GM **Data Interface** 2012-2016

INTRODUCTION

The AX-ADGM04 harness is designed for, and must be used with, the AX-ADBOX1 or AX-ADBOX2 interface (sold separately). Please refer to the AX-ADBOX1 or AX-ADBOX2 for the 16-pin connector with stripped leads.

INTERFACE FEATURES

- Provides accessory power (12-volt 10-amp)
- Maintains the retained accessory power (R.A.P.) feature
- Provides NAV outputs (parking brake, reverse, speed sense)
- Retains chimes

  † To retain fade in digital amplified models, use the AX-ADBOX1

- Retains OnStar / OE Bluetooth
- Adjustable OnStar level
- Retains RSE (rear seat entertainment)
- Retains satellite radio
- Retains the factory AUX-IN jack

- Pre-wired ASWC-1 harness (ASWC-1 sold separately)
- Can be used in non-amplified, or analog/ digital amplified models
- Retains balance and fade†
- Micro-B USB updatable

INTERFACE COMPONENTS

- AX-ADGM04 harness
- 4-pin to 4-pin resistor pad harness

APPLICATIONS

See inside front cover

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TOOLS REQUIRED

- Crimping tool and connectors, or solder gun, solder, and heat shrink • Small flat-blade screwdriver • Tape • Wire cutter • Zip ties

CAUTION! All accessories, switches, climate controls panels, and especially air bag indicator lights must be connected before cycling the ignition. Also, do not remove the factory radio with the key in the on position, or while the vehicle is running.

CHEVROLET

Avalanche † *	2012-2013
Express †	2013-2015
Malibu (with monochrome display)	2013-2015
Malibu Limited (with monochrome display)	2016

CHEVROLET (CONT)

Silverado 2500 / 3500 † *	2014
Silverado † *	2012-2013
Suburban † **	2012-2014
Tahoe † **	2012-2014
Trax	2015-2016

GMC

Savana †	2013-2015
Sierra 2500 / 3500 † *	2014
Sierra † *	2012-2013
Yukon / Yukon XL † **	2012-2014

*   These vehicles have a digital amp option. Please reference the "Service Parts Identification" sticker located in the glove box for the RPO code Y91. If Y91 is present, then the vehicle is equipped with a digital amplifier.

** These vehicles have a digital amp option. Please reference the "Service Parts Identification" sticker located in the glove box for the RPO code Y91, STZ, or UQS. If Y91, STZ, or UQS is present, then the vehicle is equipped with a digital amplifier.

†   Only for models equipped with NAV. If not equipped with NAV, use the AX-ADGM01.

Attention! This interface will work with models that are either non-amplified, analog amplified, or digital amplified. Please follow the instructions carefully for your model vehicle. Failure to do so will result in either no sound, or low sound. If you are unsure if your vehicle is factory amplified or not, please contact your local dealership.

For models _without_ an amplifier:

From the 16-pin harness with stripped leads to the aftermarket radio (harness included with interface):

- Connect the **Red** wire to the accessory wire.

    Note: If installing either an ASWC-1 or AX-LCD (both sold separately), connect the (2) **Red** wires on the AX-ADGM04 harness as well.

- Connect the **Blue/White** wire to the power antenna wire.

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

- 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 OnStar 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 (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 (4) wires, they will not be used in this application: **Green**, **Green/Black**, **Purple**, **Purple/Black**

From the AX-ADGM04 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.

- Connect the **Yellow** wire to the battery wire.

- If installing either an ASWC-1 or AX-LCD (both sold separately), connect the (2) **Red** wires to accessory power.

- Cut off the resistors from the **Green**, **Green/Black**, **Purple**, and **Purple/Black** wires below the heat shrink.

- 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.

- Ensure the (2) 4-pin Molex connectors are connected together.

    Note: The 4-pin to 4-pin resistor pad harness will not be used in this application.

- The **Black/Yellow** wire is used for OnStar level adjustment for models that do not come equipped with steering wheel controls. Refer to the OnStar level Adjustment section for further instructions.

- Connect the **Red** and **White** RCA jacks to the audio AUX-IN jacks from the aftermarket radio.

- Disregard the **Pink** wire with a red connector, it will not be used in this application.

Note: The relay attached to the AX-ADGM04 harness is only for audible turn signal clicks. No extra steps are required to retain this feature, so leave the relay as-is.

Attention! This interface will work with models that are either non-amplified, analog amplified, or digital amplified. Please follow the instructions carefully for your model vehicle. Failure to do so will result in either no sound, or low sound. If you are unsure if your vehicle is factory amplified or not, please contact your local dealership.

For models _with_ an analog amplifier:

From the 16-pin harness with stripped leads to the aftermarket radio (harness included with interface):

- Connect the **Red** wire to the accessory wire.

    Note: If installing either an ASWC-1 or AX-LCD (both sold separately), connect the (2) **Red** wires on the AX-ADGM04 harness as well.

- Connect the **Blue/White** wire to the amplifier turn on wire. This wire must be connected to hear sound from the factory amplifier.

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

- 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 OnStar 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 (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 (4) wires, they will not be used in this application: **Green**, **Green/Black**, **Purple**, **Purple/Black**

From the AX-ADGM04 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.

- Connect the **Yellow** wire to the battery wire.

- If installing either an ASWC-1 or AX-LCD (both sold separately), connect the (2) **Red** wires to accessory power.

- 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.

- Disconnect the (2) 4-pin Molex connectors, then attach the 4-pin to 4-pin resistor pad harness.

- The **Black/Yellow** wire is used for OnStar level adjustment for models that do not come equipped with steering wheel controls. Refer to the OnStar level Adjustment section for further instructions.

- Connect the **Red** and **White** RCA jacks to the audio AUX-IN jacks from the aftermarket radio.

- Disregard the **Pink** wire with a red connector, it will not be used in this application.

Note: The relay attached to the AX-ADGM04 harness is only for audible turn signal clicks. No extra steps are required to retain this feature, so leave the relay as-is.

CONNECTIONS TO BE MADE

Attention! This interface will work with models that are either non-amplified, analog amplified, or digital amplified. Please follow the instructions carefully for your model vehicle. Failure to do so will result in either no sound, or low sound. If you are unsure if your vehicle is factory amplified or not, please contact your local dealership.

For models *with* a digital amplifier:

From the 16-pin harness with stripped leads to the aftermarket radio (harness included with interface):

- Connect the **Red** wire to the accessory wire.

  Note: If installing either an ASWC-1 or AX-LCD (both sold separately), connect the (2) **Red** wires on the AX-ADGM04 harness as well.

- Connect the **Blue/White** wire to the amplifier turn on wire. This wire must be connected to hear sound from the factory amplifier.
- If the aftermarket radio has an illumination wire, connect the **Orange/White** wire to it.
- 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 OnStar 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.
- 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 (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

From the AX-ADGM04 harness to the aftermarket radio:

- Connect the **Black** wire to the ground wire.
- Connect the **Yellow** wire to the battery wire.
- If installing either an ASWC-1 or AX-LCD (both sold separately), connect the (2) **Red** wires to accessory power.
- Ensure the (2) 4-pin Molex connectors are connected together.

  Note: The 4-pin to 4-pin resistor pad harness will not be used in this application.

- The **Black/Yellow** wire is used for OnStar level adjustment for models that do not come equipped with steering wheel controls. Refer to the OnStar level Adjustment section for further instructions.
- Connect the **Red** and **White** RCA jacks to the audio AUX-IN jacks from the aftermarket radio.
- Tape off and disregard the following (5) wires, they will not be used in this application: **Green**, **Green/Black**, **Pink** (with a **red** connector), **Purple**, **Purple/Black**

Note: The relay attached to the AX-ADGM04 harness is only for audible turn signal clicks. No extra steps are required to retain this feature, so leave the relay as-is.

12-pin pre-wired ASWC-1 harness:

This harness is to be used along with the optional ASWC-1 (sold separately) to retain steering wheel audio controls. If the ASWC-1 is not being used, disregard this harness. If the ASWC-1 will be used, please refer to the ASWC-1 instructions for radio connections and programming. Disregard the harness that comes with the ASWC-1.

DIN jack:

The DIN jack is to be used with the optional AX-LCD (sold separately) to retain satellite radio information for models that do not retain this information in the driver's information center. The AX-LCD can also be used to view which factory sources are active; rear seat entertainment, satellite radio, AUX-IN.

Attention! The AX-ADGM04 will work with both the AX-ADBOX1 and AX-ADBOX2 interfaces, but programming will be different. Refer to the proper page for whichever interface is being used. Also note, the programming instructions for the AX-ADBOX2 reflect gen. 2. If installing a gen. 1 AX-ADBOX2, refer to the AX-ADBOX1 programming instructions. Gen. 2 interfaces can be distinguished by a blue reset button between the (2) connectors.

AX-ADBOX1

Installing the AX-ADGM04

With the key in the off position:

- Connect the 16-pin harness with stripped leads, and the AX-ADGM04 harness, into the interface.
- Connect the AX-ADGM04 harness to the wiring harness in the vehicle.
- If an ASWC-1 (sold separately) will be used, do not connect it until the AX-ADGM04 is programmed and fully functional.

Programming the AX-ADGM04

Attention! If the interface ever loses power, the following steps will need to be performed again. Please ensure that the owner of the vehicle knows this.

- Turn the key (or push-to-start button) to the ignition position and wait until the radio comes on.

  Note: If the radio doesn't not come on within 60 seconds, turn the key to the off position, disconnect the interface, check all connections, reconnect the interface, and then try again.

- Turn the key (or push-to-start button) to the off position, then to the accessory position. Test all functions of the installation for proper operation, before reassembling the dash.

  Note: To use fade in digital amplified models, ensure the radio is turned up 3/4 of the way.

Attention! The AX-ADGM04 will work with both the AX-ADBOX1 and AX-ADBOX2 interfaces, but programming will be different. Refer to the proper page for whichever interface is being used. Also note, the programming instructions for the AX-ADBOX2 reflect gen. 2. If installing a gen. 1 AX-ADBOX2, refer to the AX-ADBOX1 programming instructions. Gen. 2 interfaces can be distinguished by a blue reset button between the (2) connectors.

AX-ADBOX2

Installing the AX-ADGM04

With the key in the off position:

- Connect the 16-pin harness with stripped leads, and the AX-ADGM04 harness, into the interface.
- If an ASWC-1 (sold separately) will be used, do not connect it until the AX-ADGM04 is programmed and fully functional.

Attention! Do not connect the AX-ADGM04 harness to the wiring harness in the vehicle just yet.

Programming the AX-ADGM04

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.

1. Start the vehicle.
2. Connect the AX-ADGM04 harness to the wiring harness in the vehicle. The L.E.D. will initially be **Green** to indicate the interface is powered.

3. After a few seconds the L.E.D. will turn on solid Red while the interface automatically programs to the vehicle. The radio will shut off at this point. This process should take 5 to 30 seconds.
4. After the interface is programmed, the L.E.D. will turn on solid Green, and the radio will come back on, indicating programming was successful.
5. Test all functions of the installation for proper operation, before reassembling the dash.
6. If the interface fails to function, refer to "Troubleshooting", "Resetting the interface".

Troubleshooting

Resetting the interface

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, then let go to reset the interface.
3. Refer to "Programming the AX-ADGM04 Interface" from this point.

Continue to Adjusting the AX-ADGM04

Audio level adjustment (digital amplified models only):

- With the vehicle and radio turned on, turn the volume up 3/4 of the way.

- With a small flat-blade screwdriver, adjust the potentiometer clockwise to raise the audio level; counterclockwise to lower the audio level.

- Once at a desired level, audio level adjustment is complete.

Chime level adjustment:

- With the vehicle on, turn it off and leave the keys in ignition. Open the driver's door; chimes will be heard.

- Wait 10 seconds, and then with a small screwdriver, turn the potentiometer clockwise to raise the chime level; counterclockwise to lower the chime level.

- When the chime is at a desired level, remove the keys from the ignition. This will lock the chime volume at its current level.

OnStar level adjustment:

- Press the OnStar button to activate it.

- While OnStar is speaking, press the VOLUME UP or VOLUME DOWN button on the steering wheel to raise or lower the OnStar level.

- If the vehicle does not come equipped with steering wheel controls, locate the **Black/Yellow** wire on the AX-ADGM04 harness.

- While OnStar is speaking, tap the **Black/Yellow** wire to ground. Once the OnStar level is set, it will stay at that level until the **Black/Yellow** wire is tapped to ground again.

AUX-IN, RSE and satellite radio:

- If the vehicle is equipped with AUX-IN, rear seat entertainment, or satellite radio, the AX-ADGM04 can retain these features.

- Change the source of the radio to AUX-IN; satellite radio will start playing.

- The optional AX-LCD (sold separately) will display the satellite radio information.

- **Listed below are the functions of the AX-LCD while using satellite radio:**

    ▲ Arrow Up - Channel up

    ▼ Arrow Down - Channel down

    ✓ Enter - Selects current item on the screen

    ↻ Return/ESC - Exits to the previous screen

- To access advanced features of the satellite radio, press and hold the SOURCE button on the steering wheel for 3 seconds.

    Note: *If the vehicle is not equipped with steering wheel controls, the AX-LCD will be required for this feature.*

    Continued on the next page

- Listed below are the functions of the steering wheel control buttons while accessing the advanced features:

    - SEEK UP - Scrolls menu up.

    - SEEK DOWN - Scrolls menu down.

    - VOLUME UP- Enter

- Listed below are the advanced menu options:

    - Show Text - Exits menu.

    - Set Tuning Mode - Allows the user to select tuning by either a preset, or a channel.

    - Set Preset - Allows the user to program presets.

    - Set Display - Allows the user to choose which satellite radio information should be displayed.

    Note: *If using the AX-LCD, SEEK UP controls the top line on the display; SEEK DOWN the bottom line.*

    - Set Satellite Radio Text Mode - Allows the user to set the display length of the satellite radio information. Options are; On, Off, or 5 seconds (default is 5 seconds).

- To access AUX-IN or rear seat entertainment, press and hold the SOURCE button on the steering wheel for 2 seconds. This will switch to the next source available. Each time the SOURCE button is pressed for 2 seconds the source will change. The sequence of sources are SAT/RSE/AUX-IN. The AX-LCD will provide a visual confirmation of which source is active.

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

mobile electronics certification program