#### Introduction and Features

The AMHJP1K is a complete radio replacement kit for Jeep Wrangler JK. All modules and cables are included to retain important features of the factory system, including: steering wheel-mounted radio controls, factory amplifier (if equipped) and AM/FM reception. Plug & Play wiring harnesses allow for quick and easy installation without the need to cut or splice any wiring.

#### Important Notes

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

- 1. Does not retain the following factory features:
- uConnect
- In Premium Amplified Systems, only two input channels can be used from the aftermarket radio, therefore there will be no fading capability of the aftermarket stereo.
- 2. Directions for removing the display panel are on page 13.

#### **Recommended Tools**

Plastic Panel Tool Phillips Screwdriver

7mm Socket Pick Tool
Ratchet Flush Cutters
Ratchet Extension Wire Feeder

#### **Included Components**

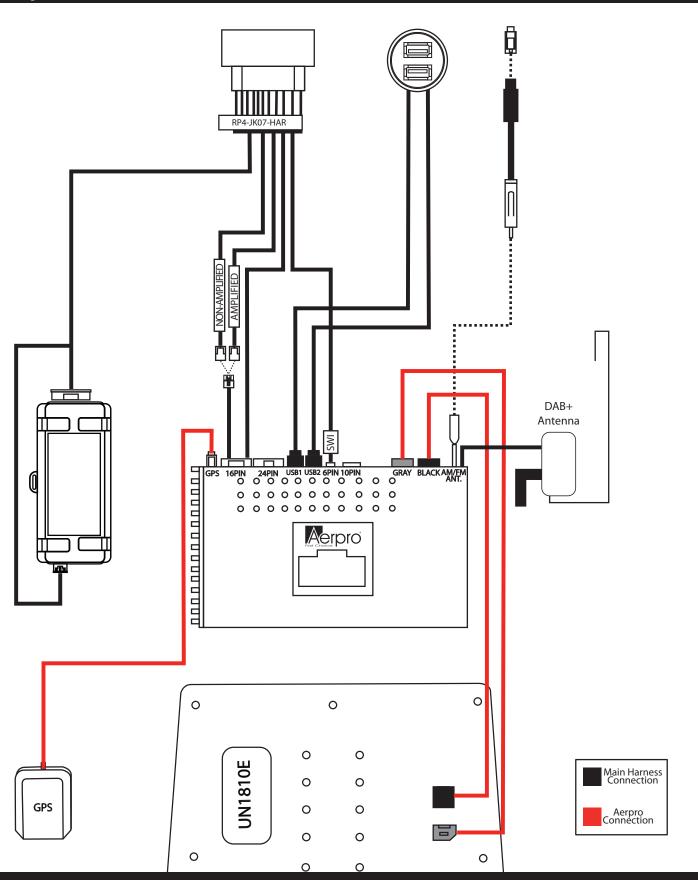
- 1. Mounting Panel Front Frame
- 2. AERA10D Display Mounting Panel
- 3. Side Mounting Brackets
- 4. Top Support Bracket
- 5. Main Wiring Harness (RP4-JK07-HAR)
- 6. Radio Replacement Interface Module (RP4-CH11)
- 7. AM / FM Antenna Adapter (BAA22)
- 8. Dual USB Extension (SSUSB2)

NOTE: Along with the AMHJP1K 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 UN1810E Installation Guide for reference.





# Wiring Diagram Overview





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, Display, Radio Module and Harness Preparation, and Radio Unit Installation.

(Directions for removing the display panel are on Page 13)

#### NOTE: LEFT HAND DRIVE VEHICLE PICTURES FOR ILLUSTRATION PURPOSES ONLY

# Section 1: Disassembly

#### Part One: Radio Removal



### Step 1

Remove the knee bolster panel below the steering column using a plastic trim tool to release the upper left and right clips and swing panel downward to disengage lower tabs.



### Step 2

Remove the two 7mm screws from the bottom edge of the radio/instrument cluster trim panel on both sides of the steering column.



### Step 3

Using a plastic trim tool, gently pry to release and remove the power window switches or storage pocket below the radio. Disconnect the connector on the back of the switch assembly.



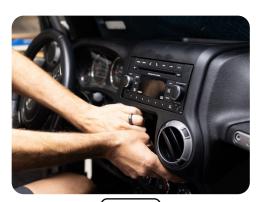
Step 4

Remove the 7mm screw inside the switch opening.



Step 5

Remove the rubber mat from the storage tray above the radio and remove the 7mm screw underneath.



Step 6

Starting below the radio, reach into the window switch opening and firmly grasp the lower bezel and pull the bezel to release the lower retaining clips.



# Section 1: Disassembly (cont.)



Step 7

Using the storage tray and area over the gauges, pull the top edge of the panel to release the upper retaining clips. Lower the steering wheel and remove the panel.



Step 8

Remove the four 7mm screws securing the radio and pull the radio from the sub-dash.



Step 9

Disconnect all wire harnesses and antenna cables from the back of the factory radio.

# Section 2: In-Vehicle Harness Connections and Preparation

#### Part One: Dual USB Extension (SSUSB2)

Apple CarPlay and Android Auto require access to a USB port. The SSUSB2 is designed to extend the USB ports on the back of the AERA10D to where they are accessible once the radio is installed.

For this installation, the factory 12V power outlet will be replaced with the SSUSB2. You may chose to follow these steps, or mount the USB ports somewhere else in the vehicle.



Step 1

Remove the climate control / switch panel by pulling outward and releasing the retaining clips. Unplug all connectors from the backside of the panel.



Step 2

Remove the metal insert from the power outlet by releasing the two retaining clips with a small pick tool and pushing out the front side.



Step 3

Remove the plastic sleeve by depressing the two tabs and pushing out the front.



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

#### Part One: Dual USB Extension (SSUSB2) (cont.)



# Step 4

Install the optional USB cover and feed the USB cables through the front of the panel. Secure with the flanged nut and then lock with the lock nut.



### Step 5

Reconnect and reinstall the climate control panel. Route the two USB cables up to the radio opening, making sure to route them behind the metal bracket.

#### Part Two: GPS & DAB+ Antenna

The GPS antenna is required for proper operation of Apple CarPlay and Android Auto. The GPS antenna and mounting plate are included in the AERA10D hardware.



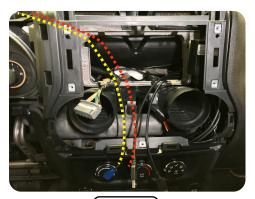
Step 1

Clean the indicated area above the right side of the instrument cluster.



Step 2

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 3

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.



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

Part Three: AM / FM Antenna Adapter



Step 1

Connect the BAA22 Antenna Adapter to the factory antenna cable (white connector).



Step 2

These are the connections for the basic installation. If adding cameras, amplifiers or external microphone, those connections should be made at this point, before mounting the radio module.

# Section 3: Display, Radio Module and Harness Preparation

Part One: Display Mounting Panel Preparation



Step 1

Place the AERA10D display into the front of the mounting panel and carefully turn the panel over onto a soft surface while holding the display in place.



Step 2

Use four M4x12 from the AERA10D hardware to attach the display to the mounting panel.



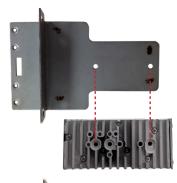
Step 3

Partially screw in the four M4x10 screws from the AMHJP1K hardware into the side holes of the mounting panel. NOTE: Ensure screw tip is flush and does not exceed the plastic thickness.



# Section 3: Display, Radio Module and Harness Preparation (cont.)

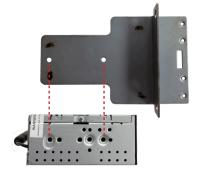
#### Part Two: Attaching the Radio Module Mounting Brackets





Step 1

Align and attach one of metal side brackets to the right side of the radio module using two M5 x 10 screws from the AERA10D box.





Step 2

Align and attach the remaining metal side bracket to the left side of the radio module using two M5 x 10 screws from the AERA10D box.



FRONT arrow should point towards the Aerpro logo.



# Step 3

Using two M4x4 screws from the AERA10D box, mount the support bracket to the top of the radio module in the location shown.

#### Part Three: Main Harness Connections (RP4-JK07-HAR)





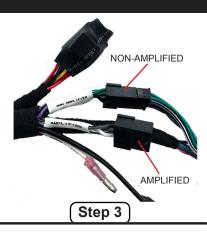
# Step 1

Set the dial on the side of the RP4-CH11 interface to Number 4.
Remove the warning sticker covering the 16-pin plug on the end of the interface.



#### Step 2

Connect the 16-pin and 4-pin connectors on the RP4-JK07-HAR Main Harness to the RP4-CH11 interface module.



If the vehicle is equipped with a factory amplifier, connect the 8-pin connector to the AMPLIFIED connector. All others connect to the NON AMPLIFIED 8-pin connector.



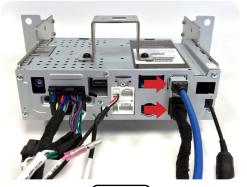
# Section 3: Display, Radio Module and Harness Preparation (cont.)

#### Part Three: Main Harness Connections (RP4-JK07-HAR) (cont.)



### Step 4

Connect the 16-pin and 6-pin connectors on the RP4-JK07-HAR Main Harness to the AERA10D radio module.



### Step 5

From the AERA10D box, connect the blue LVDS and 8-pin display cables to the radio module.

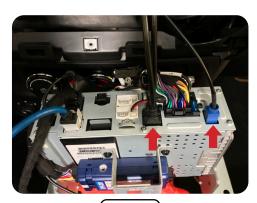


### Step 6

Attach the RP4-CH11 interface to the top of the radio module using a M4 x 4 screw from the AERA10D hardware in the threaded hole shown.

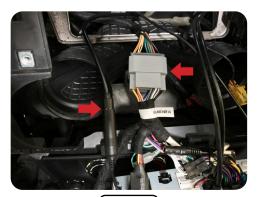
#### Section 4: Radio Unit Installation

#### Part One: Harness and Cabling Connections



Step 1

Inside the vehicle, plug in the two USB cables and connect the GPS antenna to the radio module.



Step 2

Connect the AM/FM antenna adapter. Connect the vehicle's gray 22-pin radio plug to the RP4-JK07-HAR main harness.



Step 3

Before attempting to mount the radio unit into the dash, ensure that all excess cables, wires and connectors are tucked into the sides, not directly behind the radio.



### Section 4: Radio Unit Installation

### Part Two: Mounting the Radio Assembly



Step 1

With the two display cables routed over the top of the radio module, slide the assembly into place. Take caution that no wiring gets pinched between metal brackets.



Step 2

The top support bracket on the radio assembly needs to go over the top of the factory radio support bracket with the factory nut centered in the bracket cut-out.



Step 3

If the vehicle does not have a factory radio support bracket, insert the included clip-on nut onto the top bracket as shown.



Step 4

Install the four 7mm screws removed from the factory radio to secure the radio assembly.



Step 5

Lower the steering wheel and align and reinstall the instrument cluster / radio panel. Ensure that all retaining clips are fully seated.



Step 6

Reinstall the factory 7mm screw in the upper storage tray. If using the clip-on nut in Step 3, use the included #10-24 X ½" Philips machine screw to secure.



# Section 4: Radio Unit Installation (cont.)

### Part Three: Attaching the Display Panel



Step 1

Apply a piece of cloth tape across the top and bottom edges of the radio opening. Approximately 1.5mm of tape along the face of the dash panel and the remainder folded inward.



Step 2

Apply a piece of removable tape across the bottom of the radio opening to protect the dash panel during installation.



Step 3

Connect the two display cables to the back of the display.

# Step 4

Once the radio display is connected, and before attaching the display panel, it is recommended to power up the radio and check functionality...

Volume, Balance, Fade AM/FM Reception Digital Radio Reception Bluetooth USB Apple Carplay Android Auto Steering Wheel Controls

Camera(s)





# Section 4: Radio Unit Installation (cont.)

#### Part Three: Attaching the Display Panel (cont.)



Step 5

To attach the display assembly, align the location ribs on the sides of the mounting panel to the side brackets to center the panel side to side.



Step 6

Holding the mounting panel at the sides:

- 1. Position the bottom edge almost touching the air vents.
- 2. Firmly push the assembly against the dash panel.
- 3. Slide the assembly up until it snaps in place.

Note: Once the locking clips engage, the panel will stay in place.

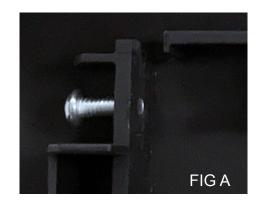
### **Installer Note!**

If you are having trouble locking the display in place, try the tips below...

Confirm the four side mounting screws are flush and not protruding beyond the thickness of the plastic. (FIG A)

Press the display assembly *harder* against the dash panel as you slide it into place.

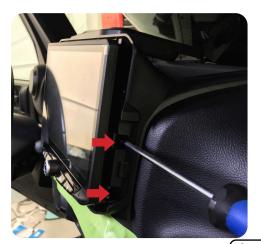
(Step 6 / Part 2)





### Section 4: Radio Unit Installation (cont.)

#### Part Three: Attaching the Display Panel (cont.)







Step 8

Step 7

Once the display panel is locked into place, use a Phillips screwdriver to tighten the two mount screws on the left and right sides of the mounting panel.

Install the front frame by hooking at the top first, then snapping in the sides and bottom. Remove the tape by pulling downward.

Reinstall the remaining screws, panels and switch pod to complete the installation

#### 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**

Email: Tech@TDJ.com.au

Phone: 03 8587 8889 FAX: 03 8587 8866



# Removing the Display Panel



Step 1

Remove the front frame by first releasing the side clips at the locations indicated by arrows.



Step 2

Using a very thin pry tool or similar, carefully release the side clips as shown on both sides.



Step 3

Once the side clips are disengaged, swing the bottom edge upwards to unhook the top of the frame and remove.



Step 4

Using a Phillips screwdriver, remove the two mounting screws on the left and right sides of the mounting panel.



Step 5

While holding the display with one hand, insert a soft plastic panel tool under either bottom corner and slightly pry up to release the display panel.

