

CUSP CV-T290

CUSP 12.3-inch Android Car Stereo Radio GPS Navigation for Toyota FJ Cruiser (Model CV-T290) User Manual

For Toyota FJ Cruiser Models 2006-2021

1. INTRODUCTION

This manual provides essential information for the installation, operation, and maintenance of your CUSP 12.3-inch Android Car Stereo Radio GPS Navigation system, model CV-T290. Please read this manual thoroughly before using the product to ensure proper functionality and safety. This unit is designed to integrate seamlessly into Toyota FJ Cruiser models from 2006 to 2021, offering advanced multimedia and navigation capabilities.

2. PRODUCT OVERVIEW

2.1 Key Features

- **Display:** 12.3-inch HD IPS Touchscreen (1920x720 resolution)
- **Processor:** Octa-core PX5 (4G+64G configuration)
- **Operating System:** Android 10.0
- **Connectivity:** Bluetooth 5.0, Wi-Fi, USB
- **Navigation:** Built-in GPS with support for various map applications (e.g., Google Maps, iGO)
- **Smartphone Integration:** Wireless and Wired Apple CarPlay, Android Auto
- **Multimedia:** Supports various audio and video formats (MKV, MP4, 3GP, AVI, FLAC, APE, MP3, WAV, WMA, OGG, MID, AAC, RM, LFAC)
- **Radio:** FM/AM/RDS tuner (NXP6686 radio chip)
- **Audio Output:** Speaker, Stereo (compatible with Amplifier TDA 7851L)
- **Additional Functions:** Split-screen mode, Voice Control, Rearview camera input, TPMS (optional), OBD (optional), DVR (optional)

2.2 What's in the Box

- CUSP 12.3-inch Android Car Stereo Unit
- Dash Install Kit
- Plug and Play cables

3. SETUP AND INSTALLATION

The CUSP multimedia player is designed for a plug-and-play installation in Toyota FJ Cruiser models (2006-2021). A dash install kit and specific cables are included to facilitate this process. Professional installation is recommended to ensure correct wiring and functionality.

3.1 General Installation Notes

- Ensure the vehicle's battery is disconnected before beginning installation.
- Carefully remove the existing head unit and dashboard trim.
- Connect the provided wiring harness to the vehicle's existing connectors.
- **Important:** Pay close attention to the orientation of ribbon cables when connecting them to the unit's circuit board. Incorrect orientation can lead to non-functional buttons or features.
- For vehicles with a stock subwoofer (especially early FJ models without the JBL system), ensure the 12V trigger (power on) line for the subwoofer is correctly connected. This may require verifying the wiring diagram and potentially soldering a wire if the provided harness does not include the specific connection.
- Securely mount the new head unit using the dash install kit.
- Reconnect the vehicle's battery and test all functions before fully reassembling the dashboard.

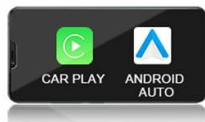


Figure 3.1: CUSP 12.3-inch Android Car Stereo Unit (Black variant).

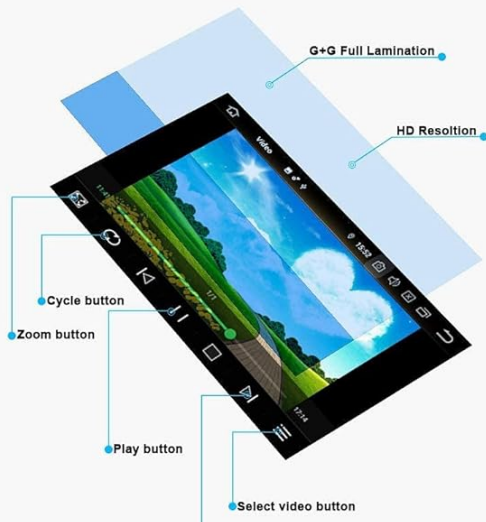
CUSP BIGGER AND FASTER

Used the most advanced hardware, speed up more easily.
Android 10.0 CPU Rockchip, PX5 Cortex A53 (1.5Ghz) Octa Core.



IPS G+G HD CAPACITIVE TOUCH SCREEN

HD 1024X600 resolution, Multi-touch, Hardness and Wear esitance, Anti-reflective, Smooth operation.



1920*1080P HD VIDEO

Support 3D Games, HD Video, 1080P, H 264, Drvx Live images Formats



IPS All VIEWING ANGLE DISPALY

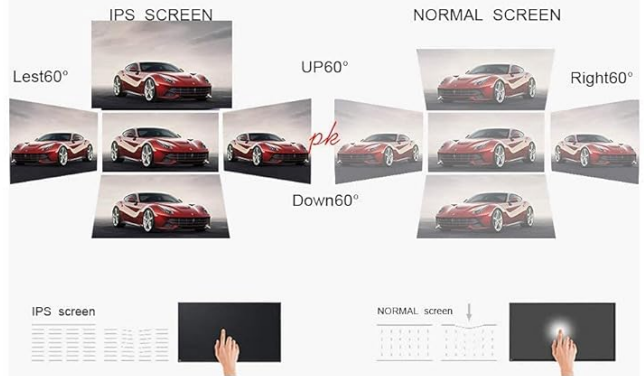


Figure 3.2: The CUSP unit installed in a Toyota FJ Cruiser dashboard, showing the integrated display.

CUSP UNIQUE DESIGN UI

High end atmosphere, low-key luxury interface design, feel comfortable when using.



NXP6686 RADIO CHIP

The NXP6686 radio chip better than the original car, has less noise, and has a stronger closing sensitivity.



- Pre-set Stations
- FM 3*6
- AM 2*6
- FM/AM Frequency
- FM 65MHz
- 87.5MHz - 108MHz
- AM 522KHz - 1710KHz



BLUETOOTH QUALCOMM BT5.0 CHIP

Support OBDII, phonebook, call history, automatic bluetooth connection, bluetooth music, talking freely



AMPLIFIER TDA 7851L

Play music, compatible with FLAC, APE, MP3, WAV, WMA, OGG, MID, AAC, RM, LFAAC etc.



VIDEO OUTPUT

Supports Split screens up and down, Dual-zone system, not affect passengers watching movies while navigating.



Figure 3.3: Comparison of the dashboard before and after installing the CUSP unit, highlighting the modernized appearance.

Your browser does not support the video tag.

Video 3.1: An overview of the CUSP 12.3-inch Android Car Stereo Radio GPS system for Toyota FJ Cruiser, demonstrating its features and interface.

4. OPERATING INSTRUCTIONS

4.1 Basic Functions and User Interface

The unit features an intuitive Android-based operating system with a responsive IPS G+G HD capacitive touchscreen. Navigate through applications and settings by tapping and swiping on the screen.



Figure 4.1: Overview of the CUSP Android Car Stereo's unique user interface design, showing various application icons and settings.

4.2 Navigation (GPS)

The unit comes with built-in GPS functionality and supports various navigation applications. You can use pre-installed maps or download others from the Google Play Store. Note that the unit may require movement to orient itself due to the absence of a magnetic sensor.

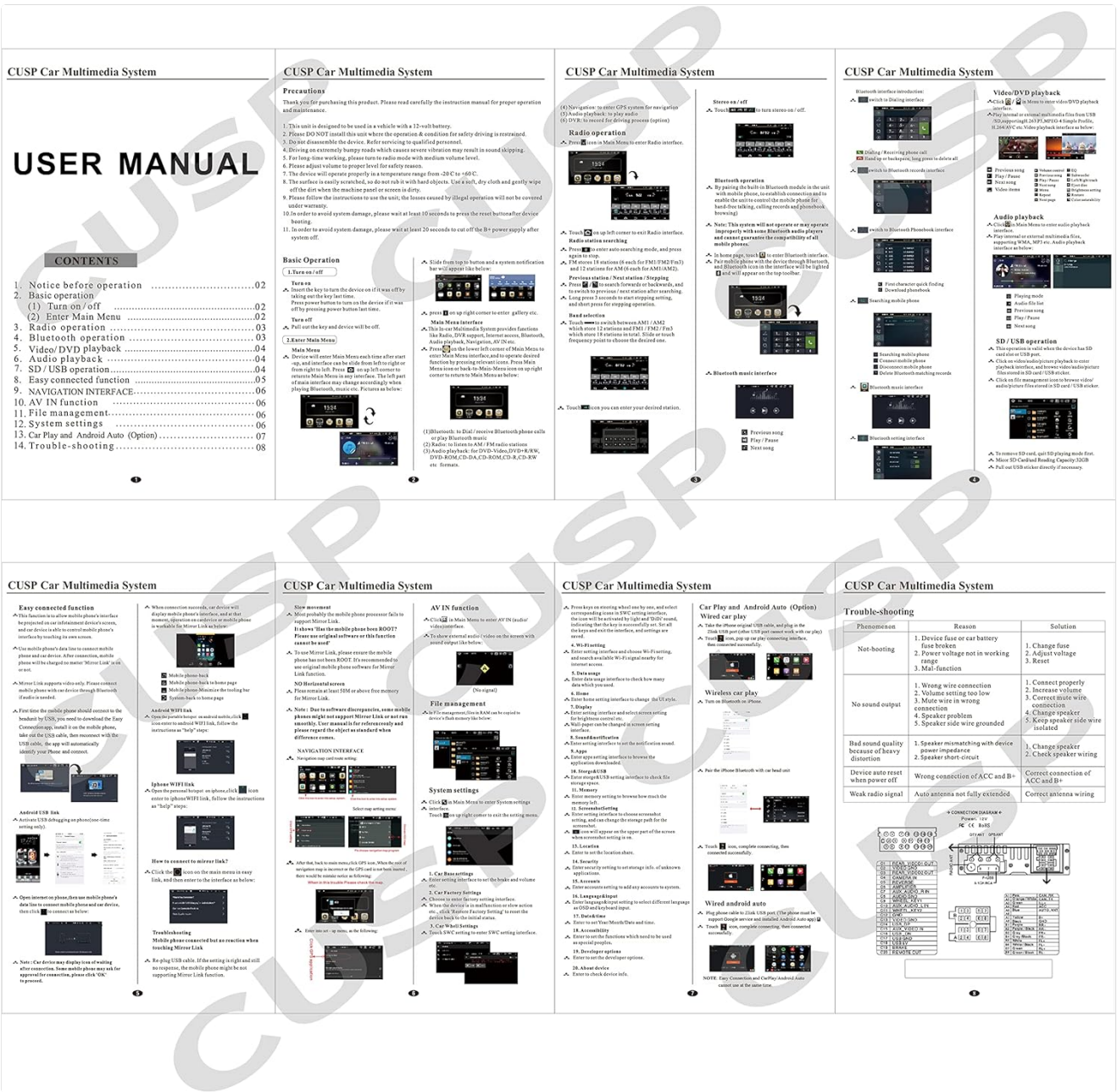


Figure 4.2: The CUSP unit displaying GPS navigation, showing a map view.

4.3 Radio Function

Access the radio function to listen to FM/AM stations. The NXP6686 radio chip provides enhanced signal reception. You can save your favorite stations as presets.

Certifications



DECLARATION OF CONFORMITY

DECLARATION OF CONFORMITY in heavy responsibility of the Name Grantor/Responsible Party in accordance with the following requirements:

Client: Shenzhen Cusp Technology Co., Ltd.
Address: 8th Floor, Building 3, Woking Science and Technology Park, Woking Town, Bantian District, Shenzhen, China.
Manufacturer: Shenzhen Cusp Technology Co., Ltd.
Address: 8th Floor, Building 3, Woking Science and Technology Park, Woking Town, Bantian District, Shenzhen, China.
Product: Car radio
Model: See the Second page
Tester: Shenzhen Cusp Technology Co., Ltd.
Date of issue: Oct. 28, 2012



RoHS DECLARATION OF CONFORMITY

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PC

RoHS



QIauto

注册人: 深圳奇卓电子科技有限公司



CUSP

注册人: 深圳奇卓电子科技有限公司



CERTIFICATE OF CONFORMITY

Product: CAR GPS
Brand Name: CUSP
Test Model Name: CS-1079
Series Model: See note 1
Holder: SHENZHEN CUSP TECHNOLOGY CO., LTD.
Address: 8th Floor, Building 3, Woking Science and Technology Park, No. 30 Wokingchun Road, Bantian District, Shenzhen



检验报告
INSPECTION REPORT

样品名称: KING JO
型号/货号: CV-107233
检验类别: 委托检验
委托单位: 深圳奇卓电子科技有限公司

SHIPMENT


BY AIR


BY TRUCK


BY TRAIN







FACTORY

CUSP is professional manufacturer for Tesla style vertical screen, car dvd, car pad, car interface from 2007. CUSP has more than 2000 models. CUSP supply OEM products to TOYOTA, HONDA, HYUNDAI, NISSAN, MITSUBISHI, FORD etc from 2010. CUSP 20% R & D engineer, and 60% technical staff. Produce under TS16949, CE, FCC, RoHS.



▲ Production Base



▲ R & D Center



▲ SMT



▲ SMT



▲ Mould Manufacturing



▲ Production Workshop



▲ High and low temperature



▲ Testing

Figure 4.4: The CUSP unit displaying the Bluetooth phone interface, showing a dial pad and call history options.



Figure 4.5: Bluetooth music streaming interface on the CUSP unit, showing album art and playback controls.

4.5 Apple CarPlay and Android Auto

The unit supports both wired and wireless Apple CarPlay and Android Auto, allowing seamless integration of your smartphone's features, including navigation, music, and messaging.

CUSP APP FREE DOWNLOAD

Cusp stereo android system is open system, customers could install apps from play store, for example Google map, Youtube, Whats app, Spotify, Skype, Wechat, Facebook, Netflix ,Booking, Grab, Twitter etc. Enjoy your car multimedia time.



VOICE CONTRL

Relax your hands, only talking, CUSP tesla unit will follow your order, turn on radio, turn up volum, navigate to park, call mom etc.



CAR PLAY & ANDROID AUTO

Car play support Iphone via wire and wireless, and Android auto support android phone via wire.








Function Summary

| | | | |
|---|---|---|--|
|  Android 9.0 |  4G+32/64G |  Rockchip px6 |  Radio |
|  Bluetooth 5.0 |  Build in wifi |  Music |  4K Video |
|  Online Map |  off line map |  Steering Wheel |  Compass |
|  Multi-touch |  Boot Time One Second |  IPS Screen |  Video Ouput |
|  TPMS(opt) |  OBD II(opt) |  DVR(opt) |  Voice Control |
|  QIBLA (opt) |  Carplay |  DAB Radio(opt) |  AHD Cam(opt) |

Figure 4.6: The CUSP unit demonstrating Apple CarPlay and Android Auto interfaces, showing smartphone integration.

4.6 Video Player

Play videos in various formats (MKV, MP4, 3GP, AVI, etc.) directly on the 1080P HD screen. Ensure video files are stored on a compatible USB device or internal storage.

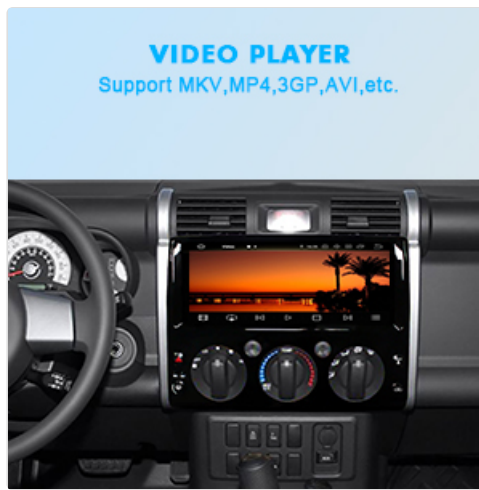


Figure 4.7: The CASP unit displaying the video player interface, showing a video playing on the screen.

4.7 Split Screen Function

Utilize the split-screen feature to run two applications simultaneously, such as navigation on one side and a video player on the other.



Figure 4.8: The CASP unit demonstrating split-screen functionality, with navigation on one side and a video on the other.

4.8 Voice Control

The unit supports voice control for various functions, allowing you to operate the system hands-free. Commands may include turning on the radio, adjusting volume, navigating, or making calls.

CAR PLAY & ANDROID AUTO

Car play support Iphone via wire and wireless, and Android auto support android phone via wire.



CarPlay



androidauto



Figure 4.9: The CUSP unit highlighting voice control capabilities, showing a microphone icon and voice command examples.

5. MAINTENANCE

To ensure the longevity and optimal performance of your CUSP car stereo, follow these maintenance guidelines:

- **Cleaning:** Use a soft, dry cloth to clean the screen and exterior. Avoid abrasive cleaners or solvents that could damage the display or finish.
- **Temperature:** Avoid exposing the unit to extreme temperatures, both hot and cold, for extended periods.
- **Software Updates:** Periodically check for and install official software updates to improve performance and address any known issues. Updates are typically provided via a USB drive.
- **Connections:** Ensure all cables and connections remain secure. Loose connections can lead to intermittent functionality.

6. TROUBLESHOOTING

If you encounter issues with your CUSP car stereo, refer to the following common problems and solutions:

| Problem | Possible Cause | Solution |
|--|--|--|
| Subwoofer not working | Incorrect 12V trigger wire connection for the subwoofer. | Verify the 12V trigger wire (power on) for the subwoofer is correctly connected to the vehicle's subwoofer switch or power source. Consult vehicle wiring diagrams if necessary. |
| Android Auto/Bluetooth connectivity issues | Outdated software, loose connections, or device incompatibility. | Ensure the unit's software is up to date. Check all USB and Bluetooth connections. Try restarting both the head unit and your smartphone. |

| Problem | Possible Cause | Solution |
|--|---|---|
| Hazard/Defrost buttons not working | Incorrect ribbon cable orientation during installation. | Recheck the ribbon cable connections to the unit's circuit board. Ensure they are inserted in the correct orientation. |
| No physical volume knob/button | This unit's design relies on touchscreen controls for volume. | Adjust volume using the on-screen controls. You may need to exit certain applications to access the main volume controls. |
| Unit not booting correctly or requires frequent resets | Power supply issues, software glitches, or loose connections. | Check all power connections. Perform a soft reset (if available) or disconnect the battery for a few minutes to hard reset. Ensure software is updated. |
| GPS navigation does not show correct vehicle orientation immediately | Unit lacks a magnetic sensor for immediate orientation. | The unit will orient itself once the vehicle begins moving and receives GPS signals. |
| Screen too bright at night / No auto night mode | Manual adjustment required for night mode. | Adjust display brightness settings manually for night driving conditions. |

7. SPECIFICATIONS

- **Model Number:** CV-T290
- **Display Size:** 12.3 Inches
- **Resolution:** 1920x720
- **Operating System:** Android 10.0
- **Processor:** Octa-core PX5 (4G RAM + 64G Storage)
- **Connectivity:** Bluetooth 5.0, USB, Wi-Fi
- **Map Type:** North America (pre-installed)
- **Vehicle Service Type:** Car (Toyota FJ Cruiser 2006-2021)
- **Audio Output Mode:** Speaker, Stereo
- **Mounting Type:** Dashboard Mount
- **Item Weight:** 7.5 pounds
- **Package Dimensions:** 16.65 x 12.76 x 8.23 inches

8. WARRANTY INFORMATION

Specific warranty details for the CUSP CV-T290 unit are typically provided at the point of purchase or by the seller. Please retain your proof of purchase for any warranty claims. It is recommended to contact the seller directly for information regarding warranty duration, coverage, and claims procedures.

9. SUPPORT

For technical assistance, installation queries, or troubleshooting beyond the scope of this manual, please contact

the CUSP Manufacturer Direct seller or their authorized support channels. Provide your product model number (CV-T290) and purchase details when seeking support.

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