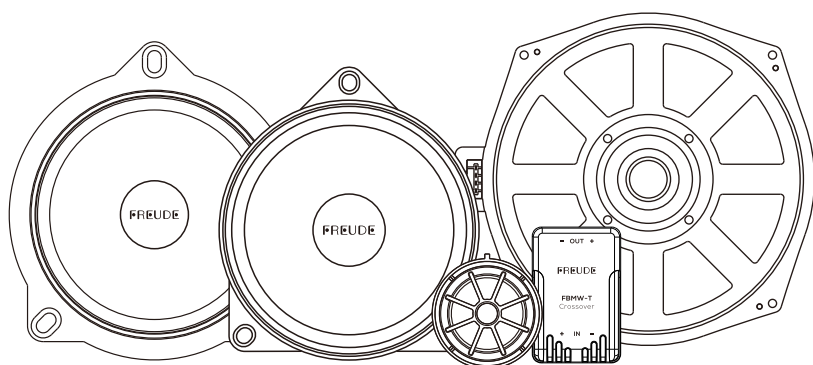


FREUDE

OWNER'S MANUAL



FBMW-100S/FBMW-100

4" 2-WAY COMPONENT KIT/4.5" 2-WAY COMPONENT KIT

FBMW-SUB

8" SHALLOW SUBWOOFER

WARNING

PLEASE READ CAREFULLY BEFORE INSTALLING OR OPERATING THIS UNIT!

Thank you for purchasing our car speakers.

Please read this instructions carefully before using and make sure you know speaker connections very well.

Precautions

- Before making holes, check the mounting space with supplied template.
- To prevent noise keep the wiring away from motors, high-voltage leads and other potential noise sources.
- To prevent a short-circuit, keep all wiring away from moving parts and sharp edges.
- Make sure you carefully read and understand the installation instructions before installing the system in vehicle.

Introduction

Thank you for choosing FREUDE . To achieve the best performance, please be sure to read all the instructions thoroughly and keep them where they will be read by all who use the product.

FREUDE FBW-100/ FBW-100S is suitable for BMW best selling models: 1 Series, 3 Series, 5 Series (for specific models please refer to P6).

The mid-range and tweeter can fit original location and connectors in BMW and you will enjoy greatly improved sound quality with FREUDE sound upgrading system.

FREUDE FBW-SUB is built to offer desired bass where space is limited and suited for BMW original audio upgrade. It is compatible with all BMW models with "Stereo" and "Standard" configuration. You could improve the bass easily by replacing original speakers with FBW-SUB.



Continuous listening to high volume(>110dB) voice may jeopardize hearing ability. listening to voice over 130dB may causes permanent damage to hearing

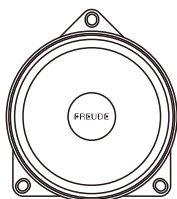
Packing List

FBMW-100S: **A** x2 **C** x2 **D** x2 **E** x2 **F** x2 **I** x1

FBMW-100: **B** x2 **C** x2 **D** x2 **E** x2 **F** x2 **I** x1

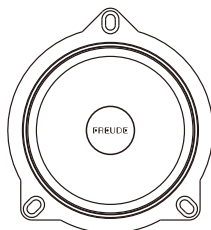
FBMW-SUB: **G** x1 **H** x1 **I** x1

A



4" Mid-range speakers

B



4.5" Mid-range speakers

C



Extension Cable

D



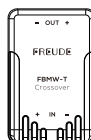
25mm Al/Mg
dome tweeters

E



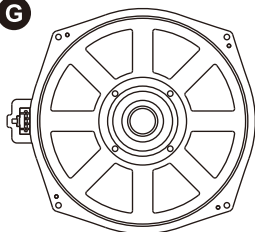
Oval Mount Bracket

F



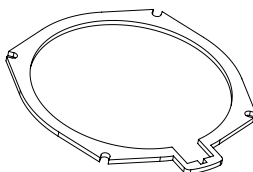
Highpass inline crossover

G



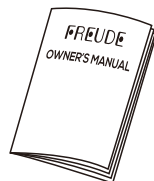
8" Shallow Subwoofer

H



EVA Gasket

I



Owner's manual(English)
Owner's manual(Simplified Chinese)

Product Specifications

· Model:	· FBMW-100S	· FBMW-100
· Type:	· 4" 2-Way Component Kit	· 4.5" 2-Way Component Kit
· Max Power:	· 60W	· 60W
· Rms Power:	· 30W	· 30W
· Impedance:	· 4ohm	· 4ohm
· Sensitivity(2.83V/1M):	· 87dB	· 87dB
· Frequency Response:	· 88Hz - 28kHz	· 80Hz - 28kHz
· Midrange Basket:	· 4" Aluminum	· 4.5" Aluminum
· Midrange Cone:	· Composite Paper Cone	· Composite Paper Cone
· Midrange Suspension	· Rubber Surround	· Rubber Surround
· Tweeter Dome:	· Al/Mg Dome With Silk Surround	· Al/Mg Dome With Silk Surround
· Tweeter Voice Coil:	· 1"(25mm)	· 1"(25mm)
· Tweeter Magnet:	· NdFeB	· NdFeB

Highlights

- Direct fit audio system for BMW without modification.
- Using OEM wiring and connectors to allow plug & play.
- Quick and easy to installation.
- Mid-range speaker was designed in a cast aluminium construction for ultimate durability and performance.
- Composite paper cone for authentic and brilliant sound reproduction.
- Butyl rubber surround.
- 25mm Al/Mg dome tweeter.

· Model:	· FBMW-SUB
· Type:	· 8" Shallow Subwoofer
· Max Power:	· 200W
· Rms Power:	· 100W
· Impedance:	· 4ohm
· Sensitivity(2.83V/1M):	· 87dB
· Frequency Response:	· 40Hz - 2000Hz
· Basket:	· 8" ABS + SPHC
· Cone:	· Composite Paper Cone
· Suspension:	· Rubber Surround
· Voice Coil:	· 2"(50.8mm)
· Magnet:	· NdFeB

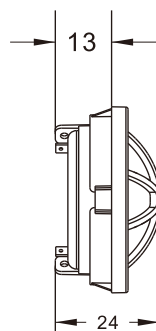
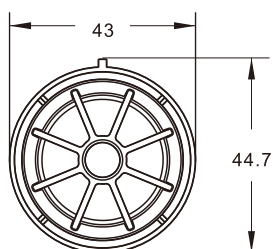
Highlights

- Approved compatibility with BMW 1-Series, 3-Series, 5-Series and X1 (for specific models please refer to P7).
- Neodymium magnet design
- BMW OEM connect for easier installation
- CONEX Spider assembly

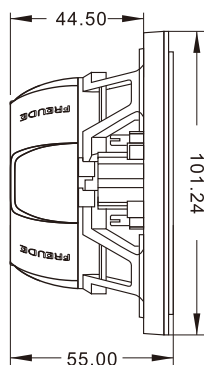
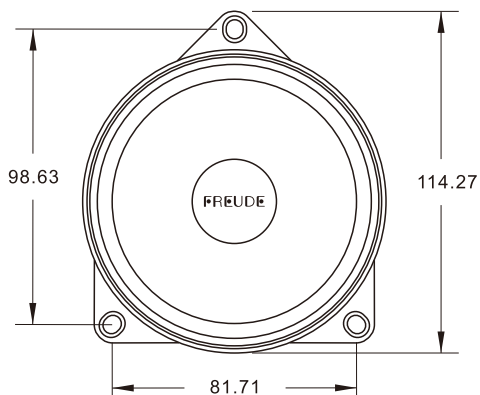
Product Dimensions

Dimensions in mm

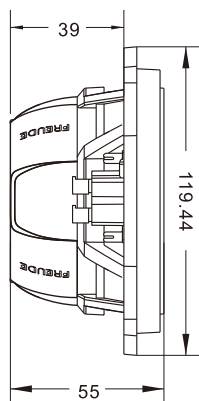
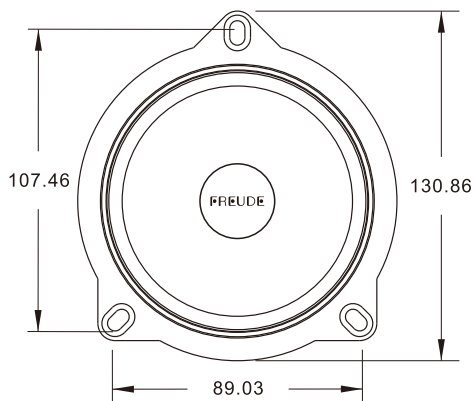
TWEETER

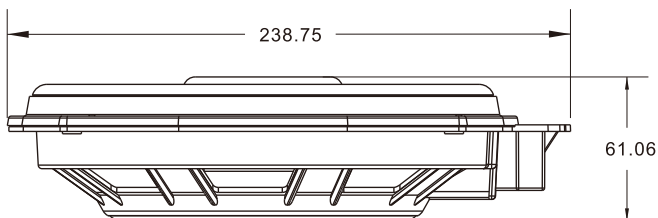
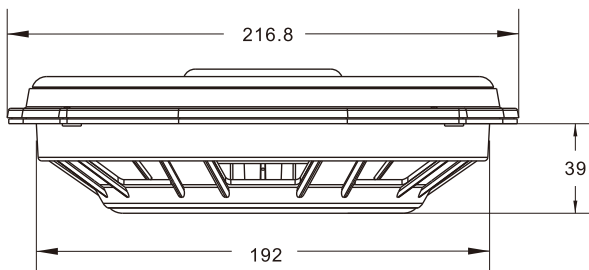
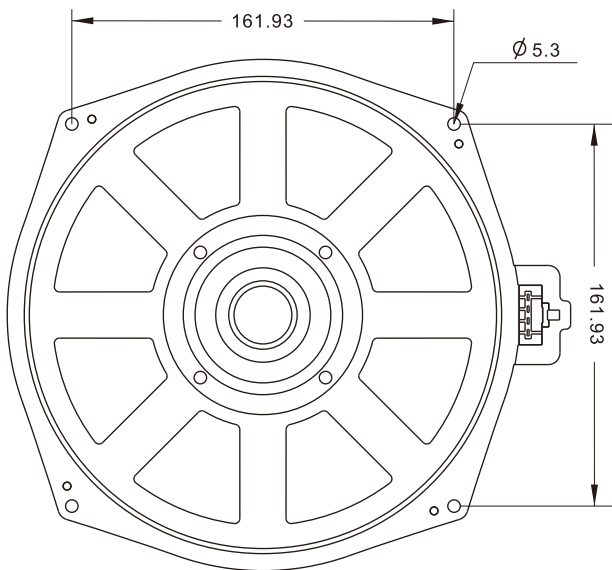


FBMW-100S



FBMW-100





Compatibility List

FBMW-100/ FBMW-100S can be installed in the following list of car models:

FBMW-100

Series	Model	Model Year	Mounting Position
1 series	E81(3-door)	2004-2013	Front door
	E82 (Coupé)	2004-2013	Front door
	E87 (5-door)	2004-2013	Front door
	E88 (Cabriolet)	2004-2013	Front door/ Rear side panel
3 series	E90(Limousine)	2005-2013	Front door
	E91 (Touring)	2005-2013	Front door/ Rear door
	E92 (Coupé)	2005-2013	Front door/ Rear side panel
	E93 (Cabriolet)	2005-2013	Front door/ Rear side panel

Series	Model	Model Year	Mounting Position
5 series	F10 (Limousine)	2010-2014	Front door/ Rear door
	F11 (Touring)	2010-2014	Front door/ Rear door
6 series	E63 (Coupé)	2002-2007	Front door/ Rear side panel
	E64 (Cabriolet)	2002-2007	Front door/ Rear side panel
	F12 (Coupé)	from 2011	Rear side panel
	F13 (Cabriolet)	from 2011	Rear side panel
X1	E84 (SUV)	from 2009	Front door

FBMW-100S

Series	Model	Model Year	Mounting Position
1 series	E81(3-door)	2004-2013	Rear door
	E82 (Coupé)	2004-2013	Rear door
	E87 (5-door)	2004-2013	Rear door
	F20 (5-door)	from 2011	Rear deck
	F21 (3-door)	from 2011	Rear deck
2 series	F22 (Coupé)	from 11/2013	Rear deck
	F87 (M2)	2015-2023	Rear deck
3 series	E90 (Limousine)	2005-2013	Rear deck
	F34 (Gran Turismo)	2013-2020	Rear deck
	F80 (M2)	2014-2020	Rear deck
4 series	F32 (Coupé)	from 10/2013	Rear deck
	F33 (Cabriolet)	from 10/2013	Rear deck
	F36 (Gran Coupé)	from 2014	Rear deck
	F82 (M4)	2014-2020	Rear deck
5 series	E60 (Limousine)	2003-2009	Front door/ Center/ Rear deck
	E61 (Touring)	2003-2009	Front door/ Center/ Rear roof
	F07 (Gran Turismo)	2010-2014	Front door/ Center/ Rear roof
	F11 (Touring)	2010-2014	Rear roof
	G31 (Touring)	2017	Rear roof
	F06 (Gran Coupé)	from 2011	Rear deck
	F13 (Cabriolet)	from 2011	Rear deck

Series	Model	Model Year	Mounting Position
7 series	E65 (Limousine)	2001-2008	Front door/ Center
	E66 (Limousine L)	2001-2008	Front door/ Center
	F01 (Limousine)	from 2008	Front door/ Rear door/ Rear deck
	F02 (Limousine L)	from 2008	Front door/ Rear door/ Rear deck
	G11 (Limousine)	2016-2023	Rear deck
	G12 (Limousine L)	2016-2023	Rear deck
X1	E84 (SUV)	from 2009	Rear deck
X3	E83 (SUV)	2003-2010	Front door/ Rear door/ Rear roof
	F25 (SUV)	from 2010	Rear roof
X5	E70 (SUV)	2006-2013	Front door/ Rear door
	F15 (SUV)	from 2013	Rear roof
X5M	F85 (SUV)	2014-Now	Rear roof
X6	E71 (SUV)	2008-2014	Front door/ Rear door/ Rear roof
	F16 (SUV)	2014	Rear roof
Z4	E89 (Roadster)	from 2009	Front door/ Rear door
i8	I15 (Roadster)	2016	Rear side panel
Mini	R60 (Countryman)	2010-2017	Front door/ Rear door
	R61 (Paceman)	2013-2020	Front door/ Rear door

Compatibility List

FREUDE FBMW-SUB is compatible with all BMW models with "Stereo" or "Standard" configuration.

To maximize the performance of FBMW-SUB, we recommend to use 1x4 Channel amplifier or 2x2 Channel amplifiers.

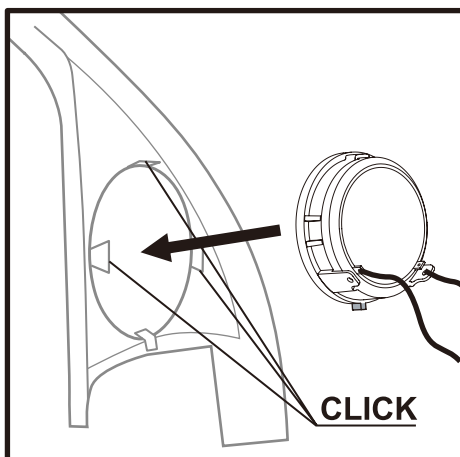
FBMW-SUB can be installed in the following list of car models:

Series	Model	Model Year	Series	Model	Model Year
1series	E81(3-door)	2004-2011	7 series	E65 (Limousine)	2001-2008
	E82 (Coupé)	2004-2011		E66 (Limousine L)	2001-2008
	E87 (5-door)	2004-2011		F01 (Limousine)	2008-2012
	E88 (Cabriolet)	2004-2011		F02 (Limousine L)	2008-2012
	F20 (5-door)	From 2011		G11 (Limousine)	2016-2023
2 series	F21 (3-door)	From 2011		G12 (Limousine L)	2016-2023
	F22 (Coupé)	From 11/2013	X1	E84 (SUV)	2009-2016
	F23 (Cabriolet)	From 11/2013		F48 (SUV)	2015-2022
	F45 (Active Tourer)	2014-2021	X3	F49 (SUV L)	From 2016
	F46 (Gran Tourer)	2014-2021		E83 (SUV)	2003-2010
3 series	F87 (M2)	2015-2023	X5	F25 (SUV)	2011-2018
	E90 (Limousine)	2005-2012		G01 (SUV)	2017-2024
	E91 (Touring)	2005-2013	X6	E70 (SUV)	2006-2013
	E92 (Coupé)	2006-2010		F15 (SUV)	2013-2018
	E93 (Cabriolet)	2007-2014		F85 (SUV)	From 2014
	F30 (Limousine)	2012-2018		G05 (SUV)	From 2018
	F31 (Touring)	2012-2018	X6	E71 (SUV)	2008-2015
	F34 (Gran Turismo)	2013-2020		F16 (SUV)	From 2014
4 series	F80 (M2)	2014-2020	i8	I15 (Roadster)	2016
	F32 (Coupé)	2013-2020		R60 (Countryman)	2010-2017
	F33 (Cabriolet)	2013-2020	Mini	R61 (Paceman)	2013-2020
	F36 (Gran Coupé)	From 2014		F56 (3-door)	2013
	F82 (M4)	2014-2020		F55 (5-door)	2012-2022
5 series	F83 (M4 Cabriolet)	2014-2020		F54 (Clubman)	From 2015
	E60 (Limousine)	2002-2005		F57 (Cabrio)	From 2013
	F07 (Gran Turismo)	2009-2016			
	F10 (Limousine)	2010-2016			
	F11 (Touring)	2011-2016			
	G30 (Limousine)	2016-2023			
6 series	G31 (Touring)	From 2017			
	E63 (Coupé)	2002-2007			
	E64 (Cabriolet)	2002-2007			
	F06 (Gran Coupé)	From 2011			
	F12 (Coupé)	2012-2019			
	F13 (Cabriolet)	2011-2018			
	G32 (Gran Turismo)	2017-2024			

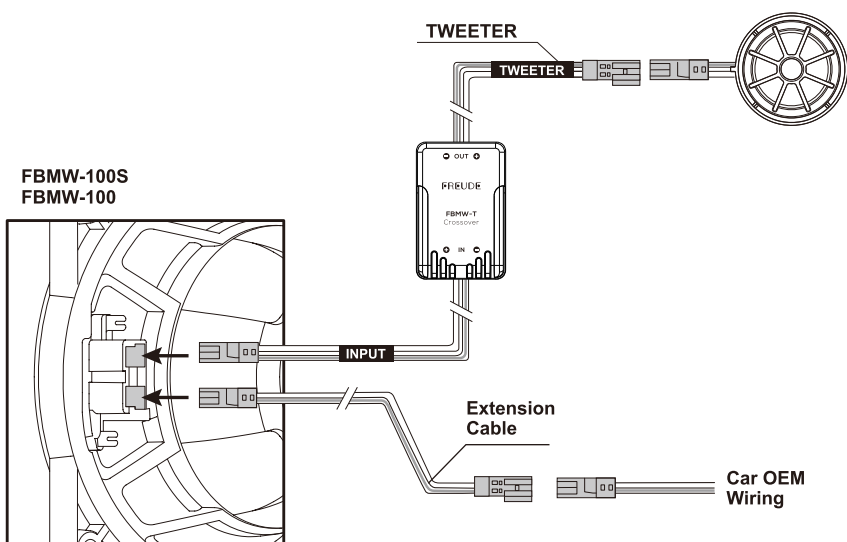
* Installed underseat in listed vehicles.

Front Door Installation

TWEETER



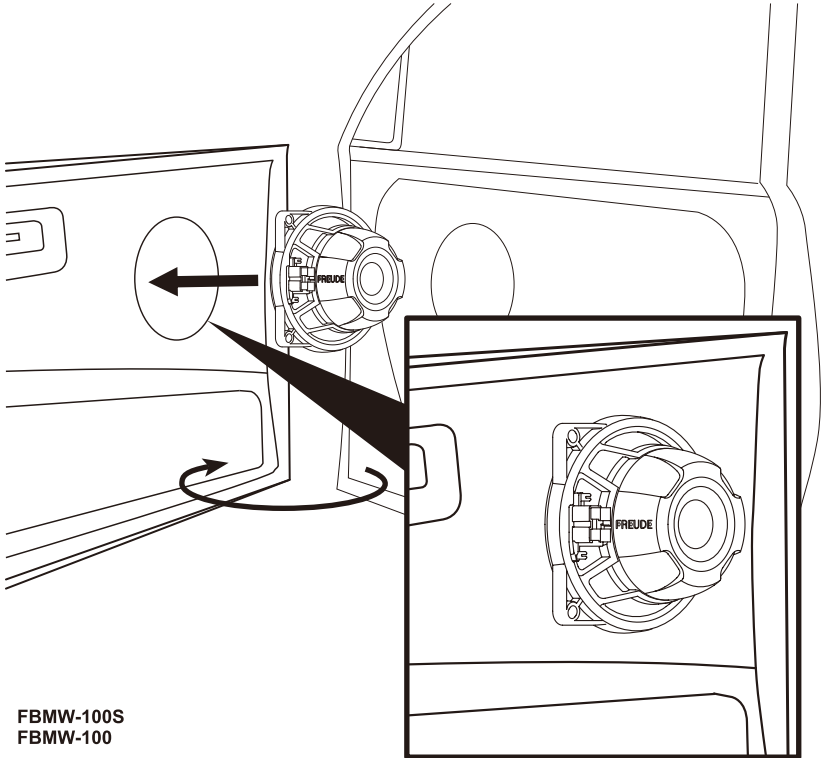
FBMW-100S/FBMW-100



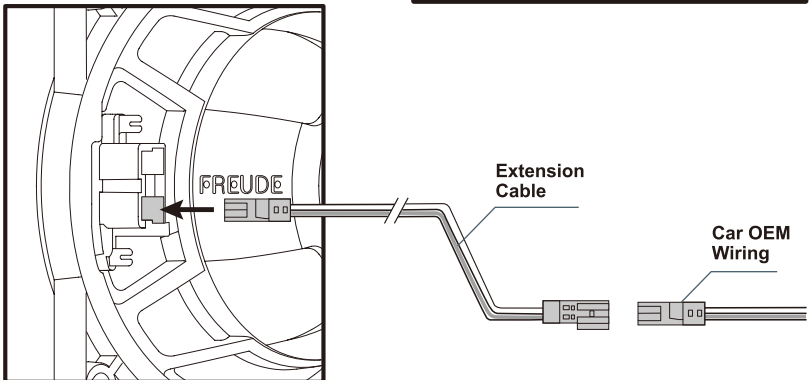
Front Door Installation

FBMW-100S/FBMW-100

Option 1 - Trim installation



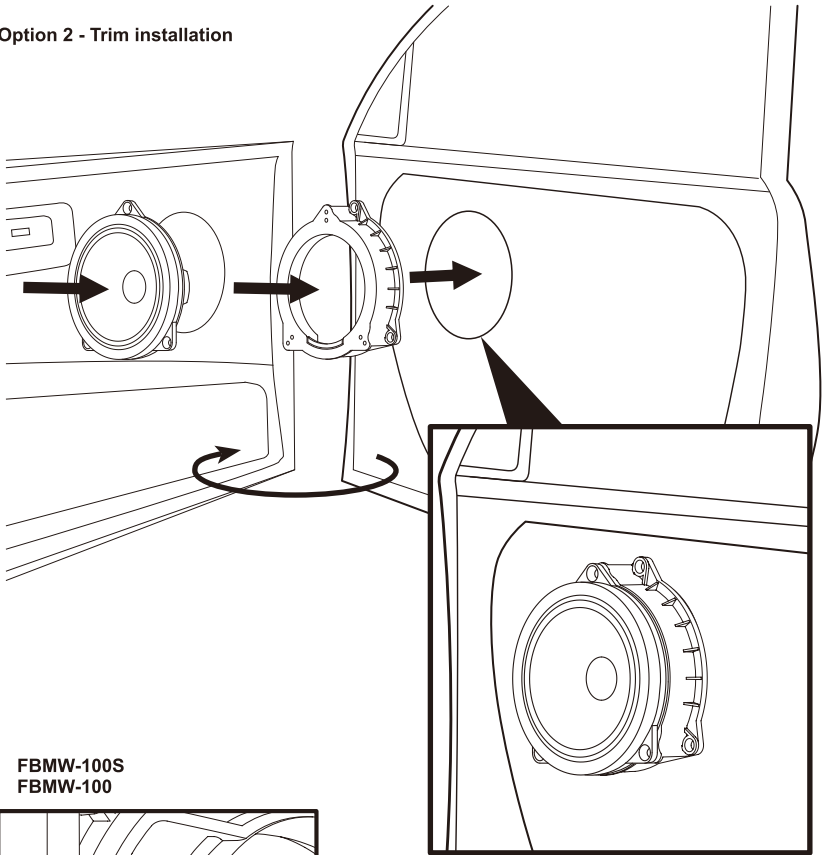
FBMW-100S
FBMW-100



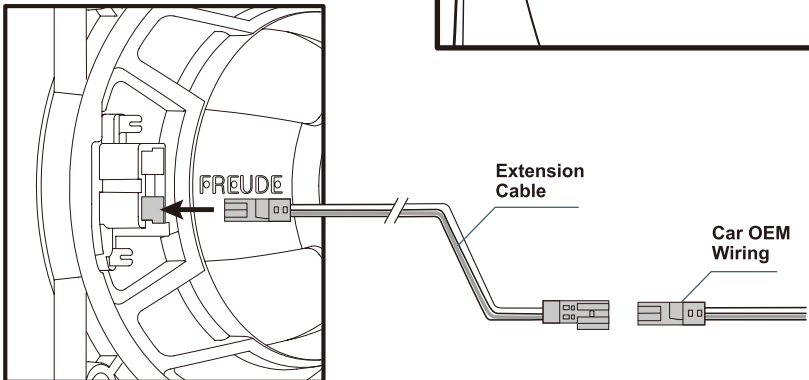
Front Door Installation

FBMW-100S/FBMW-100

Option 2 - Trim installation

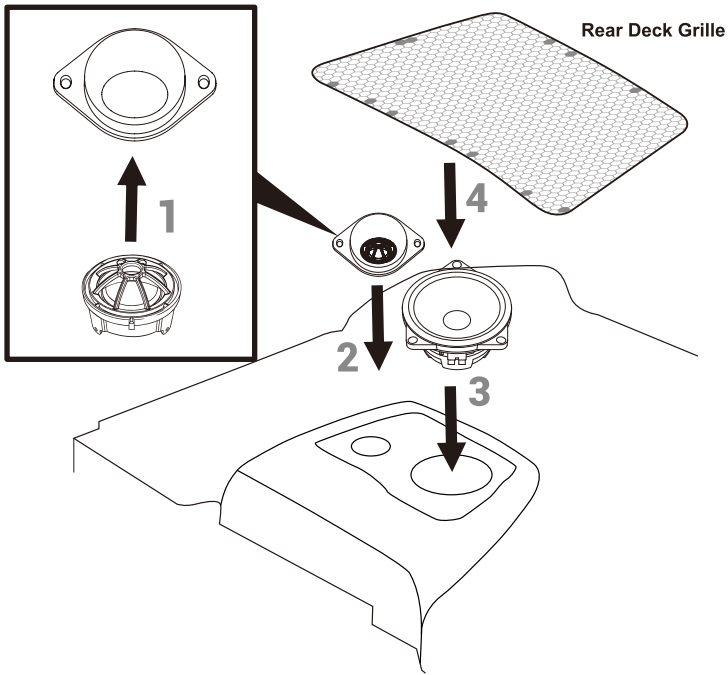


FBMW-100S
FBMW-100

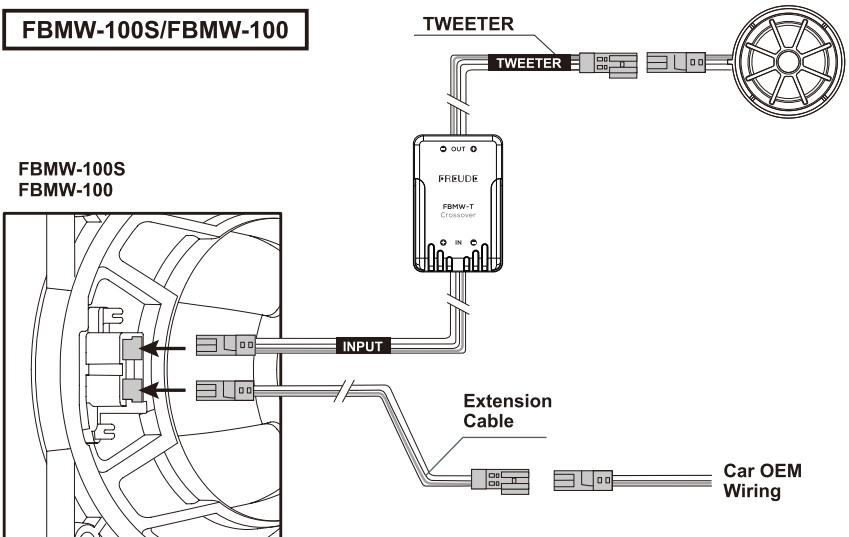


Rear Deck Installation

TWEETER

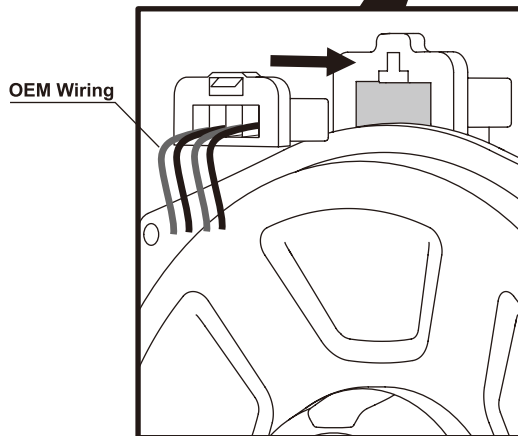
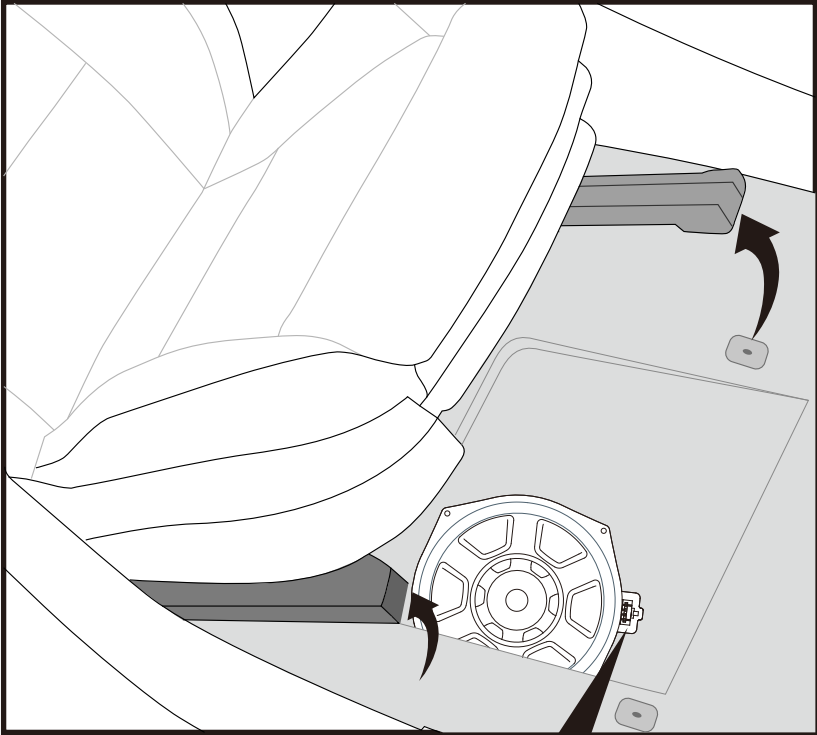


FBMW-100S/FBMW-100



| Subwoofer Installation

FBMW-SUB





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