

Suzuki Kizashi Audio and Navigation Systems



Photo: Jeff Wilson/Driverblogs.com

Technical Information and Wiring Diagrams

Compiled by ms_enj – January 2014

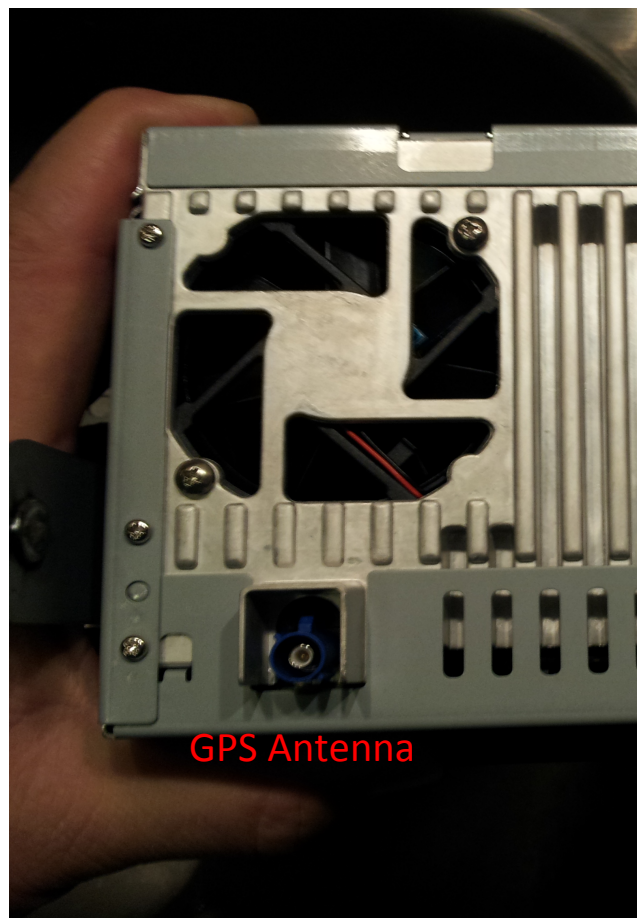


Photo: Forum User "Vinc"/Clubsx4.com

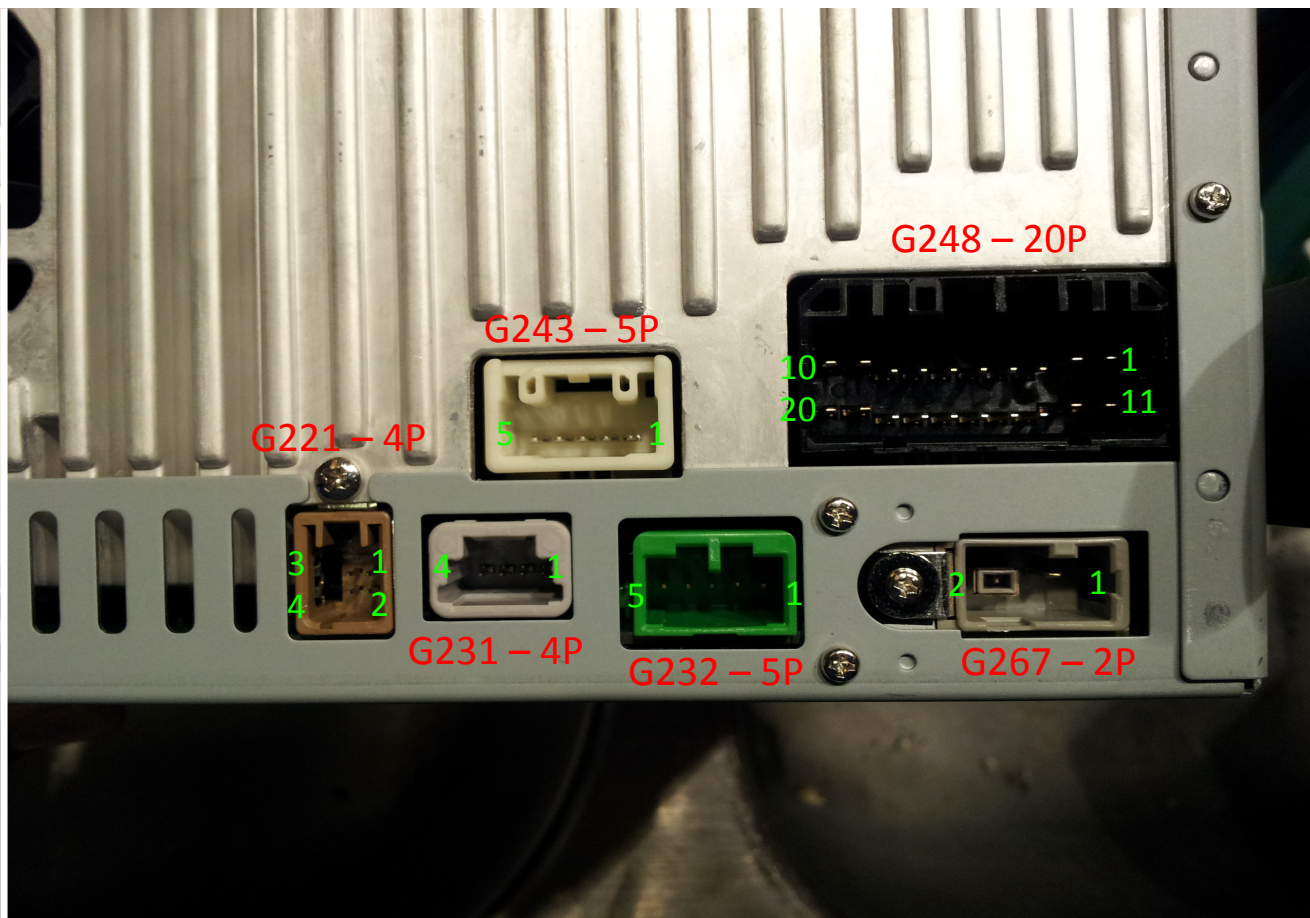


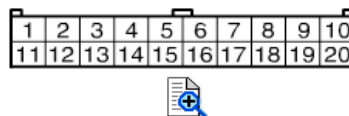
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Connector Number	Function	Number of Pins	Corresponding Plug Colour
G221	USB Socket in Storage Pocket	4	Brown/Grey
G231	Microphone from Overhead Console	4	Grey
G232	Reversing Camera	5	Green
G243	Navigation Control Inputs	5	Blue
G248	Main System Connector	20	Neutral/White
G267	Antenna Amplifier/Signal	2	Grey
N/A	GPS Antenna	Fakra C Female Connector	Blue

All Variants OEM Head Unit Pinouts

G248 – Main System Connector (**With Amplifier – See notes on next page**)

G248



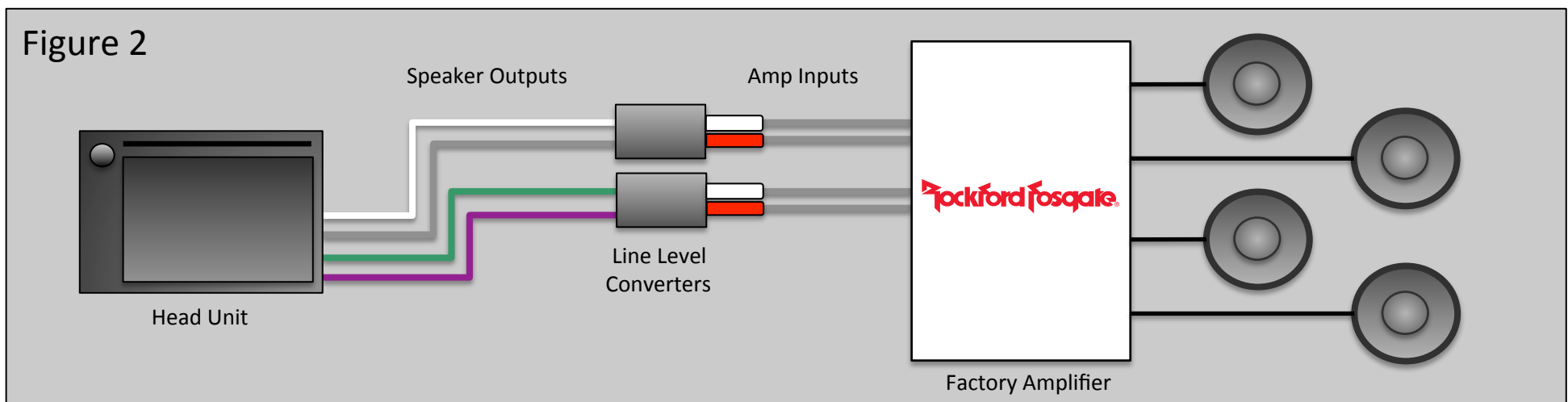
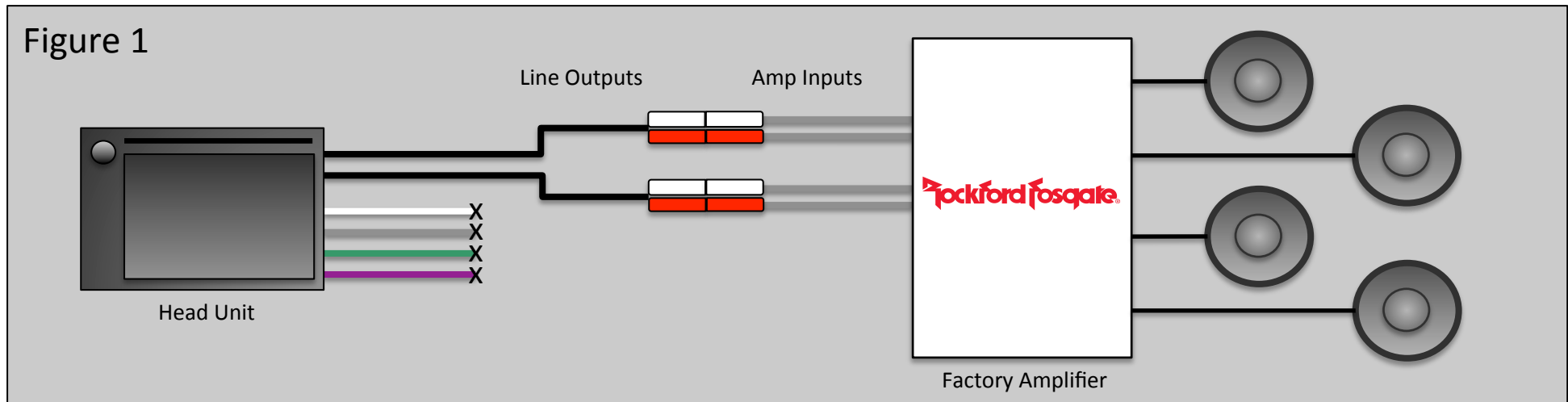
With Audio amplifier

Pin layout shown as viewing connector end at vehicle harness.

Pin Number	Wire Color	Function	Notes
1	WHITE/RED	Constant +12V Power Supply Input	
2	RED/YELLOW	Illumination Power Supply Input	+12V When parking lights or headlights are active.
3	WHITE	Front Left Positive (+) Speaker output to Amplifier	Line Level Signal.
4	BLACK/YELLOW	Front Right Positive (+) Speaker output to Amplifier	Line Level Signal.
5	BLUE/RED	Rear Left Positive (+) Speaker output to Amplifier	Line Level Signal.
6	BLACK/WHITE	Rear Right Positive (+) Speaker output to Amplifier	Line Level Signal.
7		No Connection	
8	PINK/GREEN	Steering Wheel Switch Input – Phone controls.	
9	WHITE	Accessory Switched +12V Power Supply Input	
10		No Connection	
11	BLACK	Audio Unit Ground	
12	BLUE/BLACK	Variable Illumination Signal Input	PWM with varying duty Cycle – Set with instrument cluster dimmer.
13	RED	Front Left Negative (-) Speaker output to Amplifier	Line Level Signal.
14	LIGHT GREEN	Front Right Negative (-) Speaker output to Amplifier	Line Level Signal.
15	BLUE/GREEN	Rear Left Negative (-) Speaker output to Amplifier	Line Level Signal.
16	BLUE	Rear Right Negative (-) Speaker output to Amplifier	Line Level Signal.
17	BROWN	Amplifier Power Trigger Signal Output	+12V output when ignition is in the ACC or ON position.
18	PURPLE	Vehicle Speed Signal Input	
19	PINK	Steering Wheel Switch Input – Audio controls.	
20	PINK/BLACK	Steering Wheel Switch Ground	

Fitting an aftermarket head unit to vehicles with the amplified Rockford Fosgate 10 speaker premium audio system will require connecting the head unit's front and rear line-level outputs to the factory amplifier input wiring (see figure 1), **or** connecting the speaker outputs of the head unit to a speaker to line level converter prior to the amplifier input wiring (see figure 2).

Connecting high-level speaker outputs from any non-original head unit directly to the Rockford Fosgate amplifier's inputs will, at best, sound distorted and awful, and at worst, potentially cause irreversible damage to the amplifier and/or speaker drivers!



Please note that the above wiring diagrams **do not** apply to the non-amplified audio systems. In this case, wiring speakers directly is the correct way.

G248 – Main System Connector (Without Amplifier)

G248

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20



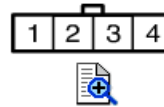
Without Audio amplifier

Pin layout shown as viewing connector end at vehicle harness.

Pin Number	Wire Color	Function	Notes
1	WHITE/RED	Constant +12V Power Supply Input	
2	RED/YELLOW	Illumination Power Supply Input	+12V When parking lights or headlights are active.
3	WHITE/GREEN	Front Left Positive (+) to FL Speaker, FL Tweeter, and Centre Speaker	Amplified Signal.
4	GREY/RED	Front Right Positive (+) to FR Speaker, FR Tweeter, and Centre Speaker	Amplified Signal.
5	GREEN	Rear Left Positive (+) to RL Speaker	Amplified Signal.
6	BLUE	Rear Right Positive (+) to RR Speaker	Amplified Signal.
7		No Connection	
8	PINK/GREEN	Steering Wheel Switch Input – Phone controls.	
9	WHITE	Accessory Switched +12V Power Supply Input	
10		No Connection	
11	BLACK	Audio Unit Ground	
12	BLUE/BLACK	Variable Illumination Signal Input	PWM with varying duty Cycle – Set with instrument cluster dimmer.
13	WHITE/BLUE	Front Left Negative (-) to FL Speaker, FL Tweeter, and Centre Speaker	Amplified Signal.
14	YELLOW	Front Right Negative (-) to FR Speaker, FR Tweeter, and Centre Speaker	Amplified Signal.
15	GREEN/BLACK	Rear Left Negative (-) to RL Speaker	Amplified Signal.
16	BLUE/RED	Rear Right Negative (-) to RR Speaker	Amplified Signal.
17		No Connection	
18	PURPLE	Vehicle Speed Signal Input	
19	PINK	Steering Wheel Switch Input – Audio controls.	
20	PINK/BLACK	Steering Wheel Switch Ground	

G231 – Overhead Console Microphone Connector

G231



If equipped

Pin layout shown as viewing connector end at vehicle harness.

Pin Number	Wire Color	Function	Notes
1		No Connection	
2	RED/GREEN	Microphone Audio Signal Input	
3	BLUE	Microphone Ground	
4	GREEN	Microphone Power Source Output	+5V DC

This connector appears to be incorporated in to the harness even when an overhead microphone is not installed in the vehicle. Installation of an electret microphone capsule can be done by removing the overhead console, carefully gluing the capsule in place, following the wiring diagram [here](#), and connecting the microphone to the overhead console PCB, which is already wired back to the G231 connector.

G232 – Rear View Camera Connector

G232

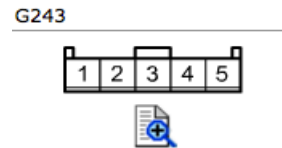


If equipped

Pin layout shown as viewing connector end at vehicle harness.

Pin Number	Wire Color	Function	Notes
1	BLUE	Rear View Camera Ground	
2		Rear View Camera Video Signal Ground	
3	BLUE/RED	Rear View Camera Video Signal Input	
4	BLUE/WHITE	Rear View Camera Power Source Output	+6V DC output when vehicle is in reverse gear.
5	BLACK	Rear View Camera Sense	Must be grounded when the unit is powered up initially to enable camera

G243 – Navigation System Control Inputs



Pin layout shown as viewing connector end at vehicle harness.

Pin Number	Wire Color	Function	Notes
1	RED/GREEN	Park Brake Signal Input	Connected to earth when park brake is applied. (See Fig. 2)
2	RED/BLUE	Reverse Gear Signal Input	+12V Input from Reverse Light Circuit. (See Fig. 1)
3	PURPLE	Vehicle Speed Signal Input	Not connected internally to Pin 18 of G248 on navigation units.
4		No Connection	
5		No Connection	

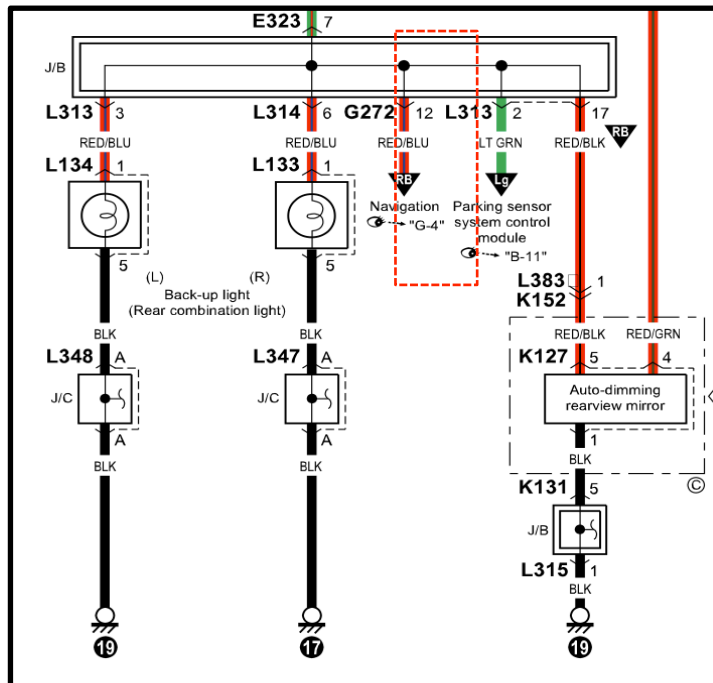


Fig. 1 – Reverse connection to Navigation system. Connect with 12V supply side of reverse light bulbs if this connector is not already fitted to vehicle.

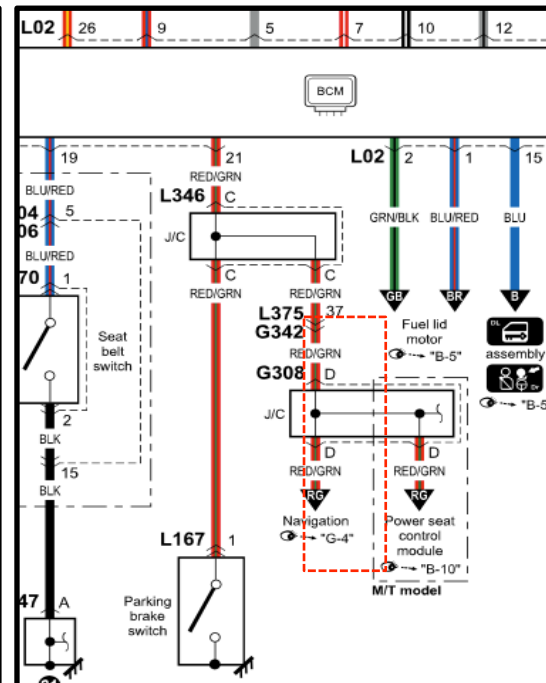


Fig. 2 – Park brake connection to Navigation system. Connect to floating side of park brake switch or BCM.

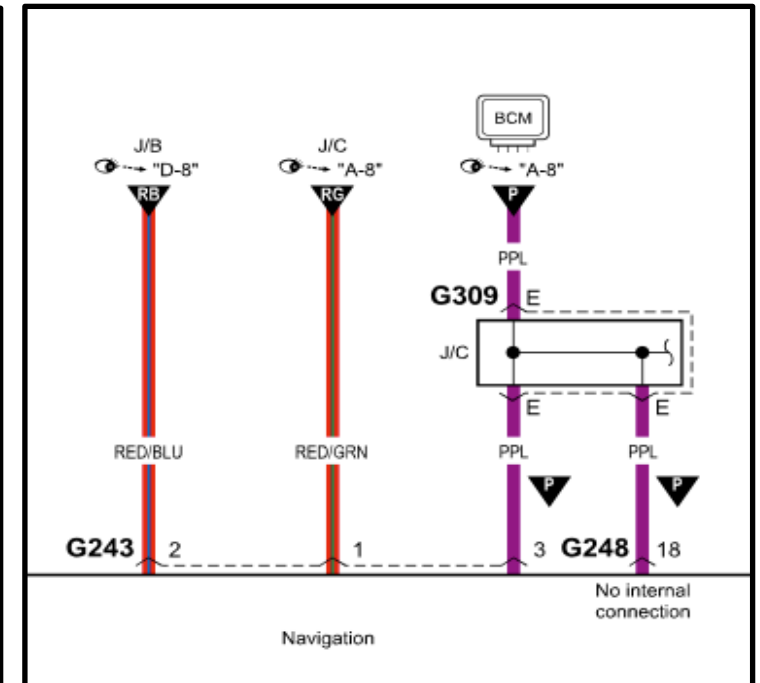


Fig. 3 – Detail of G243 connector wiring from Kizashi service manual.

G267 – AM/FM Antenna Connector

G267



Pin layout shown as viewing connector end at vehicle harness.

Pin Number	Wire Color	Function	Notes
1	BLACK	Antenna RF Input	
2		Power output for Antenna Amplifier	

GPS Antenna Connector

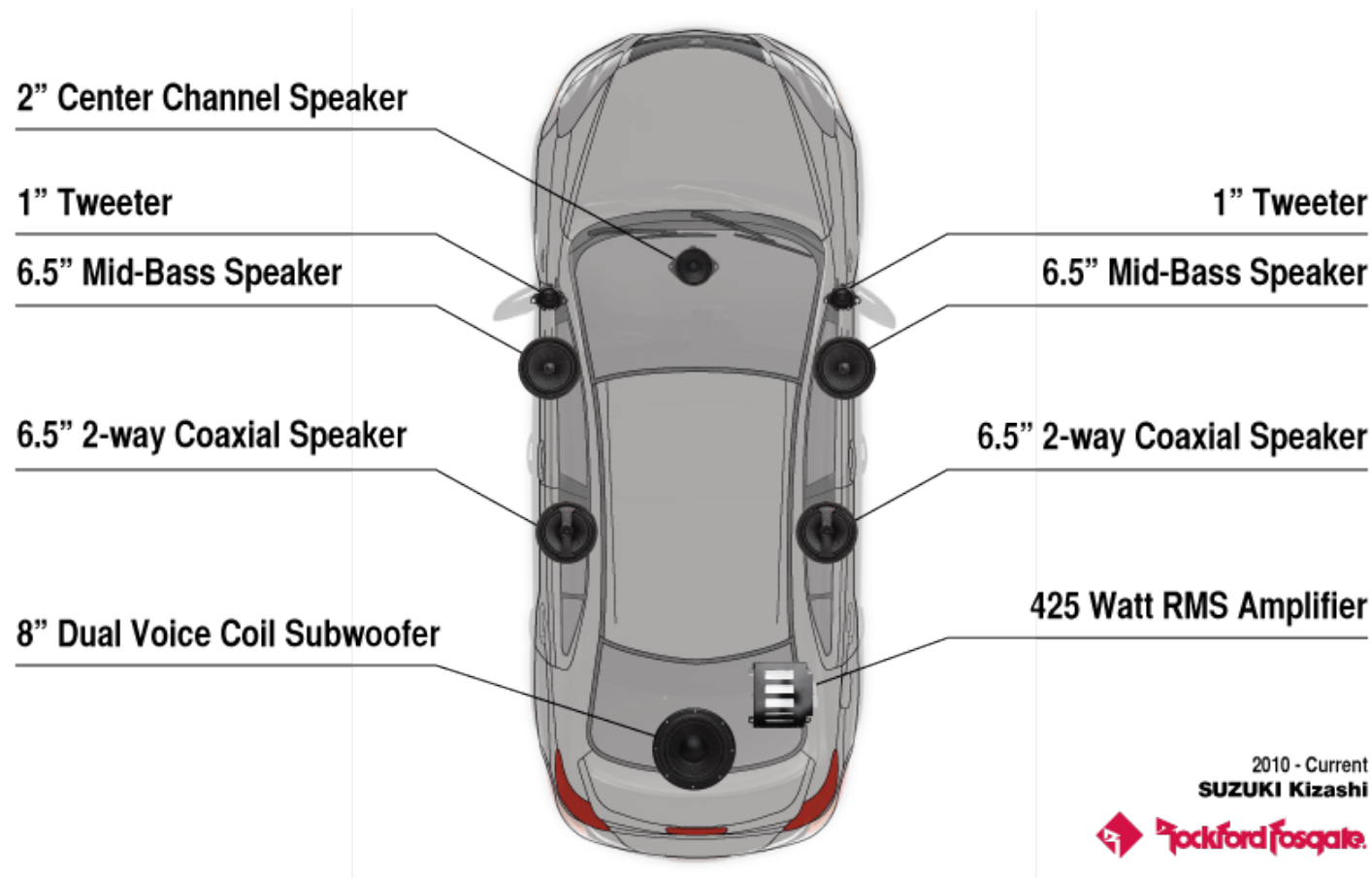


Connector is a Fakra C type, with the male fitted to the headunit unit and the female attached to the GPS antenna cable.

RP-SMA to Fakra C adapters can be used if an antenna with the Fakra connector is not available.

Be aware that these come in different colours, and each has the keyways set differently for different applications.

The correct one for the Everest unit is the **BLUE** “C” connector.



Premium Audio System Amplifier Connector Pinouts



Photo: Scosche Industries

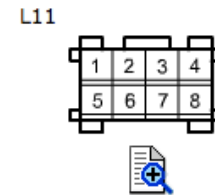
The Rockford Fosgate amplifier is located behind the carpeted trim panel on the right hand rear of the trunk, below the tail light.

Access is by removing the plastic hooks (and 10mm screws underneath) on the trunk lip trim, unclipping the trim itself, removing the plastic hook and christmas tree fasteners at the rear of the carpeted panel.

After the panel has been moved out of the way, the amplifier and bracket are held to the car with 3 x 10mm screws and two wiring harnesses.

L11 – Audio Amplifier Power & Subwoofer Output Connector

Pin layout shown as viewing connector end at vehicle harness.



With Audio amplifier

Pin Number	Wire Color	Function	Notes
1	BLUE/BLACK	Constant +12V Power Supply Input	
2	GREY	Subwoofer Positive (+) Output	Voice Coil 1
3	LIGHT GREEN	Subwoofer Positive (+) Output	Voice Coil 2
4	BLACK	Amplifier Ground	
5	BLUE/BLACK	Constant +12V Power Supply Input	
6	GREEN/YELLOW	Subwoofer Negative (-) Output	Voice Coil 1
7	GREEN/BLACK	Subwoofer Negative (-) Output	Voice Coil 2
8	BLACK	Amplifier Ground	

L12 – Audio Amplifier Speaker Connector

Pin layout shown as viewing connector end at vehicle harness.

L12

1	2	3	4	5	6	7	8	9	10	11	12
13	14	15	16	17	18	19	20	21	22	23	24



Pin Number	Wire Color	Function	Notes
1	LIGHT GREEN	Front Right Negative (-) Speaker input from Audio Unit	Line Level Input.
2	RED	Front Left Negative (-) Speaker input from Audio Unit	Line Level Input.
3	BLUE	Rear Right Negative (-) Speaker input from Audio Unit	Line Level Input.
4	BLUE/GREEN	Rear Left Negative (-) Speaker input from Audio Unit	Line Level Input.
5	BROWN	Amplifier Power Trigger Signal Input	+12V input to turn on amplifier.
6	BROWN/WHITE	Centre Speaker Positive (+) output	
7	GREEN	Rear Left Speaker Positive (+) output	
8	BLUE	Rear Right Speaker Positive (+) output	
9	BLACK/YELLOW	Front Right Tweeter Positive (+) output	
10	BLACK/BLUE	Front Left Tweeter Positive (+) output	
11	WHITE/GREEN	Front Left Speaker Positive (+) output	
12	GREY/RED	Front Right Speaker Positive (+) output	
13	BLACK/YELLOW	Front Right Positive (+) Speaker input from Audio Unit	Line Level Input.
14	WHITE	Front Left Positive (+) Speaker input from Audio Unit	Line Level Input.
15	BLACK/WHITE	Rear Right Positive (+) Speaker input from Audio Unit	Line Level Input.
16	BLUE/RED	Rear Left Positive (+) Speaker input from Audio Unit	Line Level Input.
17		No Connection	
18	BROWN/BLUE	Center Speaker Negative (-) output	
19	GREEN/BLACK	Rear Left Speaker Negative (-) output	
20	BLUE/RED	Rear Right Speaker Negative (-) output	
21	RED	Front Right Tweeter Negative (-) output	
22	RED/BLUE	Front Left Tweeter Negative (-) output	
23	WHITE/BLUE	Front Left Speaker Negative (-) output	
24	YELLOW	Front Right Speaker Negative (-) output	

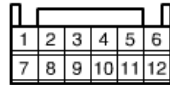
Steering Wheel Audio/Phone Switches Circuit & Pinouts

S61 – Steering Switch Connector

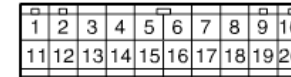
G248 – Main Audio System Connector

Pin layout shown as viewing connector end at vehicle harness.

S61



G248



Pin At S61 Connector	Pin at G248 Connector	Wire Color at G248 Connector	Function
11	8	PINK/GREEN	Steering Wheel Switch Input – Phone controls.
7	19	PINK	Steering Wheel Switch Input – Audio controls.
8	20	PINK/BLACK	Steering Wheel Switch Ground

For ease of diagnosis, measure the resistance given below at the Audio Unit's G248 connector pins shown in the table above. This eliminates the need to disconnect and remove the driver's air bag module to access the S61 connector at the clock spring.

Steering switch resistance

Terminal position	Resistance value	Measurement condition
11 – 8	$56 \pm 0.6 \Omega$	Talk switch: ON
	$241 \pm 2.4 \Omega$	Off hook switch: ON
	$751 \pm 7.5 \Omega$	On hook switch: ON
	$5151 \pm 51.5 \Omega$	Except above: ON
7 – 8	$56 \pm 1.7 \Omega$	Mute switch: ON
	$131 \pm 3.9 \Omega$	Volume switch "+": ON
	$241 \pm 7.2 \Omega$	Volume switch "-": ON
	$421 \pm 12.6 \Omega$	Mode switch: ON
	$751 \pm 22.5 \Omega$	Seek switch "▲": ON
	$1571 \pm 47.1 \Omega$	Seek switch "▼": ON
	$5171 \pm 155.1 \Omega$	Except above
1 – 2	$1500 \pm 75 \Omega$	TRIP switch: ON
	Approx. 0Ω	DISP switch: ON
	$\infty \Omega$	Except above

