# 2012 Hyundai Santa Fe





## Wiring Information

Item	Wire Color	Polarity	Wire Location	
12 Volts	red (40A)	+	ignition switch, black 6 pin plug, pin 5	
Second 12 Volts	pink (40A)	+	ignition switch, black 6 pin plug, pin 2	
Starter	green	+	ignition switch, black 6 pin plug, pin 1	
Second Starter	N/A			
Ignition	orange	+	ignition switch, black 6 pin plug, pin 6	
Second Ignition	N/A			
Third Ignition	N/A			
Accessory	blue	+	ignition switch, black 6 pin plug, pin 3	
Second Accessory	yellow	+	ignition switch, black 6 pin plug, pin 4	
Third Accessory	N/A			
Key Sense	yellow	+	ignition key switch, white 6 pin plug, pin 3	
Data Bus	white/orange (immobilizer data) (Canada only)	data	immobilizer module, white 5 pin plug, pin 5	
Can Bus High	yellow (B-CAN), blue (C-CAN)	data	data link connector, black 16 pin plug, pins 1 and 6	
Can Bus Low	black (B-CAN), orange (C-CAN)	data	data link connector, black 16 pin plug, pins 9 and 14	
Can Bus Sw	N/A			
Power Lock	blue/black	-	driver kick, brown 24 pin plug, pin 18	
Power Unlock	gray/black	-	driver kick, brown 24 pin plug, pin 19	
Lock Motor	orange	5 wire	dash fuse box, gray 18 pin plug (D), pin 18	
Unlock Motor	blue	5 wire	driver kick, brown 24 pin plug, pin 1	
Disarm Defeat	blue	5 wire	dash fuse box, gray 18 pin plug (D), pin 7	
Parking Lights (+)	green (L), yellow (R)	+	dash fuse box, blue 14 pin plug (A), pins 14 and 4	
Parking Lights (-)	blue/orange	-	headlight switch, white 18 pin plug, pin 14	
Hazards	gray	-	BCM behind dash fuse box, white 22 pin plug, pin 7	
Turn Signal (Left)	white	+	dash fuse box, gray 18 pin plug (D), pin 11	
Turn Signal (Right)	pink	+	dash fuse box, gray 18 pin plug (D), pin 10	

## Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Headlight	green (functions with ignition on only)	-	headlight switch, white 18 pin plug, pin 15
AutoLights	green/black (interrupt to turn off autolights)	-	headlight switch, white 18 pin plug, pin 16
Reverse Light	blue	+	passenger kick, red 20 pin plug, pin 2
Left Front Door Trigger	green/orange	-	driver kick, harness to rear
Right Front Door Trigger	orange (will also detect left front door)	-	driver kick, brown 24 pin plug, pin 12
Left Rear Door Trigger	same as right front door trigger		
Right Rear Door Trigger	same as right front door trigger		
Dome Supervision	brown	-	dash fuse box, red 16 pin plug (B), pin 1
Trunk/Hatch Pin	yellow/black	-	driver kick, brown 24 pin plug, pin 15
Rear Glass Pin	N/A		
Hood Pin	red/black	-	driver kick, green 24 pin plug, pin 4
Trunk Hatch/Release	locks/unlocks along with doors		
Trunk Release Motor	N/A		
Fuel Door Release	N/A		
Power Sliding Door (Left)	N/A		
Power Sliding Door (Right)	N/A		
Factory Alarm Arm	brown/orange (key lock), gray (lock/unlock detect)	- and open	driver kick, brown 24 pin plug, pins 5 and 4
Factory Alarm Disarm			driver kick, brown 24 pin plug, pins 6 and 4
Disarm No Unlock	see factory alarm disarm		
Trunk Alarm Shunt	N/A		
Tachometer	brown, gray, blue, or green (2.4L)	ac	any fuel injector, black 2 pin plug, pin 2
Wait to Start	N/A		
Neutral Safety	N/A		
Clutch Pedal	white/orange	-	clutch switch, white 2 pin plug, pin 2
Fuel Pump			passenger kick, red 20 pin plug, pin 17
Rear Defroster	gray - latched driver kick, green 2 plug, pin 15		driver kick, green 24 pin plug, pin 15
Mirror Defroster	same as rear defroster		
Left Front Heated Seat	green/orange	-	driver kick, brown 24 pin plug, pin 8
Right Front Heated Seat	green/black	-	driver kick, brown 24 pin plug, pin 7

## Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location	
Speed Sense	brown	4-Pulse	data link conn, blk 16 pin plug, pin 3 or radio, gray 8 pin	
			plug, pin 1	
Brake Wire	green/orange	+	driver kick, blue 22 pin plug, pin 21	
Parking Brake	gray/orange	-	driver kick, blue 22 pin plug, pin 12	
Horn Trigger	gray/black	-	driver kick, green 24 pin plug, pin 20	
Wipers	green (low), pink (high), yellow (ignition)	+	wiper switch, black 14 pin plug, pins 2, 1, and 5	
Left Front Window (Up/Down)	pink - white (without safety power window)	Α	power window main switch, white 14 pin plug, pins 6 and 5	
Right Front Window (Up/Down)	gray - green	Α	driver kick, door harness	
Left Rear Window (Up/Down)	pink - brown	А	driver kick, door harness	
Right Rear Window (Up/Down)	blue - orange/black	А	driver kick, door harness	
Sun Roof (Open/Close)	orange - blue (function with ignition on only)	-	sunroof switch, white 4 pin plug, pins 4 and 2	
Sun Roof (Limit/Close)	N/A			
Memory Seat 1	N/A			
Memory Seat 2	N/A			
Memory Seat 3	N/A			
Radio 12V	red/black	+	radio, gray 8 pin plug, pin 4	
Radio Ground	black	-	radio, gray 8 pin plug, pin 8	
Radio Ignition	blue	+	radio, gray 8 pin plug, pin 6	
Radio Illumination	yellow (parking lights), black/orange (dimmer)	+,-	radio, gray 8 pin plug, pins 2 and 7	
Factory Amp Turn-on	gray	+	radio, black 20 pin plug, pin 18 or 20	
Power Antenna	green	+	radio, gray 8 pin plug, pin 3	
Left Front Speaker (+/-)	black - white	+,-	radio, brown 8 pin plug, pins 3 and 7	
Right Front Speaker (+/-)	blue - red	+,-	radio, brown 8 pin plug, pins 2 and 6	
Left Rear Speaker (+/-)	black - yellow	+,-	radio, brown 8 pin plug, pins 4 and 8	
Right Rear Speaker (+/-)	green - orange	+,-	radio, brown 8 pin plug, pins 1 and 5	
Center Channel (+/-)	blue - red	+,-	amplifier, gray 16 pin plug, pins 6 and 14	
Subwoofer (+/-)	green - orange (1); blue - red (2)	+,-	amplifier, gray 26 pin plug, pins 13 and 26; 12 and 25	
Aux. Audio Input Left (+/-)	brown - orange or green - black/orange	+,-	radio, black 20 pin plug, pins 4 and 10	
Aux. Audio Input Right (+/-)	gray - orange or brown - black/orange	+,-	radio, black 20 pin plug, pins 3 and 10	
RSE Video (+/-)	yellow - black/orange (rear view camera)	+,-	radio, white 24 pin plug, pins 15 and 16	
RSE Audio Left (+/-)	green - black/orange	+,-	radio, white 24 pin plug, pins 6 and 8	
RSE Audio Right (+/-)	yellow - black/orange	+,-	radio, white 24 pin plug, pins 9 and 8	
Satellite Radio 12 Volts	N/A			
Satellite Radio Ground	N/A			
Satellite Radio Ignition	N/A			

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

### What Fits

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Item	Size	Depth	Location
Headunit	double DIN		center of dash
Left Front Speaker	6.5		left front door
Left Front Tweeter			left front door
Right Front Speaker	6.5		right front door
Right Front Tweeter			right front door
Left Rear Speaker	6.5		left rear door
Left Rear Tweeter			left rear tailgate
Right Rear Speaker	6.5		right rear door
Right Rear Tweeter			right rear tailgate
Center Channel			top center of dash
Subwoofer	8		left rear quarter panel
Left Front Headrest			
Right Front Headrest			
Left Right Headrest			
Right Rear Headrest			
Satellite Radio Tuner	(built into radio)		

## Additional Wiring Notes

Item	Note
Tachometer	On 3.5L models, use black, gray/black, pink/black, gray/black, white, or gray/black at any fuel injector, black 2 pin plug, pin 1.
Left Front Window (Up/Down)	On vehicles with safety power window, the driver power window motor is part of the window module, not allowing access to the motor wires.
Factory Alarm Arm	See Tech Doc 1300 for wiring information.
Factory Alarm Disarm	See Tech Doc 1300 for wiring information.
Center Channel (+/-)	If equipped, the amplifier is under the passenger seat.
Subwoofer (+/-)	If equipped, the amplifier is under the passenger seat. On vehicles with base amp, they are at the amplifier, black 16 pin plug, pins 2 and 9; 6 and 15.
Left Front Speaker (+/-)	If equipped, the amplifier is under the passenger seat. On vehicles with amplifier, the speaker wires are black - white at the amplifier, gray 16 pin plug, pins 8 and 16 (premium amp), or black 16 pin plug, pins 1 and 8 (base amp). The tweeter wires are black - white at the amplifier, gray 26 pin plug, pins 11 and 24 (premium amp).
Right Front Speaker (+/-)	If equipped, the amplifier is under the passenger seat. On vehicles with amplifier, the speaker wires are blue - red at the amplifier, gray 16 pin plug, pins 7 and 15 (premium amp), or black 16 pin plug, pins 7 and 16 (base amp). The tweeter wires are blue - red at the amplifier, gray 26 pin plug, pins 10 and 23 (premium amp).
Left Rear Speaker (+/-)	If equipped, the amplifier is under the passenger seat. On vehicles with amplifier, the speaker wires are black - yellow at the amplifier, gray 16 pin plug, pins 4 and 12 (premium amp), or black 16 pin plug, pins 3 and 10 (base amp). The surround wires are orange - gray at the amplifier, gray 16 pin plug, pins 2 and 10 (premium amp).
Right Rear Speaker (+/-)	If equipped, the amplifier is under the passenger seat. On vehicles with amplifier, the speaker wires are green - orange at the amplifier, gray 16 pin plug, pins 3 and 11 (premium amp), or black 16 pin plug, pins 5 and 14 (base amp). The surround wires are pink - orange at the amplifier, gray 16 pin plug, pins 1 and 9 (premium amp).
Power Unlock	To unlock the driver door only, use yellow/black (-) at the BCM behind the dash fuse box, white 22 pin plug, pin 13.