120W, 60W and 30W
Crossover Point	150Hz
Overall Dimensions (WxHxD)	9.01" x 14.02" x 8.58" (229mm x 356mm x 218mm)
Product Weight	16.08 lbs (7.62kg) /Each
Shipping Weight	21.49 lbs (9.75kg) /Each
Unit of Measure	Each
LF Driver	8" (203mm) Polypropylene Cone, Butyl Rubber Surround
Color	Black or White
Grille	Powder Coated Aluminum, Friction Fit
Input Connectors	Front-mounted four pin, Euroblock with loop output connections
Mounting Bracket	Aluminum U-Bracket with Sonance FastMount
Environmental and UV	Conforms to MIL-STD-810 for humidity, salt spray, temperature,
	IEC 529 IP45 splash-proof rating
Safety Agency	UL-1480A, CSA-C22.2 No.205, NFPA-70, and NFPA-90A

# INCLUDED ACCESSORIES

- Euroblock Connector
- FastMount Bracket
- Terminal Cover
- Grille

- PS-S83T MKII Replacement Grille White (PR) | 40215
- PS-S83T MKII Replacement Grille Black (PR) | 40216

### CERTIFICATIONS

### SAFETY AGENCY COMPLIANCE

Sonance Professional Series loudspeakers models PS-S43T MKII, PS-S53T MKII, PS-S63T MKII, PS-S83T MKII and PS-S83WT MKII meet the following standards:

UL 1480A: Listed as General Signaling Speaker used in commercial and professional audio systems

NFPA 70: 2002 National Electrical Code

Environmental AND UV: Conforms to Mil Spec 810 for humidity, salt spray, temperature, IEC 529 IP-45 splashproof 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.

- 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.

- 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.

Write the Return Authorization Number on the shipping label. Do not write it on the outside of the box.

Ship to:

Attn: Quality Assurance Department Sonance 11016 Mulberry Ave Fontana, CA 92337

# LIMITED FIVE (5) YEAR WARRANTY

Sonance warrants to the first end-user purchaser that this Sonance-brand product ("Product"), when purchased from an authorized Sonance Dealer/Distributor, will be free from defective workmanship and materials for the period stated below. Sonance will at its option and expense during the warranty period, either repair the defect or replace the Product with a new or re-manufactured Product or a reasonable equivalent.

### EXCLUSIONS

TO THE EXTENT PERMITTED BY LAW, THE WARRANTY SET FORTH ABOVE IS IN LIEU OF, AND EXCLUSIVE OF, ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, AND IS THE SOLE AND EXCLUSIVE WARRANTY PROVIDED BY SONANCE. ALL OTHER EXPRESS AND IMPLIED WARRANTIES, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, IMPLIED WARRANTY OF FITNESS FOR USE, AND IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE ARE SPECIFICALLY EXCLUDED.

No one is authorized to make or modify any warranties on behalf of Sonance. The warranty stated above is the sole and exclusive remedy, and Sonance's performance shall constitute full and final satisfaction of all obligations, liabilities, and claims with respect to the Product.

### IN ANY EVENT, SONANCE SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL, ECONOMIC, PROPERTY, BODILY INJURY, OR PERSONAL INJURY DAMAGES ARISING FROM THE PRODUCT, ANY BREACH OF THIS WARRANTY, OR OTHERWISE.

This warranty statement gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties or limitations of remedies, so the above exclusions and limitations may not apply. If your state does not allow disclaimer of implied warranties, the duration of such implied warranties is limited to period of Sonance's express warranty. Your Product Model and Description: Professional Series Surface Mount MKII. Warranty Period for this Product: Five (5) years from the date on the original sales receipt or invoice or other satisfactory proof of purchase. Additional Limitations and Exclusions from Warranty Coverage: The warranty described above is nontransferable, applies only to the initial installation of the Product, does not include installation of any repaired or replaced Product, does not include damage to allied or associated equipment which may result for any reason from use with this Product, and does not include labor or parts caused by accident, disaster, negligence, improper installation, misuse (e.g. overdriving the amplifier or speaker, excessive heat, cold or humidity, mishandling, etc.), or from service or repair which has not been authorized by Sonance. Obtaining Authorized Service: To qualify for the warranty, you must contact your authorized Sonance Dealer/Installer or call Sonance Customer Service at (949) 492-7777 within the warranty period, must obtain a return merchandise number (RMA), and must deliver the Product to Sonance shipping prepaid during the warranty period, together with the original sales receipt, or invoice or other satisfactory proof of purchase.

©2025 Sonance. All rights reserved. Sonance is a registered trademarks of Dana Innovations. Due to continuous product improvement, all features and specifications are subject to change without notice. For the latest Sonance product specification information visit our website: www.sonance.com