Aerpro®
First Choice

AMHRA2K

INTEGRATED MULTIMEDIA DISPLAY FOR RAM TRUCKS

USER GUIDE

Works with
Apple CarPlay

androidauto

dab+

Bluetooth®

HDMI®
HIGH-DEFINITION MULTIMEDIA INTERFACE

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AERA10D

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GETTING **STARTED**

Information Bar Source/Info Time

HOME Button Power ON/OFF Swipe Up To Open TABS

POWER **UP!**

With vehicle ignition in the ON or ACC position, Press and Hold the knob for 2 seconds to power ON/OFF.

The source will automatically default to the last source used prior to powering down.

You can adjust the audio volume at start-up in **Sound Settings** on page 34.

The **Information Bar** is located at the top of the screen. Depending on the SOURCE, it will provide information or content sensitive controls. Also, displays temperature, time, phone info and may contain BACK ARROW and EXIT buttons.

Customizable **TABS** can be accessed by swiping the up arrow ▲ at the bottom of the screen. Tabs give direct access to sources/settings and can be customized in **Settings > Tabs** on page 8.
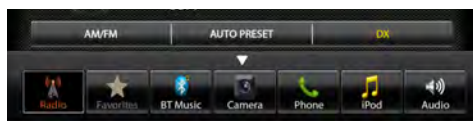
The active Tab will be highlighted and sources that are not available will be dimmed out. Once the Tabs are opened, the will auto-close after 5 seconds or press the down arrow ▼ to close the tabs.

AERA10D

SELECTING A **SOURCE**

To select a source, press the **HOME** button.

The HOME MENU displays all Sources, along with Settings, Audio, Display and Camera options.

SOURCES that are not currently available are grayed out.

QUICK **TIP**

There are multiple ways to scroll...
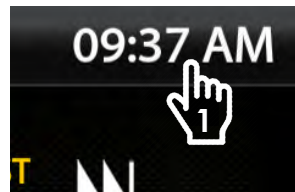**Swiping Up/Down, Up/Down Arrows**

SETTING THE **TIME**

1) Touch and Hold the Time Display on the Information Bar for 2 seconds to access the clock settings.
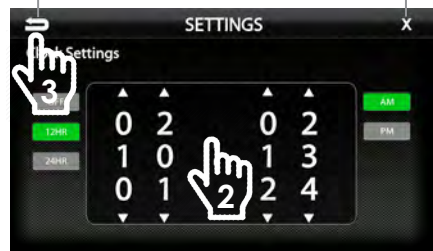
2) Swipe or click arrows to set time and format.

3) Touch the **BACK ARROW** or **EXIT** to save and exit.

Back Arrow   Exit

CUSTOMIZING THE **TABS**

HOME BUTTON > SETTINGS > TABS

The Tabs can be configured to provide quick access to your favorite sources or settings. The steps below show changing Favorites to Climate. Vehicle Info is another option to consider adding to the Tabs.

To Program a Tab:

1) Press the HOME button and select SETTINGS

2) From the SETTINGS menu, select TABS [1]

3) Select a Tab postition (1–7) on the bottom row. [2]

4) Select the desired source or setting from the options on the top rows. [3]

BACK   EXIT

Now Favorites in position 2 is replaced with Climate. Continue customizing or touch EXIT (X) to return to current source or the BACK arrow to return to SETTINGS.

CLIMATE **CONTROL**
HOME BUTTON > CLIMATE

If your RAM is equipped with Automatic Climate Controls, you can view and adjust the climate control settings from the touchscreen display as well as operate the heated/cooled seats and heated steering wheel, if equipped. The factory climate controls located below the display continues to function, and any changes made with the factory controls are reflected on the screen.

All climate control functions are explained in your RAM Owner's Manual if you need more information.

Current settings will be highlighted. You can change the highlight color in HOME > Settings > Illumination on Page 31.
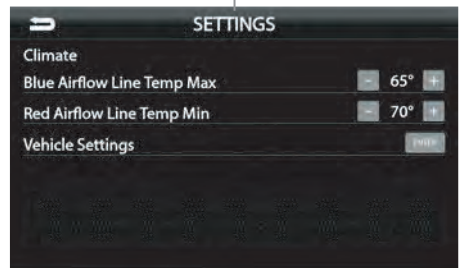
Selecting **Climate Settings** will allow you to personalize the climate display by entering the temperature values that indicate hot, cold and in between. The settings shown above will display Blue Airflow up to 65°, and White Airflow from 66°-69° and Red Airflow from 70° and up. If no White Airflow is preferred, set the temperatures 1° apart and the display will switch from Blue to Red only.

Vehicle **Info**
HOME BUTTON > Vehicle Info

Selecting Vehicle Info from the HOME Menu or Tabs will display information and status for various vehicle systems.
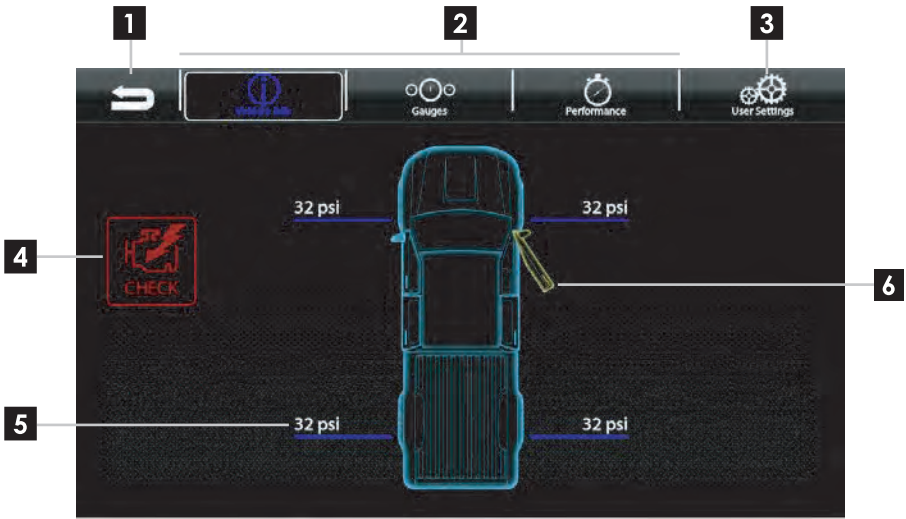
1   **BACK** - Return to the previous screen.

2   **Vehicle Info Menu** - Provides access to various vehicle display modes. The current mode will be highlighted.

3   **User Settings** - Access tire pressure, camera and GPS options.

4   **Malfunction Indicator** - Displays current malfunction indicators. Touch the indicator for more information.

5   **Tire Pressure** - Provides tire pressure and low pressure warnings. Low pressure warnings can be customized in User Settings.

6   **Door Closed/Opened** - Indicates doors and hood status.

Vehicle Info **> Gauges**

Selecting Gauges from the Vehicle Info Menu will display eight gauges that can be user defined and saved.

To Change the Gauge Type:
Lightly tapping any gauge cycles through the available gauge types.

Saving a Gauge Setup:
Press and hold either of the two Preset buttons in the bottom corners to save and later recall a gauge combination.

NOTE: To change the color of the gauges, see Illumination Page 37

NOTE: To change the Units used for the gauges, see Vehicle Settings on Page 14.

Available Gauge Types:
Battery Voltage
Oil Temperature
Oil Pressure
Transmission Temperature
Coolant Temperature
Fuel Pressure
Intake Air Temperature
Engine Calculated Load
Barometric Pressure
Intake Manifold
Fuel Pressure
Absolute Load
Ignition Timing
Engine Run Time

Vehicle Info **> Performance**

Selecting Performance from the Vehicle Info Menu will display a digital speedometer and tachomoter along with performance measurement options.

Best 0–60 MPH / Best ¼ Mile / Best 60–0
Whenever a performance measurement is achieved, the results will be displayed. Use the left and right arrows to recall Best measurements.

RESET
The RESET button will reset both Best and Last results.

Last 0–60 MPH / Last ¼ Mile / Last 60–0
Use the left and right arrows to recall the Last measurement for each option.

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Vehicle Info **> User Settings**

1 **Low Tire Pressure Threshold [0–40 PSI]**
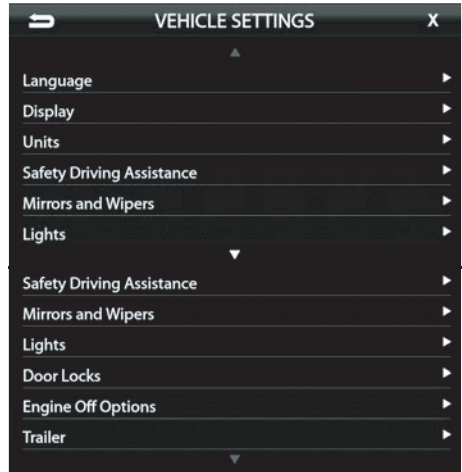Sets the threshold, in PSI, for the low tire pressure warning shown on the Vehicle Info display.

Note: This does not change the factory low tire pressure warning shown in the instrument cluster.

Vehicle **Settings**

HOME BUTTON > Settings > Vehicle Settings

The Vehicle Settings are all the factory vehicle settings retained from the factory radio. Since these are factory settings, these are all explained in detail in the uConnect section of the RAM Owner's Manual.

NOTE: The listed settings are based on how the vehicle is equipped. For example, Trailer will not be present if the truck is not equipped with a factory trailer brake.
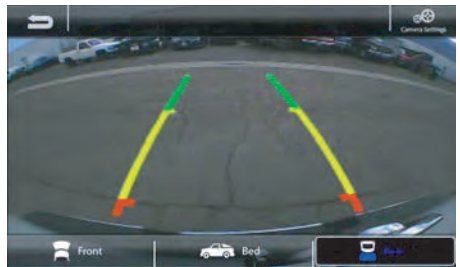
Factory **Cameras**

If equipped, the factory rear camera will continue to automatically display when in reverse and can also be activated at any time by selecting Camera from the HOME Menu or Tabs.

When a camera is manually activated, there will be menu bars at the top and bottom of the display. The top menu bar contains the BACK arrow to return to the previous screen and selecting the Camera Settings button will open up the Camera Settings menu.

The bottom menu bar displays avaiable cameras. Touch any available camera to switch camera views.

NOTE: The top and bottom menu bars will auto-hide after five seconds, and tapping the screen will re-display the menu bars.

Cargo Camera: If equipped, the factory cargo camera can be activated at any time by selecting Camera from the HOME Menu or Tabs, then selecting Bed.

Optional **Cameras**

HOME BUTTON > Camera

In addition to retaining the factory camera(s), AERA10D can support four cameraswith various trigger options. Cameras can be activated/deactivated using vehicle speed turn signalsand gear position.


Camera Park Assist usesvehicle speeda nd steering wheel position to activate a Front camera when parking.

Camera Park Assist

Camera Settings
Selecting Camera Settings from the top menu bar will display all enabled cameras. Camera triggers can be shut off using the Trigger selection. When a Trigger is set to OFF, the camera will only activate manually

For example, if the Rear camera trigger is set to OFF, the Rear camera will not automatically turn on when the vehicle is put in reverse
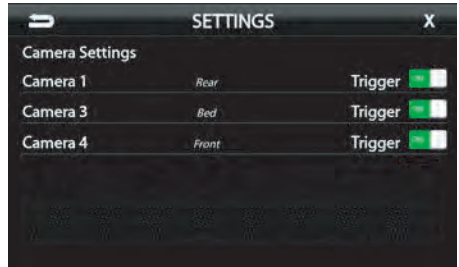
Media **Hub**
HOME BUTTON > USB

As part of the AMHRA2K Integration Kit, an upgraded media hub is installed in the center console in place of the factory USB panel. The media hub includes 2 USB ports, HDMI and a 3.5mm AUX A/V port.

Apple CarPlaya nd Android Auto require ad edicated USB port. Only one of USBp orts inside the center console will function for Apple Carplay/Android Auto, and the other USBp ort can be used for USB thumbd rivesa nd charging only.

To determine which USB port is used for Apple CarPlaya nd Android Auto, plug an Apple or Androidd evice into one of the USBp orts. The Apple CarPlay or Android Auto application will automatically launch when the device isp lugged into the correct USB port.

AM/FM **RADIO**

Press the **HOME BUTTON > Radio** to select the Radio

1 **Station Presets** - To assign a preset, go to the desired station, and press and hold a preset location until the preset button highlights and station frequency appears. A total of 18 FM and 12 AM stations can be stored in memory.

2 **AM/FM** - Press to cycle through AM/FM presets (FM1-FM2-FM3-AM1-AM2)

3 **PTY Program Type** - Indicates radio station type.

4 **Tune/Seek Down** - Press and release to Tune Down. Press and hold to Seek the next available radio station.

5 **Station Display** - Displays current frequency.

6 **ST Indicator** - Indicates when the current radio station is in Stereo.

7 **Tune/Seek Up** - Press and release to Tune Up. Press and hold to Seek the next available radio station.

8 **Preset Bank** - Indicates current preset bank.

9 **RT Info**- Station/title/artist information.

10 **DX/LOC** - Changes the radio tuner sensitivity. Touch to toggle between Distant (DX) and Local (LOC).

11 **Auto Preset** - Touch to automatically set the 6 presets with current location radio stations.

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Bluetooth **PHONE**

Press the **HOME BUTTON > Phone** to select the Phone

1 **Number Pad** - Touch to launch the number pad for dialing phone numbers.

2 **Speaker/Phone** - Switches phone calls between the car speakers and the phone handset.

3 **Clear** - Clear/delete last number entered.

4 **Call/Answer** - Dials the number entered on the phone or on the number pad. Answers an incoming call.

5 **End/Decline** - Press to end an active call or decline an incoming call.

6 **Device Info** - Displays the name of the currently paired device, signal strength and battery status.

7 **Favorites** - Customizable list of favorite contacts.

8 **Contacts** - List of contacts from the paired phone. Not supported by all phones.

9 **Settings** - List of devices and settings. Add or Delete devices.

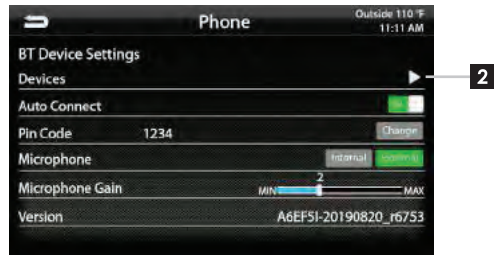**10** **Call Log** - Recent Dialed, Received and Missed calls.

Bluetooth **PHONE**

Pairing a Device

1 Select **Settings** from the Phone main menu to go to BT Device Settings.

2 Select **Devices ▶** on the BT Device settings page.

Place your device in Discoverable Mode.

3 Select **ADD** on the Devices page.

4 Select your device from the list.

NOTE!
If your device does not appear in the device list, confirm it is discoverable and select Retry

5 Select **Connect** to initiate pairing.

Bluetooth **PHONE**

6 Select **Pair** when prompted.

Confirm the Key Code on device and select Pair on the device.

If prompted, select Allow to share contacts.

6

BT Device Settings
Once a device is paired and connected, settings can be set on the BT Device Settings page.

Devices ▶
Access list of all devices in memory. Connect/Add/Delete devices.

Auto Connect [ON/OFF]
Set to ON if you want the device to automatically connect when the system is turned on.

Pin Code [CHANGE]
Change the pin code for Bluetooth connection. The default pin code is "1234".

Microphone [Internal/External]
Set to External if external microphone is installed. Set to Internal to use the microphone located on the front of the display.

Microphone Gain [0–6]
Adjusts the volume (sensitivity) of the microphone when using hands-free phone.

Bluetooth **PHONE**

Contacts
While a device is paired, Contacts can be accessed by selecting Contacts from the Phone main menu. It may take several minutes to load all contacts. When a contact is selected from the list, all associated numbers (Home/Work/Mobile) will be displayed on the left side of the screen. Touch the number you want to dial.

To add a contact number to the Favorites list, touch **FAVORITES** next to the contact phone number and it will be added to your Favorites list.

The Favorites list can be accessed from the Phone main menu.

To **Search** your contact list, select the keyboard icon on the Information Bar.

Search Contacts

Call Log
The Call Log lists recently Dialed, Received and Missed calls. Touch the contact or phone number to dial a number.

Bluetooth **MUSIC**

Press the **HOME BUTTON > BT Music** to select the BT Music source

1 **Next Track/Program** - Touch to advance to the next track/program.

2 **Play/Pause** - Touch to play or pause the audio.

3 **Previous Track/Program** - Touch once to restart current track; touch again for previous track.

4 **Song/Program Information** - Displays information for the current track.

DAB+ Digital Radio

DAB (which stands for Digital Audio Broadcasting) is a radio industry standard with broadcast channels across Australia using a digital signal. DAB is generally more efficient in it's use of the spectrum than conventional analogue radio signals, thus providing a high quality audio experience and minimising dropouts. With the additional use of service following, you're able to listen to the radio stations you love over multiple service areas, ideal for long journeys.


Press the **HOME BUTTON > DAB+** to select the DAB+ radio source.

1 **Channel Presets** - To assign a preset, go to desired channel, press and hold a preset location until preset button highlights and channel name appears. A total of 18 channels can be stored in memory.

2 **Channel Down/Up** - Touch to go to previous channel / advance to next channel. Touching and holding either button will rapidly browse through the channels.

3 **DAB Radio Info** - Displays current channel category, channel number and preset bank number.

4 **Channel Info-** Displays channel name, song/content info.

5 **Settings -** Select to edit features and functions of the DAB operation.

6 **Menu Quick Select** - Allows for quick navigation to other app's (i.e. reverse camera)

7 **Search** - Touch to display search of DAB channels/program type or ensembles.

DAB+ Digital Radio

Ensembles
Entering the search function will display a list of available local and national DAB ensembles within range of the Heigh10 unit. Use the arrows to navigate the list, and touch the screen to select the desired ensemble.

Return to DAB main screen
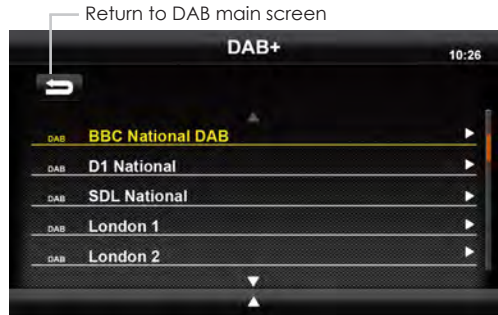
Channels
When entering a DAB ensemble, you will view a range of DAB channels. Use the arrows to navigate the list, and touch the screen to select the desired channel.

Settings
Entering the settings tab enables you to switch options involving FM to DAB and DAB to DAB Linking to ensure a seamless DAB connection whilst travelling. It also provides an option for 'Antenna Power' if the vehicle features a powered DAB antenna.

Apple **CarPlay**®

Set up Apple CarPlay
You can use Apple CarPlay to get directions, make calls, send and receive text messages, and more.

You need an iPhone 5 or later to use Apple CarPlay. Also, make sure that you're in an area that supports Apple CarPlay and that Siri is on. To turn on Siri on your phone, go to Settings > Siri & Search.

With the your vehicle running, plug your iPhone into the Apple CarPlay USB port. Apple CarPlay will launch automatically.

If your iPhone is already plugged into the USB, press the **HOME BUTTON > Apple CarPlay** to launch Apple CarPlay.

NOTE: If Apple CarPlay will not launch, see Troubleshooting.

The display will show available apps. Only apps that are supported by Apple CarPlay will appear.

To add, remove, or customize the order that the apps are in, follow these steps on your iOS device:

1. Go to Settings > General, and tap CarPlay.

2. Select UN1880.

3. Select Customize.

4. Use the add or delete icons to add or remove apps. Tap and drag an app to change the icon order.
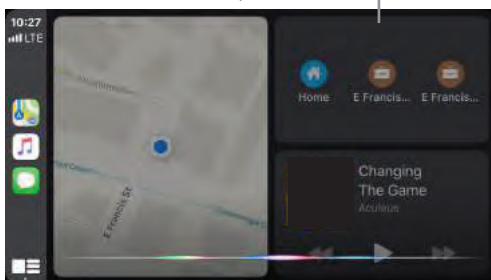
To exit Apple CarPlay, press the Main Menu icon.
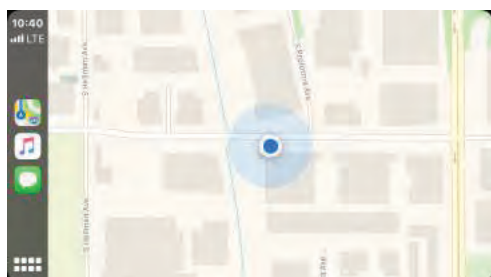
CarPlay Home
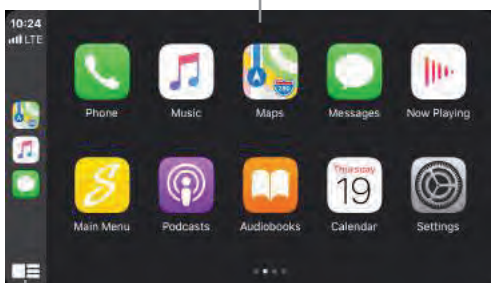
Toggle CarPlay Home / Dashboard

CarPlay Dashboard

Press & Hold for Siri

Ask Siri for what you need. Press the Voice Control button or the Home/Dashboard button in Apple CarPlay until Siri appears on the display, then say what you need.

Android **Auto**™

Set up Android Auto

Make sure your phone is running Android 5.0 (Lollipop) or later. Download the Android Auto app from Google Play on your device. Once the app is installed, open the app and follow the setup steps.

Connect your phone
Before you connect your phone for the first time, turn on your car. Make sure it's in park (P) and that you have time to set up Android Auto.
1. Unlock your phone's screen.
2. Connect your phone using a USB cable.
3.Y our phone might ask you to download or update certain apps, like Google Maps.
4.R eview the Safety Information and Android Auto permissions to access your apps.
5. Turn on notifications for Android Auto. For the best experience, we recommend accepting all requests.

Your phone's Bluetooth will be turned on automatically when Android Auto is connected to the car via USB.

To exit Android Auto, touch the Exit icon.
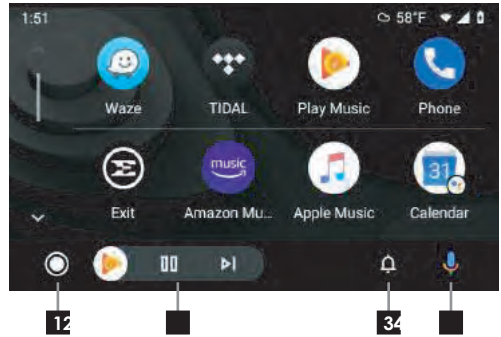
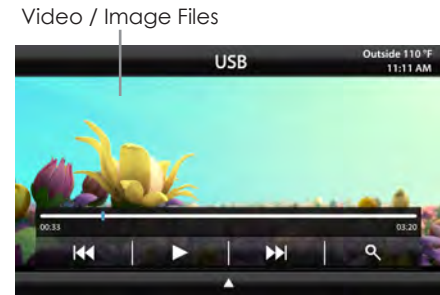1 Home Button
2 Audio Controls
3 Notifications
4 Voice Command

USB **Media**

1 2 3 4 5 6 7
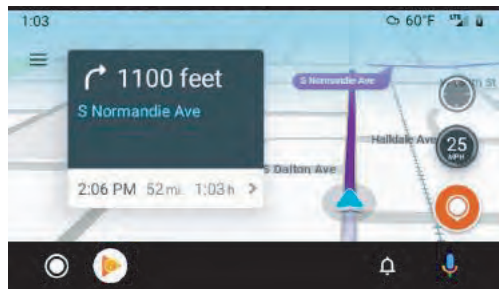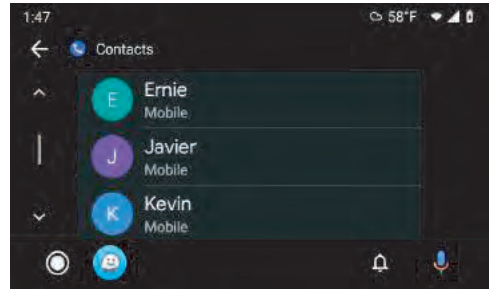
With a USB drive plugged in - press the **HOME BUTTON > USB** to select USB.

From the USB Root Menu you can browse Audio, Video and Image files. Touch to select a file to view/play.

USB Root Menu

1 **Previous Track** - Touch once to restart current track, touch again for Previous track.

2 **Play/Pause** - Touch to play or pause the audio.

3 **Next Track** - Touch to advance to the Next track.

Video / Image Files

4 **Browse** - browse artist, album or songs.

5 **Keyboard** - direct input song search

6 **Repeat** - Press once to repeat the current track (1), press again to repeat album/folder (F).

7 **Shuffle** - Plays tracks in random order.

HDMI **INPUT**

Press the **HOME BUTTON > HDMI**
to switch to the HDMI input.

The HDMI input can be used for an
external DVD player, streaming sticks,
media players and smartphone mirroring.

You can only view HDMI content with the
vehicle in Park and the parking brake ON.

When viewing HDMI content, the
Information Bar will auto-hide. To access
the Information Bar, touch anywhere on
the screen.

AV **IN**

Press the **HOME BUTTON > AV IN**
to switch to the AV input.

You can only view the AV input with the
vehicle in Park and the parking brake
ON.

When viewing the AV IN, the Information
Bar will auto-hide. To access the
Information Bar, touch anywhere on the
screen.

WARNING!

A driver is prohibited by law from
viewing a video signal on any in-dash
monitor while the vehicle is in motion.

CAMERAS

In addition to the factory rear camera, AERA10D can support up to four additional cameras. To access any installed camera, press the **HOME BUTTON > Cameras**

When a camera is first activated, there will be menu bars at the top and bottom of the display. The top menu bar contains the BACK arrow to return to the previous screen, and the Off-Road button will display the camera image along with the off-road gauges and information (FIG. A). Selecting the Camera Settings button will open up the Camera Settings menu (FIG. B).

The bottom menu bar displays avaiable cameras. Touch any available camera to switch camera views.

NOTE The top and bottom menu bars will auto-hide after five seconds, and tapping the screen will re-display the menu bars.
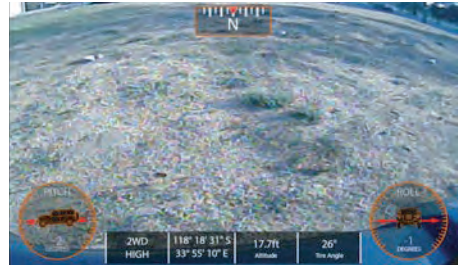

FIG. A

Camera Settings
The Camera Settings page displays all enabled cameras. Cameras can be shut off using the Trigger selection.
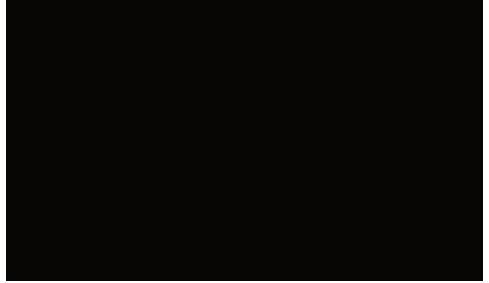

FIG. B

DISPLAY **OFF**

Press the **HOME BUTTON > Display Off** or Screen Off on the factory controls to turn off the LCD display.

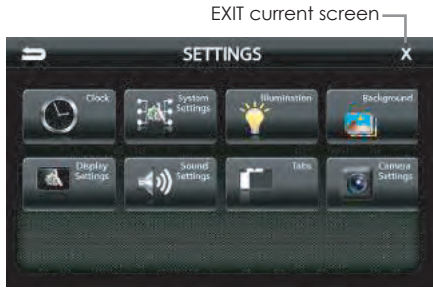This is useful at night to prevent eye fatigue.

Tap anywhere on the screen to return to the regular display.

SETTINGS

Press the **HOME BUTTON > Settings**
to access the Settings main menu.

Clock
System Settings
Illumination
Background
Display Settings
Sound Settings
Tabs
Camera Settings

EXIT current screen

Settings > Clock

Clock Settings [OFF-12HR-24HR]
*Select time format. Swipe or click arrows
to set the time.*

BACK to previous screen
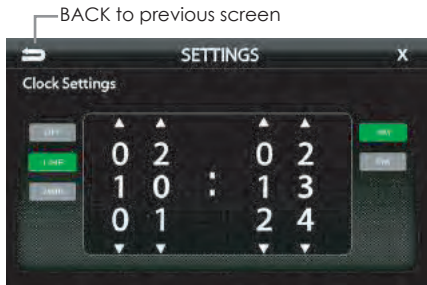
Settings > System Settings

Beep [OFF-LOW-MED-HIGH]
Sets volume of confirmation beeps.

Language [ENGLISH-FRENCH-SPANISH]
Set display language

Apple CarPlay [See Page 24]

Android Auto [See Page 25]

Load Defaults [RESET]
*Selecting Reset will reset all settings to factory
defaults. This process takes 5-7 minutes and
system must NOT be shut down during the
reset.*

Installer Settings [ENTER]
*See Installation Guide or Firmware Update
Instructions for more information.*
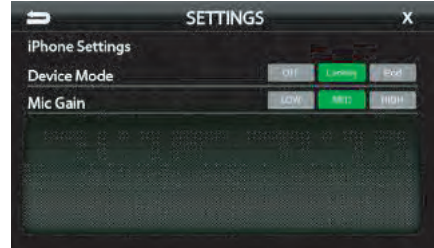
SETTINGS

Settings > System Settings > AppleCarPlay

Device Mode [OFF-CarPlay-iPod]
Determines how iPhone will be used when plugged into USB port. OFF is charging only.

Mic Gain [LOW-MED-HIGH]
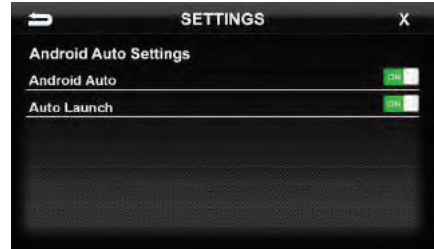*Sets microphone gain (sensitivity) when using Apple CarPlay.*

Settings > System Settings > Android Auto

Android Auto [ON-OFF]
Set to OFF for charging only with Android devices.

Auto Launch [ON-OFF]
When set to ON, Android Auto will automatically launch when a compatible Android device is plugged into USB port.

Settings > Illumination

Illumination[OFF-ON-AUTO]
Turn button illumination ON/OFF. Set to AUTO for buttons to illuminate only when vehicle lights are on.

Ilumination Brightness[0-20]
Set brightness of button illumination.

Highlight Colors
[AMBER-RED-AQUA-GREEN-BLUE-WHITE]
Set on-screen highlight colar

Illumination Color
[AMBER-RED-AQUA-GREEN-BLUE-WHITE]
Set button illumination colar

Custom Illumination [OFF-ON]
When Custom Illumination is set to ON, it allows custom illumination color based on RGB values.

SETTINGS

Settings > Background

Allows you to change the background image. Touch image thumbnail to select. You can upload up to 3 of your own images. To upload an image(s), copy images onto a USB thumb drive and connect the drive to one of the USB ports. Touch the ⊕ symbol and select a file. Images should be JPG or PNG file format and 1024x600 resolution

Settings > Display Settings

Brightness [0–20]
Adjusts Day and Night brightness of the LCD display. To adjust Night brightness level, turn on vehicle's lights and then adjust brightness.

Auto Brightness [ON-OFF]
When set to ON, the display screen will automatically dim when vehicle's lights are turned on.

AV [OFF-USB-AV]
Determines which source is routed to the AV outputs.

Settings > Tabs

The Tabs are customizable and can be configured to include favorite sources or settings.

To Program a Tab:
1) Select a Tab postition (1–7) on the bottom row.
2) Select the desired source or setting from the options on the top rows.

SETTINGS

Settings > Camera Settings

Displays all enabled cameras. Camera triggers can be shut off using the Trigger selection. When a Trigger is set to OFF, the camera will only activate manually.
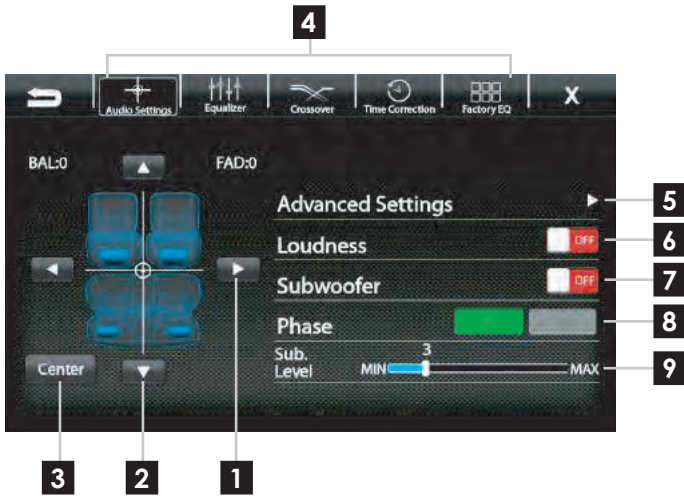
For example, if the Rear camera trigger is set to OFF, the Rear camera will not automatically turn on when the vehicle is put in reverse.

NOTE: Adding cameras and assigning triggers (presets) is done through the Installer Settings. Refer to the AMHRA2K Installer Set-Up Guide for detailed information.

Installer Settings > Camera Presets

SOUND **SETTINGS**

Settings > Sound Settings

1 Balance [-9 - 0 - 9]
Using the Left and Right arrows, adjusts the speaker balance Left/Right.

2 Fader [-9 - 0 - 9]
Using the Up and Down arrows fades the speakers Front/Rear.

3 Center
Press to set balance and fade to zero (0).

4 Audio Menu Bar
Access to Equalizers, Crossover and Time Correction.

5 Advanced Settings
Access to gain/volume settings, Toslink and microphone settings. (See page 44)

6 Loudness [ON-OFF]
When ON, boosts low and high frequencies when listening at lower volume.

7 Subwoofer [ON-OFF]
Turns subwoofer output ON/OFF.

8 Phase [0°-180°]
Changes the phase of subwoofer signal.

9 Sub Level [0-15]
Adjusts volume level of the subwoofer output.

SOUND **SETTINGS**

Sound Settings > Equalizer

Selecting Equalizer from the Audio Menu Bar will bring up the 15 band graphic equalizer and presets. Frequency adjustments can be made by touching and sliding the frequency sliders up/down. Once the desired sound is acheived, it can be saved as a Preset.

Saving EQ Settings

There are 6 user Presets that can be used to save EQ settings. This is usefull for having EQ settings for differnet types of music and volume levels or for different sources.

When you are done adjusting the EQ, touch and hold a Preset location to save the settings. The Preset will highlight.

Sound Settings > Factory EQ

Selecting Factory EQ from the Audio Menu Bar will access factory equalizer presets for different music types:

Rock - Hip-Hop - Electronic - Jazz - Pop

When a Factory EQ preset is selected, it can be fine-tuned using the Equalizer and then re-saved as a User Preset.

SOUND **SETTINGS**

Sound Settings > Crossover

Selecting Crossover from the Audio Menu Bar will access the internal electronic variable crossover. Crossover settings can be saved and recalled via Presets.

Front/Rear/Subwoofer Channels
Select Front, Rear or Subwoofer to set crossover.

Slope [6dB-12dB-18dB]
Adjusts the slope of the crossover.

Frequency
[BYPASS-25-40-63-80-100-160-250Hz]
Adjusts crossover frequency. Front and Rear channels are High Pass and Subwoofer is Low Pass.

Level [-12–0]
Adjusts signal level. Channel levels can be adjusted regardless of crossover settings.

Saving Crossover Settings

There are 6 user Presets that can be used to save Crossover settings.

When you are done adjusting the Crossover, touch and hold a Preset location to save the settings. The Preset will highlight.

NOTE: If the vehicle is equipped with a factory amplifier, Crossover is not selectable by default.

Graphical representation of crossover Slope, Frequency and Level.
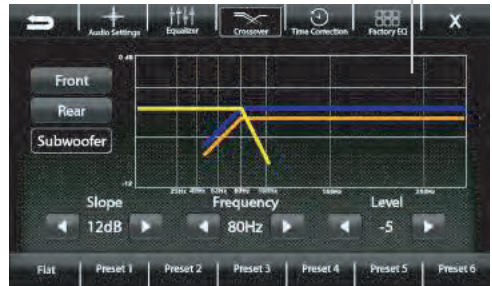
Front Channel = Blue
Rear Channel = Orange
Subwoofer = Green
Active (Selected) = Yellow

SOUND **SETTINGS**

Sound Settings > Time Correction

Selecting Time Correction from the Audio Menu Bar will access the Time Correction settings. Time Correction settings can be saved and recalled via Presets.

Time Correction compensates for the uneven distances between the speakers and a listeners ears. Time Correction delays signals from the closest speaker(s), so that all the sound arrives at the listening position at the same time, giving the listener a more accurate, life-like stereo image.

To set Time Correction, select a listening position, for example the driver's seat headrest. Then, measure from each speaker to the listening position. Set Units to Inch, and input the speaker distance values into the appropriate positions using the +/- buttons.

Saving Time Correction Settings

There are 6 user Presets that can be used to save settings. When you are done adjusting the Time Correction, touch and hold a Preset location to save the settings. The Preset will highlight.

Select milliseconds or inches

NOTE: If the vehicle is equipped with a factory amplifier, Time Correction is not selectable by default.

SOUND **SETTINGS**

Settings > Sound Settings > Advanced Settings

Selecting Advanced Settings ▶ from
the Audio Settings screen will access
the following settings:

Defeat [ON-OFF]
*When set to ON, this will defeat/bypass all
equalizer, crossover and speaker settings.
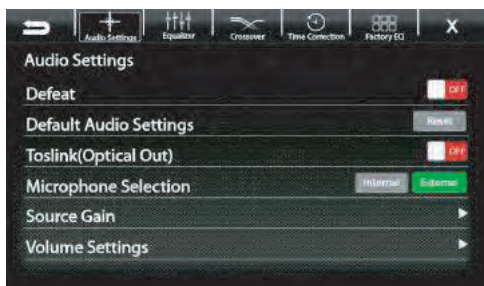This is useful when connecting to a DSP.*

Default Audio Settings [Reset]
Press to Reset all audio settings to default.

Toslink (Optical Out) [ON-OFF]
Turns variable digital output ON/OFF.

Microphone Selection [INTERNAL-EXTERNAL]
*Select External if external microphone is
installed. Select Internal to use the built-in
microphone.*

Source Gain Settings ▶

*Selecting Source Gain from the Advanced Audio
Settings will allow gain/volume adjustments for
individual sources. For example, if AM/FM is much
louder than BT Music, lower AM/FM and/or raise BT
Music to even out the volume levels.*

Arrow down for additional sources

Volume Settings ▶

*Selecting Volume Settings from the Advanced Audio
Settings will access the following Volume settings:*

Start Volume [LAST-CUSTOM]
*LAST will be same level as when unit was shut off.
CUSTOM will be a preset level adjusted below.*

Volume Slider [0–40]
Adjusts CUSTOM volume level to a specific level.

*The Volume Mode is adjustable for Bluetooth(BT),
Navigation (NAV) and Voice using the same
procedure.*

Reset Button

The Reset Button is located on the lower right hand corner of the display. To reset the unit, the power must be on, use a paper clip or similar to push the reset button for 2 seconds and release. The reset will take a few minutes; do not turn of power during this time.

Reset Button

AMHRA2K

Introduction and Features

The AMHRA2K is a complete radio replacement kit with integrated climate control retention for select RAM trucks. All modules and cables are included to retain important features of the factory system, including: steering wheel-mounted radio controls, factory reverse camera, USB ports, AM/FM reception.

Data integration with the vehicle and the Aerpro AERA10D radio allows for the retention and addition of the following features: vehicle performance gauges and information, climate controls, vehicle settings, factory amplifier control, and forced camera activation. Simplified installation and setup menus allow direct programming of camera triggers, steering wheel controls, and other settings of the radio CH4A-SRK interface.

Important Notes

We recommend reading this manual thoroughly to familiarize yourself with the entire process prior to beginning the installation.

1. **Does Not Retain:**

   Cluster Display Features
   - Compass (when equipped with 7" or 8.4" screen)
   - Clock
   - Phone pop-ups
   - Navigation pop-ups

   Factory Amplifier Features
   - Speed Controlled Volume

2. The vehicle should be OFF and key removed during entire disassembly and installation. Turning on the vehicle during the installation may cause error codes / check engine light.

Recommended Tools

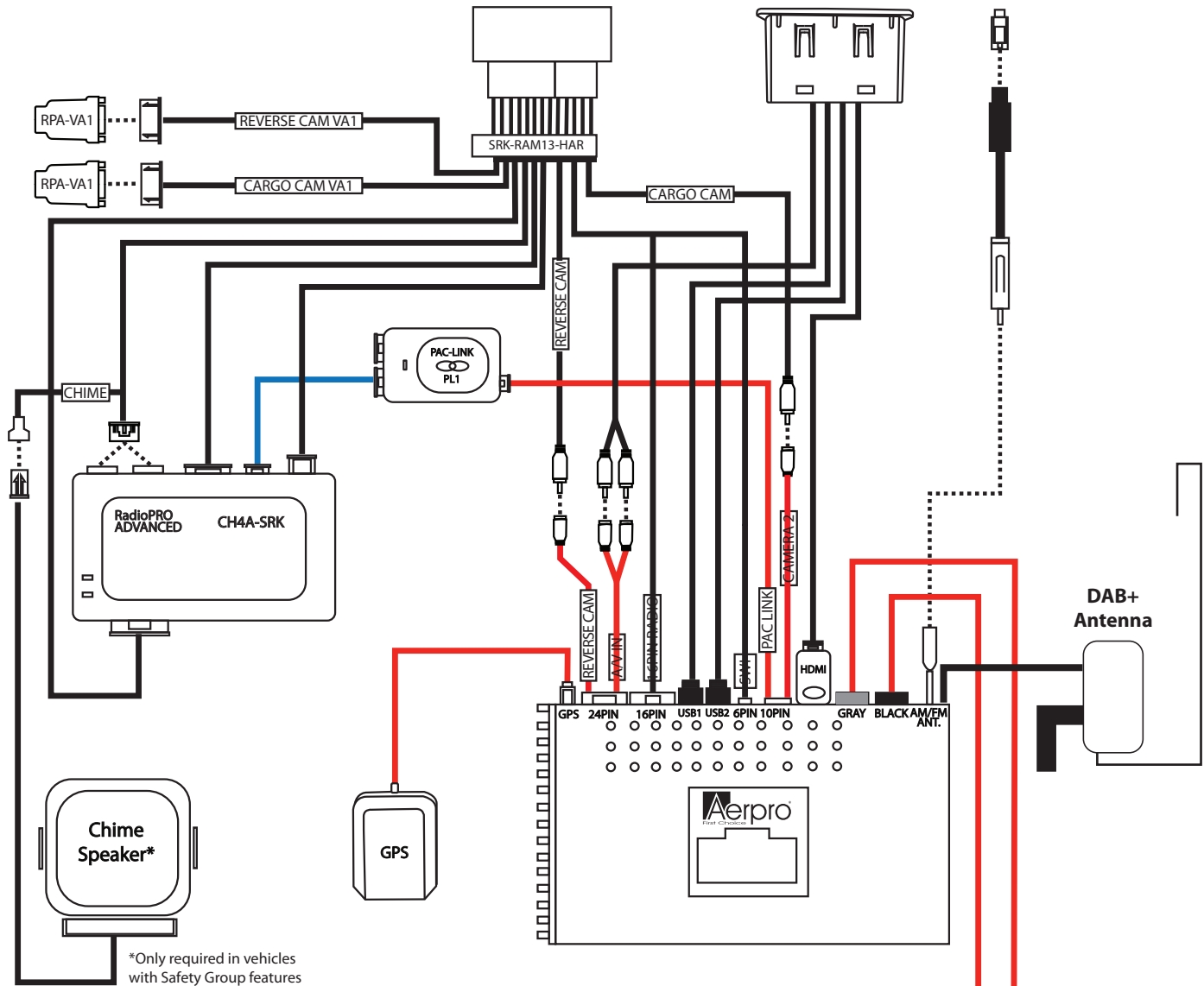|	
Plastic Panel Tool	*Phillips Screwdriver*
7mm Socket	*T20 Torx*
Ratchet	*Flush Cutters*

Included Components

1. *AERA10D Display Mounting Panel*
2. *Radio Module Mounting Brackets*
3. *External Chime Speaker*
4. *Media Hub Replacement (USBHUB-CH1-RCA)*
5. *AM / FM Antenna Adapter (BAA22)*
6. *PAC-LINK Interface Module (PL1)*
7. *CAN-Bus Connection Harness (MQS4PT-CANC)*
8. *Differential/Composite Video Modules x2 (RPA-VA1)*
9. *Main Wiring Harness (SRK-RAM13-HAR)*
10. *RadioPRO Replacement Interface Module (CH4A-SRK)*
11. *6" Data Harness (10P-2-10P-6-HAR)*
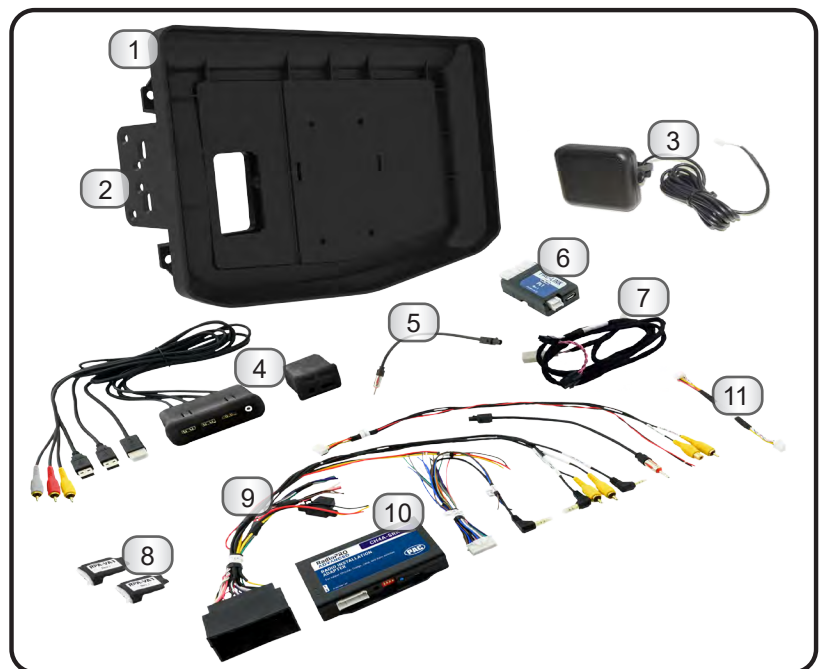
NOTE: Along with the AMHRA2 components, additional hardware and wire harnesses from the AERA10D (UN1810E) kit will also be used in the installation. There is a component list, hardware guide, wire harness descriptions and illustrations in the AERA10D Installation Guide for reference.

Wiring Diagram Overview

RPA-VA1 · · · · REVERSE CAM VA1

RPA-VA1 · · · · CARGO CAM VA1

SRK-RAM13-HAR

CARGO CAM

REVERSE CAM

PAC-LINK PL1

CHIME

RadioPRO ADVANCED   CH4A-SRK

Chime Speaker*

GPS

*Only required in vehicles
with Safety Group features

GPS 24PIN 16PIN USB1 USB2 6PIN 10PIN GRAY BLACK AM/FM ANT.

REVERSE CAM
A/V IN
SXM RADIO
PAC LINK
CAMERA 2
HDMI

DAB+
Antenna

UN1810E

Aerpro
First Choice

	Main Harness Connection
■	
■	Aerpro Connection
■	PAC Connection

Connections shown are
all required for full
functionality of the kit
and radio. If adding
additional components,
additional connections
will be needed.
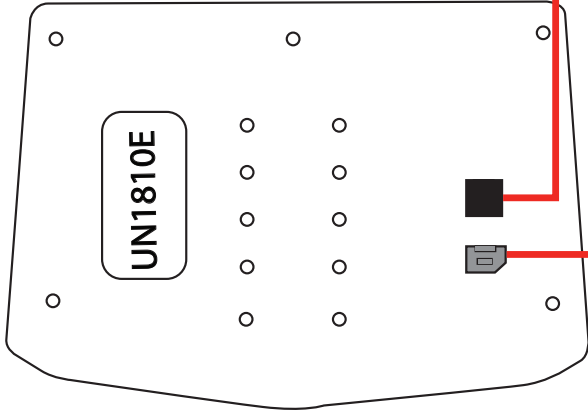
This installation manual will cover the necessary order of procedures to complete the installation efficiently and to avoid redoing any steps along the way. The order will be as follows: Disassembly, In-Vehicle Harness Connections and Preparation, Interface and Main Harness Connections, Display and Radio Unit Mounting Panel Preparation and Radio Unit Installation.

NOTE: LEFT HAND DRIVE VEHICLE PICTURED FOR ILLUSTRATION PURPOSES ONLY

Section 1: Disassembly

Part One: Dash Disassembly - With Floor Mounted Center Console

If equipped with a floor mounted center console, begin here. If not, skip ahead to Part Two on page 4.

Step 1

Remove the circled rubber inserts to gain access to the screws securing the dash and console in place.

Step 2

Remove the two T20 Torx screws from the top of the dash.

Step 3

If present, remove the T20 Torx screw from the back of the small pocket on the right side of the dash.

Step 4

Remove the two phillips head screws in the tray at the bottom of the dash panel.
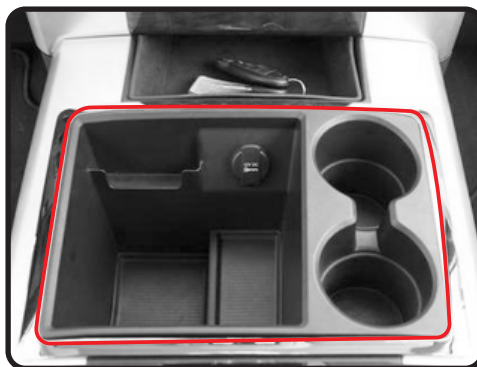
Step 5a

2013-2015 models: Remove the chrome trim ring around the center console storage compartment.

Step 5b

2016-2021 models: Remove the rubber insert in the bottom of the center console storage compartment. Remove the 7mm screw from the bottom of the storage compartment.

AMHRA2K

Section 1: Disassembly (cont.)

Step 6

Remove the center console by pulling straight up from the back and then pulling outward toward the back of the truck.

Step 7

Remove the dash panel by gripping firmly and pulling straight out on the top portion of the panel.
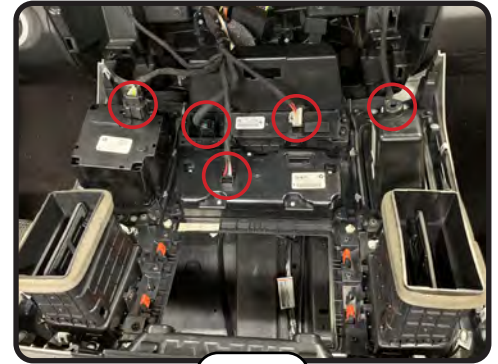
Step 8

Disconnect all the harnesses from the back of the dash panel and remove the dash panel from the truck.

Part Two: Dash Disassembly - Without Floor Mounted Center Console

Step 1

Remove the circled rubber inserts to gain access to the screws securing the dash panel in place.

Step 2

Remove the two T20 Torx screws from the top of the dash.

Step 3

Remove the T20 Torx screw from the back of the small pocket on the right side of the dash (not always present).

Step 4

Remove the dash panel by gripping firmly and pulling straight out on the top portion of the panel.

Step 5

Disconnect all the harnesses from the back of the dash panel and remove the dash panel from the truck.

Aerpro
First Choice

AMHRA2K

Section 1: Disassembly (cont.)

Part Three: Radio Display Removal
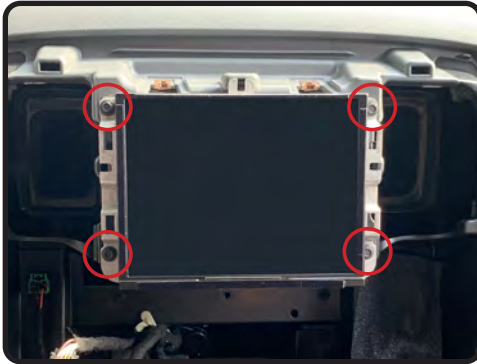
Step 1

Remove the four 7mm screws securing the radio display in place.

Step 2

Disconnect all the connectors from the back of the radio (the number of connections will vary based on the vehicle's available features).

Step 3

Remove the display from the dash (dash appearance may vary according to model year).

Part Four: Floor Mounted Center Console Disassembly

If equipped with a floor mounted center console, proceed with the console disassembly steps listed below. If equipped with a center seat mounted storage console, skip ahead to Part Five on page 7.

Step 1

Open the upper console storage and remove the rubber mat. Remove the seven inner tray T20 TORX screws. Remove the inner tray enough to access the wire harness connectors for the factory USB hub.
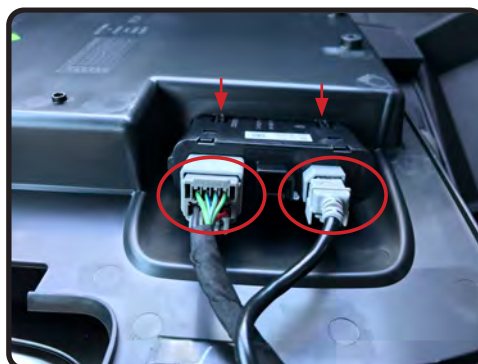
Step 2

Disconnect the two connectors from the factory USB hub. Compress the four retaining tabs on the USB hub to release and remove the hub assembly from the inner tray.

Step 3

Using a plastic trim tool, remove the center console rear panel by releasing the four retaining clips. Note: The rear power outlet can remain connected and the rear panel laid on the floor.

AMHRA2K

Section 1: Disassembly (cont.)

Part Four: Floor Mounted Center Console Disassembly (cont.)

Step 4

Remove the five Torx T20 screws from the upper lid bracket and remove the upper console lid.
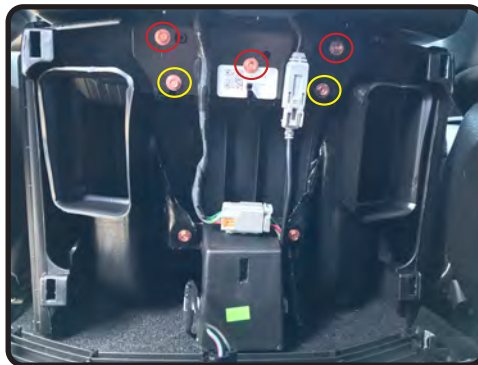
Step 5

At the rear of the console, remove the three 7mm screws from the lower lid bracket. Loosen the two lower 7mm screws. Unplug the two connectors and remove the upper console assembly.
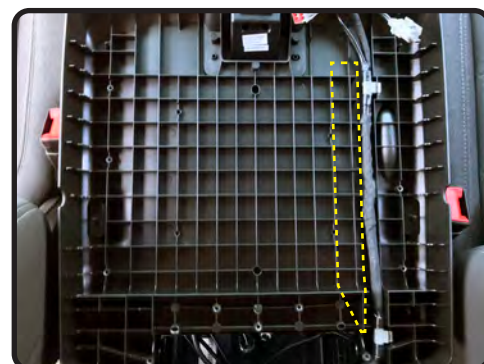

Step 6

On the backside of the upper console, remove the five Torx T20 screws securing the hinge. Unclip the console wire harnesses from the hinge and remove.
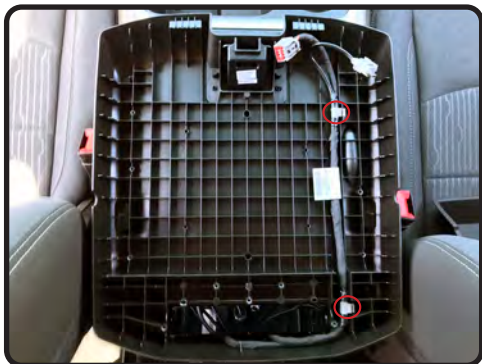
Step 4A

2016-2021 models: Unclip and remove the factory USB wire harness from the upper console to allow room to route the replacement hub cables.

OR

Step 4B

2013-2015 models: For trucks equipped with a 12V receptacle in the upper console, the factory wire harness will need to be reconnected. To allow space for routing the replacement hub cables, the plastic ribs will need to be trimmed flush in the area next to the factory wire harness.

AMHRA2K

Section 1: Disassembly (cont.)

Part Five: Seat Mounted Storage Console Disassembly

Step 1

Using a plastic trim tool, remove the trim panel surrounding the cup holders.

Step 2

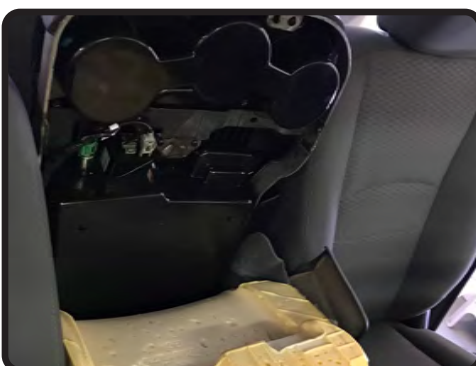Starting on either side, pull and remove the spline attached to the fabric from the groove in the console.

Step 3

Continue to remove the fabric spline around the entire console.

Step 4

Tilt up the console and pull back the fabric to expose the foam padding.

Step 5

Pull back the foam padding to access the back side of the USB hub.

Step 6

Unplug the two connectors from the factory USB hub. Compress the four retaining tabs on the hub to release and remove the hub assembly from the console.

NOTE: If the truck has an aftermarket leather interior installed, there may be spray adhesive holding the OEM fabric to the bottom of the console. This will need to removed and then reattached with spray adhesive.

AMHRA2K

Section 1: Disassembly (cont.)

Part Five: Seat Mounted Storage Console Disassembly (cont.)
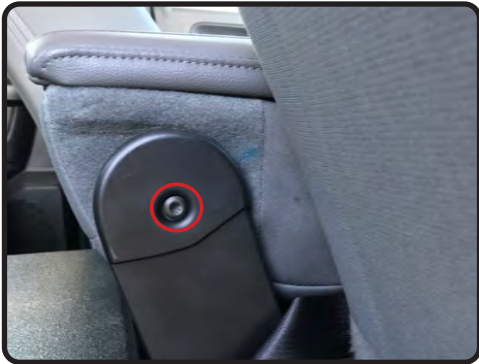
Step 7

Remove the Torx T45 screw from the passenger side hinge cover and remove cover.

Step 8

On the backside of the hinge cover, remove the rib by scoring with a utility knife and snapping the rib off.

Step 9

For access under the carpet, remove the passenger side door sill panel.

NOTE: The replacement media hub cables will be ran under the carpet from the center seat console to the radio opening. Removing the passenger seat will make this easier and provide more cable length at the radio opening, but is not necessary.

Part Six: Lower Knee Panel Removal (Optional)

NOTE: Removal of the lower knee panel is required for all 2018-2021 Classic model trucks and/or any truck equipped with Safety Group features (parking sensors).

Step 1

Remove the two 7mm screws from the bottom edge of the knee panel.

Step 2

Pull the panel to release the retaining clips and carefully lay the panel on the floor board.
Note: Disconnecting the OBD port and bonnet release attached to the panel is not required.

Section 2: In-Vehicle Harness Connections and Preparation

Part One: Media Hub Installation (Floor Mounted Center Console)

If equipped with a floor mounted center console, proceed with the installation steps listed below.
If equipped with a center seat mounted storage console, skip ahead to Part Two on page 9.

Step 1

Select the correct media hub plastic assembly for the vehicles console type and assemble the media hub.
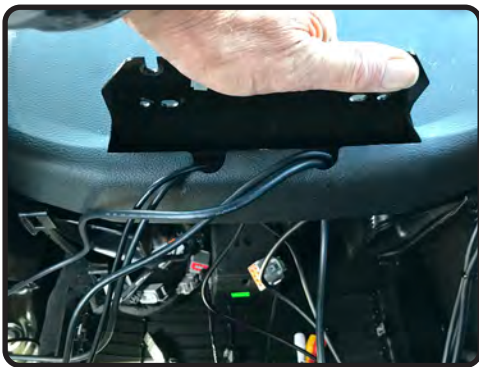

Step 2

Feed the cables through the console tray opening and install the hub into the console inner tray.

Step 3

Zip tie and route the cables to the rear of the console following the channel in the bottom of the console.

Step 4

With the media cables routed through cut-outs on the bottom of the upper console, reinstall the hinge using the five Torx T20 screws removed in disassembly.
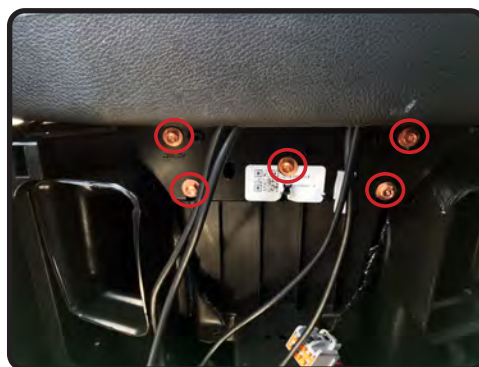
Step 5

Position and reattach the upper console to the lower console using the 7mm screws removed in disassembly. 2013-2016 models: Connect the factory connectors to the upper console wire harness.

Step 6

Following the factory wire harness, route the four media cables forward under the lower console into the area under the cup holders and then up into the radio opening.

AMHRA2K

Section 2: In-Vehicle Harness Connections and Preparation (cont.)

Part Two: Media Hub Installation (Seat Mounted Storage Console)
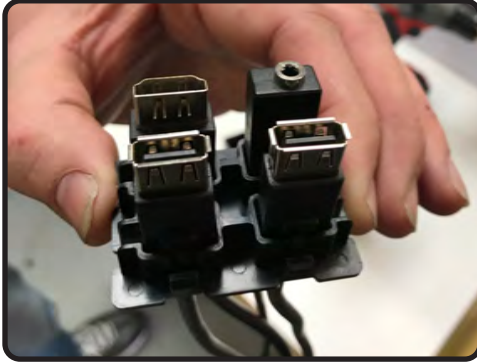
Step 1

Select the correct media hub plastic assembly for the vehicles console type and assemble the media hub.

Step 2

Feed the cables through the factory opening and install the hub into the console inner tray.

Step 3

Following the factory harness, route the media cables down under the passenger seat. Zip tie securely to the factory harness to ensure console hinge cover will fit properly when reinstalled.

Step 4

Feed the cables under the carpet; either using the pre-existing hole for the air bag harness or cutting a new hole closer to the center of the vehicle.
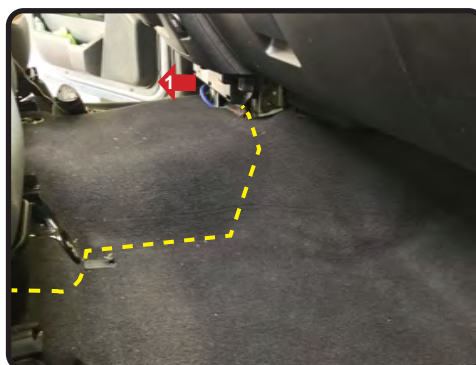
Step 5

Remove the lower panel under the center storage drawer (1). Route the cables (under the carpet) to the opening at the base of the center dash area.

Step 6

Route the media cables up into the lower radio opening, below the metal bracket.

![Aerpro First Choice logo]

AMHRA2K

Section 2: In-Vehicle Harness Connections and Preparation (cont.)

Part Three: GPS & DAB+ Antennas / AM/FM Antenna Adapter (BAA22)
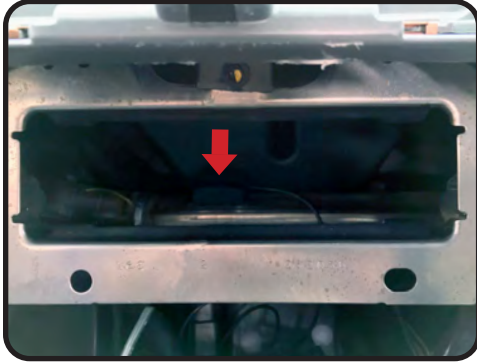
Step 1

From the AERA10D box, position the DAB+ antenna on the windscreen and the magnetic GPS antenna on the metal bar running across the back of the sub-dash at the rear of the radio opening.

Step 2

Route the blue GPS & DAB+ antenna connectors behind the metal bracket and into the radio opening. Bundle and secure the excess antenna cable behind the instrument cluster.

Step 3

From the AMHRA2K components, connect the BAA22 antenna adapter to the white factory antenna connector.

Part Four: Chime Speaker (Optional)

Note: Installation of the chime speaker is only required in trucks equipped with Safety Group features (parking sensors).

Step 1

To the right of the steering column, locate the indicated hole on the metal brace.
Remove the knobs from the chime speaker and separate it from the mounting bracket.

Step 2

Using the existing hole, mount the chime speaker bracket to the metal brace using one of the supplied mounting bolts and wing nuts. Drill a second hole and install the other bolt and wing nut.

Step 3

Reattach the speaker to the mounting bracket.
Route the chime speaker cable up to the radio opening leaving enough slack to connect to the SRK-RAM13 main harness.

Section 2: In-Vehicle Harness Connections and Preparation (cont.)

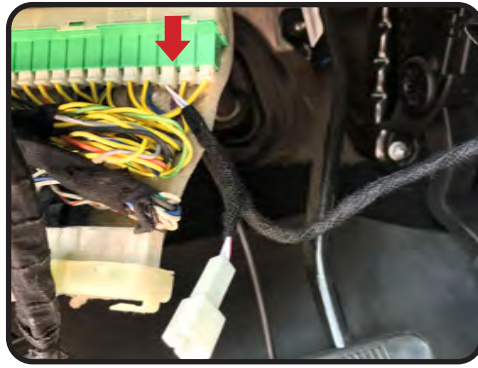### Part Five: CAN Connection Harness - MQS4PT-CANC (Optional)

Note: Installation of the CAN Harness is only required for 2018 and newer trucks.

Step 1

To the left of the steering column, locate the green CAN connection blocks with white plugs. Route the white 2-pin connector end of the MQS4PT-CANC harness from the radio opening to the CAN connection block.

Step 2A

Plug the male white connector from the MQS4PT-CANC harness into any open spot on the green CAN junction block.
The female connector on the MQS4PT-CANC will not be used.

OR
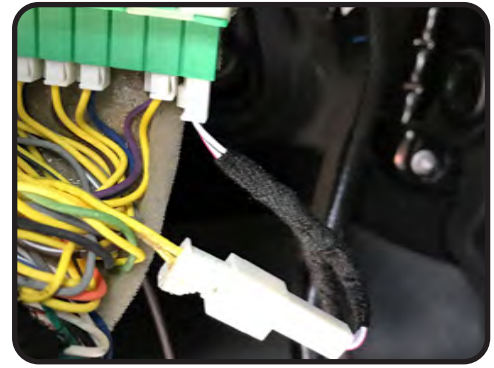
Step 2B

If there are no open ports on the CAN junction block, unplug one factory male connector and insert it into the female connector on the MQS4PT-CANC harness, then insert the male connector on the MQS4PT-CANC harness into the now empty port on the CAN junction block.

Section 3: Interface and Main Harness Connections and Preparation

Part One: CH4A-SRK Radio Interface Connections

Step 1

Connect the three connectors from the SRK-RAM13-HAR Main Harness to the indicated ports on the CH4A-SRK module.

Step 2

Referencing the sticker on the back, connect the fourth connector to the appropriate port. *Amplified* if the truck has a factory amplifier, *Non-Amplified* for base audio.
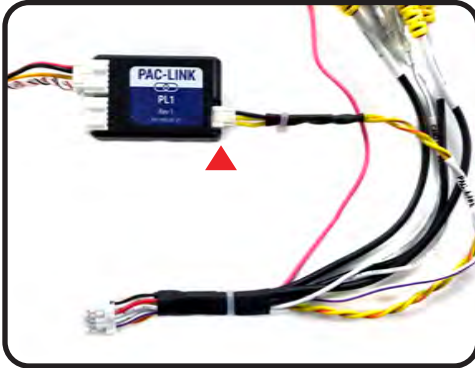

Step 3

Connect one end of the 6" Data Harness (10P-2-10P-6-HAR) to the CH4A-SRK Expansion Port and the other end to either port on the PAC-LINK (PL-1)

Section 3: Interface and Main Harness Connections and Preparation (cont.)
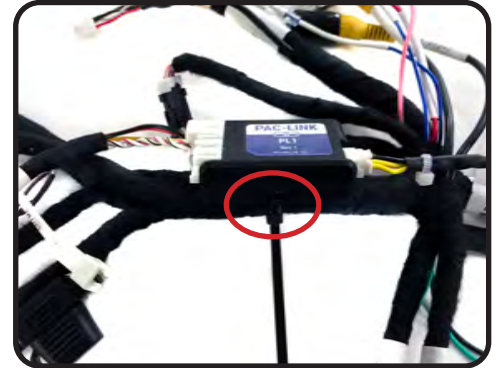
Part Two: Main Harness Connections

Step 1

From the AERA10D wire harnesses, connect the 3-pin PAC-Link lead on the 10-pin Multi Camera Harness to the PL-1.
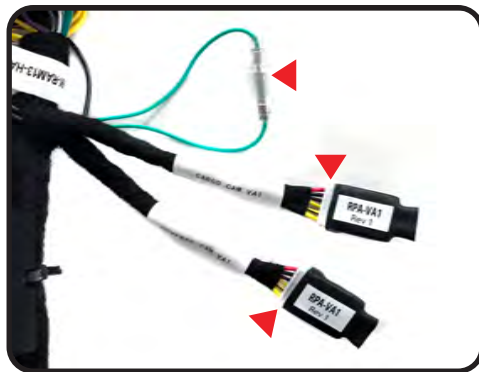

Step 2

Connect the pink SPEED SEN lead on the Main Harness to the pink SPEED SEN lead on the 10-pin Multi Camera Harness.
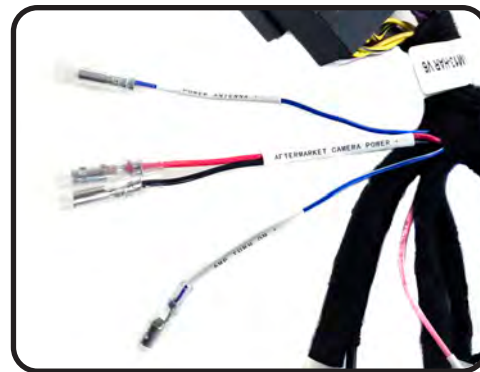

Step 3

Zip tie the PAC-Link (PL-1) to the main harness.

Step 4

Connect the male and female ends of the Light Green leads together. If factory equipped, connect a RPA-VA1 to REVERSE CAM VA1 and CARGO CAM VA1.

Step 5

The SRK-RAM13H-HAR Main Harness also provides Aftermarket Camera Power/Ground, Amp Turn On and Power Antenna leads if needed.

Section 4: Display & Radio Unit Mounting Preparation

Part One: Display Mounting Panel
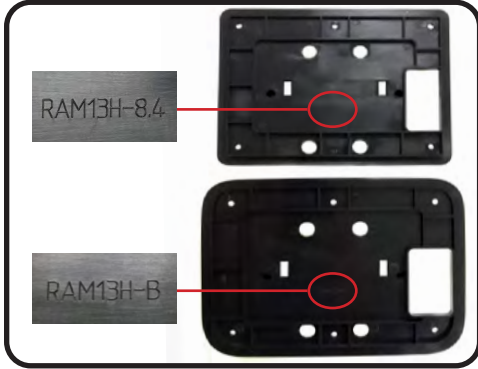
Step 1

From the SRK-RAM13H kit, choose the appropriate mount plate. *RAM13H-8.4* is used when replacing an 8.4" factory display and *RAM13H-B* is used for all others.

Step 2

Position the mount plate on the backside of the dash panel opening with the cut-out on the left side. Align the two locator pins on main frame to the mount plate and push to snap together.
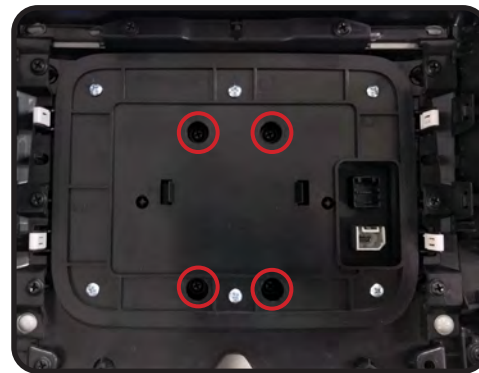

Step 3

Place the AERA10D display into the main frame. While holding the display, carefully turn over the panel and place it face down on a soft surface.

Step 4

Install six M4x12 Philips screws from the SRK-RAM13H kit to secure the mounting plate and main frame to the dash panel.

Step 5

Install four M4x10 screws from the AERA10D hardware pack to secure the display in the mounting panel.

Section 4: Radio Unit & Display Mounting Preparation (cont.)
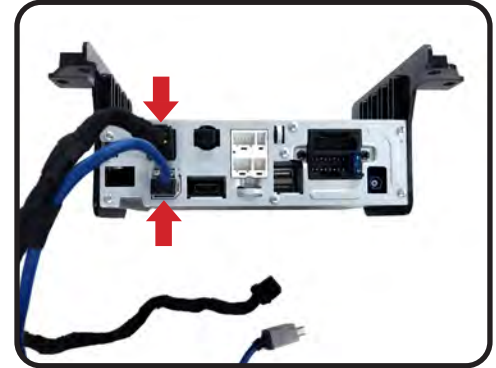
Part Two: Attaching Side Brackets

Step 1

With the radio module facing up, loosely attach a side bracket using two M5x10 screws from the SRK-RAM13H hardware. Slide the bracket as far down as it will go and tighten the screws.

Step 2

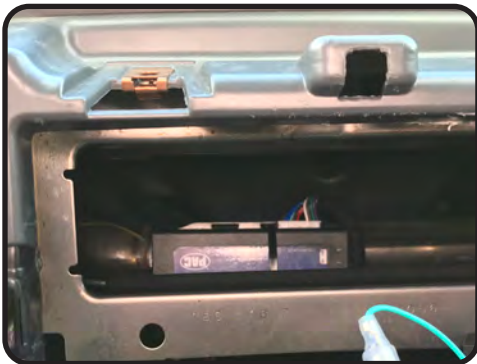Attach the other side bracket using two M5x10 screws. Ensure the bracket is positioned as far down as possible.

Step 3

From the AERA10D harnesses, plug in the blue LVDS and 10-pin display harnesses into the radio module.
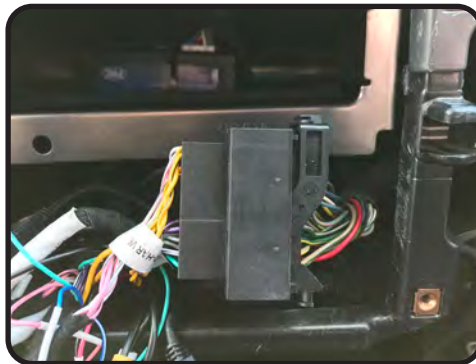
Section 5: Radio Unit Installation

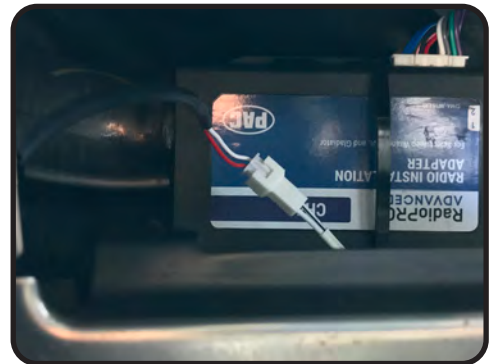### Part One: Harness and Cabling Connections

Step 1

Using the long zip tie from the AMHRA2K hardware, mount the CH4K-SRK module to the metal bar and wire harness at the rear of the radio cavity.

Step 2

Connect the 52-pin dock-and-lock connector on the SRK-RAM13-HAR Main Harness to the OEM radio connector in the vehicle.
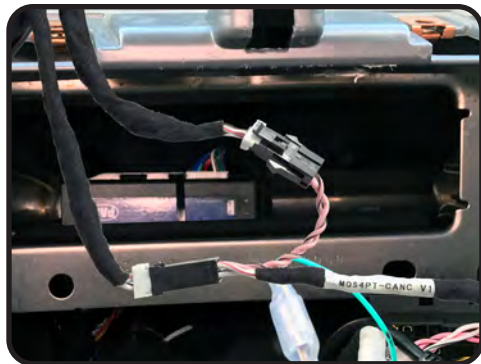
Step 3

If installed, connect the 2-pin Chime Speaker connector to the 2-pin connector labeled CHIME on the SRK-RAM13-HAR Main Harness.
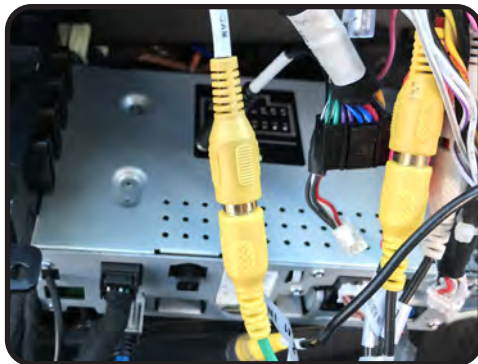
AMHRA2K

Section 5: Radio Unit Installation (cont.)

Part One: Harness and Cabling Connections (cont.)

Step 4

2018+ Models Only: Disconnect the 4-pin connectors on the SRK-RAM13-HAR Main Harness. Connect the MALE 4-pin connector on the MQS4PT-CANC harness into the FEMALE 4-pin connector and the MALE connector into the FEMALE.

Step 5

If equipped with an OEM rear camera, connect the REVERSE CAM RCA on the SRK-RAM13-HAR to the REVERSE CAMERA IN RCA on the AERA10D's 24-pin AV Harness. Or alternatively, connect an aftermarket camera to REVERSE CAMERA IN.
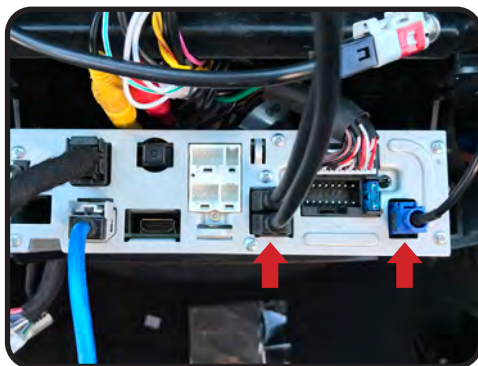

Step 6

If equipped with an OEM cargo camera, connect the CARGO CAM RCA on the SRK-RAM13-HAR to the CAMERA 2 input on the AERA10D's 10-pin Multi Camera Harness.
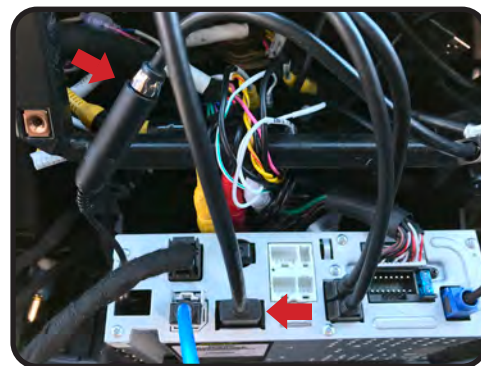

Step 7

Connect the Red,White and Yellow RCA's from the media hub to the AUX IN inputs on the AERA10D's 24-pin AV Harness.

Step 8

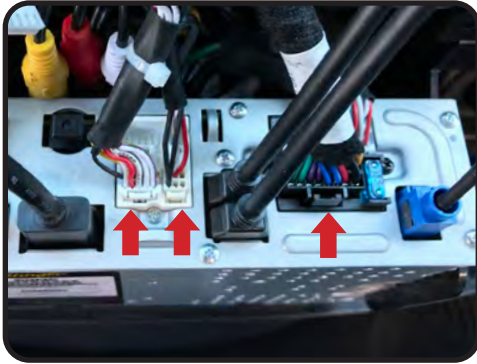Plug the two USB cables into the AERA10D USB ports. Connect the GPS & DAB+ antenna connectors.

Step 9

Connect the AM/FM antenna lead to the AERA10D antenna input. Plug in the HDMI cable.

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Section 5: Radio Unit Installation (cont.)

Part One: Harness and Cabling Connections (cont.)
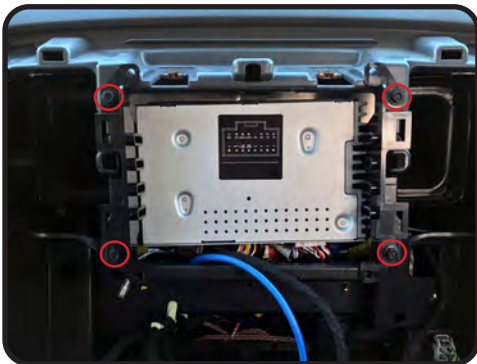

Step 10

From the SRK-RAM13-HAR, plug in the AERA10D 10-pin Multi Camera Harness, 6-pin SWC/IR Harness and 16-pin Main Radio Harness.


Step 11

These are the connections for the basic installation. If adding additional components, those connections should be made at this point, before mounting the radio module.

Part Two: Radio Unit Mounting

Step 1

With the two display cables routed out towards the front, position the radio assembly in place and install the four 7mm screws removed from the factory radio display.
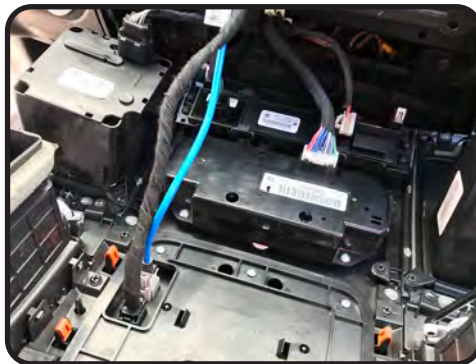
Step 2

Plug the two display cables into the back of the AERA10D display. Reconnect all the factory connectors removed from the back of center dash panel.

Step 3

Align the center dash panel in place and push around entire panel to fully seat all retaining clips.

! Before turning on the ignition, close all the doors and lock the truck with the key fob. Wait five minutes and then unlock and start the vehicle. The initial boot up may take up to 30 seconds before the display is active. Do not press the power button or turn off the vehicle during this time. Once powered up, refer to the AMHRA2K Installer Set-Up Guide for access to the Installer Settings.

Troubleshooting

1. **Vehicle Info icon not showing on main menu** - After updating the Radio System Firmware, perform a master reset on the radio by tapping "Master Reset" in the "Installer Settings"; then, update the PAC Application APK firmware in that order. If the Vehicle Info icon still does not show, turn off the vehicle, open the driver door, and let it sleep for about 5 minutes, then restart the vehicle and check for the Vehicle Info icon again.

CH4A-SRK Interface Module LED Diagnostics

LED Pattern	State	Action
LED 2 solid red	Vehicle RAP / ACC Output Is On	N / A
LED 2 flashing green	SWC Activity	N / A
LED 2 flashing red	Module Resetting / Initializing	N / A
LED 1 solid green	Module Powered and Operating	N / A
LED 1 flashing amber	USB Connected	N / A
Off	No Activity	Verify key is in ignition position. Verify that there is 12v on the yellow wire and ground on the black wire.

PL1 Adapter Module LED Diagnostics

LED Pattern	State	Action
LED flickering green or red	Data Communication / Normal Operation	N / A
Off	No Activity	Verify 10pin harness connections and key position

Reset / Restoring Interface Factory Settings

You can restore the RadioPRO interface module to factory default settings by pressing and holding the programming button on the side of the module until the status LED starts blinking red. Once the LED starts blinking red, release the button. You must release the button while the LED is blinking red in order to perform the reset. This reset will restore all settings to factory defaults.

Technical Support

If you need assistance setting up or using your Aerpro product now or in the future, call Aerpro Support Australia
TEL: 03 – 8587 8898 FAX: 03 – 8587 8866 Mon-Fri 9am – 5pm AEST. If you would like to download a digital copy of this manual, or other Aerpro manuals/software, please visit the http://aerpro.com website.