



## INTERFACE COMPONENTS

- AXDIS-GMLN31 interface
- AXDIS-GMLN31 harness
- 16-pin harness with stripped leads
- Female 3.5mm connector w/stripped leads

**APPLICATIONS** (see next page)

## GM Data Interface with SWC 2019-2023

Visit [AxxessInterfaces.com](http://AxxessInterfaces.com) for up-to-date vehicle specific applications.

### INTERFACE FEATURES

- Non-amplified models only
- Provides accessory power (12-volt 10-amp)
- Retains R.A.P. (retained accessory power)
- Provides NAV outputs (parking brake, reverse, speed sense)
- Retains audio controls on the steering wheel
- Rearview camera retention
- Retains balance and fade
- Micro-B USB updatable

### TOOLS REQUIRED

- Wire cutter
- Crimp tool
- Solder gun
- Tape
- Small flat-blade screwdriver
- Connectors (example: butt-connectors, bell caps, etc.)

MetraOnline.com may be used to assist with dash assembly instructions. Simply enter your Year, Make, Model vehicle into the vehicle fit guide and look for the Dash Kit Installation Instructions.

[www.MetraOnline.com](http://www.MetraOnline.com)



Product Info



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**ATTENTION:** With the key out of the ignition, disconnect the negative battery terminal before installing this product. Ensure that all installation connections, especially the air bag indicator lights, are plugged in before reconnecting the battery or cycling the ignition to test this product.  
**NOTE:** Refer also to the instructions included with the aftermarket radio.

## APPLICATIONS

### Chevrolet

Camaro (IOR)*†	2019-2023
Chevy (IOR) †	2019-2021
Colorado (IOR)	2019-2022
Cruze	2019
Equinox (IOR) †	2019-2023
Malibu (IOR) †	2019-2022
Silverado (IOR) †	2019-2021
Sonic	2019-2022

\*No Backup Camera Retention

†For extension, use **AXEXH-GM31**

### Chevrolet (Cont.)

Spark (IOR)	2019-2022
Trax (IOR)	2017-2020
Trax (no RPO)	2021-2022

### GMC

GMC Acadia (IOR)	2020-2022
Canyon (IOR)	2019-2022
Sierra 1500 (IOR) †	2019-2021
Terrain (IOR) †	2019-2022

## CONNECTIONS

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

- Connect the **Red** wire to the accessory wire.
- If the aftermarket radio has an illumination wire, connect the **Orange/White** 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.

*The following (3) 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.
- Connect the **Light Green** wire to the parking brake wire
- Tape off and disregard the following (5) wires, they will not be used in this application: **Blue/White, Green, Green/Black, Purple and Purple/Black.**

### From the AXDIS-GMLN31 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- 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 speaker output.
- Connect the **Yellow** RCA jack into the aftermarket radio's 'Rear Camera' input.

**Note:** The relay attached to the harness is only for audible turn signal clicks. No extra steps are required to retain this feature, so leave the relay as-is.

Continue to 3.5mm jack steering wheel control retention

### 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 included *female 3.5mm connector with stripped leads*, to the male 3.5mm SWC jack from the **AXDIS-GMLN31 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. 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 AXSWCH-PAR (sold separately), and then connect the 4-pin connector from the AXSWCH-PAR into the radio.
- **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 **AXDIS-GMLN31 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.

## INSTALLING THE AXDIS-GMLN31

### With the Key in the Off Position:

- Connect the 16-pin harness with stripped leads, and the **AXDIS-GMLN31 harness**, into the interface.

**Attention!** Do not connect the **AXDIS-GMLN31 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 THE AXDIS-GMLN31

For the steps below, the LED located inside the interface can only be seen while active. The interface does not need to be opened to see the LED

1. Start the vehicle.
2. Connect the **AXDIS-GMLN31 harness** to the wiring harness in the vehicle.
3. The LED will initially turn on solid **Green**, then turn off for a few seconds while it auto detects the radio installed.
4. The LED will then flash **Red** up to (24) 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 **LED Feedback** section for more information.
5. After a couple seconds the LED 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.
6. Once the vehicle has been auto detected by the interface, the LED will turn on solid **Green**, and the radio will come back on, indicating programming was successful.
7. Test all functions of the installation for proper operation, before reassembling the dash. If the interface fails to function, refer to Resetting the **AXDIS-GMLN31**.

**Note:** The LED 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

## LED Feedback:

The (24) **Red LED** flashes represent a different radio manufacturer for the **AXDIS-GMLN31 SWC interface** to detect.

For example, if you are installing a **JVC** radio, the **AXDIS-GMLN30 interface** will flash **Red** (5) times, then stop.

At right is the **LED Feedback Legend**, which indicates the flash count of the radio manufacturer.

## LED Feedback Legend

Flash Count	Radio
1	Eclipse (type 1) †
2	Kenwood ‡
3	Clarion (type 1) †
4	Sony / Dual
5	JVC
6	Pioneer / Jensen
7	Alpine *
8	Visteon
9	Valor
10	Clarion (type 2) †
11	Metra OE
12	Eclipse (type 2) †

Flash Count	Radio
13	LG
14	Parrot **
15	XITE
16	Philips
17	TBD
18	JBL
19	Insane
20	Magnadyne
21	Boss
22	Axxera
23	Axxerra (type 2)
24	Alpine (type 2)

## KEYNOTES

\*If the **AXDIS-GMLN31** flashes **RED** (7) times, and an **Alpine** radio is not installed, that means there is an open connection not accounted for. Verify that the 3.5mm jack is connected to the correct steering wheel jack/wire in the radio.

\*\* The **AXSWCH-PAR** is required (sold separately). Also, the software in the radio must be rev. 2.1.4 or higher.

† If a **Clarion** or **Eclipse** radio is installed and the steering wheel controls do not function, change the radio to **Clarion (type 2)** or **Eclipse (type 2)** respectively. If the steering wheel controls still do not function, refer to the **Changing Radio Type** document available at [axessinterfaces.com](http://axessinterfaces.com).

‡ If a **Kenwood** radio is installed and the LED feedback flashes (5) times instead of (2), manually change the radio type to **Kenwood**. To do this, refer to the **Changing Radio Type** document on next page, also available at [axessinterfaces.com](http://axessinterfaces.com).

*Continued on the next page*

## STEERING WHEEL CONTROL SETTINGS (CONT)

**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, you must manually program the **AXDIS-GMLN31** 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 LED in the **AXDIS-GMLN31** goes solid.
2. Release the **Volume-Down** button; the LED 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 LED 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 LED goes solid. The LED will remain on for about (3) seconds while it stores the new radio information.
6. Once the LED 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

Flash Count Radio Legend		
1. Eclipse (type 1)	9. Valor	17. TBD
2. Kenwood	10. Clarion (type 2)	18. JBL
3. Clarion (type 1)	11. Metra OE	19. Insane
4. Sony / Dual	12. Eclipse (type 2)	20. Magnadyne
5. JVC	13. LG	21. Boss
6. Pioneer / Jensen	14. Parrot	22. Axxera
7. Alpine	15. XITE	23. Axxerra (type 2)
8. Visteon	16. Philips	24. Alpine (type 2)

### Remapping the Steering Wheel Control Buttons

Let's say you have **AXDIS-GMLN31** initialized and you want to change the button assignment for the steering wheel control buttons. For example, you would like **Seek-Up** to become Mute. Follow the steps below to remap the steering wheel control buttons:

1. Ensure the **AXDIS-GMLN31** is visible so you can see the LED 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 LED goes solid.
3. Release the **Volume-Up** button, the LED 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.

*Continued on the next page*

## STEERING WHEEL CONTROL SETTINGS *(CONT)*

**Note:** If the next function on the list is not on the steering wheel, press the **Volume-Up** button for (1) second until the LED comes on, and then release the **Volume-Up** button. This will tell the **AXDIS-GMLN31** that this function is not available and it will move on to the next function.

- To complete the remapping process, press and hold the **Volume-Up** button on the steering wheel until the LED in the **AXDIS-GMLN31** goes out.

### Button Assignment Legend

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

\* Not applicable in this application

**Note:** Not all radios will have all of 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 **AXDIS-GMLN31** 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 your liking.

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

- Turn on the ignition but do not start the vehicle.
- Press and hold down the steering wheel control button that you want to assign a long press function to for about (10) seconds, or until the LED flashes rapidly. At this point release the button; the LED will then go solid.
- 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 LED will flash rapidly while the **Volume-Up** button is being pressed, and then go back to a solid LED once released. Go 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 LED will go out.
- To store the long press button in memory, press the button that you assigned a long press button to (the button held down in Step 2). The LED will now go off indicating the new information has been stored.

**Note:** These steps must be repeated for each button you would like to assign a dual purpose feature to. To reset a button back to its default state, repeat Step 1, and then press the **Volume-Down** button. The LED will go out, and the long press mapping for that button will be erased.



# AXDIS-GMLN31

INSTALLATION INSTRUCTIONS



## Dual Assignment Legend

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

\* Not applicable in this application

## TROUBLESHOOTING

### Resetting the AXDIS-GMLN31

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 “Programming the Interface” from this point.

Having difficulties? We're here to help.



Contact our Tech Support line at:

**386-257-1187**



Or via email at:

[techsupport@metra-autosound.com](mailto:techsupport@metra-autosound.com)

### Tech Support Hours (Eastern Standard Time)

Monday - Friday: 9:00 AM - 7:00 PM

Saturday: 10:00 AM - 5:00 PM

Sunday: 10:00 AM - 4:00 PM



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