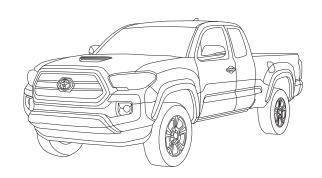
# Toyota Tacoma iLX-F309TCM

//////LPINE

## 9" Restyle In-Dash System Installation Manual

Model: Tacoma

Model Year: 2016-Up



| Toyota | Model  | Year      |  |
|--------|--------|-----------|--|
|        | Tacoma | 2016 - Up |  |

<sup>\*</sup> 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-F309TCM. This installation manual is designed to take you through the step-by-step installation of iLX-F309TCM into a 2016-Up Toyota Tacoma 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.

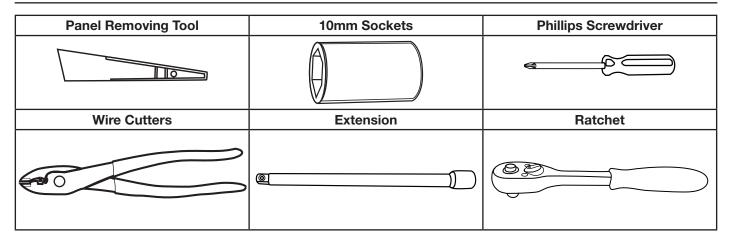
## To Ensure Safe Use, Always Follow These Precautions

- 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**

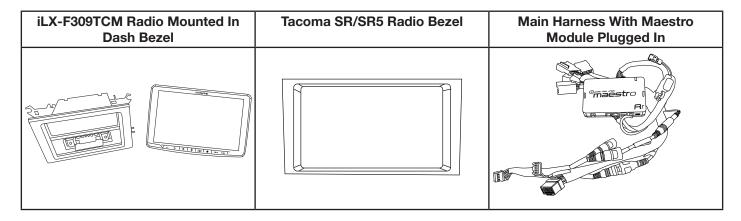
| <u> </u> | Ignoring the content marked by this indication and using the product incorrectly is expected to lead to death or serious injury.        |
|----------|---|
| <u> </u> | Ignoring the content marked by this indication and using the product incorrectly is only expected to lead to injury or property damage. |

## **Tools Required**



## **Accessory List**

#### **Installation Kit Parts**



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

#### **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.



#### 2 REGISTER A WEBLINK ACCOUNT

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 clips of the radio bezel and remove it.



2 Use a 10mm socket to extract (4) 10mm screws from the factory radio, disconnect and remove it.



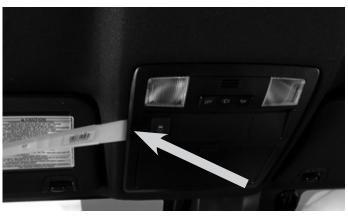
3 Use a panel removal tool remove the driver's side A pillar screw cover.



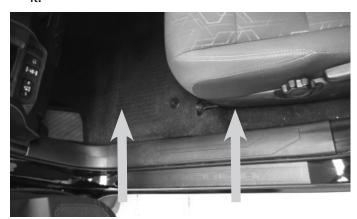
4 Use a 10mm socket to extract the screw from the A pillar panel cover.



5 Use a panel removal tool to release the clips on the eye wear storage compartment and remove it.



6 Remove the drive's side door sill by carefully lifting it.



## Factory Unit Disassembly Process (Continued)

7 Remove the plastic nut on the driver's kick panel and carefully lift it to remove it.



8 Extract (3) 10mm screws from the driver's side knee cover, release the clips and remove it.



## **SR & SR5 Models Only**

SR and select SR5 models have a smaller size radio opening. Locate the SR/SR5 application bezel and switch it before beginning the iLX-F309TCM installation. The steps below will guide you through the process.

1 Remove (4) Phillips screws. (2) on each side.



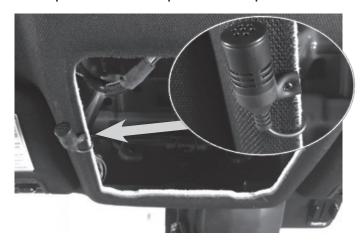
2 Attached the smaller bezel using the (4) screws previously removed.





## **Installation Instructions**

1 Mount the microphone next to the eyewear compartment with the provided Phillips screw.



2 Connect the Black OBD2 adapter to the White OBD2 port below the driver's knee cover.



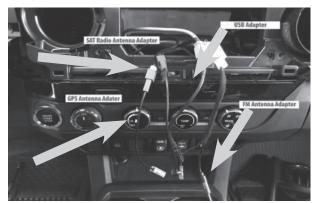
3 Route the microphone down to the OBD2 connector and route both Microphone and OBD2 cables to the radio cavity as shown below.



5 Connect the radio harness (according to the vehicles sound system) following the system diagram on pages 9 or 10.



4 Connect the FM, GPS, SAT Radio Antenna and USB adapters.



6 Mount the iLX-F309TCM source unit using the (4) 10mm factory screws.



## **Installation Instructions (Continued)**

7 Snap the radio bezel back in place.



9 Use a long magnetized Phillips screwdriver to secure the display to the source unit using the provided (4) M4 Phillips screws.



11 Slide screw cover into place. Note: Failure to mount the cover properly may cause the iLX-F309TCM to not turn ON or function properly.



13 Return all removed components back to their corresponding location and connect the Negative (-) battery terminal. 8 Insert the iLX-F309 display into the source unit



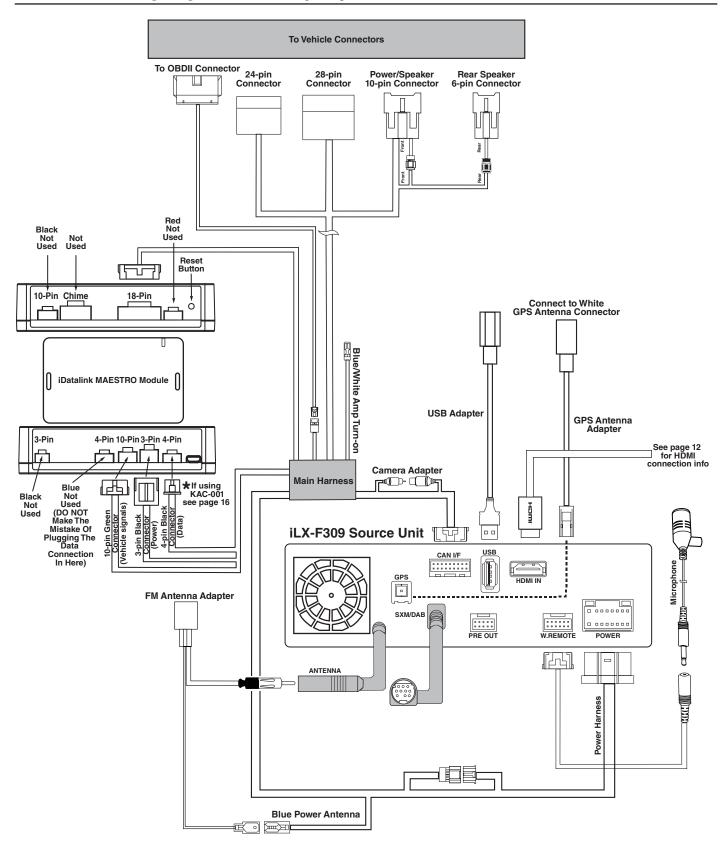
10 Use a piece of double sided tape on a ¼" drive extension (or any other hand tool with a flat side) to slide screw cover into place.



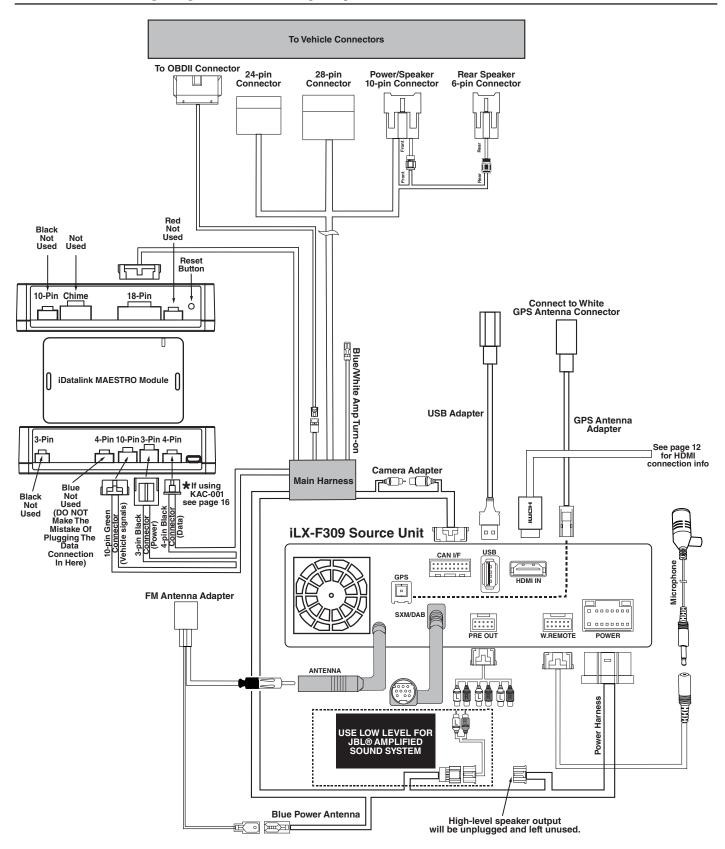
12 Secure the display screw cover with the provided 2mm Phillips screw.



## iLX-F309TCM Wiring Diagram W/O Factory Amplifier

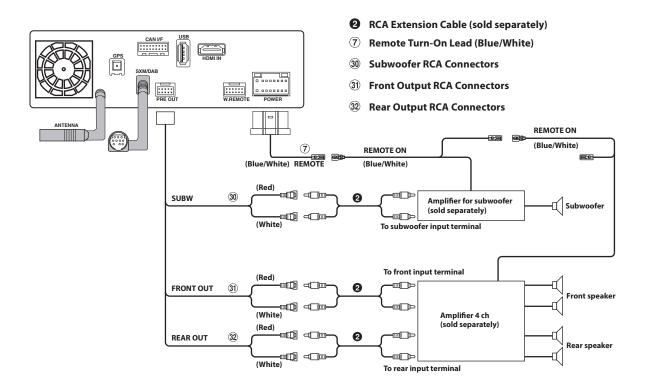


## **iLX-F309TCM Wiring Diagram With Factory Amplifier**

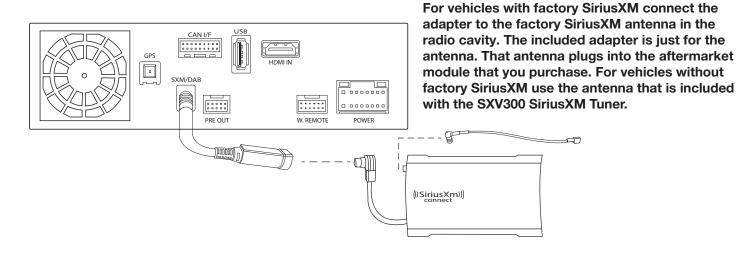


There is no way to integrate the factory SiriusXM tuner. Once the radio is removed, the factory SiriusXM is removed. As the title states, SiriusXM requires a tuner sold separately. This diagram shows how to integrate the antenna connection.

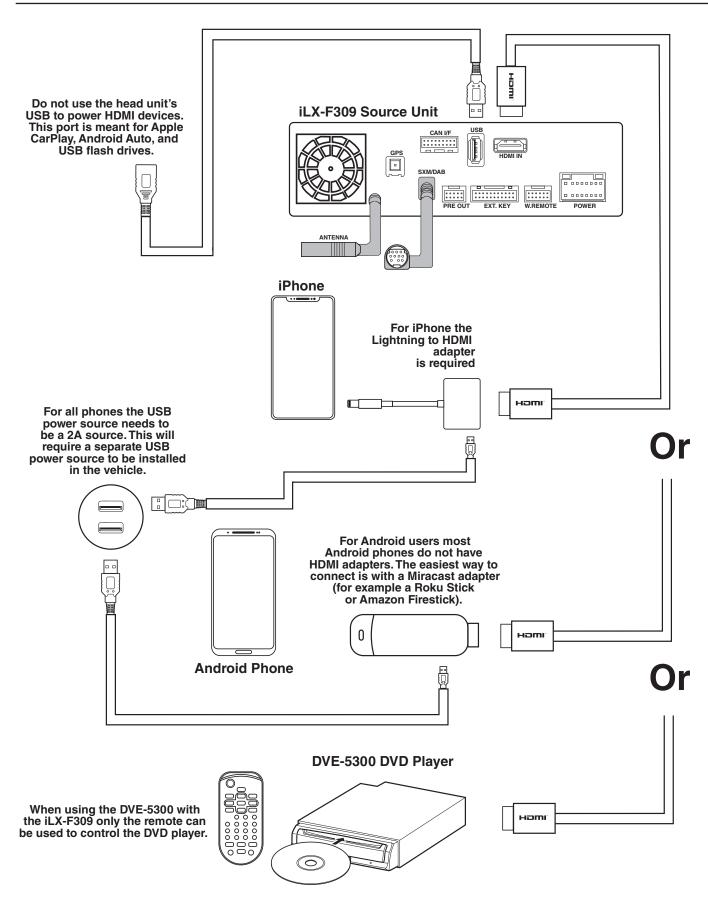
## **Connection Of An External Amplifier**



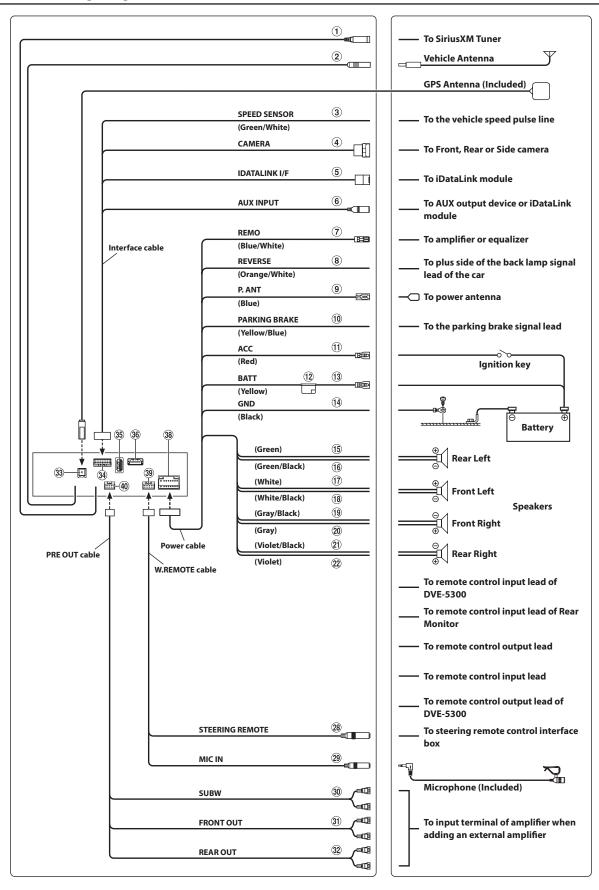
## **Connecting A SiriusXM Module (Sold Separately)**



## **ILX-F309TCM HDMI Input**



## **iLX-F309TCM Wiring Diagram**

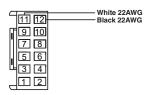


## **Wire Harness Pin Outs**

#### Radio Main

|            |           | Diue ZZAWG  |
|------------|-----------|---|
|            | 8    16 + | Red 20AWG   |
|            | 7 15      | Blue/White 22AWG Orange/White 22AWG Yellow/Blue 22AWG |
|            | 6 14      | Purple 20AWG  |
|            | 5 13+     | Gray 20AWG Purple/Black 20AWG                         |
| $I \vdash$ | 4 12+     | Gray/Black 20AWG                                      |
|            | 3 11+     | White 20AWG  Green/Black 20AWG                        |
|            | 2 10+     | White/Black 20AWG  White/Black 20AWG  Yellow 18AWG    |
|            | 1 9       | Black 18AWG   |
|            |           |   |

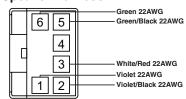
#### **Remote Harness**



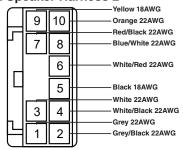
#### **Cam Aux Data**

|   | Yellow 22AWG      |
|---|-------------------|
| 17 18   | Red 22AWG         |
|   | Black 22AWG       |
| 15   16   | White 22AWG       |
| বিহা বিহা                                       | White 22AWG       |
| 11 12   | Black 22AWG       |
| 9 10  | Black 22AWG       |
| <del>                                    </del> | White 22AWG       |
|   | Green/White 22AWG |
|   | Red 22AWG         |
| 3 4   |                   |
| 1 2   |                   |
|   |                   |

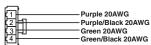
#### **OEM Speaker Harness 1**



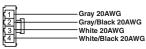
#### **OEM Speaker Harness 2**



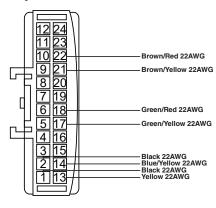
#### **Speaker Harness**



#### **Speaker Harness**



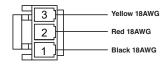
#### Toyota Radio 1



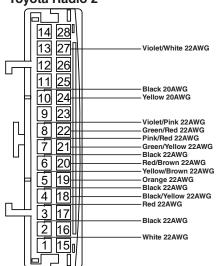
#### iDatalink



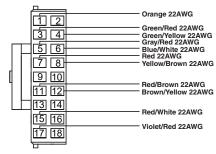
#### Power/ACC



#### Toyota Radio 2



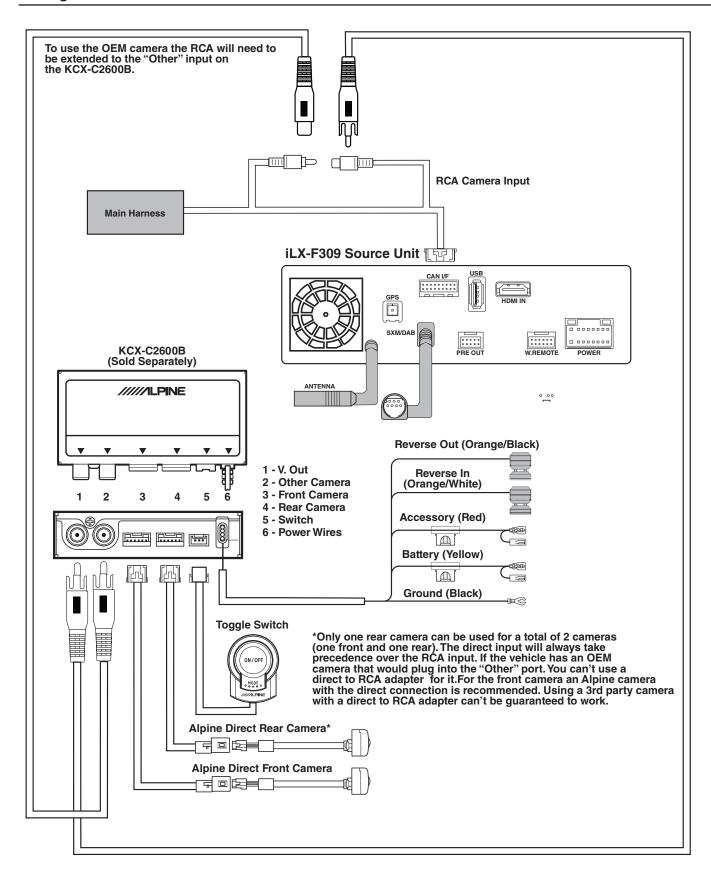
#### **Data SWC**



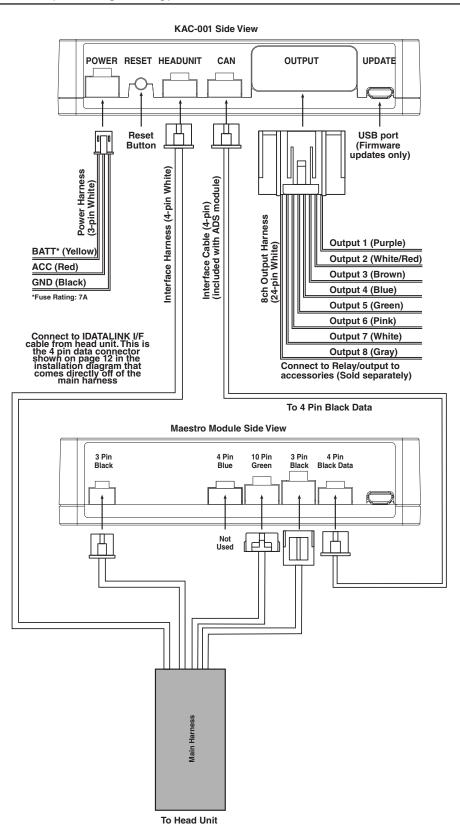
#### **Audio In**

| White/Red 22AWG Red/Black 22AWG Yellow/Black 22AWG Pink 22AWG Green 22AWG Yellow/Green 22AWG Blue/White 22AWG Black/Yellow 22AWG |
|--|
| Didok Tellow ZZAWG   |
|  |

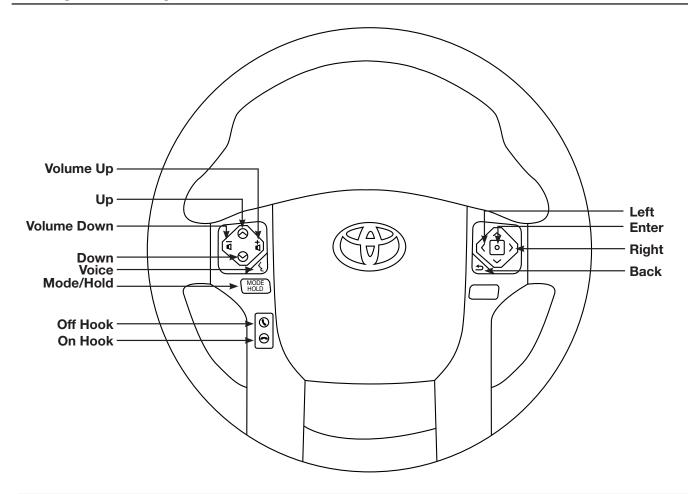
## **Adding A Front Camera**



## **Connection Of KAC-001 (Sold Separately)**



## **Steering Wheel Configuration**



| Button      | Press Once                  | Press And Hold     |
|-------------|-----------------------------|--------------------|
| Volume Up   | Volume +                    | None               |
| Up          | Seek +                      | Preset & Folder +  |
| Volume Down | Volume -                    | Attenuation On/Off |
| Down        | Seek -                      | Preset & Folder -  |
| Voice       | Voice or Siri               | None               |
| Mode/Hold   | Source                      | None               |
| Off Hook    | Answer Call                 | None               |
| On Hook     | Hang Up & Reject Call       | None               |
| Left        | Display Vehicle Screen Info | None               |
| Enter       | Phone Menu                  | None               |
| Right       | Display Guages Screen       | None               |
| Back        | Band                        | None               |

## **Set Up Guide**

- 1 Turn the vehicle's Ignition switch to ACC.
- 2 Turn ON the iLX-F309TCM 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).
- 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 CTLR).
- **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              | 1 iPhone not working with               | Not using Apple HDMI to Lightning adapter.                  | Purchase the HDMI to Lightning adapter directly from Apple. Not all 3rd party adapters work the same.   |
| HDMI.          | <u> </u>                                | 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              |   | 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. |
|                | Android phone is not working with HDMI. | 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           | Incorrect serial number is being used.                      | In the iLX-F309TCM settings confirm the serial number. MENU/SETUP/GENERAL/ABOUT.  |
| number is inva | number is invalid.                      | 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  |  | Incorrect serial number was used when flashing maestro.        | Flash Maestro with correct serial number.   |
|    | Headunit will not turn on.   | 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<br>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 18.   |
| 6  | Cannot control the DVD Player properly.  | The iLX-F309TCM 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.                                     |
|    |  | Loose or disconnected USB cable.                               | Check the USB connection behind the headunit.   |
| 11 | iPhone or Android phone is<br>not recognized<br>when connected to the<br>USB cable.            | 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 amplied 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 |