

# IMPULSE 4.320 CABLE PRODUCT INFORMATION FOCAL INSIDE

---

February 2022



# DEDICATED CABLES CONCEPT

Focal has developed a dedicated line of cables for our compact amplifiers, to simplify the installation of audio solutions Focal Inside Plug and play as much as possible.

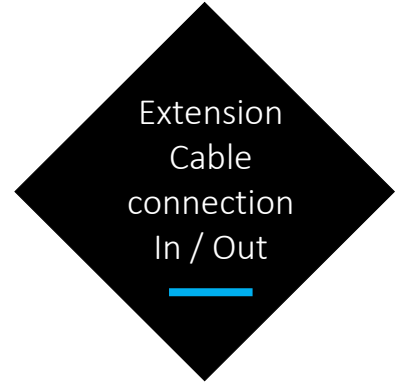
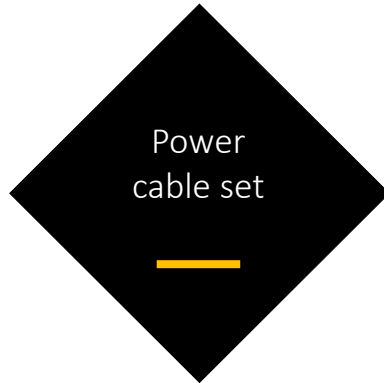
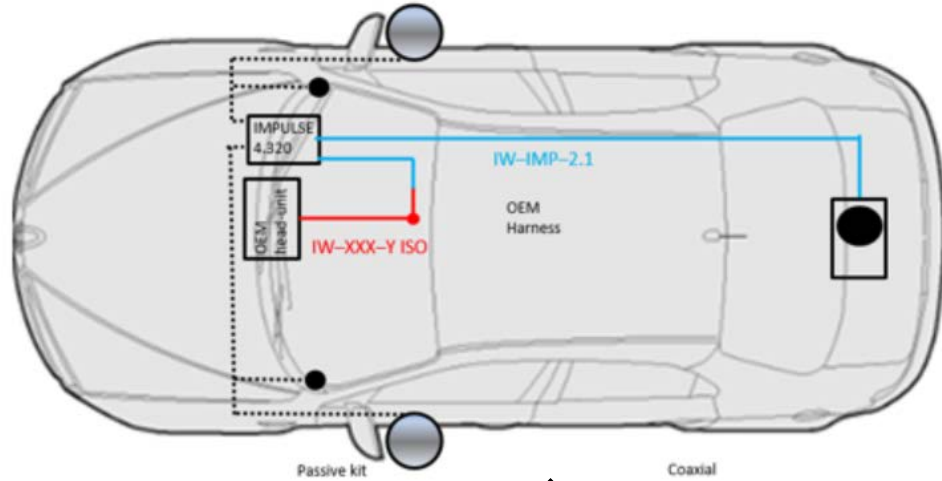
In an "OEM" philosophy our cables are built in the same materials and connectors as what we develop on our OEM partners. Our wide range of Focal Inside cables will allow you to respond to all audio configurations. saving you a lot of time.

Impulse 4.320





# Cables line explication



Cables divided into 3 families:

Iso Harness, Extension Cables for impulse 4.320.

**Harness ISO** : Made for each brand, to connect to head unit and take audio signal.

**Extension cables** : to connect ISO Harness to amplifiers.

Take the signal, the booster, and send it to the speakers on doors by the original car cables.

**Speakers cables** : Power set cable to connect Impulse 4.320 direct to battery.

# 3 Families cables

1/ Power set



2/ harness ISO cable



3/ Extension cable



# 1 / Y ISO HARNESS

— IW – XXX – Y – ISO

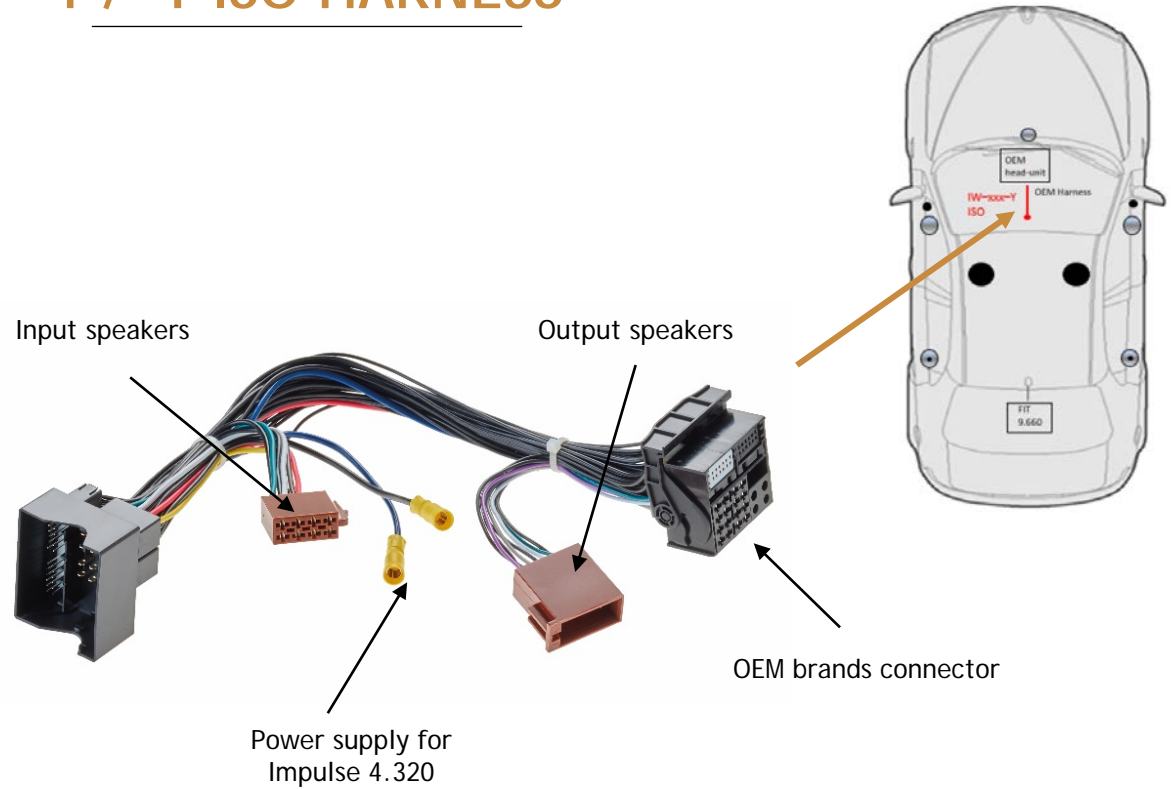
Y iso Harness, are developed for each car brands, for better and easier installation for perfect integration.

Specific brands connector, and iso connectors speakers.

Possibility to connect Impulse 4.320 power supply directly with this bracket.

Made for many brands

Can be used for the following products:  
Impulse 4.320, and also Ibus 2.0/2.1



# 1 / Y ISO HARNESS details

## IW - XXX - Y - ISO

Y iso Harness, are developed for each car brands, for better and easier installation for perfect integration.

Specific brands connector, and iso connectors speakers.

Possibility to connect Impulse 4.320 power supply directly with this bracket.

Made for:  
Ford, BMW/Mini, Toyota, Nissan  
Renault, Peugeot/Citroen, VW

Can be used for the following products:  
Impulse 4.320, Fit 9.660, Ibus 2.0/2.1



IW FOR YISO HARNESS



IW FOR YISO HARNESS



IW FOR YISO HARNESS V2



IW MBZ YISO HARNESS



IW NIS YISO HARNESS



IW PSA YISO HARNESS



IW REN YISO HARNESS



IW TOY YISO HARNESS



IW TOY YISO HARNESS V2



IW VW YISO HARNESS



# IW-BMW-Y-ISO-HARNESS



Specific  
BMW and Mini harness

Head Unit  
connector

Iso  
Connectors



## IW-BMW-Y-ISO-HARNESS



Serie 1, 2, 3, 4, 5, 6, 7

i3 / i8 / Z4

Serie X1, X2, X3, X4, X5,  
X6, X7



Countryman,  
Clubman, Cabrio,  
Roadster,  
Convertible,  
Paceman

Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier





# IW-FORD-Y-ISO-HARNESS

2 différent models



Specific  
FORD harness



Head Unit  
connector



Iso  
Connectors



# IW-FORD-Y-ISO-HARNESS

2 différent models



Bronco  
F-150 2021-  
Fiesta VIII  
Focus IV  
Kuga III  
Puma II  
Sharp

Tourneo Connect 2019-  
Tourneo Custom 2019-  
Transit Connect  
Transit Courier  
Transit Custom

Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier



## IW-FORD-Y-ISO-HARNESS V2

2 différent models



Specific  
FORD V2 harness

Head Unit  
connector

Iso  
Connectors



## IW-FORD-Y-ISO-HARNESS V2

2 différent models



F-150  
D-max  
C-max  
Ecosport  
Edge II  
Fiesta VII  
Focus III  
Galaxis III  
Ka+  
Kuga II

Mondeo  
Mustang -2020  
Ranger III  
S-max II  
Tourneo Connect -2018  
Tourneo Courier -2018  
Tourneo Custom -2018  
Transit connect -2018  
Transit custom -2018

Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier



# IW-MBZ-Y-ISO-HARNESS



Specific  
**Mercedes** harness

Head Unit  
connector

Iso  
Connectors



## IW-MBZ-Y-ISO-HARNESS



Before 06-2020 USE WITH  
**NGT5** head unit

C class

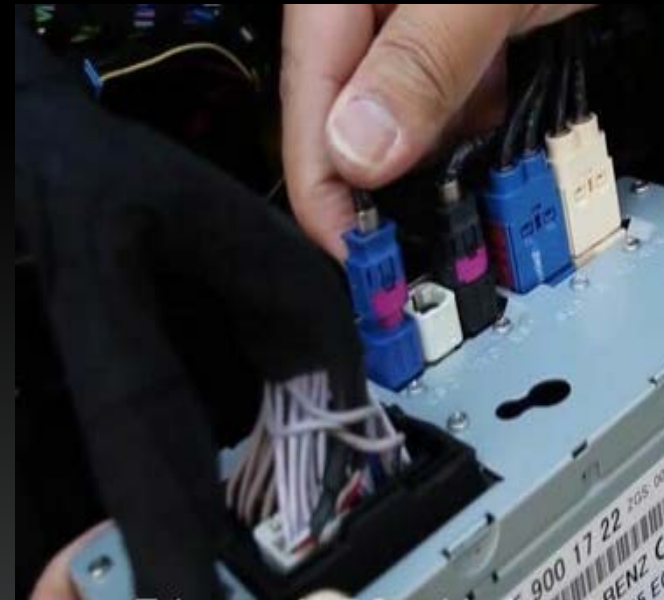
E class

S class

Glc

Glc coupe

Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier



# IW-NIS-Y-ISO-HARNESS



Specific  
**NISSAN** harness



Head Unit  
connector



Iso  
Connectors



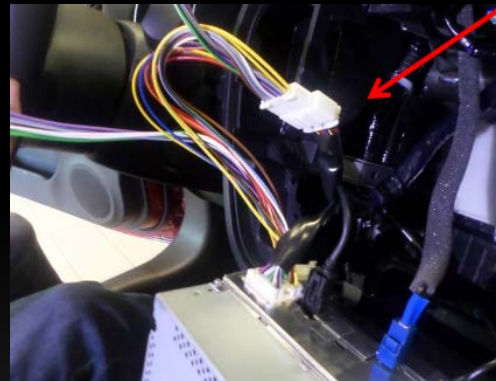
# IW-NIS-Y-ISO-HARNESS



350 Z  
370 Z  
Altima  
Armada  
Frontier  
Gt-R  
Juke  
Micra  
Murano

Note  
Nv 300  
Nv 400  
Pathfinder  
Pulsar  
Tiida  
Vera  
X-trail  
X-terra  
Urvan

Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier





# IW-PSA-Y-ISO-HARNESS



Specific  
PEUGEOT/ CITROEN  
harness



Head Unit  
connector



Iso  
Connectors



# IW-PSA-Y-ISO-HARNESS



PEUGEOT

208 II

308 II

508 II

2008

3008

5008

Expert III

Rifter

Traveler III



CITROËN

Berlingo III

C3 III

C4 grand space Tourer

C4 II

C4 cactus II

C4 space Tourer

C5 aircross

Jumpy III

Space Tourer



Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier

# IW-REN-Y-ISO-HARNESS



Specific  
RENAULT harness



Head Unit  
connector



Iso  
Connectors



# IW-REN-Y-ISO-HARNESS



RENAULT

Alaskan  
Clio  
Captur  
Espace  
Laguna  
Megane  
Scenic  
Twingo II/III  
Vel satis  
Wind  
Zoe



Dokker  
Duster  
Lodgy  
Logan  
Sandero



For two  
For two cabrio  
For two brabus  
For four

Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier



# IW-TOY-Y-ISO-HARNESS



Specific  
TOYOTA harness

Head Unit  
connector

Iso  
Connectors



# IW-TOY-Y-ISO-HARNESS



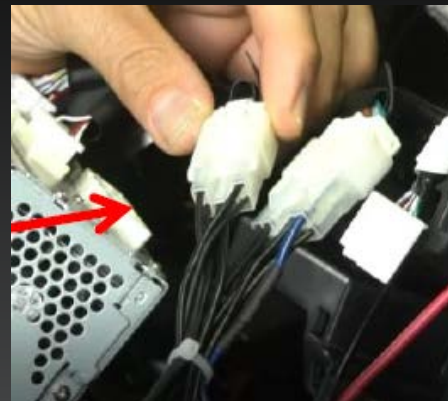
4 Runner	Fortuner
Altis	Gt 86
Auris	Highlander
Avalon	Hilux
Avanza	IQ
C-Hr	Land cruiser
Camry II	Matrix
Celica	Prius
Echo	Pro ace
Fj cruiser	Rav 4

Ct  
Gx  
IS  
Ls

BRZ  
Forester IV  
Impreza IV  
Outback IV  
Outback V  
Wrx

.....

Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier



# IW-TOY-Y-ISO-HARNESS V2

2 différent models



Specific  
TOYOTA V2 harness

Head Unit  
connector

Iso  
Connectors





## IW-TOY-Y-ISO-HARNESS V2

2 différent models



**TOYOTA**

4 Runner 2020-  
Avalon 2019-  
C-Hr 2019-  
Camry II 2018-  
Corolla 2019-  
Highlander 2020-  
Rav 4 2019-  
Sequoia 2019-  
Sienna 2018-  
Tacoma 2019-  
Tundra 2020-

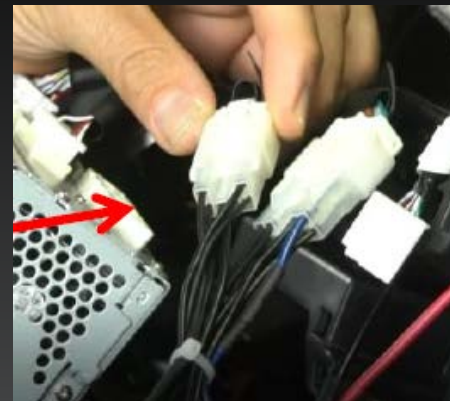


.....



.....

Find application cable in car compatibility sheet  
Harness Iso cable not compatible with OEM amplifier





# IW-VW-Y-ISO-HARNESS



Volkswagen

Specific  
VW harness

Head Unit  
connector

Iso  
Connectors



## IW-VW-Y-ISO-HARNESS



Volkswagen

Golf 7

Polo

Passat

New beetle

Tiguan

...

Find application cable in car compatibility sheet

Harness Iso cable not compatible with OEM amplifier



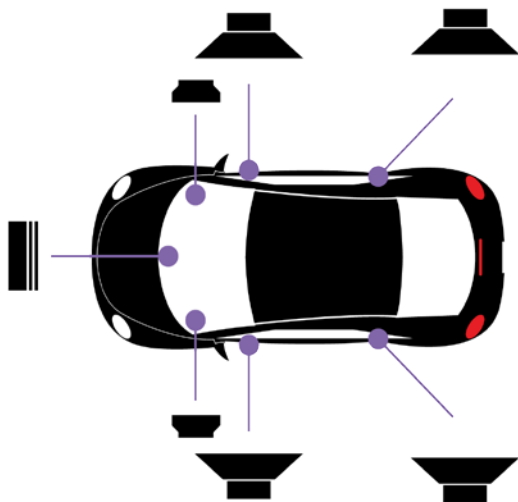
# FOCAL INSIDE ELECTRONIC



IMPULSE 4.320 cables system

# FRONT and REAR SPEAKERS

## All brands configuration



Audio: Front and Rear speakers power by Impulse  
4x50 W rms

Amplifier : Impulse 4.320

Speakers : Component front  
Coaxial rear

Cables :  
Head unit harness **IW xxx Y ISO HARNESS**

Extension cables **IW IMP EXT 150**

Power cable optional **IW PWSUP 600**

# EXTENSION CABLE 4.0 IW IMP EXT 150

## IW – IMP – EXT – 150

### Extension cables IMPULSE 4.320

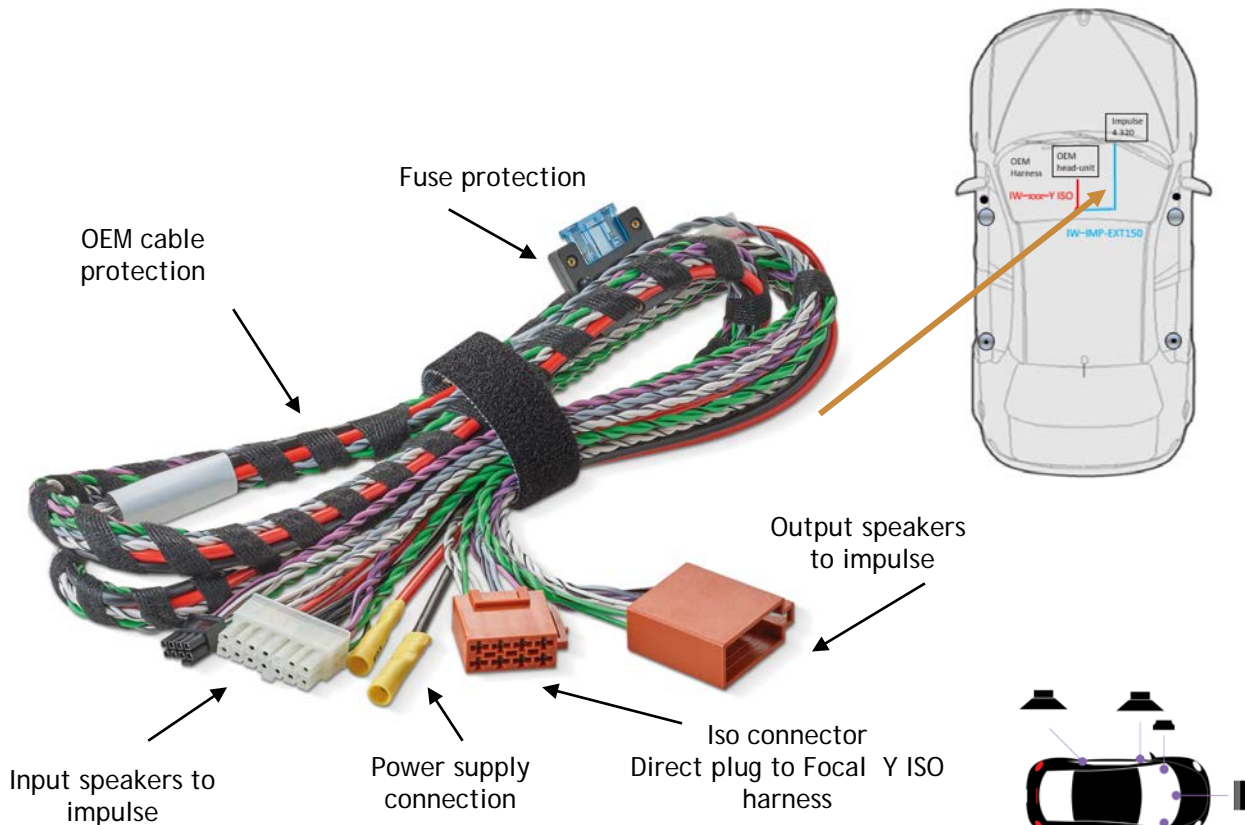
Connect the head-unit harness with ISO connector, in Amplifier IMPULSE 4.320 with specific connectors.

With the iso connector we recover the signal at the iso output of the car head unit, and after amplifying it we send it back to the front and rear doors speakers, using the original car harness.

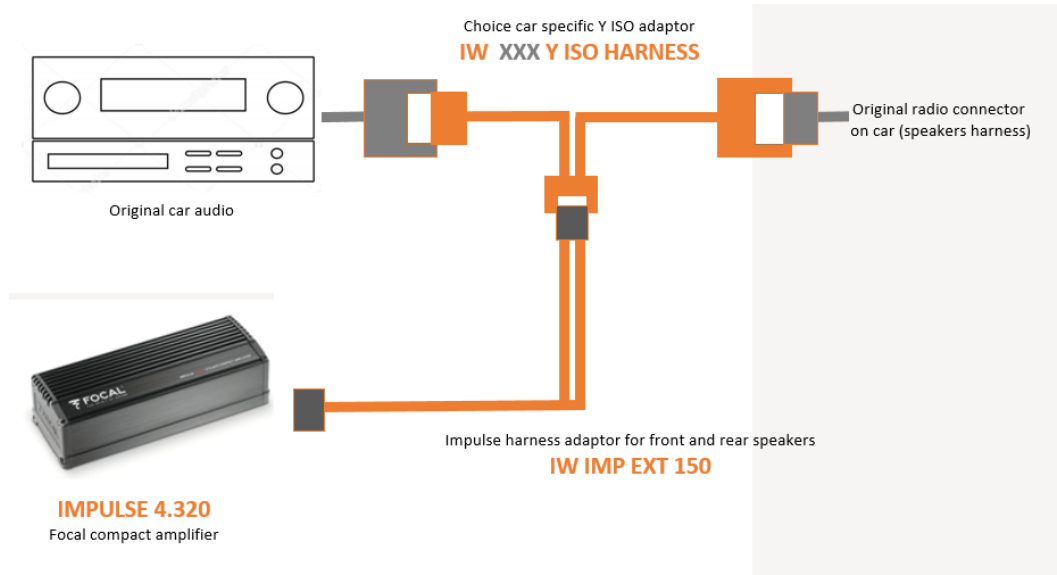
This cable simply the impulse connection in each car. The IMPULSE 4.320 amplifier allows you to amplify the front speakers and rear speakers with its 4 channels.

4x50 Wrms for front and rear speakers

If the power supply allows you to directly connect the impulse to the dedicated connectors of the Focal Y ISO harness. The search for position and ground power is then completely simplified.



# Cable explanation



# IW IMPEXT150

It is very easy to upgrade the sound of your car, from the original car radio.

Have installed a cable behind the car radio on the original connectors.

Our Y ISO Harness adaptor sends the audio signal to our dedicated cable of the chosen audio solution.

Direct plug play on the Impulse 4.320 amplifier and amplify front and rear speakers.

it remains to connect a Ground and the power supply and the installation is ready.

Choice the harness référence on Focal Inside compatibility list



## IW-IMP-EXT-150

Impulse cable 1,5mt long



ISO connector



Power supplier connection



## Set-up 2 : Speakers replacement with IMPULSE amplifier



Y ISO HARNESS

Choice your Brand cable



IW IMP EXT 150

Front and Rear speakers



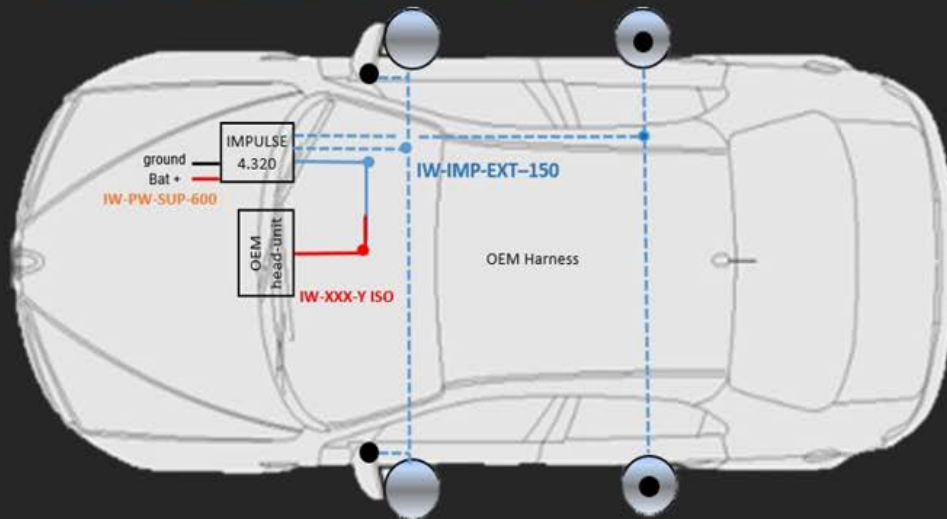
IMPULSE 4.320



Speakers replacement

Choice your brand speakers

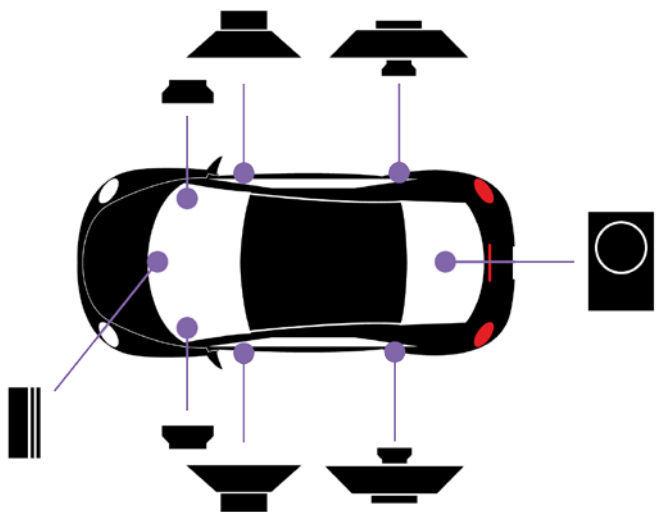
## DEDICATED INTEGRATION CABLES





# FRONT and ONE SUBWOOFER

## All brands configuration



Audio: Front and Rear subwoofer power by Impulse  
2x50 + 1 x 160 W rms

Amplifier : Impulse 4.320

Speakers : Component front  
PSB200 subenclosure  
Coaxial rear (power by head-unit)

Cables :

Head unit harness **IW xxx Y ISO HARNESS**

Extension cables **IW IMP 2.1**

Power cable optional **IW PWSUP 600**

# EXTENSION CABLE IW IMP 2.1

## IW – IMP – 2.1

### Extension cables IMPULSE 4.320

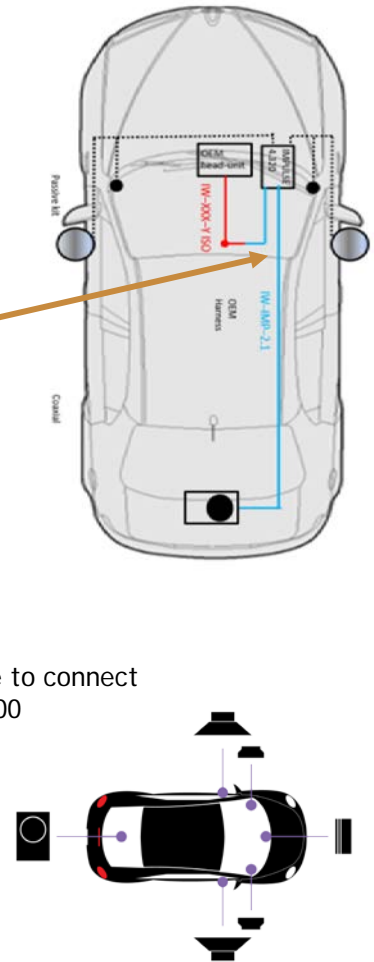
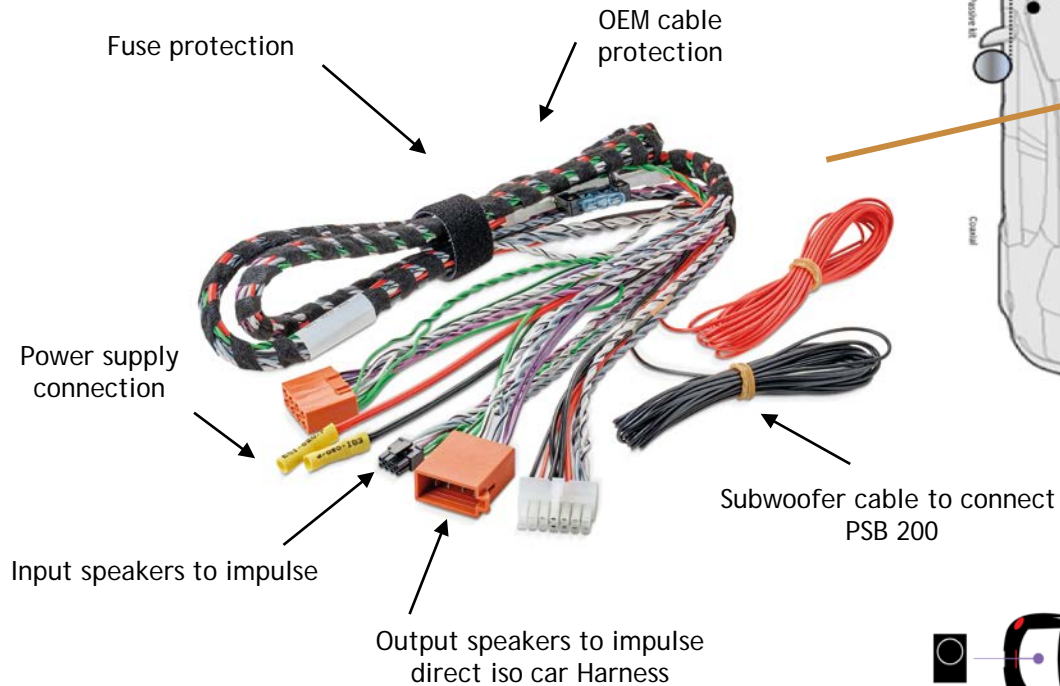
Connect the head-unit harness with ISO connector, in Amplifier IMPULSE 4.320 with specific connectors.

With the iso connector we recover the signal at the iso output of the car head unit, and after amplifying it we send it back to the front speakers using the original car harness. 2 rear channel Impulse are bridge to mono for manage subwoofer box, PSB 200.

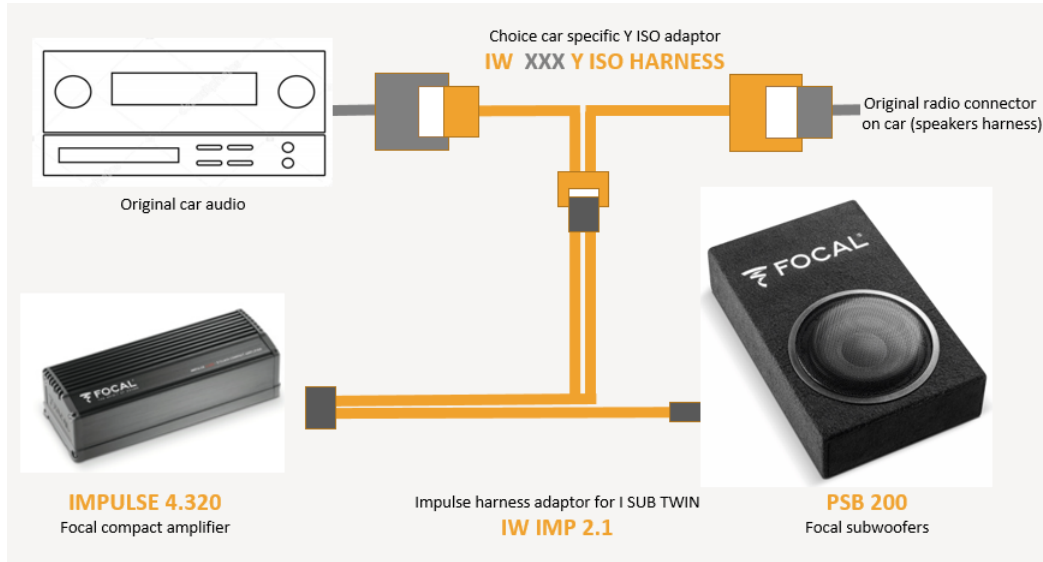
This cable simply the impulse connection in each car. The IMPULSE 4.320 amplifier allows you to amplify the front speakers and subwoofer box with its 3 channels.

**2x50w front 1 x160w rms bridge subwoofers.**

If the power supply allows you to directly connect the impulse to the dedicated connectors of the Focal Y ISO harness. The search for position and ground power is then completely simplified.



# Cable explication



# IW IMP 2.1

It is very easy to upgrade the sound of your car, from the original car radio.

Have installed a cable behind the car radio on the original connectors.

Our Y ISO Harness adaptor sends the audio signal to our dedicated cable of the chosen audio solution.

Direct plug play on the Impulse 4.320 amplifier and on sub boxes PSB200.

Direct bridge subwoofer mode.

it remains to connect a Ground and the power supply and the installation is finished.



Choice the harness référence on Focal Inside compatibility list



## Full pack: Speakers replacement with IMPULSE amplifier and PSB 200



Y ISO HARNESS

Choice your Brand cable



IW IMP 2.1 HARNESS

Front and 1 subwoofer



IMPULSE 4.320



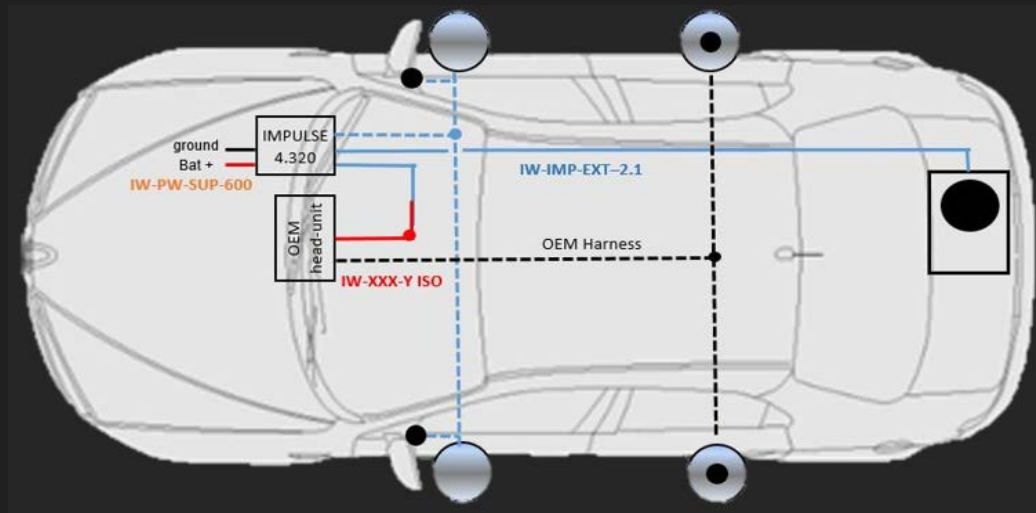
Speakers replacement

Choice your brand speakers



PSB 200

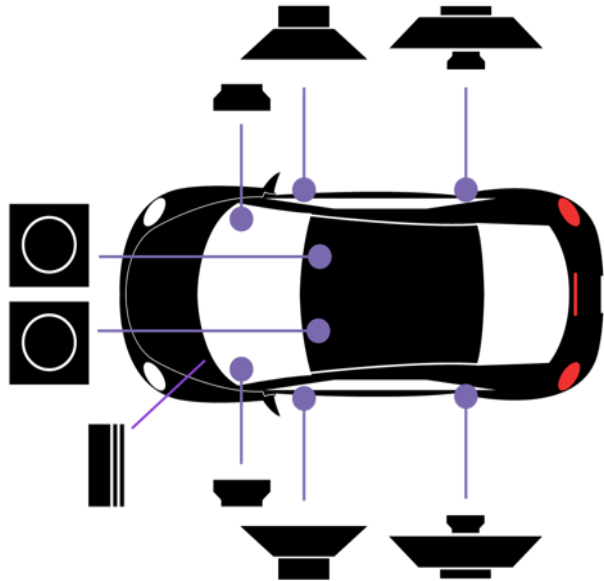
## DEDICATED INTEGRATION CABLES



Rear speakers on head unit

# FRONT and TWO SUBWOOFERS

## All brands configuration



Audio: Front and i sub twin power by Impulse  
2x50 + 2 x80 W rms (2 ohms subwoofers)

Amplifier : Impulse 4.320

Speakers : Component front

ISUB TWIN subwoofers 2 ohms

Coaxial rear (power by head-unit)

Cables :

Head unit harness **IW xxx Y ISO HARNESS**

Extension cables **IW IMP 2.2**

Power cable optional **IW PWSUP 600**

# EXTENSION CABLE IW IMP 2.2

## IW – IMP – 2.2

### Extension cables IMPULSE 4.320

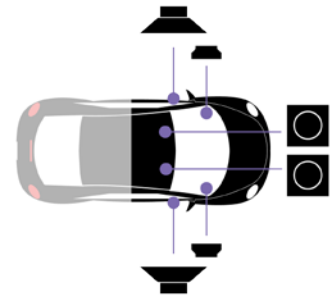
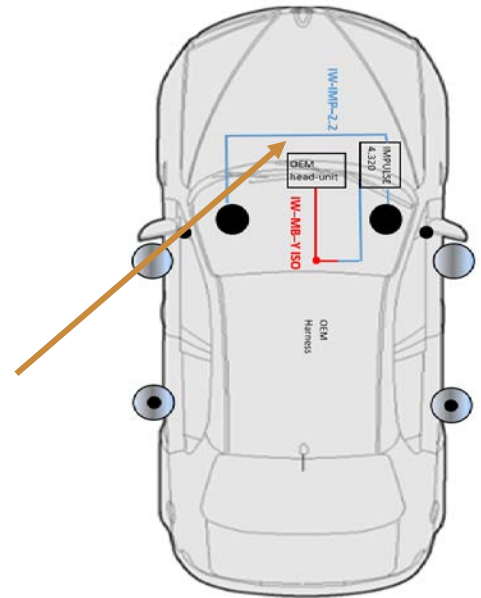
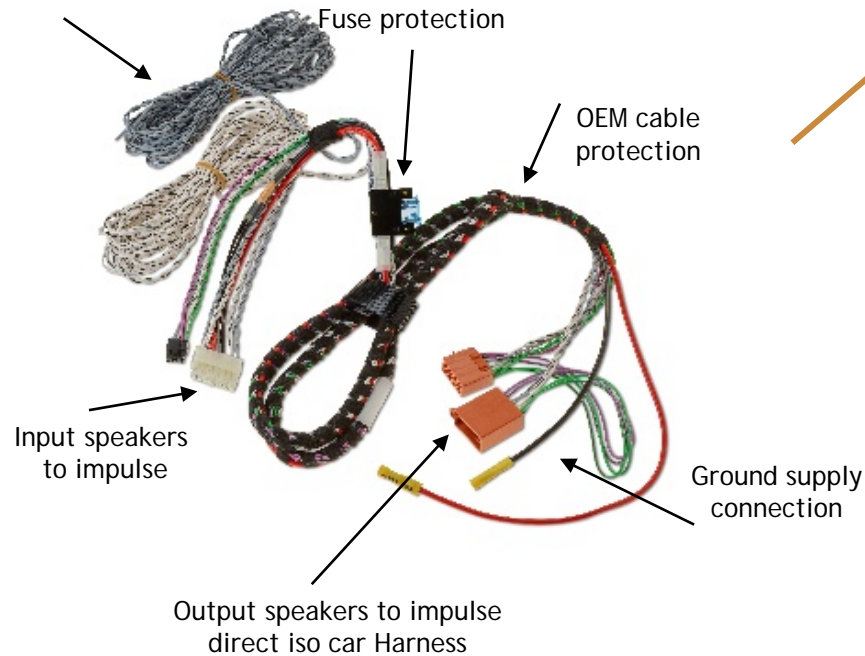
Connect the head-unit harness with ISO connector, in Amplifier IMPULSE 4.320 with specific connectors.

With the iso connector we recover the signal at the iso output of the car head unit, and after amplifying it we send it back to the front speakers using the original car harness. 2 rear channel Impulse can manage 2 front subwoofers, better with 2ohms speakers.

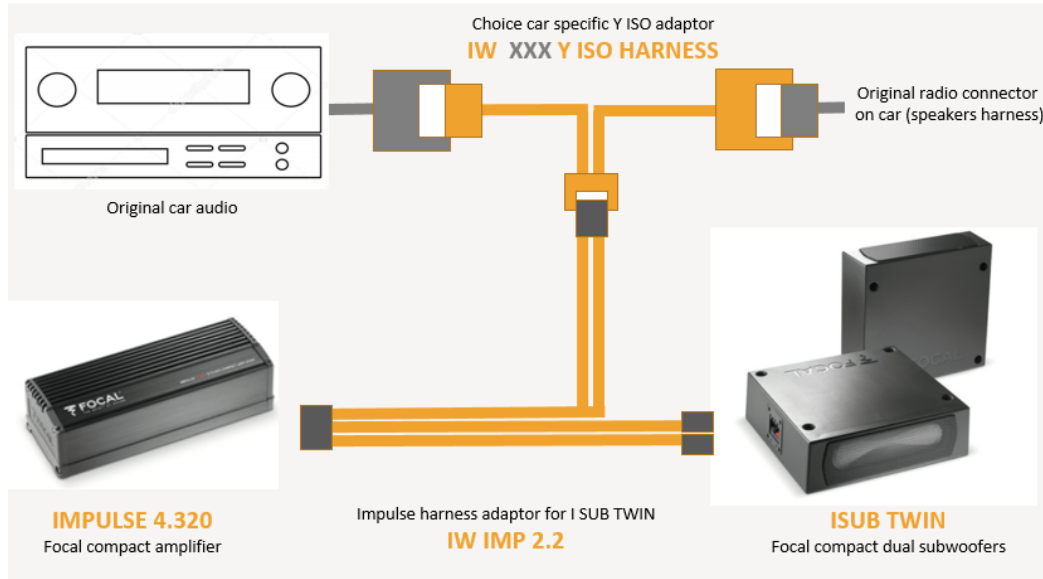
This cable simply the impulse connection in each car. The IMPULSE 4.320 amplifier allows you to amplify the front speakers and front subwoofers **2x50w front 2 x80w rms 2ohms subwoofers.**

If the power supply allows you to directly connect the impulse to the dedicated connectors of the Focal Y ISO harness. The search for position and ground power is then completely simplified.

2 x Subwoofer cable to connect  
2 front subwoofers



# Cable explication



# IW IMP 2.2

It is very easy to upgrade the sound of your car, from the original car radio.

Have installed a cable behind the car radio on the original connectors.

our Y ISO Harness adaptor sends the audio signal to our dedicated cable of the chosen audio solution.

Direct plug play on the Impulse 4.320 amplifier and on the two twin sub boxes with IW IMP 2.2 cable.

it remains to connect a Ground and the power supply and the installation is ready.

Choice the harness référence on Focal Inside compatibility list





## FULL Pack : Speakers replacement with IMPULSE amplifier and ISUB TWIN



Y ISO HARNESS

Choice your Brand cable



IW IMP 2.2 HARNESS

Front and 2 subwoofers



IMPULSE 4.320



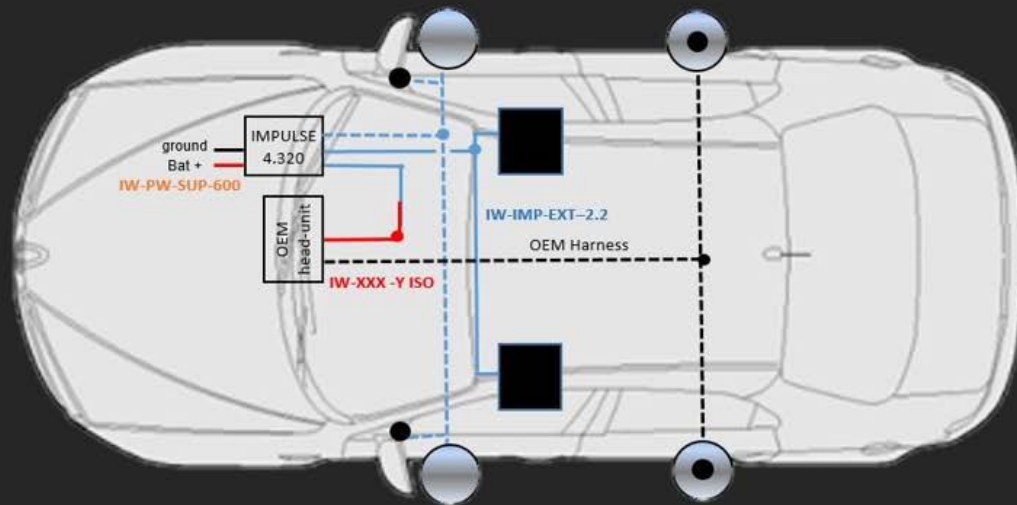
Speakers replacement

Choice your brand speakers



I SUB TWIN

## DEDICATED INTEGRATION CABLES

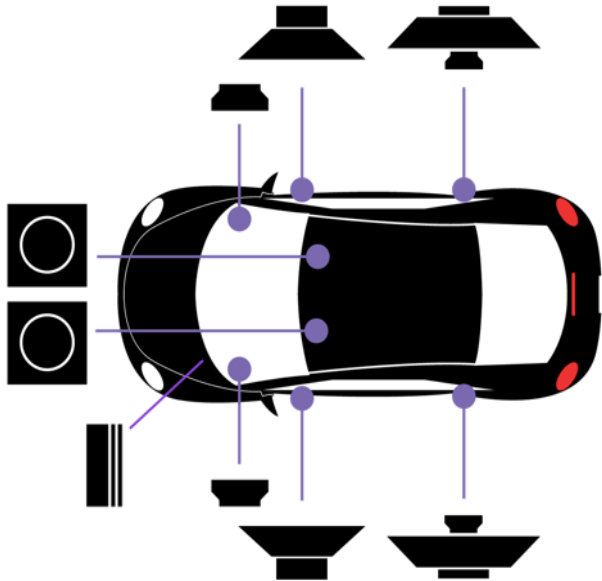


\* Rear speakers on head unit



# MERCEDES FRONT and TWO SUBWOOFERS

## Configuration with NGT5



Audio: Front and isub MBZ 2 power by Impulse  
2x50 + 2 x80 W rms (2 ohms subwoofers)

Amplifier : Impulse 4.320

Speakers : Component front  
ISUB MBZ 2 subwoofers 2 ohms  
Coaxial rear (power by head-unit)

Cables :

Head unit harness **IW MBZ Y ISO HARNESS**

Extension cables **IW IMP 2.2**

Power cable optional **IW PWSUP 600**

# EXTENSION CABLE IW IMP 2.2

## IW – IMP – 2.2

### Extension cables IMPULSE 4.320

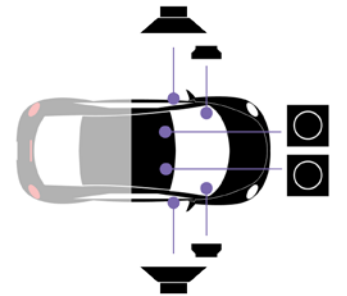
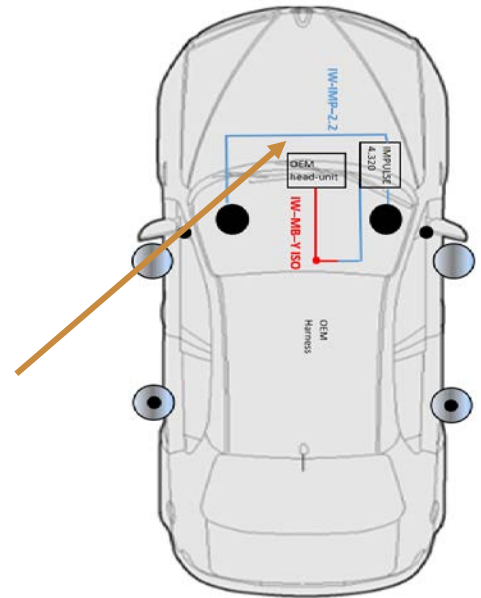
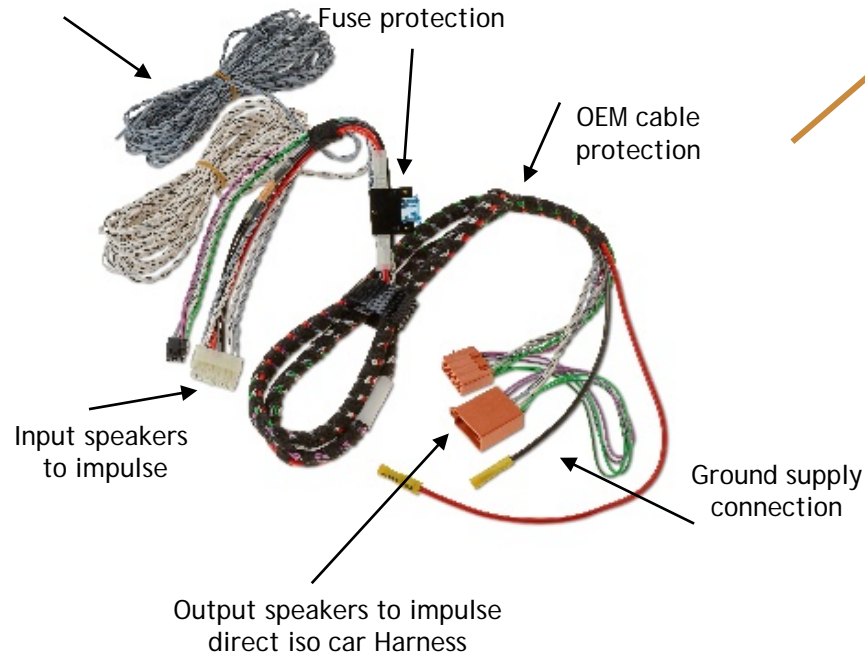
Connect the head-unit harness with ISO connector, in Amplifier IMPULSE 4.320 with specific connectors.

With the iso connector we recover the signal at the iso output of the car head unit, and after amplifying it we send it back to the front speakers using the original car harness. 2 rear channel Impulse can manage 2 front subwoofers, better with 2ohms speakers.

This cable simply the impulse connection in each car. The IMPULSE 4.320 amplifier allows you to amplify the front speakers and front subwoofers **2x50w front 2 x80w rms 2ohms subwoofers.**

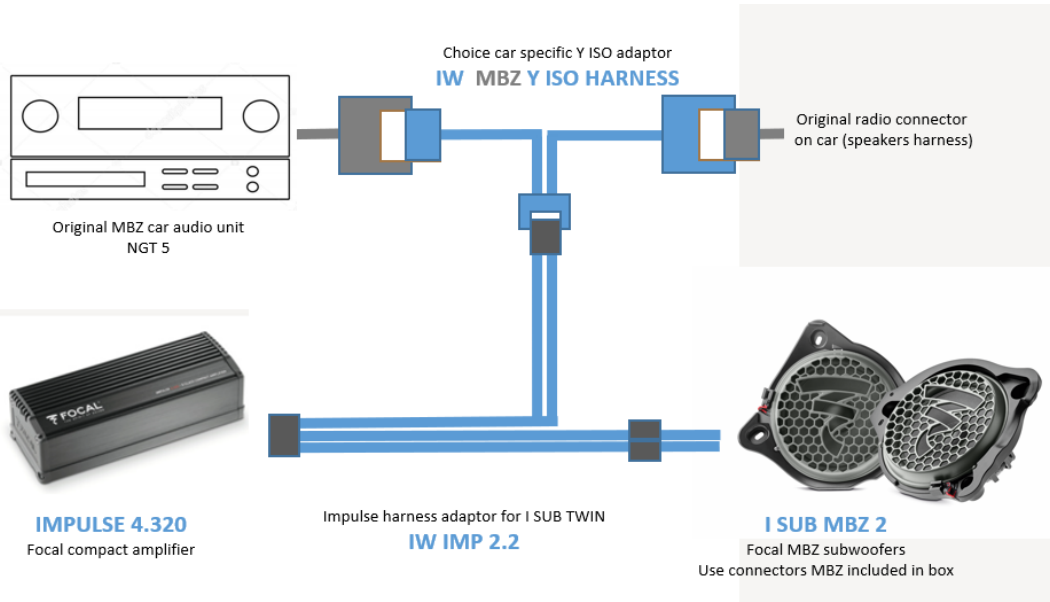
If the power supply allows you to directly connect the impulse to the dedicated connectors of the Focal Y ISO harness. The search for position and ground power is then completely simplified.

2 x Subwoofer cable to connect  
2 front subwoofers



# Cable explication

Control the harness référence on Focal Inside compatibility List, Word Only with NGT5 Mercedes head unit, before 06/2019



Focal Head unit  
Harness solution  
Y iso cables



# IW IMP 2.2

It is very easy to upgrade the sound of your car, from the original car radio.

Have installed a cable behind the car radio on the original connectors.

our Y ISO Harness adaptor sends the audio signal to our dedicated cable of the chosen audio solution.

Direct plug play on the Impulse 4.320 amplifier and on the two twin sub boxes with IW IMP 2.2 cable.

it remains to connect a Ground and the power supply and the installation is ready.



## Mercedes Warning

Harness compatible with Mercedes with NGT5 head unit  
Model before 2019/2020, with fakra connector.

**C class w205**      **02/2014 – 06/2020**

**E class w213**      **04/2016 – 06/2020**

**GLC class 253/x253**    **06/2015 – 04/2019**

**S class w222**      **05/2013 – 06/2020**

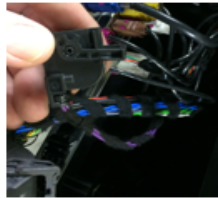
### Warning:

After 2020 Mercedes use a Quadlock connector with second subwoofer connector for advance option.

Quadlock connector



Subwoofer connector



## IW MBZ Y ISO HARNESS



# Set up Mercedes: Speakers replacement with IMPULSE amplifier and ISUB MBZ 2



IW MBZ Y ISO HARNESS

Control your compatibility car



IW IMP 2.2 HARNESS

Front and 2 subwoofers



IMPULSE 4.320



Speakers replacement

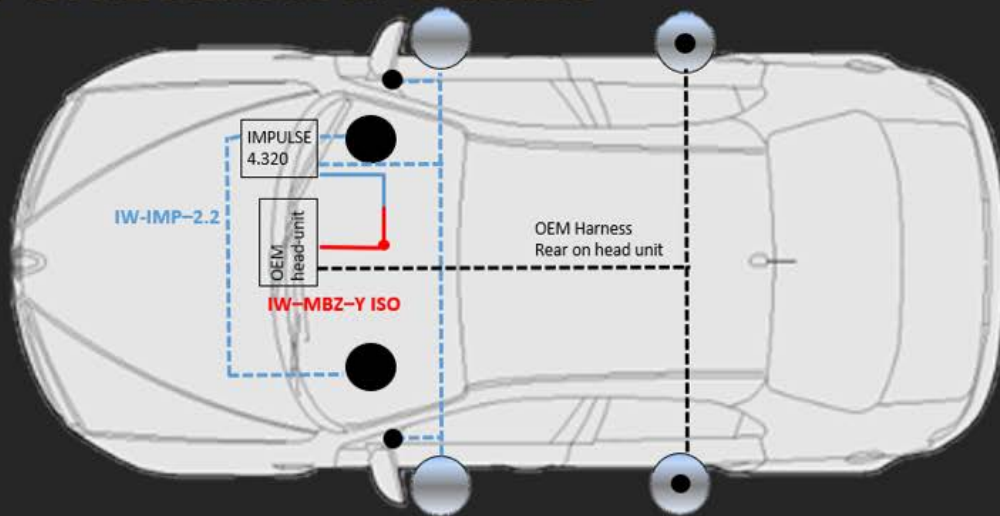
Choice your speakers



I SUB MBZ 2

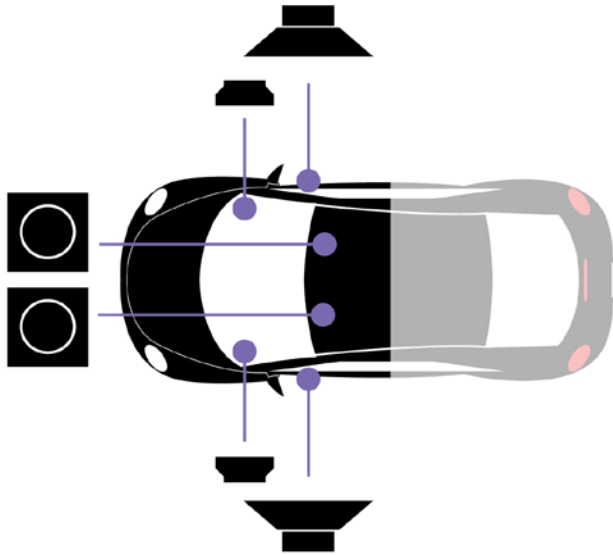
Only for left hand driver

## DEDICATED INTEGRATION CABLES



\* Rear speakers on head unit

# BMW FRONT and TWO SUBWOOFERS



Audio: front and rear speakers power by Impulse  
2x 50w + 2x 80w rms (2 ohms)

Amplifier : Impulse 4.320

Speakers : Component front  
Front **BMW** subwoofers 2ohms  
Coaxial rear (power by head-unit)

Cables :

Extension cables **IW BMW IMP 2.1**

Power cable optional **IW PWSUP 600**

## 2 / EXTENSION CABLE IMPULSE 4.320

### IW – BMW - IMP – 2.1

#### Extension cables IMPULSE 4.320

This BMW 2.1 cable for the impulse uses a specific connection. It takes the car radio signal directly from the subwoofers connector under the front seats.

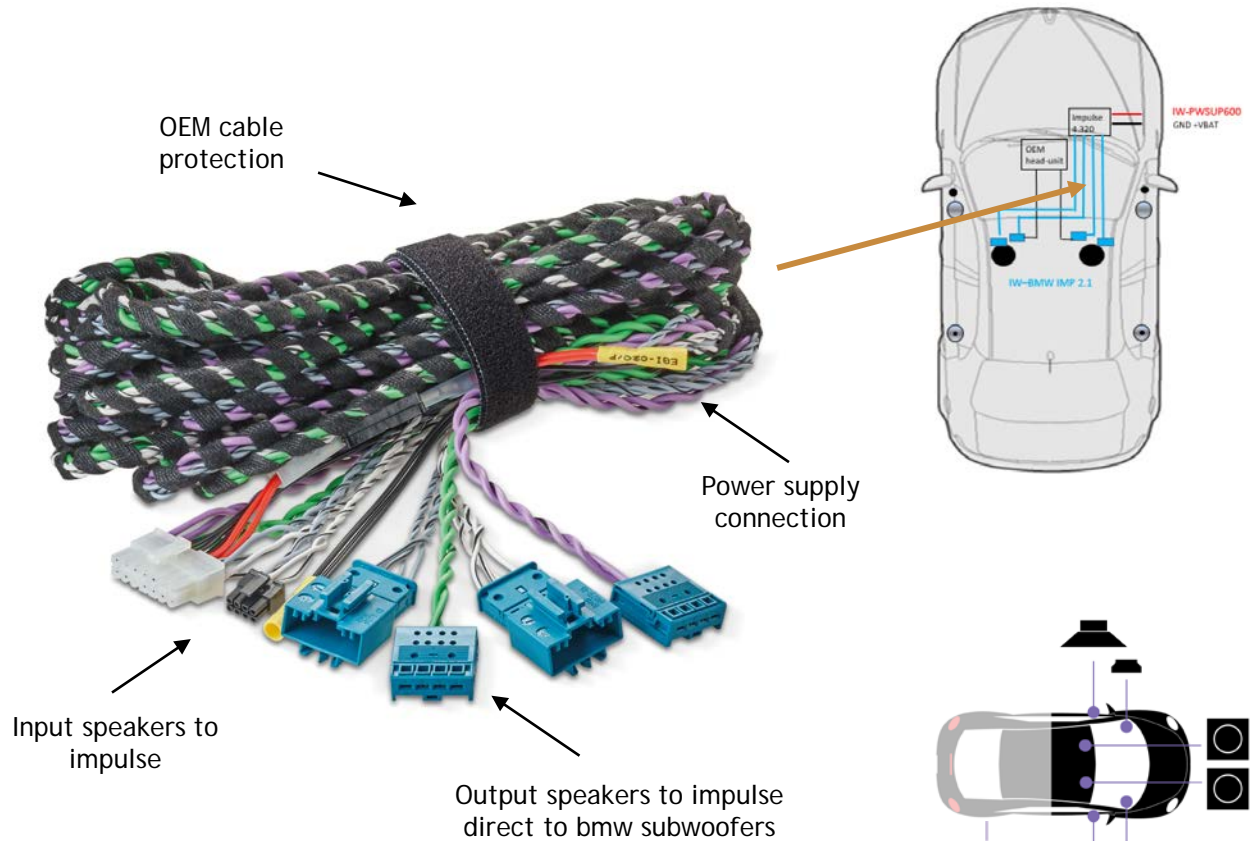
This signal is sent in the impulse and manage to amplify the front speakers of the car, and the both subwoofers under the seats.

All adjustments, crossover, levels, phase, are made in the Impulse 4.320.

No need to dismantle the car radios of bmw, this type of assembly saves a lot of installation time,

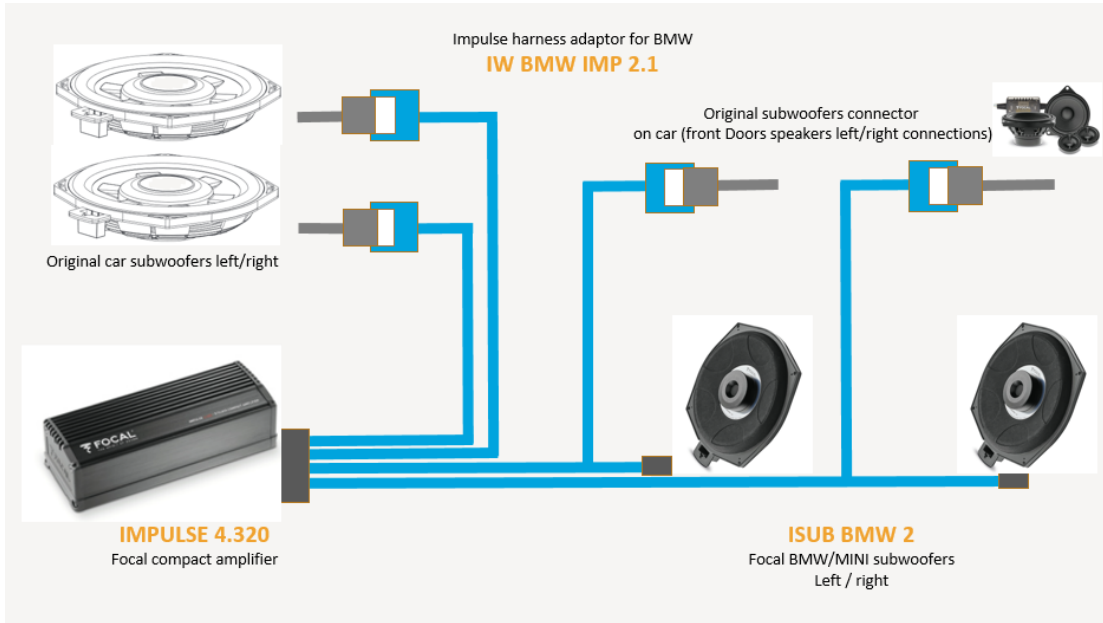
it's simple and very effective, the performances are really amazing with a simply never seen.

2 plugs for power supply use IW POW SUP 600





# Cable explication



This cable is compatible with cars **with 4 wires** in the subwoofer connectors under the seats.

# IW BMW IMP 2.1

On standard BMW audio versions, the audio signal from the front doors is parallel to the front subwoofers.

The audio signal coming out of the car radio goes through the subwoofers under the seats to go into the doors.

Our IW BMW IMP 2.1 focal cable allows to recover the signal on this BMW sub connectors, left and right.

Direct to amplify it with our impulse 4.320.

to separate it, 2 channels for the front doors, and two channels for the two subwoofers left and right.

With the settings of the impulse, this will give you an extraordinary update, and simply without disassembling the car radio.





## IW BMW IMP 2.1

Signal take under  
front seat



OEM BMW  
connector adapter



Compact size  
amplifier



# FULL pack: Speakers replacement with IMPULSE amplifier and 1 SUB BMW 2



IW BMW IMP 2.1 HARNESS

Front and 2 subwoofers



IMPULSE 4.320



BMW Speakers replacement

Choice your speakers size

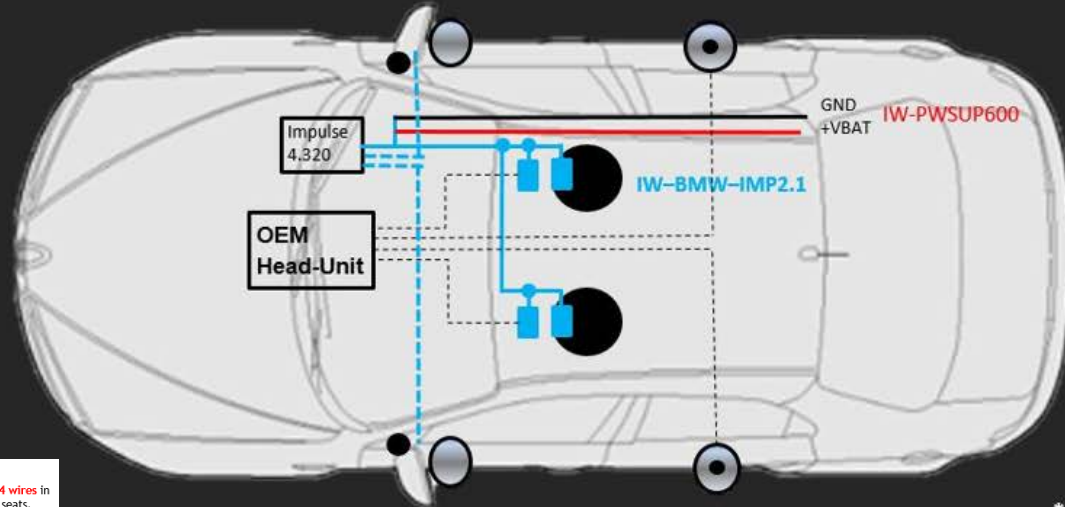
IS/IC BMW 100/100L



1 SUB BMW 2

2 ohms subwoofers

## DEDICATED INTEGRATION CABLES



This cable is compatible with cars with 4 wires in the subwoofer connectors under the seats.

\* Rear speakers connect on head unit

## 4 / POWER SUPPLIER

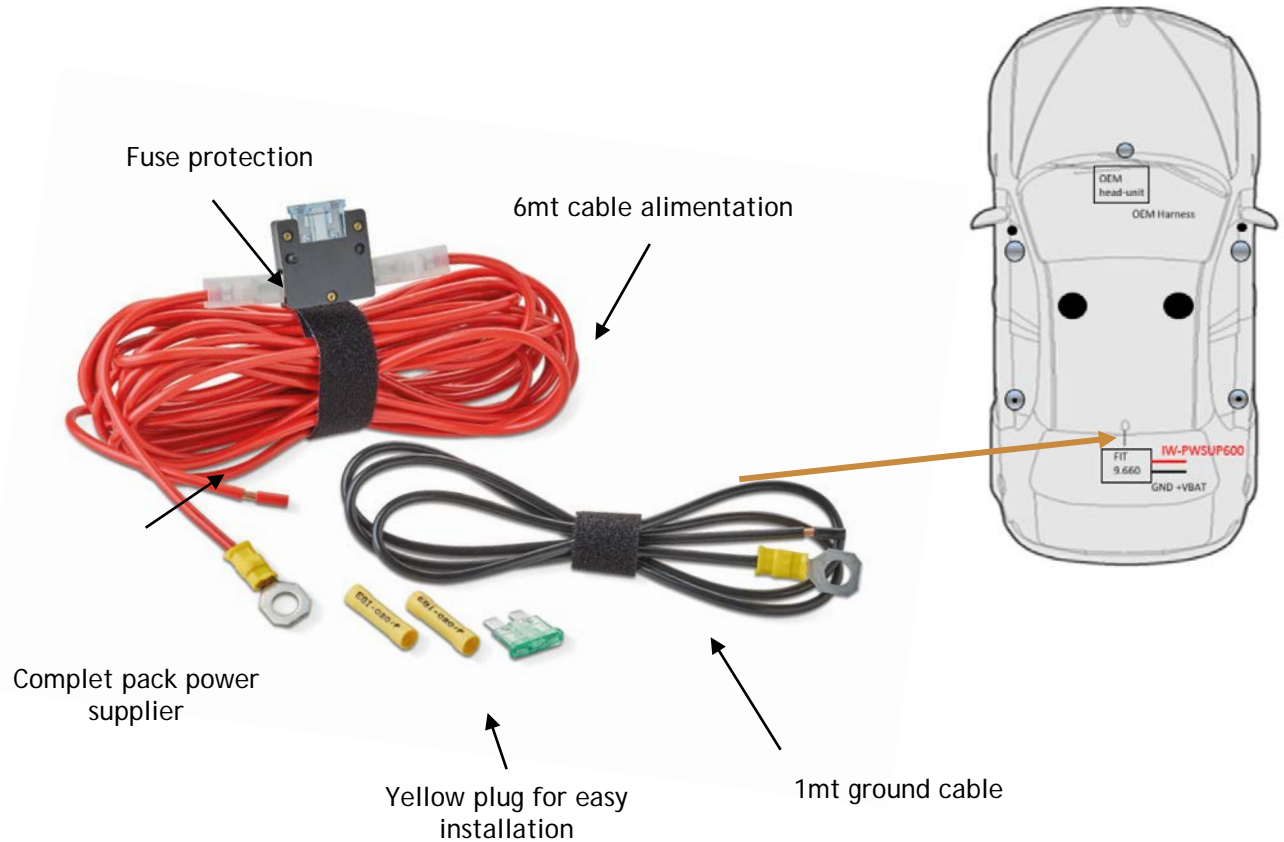
### IW – PW – SUP 600

Power Supplier pack  
Fit 9.660/ Impulse 4.320

Complet pack for power alimention and ground connection.

Use by Fit 9.660 and Impulse 4.320.

6mt cable red alimention.  
1mt cable black ground.  
2 yellow plug connexion.  
Fuse protection.



## 4 / SIMULATOR SPEAKERS CABLE

### IW – SPKSIM – ISO speakers

#### Speakers simulator Impulse 4.320

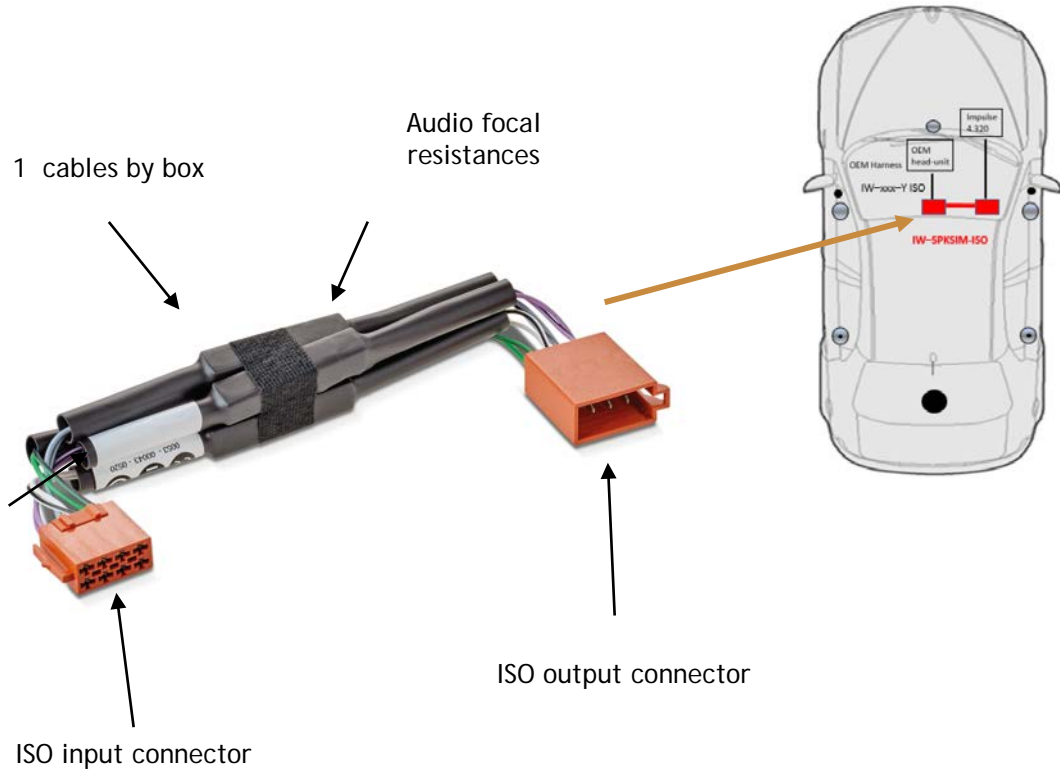
Some models of cars, when we change the original speakers, and adding an amplifier, it happens that it brings some problems. like losing the front / rear fader.

To solve this type of problem, we have developed a speaker simulator with audio resistance.

this cable easily plugs into the ISO connectors of our harness speakers. and remove audio faults.

simple and efficient


















Can be use to Impulse 4.320, and Ibus 2.0/2.1



# CABLE LIST

## Focal Inside references

### Head unit y iso harness adaptor

		IW BMW YISO HARNESS
		IW FOR YISO HARNESS
		IW FOR YISO HARNESS V2
		IW NIS YISO HARNESS
		IW MBZ YISO HARNESS
		IW PSA YISO HARNESS
		IW REN YISO HARNESS
		IW TOY YISO HARNESS
		IW TOY YISO HARNESS V2
		IW VW YISO HARNESS

### Impulse cable extension

	IW BMW IMP 2.1	
	IW IMP ext 150 (2.0)	
	IW IMP 2.1	
	IW IMP 2.2	