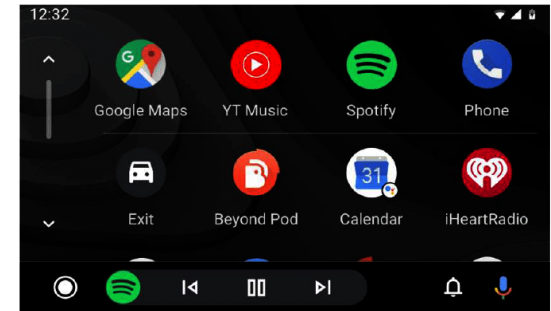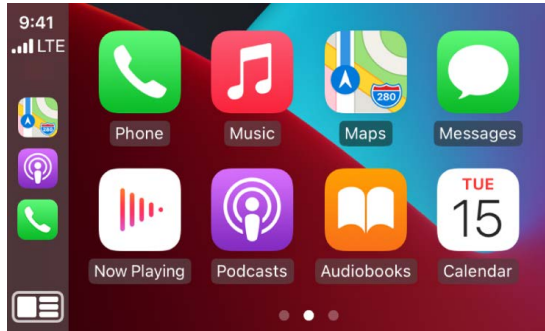# IT3-MIB2-83

ZZ2

Apple Car Play

Android Auto

CarPlay / Android Auto + Camera input for Audi vehicles equipped with the MIB2 (8.3" screen) System

ZZPLAY

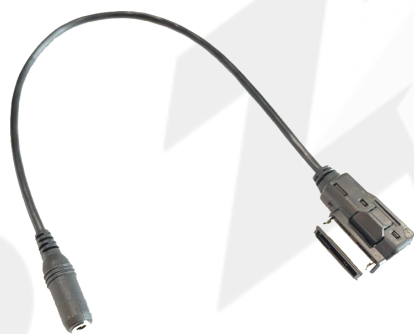929-220-1212 / 877-241-2526 - www.zz-2.com

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Components

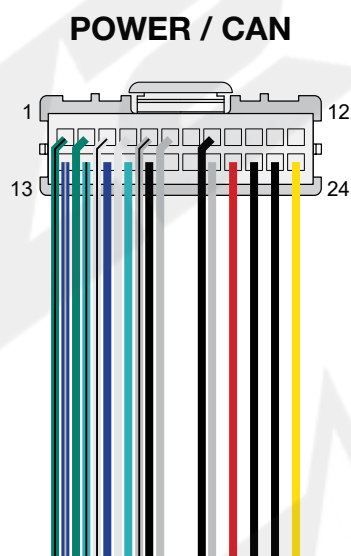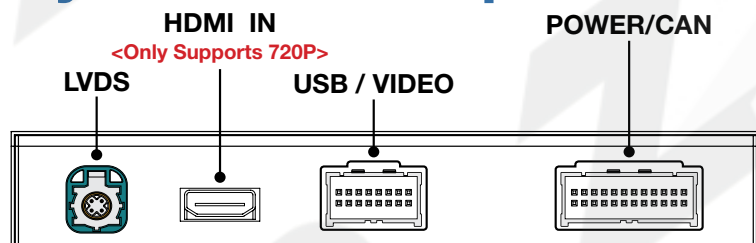ZZPlay Interface

LVDS Y-Cable

FAKRA Antenna

Audi AMI AUX Cable

Main T-Harness

AV/USB Cable

Body Connector specifications

LVDS   HDMI IN
<Only Supports 720P>
   USB / VIDEO   POWER/CAN

POWER / CAN

AV CABLE

LVDS Cable

Power / Can Cable

1	CAN_3_LOW	13	AUX_OUT_GND → (Car)
2	CAN_3_HIGH	14	AUX_OUT_R → (Car)
3	CAN_2_LOW	15	AUX_IN_R
4	CAN_2_HIGH	16	AUX_OUT_L → (Car)
5	CAN_1_LOW	17	AUX_IN_L
6	CAN_1_HIGH	18	AUX_IN_GND
7	AUX_IR	19	MIC_IN_N
8	GND	20	MIC_OUT_N → (Car)
9	MMI_OUT_TX → (Car)	21	MIC_IN_P
10	MMI_IN_RX	22	MIC_OUT_P → (Car)
11	MMI_OUT_RX → (Car)	23	GROUND
12	MMI_IN_TX	24	BATTERY POWER INPUT
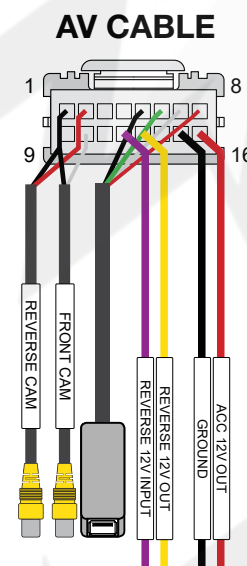
AV CABLE

1	CVBS_GROUND	9	
2	REVERSE_CAM_VIDEO_INPUT	10	FRONT_CAM_VIDEO_INPUT
3		11	
4	GROUND_SHIELD	12	REVERSE_12V_INPUT
5	USB_GND	13	REAR_12V_POWER_OUT
6	DATA +	14	
7	DATA -	15	GROUND
8	5V POWER	16	12V(ACC)_OUT

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Car Compatibility Chart

| Car Models	Production Year	Specific Models	Head Unit Ver.
A3 (8V)	2017 ~ 2018	8.3 inch	- MIB2
A4 (B8)	2016 ~ Present	8.3 inch	- MIB2
A5 (B9)	2016 ~ Present	8.3 inch	- MIB2
Q2	2019 ~ Present	8.3 inch	- MIB2
Q5 (80A)	2016 ~ Present	8.3 inch	- MIB2
Q7 (4M)	2016 ~ Present	8.3 inch	- MIB2

AUDI A4 (B9)

AUDI Q7 (4M)

ATTENTION: With the latest system software (3.6.13), use OEM Bluetooth streaming (source) for all audio playback from CarPlay/Android Auto.
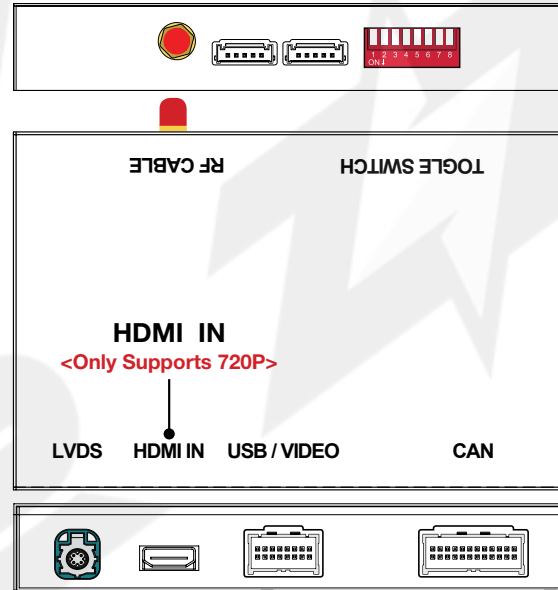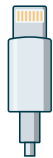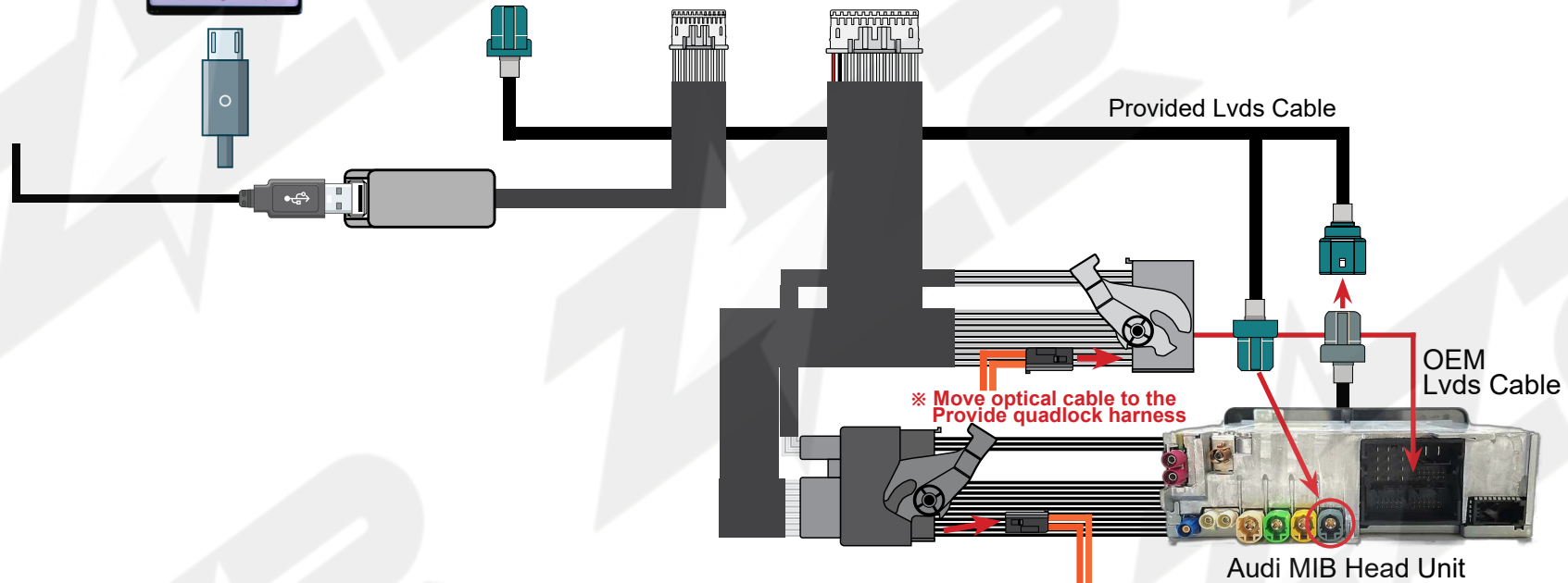
Full Installation Diagram
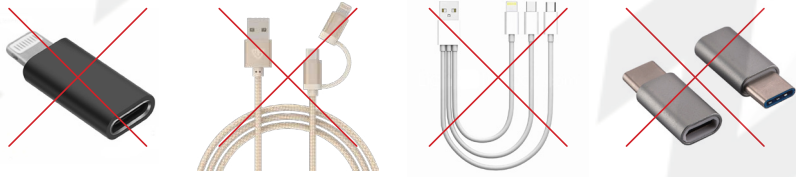
We recommend using for each phone manufacturer genuine cable
Please. Never use "Adapter Type and Multi cable"

Apple Car Play
Apple i-phone

Android Auto
Gogle Android

HDMI IN
<Only Supports 720P>

LVDS   HDMI IN   USB / VIDEO   CAN

TOGLE SWITCH   RF CABLE

AV Cable

REVERSE CAM

FRONT CAM

REVERSE CAM

FRONT CAM

GROUND	Ground
REVERSE 12V IN	Reverse Detect 12V IN
12V ACC OUT	12V Power **ACC OUT**
12V OUT REVERSE CAM	12V Power **OUT** For Reverse Cam Power

Provided Lvds Cable

OEM Lvds Cable

※ **Move optical cable to the Provide quadlock harness**

Audi MIB Head Unit

11/23
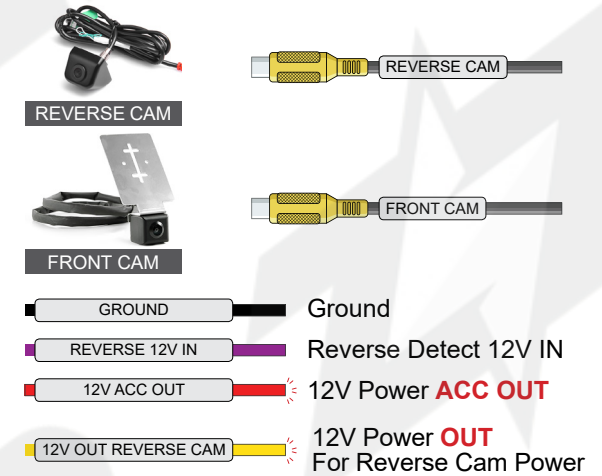
DIP Switch Settings

OFF

ON : ↓   OFF : ↑

ON
1 2 3 4 5 6 7 8
ON↓

PIN	ON (▼)	OFF(▲)
1		
2		
3	Selection of car mode	
4		
5		
6		
7	Without PDC Button	With PDC Button
8	Without Bluetooth	With Bluetooth

PDC Button

Audi MIB System

No.1	No.2	No.3	No.4	No.5	No.6	Year	Car Model	Screen Size	Note.
ON (▼)	ON (▼)	ON (▼)	OFF(▲)	OFF(▲)	OFF(▲)	2017 ~ 2018	A3	8.3 inch	MIB2
						2019 ~ present	Q2	8.3 inch	MIB2
ON (▼)	ON (▼)	OFF(▲)	ON (▼)	OFF(▲)	OFF(▲)	2016 ~ present	A4 (B9)	8.3 inch	MIB2
						2016 ~ present	A5 (B9)	8.3 inch	MIB2
						2016 ~ present	Q7 (4M)	8.3 inch	MIB2
ON (▼)	ON (▼)	ON (▼)	OFF(▲)	ON (▼)	ON (▼)	2016 ~ present	Q5 (80A)	8.3 inch	MIB2
ON (▼)	ON (▼)	ON (▼)	OFF(▲)	ON (▼)	OFF(▲)		TEST Mode		

Audio Playback Options

To change these settings, you must access the interface main menu. Go to ZZPLAY>SETUP and scroll towards the bottom of the list. If 'BT Channel' does not exist, your system is out of date and needs to be updated. Contact ZZ2 for more information.
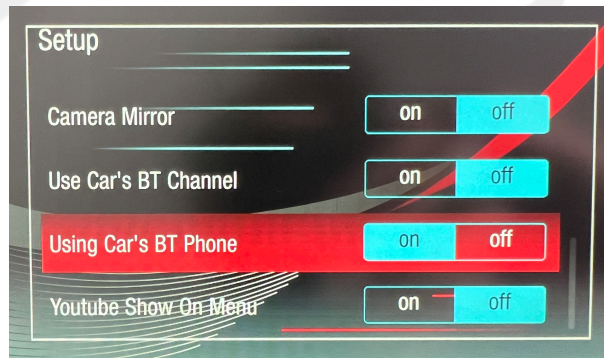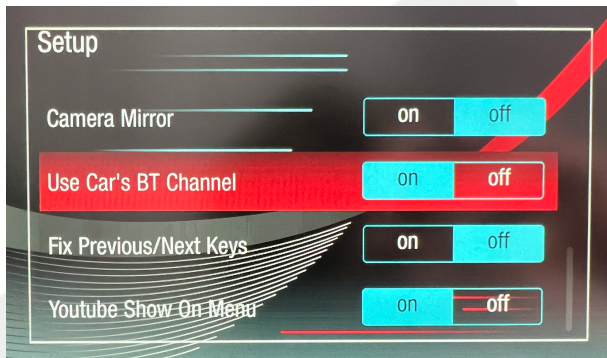
Use Car's BT Channel (ON):
Sends all CarPlay/AA audio (music & telephony) directly to *factory radio's Bluetooth stream source.*

NOTES:

- Not all vehicles will be equipped with Bluetooth streaming - verify before using

- Phone must remain (Bluetooth) connected to the factory radio for phone calls & music

- Use **BT Audio** source (not AUX!) to hear music from CarPlay/AA

- Adjusting this feature (ON or OFF) will reboot the unit once

Use Car's BT Phone (ON): Sends CarPlay/AA *music* to AUX, but *telephony* to factory radio's Bluetooth system for phone calls only.

NOTES:

- Phone must remain (Bluetooth) connected to the factory radio for phone calls only

- Use **AUX Input** source (not Bluetooth Audio!) to hear music from CarPlay/AA

- Answer incoming phone calls **from the steering wheel pickup button** for best results

- Place outgoing phone calls using SIRI/Voice command for best results

Use Car's BT Channel & Phone (OFF): Sends 100% of the audio from CarPlay/AA to the AUX input - including phone calls.
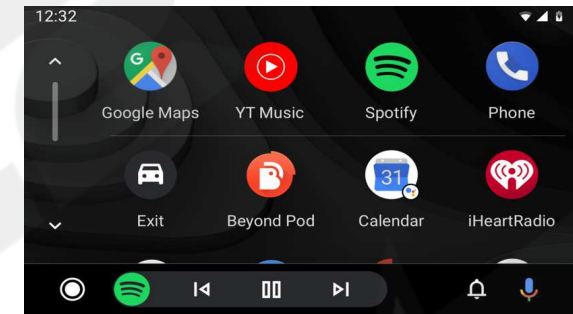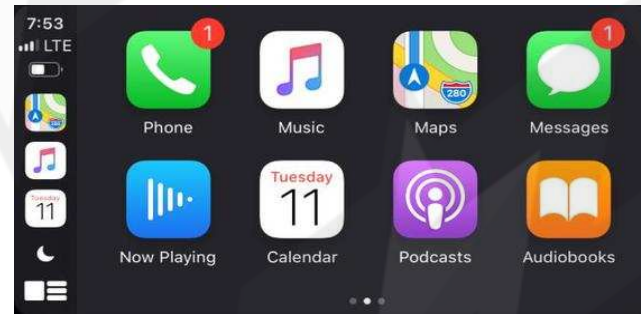
NOTES:

- Connection to factory Bluetooth not required

- May cause echoing during phone calls - MIC settings inside 'AUDIO' section available for adjustment

- Must use this setup for Phone Mirroring feature for sound from phone when mirroring
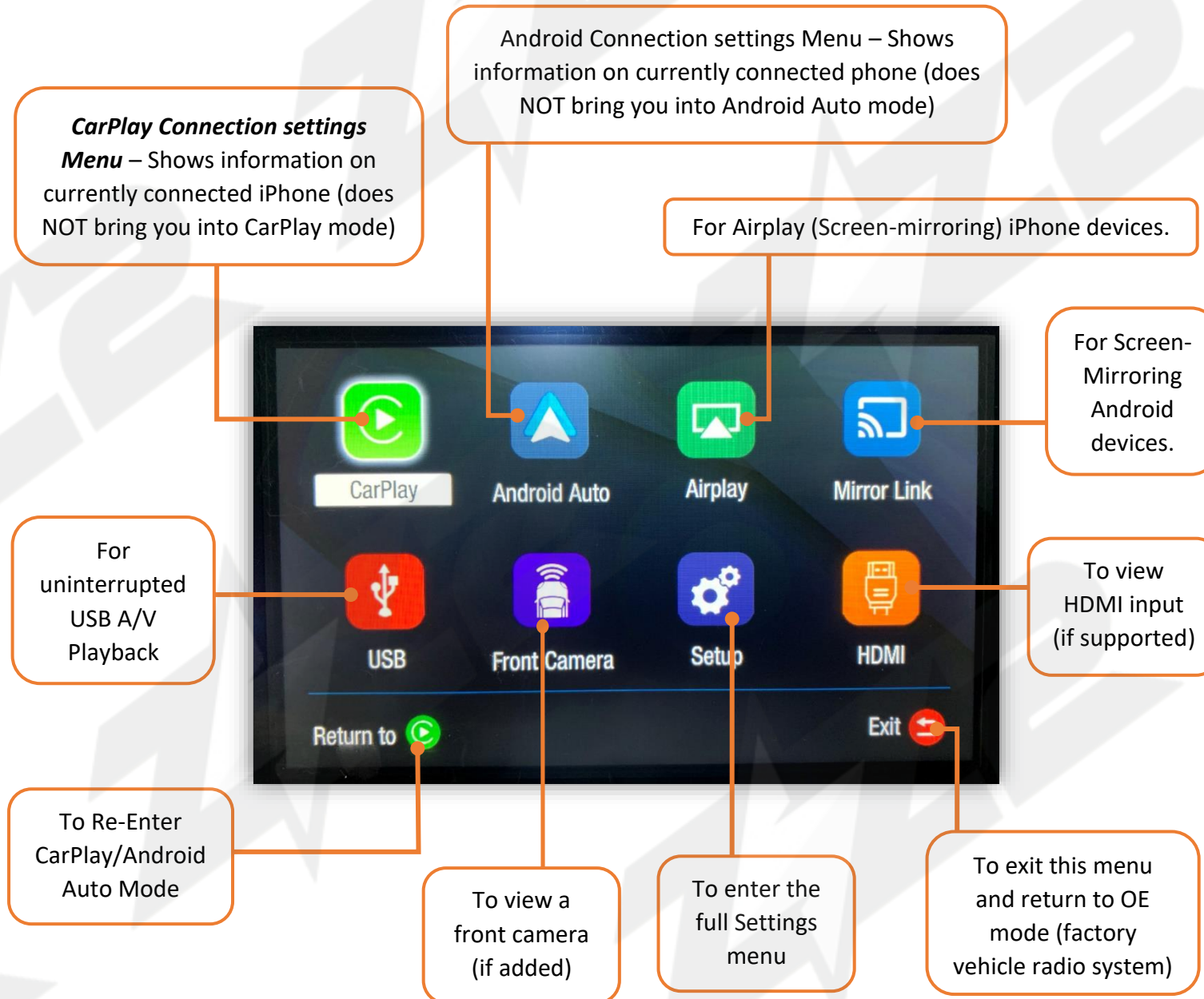
Activation by original buttons

 Apple Car Play   Android Auto

Button	Function	Operation	Remarks
1 NAV	Changing Modes	Press the button 3 seconds	Order : OEM → Car Play
		Press the button short time	Return to the OEM mode in any modes.
2 Dial	Move the pointer	Turn the dial	Apple Car Play Function
			Google Android Auto
3 Back	Go back	Press the button	Apple Car Play Function
			Google Android Auto
4 Voice	"Siri" "Google Assistant"	Press the button 3 seconds	Apple Car Play Function
			Google Android Auto

ATTENTION: With the latest system software (3.6.13), use __OEM Bluetooth streaming (source)__ for all audio playback from CarPlay/Android Auto.

Settings

Android Connection settings Menu – Shows information on currently connected phone (does NOT bring you into Android Auto mode)

CarPlay Connection settings Menu – Shows information on currently connected iPhone (does NOT bring you into CarPlay mode)

For Airplay (Screen-mirroring) iPhone devices.

For Screen-Mirroring Android devices.

CarPlay   **Android Auto**   **Airplay**   **Mirror Link**

USB   **Front Camera**   **Setup**   **HDMI**

Return to   Exit

For uninterrupted USB A/V Playback

To view HDMI input (if supported)

To Re-Enter CarPlay/Android Auto Mode

To view a front camera (if added)

To enter the full Settings menu

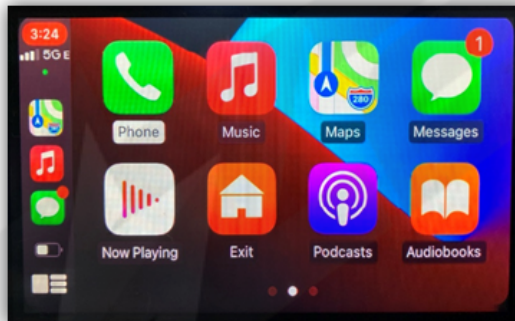To exit this menu and return to OE mode (factory vehicle radio system)

Settings

The next few pages overview the IT3 interface, navigating settings and explains entering/exiting all menus. There are (2) menu systems that exist *outside of the OE radio system:* **CARPLAY (or Android Auto)** menu and the **ZZPLAY Interface Menu**. They operate independent of each other (the ZZPLAY Interface menu will function regardless of whether or not a phone is connected to the module). Settings for CARPLAY will only control CarPlay settings. Settings for the ZZPLAY Interface control things like reverse camera settings, audio output control settings and other vehicle/interface-specific parameters.

CARPLAY

ZZPLAY INTERFACE MENU
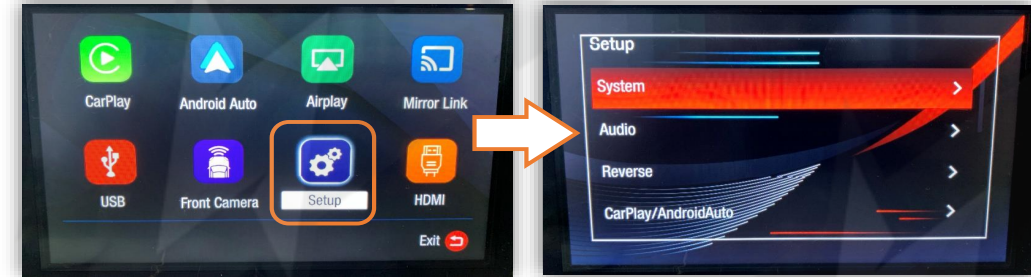
To enter the **ZZPLAY Interface Menu** from the CARPLAY system, locate the 'Exit' tile and select it. If there is no phone connected, simply using the activation button (which normally brings you into CARPLAY mode) will enter you in the **ZZPLAY Interface Menu.**


If a phone is paired and you've entered the **ZZPLAY Interface Menu**, select 'Return to [icon]' to return to CarPlay mode.

Selecting 'Setup' will bring you to the **ZZPLAY Interface Setup Menu** with all options pertaining to the specific vehicle and install.
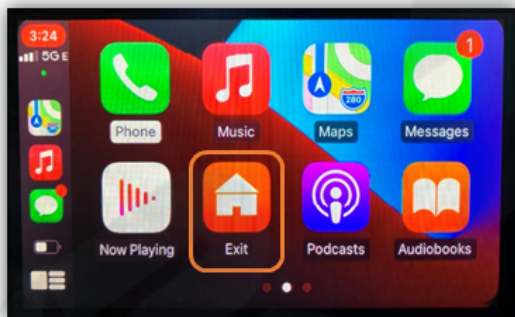
Inside **System** includes *Language, Display options,* a *Software Update prep mode (USB Updates – CONTACT US)* and *System Version* information for this module. *NOTE: The System Version information screen stores required information when updating the module – take a picture of this if you're planning to update the unit.*

SDK Version: 25.0.0.7.0.0.2.0
CUST Version: ZZ2_3.5.7.L
MCU Version: 21.8.2.10
HW Version: Lexus_1
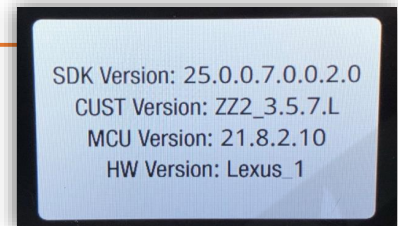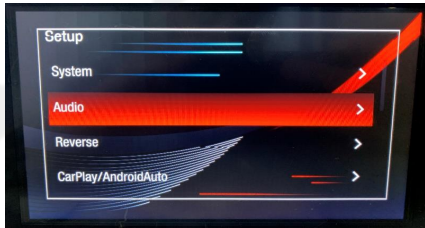
Settings

Audio provides audio level controls for the interface:
(Global Vol level, Music, Speech and Alert volumes are all separated out specifically for tuning the interface for the best user experience).

An array of *Microphone* settings are used specifically when using the _provided system microphone_. *ZZ2 recommends using the OEM Bluetooth system whenever possible for IT3 hardware (and in that case, these settings don't apply)*. In some cases where the provided microphone is required, follow these steps to reduce echo delay (OR run 'AEC Auto Setup below):

Before beginning, be in AUX mode, someone must be on the phone with you (outside of vehicle) to test, start the car and roll all windows up:

1. Bring *Microphone OP (gain)* down as low as possible, to the point where you can still hear them clearly (typically 1-3)
2. Start *Microphone Delay* at 0, bring up 1 detent at a time, testing audibly while you increase this setting (say: 'testing 1, 1, 1, 1', then 'testing 2, 2, 2, 2' as you go, etc). Stop when echo goes away.
3. Re-test the phone call after complete at different (OE) volume levels.
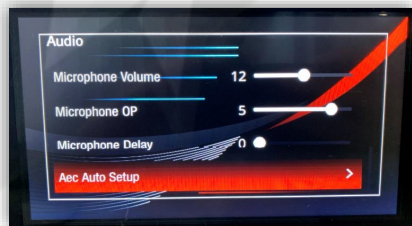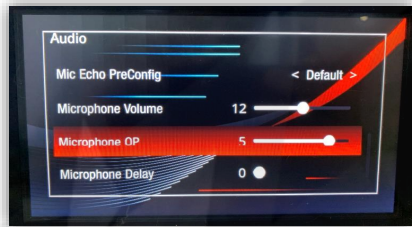
AEC Auto Setup will attempt to run an echo delay test automatically. For this test you _cannot be on the phone_ to begin with, it uses a series of tones to determine how to adjust settings based on the interior of the vehicle.
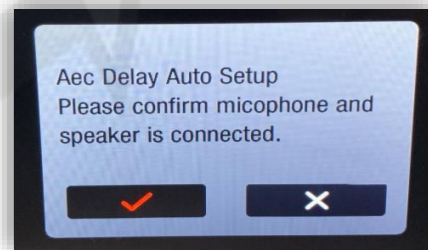
Reverse configures all camera options, whether aftermarket or OEM.

Reverse Camera should be default set to 'Original' for OE camera, or select 'Aftermarket' if adding a reverse camera.

Reverse Line Detect activates the wire trigger (violet) for reverse camera (used for manual transmissions typically), found on the USB Media Harness. With this feature ON, it may also disable the reverse (over CAN data) command.

Reverse Display Track designates whether or not to display dynamic guidelines on the reverse image (aftermarket cam only).

Reverse Display Radar is only used when the vehicle is equipped with OE reverse sensors (typically it will show a visual radar screen next to the rear camera image screen).

Front View Time sets the length of time an added front camera (to Front RCA input) will show after leaving reverse gear.

Reverse Match Original adjusts the positioning of reverse screen to match original camera location.

Match 360 Display, or *Ignore 360 State* (vehicle dependent) relates to any vehicle with multiple cameras. Adjust this show those stitched or side cameras when in CarPlay/AA mode not. This feature is typically OFF.

Settings

Carplay/Android Auto has adjustments for the CarPlay screen positioning (overall) and other rarely used CarPlay/AA screen features.

Left Scrap shifts the CarPlay/AA screen to the left in small increments.

Right Scrap shifts the CarPlay/AA screen to the right in small increments.

Top Scrap shifts the CarPlay/AA screen upwards in small increments.

Bottom Scrap shifts the CarPlay/AA screen to the downwards in small increments.

Auto Dark Mode dims the CarPlay/AA screen based on the Phone's current setting (or gets ignored).

Enable Carplay U/D Key changes certain CAN commands, DO NOT USE THIS FEATURE.

Back in Setup, **Wifi Channel (reboot required)** sets the WIFI channel used to connect to the phone. If all other factors have been checked (antenna placement, Low Data Mode off, etc) and you're still having wireless connectivity problems:

1. On the phone, reset phone network settings: *SETTINGS>GENERAL>RESET>RESET NETWORK SETTINGS*
2. On the interface: Set **Wifi Channel (reboot required)** option to '6', then reboot and test.

Wheel Key Swap will adjust the CarPlay/AA navigation controls from UP=UP to UP=DOWN and from LEFT=LEFT to LEFT=RIGHT. *NOTE: this is not supported in every vehicle.*

Touch Pad/Remote Lever (Lexus only):

Mini Touch Pad > For vehicles with TOUCH PAD

Remote Lever > For vehicles with Joystick

Using Car's BT Phone: As of SW verison 3.6.13, this setting should no longer be used.

Using Car's BT Channel: As of SW version 3.6.13, this setting should be turned ON for every installation (unless the vehicle does not come equipped with OEM Bluetooth). Once turned ON, use OEM Bluetooth Audio source for all sound from the ZZPLAY unit. This is how ZZ2 always suggests to use these systems (for IT3 hardware).

HiCar map confirmation: This setting is never used in N.A. – leave *OFF* and ignore.
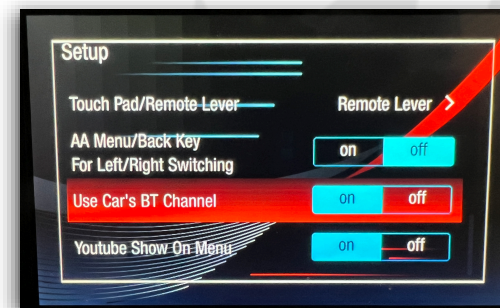
IT3-MIB2 *FAQ*

Question: *I can't hear any audio from the CarPlay/Android Auto system.*

Answer: Your OE system must be resting on BT Audio (if on latest module sw) or AUX mode in order to hear any sound from the kit. This includes during phone calls. NOTE: Some systems AUX input are not labeled 'AUX', it may be labeled 'Media Interface' or there may be an audio conversion to the vehicle's USB input. Check with your installer for more information.

Question: *I'm hearing reports of a lot of echo or delayed echo on audio during a phone call. Why is this happening and how can I eliminate this?*

Answer: This happens when using the OEM AUX input for audio instead of the OEM Bluetooth. When using AUX, the signal path travels through the OEM amplifier, and there is active time-alignment & processing on this audio channel which is the root cause. To avoid this problem, the module must have the latest firmware update (at least 3.6.13), and then inside ZZPLAY setup, turn on 'Using Car's BT Channel'. With this setting active, use factory Bluetooth Audio instead of AUX for all sound from CarPlay/AA.

Question: *Sometimes my phone won't connect lately / Sometimes when it connects the screen goes black / Sometimes CarPlay kicks me out back to the interface menu.*

Answer: For iPhone users, you must perform a 'Hard Reset' on the phone in use on average twice a month to clear certain cache and reset the processors (this will not wipe any data). Google search 'Hard Reset iPhone 13' (or whatever version iPhone version you have) and perform that task. After this is done properly, you will see a difference in speed and reliability (of pairing/connecting).

Question: *Incoming text responses from SIRI are silent on CarPlay. It mutes the audio but I don't hear the read-out.*

- *Fix 1*: Try a Forced Restart (hard reset, above)

- *Fix 2:* Disconnect from CarPlay (may require forgetting the unit entirely).. remain connected to the OEM Bluetooth source. Active SIRI from the phone - while SIRI is responding, turn the volume UP using the phone volume keys as high as required.

Question: *Using Android, I cannot get the phone to reliably connect wirelessly (or at all).*

Answer: Android phones are more finicky and iPhones with their wireless connectivity. Make sure the OS is fully up-to-date. Clear the cache on the Android Auto application. The Android OS must be at least version 11. Some phones (TCL, Motorola) seem to have protocols that don't play nice with every system. If you run into this, use a good USB-C cable for the Android Auto Connection instead.

support@zz-2.com

929-220-1212

Toll free: 877-241-2526

Extension 2: Tech Support