

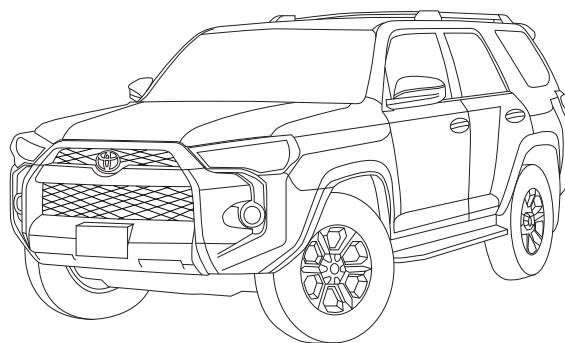
Toyota 4Runner

iLX-F309FRN

9" Restyle In-Dash System

Installation Manual

- Model: 4Runner
- Model Year: 2014-Up



Toyota	Model	Year
	4Runner	2014 - Up

* The specified vehicles have been tested and have met compatibility specs at the time of testing. Compatibility is not guaranteed if the manufacturer has made production changes to the listed vehicles above.

⚠ Warning: Before you begin wiring, remove the ground wire from the negative terminal of the battery. Failing to do so can lead to electric shock, injury or damage to equipment.

Introduction

- Congratulations on purchasing the iLX-F309FRN. This installation manual is designed to take you through the step-by-step installation of iLX-F309FRN into a 2014-Up Toyota 4Runner. Please familiarize yourself with the owners manual and if you still have additional questions please call 1-800-TECH-101.

Note

- Design and specifications are subject to change without notice for improvement.



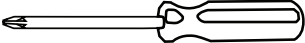

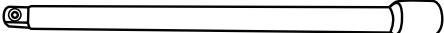
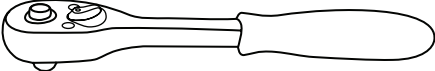
To Ensure Safe Use, Always Follow These Precautions

- The installation of this product requires specialized skills and experience. We recommend that you have the product installed by an Alpine authorized dealer.
- Before you use this product, be sure to carefully read this installation manual and the separate user's manual so that you can use the product correctly. Alpine Electronics bears no responsibility for problems that arise as a result of failure to follow the instructions in the manuals.
- This manual includes a number of symbols that are intended to help you use the product safely, to prevent harm to you and others, and to protect against damage to property. These symbols and their meanings are listed below. Make sure you fully understand these symbols before you begin reading the main text.

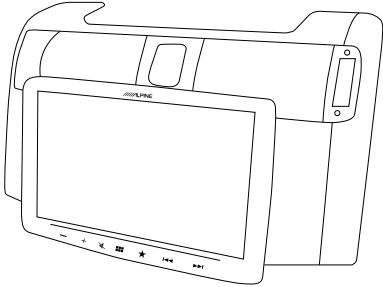
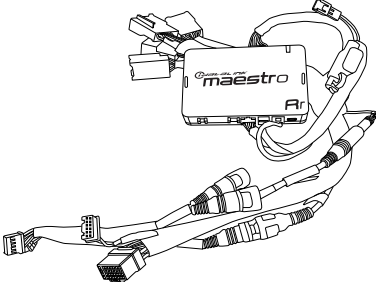

Explanations of Injury and Damage That May Result from Incorrect Use

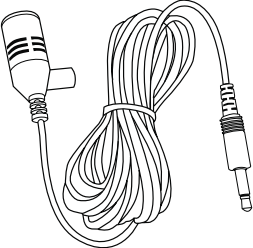
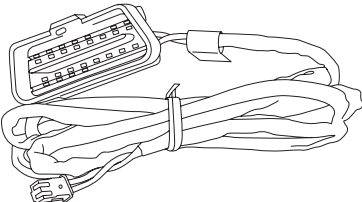

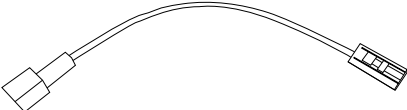


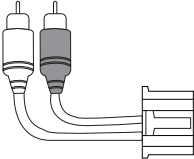

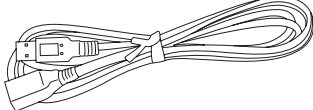
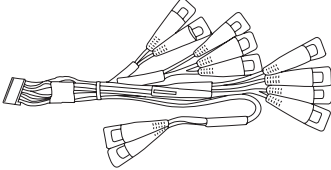
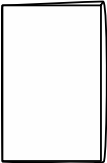

⚠ Warning	Ignoring the content marked by this indication and using the product incorrectly is expected to lead to death or serious injury.
⚠ Caution	Ignoring the content marked by this indication and using the product incorrectly is only expected to lead to injury or property damage.

Tools Required

Panel Removing Tool	10mm Sockets	Phillips Screwdriver
		
Wire Cutters	Extension	Ratchet
		

Accessory List

Installation Kit Parts		
iLX-F309FRN Radio Mounted In Dash Bezel	Main Harness With Maestro Module Plugged In	OEM USB Adapter
		

Bluetooth Mic	OBDII Adapter Cable	FM Antenna Adapter
		
GPS Antenna Adapter	Satellite Radio Antenna Adapter	Phillips Screws x 1
		
Low Level RCA Adapter	Cable Ties x 10	USB Extension Harness
		
Aux/Preout Harness	Documents	
	<div>   </div> <div> Alpine Registration Card Quick Reference Guide </div>	

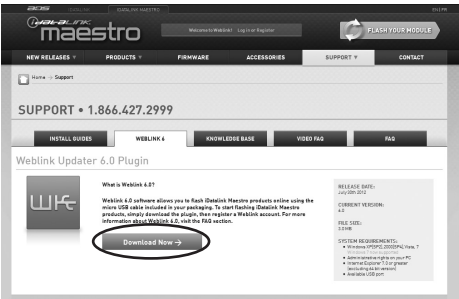
Programming the iDatalink Maestro Module

The Maestro module is pre-flashed already. This page is here in case the module needs to be flashed again.

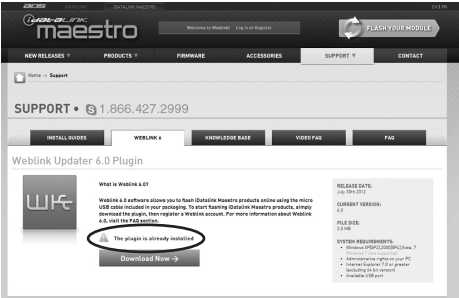
1 INSTALL THE WEBLINK PLUG-IN

Go to: idatalinkmaestro.com/plugin and follow the installation steps. The Maestro module must be programmed specifically for each vehicle and radio. Take care to enter the correct vehicle information, factory options, head unit model, and head unit serial number. The head units serial number is an alphanumeric value which is found on the head units label, underneath the bar code.

Review the System Requirements before installing.



If the plugin is already installed, the caution, “The plugin is already installed” appears. Please skip to step 2.



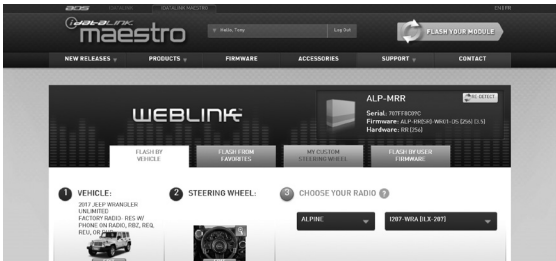
3 CONNECT YOUR MAESTRO MODULE

Use your Maestro module to connect to your PC.



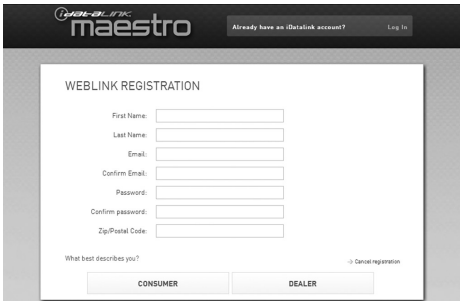
5 PROGRAM YOUR MODULE

Follow the programming steps for your vehicle.



Go to: idatalinkmaestro.com/register and complete the registration process.

A confirmation email will be sent to you requiring validation.



For existing customers, click log in.



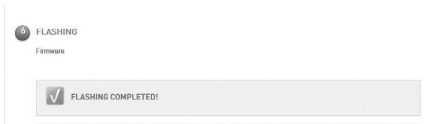
4 LOG INTO WEBLINK

Go to: idatalinkmaestro.com/login. Enter your username and password, then click OK.



6 Once Programing is complete “FLASHING COMPLETED!” will be displayed.

Proceed to the next page to complete installation.



NOTE: If serial number is invalid, Call ADS at 1-866-427-2999 with the serial number.

Factory Unit Disassembly Process

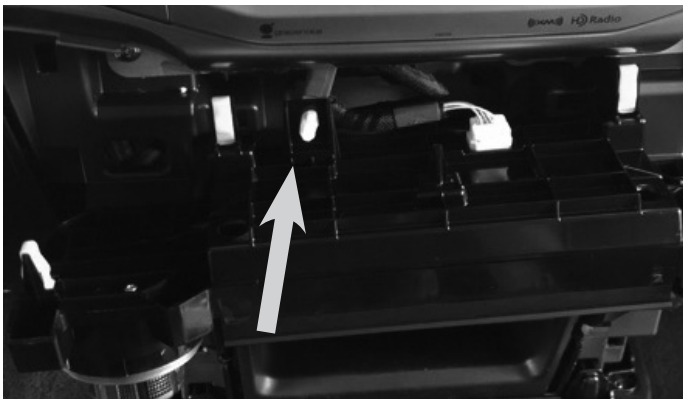
- 1 Use a panel removal tool to release the clips on both right and left panels of the HVAC control panel.



- 2 Use a panel removal tool to release the HVAC control panel.



- 3 Use a pair of needle nose pliers to close and release the tabs on the wire harness anchor. Disconnect the harness and remove the HVAC.



- 4 Use a 10mm socket to extract the (4) screws below the factory radio.



- 5 Use a panel removal tool to release the clips and remove the factory radio.



- 6 Use a panel removal tool to remove the “SRS Curtain Airbag” screw cover.

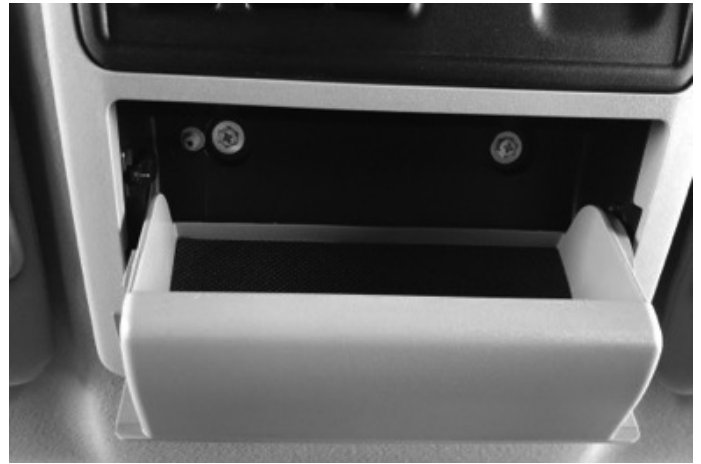


Factory Unit Disassembly Process (Continued)

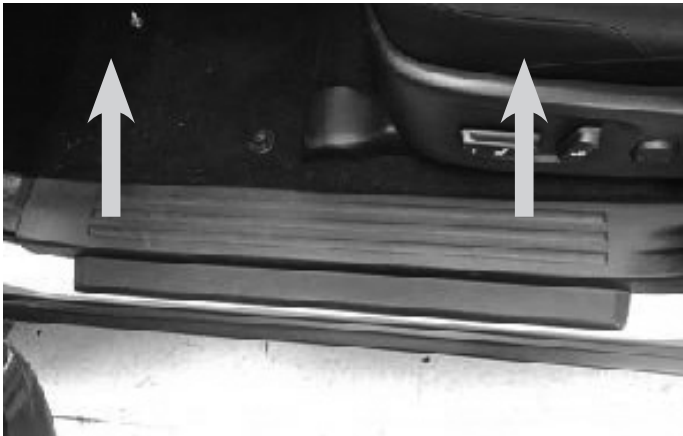
- 7 Extract (1) 10mm screw from the A pillar and lift to remove it.



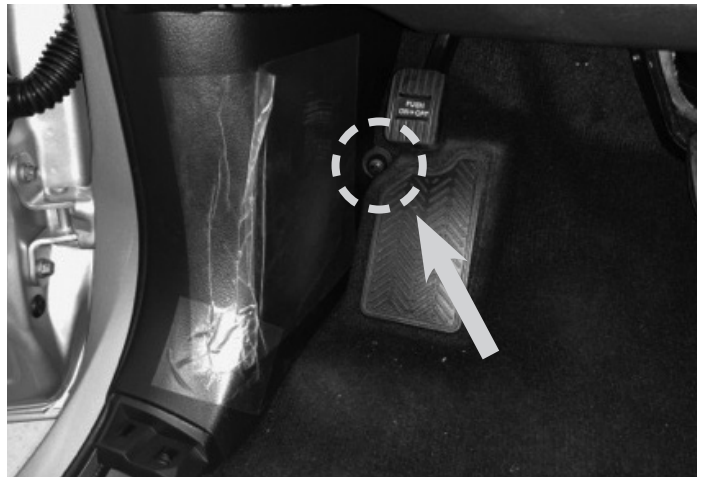
- 8 Extract (2) 10mm screws from the eyewear compartment and pull down to release it. Disconnect and remove it.



- 9 Remove drivers side door sill by lifting up.



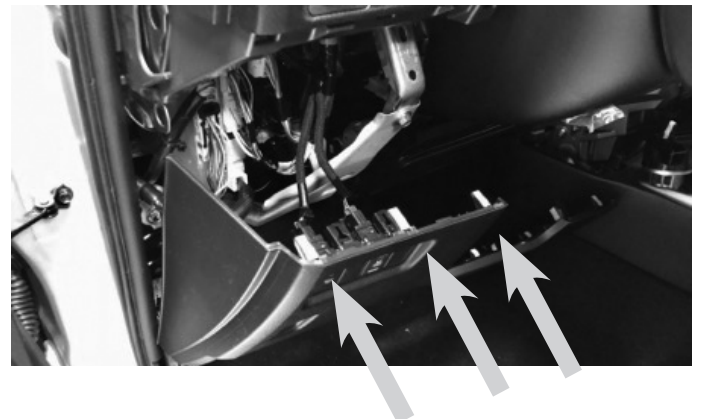
- 10 Remove the plastic fastener on the driver's kick panel by turning left. Unsnap and remove the kick panel.



- 11 Extract (2) 10 mm screws from the lower section of the driver's knee cover panel.

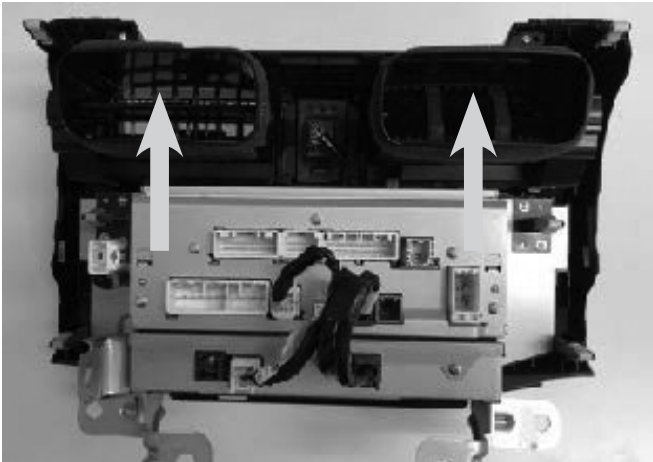


- 12 Use a panel removal tool to release the clips and remove the driver's knee cover panel.

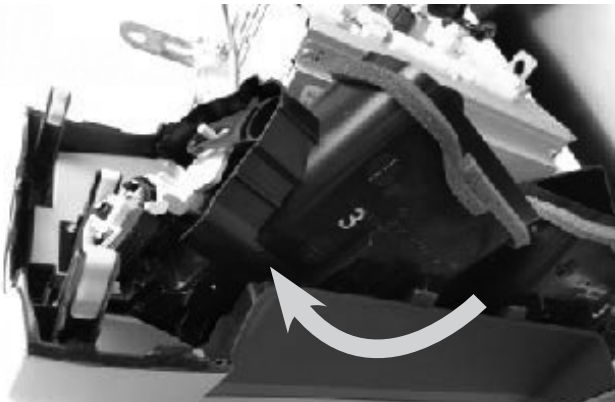


Removing Radio Panel Components

- 1 Remove both left and right air vents following steps 2 and 3.



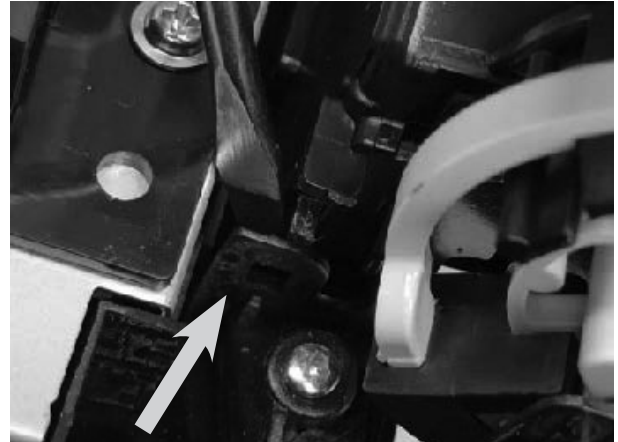
- 3 Tilt, lift, and remove both vents.



- 5 Use a razor blade to cut the tape securing the hazard light switch harness and remove it. NOTE: Cut away from the harness so the wiring is not accidentally damaged.



- 2 Use a small flat head screw driver to release the lock tabs on the outer side of the vent.



- 4 Use a small flat head screw driver to release the lock tab on the hazard light connector at the radio chassis.



- 6 Disconnect the hazard light switch and remove it by pushing it from the rear to the front of the radio panel.



Removing Radio Panel Components (Continued)

- 7 Extract (6) small Phillips screws from the factory radio panel.



- 8 Remove the top and vent trims. Note: be sure to retain all screws as they will be used on the new radio panel.



Installation Instructions

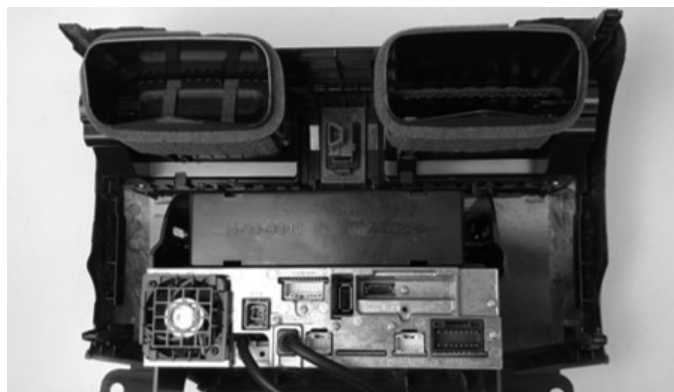
- 1 Install the Hazard light switch, top and side vent trims using the factory screws into the iLX-F309FRN radio panel.



- 3 Attach the microphone to the headliner next to the eyewear compartment with the provided Phillips screw.



- 2 Snap both left and right vents into place.



- 4 Connect the OBD2 adapter to the OBD2 port below the driver's side dash. .

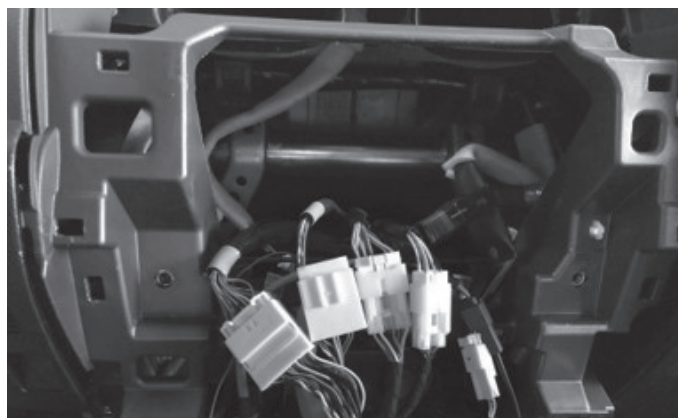


Installation Instructions (Continued)

- 5 Route the microphone cable down to the OBD2 port and route both OBD2 cable and microphone to the radio cavity as shown below.

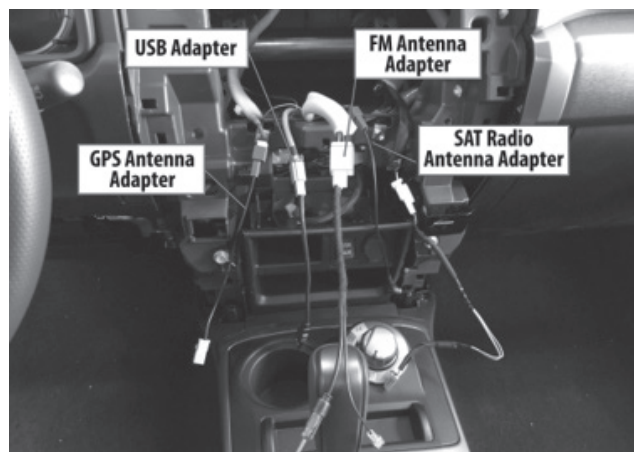


- 7 Connect the main harness and additional connectors between the vehicle and radio according to the corresponding wiring diagram on pages 10 or 11.



- 9 Return all removed components to their factory locations and connect the negative (-) battery terminal.

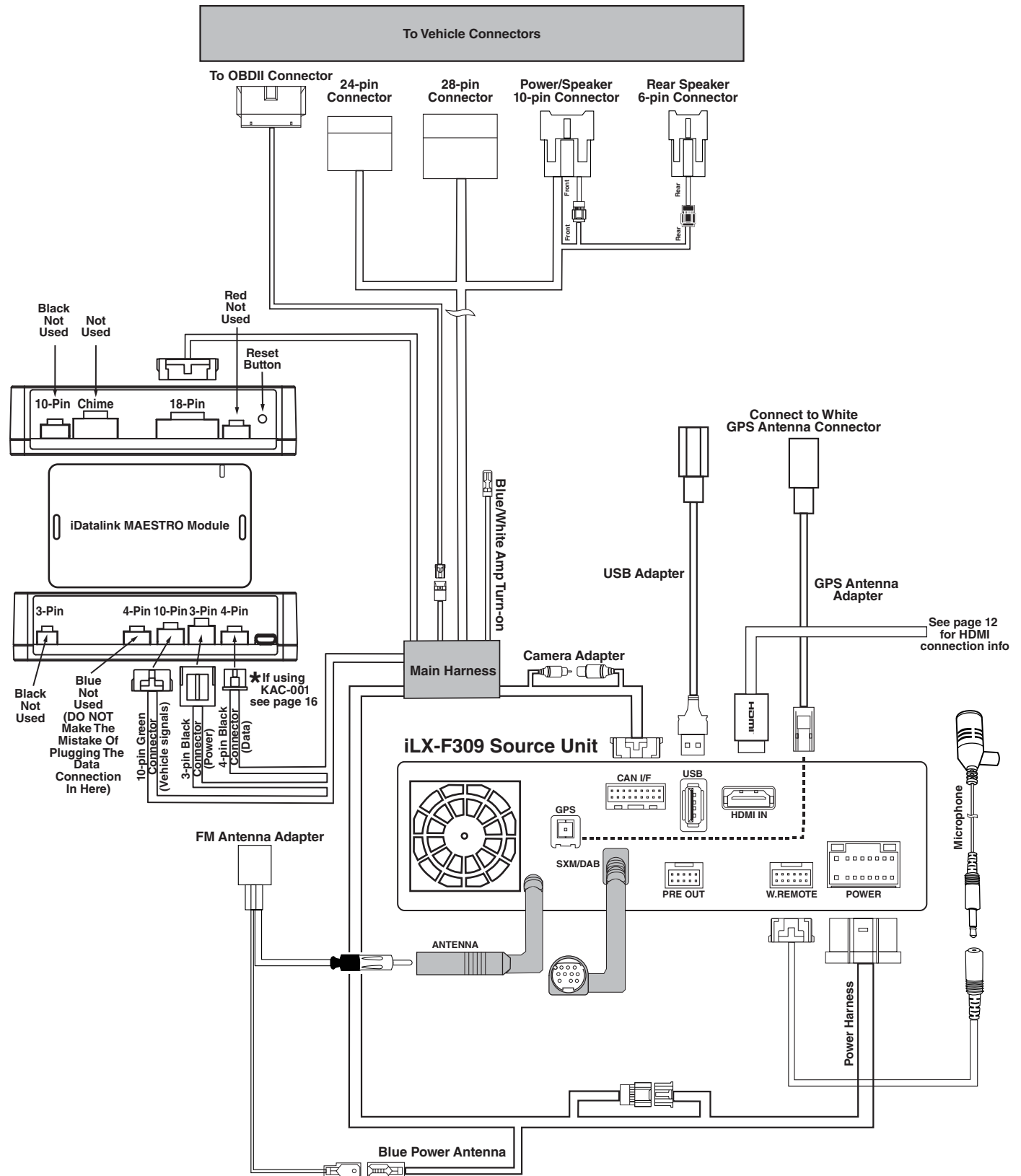
- 6 Connect the GPS antenna, FM antenna, SAT Radio antenna and USB adapters into the vehicle side.



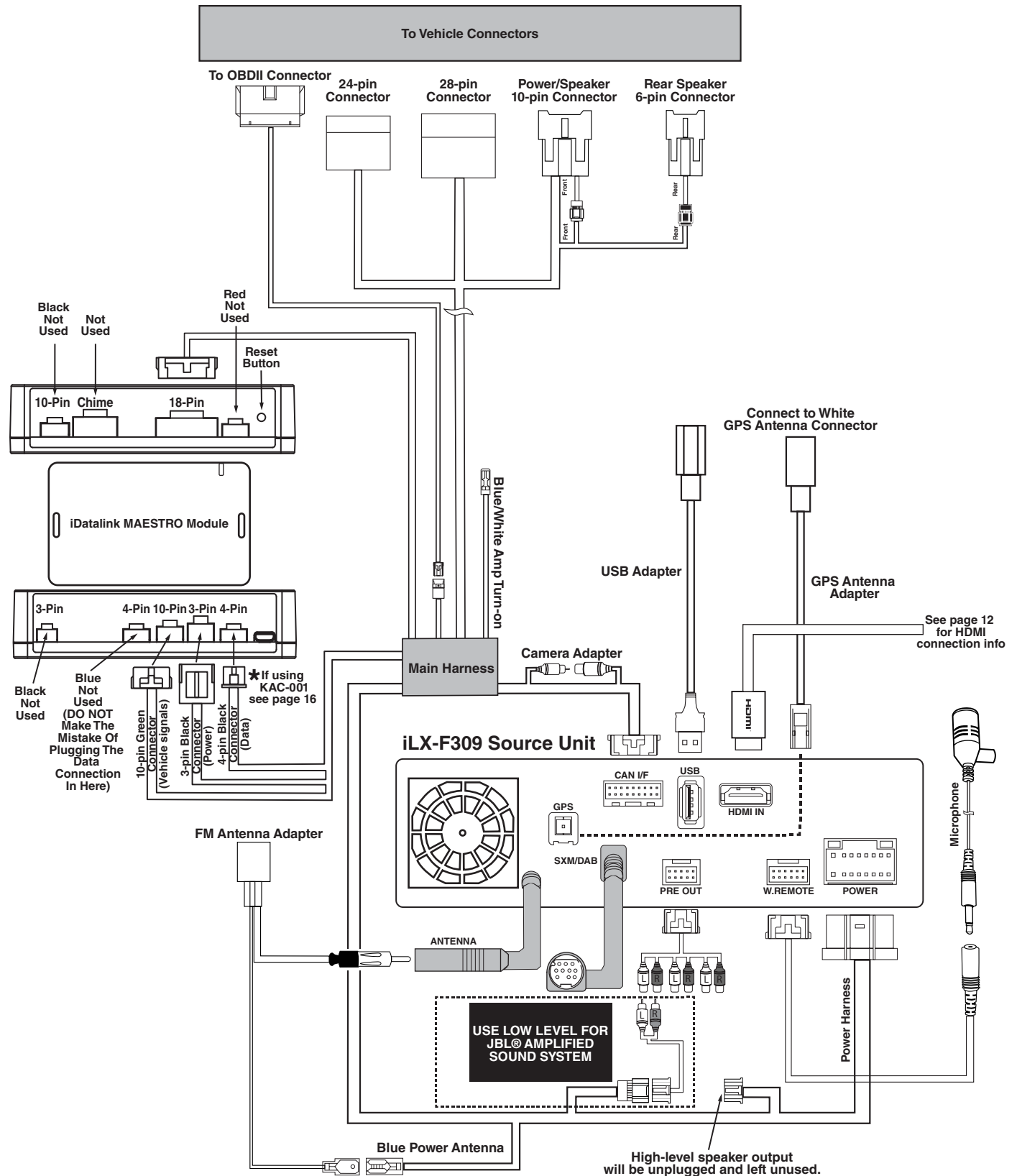
- 8 Mount the iLX-F309FRN using the factory screws. Note: Kit only requires (2) 10mm screws. Place the additional (2) 10mm screws back into the factory location in case they are needed in the future.



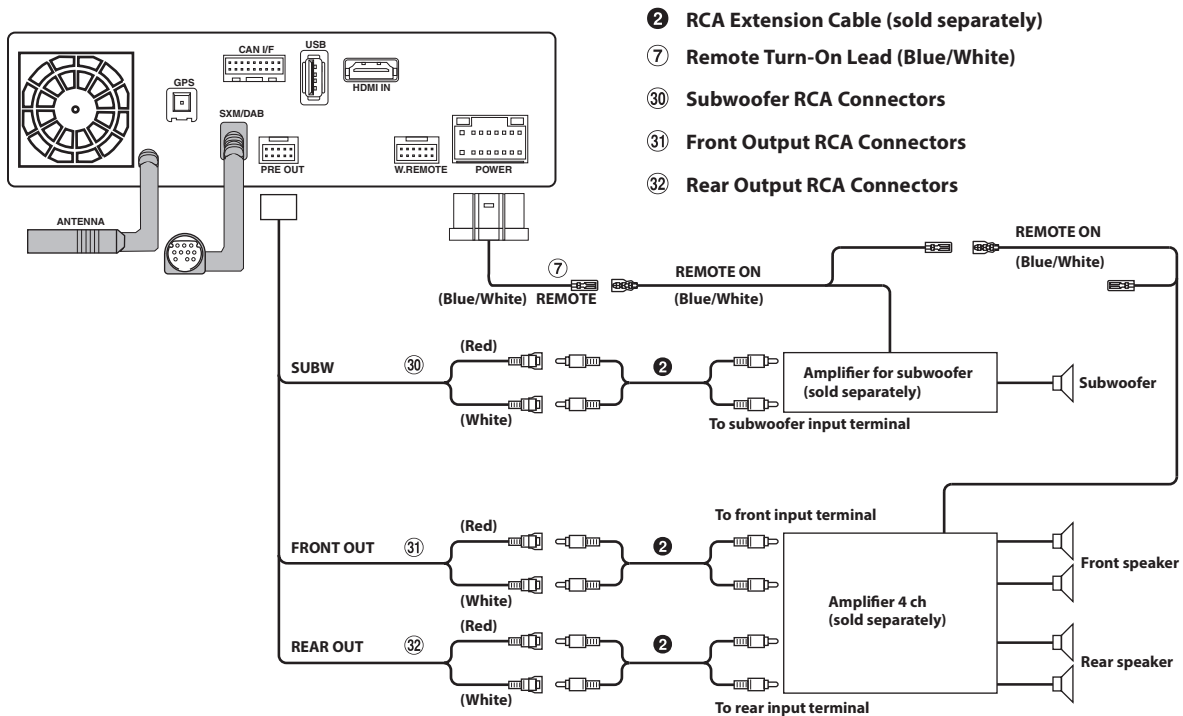
iLX-F309FRN Wiring Diagram W/O Factory Amplifier



iLX-F309FRN Wiring Diagram With Factory Amplifier

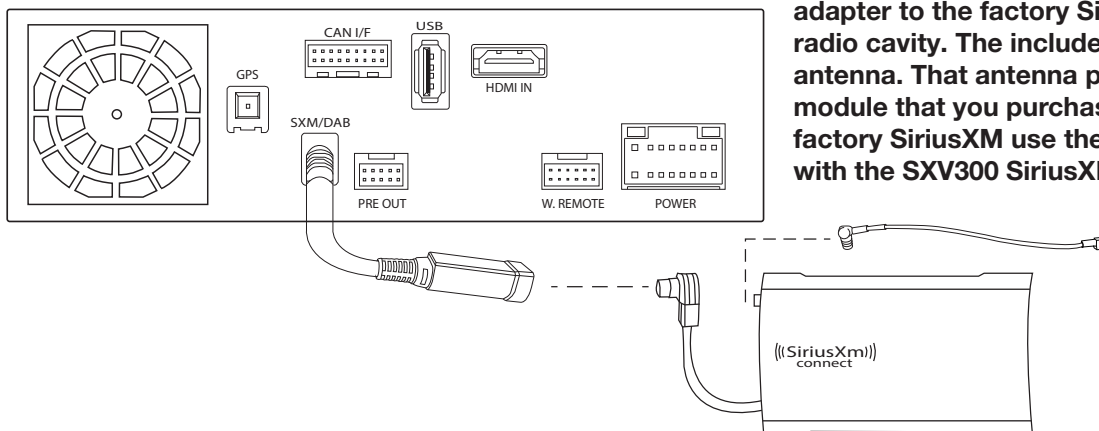


Connection Of An External Amplifier



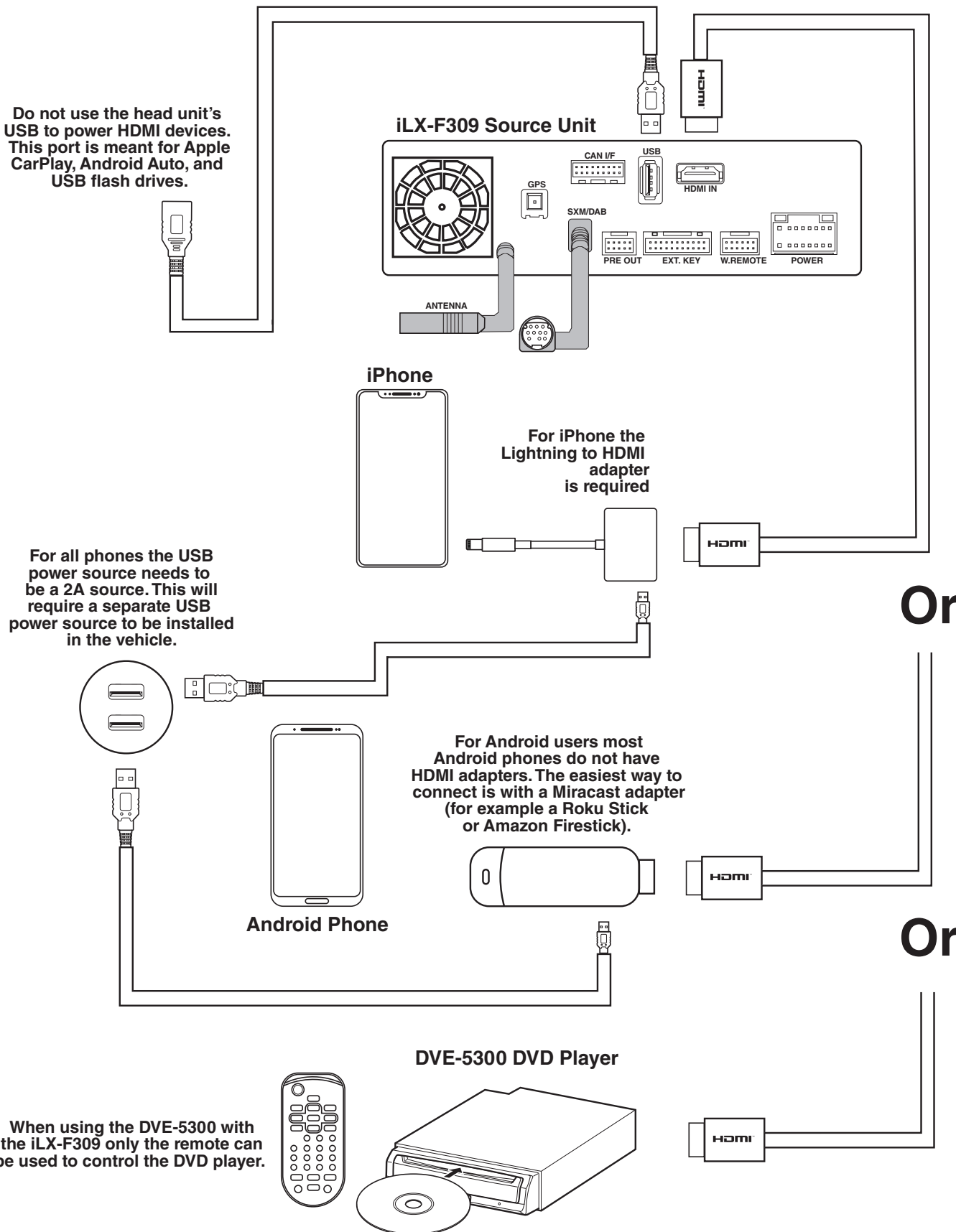
Connecting A SiriusXM Module (Sold Separately)

There is no way to integrate the factory SiriusXM tuner. Once the radio is removed, the factory SiriusXM is removed. As the title states, SiriusXM requires a tuner sold separately. This diagram shows how to integrate the antenna connection. For vehicles with factory SiriusXM connect the adapter to the factory SiriusXM antenna in the radio cavity. The included adapter is just for the antenna. That antenna plugs into the aftermarket module that you purchase. For vehicles without factory SiriusXM use the antenna that is included with the SXV300 SiriusXM Tuner.

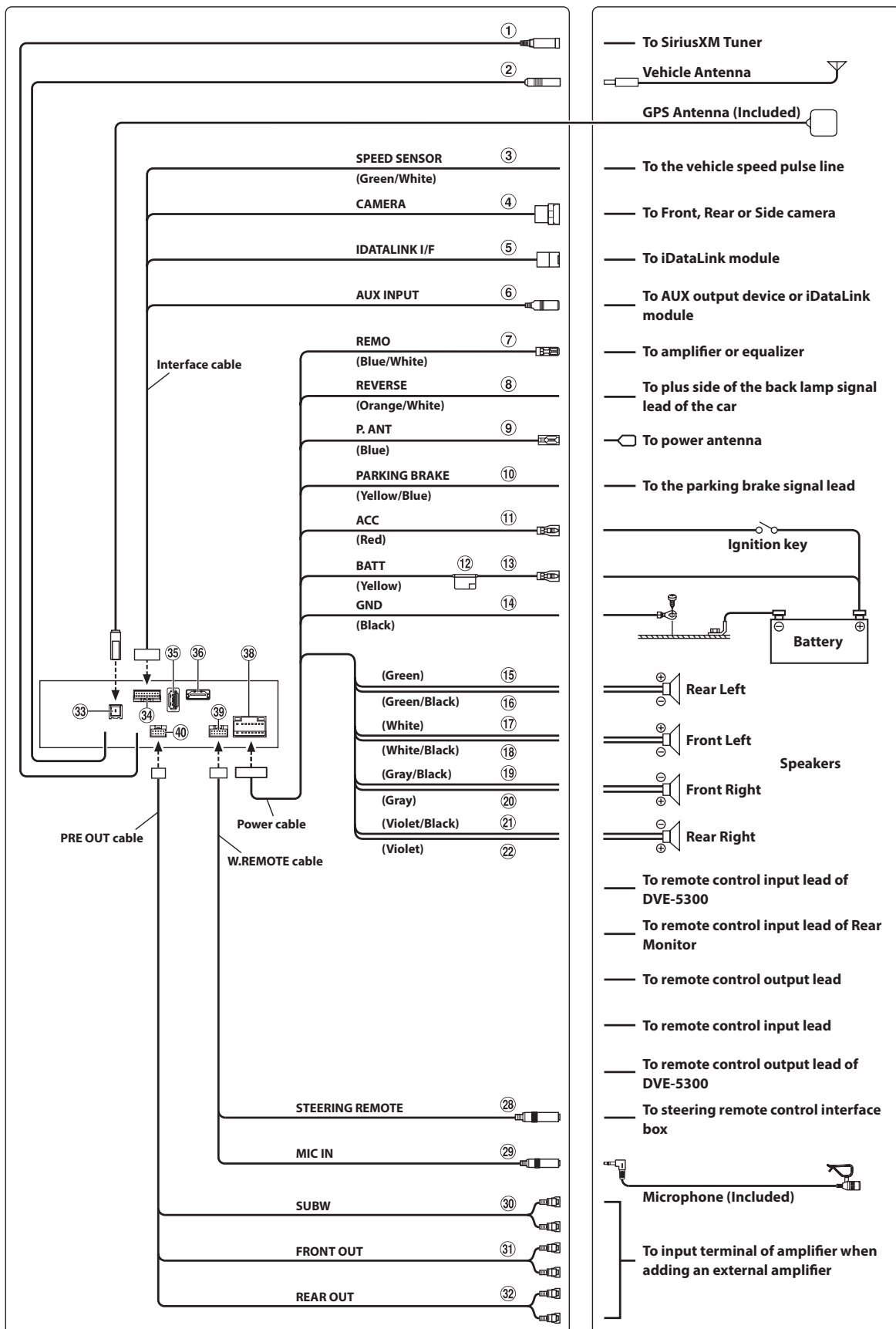


iLX-F309FRN HDMI Input

Do not use the head unit's USB to power HDMI devices. This port is meant for Apple CarPlay, Android Auto, and USB flash drives.



iLX-F309FRN Wiring Diagram

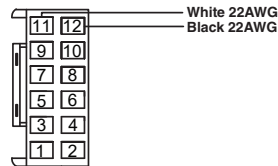


Wire Harness Pin Outs

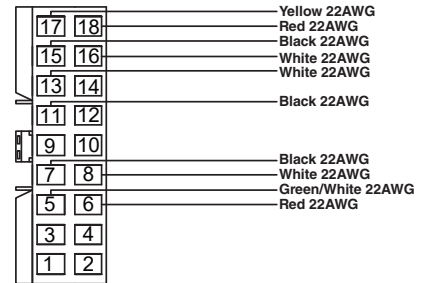
Radio Main



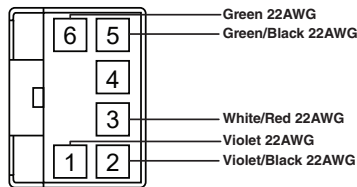
Remote Harness



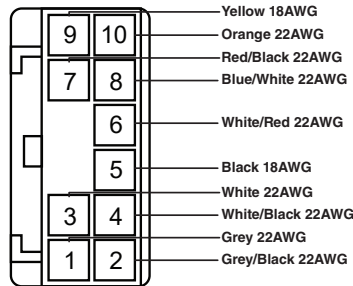
Cam Aux Data



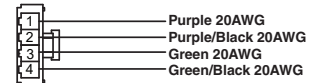
OEM Speaker Harness 1



OEM Speaker Harness 2



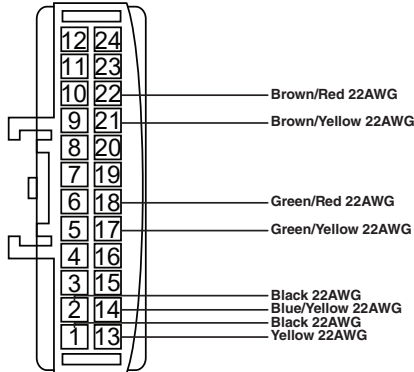
Speaker Harness



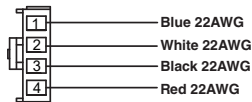
Speaker Harness



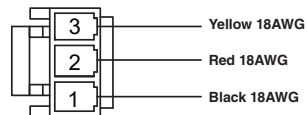
Toyota Radio 1



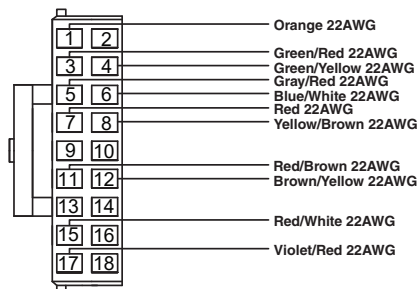
iDataLink



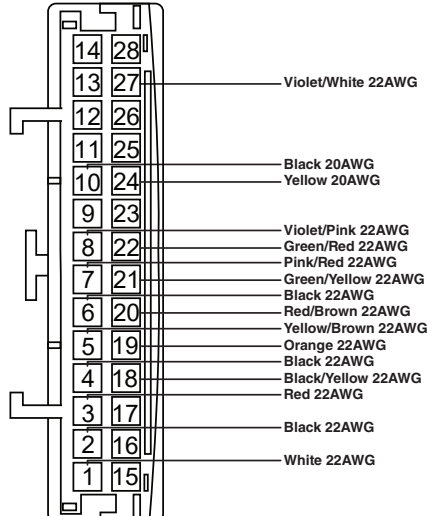
Power/ACC



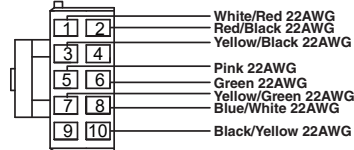
Data SWC



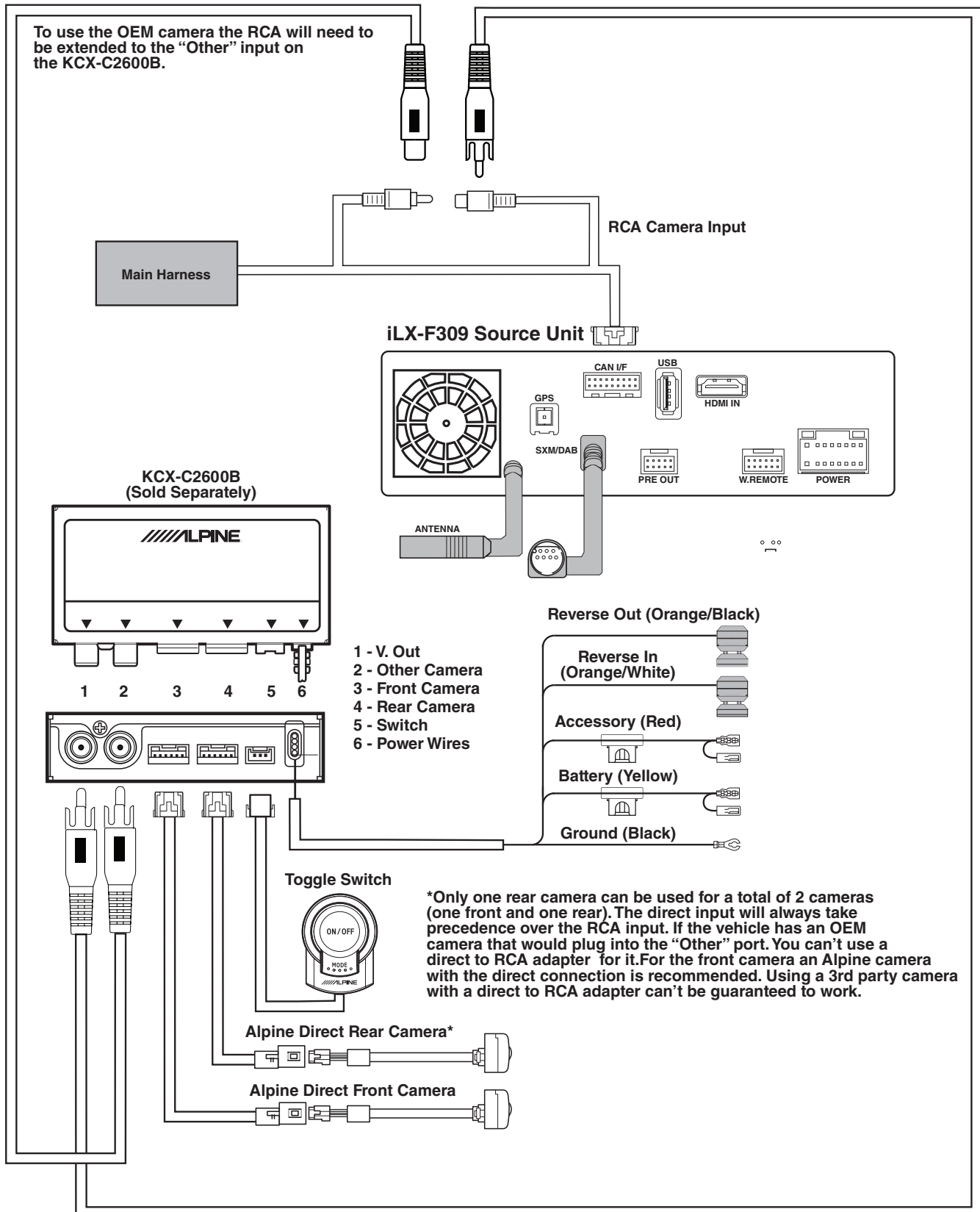
Toyota Radio 2



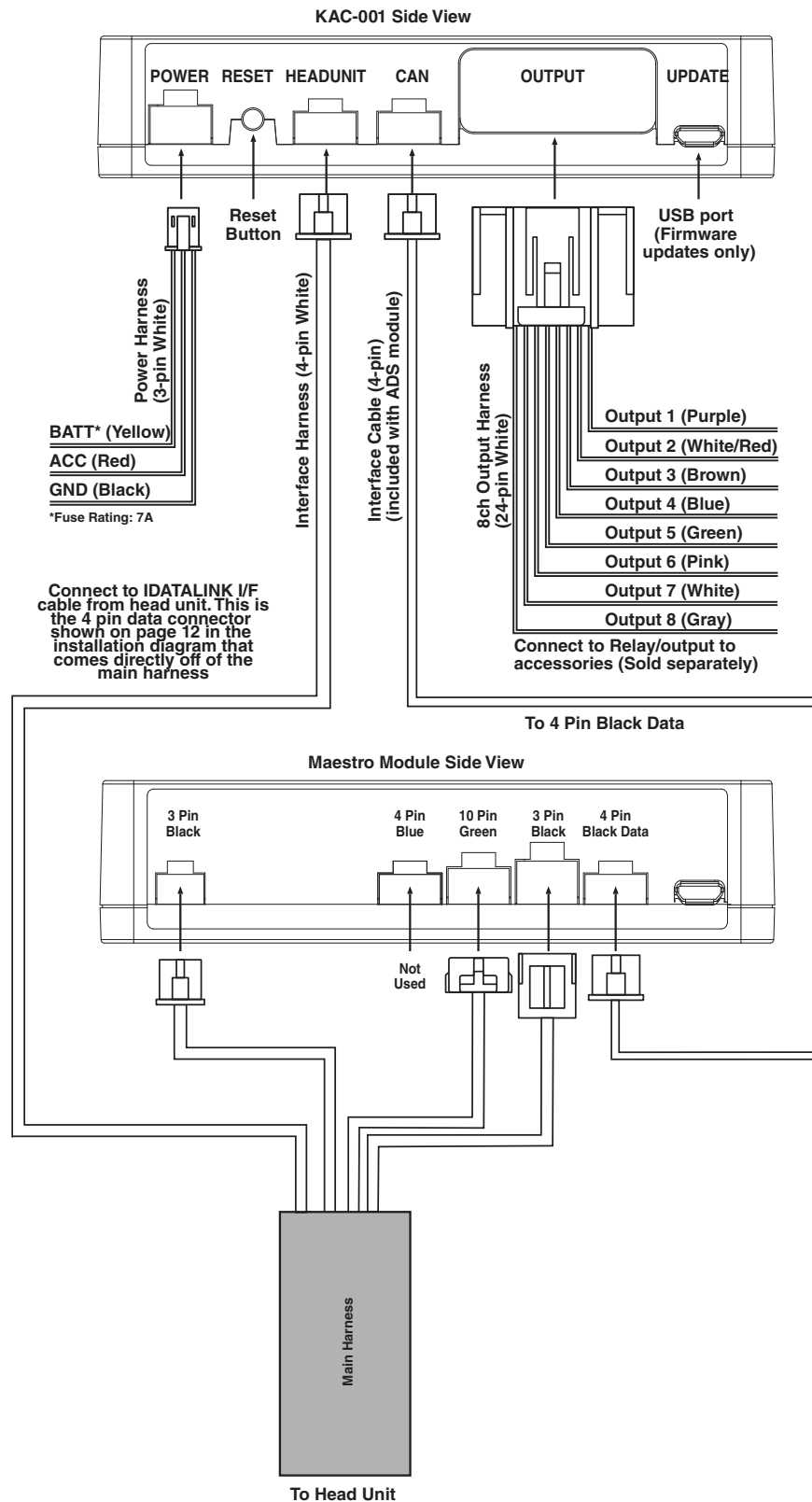
Audio In



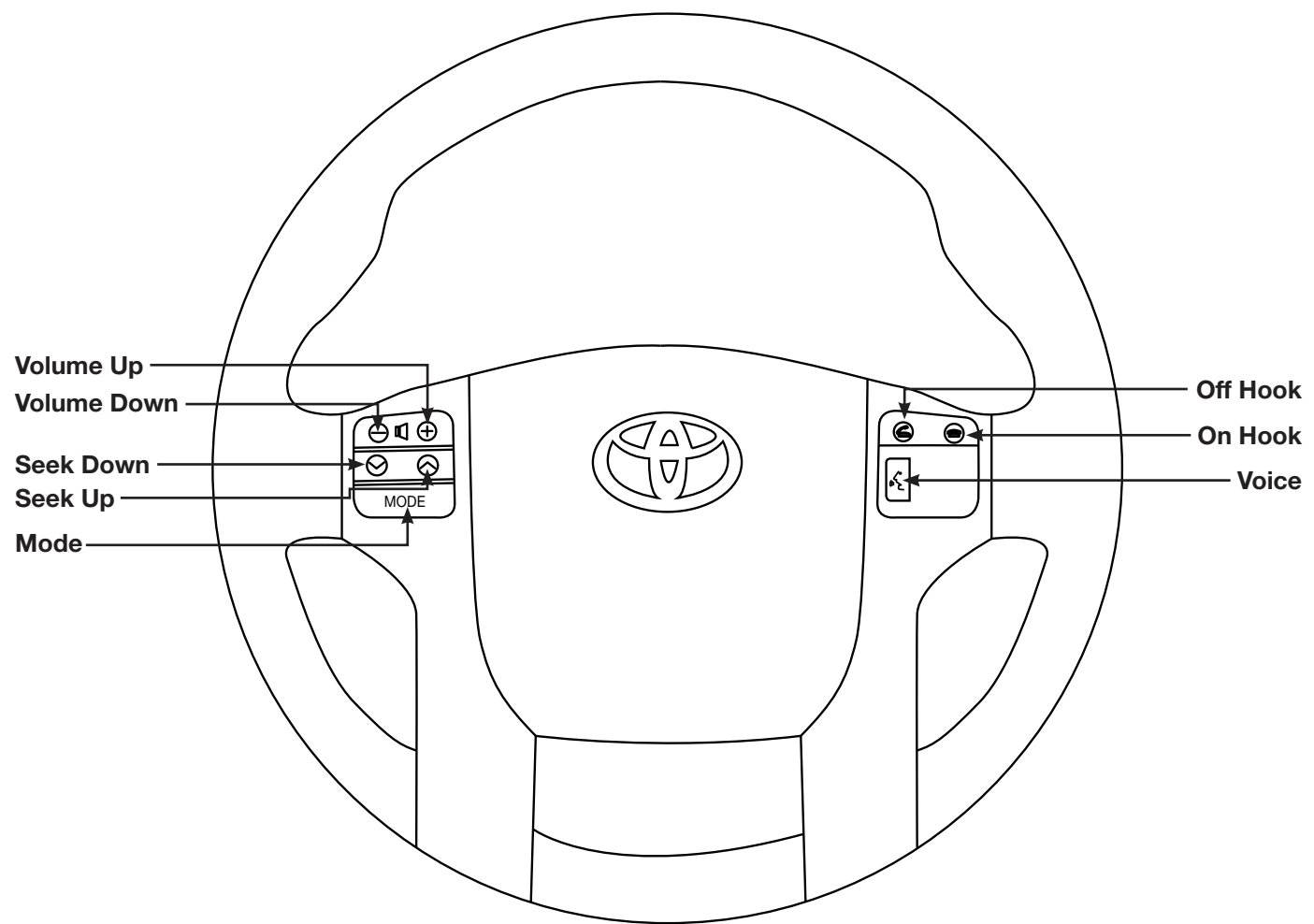
Adding A Front Camera



Connection Of KAC-001 (Sold Separately)



Steering Wheel Configuration



Button	Press Once	Press And Hold
Volume Up	Volume +	None
Volume Down	Volume -	Attenuation On/Off
Seek Up	Seek +	Preset & Folder +
Seek Down	Seek -	Preset & Folder -
Mode	Source	Display Gauges Screen
Off Hook	Answer Call	None
On Hook	Hang Up & Reject Call	None
Voice	Voice or Siri	None

Set Up Guide

- 1 Turn the vehicle's Ignition switch to ACC.
- 2 Turn ON the iLX-F309FRN by pressing any key.
- 3 Select the user language and press OK.
- 4 Engage and release the parking brake twice (parking brake on, off, and back on).
- 5 If a camera is present, turn it ON in the system menu. (MENU/SETUP/SYSTEM/CAMERA/CAMERA SELECT).
- 6 AUDIO MUTE ON REVERSE- By default, when the vehicle is shifted into reverse the AUDIO will MUTE. If this feature is not desired turn it off in the AUDIO MENU (MENU/SETUP/SOUND/MUTE WHILE BACKING UP).
- 7 When the KAC-001 (External Accessory Control Module) is present be sure to turn it ON in the SETUP MENU. (MENU/SYSTEM/EXTERNAL ACCESSORIES/EXTERNAL ACCESSORY CTRL).
- 8 Vehicle information- Set the desired gauge information. (MENU/VEHICLE INFO/GAUGES/CAR SETTINGS).
- 9 NOTE: For all the product information please download the full owners manual in the support section of the website at www.alpine-usa.com.

Troubleshooting Guide

Symptom		Possible Cause	Remedy
1	iPhone not working with HDMI.	Not using Apple HDMI to Lightning adapter.	Purchase the HDMI to Lightning adapter directly from Apple. Not all 3rd party adapters work the same.
		Didn't plug USB power into a 2A source.	Do not plug into the USB from the Alpine head unit. A third party USB adapter will need to be used that is 2A.
2	Android phone is not working with HDMI.	Using incorrect HDMI adapter.	If the phone has the feature to use an HDMI adapter it must be the one purchased from the manufacturer of the phone, not a third party adapter.
		Miracast adapter isn't plugged into a 2A source.	Do not plug into the USB from the Alpine head unit. A third party USB adapter will need to be used that is 2A.
		Miracast adapter has resolution settings that are too high.	Plug the adapter into another monitor (for example a television in the home) and reduce the resolution settings.
3	iDatalink website says serial number is invalid.	Incorrect serial number is being used.	In the iLX-F309FRN settings confirm the serial number. MENU/SETUP/GENERAL/ABOUT.
		Serial number may not be in iDatalink database.	Call ADS at 1-866-427-2999 and verify.

Troubleshooting Guide Continued

Symptom		Possible Cause	Remedy
4	Headunit will not turn on.	Incorrect serial number was used when flashing maestro.	Flash Maestro with correct serial number.
		4 pin Maestro data cable is disconnected or damaged.	Check for proper connection or disconnected pins.
		OBD2 cable is not plugged in.	Connect OBD2 connector to the OBD2 port.
		Monitor, power plate screw, or main harness are not connected.	Check for proper connection or disconnected pins.
5	Cannot enter SETTINGS MENU.	Vehicle is in motion or parking brake is not engaged.	With vehicle in (P)PARK engage the parking brake. Release the parking brake and engage the parking brake a second time, as shown in the Setup Guide on page 19.
6	Cannot control the DVD Player properly.	The iLX-F309FRN does not have remote wires.	The DVE-5300 (sold separately) can only be controlled by the wireless remote that is included with it.
7	Sound mutes when vehicle is shifted into reverse.	Mute on reverse is turned on in the SOUND menu.	Change Mute on reverse to off.
8	Only the front speakers are on for SXM Radio.	SXM Tuner has not been activated.	Activate SXM Tuner.
9	CarPlay, Android Auto, or off-road navigation map positioning issues.	GPS antenna is positioned incorrectly.	GPS antenna is obstructed and doesn't have line of sight to the sky. Perform a factory reset. The unit will automatically recalibrate.
10	CarPlay, Android Auto, or off-road navigation vehicle position icon heading in wrong direction	Reverse Signal is not connected or not reliable.	Ensure that Reverse wire is connected. Also ensure that no 3rd party interface module(s) interfere with the Reverse Signal. The head unit uses the Reverse Signal to achieve optimal positioning performance.
11	iPhone or Android phone is not recognized when connected to the USB cable.	Loose or disconnected USB cable.	Check the USB connection behind the headunit.
		Non-compatible cable.	Use the cable supplied with the iPhone or Android phone. Third party adapters and long extensions may not work. Only use USB extension that came with the head unit.
		Dirty charging port on phone.	Clean charging port.
12	No output from RCA's.	Maestro module is flashed for amplified system.	Re-flash module for non-amplified system.
13	Volume controls on bezel and steering wheel controls do not work.	The setting for External Processor was turned on.	That setting should only be checked when using an external sound processor. When there isn't one being used in the audio system it needs to be in the default setting of off. MENU/SETUP/SYSTEM/EXTERNAL ACCESSORIES/EXTERNAL AUDIO PROCESSOR/OFF