



Hyundai Santa Fe (without NAV) 2017-2018/ Santa Fe Sport (without NAV, with display radio*) 2017-2018

* Display radio is an Android Auto / Apple CarPlay radio

KIT FEATURES

- ISO DIN radio provision with pocket
- ISO DDIN radio provision
- Includes climate display and ASWC-1
- Retains audio controls on the steering wheel
- Retains the factory backup camera
- Provides NAV outputs (speed sense)
- Includes an AX-CAM6V 12 TO 6V stepdown
- Painted matte black

KIT COMPONENTS

- A) Radio trim panel • B) Radio brackets • C) Climate display • D) Pocket • E) (12) #8 x 3/8" Phillips screws • F) Wiring harness (not shown)

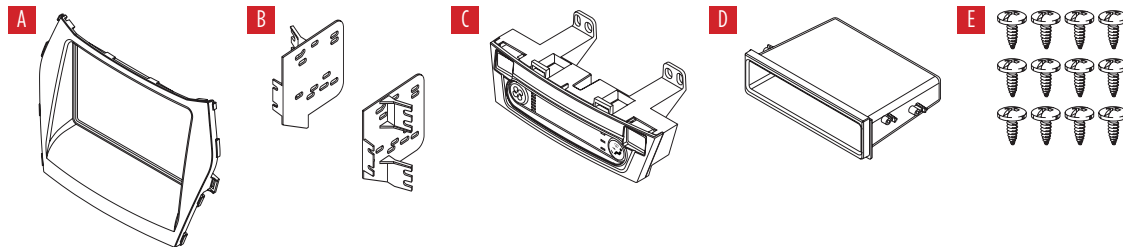


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WIRING & ANTENNA CONNECTIONS (sold separately)

Wiring Harness: Included with kit

Antenna Adapter: Included with kit

Steering wheel control interface: ASWC-1 Included with kit
12v to 6v camera stepdown: AX-CAM6V included with kit

TOOLS REQUIRED

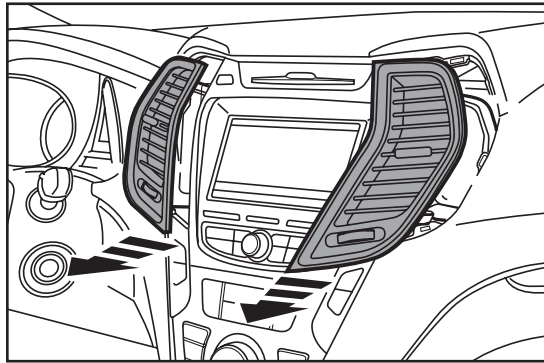
- Panel removal tool • Phillips screwdriver • Wire cutter • Crimp tool • Solder gun • Tape • Connectors (example: butt-connectors, bell caps, etc.)

Attention! Let the vehicle sit with the key out of the ignition for a few minutes before removing the factory radio. When testing the aftermarket equipment, ensure that all factory equipment is connected before cycling the key to ignition.

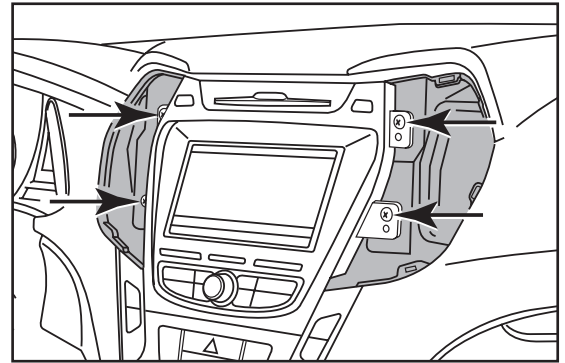
DASH DISASSEMBLY

1. Unclip and remove the center a/c vents. (Figure A)
2. Remove (4) Phillips screws securing the radio. Slide the radio out, then unplug and remove the radio. (Figure B)

Continue to Kit Assembly



(Figure A)



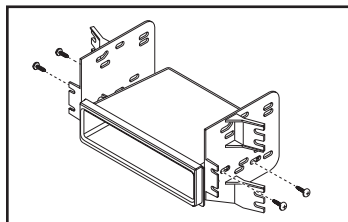
(Figure B)

KIT ASSEMBLY

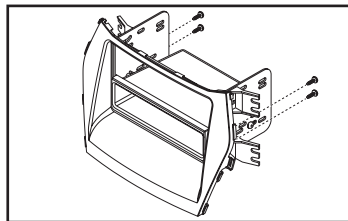
ISO DIN radio provision with pocket

1. Secure the *radio brackets* to the *pocket* using the (4) #8 x 3/8" Phillips screws provided. (Figure A)
2. Secure the bracket/pocket assembly to the *radio trim panel* using the (4) #8 x 3/8" Phillips screws provided. (Figure B)
3. Remove the metal DIN sleeve and trim ring from the aftermarket radio.
4. Slide the radio into the bracket/panel/pocket assembly, then secure it to the assembly using the screws supplied with the radio. (Figure C)

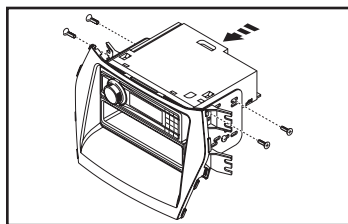
Continue to Wiring Instructions



(Figure A)



(Figure B)

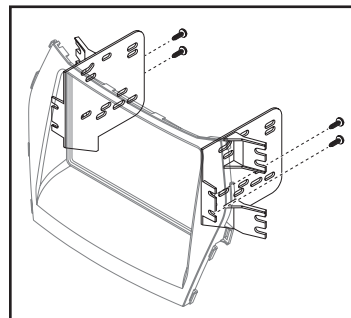


(Figure C)

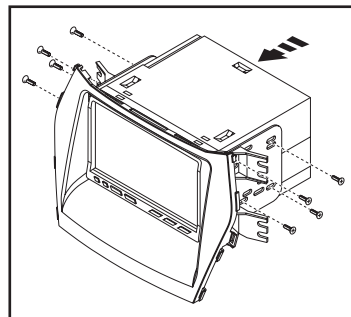
ISO DDIN radio provision

1. Secure the *radio brackets* to the *radio trim panel* using the (4) #8 x 3/8" Phillips screws provided. (Figure A)
4. Slide the radio into the bracket/panel assembly, then secure it to the assembly using the screws supplied with the radio. (Figure B)

Continue to Wiring Instructions



(Figure A)



(Figure B)

WIRING INSTRUCTIONS

From the wiring harness included with the kit to the aftermarket radio:

- Connect the **Black** wire, and also the **Black** wire labeled "CAMERA GROUND", to the ground wire, and also to the **Black** wire from the AX-CAM6V.
- Connect the **Yellow** wire to the battery wire.
- Connect the **Red** wire to the accessory wire.
- Connect the **Red** wire labeled "6-volt camera power" to the **Blue/Red** wire from the AX-CAM6V.
- Connect the **Blue/White** wire from the AX-CAM6V to reverse power. This wire will have to be sourced in the vehicle.
- Connect the **Blue** wire to the power antenna wire.
- If the aftermarket radio has an illumination wire, connect the **Orange** wire to it.
- Connect the **Gray** wire to the right front positive speaker output.
- Connect the **Gray/Black** wire to the right front negative speaker output.
- Connect the **White** wire to the left front positive speaker output.
- Connect the **White/Black** wire to the left front negative speaker output.
- Connect the **Green** wire to the left rear positive speaker output.
- Connect the **Green/Black** wire to the left rear negative speaker output.
- Connect the **Purple** wire to the right rear positive speaker output.
- Connect the **Purple/Black** wire to the right rear negative output.

The following (1) wire is only for a multimedia/navigation radio that requires this wire.

- Connect the **Blue/Pink** wire to the VSS/speed sense wire.
- If retaining the factory AUX-IN jack, connect the **Red** and **White** RCA jacks to the audio AUX-IN jacks.
- Connect the **Yellow** RCA jack to the backup camera input.

Continued on the next page

WIRING INSTRUCTIONS (CONT.)

3.5mm jack steering wheel control retention:

The 3.5mm jack is to be used to retain audio controls on the steering wheel.

- **For the radios listed below:** Connect the *female 3.5mm connector with stripped leads* included with the ASWC-1, to the male 3.5mm SWC jack from the wiring harness included with the kit. Any remaining wires tape off and disregard:
 - **Eclipse:** Connect the steering wheel control wire, normally **Brown**, to the **Brown/White** wire of the connector. Then connect the remaining steering wheel control wire, normally **Brown/White**, to the **Brown** wire of the connector.
 - **Metra OE:** Connect the steering wheel control Key 1 wire (**Gray**) to the **Brown** wire.
 - **Kenwood or select JVC with a steering wheel control wire:** Connect the **Blue/Yellow** wire to the **Brown** wire.
Note: If your **Kenwood** radio auto detects as a **JVC**, manually set the radio type to **Kenwood**. See the instructions under changing radio type.
 - **XITE:** Connect the steering wheel control SWC-2 wire from the radio to the **Brown** wire.
 - **Parrot Asteroid Smart or Tablet:** Connect the 3.5mm jack into the AX-SWC-PARROT (sold separately), and then connect the 4-pin connector from the AX-SWC-PARROT into the radio.
Note: The radio must be updated to rev. 2.1.4 or higher software.
 - **Universal “2 or 3 wire” radio:** Connect the steering wheel control wire, referred to as Key-A or SWC-1, to the **Brown** wire of the connector. Then connect the remaining steering wheel control wire, referred to as Key-B or SWC-2, to the **Brown/White** wire of the connector. If the radio comes with a third wire for ground, disregard this wire. **Note:** After the interface has been programmed to the vehicle, refer to the manual provided with the radio for assigning the SWC buttons. Contact the radio manufacturer for more information.
- **For all other radios:** Connect the 3.5mm jack from the wiring harness included with the kit into the jack on the aftermarket radio designated for an external steering wheel control interface. Refer to the aftermarket radios manual if in doubt as to where the 3.5mm jack goes to.

INSTALLATION

With the key in the off position:

1. Connect the wiring harness included with the kit to the *climate display*, and then to the wiring harness in the vehicle.
2. Locate the factory antenna connector in the dash and complete all necessary connections to the radio. Use the antenna adapter provided to adapt the factory antenna connector to the aftermarket radio.
3. Connect the wiring harness included with the kit to the ASWC-1.

Attention! If retaining steering wheel controls, ensure that the SWC jack/wire is connected to the radio before proceeding. If this step is skipped, the ASWC-1 will need to be reset for the steering wheel controls to function.

PROGRAMMING THE ASWC-1 AND CLIMATE DISPLAY

Programming the ASWC-1:

1. Press and hold the Volume-Up button on the steering wheel, then turn the ignition on. The LED will start flashing rapidly, which means the ASWC-1 is looking for the vehicle and the radio.

Note: If the LED did not start flashing rapidly, press the reset button for 3 seconds.

2. After a few seconds the LED should stop flashing rapidly, and then go out for approximately 2 seconds.
3. After approximately 2 seconds there will be a series of 7 **Green** flashes, some short, and some long. The long flashes represent the wires that are connected to the ASWC-1.

Tip: Knowing this will help to troubleshoot, if need be.

4. The LED will pause for another 2 seconds, and then flash **Red** up to 18 times depending on which radio is connected to the ASWC-1. Refer to the L.E.D. feedback section for information.
5. This is the end of the auto detection stage. If the ASWC-1 detected the vehicle and the radio successfully, the L.E.D. will light up solid. Release from holding the Volume-Up button.
6. Test the steering wheel controls for proper operation. Refer to the “(ASWC-1) Steering wheel control settings” for customizing the buttons, if so desired.

Programming the climate display:

7. Turn the parking lights on.
8. Turn the vehicles light dimmer all the way down, then all the way up.
9. Turn the lights off.
10. Test all functions of the installation for proper operation, before reassembling the dash.

FINAL ASSEMBLY

1. Remove (2) Phillips screws securing the factory hazard climate control panel.
2. Secure the *climate display* included with the kit to the dash using the factory screws.
3. Secure the radio assembly to the dash using the factory screws.
4. Clip the factory vents to the dash to complete the installation.

(ASWC-1) STEERING WHEEL CONTROL SETTINGS

L.E.D. feedback

The (18) **Red** L.E.D. flashes represent what brand radio the ASWC-1 believes it is connected to. Each flash represents a different radio Manufacturer. For example, if you are installing a JVC radio, the ASWC-1 will flash **Red** (5) times, and then stop. Following is a legend that dictates which radio Manufacturer corresponds to which flash.

L.E.D. feedback legend

1 flash - Eclipse (Type 1) †	7 flashes - Alpine *	13 flashes - LG
2 flashes - Kenwood ‡	8 flashes - Visteon	14 flashes - Parrot **
3 flashes - Clarion (Type 1) †	9 flashes - Valor	15 flashes - XITE
4 flashes - Sony/Dual	10 flashes - Clarion (Type 2) †	16 flashes - Phillips
5 flashes - JVC	11 flashes - Metra OE	17 flashes - TBA
6 flashes - Pioneer/Jensen	12 flashes - Eclipse (Type 2) †	18 flashes - JBL

*** Note:** If the ASWC-1 flashes **Red** (7) times, and you do not have an Alpine radio connected to it, that means the ASWC-1 does not detect a radio connected to it. Verify that the 3.5mm jack is connected to the correct steering wheel jack/wire in the radio.

**** Note:** The AX-SWC-PARROT is required (sold separately). Also, the Parrot radio must be updated to rev. 2.1.4 or higher through www.parrot.com.

† Note: If you have a Clarion radio and the steering wheel controls do not work, change the radio type to the other Clarion radio type; same for Eclipse. The following section explains how to do this.

‡ Note: If you have a Kenwood radio and the L.E.D. feedback comes back showing as a JVC radio, change the radio type to Kenwood. The following section explains how to do this.

Attention: The Axxess Updater App can also be used to program the following (3) sub-sections as well, pending that the ASWC-1 has been programmed.

Continued on the next page

(ASWC-1) STEERING WHEEL CONTROL SETTINGS (CONT.)

Changing radio type

If the L.E.D. flashes do not match the radio you have connected, you must manually program the ASWC-1 to tell it what radio it is connected to.

1. After (3) seconds of turning the key on, press and hold the Volume-Down button on the steering wheel until the L.E.D. in the ASWC-1 goes solid.
2. Release the Volume-Down button; the L.E.D. will go out indicating the ASWC-1 is in Changing Radio Type mode.
3. Refer to the Radio Legend to know which radio number you would like to have programmed.
4. Press and hold the Volume-Up button until the L.E.D. goes solid, and then release. Repeat this step for the desired radio number you have selected.
5. Once the desired radio number has been selected, press and hold the Volume-Down button on the steering wheel until the L.E.D. goes solid. The L.E.D. will remain on for about (3) seconds while it stores the new radio information.
6. Once the L.E.D. goes out, the Changing Radio Type mode will then end. You can now test the steering control wheel controls.

Note: If at any time the user fails to press any button for a period longer than (10) seconds, this process will abort.

Radio legend

1 flash - Eclipse (Type 1)	7 flashes - Alpine	13 flashes - LG
2 flashes - Kenwood	8 flashes - Visteon	14 flashes - Parrot
3 flashes - Clarion (Type 1)	9 flashes - Valor	15 flashes - XITE
4 flashes - Sony/Dual	10 flashes - Clarion (Type 2)	16 flashes - Philips
5 flashes - JVC	11 flashes - Metra OE	17 flashes - TBA
6 flashes - Pioneer/Jensen	12 flashes - Eclipse (Type 2)	18 flashes - JBL

Continued on the next page

(ASWC-1) STEERING WHEEL CONTROL SETTINGS (CONT.)

Remapping the steering wheel control buttons

Once the ASWC-1 has been programmed, the button assignment for the steering wheel controls may be reassigned if so desired. For example, if the Seek-Up button is preferred to be the Mute button instead. Follow the steps below to remap the steering wheel control buttons.

1. Ensure the ASWC-1 is visible so you can see the L.E.D. flashes to confirm button recognition.

Tip: Turning the radio off is recommended.

2. Within the first twenty seconds of turning the ignition on, press and hold the Volume-Up button on the steering wheel until the L.E.D. goes solid.
3. Release the Volume-Up button, the L.E.D. will then go out; The Volume-Up button has now been programmed.
4. Follow the list in the Button Assignment Legend to reference the order in which the steering wheel control buttons need to be programmed.

Note: If the next function on the list is not on the steering wheel, press the Volume-Up button for (1) second until the L.E.D. comes on to skip that function, and then release the Volume-Up button. This will tell the ASWC-1 that this function is not available, and it will move on to the next function.

5. To complete the remapping process, press and hold the Volume-Up button until the L.E.D. in the ASWC-1 goes out.

Button assignment legend

1. Volume-Up	7. Preset-Up	13. On-Hook
2. Volume-Down	8. Preset-Down	14. Off-Hook
3. Seek-Up/Next	9. Power	15. Fan-Up *
4. Seek-Down/Prev	10. Band	16. Fan-Down *
5. Source/Mode	11. Play/Enter	17. Temp-Up *
6. Mute	12. PTT (Push to Talk)	18. Temp-Down *

* Not applicable in this application

Note: Some radios may not have these commands. Please refer to the manual provided with the radio, or contact the radio manufacturer for specific commands recognized by that particular radio.

Continued on the next page

(ASWC-1) STEERING WHEEL CONTROL SETTINGS (CONT.)

Dual assignment instructions (long button press)

The ASWC-1 has the capability to assign (2) functions to a single button, except Volume-Up and Volume-Down. Follow the steps below to program the button(s) to the desired setting.

Note: Seek-Up and Seek-Down come pre-programmed as Preset-Up and Preset-Down for a long button press.

1. Turn the key to ignition but do not start the vehicle.
2. Press and hold the desired steering wheel control button for (10) seconds, or until the L.E.D. flashes rapidly. At this point release the button; the L.E.D. will then go solid.
3. Press and release the Volume-Up button the number of times corresponding to the new button number selected. Refer to the Dual Assignment Legend. The L.E.D. will flash rapidly while the Volume-Up button is being pressed, and then go back to a solid L.E.D. once released. Proceed to the next step once the Volume-Up button has been pressed the desired number of times.

Caution: If more than (10) seconds elapses between pressing the Volume-Up button, this procedure will abort, and the L.E.D. will go out.

4. Press the desired button to store it to memory. The L.E.D. will now go out indicating the new information has been stored to memory.

Note: These steps must be repeated for each button desired to assign a dual assignment feature to. To reset a button back to its default state, repeat Step 1, then press the Volume-Down button. The L.E.D. will go out, and the dual assignment feature for that button will be erased.

Dual assignment legend

- | | | |
|-------------------|------------------------|-----------------|
| 1. Not allowed | 7. Preset-Up | 13. On-Hook |
| 2. Not allowed | 8. Preset-Down | 14. Off-Hook |
| 3. Seek-Up/Next | 9. Power | 15. Fan-Up * |
| 4. Seek-Down/Prev | 10. Band | 16. Fan-Down * |
| 5. Mode/Source | 11. Play/Enter | 17. Temp-Up * |
| 6. ATT/Mute | 12. PTT (Push to Talk) | 18. Temp-Down * |

* Not applicable in this application

[illegible]



99-7385B
INSTALLATION INSTRUCTIONS



IMPORTANT

If you are having difficulties with the installation of this product, please call our Tech Support line at 1-800-253-TECH. Before doing so, look over the instructions a second time, and make sure the installation was performed exactly as the instructions are stated. Please have the vehicle apart and ready to perform troubleshooting steps before calling.



KNOWLEDGE IS POWER

Enhance your installation and fabrication skills by enrolling in the most recognized and respected mobile electronics school in our industry. Log onto www.installerinstitute.com or call 800-354-6782 for more information and take steps toward a better tomorrow.



**Metra recommends MECP
certified technicians**