



# Hyundai Santa Fe (with factory NAV) 2013–2018/ Santa Fe Sport (with factory NAV) 2014–2018/ Santa Fe XL (with factory NAV) 2019

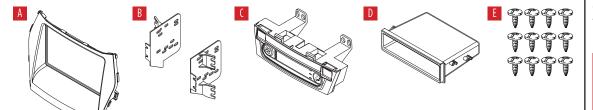
Visit <u>MetraOnline.com</u> for more detailed information about the product and up-to-date vehicle specific applications

### **KIT FEATURES**

- ISO DIN radio provision with pocket
- ISO DDIN radio provision
- Includes Axxess interface for climate display and steering wheel functions
- 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 harnesses and antenna adapter (not shown)



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### WIRING & ANTENNA CONNECTIONS (sold separately)

Wiring Harness: Axxess interface and wiring harness Included with kit Antenna Adapter: Included in kit Steering wheel control interface: Included with kit 12v to 6v camera stepdown: AX-CAM6V included with kit

### TOOLS REQUIRED

• Panel removal tool • Phillips screwdriver

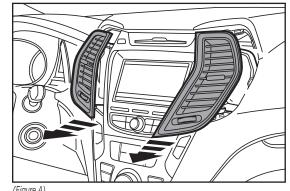
Attention! With the key out of the ignition, disconnect the negative battery terminal before installing this product. Ensure that all installation connections are secure before cycling the ignition to test this product.

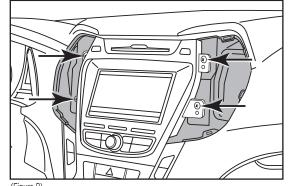
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# DASH DISASSEMBLY

- **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)

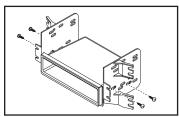


# **KIT ASSEMBLY**

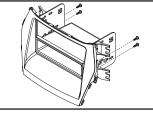
### ISO DIN radio provision with pocket

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

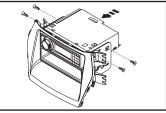
Continue to Axxess Interface Installation



(Figure A)



(Figure B)

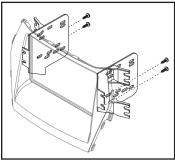




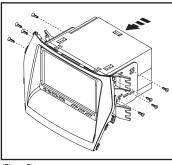
### **ISO DDIN radio provision**

- Secure the *radio brackets* to the *radio trim panel* using the (4) #8 x 3/8" Phillips screws provided. (Figure A)
- 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 Axxess Interface Installation



(Figure A)



(Figure B)

# **AXXESS INTERFACE INSTALLATION**

### **INTERFACE FEATURES**

- Provides NAV outputs (parking brake, reverse, speed sense)
- Retains audio controls on the steering wheel
- Retains the factory backup camera
- Includes an AX-CAM6V 12 to 6V step-down
- Retains the factory AUX-IN jack
- Retains balance
- Micro "B" USB updatable

### INTERFACE COMPONENTS

- Axxess interface
- AX-HYKIA-SPDIF interface
- AX-CAM6V
- 7386 harness (a) (labeled LD-SANTAMP3)
- 7386 harness (b) (labeled LD-SOULAMP2)
- 16-pin harness with stripped leads
- Female 3.5mm connector with stripped leads

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### **TOOLS REQUIRED**

- Crimping tool and connectors, or solder gun, solder, and heat shrink
- Tape Wire cutter Zip ties



# CONNECTIONS

### From the 16-pin harness with stripped leads to the aftermarket radio:

- Connect the **Red** wire to the accessory wire.
- Connect the Blue/White wire to the amp turn on wire. This wire must be connected to hear sound from the factory amplifier.
- If the aftermarket radio has a mute wire, connect the **Brown** wire to it. If the mute wire is
  not connected, the radio will turn off when BlueLink is activated.
- 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.

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

- Connect the **Light Green** wire to the parking brake wire.
- Tape off and disregard the following (7) wires, they will not be used in this application: Blue/Pink, Green, Green/Black, Green/Purple, Orange/White, Purple, Purple/Black

### From the 7386 harness to the aftermarket radio:

There are (2) 7386 harnesses. Harness (a) is for 13-16 models, and harness (b) is for 17-18 models.

- Connect the **Black** wire, the Black wire labeled "CAMERA GROUND" (harness a only), and also the **Black** wire from the AX-CAM6V, to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- Connect the Red wire labeled "CAMERA POWER 6V" to the Blue/Red wire from the AX-CAM6V.
- Connect the **Blue** wire to the power antenna wire.
- If the aftermarket radio has an illumination wire, connect the **Orange** wire to it.

The following (2) wires are only for multimedia/navigation radios that require these wires.

- Connect the **Blue/Pink** wire to the VSS/speed sense wire.
- Connect the Green/Purple wire to the reverse wire, and also to the Blue/White wire from the AX-CAM6V.
- If retaining the factory AUX-In jack, connect the **Red** and **White** RCA jacks to the audio AUX-IN jacks from the aftermarket radio.
- Connect the Yellow RCA jack to the backup camera input.
- For harness (b), tape off and disregard the following (1) wire, it will not be used in this application: **Light Green**.

# **CONNECTIONS** (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 Axxess interface, 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.

### INSTALLING THE AXXESS INTERFACE AND AX-HYKIA-SPDIF

### With the key in the off position:

- 1. Connect the 16-pin harness with stripped leads, and the 7386 harness, into the Axxess interface.
- 2. Connect the 7386 harness to the AX-HYKIA-SPDIF interface.
- 3. Connect the 7386 harness to the climate display.
- **4.** Locate the factory antenna connector in the dash and complete all necessary connections to the radio.

**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 Axxess interface will need to be reset for the steering wheel controls to function.

### Programming the Axxess interface:

- 1. For the steps below, the L.E.D. located inside the interface can only be seen while active. The interface does not need to be opened to see the L.E.D.
- 2. Start the vehicle. The L.E.D. will initially turn on solid **Green**, then turn off for a few seconds while it auto detects the radio installed.
- **3.** The L.E.D. will then flash **Red** up to (18) times indicating which radio is connected to the interface, and then turn off for a couple of seconds. Pay close attention to how many **Red** flashes there are. This will help in troubleshooting, if need be. Refer to the L.E.D. feedback section for more information.
- After a couple seconds the L.E.D. will turn on solid Red while the interface auto detects the vehicle. The radio will shut off at this point. This process should take 5 to 30 seconds.
- **5.** Once the vehicle has been auto detected by the interface, the L.E.D. will turn on solid **Green**, and the radio will come back on, indicating programming was successful.
- **6.** Test the steering wheel controls for proper operation. Refer to the "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.
- 11. If the interface fails to function, refer to "Troubleshooting", "Resetting the Axxess interface".

**Note:** The L.E.D. will turn on solid **Green** for a moment, and then turn off under normal operation after the key has been cycled.

# FINAL ASSEMBLY

#### **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.

### L.E.D. feedback

The (18) **Red** L.E.D. flashes represent what brand radio the Axxess interface believes it is connected to. Each flash represents a different radio Manufacturer. For example, if you are installing a JVC radio, the Axxess interface 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) $^{\rm t}$	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

\* **Note:** If the Axxess interface flashes **Red** (7) times, and you do not have an Alpine radio connected to it, that means the Axxess interface 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 Axxess interface has been programmed.



### Changing radio type

If the L.E.D. flashes do not match the radio you have connected, you must manually program the Axxess interface 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 Axxess interface goes solid.
- 2. Release the Volume-Down button; the L.E.D. will go out indicating the Axxess interface is in Changing Radio Type mode.
- Refer to the Radio Legend to know which radio number you would like to have programmed.
- 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

### Remapping the steering wheel control buttons

Once the Axxess interface 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 Axxess interface 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 Axxess interface 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 Axxess interface 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.



### Dual assignment instructions (long button press)

The Axxess interface 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

## TROUBLESHOOTING

#### Resetting the Axxess interface

- 1. The **Blue** reset button is located inside the Axxess interface, between the two connectors. The button is accessible outside the Axxess interface, no need to open the Axxess interface.
- 2. Press and hold the reset button for (2) seconds, then let go to reset the Axxess interface.
- **3.** Refer to "Programming the Axxess Interface" from this point.





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