

[Manuals.plus](#) /

› [CUSP](#) /

› CUSP 12.1" Radio Head Unit User Manual for Ford F150 (2015-2021) & F250/F350/F450 (2017-2021)

CUSP CV-F666

CUSP 12.1" Radio Head Unit User Manual

MODEL: CV-F666

For Ford F-150/Raptor (2015-2021) & F250/F350/F450 Super Duty (2017-2021)

1. Introduction

This manual provides detailed instructions for the installation, operation, and maintenance of your CUSP 12.1" T-Style Android Radio Head Unit. Please read this manual thoroughly before installation and use to ensure proper functionality and to maximize your driving experience.

The CUSP head unit is designed to integrate seamlessly into specific Ford truck dashboards, offering an upgraded multimedia experience with a large vertical touchscreen, advanced connectivity, and enhanced audio features.

2. Compatibility

This head unit is specifically designed for the following vehicle models and years:

- Ford F-150/Raptor: 2015-2021
- Ford F250/F350/F450 Super Duty: 2017-2021

Important:

- Verify your vehicle's year, trim, factory radio, dashboard style, and AC panel before installation.
- This unit is not a universal double DIN radio.
- Compatibility with factory functions may vary by trim level.
- If your vehicle has an AUTO A/C with a digital amplifier B/O, this unit may not fit. Contact CUSP for alternative models.

Custom Fit for Ford F-150

for Ford F-150 F150/Raptor 2015-2021, F250 F350 F450 2017-2021



Image: The CUSP 12.1 inch head unit seamlessly integrated into a Ford F-150 dashboard. The image displays the 'After' view with the modern touchscreen, and 'Before' views of both manual and auto AC panels, highlighting the visual upgrade and fitment considerations.

3. Features

- **12.1" T-Style Touchscreen:** Large vertical display for enhanced visibility and control.
- **Wireless & Wired CarPlay/Android Auto:** Seamless smartphone integration for navigation, music, calls, and messages.
- **PX6 Android System:** Powered by a PX6 processor with 4GB RAM and 64GB ROM for smooth operation.
- **GPS Navigation:** Supports online and offline maps for reliable guidance.
- **DSP Sound Tuning:** Built-in Digital Sound Processor for customizable audio adjustments (EQ, bass/treble control).
- **Bluetooth:** Hands-free calling and audio streaming.
- **Wi-Fi Connectivity:** For internet access and app downloads.
- **Steering Wheel Control (SWC) Support:** Retains factory steering wheel button functionality.
- **Backup Camera Input:** Supports rear camera for improved reversing visibility.
- **Plug & Play Wiring:** Designed for easier installation with vehicle-specific harnesses.

- **AC Display & Control:** Integrated climate control interface.

Big Screen. Smart Apps. Better Driving.

Video apps, music, maps and phone connection in one 12.1" touchscreen.



PX6
process



64GB
ROM



4GB
RAM

Image: The CUSP 12.1 inch head unit showcasing its large screen and smart app capabilities, including video streaming, music, and navigation applications.

4. What's in the Box

The package includes the following components:

- Radio Head Unit (1)
- Power Cable (1)
- A/V Cable (1)
- Rear Camera Cable (1)
- USB Cable (2)
- GPS Antenna (1)
- Extra Microphone (1)
- Rear Camera (1)

- Crowbar (1) - for trim removal
- AUX Line (1)
- Video Cable (1)
- Radio Antenna (1)

Essential Accessories Included

Designed to support a smoother installation process

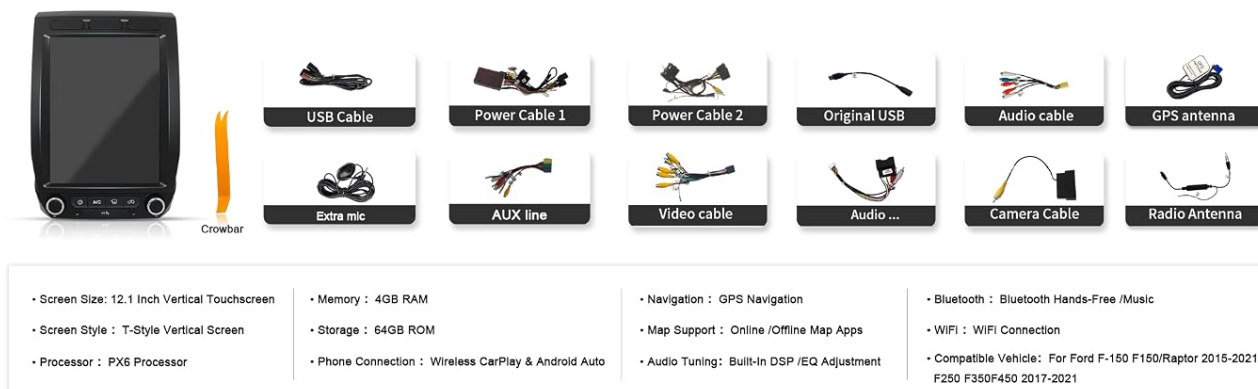


Image: A visual representation of all essential accessories included with the CUSP head unit, designed to facilitate a smooth installation process.

5. Installation

The CUSP head unit is designed for plug-and-play installation on compatible dashboards. However, professional installation is recommended if you are unfamiliar with car audio system wiring or dashboard disassembly.

5.1 Pre-Installation Checks

1. Confirm vehicle compatibility (Section 2).
2. Ensure all components listed in Section 4 are present.
3. Disconnect the vehicle's battery before starting any electrical work.

5.2 Wiring Connection

Utilize the provided vehicle-specific wiring harness. Connect all cables securely to their corresponding ports on the head unit and the vehicle's wiring system. Refer to the wiring diagram if provided with your unit.

Plug & Play Style Installation

Vehicle-specific harness and installation support help make the upgrade easier



Image: A close-up view of hands connecting the plug-and-play wiring harness to the rear of the CUSP head unit, demonstrating the ease of installation.

Your browser does not support the video tag.

Video: This video demonstrates the cable connection process for the CUSP Car Radio Stereo Screen for Ford F150, showing how to correctly plug in the wires according to the operation.

5.3 Post-Installation

1. Reconnect the vehicle's battery.
2. Power on the unit and perform initial setup.
3. Test all functions, including audio, touchscreen response, steering wheel controls, and AC functionality.

6. Setup

6.1 Initial Power-On

Upon first power-on, the unit will boot to the Android home screen. Follow any on-screen prompts for initial language and time settings.

6.2 Wi-Fi and Bluetooth Connection

- **Wi-Fi:** Go to Settings > Network & Internet > Wi-Fi. Select your network and enter the password.
- **Bluetooth:** Go to Settings > Connected devices > Bluetooth. Enable Bluetooth and pair with your smartphone for hands-free calling and audio streaming.

6.3 CarPlay & Android Auto Setup

The unit supports both wireless and wired CarPlay and Android Auto. Connect your smartphone via USB or pair wirelessly via Bluetooth/Wi-Fi as prompted by the unit or your phone.

Drive Smarter with CarPlay & Android Auto

Use maps, music, calls and messages from your phone on the big screen



Image: The CUSP 12.1 inch head unit displaying the CarPlay interface, showing seamless integration with smartphone applications for navigation, communication, and entertainment.

6.4 GPS Navigation

The unit comes with pre-installed GPS navigation capabilities. You can use online maps (requires Wi-Fi/data connection) or pre-loaded offline maps. Ensure the GPS antenna is properly connected for optimal signal reception.

GPS Navigation for Every Drive

Online and offline map support for road trips, work trucks and daily driving



Image: The CUSP 12.1 inch head unit displaying a detailed map for GPS navigation, suitable for various driving needs.

Your browser does not support the video tag.

Video: This video demonstrates the GPS and general radio functions of the CUSP Car Stereo Radio for Ford F150 Raptor F250 F350 F450, showing map usage and media playback.

6.5 DSP Sound Tuning

Access the DSP settings through the unit's audio menu to customize your sound experience. Adjust equalizer settings, bass, treble, and sound balance to your preference.

Built-In DSP Sound Tuning

Adjust your music with clearer bass, vocals and sound balance



DSP Audio



EQ Adjustment



Bass/Treble
Control



Clearer
In-Car Sound



Image: The CUSP 12.1 inch head unit showing the built-in DSP sound tuning interface, allowing users to adjust audio settings for clearer bass, vocals, and overall sound balance.

Your browser does not support the video tag.

Video: This video demonstrates the DSP sound tuning features of the CUSP head unit, showing how to adjust equalizer settings and sound balance.

7. Operating Instructions

7.1 Touchscreen Operation

The 12.1" capacitive touchscreen responds to touch gestures similar to a smartphone or tablet. Tap to select, swipe to scroll, and pinch to zoom (where applicable, e.g., maps).

7.2 Using CarPlay / Android Auto

Once connected, your phone's interface will appear on the head unit. Use the touchscreen to access navigation, make calls, send messages, and play music through your phone's apps.

7.3 Media Playback

- **USB:** Connect a USB flash drive to the provided USB ports for media playback.
- **Bluetooth Audio:** Stream music from your paired smartphone.
- **Radio:** Access FM/AM radio stations.

7.4 Steering Wheel Controls (SWC)

The unit is designed to retain your vehicle's factory steering wheel controls. These controls allow you to manage audio volume, track selection, and answer/end calls without taking your hands off the wheel.

7.5 Backup Camera Functionality

When the vehicle is shifted into reverse, the display will automatically switch to the rear camera view, providing visual assistance for parking and maneuvering. Ensure the included rear camera is properly installed and connected.

7.6 AC Control Interface

The head unit integrates with your vehicle's AC system, allowing you to control climate settings directly from the touchscreen interface. The display will show current temperature, fan speed, and mode settings.

Keep the Factory Features You Use Most

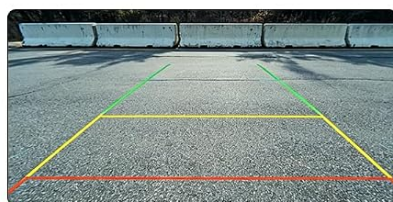
Designed for Ford F150 / F-150 Raptor 2009-2015



1. Steering
Wheel Control



2. Backup
Camera Input



3. A/C
Control Interface



Image: The CUSP 12.1 inch head unit demonstrating key factory feature retention, including steering wheel control, backup camera input, and the integrated AC control interface.

Your browser does not support the video tag.

Video: This video demonstrates how to access and adjust manual A/C settings on the CUSP Car Stereo Screen for Ford Raptor F150, showing the interface and control options.

Your browser does not support the video tag.

Video: This video demonstrates how to access and adjust auto A/C settings on the CUSP 12.1 Car Stereo Radio for Ford Raptor F150, showing the interface and control options.

8. Maintenance

- **Screen Cleaning:** Use a soft, lint-free cloth to clean the touchscreen. Avoid abrasive cleaners or harsh chemicals.
- **Software Updates:** Periodically check for software updates to ensure optimal performance and access to new features. Updates can typically be found via the unit's settings menu or the manufacturer's website.
- **General Care:** Avoid exposing the unit to extreme temperatures, direct sunlight for prolonged periods, or excessive moisture.

9. Troubleshooting

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

Problem	Possible Cause / Solution
No Power / Unit Not Turning On	• Check all power cable connections. • Verify vehicle battery is connected and charged. • Check vehicle fuses related to the radio/accessory power.
AC Function Issues (No Control, Incorrect Readings)	• Ensure all AC control wiring is correctly connected. • Perform a soft reset of the unit (refer to settings for reset option). • Disconnect and reconnect the vehicle battery to reset the HVAC module. • Verify compatibility with your specific AC panel type (manual vs. auto).
Time Keeps Resetting / Incorrect Time	• Ensure the GPS antenna is properly connected and receiving a signal. • Check time zone settings in the unit's system settings. • If connected to Wi-Fi, ensure 'Automatic date & time' is enabled.
CarPlay / Android Auto Not Working	• Ensure your smartphone is compatible and has the latest OS updates. • Try connecting with a different USB cable (for wired connection). • Verify Bluetooth and Wi-Fi are enabled on both the unit and your phone for wireless connection. • Restart both the head unit and your smartphone.
Poor Sound Quality	• Check speaker wiring connections. • Adjust DSP settings (equalizer, balance, fader). • Ensure audio source quality is good.

Problem	Possible Cause / Solution
Factory Rear View Camera Not Displaying	• Verify the factory camera input is correctly wired to the head unit. • Some factory cameras may require an adapter or specific wiring configuration not included. Consult CUSP support.

If issues persist, please contact CUSP customer support with your vehicle details and a description of the problem.

10. Specifications

Feature	Detail
Brand	CUSP
Model Name	F150 Car Stereo
Model Number	CV-F666
Screen Size	12.1 inches
Resolution	1024*768
Operating System	Android
Processor	PX6
Memory (RAM)	4GB
Storage (ROM)	64GB
Connectivity Technology	Bluetooth, GPS, USB, Wi-Fi, Wireless Android Auto, Wireless CarPlay
Map Type	GPS Navigation, Offline Map, Online Map, Road Map, Vehicle Navigation Map
Audio Output Mode	Stereo
Human-Interface Input	Touchscreen
Control Method	App, Push Button, Touch, Voice
Item Weight	5.44 kg

11. Warranty and Support

This CUSP head unit comes with a **1-year warranty** from the date of purchase. The warranty covers manufacturing defects and malfunctions under normal use.

For technical support, installation guidance, or warranty claims, please contact CUSP Manufacturer Direct. You may need to provide your vehicle year, trim, dashboard photo, and factory radio photo for fitment confirmation and specific troubleshooting.

Contact information can typically be found on the product packaging or the official CUSP website.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

<https://manuals.plus/asin/B08R912XKN>

More documents and user manuals: <https://manuals.plus/>