AXXESS AX-HYKIA1-SWC Data Radio Interface Installation Guide

AXXESS

AX-HYKIA1-SWC
INSTALLATION INSTRUCTIONS
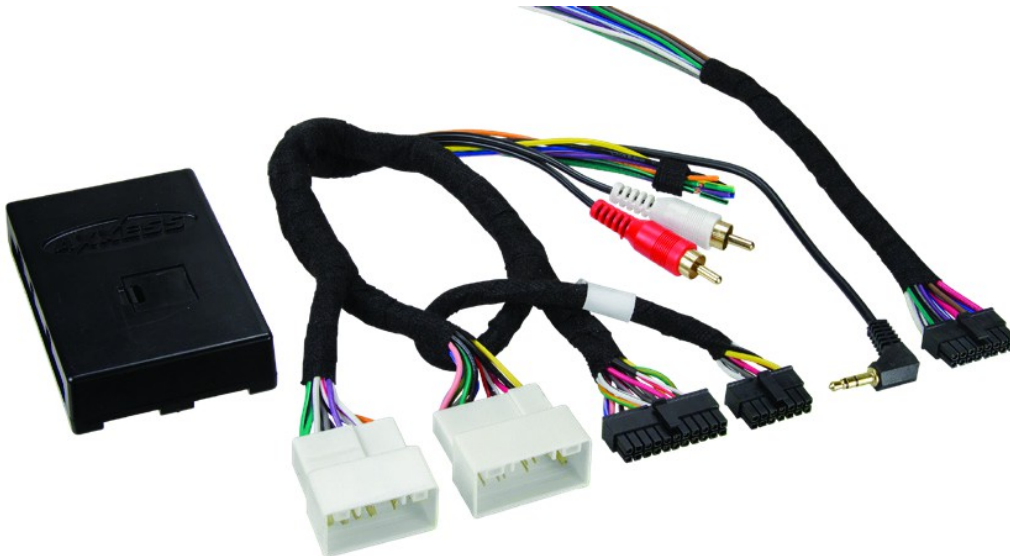
Contents

INTERFACE COMPONENTS

- AX-HYKIA1-SWC interface
- AX-HYKIA1-SWC harness
- 16-pin harness with stripped leads
- Female 3.5mm connector with stripped leads

Hyundai/Kia Data Interface with SWC 2010-2016
Visit AxxessInterfaces.com for more detailed information about the product and up-to-date vehicle specific applications

INTERFACE FEATURES

- Provides NAV outputs (parking brake, reverse, speed sense)
- Retains audio controls on the steering wheel
- Retains BlueLink
- Designed for amplified* and non-amplified models
- Retains balance and fade†
- Micro-B USB updatable

  * Requires the AX-HYKIA-SPDIF (sold separately)

  † Non-amplified models only

APPLICATIONS

HYUNDAI

Elantra * Genesis Coupe * Santa Fe * Santa Fe Sport * * Without NAV	2011-2016 2013-2016 2013-2016 2014-2016	Sonata * Sonata Hybrid * Tucson *	2011-2016 2011-2015 2010-2015

KIA

Optima *	2011-2015	Sorento *	2014-2016
Optima Hybrid *	2011-2016	Soul *	2012-2013
Sorento (with UVO)*	2012-2013	Sportage	2011-2016

TOOLS REQUIRED

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

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.

CONNECTIONS

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

- Connect the Red wire to the accessory wire.
- If the vehicle comes equipped with a factory amplifier, connect the Blue/White wire to the amp turn-on wire.
- 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 (2) wires are only for a multimedia/navigation radio that requires these wires.
- Connect the Green/Purple wire to the reverse 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, Blue/White*, Green, Green/Black, range/White, Purple, Purple/Black
  * Non-amplified models

From the AX-HYKIA1-SWC harness to the aftermarket radio:

- Connect the Black wire to the ground wire.
- Connect the Yellow wire to the battery wire.
- 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 (1) wire is only for a multimedia/navigation radio that requires this wire.

- Connect the Blue/Pink wire to the VSS/speed sense wire.
- Connect the Red and White RCA jacks to the audio AUX-IN jacks of the aftermarket radio.

For models equipped without a factory amplifier only:

- 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.

For models equipped with a factory amplifier only:

- Connect the AX-HYKIA-SPDIF (sold separately) to the 14-pin connector.
- Cut the front speaker wires away from the main 18-pin connector:
  Gray, Gray/Black, White, White/Black

3.5mm jack steering wheel control retention:

- The 3.5mm jack is to be used to retain audio controls on the steering wheel control.
- For the radios listed below: Connect the female 3.5mm connector with stripped leads, to the male 3.5mm SWC jack from the AX-HYKIA1-SWC harness. 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.
- 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 the 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 AX-HYKIA1-SWC harness, into the jack on the aftermarket radio designated for an external steering wheel control interface. Please 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:

- Connect the 16-pin harness with stripped leads, and the AX-HYKIA1-SWC harness, into the interface.
- For models equipped with a factory amplifier, connect the AX-HYKIA-SPDIF (sold separately) to the HYKIA2-SWC interface.

Attention! Do not connect the AX-HYKIA1-SWC harness to the wiring harness in the vehicle just yet. Attention! If retaining steering wheel controls, ensure that the jack/wire is connected to the radio before proceeding. If this step is skipped, the interface will need to be reset for the steering wheel controls to function.

PROGRAMMING

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.

- Start the vehicle.
- Connect the AX-HYKIA1-SWC harness to the wiring harness in 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.
- The L.E.D. will then flash Red up to (21) times indicating which radio is connected to the interface, and then turn it 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 of 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.
- 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.
- Test all functions of the installation for proper operation, before reassembling the dash.
- If the interface fails to function, refer to the Troubleshooting section.
  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.

STEERING WHEEL CONTROL SETTINGS

L.E.D. feedback
The (21) Red L.E.D. flashes represent which brand radio the AX-HYKIA1-SWC is connected to. Each flash represents a different radio manufacturer. For example, if you are installing a JVC radio, the AX-HYKIA1-SWC 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) †	12 flashes – Eclipse (Type 2) †
2 flashes – Kenwood ‡	13 flashes – LG
3 flashes – Clarion (Type 1) †	14 flashes – Parrot **
4 flashes – Sony / Dual	15 flashes – XITE
5 flashes – JVC	16 flashes – Philips
6 flashes – Boss / Jensen / Pioneer	17 flashes – TBD
7 flashes – Alpine *	18 flashes – JBL
8 flashes – Visteon	19 flashes – Insane Audio
9 flashes – Valor	20 flashes – Magnadyne / Axxera
10 flashes – Clarion (Type 2) †	21 flashes – Boss
11 flashes – Boss / Metra OE	

* **Note:** If the AX-HYKIA1-SWC 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 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. Refer to the "Programming Information" document online.

‡ **Note:** If you have a Kenwood radio and the L.E.D. feedback comes back as showing as a JVC radio, change the radio type to a Kenwood. Refer to the "Programming Information" document online.

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

Changing radio type

If the LED flashes do not match the radio you have connected to, you must manually program the AX-HYKIA1-SWC 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 AX-HYKIA1-SWC goes solid.

2. Release the Volume-Down button; the L.E.D. will go out indicating we are now 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 off, 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

Radio legend 1. Eclipse (Type 1) 2. Kenwood 3. Clarion (Type 1) 4. Sony/Dual 5. JVC 6. Boss / Jensen / Pioneer 7. Alpine 8. Visteon 9. Valor 10. Clarion (Type 2) 11. Boss / Metra OE	12. Eclipse (Type 2) 13. LG 14. Parrot 15. XITE 16. Philips 17. TBD 18. JBL 19. Insane Audio 20. Magnadyne / Axxera 21. Boss

Remapping

Once the AX-HYKIA1-SWC 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 AX-HYKIA1-SWC 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, and then release the Volume-Up button. This will tell the AX-HYKIA1-SWC 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 on the steering wheel until the L.E.D. in the AX-HYKIA1-SWC goes out.

Button assignment legend

1. Volume-Up 2. Volume-Down 3. Seek-Up/Next 4. Seek-Down/Prev 5. Source/Mode 6. Mute 7. Preset-Up 8. Preset-Down 9. Power	10. Band 11. Play/Enter 12. PTT (Push to Talk) 13. On-Hook 14. Off-Hook 15. Fan-Up * 16. Fan-Down * 17. Temp-Up * 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 (long button press)
The AX-HYKIA1-SWC has the capability to assign (2) functions to a single button, except VolumeUp 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 the 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	10. Band
2. Not allowed	11. Play/Enter
3. Seek-Up/Next	12. PTT
4. Seek-Down/Prev	13. On-Hook
5. Mode/Source	14. Off-Hook
6. ATT/Mute	15. Fan-Up *
7. Preset-Up	16. Fan-Down *
8. Preset-Down	17. Temp-Up *
9. Power	18. Temp-Down *

TROUBLESHOOTING

Resetting

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

If you are having difficulties with the installation of this product, contact our Tech Support line either by phone at 386-257-1187, or email at **techsupport@metra-autosound.com**. Before doing so, look over the instruction booklet a second time and ensure that the installation was performed exactly as the instruction booklet is stated. Have the vehicle apart and ready to perform troubleshooting steps before contacting Metra/Axxess Tech Support.

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**

AxxessInterfaces.com

Documents / Resources

	AXXESS AX-HYKIA1-SWC Data Radio Interface [pdf] Installation Guide AX-HYKIA1-SWC, Data Radio Interface

References

- 🖱 **Auto Sound Company Inc - Aftermarket Vehicle Accessory Specialists**
- 🅰 **Axxess Integrate - Comprehensive Interface Products for Vehicle Upgrades**
- 🌐 **Installer Institute | Car Audio Installation and Mobile Electronics Education**
- P **Parrot | European leader in professional drones**

Manuals+,