2013 BMW 6 Series (F12/F13)

Wiring Information

Item	Wire Color	Polarity	Wire Location
12 Volts	red (40A)	+	Car Access System under driver dash, 41 pin plug, pin 21
Second 12 Volts	N/A		
Starter	black (for starter kill only)	+ low curr	Car Access System under driver dash, 41 pin plug, pin 22
Second Starter	orange (SS1), black/white (SS2)	- resistor	start/stop btn or Car Access System under dr dash, 26 pin plg, pins 8,7
Ignition	green (for ignition sense only)	+ low curr	Car Access System under driver dash, 41 pin plug, pin 1
Second Ignition	N/A		
Third Ignition	N/A		
Accessory	N/A		
Second Accessory	N/A		
Third Accessory	N/A		
Key Sense	N/A		
Data Bus	(immobilizer antenna ring is in steering column)		
Can Bus High	yellow/red (K CAN)	data	Car Access System under driver dash, 41 pin plug, pin 35
Can Bus Low	yellow/brown (K CAN)	data	Car Access System under driver dash, 41 pin plug, pin 26
Can Bus Sw	N/A		
Power Lock	yellow/red (center dash switch)	-	Car Access System under driver dash, 26 pin plug, pin 3
Power Unlock	(same as power lock)		
Lock Motor	purple or black	5 wire	driver kick or Pass Dash Fuse Box ECU, 47 pin plug, pin 36 or 14
Unlock Motor	orange	5 wire	driver kick or Pass Dash Fuse Box ECU, 47 pin plug, pin 18
Disarm Defeat	yellow/white	5 wire	passenger kick or Pass Dash Fuse Box ECU, 47 pin plug, pin 19
Parking Lights (+)	(LIN bus - Front); gray/pur (LR); gray/yel (RR)	+	Footwell Module in driver kick, 51 pin plug (2B), pins 16, 18
Parking Lights (-)	(LIN bus)		
Hazards	brown/blue	-	Footwell Module in driver kick, 26 pin plug, pin 18
Turn Signal (Left)	blue/green (F); blue/green (R)	+	Footwell Mod in dr kick, 51P plug (2B), pin 13; 51P plug (3B), pin 45
Turn Signal (Right)	blue/brown (F); blue/brown (R)	+	Footwell Mod in dr kick, 51P plug (3B), pin 40; 51P plug (2B), pin 12

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Headlight	yellow/green (L); yellow/blue (R)	+	Footwell Mod in dr kick, 51P plug (2B), pin 6; 51P plug (3B), pin 38
AutoLights	(LIN bus)		
Reverse Light	yellow/brown	+	Footwell Module in driver kick, 51 pin plug (3B), pin 47
Left Front Door Trigger	purple/blue	-	Footwell Module in driver kick, 51 pin plug (3B), pin 24
Right Front Door Trigger	orange	-	Footwell Mod in driv kick, 51 pin plg (3B), pin 13
Left Rear Door Trigger	gray/yellow (Gran Coupe)	-	Footwell Mod in driv kick, 51 pin plg (3B), pin 26
Right Rear Door Trigger	green/yellow (Gran Coupe)	-	Footwell Mod in driv kick, 51 pin plg (3B), pin 15
Dome Supervision	red/blue	+	Footwell Module in driver kick, 51 pin plug (2B), pin 35
Trunk/Hatch Pin	gray/brown	- N.C.	Passenger Dash Fuse Box ECU, 54 pin plug, pin 11
Rear Glass Pin	N/A		
Hood Pin	purple/green	-	Car Access System under driver dash, 41 pin plug, pin 38
Trunk Hatch/Release	green/black	-	Car Access System under driver dash, 41 pin plug, pin 39
Trunk Release Motor	gray/green	5 wire	Passenger Dash Fuse Box ECU, 47 pin plug, pin 12
Fuel Door Release	(locks/unlocks along with doors)		
Power Sliding Door (Left)	N/A		
Power Sliding Door (Right)	N/A		
Factory Alarm Arm	white/yellow (driver door key lock)	-	Footwell Module in driver kick, 51 pin plug (3B), pin 42
Factory Alarm Disarm	white/blue (driver door key unlock)	double -	Footwell Module in driver kick, 51 pin plug (3B), pin 46
Disarm No Unlock	(transponder and push-button start)		
Trunk Alarm Shunt	N/A		
Tachometer	black	ac	data link connector, 16 pin plug, pin 9
Wait to Start	N/A		
Neutral Safety	N/A		
Clutch Pedal	blue	+	Car Access Sys under dr dash, 41 pin plug, pin 41
Fuel Pump	red/green	+	rear fuse holder, plug (5B), pin 1
Rear Defroster	blue/yellow	+ latched	Passenger Dash Fuse Box ECU, 47 pin plug, pin 4
Mirror Defroster	(LIN bus)		
Left Front Heated Seat	(LIN bus or K CAN)		
Right Front Heated Seat	(LIN bus or K CAN)		

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Speed Sense	yellow/purple	ac	Parking Brake Control Module in RR cargo floor, 22 pin plug, pin 7
Brake Wire	brown/gray (functions with ignition on only)	+	Car Access System under driver dash, 41 pin plug, pin 32
Parking Brake	(electric parking brake)		
Horn Trigger	red/brown	+	passenger dash fuse box, plug (8B), pin 6
Wipers	(LIN bus)		
Left Front Window (Up/Down)	(use factory alarm arm/disarm)		
Right Front Window (Up/Down)	(see left front window)		
Left Rear Window (Up/Down)	(see left front window)		
Right Rear Window (Up/Down)	(see left front window)		
Sun Roof (Open/Close)	(use factory alarm arm/disarm)		
Sun Roof (Limit/Close)	N/A		
Memory Seat 1	(LIN bus)		
Memory Seat 2	(LIN bus)		
Memory Seat 3	N/A		
Radio 12V	red/white or red/yellow	+	radio, 40 pin plug, pin 15
Radio Ground	brown	-	radio, 40 pin plug, pin 12
Radio Ignition	(K CAN)		
Radio Illumination	N/A		
Factory Amp Turn-on	(same as power ant - HiFi); (MOST bus - Top HiFi)		
Power Antenna	black/white	+	radio, 40 pin plug, pin 13
Left Front Speaker (+/-)	yellow/red - yellow/brown	+,-	radio, 40 pin plug, pins 3 - 7
Right Front Speaker (+/-)	purple/red - purple/brown	+,-	radio, 40 pin plug, pins 2 - 6
Left Rear Speaker (+/-)	brown/red - brown/blue	+,-	radio, 40 pin plug, pins 4 - 8
Right Rear Speaker (+/-)	green/red - green/brown	+,-	radio, 40 pin plug, pins 1 - 5
Center Channel (+/-)	black/white - black/purple	+,-	amp, 42 pin plg, pins 39-40 (HiFi), or 20 pin plg, pins 5-15 (Top HiFi)
Subwoofer (+/-)	N/A		
Aux. Audio Input Left (+/-)	gray - brown	+,-	radio, 40 pin plug, pins 30 - 36
Aux. Audio Input Right (+/-)	blue - brown	+,-	radio, 40 pin plug, pins 35 - 36
RSE Video (+/-)	white - (shield) (DVD changer)	+,-	radio, 40 pin plug, pins 24 - 23
RSE Audio Left (+/-)	(MOST bus)		
RSE Audio Right (+/-)	(MOST bus)		
Satellite Radio 12 Volts	N/A		
Satellite Radio Ground	N/A		
Satellite Radio Ignition	N/A		
Satellite Radio Antenna	N/A		

Satellite Audio Left (+/-)	N/A	
Satellite Audio Right (+/-)	N/A	

What Fits

Item	Size	Depth	Location
Headunit	irregular		center of dash
Left Front Speaker	8.54		under left front seat
Left Front Tweeter	0.98 (tweeter); 3.94 (midrange)		left front door
Right Front Speaker	8.54		under right front seat
Right Front Tweeter	0.98 (tweeter); 3.94 (midrange)		right front door
Left Rear Speaker	3.94 (midrange); 3.94 (midrange)		left rear side panel; left rear deck (Top HiFi)
Left Rear Tweeter	0.98 (tweeter); 0.98 (tweeter)		left rear side panel; left rear deck (Top HiFi)
Right Rear Speaker	3.94 (midrange); 3.94 (midrange)		right rear side panel; right rear deck (Top HiFi)
Right Rear Tweeter	0.98 (tweeter); 0.98 (tweeter)		right rear side panel; right rear deck (Top HiFi)
Center Channel	0.98 (tweeter); 3.94 (midrange)		top center of dash
Subwoofer	N/A		
Left Front Headrest			
Right Front Headrest			
Left Right Headrest			
Right Rear Headrest			
Satellite Radio Tuner	(built into radio)		

Additional Wiring Notes

Item	Note
Left Front Speaker (+/-)	On models with amplifier, the speaker wire are black/red - black/brown (woofer); black/red - black/brown (tweeter/midrange) at the amplifier in left side of trunk, 42 pin plug, pins 4 - 3; 33 - 34 (HiFi), or 20 pin plug, pins 8 - 18; 19 - 9 (Top HiFi).
Right Front Speaker (+/-)	On models with amplifier, the speaker wire are blue/red - blue/brown (woofer); blue/red - blue/brown (tweeter/midrange) at the amplifier in left side of trunk, 42 pin plug, pins 23 - 22; 11 - 12 (HiFi), or 20 pin plug, pins 6 - 16; 17 - 7 (Top HiFi).
Left Rear Speaker (+/-)	On models with amplifier, the speaker wire are white/red - white/brown at the amplifier in left side of trunk, 42 pin plug, pins 31 - 32 (HiFi), or 20 pin plug, pins 14 - 4 (Top HiFi). The speaker 2 wires are yellow/red - yellow/brown at the amplifier, 20 pin plug, pins 1 - 11 (Top HiFi).
Right Rear Speaker (+/-)	On models with amplifier, the speaker wire are gray/red - gray/brown or yellow/red - yellow/brown at the amplifier in left side of trunk, 42 pin plug, pins 13 - 21 (HiFi), or 20 pin plug, pins 13 - 3 (Top HiFi). The speaker 2 wires are purple/red - purple/brown at the amplifier, 20 pin plug, pins 12 - 2 (Top HiFi).