Code My Bimmer

Specializing in BMW coding and retrofits



http://www.codemybimmer.ca

BMW F30



Please take all safety precautions when working on vehicle electrical systems. Shock hazards exist when working with electrical systems.



We recommend disconnecting the vehicles battery prior to disconnecting or connecting any equipment to your vehicle. Damage can occur to vehicle systems.

NOTE

These instructions cover installation of a 2012-2015 BMW 3 series, F30 chassis with factory installed backup camera.

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- BMW[™]
- CarPlay[™]
- iDrive[™]

Foreword

These instructions are meant to assist the Do-It-Yourself installer in installing the Code My Bimmer retrofit. This should be accomplished by someone that is familiar with electronics and disassembling their vehicle as damaged may occur from improper techniques.

The installer takes full responsibility for any damage that occurs during installation.

Retrofit kit contents

The retrofit kit will come with following parts:

- Control unit
- Main T harness
- USB harness
- Video cable



Required tools

We recommend the following tools for installing the Code My Bimmer retrofit into your vehicle:

- Plastic panel removal tool set
- T20 Torx screw driver
- Cover/blanket for center console







Disassembly

1. Cover center console with blanket to prevent damage to your trim



- 2. Remove the dash trim above the radio control panel.
 - a. Using a plastic panel removal tool, start on the left-hand side and gently separate the panel from the dash. The trim is held in by clips on the back. Place the tool between the dash and trim. Gently pry them apart until the clip separates.



b. Working left to right, continue to use the tool to separate the trim from the dash taking care on the very far right where the trim is narrower.



3. Pull the trim free from the dash to access the connectors behind the trim, between the vents.



a. Disconnect the 2 connectors on the backside of the trim.

4. Remove the panel below the HVAC panel by gently pulling down the top of the panel.





5. Disconnect the lighting connectors behind the panel. Depending on your car configuration, you may have 1 or 2 connectors.



6. Remove the 4 screws securing the HVAC panel to the dash. 2 below the panel and 2 above.



7. While holding the HVAC panel, disconnect the connector on the back of it.



8. Remove the 2 screws securing the screen into the dash



9. Pull the screen up and away from the dash taking care not to damage the cable attached to the back of it.



10. Disconnect the video cable on the back of the screen



11. Remove the 4 screws holding the headunit in the dash.



12. Remove head unit partially from the dash so that you can access the cables on the back of the head unit.

NOTE

It is not necessary to disconnect all the cables to install the retrofit, however it will make the installation easier.



Connecting retrofit

Testing

It is recommended that you connect your retrofit unit to the vehicle and test that it functions properly prior to finishing the installation.

Installation

The retrofit is now ready to be connected. You must find a location for the retrofit unit to reside in the vehicle. While we leave this choice up to each customer.

We recommend locating the unit under the driver's side dash below the steering wheel. Cables can easily be fed from the head unit cavity to under the steering wheel area.

Secure the retrofit unit in the location selected using zip ties or Velcro.

NOTE

Connect the retrofit and verify operation before permanently locating the unit and harnesses in the dash.

The following connections need to be made:

- T harness
- USB cable
- Cable from LVDS1 connector to back of OEM screen
- OEM LDVS cable between LVDS2 connector on retrofit unit and back of head unit.



- 1. Disconnect the main harness plug from the head unit.
- 2. Connect the T harness between the factory plug and the head unit.



Take care when connecting the T harness to the head unit as the plug connection can be tight and may bend pins on either connection



- 3. Remove the OEM LVDS connector on the back of the head unit and connect it LVDS2 plug on the retrofit unit.
 - a. Leave the other end of the OEM LVDS cable connected to the back of the head unit.
- 4. Connect cable coming from LDVS1 on the retrofit unit to the OEM screen.



5. Route the USB cable to a location of your choosing.

Dip Switch settings

The Dip switches need to be set for your vehicles configuration. Use the charts below to set the Dip switch on retrofit control unit based on your vehicles options.

NOTE

Switches 1, 2, 6, 7, and 8 need to be set individually to the table below based on your vehicles options

Switch	Position	Function
1	OFF	Turn ON
		parking guide lines
	ON	Turn OFF
		parking guide lines
2	OFF	Turn ON
		360° view
	ON	Turn OFF
		360° view
6	OFF	No function assigned.
	ON	Leave set to OFF
7	OFF	Aftermarket
		rear view camera
	ON	OEM
		rear view camera
8	OFF	OEM
		microphone
	ON	Aftermarket
		microphone

NOTE

Switches 3 through 5 need to be set together to the positions below based on your car model

Switch	Switch	Switch	Car model
3	4	5	
OFF		ON	2013-2016 6.5" 1/2/3/4/5 series / Mini / X3
			2016 X1, 6.5"
			VGA mode
ON	OFF	ON	2013-2016 6.5" 1/2/3/4/5 series / Mini / X3
			2016 X1, 6.5"
			CVBS mode
OFF			2013-2015 8.8" Mini / 1/2/3 series / X3/ X4
			2013-2016 10.25" 5 series/ X5 / X6
			2013-2015 10.25" 7 series
			VGA mode
ON OF		FF	2013-2015 8.8" Mini / 1/2/3 series / X3/ X4
			2013-2016 10.25" 5 series/ X5 / X6
			2013-2015 10.25" 7 series
			CVBS mode
OFF	ON	OFF	2016 8.8" 1/2/3 series / Mini / X3 / X4
			VGA mode
ON		OFF	2017 6.5" 1 series
			CVBS mode
OFF		ON	2017 6.5" 1series
			VGA mode

Operation

Connect the USB cable from the retrofit unit to your iPhone using the lightning cable.

How to enter CarPlay

- 1. Press the multimedia button on your iDrive controller.
 - a. Under sources select AUX.
- 2. Long press the multimedia button on your iDrive for 3 seconds to enter CarPlay mode.



3. The I Car screen will appear on your OEM display.



4. Select iOS to enter CarPlay.



5. Select MirrorLink to mirror your phone to your OEM screen.



To exit. long press the multimedia button again on your iDrive for 3 seconds while in CarPlay mode to revert to the OEM display.

Tips and Tricks

- Car must be powered on for CarPlay retrofit to work
- Turn your phones BT function off to place phone calls via the CarPlay retrofit

Additional harness connections

- 1. Ground
- 2. Rear camera video in
- 3. Reverse detect
- 4. Right view detect
- 5. Front camera video in
- 6. B+
- 7. Left view detect
- 8. ACC out

