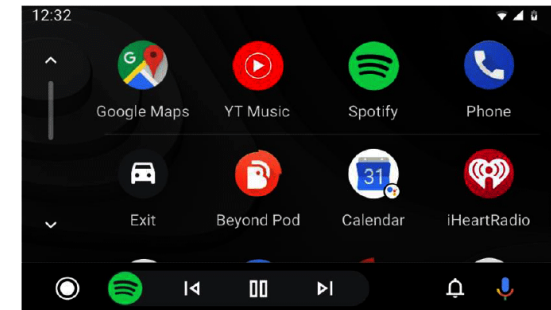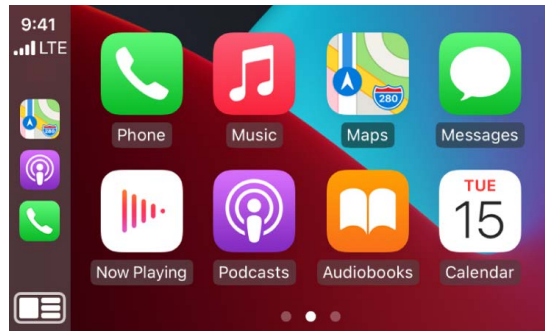# ITZ-PCM4-C

Apple Car Play

Android Auto

**CarPlay / Android Auto + Camera input for
Porsche vehicles equipped with PCM4 System**

ZZPLAY

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ITZ-PCM4-C Kit Components

ITZ-PCM4-C Interface

4 pin LVDS Y-Cable

WIFI/ BT Antenna

(Optional)
EXT MIC

(Optional) EXT MIC Cable

USB & CVBS Cable

Radio T-Harness

ITZ-PCM4-C Install Diagram

NOTEs:

- *Only ground this black 'Audio Ground' wire if there is NO audio playback when in AUX or there is audio noise.

- If the vehicle is equipped with a manual transmission, you must set the 'LINE DETECT' to ON and supply 12v (+) to the violet (REV (+) IN) wire.
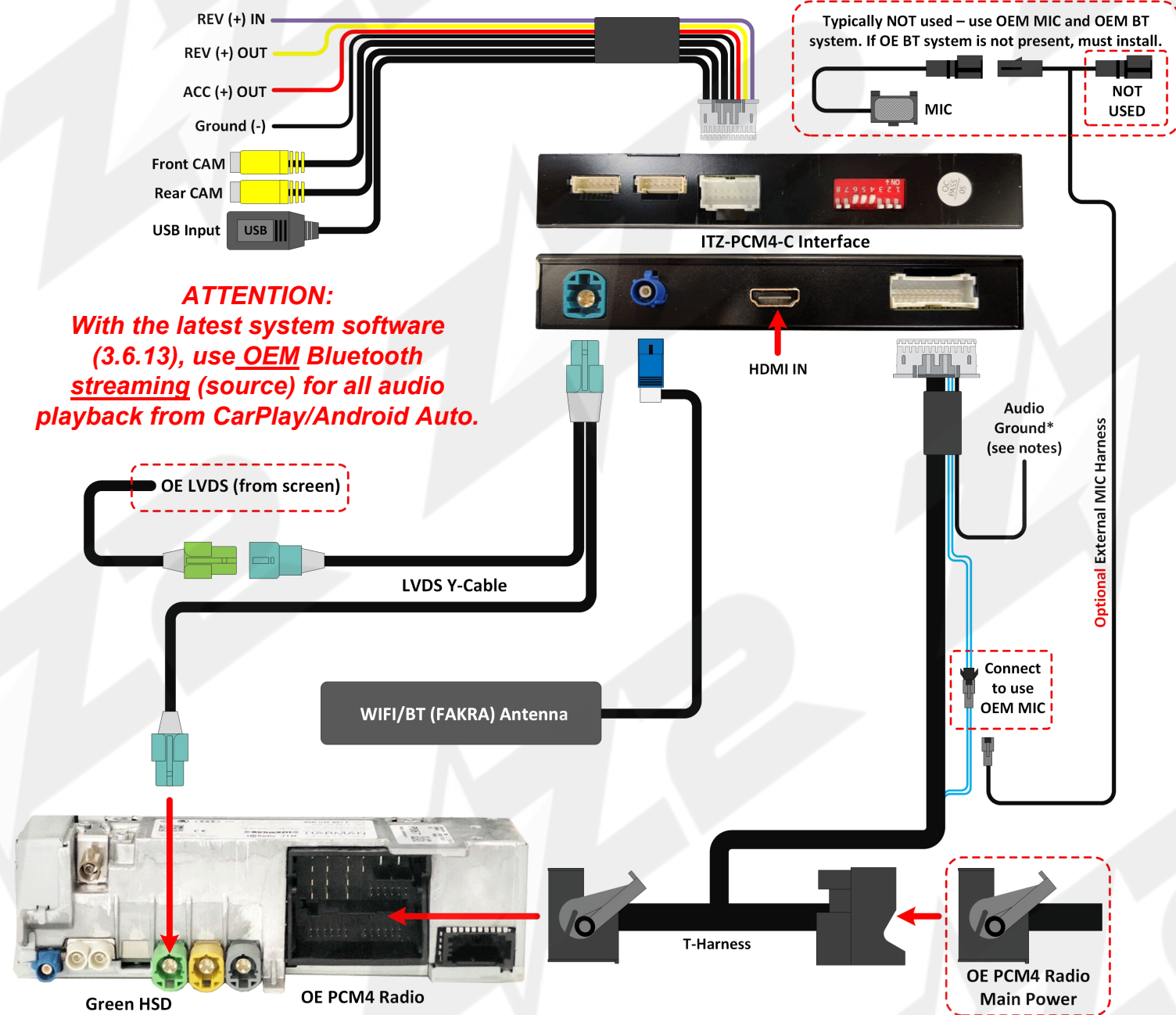
- If CAN is being used to switch to reverse image, LINE DETECT is ignored. If using the wire trigger to switch to reverse, CAN is ignored.

- After all connections are made, perform a CAN reset before use! (lock all doors, remove prox-key and let vehicle sleep for ~10 minutes)

- Try not to use the provided MIC harness, connect the (2) 2-pin connectors together at the main T-harness to use the OE MIC.

Perform all testing with the vehicle RUNNING.

LINE DETECT must be set to ON if using wire trigger!

REV (+) IN
REV (+) OUT
ACC (+) OUT
Ground (-)
Front CAM
Rear CAM
USB Input — USB

Typically NOT used – use OEM MIC and OEM BT system. If OE BT system is not present, must install.

MIC

NOT USED

ITZ-PCM4-C Interface

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

HDMI IN

Audio Ground* (see notes)

Optional External MIC Harness

OE LVDS (from screen)

LVDS Y-Cable

WIFI/BT (FAKRA) Antenna

Connect to use OEM MIC

Green HSD

OE PCM4 Radio

T-Harness

OE PCM4 Radio Main Power

Dip Switch Settings *(all vehicles)*

OFF

ON

ON ↓ 5   OFF ↑ 1

	1	2	3	4	5	6	7	8
ALL VEHICLES	KEEP **ON**	KEEP **ON**	KEEP OFF	KEEP **ON**	KEEP OFF	KEEP OFF	KEEP OFF	OFF: OE MIC ON: ADDING MIC

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

ITZ-PCM4-C

CarPlay / Android Auto + Camera input for Porsche vehicles equipped with PCM4 System

Operation:

Press & Release to go back one step
HOLD (2 seconds) to force front camera any time
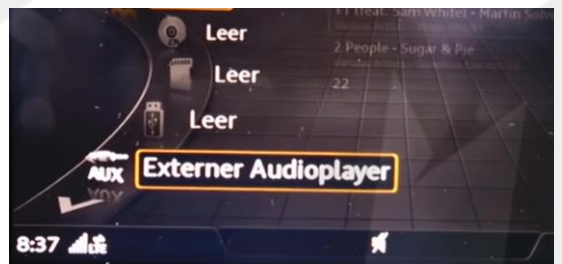*HOLD (10 seconds) to restart module*

HOLD (inwards) to Activate SIRI / Google Assistant

Rotate to navigate CarPlay/Android Auto (also use touch screen)

Press & Hold to Enter/Exit CarPlay mode

Press & Release to cycle between CarPlay split screen & CarPlay apps screen

Select AUX input in order to get audio input

NOTE! Make sure switch to BT Audio or "AUX" mode on original car stereo for audio before using the CarPlay integration.

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

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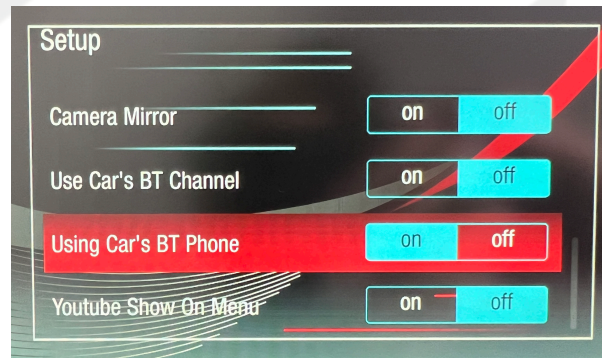
Use Car's BT Phone (ON): Sends CarPlay/AA *music* to AUX, but *telephony* to factory radio's Bluetooth system for phone calls only.

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*

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1. If you would like to use a cable to connect your iPhone, please use a certified Apple cable.
2. If you would to use a wireless connectivity, please follow the next steps.
3. Before pairing the iPhone with the system, please make sure you do a "hard reset" on the phone in order to prevent any malfunction. (Check phone manual/ online)
4. Once you are done with the previous step go to Settings > Bluetooth and the phone should be able to find a Bluetooth device called CarPlay8***** under the Other Devices.

4. Select CarPlay8***** and a Bluetooth Pairing Request will be displayed on the screen with a code. Select "PAIR".
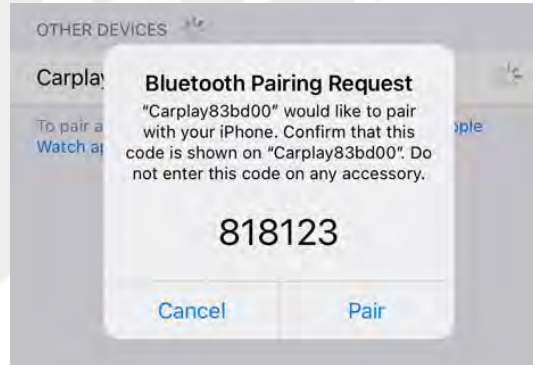
5. Right after the Pairing notification a new request to Sync your contact with the car will be displayed. Select "ALLOW" in order to have caller ID and access to your contacts through CarPlay.

6. A notification asking for a permission to connect your iPhone to the car even when the phone is locked will pop up. Select "Use CarPlay" and the CarPlay main screen should show up on the factory radio screen.

7. When the phone is connected push and hold the STAR (*) button for 2 seconds to switch to CarPlay.
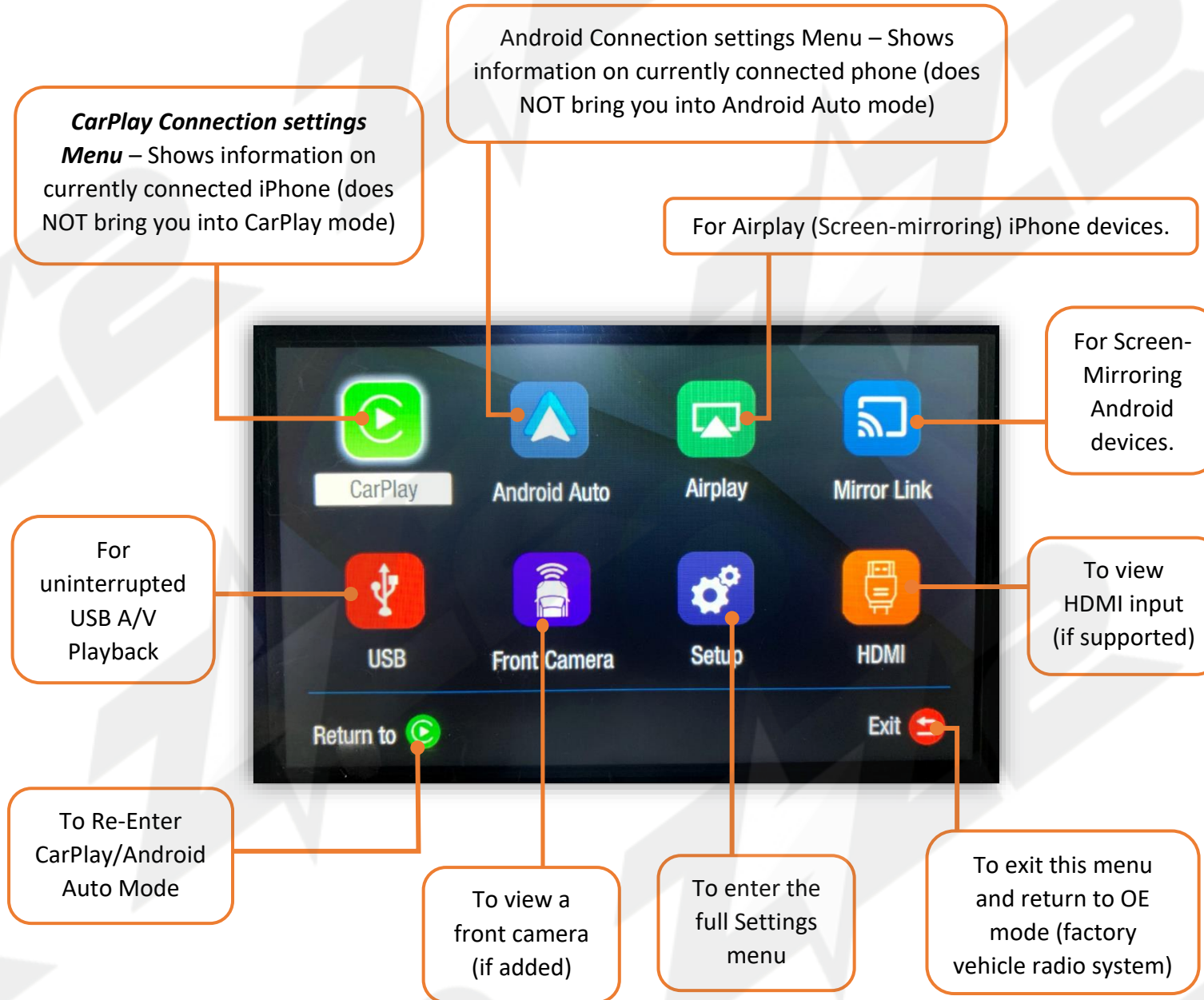
Bluetooth Phone Calls

Please access the Main Menu of the Interface, by selecting the **yellow ZZPLAY tile**, and then go to **SETUP > USING CAR'S BT CHANNEL** and make sure that option is **ON**. After that go back to the main screen and RETURN to CarPlay/Android Auto. **On the phone, please make sure the device is paired with the factory Bluetooth as well as the ZZPLAY unit.**

When using the ZZPLAY system, you must be in Bluetooth Audio source (not AM, FM, AUX or any other source) in order to hear audio from CarPlay/ AA. If the vehicle is not factory-equipped with Bluetooth, you must use AUX for the audio source (and BT Channel must be turned OFF).

ITZ-PCM4-C

CarPlay / Android Auto + Camera input for Porsche vehicles equipped with PCM4 System

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.

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)

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ITZ-PCM4-C

CarPlay / Android Auto + Camera input for Porsche vehicles equipped with PCM4 System

The next few pages overview the ITZ 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.
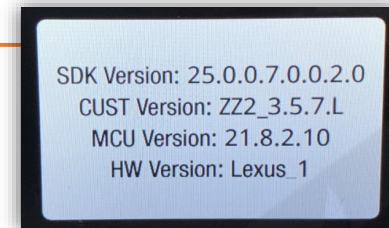
CARPLAY

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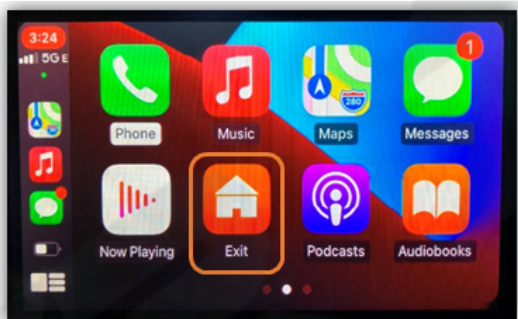
If a phone is paired and you've entered the **ZZPLAY Interface Menu**, select 'Return to [icon]' to return to CarPlay mode.


Selecting 'Setup' will bring you to the **ZZPLAY Interface Setup Menu** with all options pertaining to the specific vehicle and install.
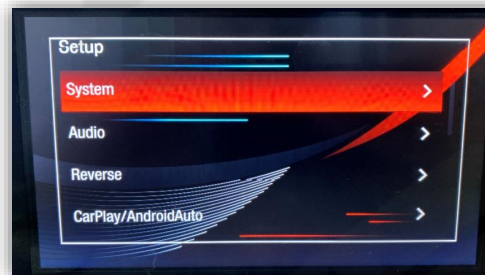
Inside **System** includes *Language, Display options,* a *Software Update prep mode (USB Updates – CONTACT US)* and *System Version* information for this module. *NOTE: The System Version information screen stores required information when updating the module – take a picture of this if you're planning to update the unit.*
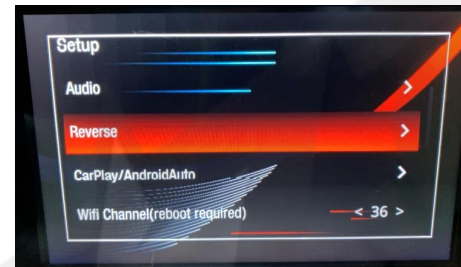
ITZ-PCM4-C

CarPlay / Android Auto + Camera input for Porsche vehicles equipped with PCM4 System
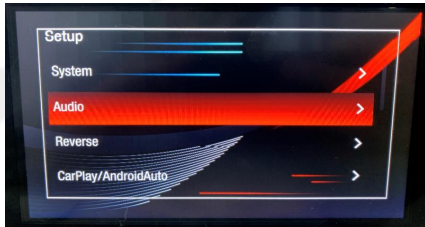
Audio provides audio level controls for the interface:
(Global Vol level, Music, Speech and Alert volumes are all separated out specifically for tuning the interface for the best user experience).

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.
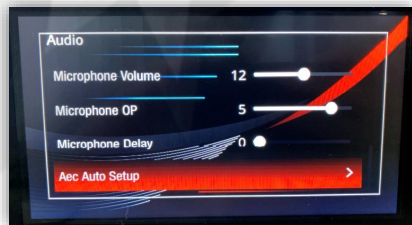
AEC Auto Setup will attempt to run an echo delay test automatically. For this test you _cannot be on the phone_ to begin with, it uses a series of tones to determine how to adjust settings based on the interior of the vehicle.

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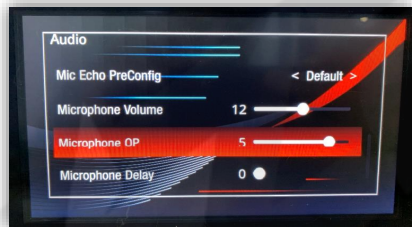
Reverse Display Track designates whether or not to display dynamic guidelines on the reverse image (aftermarket cam only).

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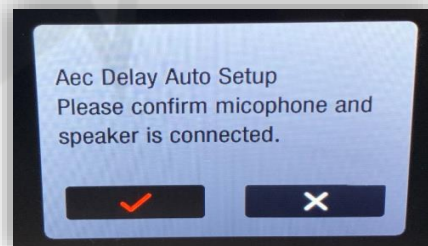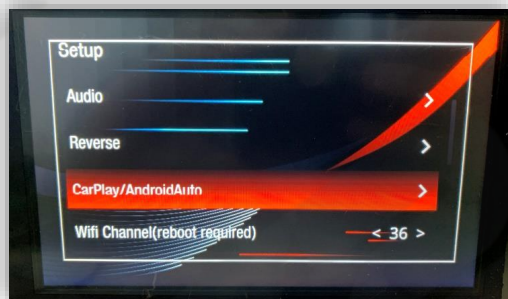
Match 360 Display, or **Ignore 360 State** (vehicle dependent) relates to any vehicle with multiple cameras. Adjust this show those stitched or side cameras when in CarPlay/AA mode not. This feature is typically OFF.

ITZ-PCM4-C

CarPlay / Android Auto + Camera input for Porsche vehicles equipped with PCM4 System

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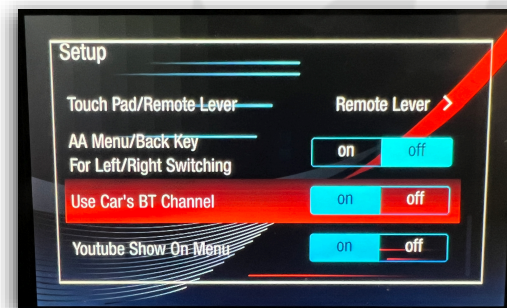
HiCar map confirmation: This setting is never used in N.A. – leave *OFF* and ignore.

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).. <u>remain connected to the OEM Bluetooth source</u>. 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

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Toll free: 877-241-2526

Extension 2: Tech Support