

2014 Hyundai Santa Fe (Smart Key)



Wiring Information

Item	Wire Color	Polarity	Wire Location
12 Volts	red (50A)	+	dash fuse box, white 4 pin plug (B), pin 4
Second 12 Volts	white (50A)	+	dash fuse box, white 4 pin plug (B), pin 1
Starter	pink	+	driver kick, black 46 pin plug, pin 11
Second Starter	yellow/orange (SS1); orange/black (SS2)	-	start/stop button switch, black 16 pin plug, pins 2, 3
Ignition	green	+	driver kick, black 46 pin plug, pin 21
Second Ignition	N/A		
Third Ignition	N/A		
Accessory	blue	+	driver kick, black 46 pin plug, pin 26
Second Accessory	pink	+	driver kick, black 46 pin plug, pin 36
Third Accessory	N/A		
Key Sense	N/A		
Data Bus	white/orange (EMS COM immobilizer data)	data	driver kick, black 46 pin plug, pin 32
Can Bus High	blue (B-CAN); green (C-CAN)	data	driver kick, wht 48 pin plug, pin 24; data lmk conn, blk 16 pin plg, pin 6
Can Bus Low	red (B-CAN); orange (C-CAN)	data	driver kick, wht 48 pin plug, pin 33; data lmk conn, bk 16 pin plg, pin14
Can Bus Sw	N/A		
Power Lock	brown/orange	-	dash fuse box, rear, white 32 pin plug (E), pin 5
Power Unlock	yellow/black (passenger doors)	-	dash fuse box, rear, white 32 pin plug (E), pin 6
Lock Motor	orange	5 wire	dash fuse box, gray or black 51 pin plug (C), pin 48
Unlock Motor	blue	5 wire	driver kick, white 48 pin plug, pin 21
Disarm Defeat	green	5 wire	dash fuse box, gray or black 51 pin plug (C), pin 47
Parking Lights (+)	green/black (L); yellow/black (R)	+	dash fuse box, white 24 pin plug (D), pins 14, 16
Parking Lights (-)	pink	-	headlight switch, white 16 pin plug, pin 15
Hazards	pink	-	dash fuse box, rear, white 24 pin plug (H), pin 13
Turn Signal (Left)	yellow (F); gray (R)	+	dash fuse box, blu 31 pin plug (A), pin 6; wht 24 pin plug (D), pin 21
Turn Signal (Right)	white (F); white/black (R)	+	dash fuse box, blu 31 pin plug (A), pin 2; wht 24 pin plug (D), pin 1

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Headlight	blue/orange	-	headlight switch, white 16 pin plug, pin 16
AutoLights	yellow (interrupt to turn off autolights)	-	headlight switch, white 16 pin plug, pin 14
Reverse Light	red	+	dash fuse box, gray or black 51 pin plug (C), pin 41
Left Front Door Trigger	gray/orange	-	power window main switch, white 32 pin plug, pin 21
Right Front Door Trigger	yellow/black	-	passenger power window sw, wht 20 pin plug, pin 20
Left Rear Door Trigger	white	-	dash fuse box, white 24 pin plug (D), pin 9
Right Rear Door Trigger	brown/black	-	dash fuse box, white 24 pin plug (D), pin 8
Dome Supervision	brown	-	left front pillar, white 34 pin plug, pin 29, or white 36 pin plg, pin 23
Trunk/Hatch Pin	white	-	dash fuse box, white 24 pin plug (D), pin 24
Rear Glass Pin	N/A		
Hood Pin	pink/black	-	dash fuse box, blue 31 pin plug (A), pin 4
Trunk Hatch/Release	gray/black (rear handle switch)	-	dash fuse box, white 24 pin plug (D), pin 3
Trunk Release Motor	blue	+	dash fuse box, gray or black 51 pin plug (C), pin 19
Fuel Door Release	blue	+	driver kick, harness to rear
Power Sliding Door (Left)	N/A		
Power Sliding Door (Right)	N/A		
Factory Alarm Arm	brn/blk (key lock); red/og (detect)(Tech Doc 1300)	- and open	power window main switch, white 32 pin plug, pins 22, 24
Factory Alarm Disarm	pnk/blk (key unlck); rd/og (detect)(Tech Doc 1300)	both -	power window main switch, white 32 pin plug, pins 23, 24
Disarm No Unlock	(see factory alarm disarm)		
Trunk Alarm Shunt	N/A		
Tachometer	white	ac	driver kick, black 46 pin plug, pin 13
Wait to Start	N/A		
Neutral Safety	N/A		
Clutch Pedal	N/A		
Fuel Pump	pink	+	driver kick, blue 31 pin plug, pin 21 or 10
Rear Defroster	grn/org (rear defog); blu/org or blue (frt deicer)	- latched	dash fuse box, blue 31 pin plug (A), pins 14, 12
Mirror Defroster	(B-CAN)		
Left Front Heated Seat	brown/black or gray/black	+	left seat warmer switch, white 26 pin plug, pin 2
Right Front Heated Seat	brown/black or gray/black	+	right seat warmer switch, green 26 pin plug, pin 2

Wiring Information (Continued)

Item	Wire Color	Polarity	Wire Location
Speed Sense	brown/orange	4-Pulse	data link conn, blk 16 pin plug, pin 3 or radio, wht 24 pin plug, pin 16
Brake Wire	red/orange	+	driver kick, black 46 pin plug, pin 20
Parking Brake	gray/orange	-	dash fuse box, white 24 pin plug (D), pin 2
Horn Trigger	gray	-	driver kick, black 46 pin plug, pin 30
Wipers	orange/black	+	driver kick, black 46 pin plug, pin 8
Left Front Window (Up/Down)	white - pink (with auto down only)	A	power window main switch, white 18 pin plug, pins 11 - 12
Right Front Window (Up/Down)	white - pink	A	passenger power window switch, white 18 pin plug, pins 11 - 12
Left Rear Window (Up/Down)	pink - brown	A	left rear power window switch, white 14 pin plug, pins 9 - 12
Right Rear Window (Up/Down)	blue - orange	A	right rear power window switch, white 14 pin plug, pins 9 - 12
Sun Roof (Open/Close)	gray/black - brown/black (funct with ign on only)	-	sunroof switch, white or black 6 pin plug, pins 2 - 3
Sun Roof (Limit/Close)	N/A		
Memory Seat 1	blue	-	power window main switch, white 32 pin plug, pin 19
Memory Seat 2	red/black	-	power window main switch, white 32 pin plug, pin 18
Memory Seat 3	N/A		
Radio 12V	pink or red	+	radio, white 24 pin plug, pin 12
Radio Ground	black	-	radio, white 24 pin plug, pin 24
Radio Ignition	brown	+	radio, white 24 pin plug, pin 11
Radio Illumination	red/orange (parking lights); blue/orange (dimmer)	+,-	radio, white 18 pin plug, pins 8, 17
Factory Amp Turn-on	(M-CAN)		
Power Antenna	green	+	radio, white 18 pin plug, pin 18
Left Front Speaker (+/-)	brown - white	+,-	radio, white 18 pin plug, pins 2 - 11
Right Front Speaker (+/-)	red - blue	+,-	radio, white 18 pin plug, pins 3 - 12
Left Rear Speaker (+/-)	yellow - black	+,-	radio, white 18 pin plug, pins 1 - 10
Right Rear Speaker (+/-)	green - orange	+,-	radio, white 18 pin plug, pins 4 - 13
Center Channel (+/-)	white - black	+,-	amplifier under passenger seat, white 16 pin plug, pins 7 - 15
Subwoofer (+/-)	green - orange (1); blue - red (2)	+,-	amplifier under pass seat, white 26 pin plug, pins 13 - 26; 12 - 25
Aux. Audio Input Left (+/-)	green - black/orange or yellow - black/orange	+,-	radio, white 24 pin plug, pins 21 - 9
Aux. Audio Input Right (+/-)	white - black/orange or brown - black/orange	+,-	radio, white 24 pin plug, pins 8 - 9
RSE Video (+/-)	red - black (rear view camera)	+,-	radio, wh 16P plg, pins 4-3 or wh 18P plg, pins2-3
RSE Audio Left (+/-)	N/A		
RSE Audio Right (+/-)	N/A		
Satellite Radio 12 Volts	(built into radio)		
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			left front door
Left Front Tweeter			left front door
Right Front Speaker			right front door
Right Front Tweeter			right front door
Left Rear Speaker			left rear door
Left Rear Tweeter			left rear quarter panel (surround)
Right Rear Speaker			right rear door
Right Rear Tweeter			right rear quarter panel (surround)
Center Channel			top center of dash
Subwoofer			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
Power Unlock	To unlock the driver door, you can 5 wire the driver unlock motor or use white (-) at the relay box behind the glove box, white 24 pin plug, pin 21.
Left Front Speaker (+/-)	On models with amplifier, the speaker wires are brown - white (woofer); black - white (tweeter) at the amplifier under passenger seat, white 12 pin plug, pins 6 - 12; 4 - 10.
Right Front Speaker (+/-)	On models with amplifier, the speaker wires are red - blue (woofer); orange - blue (tweeter) at the amplifier under passenger seat, white 12 pin plug, pins 5 - 11; 3 - 9.
Left Rear Speaker (+/-)	On models with amplifier, the speaker wires are yellow - black at the amplifier under passenger seat, white 12 pin plug, pins 2 - 8. The surround wires are yellow - black at the amplifier, white 16 pin plug, pins 2 - 10.
Right Rear Speaker (+/-)	On models with amplifier, the speaker wires are green - orange at the amplifier under passenger seat, white 12 pin plug, pins 1 - 7. The surround wires are green - orange at the amplifier, white 16 pin plug, pins 1 - 9.
Trunk Hatch/Release	On models with power tail gate, the open/close is green/black (-) in the driver kick, white 48 pin plug, pin 45.