

250-8425 Camera Interface

Installation Manual



Product Name: 250-8425

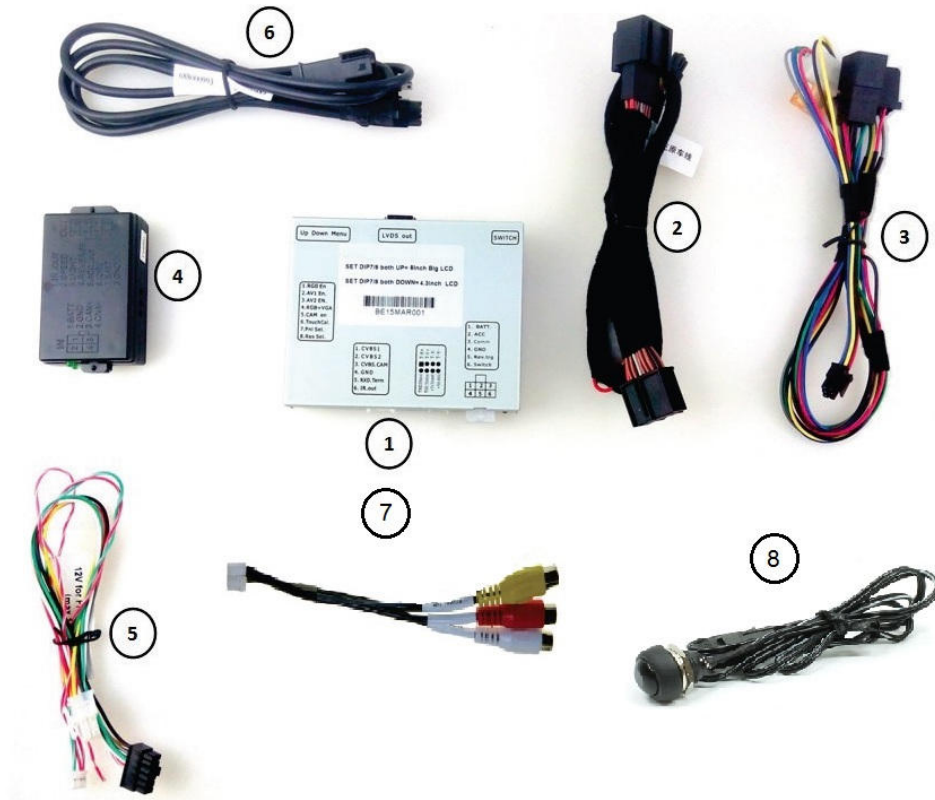
Product Type: Camera Interface

Application: Cadillac CUE, GM, and Chevrolet MyLink 4" or 8" Entertainment Systems.

Model	Year	Model	Year
Cadillac ATS	2013-2017	Chevrolet Silverado	2014-2017
Cadillac SRX	2013-2017	Chevrolet Suburban	2014-2017
Cadillac CTS	2013-2017	Chevrolet Colorado	2013-2017
Cadillac Escalade	2015-2017	Chevrolet Impala	2013-2017
Cadillac XTS	2013-2017	Chevrolet Tahoe	2013-2017
		GMC Sierra	2014-2017
		GMC Yukon	2013-2017
		GMC Canyon	2014-2017

Applications were correct at time of printing. For updates please refer to www.rostra.com .

What's in the box:



Item	Qty	Description
1	1	Camera Interface
2	1	CAN Interface Harness (Cadillac)
3	1	CAN Interface Harness (Buick)
4	1	CAN Box
5	1	Power Interface Harness
6	1	LVDS Cable
7	1	RCA Camera Input Cable
8	1	Switch Button for Front Camera Activation

Prior to Installation:

Care must be taken when installing this accessory to ensure damage does not occur to the vehicle. The installation of this accessory should follow approved guidelines to ensure a quality installation.

Read entire instructions thoroughly before starting.

This document covers such items as:-

- Vehicle Protection (use of covers and blankets, cleaning chemicals, etc.).
- Vehicle Disassembly/Reassembly (panel removal, part storage, etc.).
- Electrical Component Disassembly/Reassembly (battery disconnection, connector removal, etc.)

NOTES:

Removed Parts:

Inspect the vehicle for any damage.

Place all removed parts on a protected surface in an area where they will not be damaged.

Connectors:

When disconnecting connectors, do not pull on the wires; pull on the connectors.

Vehicle Preparation and Protection

CAUTION!

- **Do not touch the positive terminal with any tool when removing cable.**
- **Be sure ignition key is in the OFF position during install**
- **Do not disconnect ANY airbag connectors or indicators. Doing so may result in activating a diagnostic code. These codes will require the dealer to perform the reset procedure and may be charged a dealer fee.**
- **If you are unsure of any vehicle trim removal process consult the OEM service manual.**
- **Removing vehicle trim panels in extreme hot and cold climate could result in some vehicle damage. Use care when removing all vehicle trim.**
- **Using tape on vehicle trim panels could help limit any scratches and or marring. Use plastic trim panel removal tools whenever possible.**

The instructions included in this kit are current at the time of printing. It is designed as a guide to help make the installation of this product successful. Always use caution and ask for assistance if you are not sure how to proceed. Rostra Precision Controls inc. is not responsible for any damage that may occur during installation.

Vehicle Preparation

Before beginning your installation, familiarize yourself with the installation instructions and the RearSight camera system components.

To ensure your safety, **(A)** apply the emergency brake and **(B)** read this entire manual before beginning.



CAUTION: It is advisable to disconnect the negative battery cable for 3 minutes before beginning installation to avoid unintended air bag deployment. Note and record any anti-theft radio codes prior to disconnecting.

Camera System Functions / Features

- The Reverse Camera is automatically triggered when placing the vehicle into reverse gear. The display may also be set to display dynamic reverse guidelines which offer assistance while reversing the car.

- The Front Camera is triggered automatically or manually depending on how it is installed.

Activation can be controlled by either:

1: When changing from reverse gear to drive the camera will be shown automatically for 10 seconds and then return to the OEM display.

2: The driver can activate the front camera by pushing a switch (if installed) and pressing again will return the system to the OEM screen.

NOTE: These activation options must be set at the time of installation and cannot be changed by the driver.

- The User can also switch to the front camera using the touch screen. Press and hold on the left side of the screen for 2 seconds to switch to front camera and the same to switch back to the OEM display.
- This interface is compatible with both the 8" display screen and the 4.3" display screen equipped vehicles. Please note the DIP switch settings must be set correctly for the system to operate.

Dynamic parking lines or "Moving Lines" are provided by vehicle data and shown over the rear camera image. This is a selectable feature at installation.

NOTE: Dynamic lines can not be added to an OEM camera.

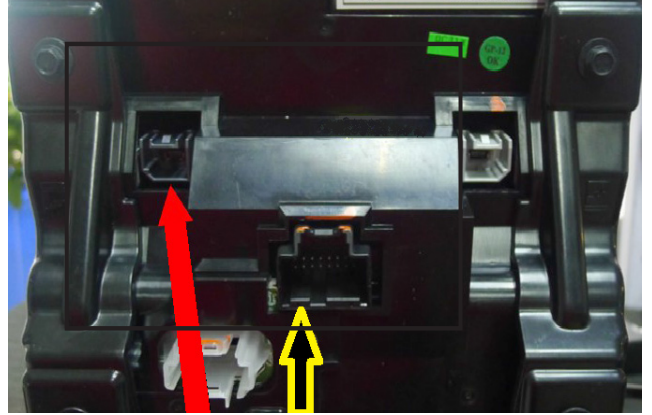
Installation:

Removal of the Radio control center is required for installation. This is a general installation manual, we recommend that specific instructions for R&R of the radio screen be reviewed with a shop manual before starting installation.

After the components are removed, connect the following:

1. The camera module can be located behind the radio or to either side. Determine your exact mounting location to insure you route your wires correctly.
2. Using the supplied T-harness power cable, disconnect the matching cable from the rear of the main radio unit. Plug the T-harness in the radio and the factory harness into the T-harness. (Yellow arrow).
3. Disconnect the USB type video cable from the rear of the radio. (Red arrow). Plug the supplied LVDS cable in to the radio and the factory cable into the LVDS cable. Connect the LVDS cable to the Camera module.

This is a view of the radio display panel from the rear.



Cadillac CUE system Shown above

NOTE: *The Buick, GMC radio panel will look different than the picture above but the connections are the same.*

4. Connect the CAN module included in the kit to the module power harness connection.
5. Connect the CAN to Nav interface cable to the main Camera module as shown in the wiring diagram.
6. Front Camera activation switch:
The Front Camera can be activated by pressing on the left top portion of the screen or using the included wired switch. If using the switch, find a suitable location, drill a 1/2" hole to mount the switch and then route the wire to the Camera module.
7. Rear Camera installation: **NOTE: The YELLOW RCA video input cable is NOT used in this installation.** Install your rear camera as per the specific instructions supplied. Rear camera power should be supplied by ignition power. Connect the RCA video cable from the rear camera to the RED color RCA connection marked "Camera In".
8. Front Camera Installation: Mount the front camera as per the included instructions. Route the power and RCA video cable to the module. Connect the Front Camera Video cable to the White RCA Plug marked "Video 1 IN" Connect the red positive wire for the camera power to the red wire on the CAN Box Harness. Connect the Black negative wire for camera power to a ground source.



The YELLOW "VIDEO IN 2" Cable is not used with this application.
No connection is needed to this cable.

DIP Switch Settings for hardware configuration:

Check all settings when installing.

NOTE: DIP switch settings are not the same as the on-screen menu settings. Functions settings for example; Dynamic parking lines are selected in the On-screen menu after completing this step.

When selecting hardware configuration settings, Up is OFF and Down is ON for the Dip Switches.

DIP Switch Settings for hardware configuration:

DIP Down= ON		DIP UP= OFF	
DIP	ON	OFF	Default
1	No function	No function	UP(OFF)
2	Front camera installed	Front camera not installed	DOWN(ON)
3	No function	No function	UP(OFF)
4	No function	No function	UP(OFF)
5	Aftermarket Reverse camera installed	OE Reverse camera is used	DOWN(ON)
6	Front Camera auto triggered after Reverse. (10Sec)	Front Camera is not triggered after Reverse. (<i>*Only manual switch will be used if function is off</i>)	DOWN(ON)
7, 8	DIP7&DIP8= DOWN(ON) : 4 inch screen selected	DIP7&DIP8=UP(OFF): 8 inch screen selected	DIP7&DIP8=UP(OFF)

NOTE: For installation of a front camera ONLY or as an addition to a vehicle that has a OEM rear camera insure that DIP Switch 2 is in the ON position and DIP Switch 5 is in the OFF position.

Menu Setting for functions: (Dynamic parking lines, picture size adjustment)

Access the settings menu by pressing the Menu buttons on the bottom of the Camera Interface Module while a picture is displayed. Use a small pointed object, but press lightly, too much pressure could damage the switches.

The Menu will allow you to adjust the screen properties, size, position, and access parking lines.

Use the Menu button to scroll through the options and “+” or “-” buttons to adjust the value.

1: Contrast, Brightness, and Saturation are all screen image adjustments for picture quality. adjust as needed to match the OEM screen image.

2: Position H and V are to adjust the image position Vertically and Horizontally on the OEM panel. Adjust if needed to correctly fit the screen.

3: IR-AV1 and IR-AV2 are not used in this application, do not adjust these values for proper operation.

4: Guide-L adjusted the parking line position

5: Car Type - Select SUV or Sedan for line type/width to match the vehicle type.

6: UI-CNTRL - Turns on and Off the Dynamic Parking lines

7: H-Size, V-Size - These will stretch or shrink the image to match the OEM screen if needed.

Setup Menu	
Contrast	50
Brightness	50
Saturation	62
Position-H	23
Position-V	3
IR-AV1	NOT USED
R-AV1	NOT USED
Guide-L	0
Car Type	SUV
UI-CNTRL	OFF
H - SIZE	16
V - SIZE	40

Specifications:

No.	Name	Parameter
1	Front Cam Video , Reverse Cam video	0.7Vpp with 75 ohm impedance NTSC/PAL/SECAM automatic switch
2	Reverse Control wire	>5V will force into camera mode. these wires can tolerate 12V for <10 seconds.
3	Normal Power consumption	4.8W
4	Standby current	< 10uA
5	Reverse trigger threshold	>5V trigger
6	Work temperature	-40°C to +85°C
7	Dimensions	11.2*9.0*2.2cm