



PA805DB-RSMA

Passive Directional Antenna

Online user guide for PA805DB-RSMA.
Version: 1.0 (2023-B)



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IMPORTANT SAFETY INSTRUCTIONS

1. READ these instructions.
2. KEEP these instructions.
3. HEED all warnings.
4. FOLLOW all instructions.
5. DO NOT use this apparatus near water.
6. CLEAN ONLY with dry cloth.
7. DO NOT block any ventilation openings. Allow sufficient distances for adequate ventilation and install in accordance with the manufacturer's instructions.
8. DO NOT install near any heat sources such as open flames, radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not place any open flame sources on the product.
9. DO NOT defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wider blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. PROTECT the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. ONLY USE attachments/accessories specified by the manufacturer.
12. USE only with a cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. UNPLUG this apparatus during lightning storms or when unused for long periods of time.
14. REFER all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. DO NOT expose the apparatus to dripping and splashing. DO NOT put objects filled with liquids, such as vases, on the apparatus.
16. The MAINS plug or an appliance coupler shall remain readily operable.
17. The airborne noise of the Apparatus does not exceed 70dB (A).
18. Apparatus with CLASS I construction shall be connected to a MAINS socket outlet with a protective earthing connection.
19. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
20. Do not attempt to modify this product. Doing so could result in personal injury and/or product failure.
21. Operate this product within its specified operating temperature range.

General Description

The Shure PA805DB-RSMA is a passive directional antenna that improves RF performance by rejecting off-axis RF signal. Positioned remotely, antennas can be aimed directly at transmitters.

The antenna attaches to a microphone stand or to the separate wall-mounting bracket, and delivers the following benefits over standard omnidirectional half-wave antennas:

- Reduced interference
- Improved RF signal-to-noise ratio
- Antenna gain helps overcome cable loss

Installation Instructions

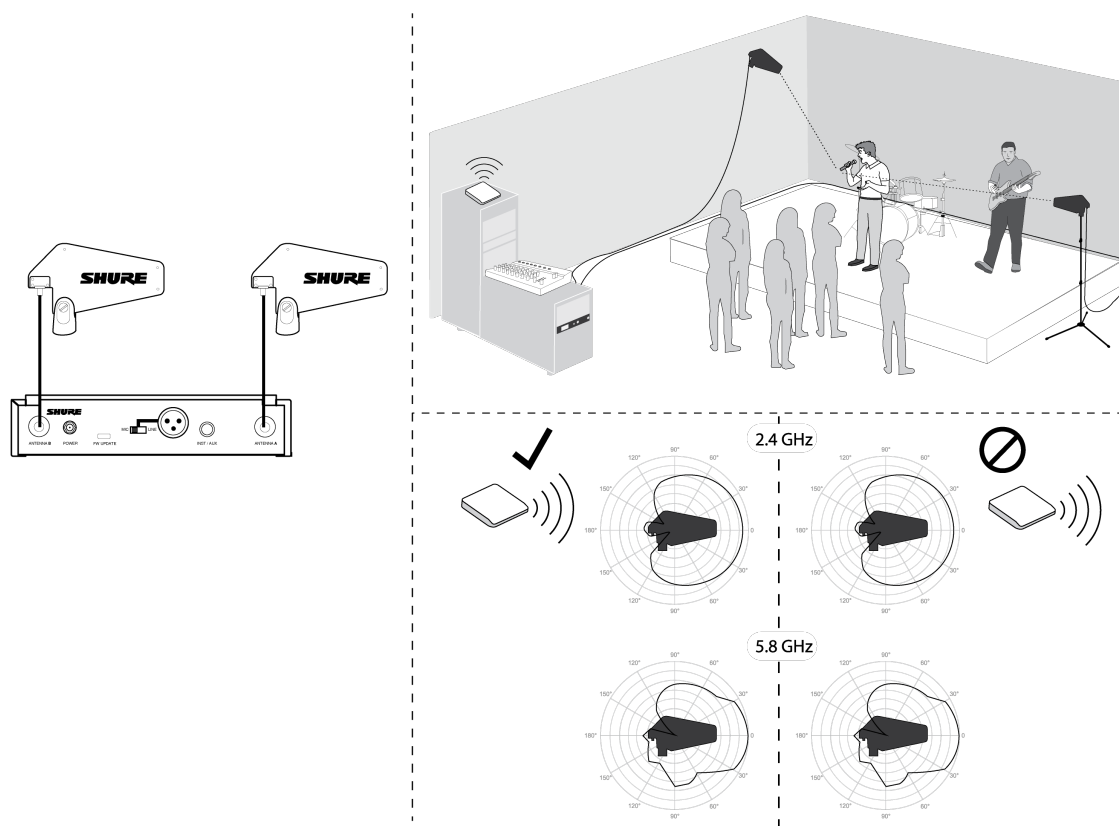
1. Determine the length of cable required to connect each antenna to the receiver or antenna/power distribution system. Use the shortest length of cable possible, because longer cable runs increase power and signal loss.

Important: Only use low-loss reverse SMA cables to prevent signal loss.

2. Use reverse SMA cables to connect an antenna to each of the ANTENNA A and ANTENNA B ports of the receiver or antenna/power distribution system.
3. Position antennas so there is nothing obstructing the line of sight to the transmitter, including the audience. Point antennas at the transmitters, with the rear side facing sources of interference (Wi-Fi access points, for example). Placing them farther apart improves diversity performance. For optimal performance, minimize the distance between the transmitters and the antennas by placing antennas near the stage, rather than at a front-of-house position.

Note: Always perform a walk-around test to verify coverage before using a wireless system during a speech or performance. Experiment with antenna placement to find the optimum location. If necessary, mark any trouble spots and ask presenters or performers to avoid those areas.





Cable Selection

Cable	Length	Loss at 2.4 GHz	Loss at 5.8 GHz
UA802-RSMA	0.6 m (2 ft.)	1 dB	2 dB
UA806-RSMA	1.8 m (6 ft.)	1 dB	1.2 dB
90C31342 (ships with PA805DB-RS-MA)	3 m (10 ft.)	1.5 dB	2.5 dB
UA825-RSMA	7.6 m (25 ft.)	3.3 dB	5.1 dB
UA850-RSMA	15.2 m (50 ft.)	6.4 dB	10.2 dB
UA8100-RSMA	30.4 m (100 ft.)	6.8 dB	10.8 dB

For additional technical assistance, call the Shure Customer Service Department.

Furnished Accessories

3 m (10 ft.) Reverse SMA Cable	95C31342
Brass Adapter	31B1856

Optional Accessories and Replacement Parts

Remote Antenna Mounting Bracket Kit	UA505-RSMA
Frequency Manager	GLXD+FM
Reverse SMA Passive Antenna Splitter	UA221DB-RSMA
0.6 m (2 ft.) Reverse SMA Cable	UA802-RSMA
1.8 m (6 ft.) Reverse SMA Cable	UA806-RSMA
3 m (10 ft.) Reverse SMA Cable	95C31342
7.6 m (25 ft.) Reverse SMA Cable	UA825-RSMA
15.2 m (50 ft.) Reverse SMA Cable	UA850-RSMA
30.4 m (100 ft.) Reverse SMA Cable	UA8100-RSMA
Reverse SMA Bulkhead Adapters, lockwasher, nut	95A32436

Specifications

Frequency Range

2.39 to 2.51 GHz and 5.0 to 6.0 GHz

Antenna Gain

@ 2.45 GHz, typical	6.2 dBi
@ 5.785 GHz, typical	8.4 dBi

3 dB Horizontal Beam Width

@ 2.45 GHz, typical	109 degrees
@ 5.785 GHz, typical	64 degrees

3 dB Vertical Beam Width

@ 2.45 GHz, typical	61 degrees
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@ 5.785 GHz, typical	53 degrees
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Polarization
Linear

Impedance
50 Ω

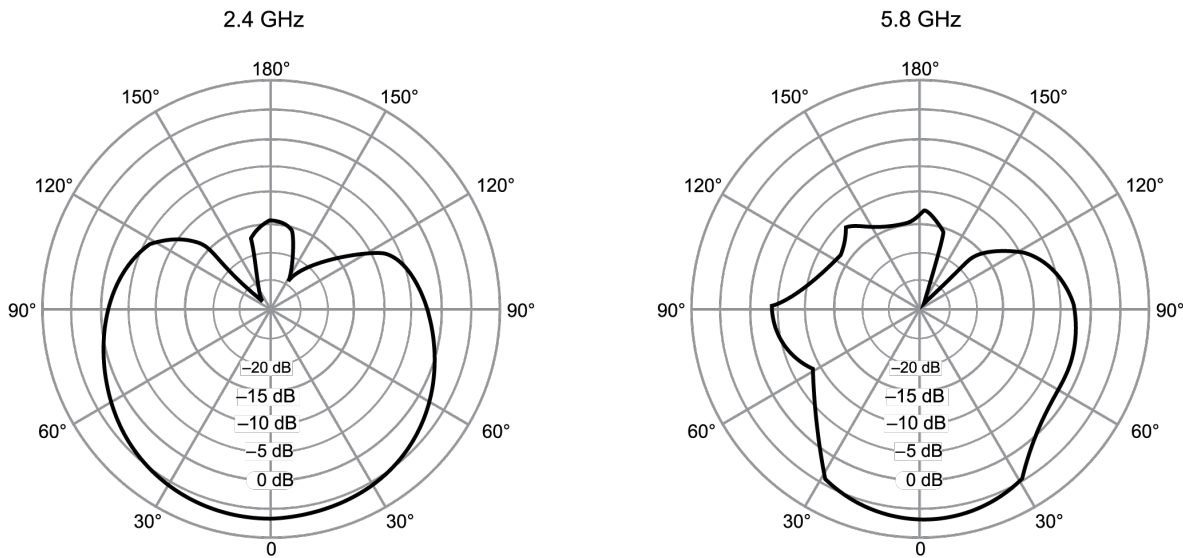
Voltage Standing Wave Ratio (VSWR)

2.4 - 2.5 GHz	< 1.5 (< 1.3, typical)
5.0 - 6.0 GHz	< 2.5 (< 2, typical)

Connector Type
Reverse SMA

Dimensions
4.13 x 6.45 x 1 in. (105 x 164 x 27.5 mm) with mounting accessories, (H x W x D)

Weight
2.5 oz. (56.7 g) with mounting accessories



Polar Pattern

Important Product Information

Waste Electrical and Electronic Equipment (WEEE) Directive



In the European Union and the United Kingdom, this label indicates that this product should not be disposed of with household waste. It should be deposited at an appropriate facility to enable recovery and recycling.

Registration, Evaluation, Authorization of Chemicals (REACH) Directive

REACH (Registration, Evaluation, Authorization of Chemicals) is the European Union (EU) and the United Kingdom (UK) chemical substances regulatory framework. Information on substances of very high concern contained in Shure products in a concentration above 0.1% weight over weight (w/w) is available upon request.

Certifications

CE Notice:

Hereby, Shure Incorporated declares that this product with CE Marking has been determined to be in compliance with European Union requirements. The full text of the EU declaration of conformity is available at the following site: <https://www.shure.com/en-EU/support/declarations-of-conformity>.

Authorized European Importer / Representative:

Shure Europe GmbH
Department: Global Compliance
Jakob-Dieffenbacher-Str. 12
75031 Eppingen, Germany
Phone: +49-7262-92 49 0
Fax: +49-7262-92 49 11 4
Email: EMEAsupport@shure.de

UKCA Notice:

Hereby, Shure Incorporated declares that this product with UKCA Marking has been determined to be in compliance with UK-CA requirements. The full text of the UK declaration of conformity is available at the following site: <https://www.shure.com/en-GB/support/declarations-of-conformity>.

Authorized UK Importer / Representative:

Shure UK Limited
Unit 2, The IO Centre, Lea Road,
Waltham Abbey, Essex, EN9 1 AS, UK

China RoHS

部件名称	有害物质					
	铅	汞	铜	六价铬	多溴联苯	多溴二苯醚
电路模块	X	○	○	○	○	○
金属模块	X	○	○	○	○	○
线缆及其组件	X	○	○	○	○	○
外壳	○	○	○	○	○	○
电源适配器*	X	○	○	○	○	○
电池组*	X	○	○	○	○	○

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○: 表示该有害物质在该部件所有均质材料中的含量均在GB/T26572规定的限量要求以下。
X: 表示该有害物质至少在该部件某一均质材料中的含量超过GB/T26572规定的限量要求。
注: 本产品大部分的部件采用无害的环保材料制造, 含有有害物质的部件皆因全球技术发展水平的限制而无法实现有害物质的替代。
*: 表示如果包含部分